BUDGET JUSTIFICATIONS

The United States Department of the Interior

and Performance Information
Fiscal Year 2016

BUREAU OF OCEAN ENERGY MANAGEMENT

NOTICE: These budget justifications are prepared for the Interior, Environment and Related Agencies Appropriations Subcommittees. Approval for release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained through the Office of Budget of the Department of the Interior.

BUREAU OF OCEAN ENERGY MANAGEMENT
FY 2016 PERFORMANCE BUDGET

Table of Contents

Table of Figures

Table of Tables

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Director's Preface

"Today we are making available critical energy resources for safe and responsible offshore oil and gas development, a cornerstone of our domestic energy portfolio. We are also making great strides in harnessing offshore renewable energy for our clean, domestic and low carbon energy future. Taken together, we are helping to meet the nation's energy needs, create jobs, support energy security and cut carbon for today and beyond."

– Abigail Ross Hopper, BOEM Director
January 14, 2015

The Bureau of Ocean Energy Management (BOEM) is responsible for managing the Nation's offshore resources in a balanced way that promotes efficient and environmentally responsible energy and mineral development through oil and gas leasing, renewable energy development, and marine mineral leasing, all of which are guided by rigorous, science-based environmental review and study. BOEM plays an important role in advancing President Obama's all-of-the-above approach to expanding responsible development of domestic energy resources as part of a broad effort to secure the Nation's energy future, benefit the economy, and create jobs.

The FY 2016 budget request will support ongoing efforts and important initiatives that are vital to BOEM's mission and critical to advancing Administration priorities. BOEM's FY 2016 request reflects a careful analysis of the resources needed to develop the Bureau's capacity and to execute its functions carefully, responsibly, and efficiently.

With this request, BOEM proposes to focus resources in the following areas:

- **Current Leasing Program.** Since the approval of the 2012-2017 Outer Continental Shelf (OCS) Oil and Gas Leasing Five Year Program in August 2012, BOEM has worked diligently to carry out its innovative, regionally-tailored approach to offshore oil and gas leasing. During calendar year 2014, BOEM held three lease sales, which together generated more than $960 million in high bids. Two lease sales are planned for calendar year 2015 and five lease sales are planned for calendar year 2016. A comprehensive table showing the lease sale schedule provided for by the Five Year Program is included in the Conventional Energy chapter of this budget justification.

- **Development of the 2017-2022 OCS Oil and Gas Leasing Program.** BOEM is successfully moving forward with the development of the 2017-2022 Five Year Program that will lay out the schedule of oil and gas lease sales that the Secretary of the Interior

determines will best meet national energy needs and address energy security for that five-year period. BOEM will build on this effort during FY 2015 and FY 2016 by continuing to develop the 2017-2022 Five Year Program, including initiating a comprehensive programmatic environmental impact statement for the Program, so that it can take effect in July 2017.

- **Risk Management.** In order to better align regulatory requirements with the realities of aging offshore infrastructure and ensure that lease obligations, such as decommissioning, do not fall to the taxpayer, BOEM is continuing development of a risk management/financial assurance program to modernize our regulatory regime.

- **Renewable Energy.** In recognition of the need to advance our clean, domestic and low carbon energy future, BOEM continues to advance renewable energy through an aggressive leasing program. The Bureau anticipates issuing eight additional commercial leases during FY 2015, with another five during FY 2016, pending the required public consultation and environmental analyses. This builds on the issuance of the first three competitive lease sales offshore Massachusetts/Rhode Island, Virginia, and Maryland one of which was issued in FY 2014 and two of which have been issued in FY 2015 so far.

- **Science Based Analysis.** Utilizing science as the foundation for sound policy decisions, and managing offshore energy and mineral resources in an environmentally and economically responsible way, BOEM facilitates top-quality research by talented scientists from a range of disciplines that is targeted to support policy needs and priorities.

Consistent with the overall contours of the FY 2016 budget, these initiatives will advance the Administration's priorities and will allow BOEM to effectively and efficiently manage responsible development of offshore energy resources.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

General Statement

The Bureau of Ocean Energy Management manages the environmentally and economically responsible development of the Nation's offshore energy and mineral resources. The Bureau's functions include offshore leasing, resource and economic evaluation, review and administration of oil and gas exploration and development plans, renewable energy development, National Environmental Policy Act (NEPA) analysis, and environmental studies. BOEM's functions are described in more detail in the following narrative.

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 and mineral resources in an environmentally and economically responsible way.

Leasing. BOEM is responsible for conventional and renewable energy and marine mineral leasing policies and programs. For conventional energy, this applies to all Outer Continental Shelf leasing issues for oil, gas and other marine minerals. This includes developing a Five Year Oil and Gas Leasing Program and designing individual oil and gas lease sales in a way that makes oil and gas resources available, protects communities and the environment, ensures fair value to the American taxpayer, and provides incentives for diligent development of leases. For renewable energy, BOEM manages offshore leasing and oversees all activities for renewable energy and alternate-use projects. BOEM also makes OCS sand and gravel resources available for coastal restoration and protection projects.

Plan Administration. BOEM conducts in-depth reviews of exploration plans, development and production plans, and development operation coordination documents to ensure that plan activities are conducted in accordance with applicable laws, regulations, and lease terms. BOEM is committed to ensuring that its process for reviewing and approving plans is rigorous, efficient, and transparent to industry. BOEM works collaboratively with industry throughout the review of plans, with the goals of ensuring that operators comply with rigorous operational and environmental requirements and that the review process is efficient.

Environmental Science. BOEM is committed to ensuring that both conventional and renewable energy decisions are informed by the best available science. BOEM facilitates top-quality research by talented scientists from a range of disciplines and targeted to support policy needs and priorities. Applied research through the studies program informs the environmental reviews

that BOEM prepares to support decision-making. To ensure their full integration, BOEM oversees both applied research and environmental review processes.

Economics. BOEM conducts economic, statistical, engineering, and cost-benefit analyses for Bureau and Departmental energy and minerals programs. The objective is to evaluate, recommend, design, and implement policies and statutory requirements relating to lease terms, bidding systems, auction designs, rulemaking, revenue forecasts, post-sale bid adequacy determinations, and revenue sharing with the states. This work involves broad interfaces with other bureaus and offices within the Department of the Interior (DOI), with other Federal departments and offices, and with Congressional energy resource committees.

Resource Evaluation. BOEM's resource evaluation program includes: fair market value determination, which is focused on thoroughly assessing the oil and gas potential and associated economic value of OCS tracts offered for lease; resource assessment, which is focused on identifying geologic plays on the OCS that offer the highest potential for hydrocarbon resources; and reserves inventory, or the development of independent estimates of economically recoverable amounts of oil and gas contained within discovered fields obtained by conducting field reserve studies. Program activities also include acquisition and analysis of geological and geophysical (G&G) data, as well as permitting of G&G activity to ensure that pre-lease exploration, prospecting, and scientific research operations in Federal waters are conducted in a balanced way that protects wildlife and the environment, as well as cultural and archaeological resources, and minimizes conflicts with other uses of the OCS – such as subsistence use and exploration and development on nearby leases.

Renewable Energy Development. The Energy Policy Act of 2005 authorizes DOI to grant leases, easements, or rights-of-way for activities on the OCS that produce or support production, transportation, or transmission of energy from renewable sources. Renewable energy and alternate-use projects can include wind, wave and ocean current energy, as well as projects that make alternative use of existing oil and gas platforms in Federal waters. The Department and BOEM have continued to advance renewable energy efforts, as part of the President's all-of-the-above strategy. This includes advancing the Smart from the Start initiative, which aims to facilitate efficient and environmentally responsible siting, leasing, and construction of new wind energy projects in the Atlantic. BOEM is also working to facilitate renewable energy off the Pacific Coast.

BUREAU BUDGET 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 offshore energy and mineral resources in an appropriately balanced way that promotes economic development,

energy independence, and environmental protection. The OEM account is comprised of the following activities:

Renewable Energy. This activity funds renewable energy activities for the OCS, including program development, implementation and compliance work in support of competitive and noncompetitive leasing actions; review of site assessment and construction and operations plans; consultation with state and local governments, Federal agencies, tribes, and other stakeholders; and development of a multipurpose marine cadastre. The renewable energy activity supports the Smart from the Start initiative described above.

Conventional Energy. Activities funded through Conventional Energy include: OCS oil and gas leasing, and the development of the Five Year Program; implementing the lease sale process; administering leases; and reviewing exploration and development plans and G&G permit applications. Resource evaluation is a critical component of the program that provides the information needed to support program decision making. This includes technical and economic analysis; tract evaluation; assessment and modeling; conservation of resources; reserves inventories; G&G data acquisition; and fair market value determinations. The Risk Management Policy Group is also funded through Conventional Energy. Additionally, activities involving marine minerals other than oil and gas are funded within this activity.

The Atlantis platform in the Gulf of Mexico

Environmental Programs. This activity funds environmental analyses such as environmental impact statements and environmental assessments needed to assess potential environmental impacts of proposed actions in accordance with NEPA and related regulations. It also supports applied research through the Environmental Studies Program, designed to support policy priorities and ensure that environmental reviews conducted in support of policy decisions incorporate rigorous scientific analysis.

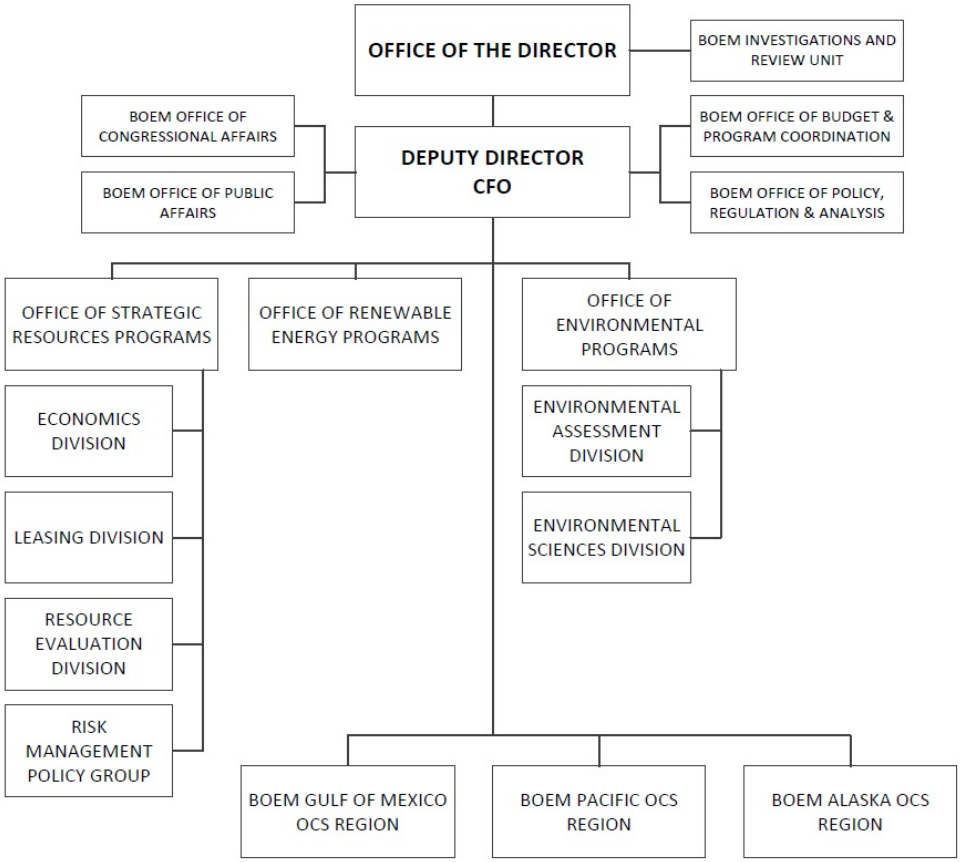
General Support Services. This activity partially funds administrative and shared support services for the Bureau. However, because it is a relic of the Minerals Management Service legacy organization, it does not accurately reflect actual administrative costs (as shown in Appendix D). In an effort to more clearly depict administrative costs and reduce confusion with Appendix D, BOEM proposes to eliminate this activity and realign the funding to the supported budget activities. No full time equivalents (FTE) are directly funded by, or charged to, this

activity. The realignment constitutes an internal transfer within the base budget, and the revised budget structure will be reflected in FY 2016 and thereafter.

Executive Direction. This activity funds Bureau-wide leadership, direction, management, coordination, communications strategies, outreach, and regulatory development. It includes functions such as budget, congressional and public affairs, policy analysis, and regulations. The Office of the Director is funded within this activity and is responsible for providing general policy guidance and overall leadership within BOEM. The Director's Office also oversees administrative direction and coordination for all administrative activities within BOEM.

Functions and funds within these activities are divided among program offices located at headquarters and regional offices, which are described below. BOEM's organizational structure is designed to advance each of the elements of its mission. The national functions are grouped into three offices headquartered in the Greater Washington, D.C., area and focus on strategic resource development, environmental analysis and applied science, and offshore renewable energy development. Additionally, BOEM has three regional offices that handle a number of key agency responsibilities. This structure is summarized below and displayed in the organizational chart in Figure 1.

Figure 1: BOEM Organizational Chart



The Office of Strategic Resources Programs is committed to managing offshore resources to help meet the Nation's energy and resource needs by developing programs to provide access to, and fair return to the American taxpayer for offshore energy and mineral resources through strategic planning and resource and economic evaluation. This includes: development of the Five Year Program; assessment of mineral resource potential, tracking of inventories of oil and gas reserves, and development of production projections; economic evaluation to ensure the receipt of fair value through lease sales and lease terms; and protection of the American taxpayer through a comprehensive Risk Management Program designed to offer a mitigation plan for addressing contingent liabilities on the OCS.

The Office of Renewable Energy Programs advances a sustainable OCS renewable energy future through interactive site planning and environmentally responsible operations and energy generation. Among other things, this office supports the Secretary's Smart from the Start initiative to facilitate siting, leasing, and construction of new projects, spurring the responsible development of offshore wind resources off the Atlantic coast.

The Office of Environmental Programs conducts and oversees applied science and environmental assessments at every stage of the offshore energy development planning process – for both conventional and renewable energy activities – in order to inform decisions for environmentally responsible ocean energy and mineral development. BOEM also ensures that it manages, mitigates, monitors, and adapts to the potential consequences of exploring for and developing these resources. As a responsible steward, BOEM must also meet its stakeholder engagement responsibilities. To fulfill these responsibilities, BOEM's environmental programs are comprised of a diverse team of scientists, policy specialists, and technical professionals, whose expertise spans archaeology, biology, oceanography, environmental, and social disciplines.

BOEM has three regional offices – Gulf of Mexico, Pacific and Alaska – which are located in New Orleans, Louisiana; Camarillo, California; and Anchorage, Alaska, respectively. The regional offices are integrated into the national programs and are integral to all aspects of each program's responsibilities, especially oil and gas resource evaluations, environmental studies and assessments, leasing activities, review of exploration and development plans, fair market value determinations, and G&G permitting.

Headquarter and regional offices work together to implement BOEM's various activities. In addition, strong partnerships with other Federal agencies, state and local governments, environmental and other interest groups, the general public, and the oil and gas and renewable energy industries enable the regional offices to best coordinate development to fulfill BOEM's resource management responsibilities.

FY 2016 BUDGET REQUEST

Funding for BOEM is requested through the OEM appropriation account. The OEM appropriation is partially offset by a portion of OCS rental collections and cost recovery fees.

In FY 2016, BOEM requests $170.9 million in total budget authority, a net increase of $1.1 million over the FY 2015 enacted level, as shown in Table 1. BOEM's request includes offsetting collections of $93.0 million from rental receipts and $3.7 million from cost recovery fees. This results in a requested increase of $1.8 million in net direct appropriations.

Table 1: Summary of BOEM Budget Request

(Dollars in Thousands)

BOEM	2014 Actual	2015 Enacted	2016 Request	Change from 2015
Ocean Energy Management				
Renewable Energy	23,656	23,104	24,278	+1,174
Conventional Energy	49,441	49,633	59,869	+10,236
Environmental Programs	63,218	65,712	68,045	+2,333
General Support Services	14,320	15,002	-	-15,002
Executive Direction	16,256	16,319	18,665	+2,346
Total, OEM	**166,891**	**169,770**	**170,857**	**+1,087**
Offsetting Collections				
Rental Receipts	-95,162	-94,868	-92,961	+1,907
Cost Recovery Fees	-2,729	-2,480	-3,661	-1,181
Total, Offsetting Collections	**-97,891**	**-97,348**	**-96,622**	**+726**
Net Current Appropriation, BOEM	**69,000**	**72,422**	**74,235**	**+1,813**
Full Time Equivalents (FTE)	**543**	**552**	**574**	**+22**

FY 2016 BUDGET HIGHLIGHTS

BOEM's FY 2016 budget request reflects a careful analysis of the resources needed to develop the agency's capacity and to execute its functions carefully, responsibly, and efficiently. The request includes funding and personnel increases to continue developing the Risk Management Program, to address staffing and resource needs resulting from increased OCS activity, and to build upon collaborative efforts for ecosystem science. The request also reflects an adjustment

resulting from a revised offsetting collections estimate, fixed cost changes, and a general reduction within the budget activities. Table 2 below shows the proposed changes relative to the FY 2015 enacted level.

Table 2: Crosswalk to FY 2016

Bureau of Ocean Energy Management
Crosswalk to FY 2016 Funding Level*
Dollars in Thousands

Activity	Program Change	Total BA	Offsetting	Net	FTE
BOEM FY 2015 ENACTED		**169,770**	**-97,348**	**72,422**	**552**
Bureau-Wide	FY 2016 Fixed Costs	-114			
Conventional Energy	Risk Management Program	+2,500			+13
Multiple Activities	Staffing for Increased OCS Activity	+1,085			+7
Environmental Programs	Collaborative Efforts on Ecosystem Science	+500			+2
Environmental Programs	PEIS for 2017-2022 Program	-2,500			
Multiple Activities	Programmatic Reductions	-384			
Multiple Activities	Internal Transfers (Realignment of GSS)	-			
Offsetting Collections	Change in Estimated Collections		+726		
FY 2016 Budgetary Changes		**+1,087**	**+726**		**+22**
BOEM FY 2016 BUDGET REQUEST		**170,857**	**-96,622**	**74,235**	**574**

* Changes are not listed in order of priority.

FY 2016 Fixed Costs (-$114,000; 0 FTE). Estimated fixed costs in FY 2016 are decreasing from the FY 2015 level and are fully funded in the FY 2016 budget. These costs include changes associated with employee pay, changes in Federal health benefits and Worker's Compensation, rent to the General Services Administration, and payments to the Department through its Working Capital Fund.

Internal Transfers (Realignment of General Support Services) (+$0; 0 FTE). In FY 2016, BOEM proposes an internal transfer to realign the General Support Services (GSS) budget activity. This proposal does not require additional funding and has a net-zero budgetary impact. The GSS budget activity does not accurately reflect actual administrative costs, so BOEM proposes to eliminate this relic of the MMS legacy organization, and reallocate those dollars to the other activities those funds directly support. The distribution of GSS funds across the activities would be based on the proportion of positions in each budget activity, which is consistent with the allocation of administrative costs associated with the BSEE administrative Reimbursable Service Agreement (RSA). The GSS activity is used to pay for BOEM's general administrative expenses and overhead, and no FTE are directly funded by, or charged to, this

activity. The proposed realignment would constitute an internal transfer within the base budget, and the revised budget structure would be reflected in FY 2016 and thereafter.

Risk Management (+$2,500,000; +13 FTE). In FY 2014, BOEM initiated an effort to expand its risk management program, and the Bureau is requesting additional resources in FY 2016 to continue building the mission critical program and establish the base funding necessary to support an effective national program in the outyears. BOEM currently has neither the expertise nor resources to support the continued development of the Risk Management Program, leaving the Federal Government and American taxpayers vulnerable to risks resulting from OCS resource development, use, and decommissioning. Resources will be used to procure new technical expertise both in the form of contractual support to aid in further developing a bureau level risk management protocol, as well as the personnel resources to implement and sustain the business processes once the Bureau implements the protocol. Without the risk management protocols in place or the necessary staff to review company financial data and legal risk transference agreements, it is possible BOEM may miss the early warning signs prior to bankruptcies, and the Federal Government may not be as well positioned as it could have been to protect the government's claims, thereby increasing the government and taxpayer exposure. A lessee's bankruptcy could easily result in insufficient funds available for decommissioning work. Since there is no contingency fund, if a bankruptcy results in insufficient funds for decommissioning work, the responsibility for covering any uncovered decommissioning costs would fall to the American taxpayer, either through BOEM or the Department of the Interior.

This Program is ultimately intended to instill project risk management practices that do not currently exist within the Bureau or Department. The responsibility for this Program will be housed primarily in the Conventional Energy activity, and as the Program builds capacity, BOEM will develop a similar, complementary function in the Renewable Energy activity. Ultimately, every dollar this program receives will bring the Federal Government one step closer to the level of financial protection it is obligated to provide to its citizens.

Staffing for Increased OCS Activity (+$1,085,000; +7 FTE). BOEM's responsibilities with respect to activity on the OCS have been increasing over the last several years, and this trend is anticipated to continue as activity on the OCS increases. BOEM has seen a 36 percent increase in active deepwater drilling rigs in the Gulf of Mexico since 2010, and this has led to a steady increase in the number of plans BOEM must review. In fact, during FY 2014, BOEM experienced a nearly 50 percent increase in the number of plans it reviewed compared with FY 2012. Furthermore, the plan review process has been substantially modified in recent years, adding several more requirements to an already involved process. The changes to the plan review process and the focus on improvements to the plan reviews have required BOEM to redirect personnel to meet those needs, requiring them to do both new duties (plan reviews) and, as workload permits, old duties (other oil and gas analyses). This has left other functions under–supported and staff overworked.

Funding is requested in FY 2016 to allow BOEM to manage this increasing activity on the OCS and an increased workload resulting from focusing personnel on the timely and thorough completion of reviews of exploration and development plans. This initiative would provide the resources to staff critical functions so plan reviews and associated workloads do not accumulate, and to ensure they are timely completed. Commensurate with the anticipated increase in direct program support is the need for resources to centrally manage and oversee these activities. Funds provided by this initiative enable BOEM to focus on the increasing plans work and other interrelated critical areas resulting from increasing OCS activity.

Collaborative Efforts on Ecosystem Science (+$500,000; +2 FTE). The purpose of this initiative is twofold: to support BOEM's engagement in Arctic Council efforts and to increase the Bureau's expertise on issues that may be of interest to the Council, namely factors related to climate change resilience and adaptation. BOEM recognizes the importance of its work in the Arctic, as well as the potential of that work to influence U.S. policy as it relates to Arctic resource management issues. BOEM would use the requested funding to continue building upon its Arctic knowledge and leveraging it with that of the other members of the Arctic Council. BOEM also requests funding to develop greater expertise in greenhouse gases and ocean-atmospheric interactions and to study and evaluate their impacts on OCS resources, including marine ecosystems, ocean acidity, and ambient air quality. This initiative would provide the necessary scientific expertise to undertake these activities, and it would also support the Arctic Council's focus area on climate change resilience and adaption in the Arctic.

Programmatic Environmental Impact Statement (PEIS) for 2017-2022 Program (-$2,500,000; 0 FTE). In FY 2015, BOEM requested $2.5 million in funding to support a comprehensive PEIS that is required for BOEM's next Five Year Program (2017-2022). The PEIS is mandated by NEPA and is required in order to fulfill the requirements of the OCS Lands Act and BOEM's mission. The development of the PEIS involves scoping, development of alternatives, Federal and state agency coordination, public comment, comment analysis and response, as well as publication of the draft and final PEIS. The funding was required for and will be used in full in FY 2015, making it a one-time need.

Programmatic Reductions (-$384,000; 0 FTE). In order to support BOEM's highest priority needs in FY 2016, the Bureau proposes general reductions that are aimed at identifying administrative savings and minimizing programmatic impacts.

Federal Oil and Gas Reforms. The 2016 budget includes a proposed package of legislative reforms to bolster and backstop administrative actions being taken to reform the management of DOI's onshore and offshore oil and gas programs, with a key focus on improving the return to taxpayers from the sale of these Federal resources. These statutory and administrative changes fall into three general categories: (1) advancing royalty reforms, (2) encouraging diligent

development of oil and gas leases, and (3) improving revenue collection processes.

Royalty reforms include: evaluating minimum royalty rates for oil, gas, and similar products; adjusting onshore oil and gas royalty rates; analyzing a price-based tiered royalty rate; and repealing legislatively-mandated royalty relief. Diligent development requirements include shorter primary lease terms, stricter enforcement of lease terms, and monetary incentives to get leases into production (e.g., a new statutory per-acre fee on nonproducing leases). Revenue collection improvements include simplification of the royalty valuation process, elimination of interest accruals on company overpayments of royalties, and permanent repeal of DOI's authority to accept in-kind royalty payments.

Collectively these reforms will generate $2.5 billion in net revenue to the Treasury over ten years, of which nearly $1.7 billion would result from statutory changes. Many states will also benefit from higher Federal revenue sharing payments as a result of these reforms.

SCIENCE COORDINATION

BOEM is a science agency: science is critical to BOEM's mission to manage offshore energy and mineral resources in an environmentally and economically responsible way. A fundamental component of this mission is to carry out the direction set forth by U.S. laws and policies governing resource development. For instance, the OCS Lands Act requires BOEM to consider the impacts from OCS development on the marine, coastal, and human environments. BOEM's science is intended to inform decision-makers and the public about potential environmental impacts of OCS energy and mineral resource development, how to prevent or mitigate those impacts, and how to monitor impacts and measures for continued environmental protection. Therefore, the valuable data collected through BOEM's environmental programs is used not only within BOEM, but also by stakeholders, including other Federal agencies and state and local governments.

Support for research and development, and science in general, remains a priority for the Administration. Basic research, which is defined within the Office of Management and Budget (OMB) Circular A-11 as the "systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind," may include activities with broad applications. OMB Circular A-11 defines applied research as the "systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met." As a key component of its Environmental Studies Program, BOEM utilizes partnerships, including those with Federal, state, and academic institutions, to conduct applied scientific work to support the Bureau's decision-making processes.

The President's Budget continues to promote research and development, scientific investments, and monitoring to best manage the country's natural resources and heritage. Continued and enhanced coordination of science activities across bureaus will be required to achieve the Department's important mission objectives. The 2016 budget facilitates this need by better supporting integrated efforts to achieve resource management outcomes.

A piping plover scouts for food

The FY 2016 budget builds on the work done on landscape-level and ecosystem-wide conservation, oceans policy, and climate adaptation and resilience, and moves toward institutionalizing these Administration priorities. Conservation, as applied to environmentally responsible offshore ocean energy development, is a key component of BOEM activities. In keeping with the BOEM mission, environmental impacts from oil and gas development, marine mineral activities, and renewable energy projects are taken into account prior to exploring for and extracting resources.

BOEM has identified several key areas for investment where coordination with other Department bureaus will leverage results to more effectively achieve mission outcomes. The FY 2016 BOEM budget continues to support these practices through important partnerships and collaborative efforts. BOEM leverages its funds and expertise with other Federal agencies, state and local governments, academia, and industry. By contributing personnel, equipment, facilities and funds, the partners are able to extend the scope of research to enable all partners involved to obtain maximum results from research efforts. Additionally, students may have the opportunity to learn through collaborative projects, thus helping to engage our youth in science-based careers. For instance, BOEM and the U.S. Geological Survey partner to leverage resources for OCS ecosystem studies. Each year, the U.S. Geological Survey (USGS) receives OCS ecosystem funds which it leverages with BOEM to enable the two Bureaus to extend the scope of their research (in FY 2014 the USGS received approximately $2.0 million for this research). The extra funding enables BOEM to address additional studies requirements through USGS that it otherwise might not necessarily be able to fund.

BOEM funding enables critical environmental studies that not only support its mission, but also the missions and research efforts of other entities. The following are several examples of how BOEM partnerships provide funds for environmental work critical to both BOEM's and other entities' missions and research efforts.

From FY 2010 to FY 2014, BOEM provided nearly $70 million to Federal partners to conduct scientific environmental work for the Bureau. Of that amount, nearly $45 million went to partnerships with the National Oceanic and Atmospheric Administration (NOAA) and nearly

A walrus surfaces in Alaska sea ice

$20 million to other Bureaus within DOI. Federal partnerships help BOEM obtain the science needed to support the Bureau's decisions while maximizing the utility of the results and leveraging limited resources. For example, BOEM conducts oceanographic work through NOAA at a lower cost than through commercial means due to NOAA's in-kind contributions of ships, equipment and personnel. BOEM's total cumulative investment in the environmental studies budget was nearly $170 million during this period.

BOEM also leverages numerous resources through the National Oceanographic Partnership Program (NOPP) framework to help fund its collaborative conservation activities. BOEM has approximately 20 ongoing multi-year projects in cooperation with a variety of NOPP partners from the Federal, academic, and industrial sectors. These funds are leveraged many-fold with our partners, with the contributions from partners varying by year, project, and partner. During FY 2015, through NOPP, BOEM plans to participate in the study "Initiating an Arctic Marine Biodiversity Observing Network (AMBON) for Ecosystem Monitoring" in the Chukchi Sea. This work includes many partners and will develop a prototype ecosystem-based marine biodiversity network over offshore oil and gas lease areas in the Chukchi Sea, monitoring multiple trophic levels and species, and informed by historical data and past modeling efforts. Monitoring biodiversity will improve information about the health of biodiversity in the Chukchi Sea as a means to enhance environmental impact assessments and develop better metrics for cumulative impact analysis.

In addition to BOEM's work with NOPP, NOAA and the USGS, BOEM has successfully partnered with other Federal partners including the National Aeronautics and Space Administration, U.S. Navy, U.S. Air Force, U.S. Army Corps of Engineers and the National Park Service to study, analyze, develop and construct various conservation activities related to the strategic placement of dredged material from the OCS. BOEM is responsible for leasing OCS sediment resources for coastal restoration projects and in addition to Federal partners, has active partnerships with coastal states, such as Louisiana, Florida and Virginia, as well as their environmental agencies. These partnerships have resulted in the successful conveyance of more than 92 million cubic yards of OCS sediment resources for coastal restoration projects, which protect billions of dollars of infrastructure as well as important ecological habitat.

SECRETARIAL INITIATIVES

Powering Our Future and Responsible Use of the Nation's Resources. Through early planning, thoughtful mitigation, and the application of sound science, the Department is working to ensure the President's all-of-the-above energy strategy is applied in a manner that fosters environmentally and economically responsible development of the Nation's offshore energy and mineral resources, while diligently seeking ways to improve efficiency through the use of technology, shared services, and best practices.

In FY 2014, BOEM began the multi-year planning process for the development of the 2017-2022 Five Year OCS Oil and Gas Leasing Program. Development of the Five Year Program takes into consideration oil and gas resources as well as economic, social, and environmental impacts. BOEM cooperates and/or consults with stakeholders to develop a program that offers access to those areas of the OCS with the most promising potential for development of oil and gas resources in an environmentally responsible manner. In preparation for the 2017-2022 Five Year Program, BOEM issued a Request for Information (RFI) and comments on June 13, 2014. BOEM extended its usual 60-day comment period to a total of 75 days to provide the public an opportunity to review the RFI and identify environmental and other concerns as well as comment on the potential for leasing. Information collected during the public comment period was considered when preparing the Draft Proposed Program issued in January 2015, which will be followed by a Proposed Program, and a Proposed Final Program. BOEM will continue to seek public comment throughout each stage of development of the 2017-2022 Five Year Program. In addition to considering public comment and input from other interested parties, BOEM also prepares a Programmatic Environmental Impact Statement PEIS, which evaluates potential environmental impacts of OCS oil and gas leasing options within the Proposed Program. BOEM has initiated work on the PEIS during FY 2015, and information resulting from the PEIS will inform decisions within the Proposed Final Program.

BOEM also supports the President's all-of-the-above energy strategy through its significant progress on renewable energy leasing and development. To date, BOEM has awarded seven commercial wind energy leases off the Atlantic Coast. In FY 2015, BOEM anticipates conducting additional competitive auctions for Wind Energy Areas offshore Massachusetts and New Jersey.

Engaging the Next Generation. BOEM is actively engaged in youth initiatives and participates in the DOI Youth Task Force, Youth Alliance, and inter-agency working group for the development of the 21st Century Conservation Corps. Furthermore, the hiring of young people is integral to BOEM's efforts to identify and recruit high-performing candidates for the future workforce, and it has the added benefit of encouraging youth to pursue science-based studies. BOEM is also actively engaged in a number of recruitment and outreach activities that target younger generations.

Building a Landscape-Level Understanding of Our Resources. The Department of the Interior seeks to harness emerging technologies and work with partners to elevate the Nation's understanding of our resources on a landscape-level. In particular, BOEM is working to provide the science and tools for policy and decision-makers to effectively manage resources to address habitat characteristics, risk vulnerabilities, mineral resources, energy potential, and conservation priorities. Two examples of these investments follow:

- **Marine Cadastre.** BOEM is responsible for producing and maintaining the official marine cadastre for the Federal OCS areas of the United States. The MarineCadastre.gov project is a web-based integrated marine information system that provides authoritative and regularly updated ocean information, including offshore boundaries, infrastructure, ocean uses, habitat distribution data, energy potential, and other data sets important to large regional ocean planning efforts, as well as project-specific planning. Data is provided as immediate viewable map data, downloadable Geographic Information Systems (GIS) formatted data, and as map services. The MarineCadastre.gov includes a variety of BOEM/BSEE data sets, enabling users inside and outside of BOEM access to the most up-to-date versions of lease maps, protractions, lease blocks, boundaries, pipelines, wells, and other BOEM/BSEE generated GIS data important to BOEM's stakeholders for marine planning and energy development planning purposes. More information on this function can be found in the Conventional Energy chapter.

- **Marine Minerals Program.** BOEM is the sole responsible steward of OCS sand, gravel and shell resources critical for the long-term success and cost-effectiveness of many shore protection, beach nourishment, and wetlands restoration projects along the Gulf and Atlantic coasts. BOEM's Marine Minerals Program oversees the development of OCS sand and gravel resources that are most often used to protect and improve coastal resources and the environment locally, regionally and nationally. In addition to being a statutory responsibility, activities of the Marine Minerals Program also reflect a strategic investment in advance planning, sand resource evaluation, stakeholder coordination and environmental assessment and study so that, when they are needed, OCS sand resources can be made available in a responsible way. OCS sand resources are often needed under urgent circumstances to restore damaged shorelines and wetlands to pre-storm condition, or are needed more strategically to protect coastal areas in advance of a storm, or to re-establish important biological habitat and ecological function.

Building a 21st Century Department of the Interior. BOEM strives to make program funding go further during times of constrained resources. Below are two examples of efforts BOEM will continue during FY 2016.

- **Leveraging Technology to Reduce Administrative Overhead.** In support of the Department's continued efforts to reduce administrative spending, BOEM has applied rigorous oversight of high-priority areas, such as those for travel expenses. BOEM continues to support this effort through the increased use of technology, including teleconferencing, video conferences, shared web sites, and web conferences, as well as enhanced oversight and internal controls.

- **Consolidation of Resources through Co-location with BSEE.** BSEE and BOEM co-locate office space within most headquarters and regional office locations. BSEE manages the General Services Administration (GSA) occupancy agreements on behalf of BOEM and is reimbursed by BOEM for its share of the space via a reimbursable service agreement. The co-location of office space enables BOEM to share special space needs (e.g., conference rooms), thereby reducing its physical footprint. The occupancy agreements where BOEM and BSEE are co-located include: Anchorage, Alaska (the lease expires in 2019); Camarillo, California (moved to new location in the fourth quarter of FY 2014, with a lease that expires in 2024); New Orleans, Louisiana (the lease expires in 2025) and two warehouses in the New Orleans area; and Washington, DC. BOEM anticipates relocating its Herndon, VA, office during the second quarter of FY 2015 (the new lease expires in 2025).

PRESIDENT'S MANAGEMENT AGENDA

The Department of the Interior supports the President's Management Agenda to build a better government, one that delivers continually improving results for the American people and renews their faith in government. BOEM is actively involved in the government-wide effort to bring forward the most promising ideas to improve government effectiveness, efficiency, spur economic growth, and promote people and culture. BOEM supports achievement of the President's Management Agenda objectives in these four pillars, as described below.

Effectiveness. BOEM supports the Department's efforts to improve customer service, streamline and speed transactions, implement evidence-based policy, increase accountability and participation, and harness ingenuity of the American people to do more than government can do by itself. The following are examples of ways BOEM supports the Administration's efforts to include a renewed focus on customer service and smarter IT delivery.

- **TIMS:** BOEM continues to enhance its Technical Information Management Systems (TIMS) information technology system in order to develop an ePlans Portal that will digitize significant elements of the plan review process, creating significant efficiencies for both industry and government that would reduce plan processing time by up to 40 percent, yield financial savings, and improve data quality and decision-making. In

developing the portal, BOEM will coordinate closely with BSEE, which is simultaneously developing a complementary ePermits portal. The ePlans portal is a critical component of BOEM's efforts to improve and modernize its core mission processes, and to facilitate coordination and data-sharing between BOEM, BSEE, and other state and Federal regulatory agencies. Through ePlans, information transfer can be managed effectively through a prescribed workflow for plan and NEPA reviewers, with timely decisions relayed back to the plans coordinator. System validation checks performed prior to plan submission will eliminate the need for plan coordinators and reviewers to perform these checks manually, allowing them more time to analyze non-routine plans.

- **Renewable Energy Licensing:** The Department has established a Memorandum of Understanding (MOU) regarding offshore renewable energy coordination with the Department of Energy, Federal Energy Regulatory Commission (FERC). BOEM and FERC responsibilities intersect for marine hydrokinetic projects, with BOEM issuing commercial marine hydrokinetic leases and FERC issuing licenses for construction and operation of these projects. The agencies have worked together to achieve efficiencies for both the agencies and potential applicants. To that end, the two agencies signed a MOU in April 2009, issued joint guidelines for potential marine hydrokinetic developers later that year, and updated those guidelines in July 2012.

Efficiency. The Department of the Interior supports the President's Management Agenda objective to cut waste and implement a government that is more responsive and open. The BOEM budget supports the Department's plan to build upon the Accountable Government Initiative through a set of integrated enterprise reforms designed to support collaborative, evidence-based resource management decisions; efficient IT Transformation; optimized programs, business processes, and facilities; and a network of innovative cost controlling measures that leverage strategic workforce alignment to realize an effective 21st Century Interior organization. In addition to the efforts described above under the "Building a 21st Century Department of the Interior" section, specific BOEM efforts to do this include:

- **Shared Administrative Services:** BOEM receives administrative services provided by BSEE through a reimbursable service agreement. The services include: finance, human resources, procurement, facilities, information management, and physical and personnel security. Acquiring these critical services through BSEE minimizes the duplication of administrative functions in BOEM and BSEE, and optimizes efficiency through the consolidation of resources into a single service provider. The Department has strongly supported the expansion of business cross-servicing for more than 30 years. This latest effort between BOEM and BSEE is another step forward in this direction and will have the added benefit of implementing standardized practices that will further increase the

productivity for highly skilled personnel in both bureaus. By utilizing the shared services model, BOEM and BSEE can continue to improve their best practices.

Economic Growth through Open Data. Through enhanced customer service, smarter IT delivery, and infrastructure permitting, the government can be a platform to fuel economic growth, increase the availability of government data resources, open up Federal assets such as laboratories and spectrum to fuel private-sector innovations, streamline and speed transactions, and foster public-private collaborations to create jobs of the future.

- **Environmental Studies – geoESPIS:** In coordination with BSEE, BOEM is overhauling the current Environmental Studies Program Information System (ESPIS) system. The ESPIS is an information system that contains reports and information about BOEM environmental studies compiled over more than 40 years. This information is used internally for environmental analyses as well as shared externally to the public. Through the geoESPIS project, BOEM is making environmental study reports as well as the associated data more discoverable and accessible to the public. This effort supports the OMB Open Data Policy initiative, specifically by "building or modernizing information systems in a way that maximizes interoperability and information accessibility" (OMB Memo M-13-13). The ESPIS is being redesigned to (1) allow access to all study products (e.g. data, photos, and presentations)—not just reports, (2) make the system more functional and user-friendly and (3) link to the Multipurpose Marine Cadastre. The NOAA Coastal Services Center in Charleston, SC, is handling the geospatial/data aspects of the project through an Interagency Agreement. The ESPIS Design Team, consisting of representatives from all Regions, is meeting regularly via teleconference. The second version geoESPIS search tool was released in July 2014 and is currently being reviewed and improved through an iterative development process. To date, approximately 85 percent of BOEM's environmental studies have been entered into the database and are considered complete, along with more than 5,000 publications and 800 data products. BOEM is making this information available to its stakeholders online to enable them access to research and to further expand their access to information and resources.

- **Renewable Energy Task Forces and Data Collection:** BOEM recognizes the importance of coordinating and consulting with state, local, Tribal, and Federal stakeholders to develop a comprehensive renewable energy program for the OCS. This is accomplished through intergovernmental task forces and cooperative agreements that leverage funds to collect important information about the offshore environment that meets both the needs of BOEM and the states.

People and Culture. The Department of the Interior seeks to innovate by unlocking the full potential of the existing workforce and building the workforce needed for tomorrow. To help the Department accomplish this, BOEM is working to attract, develop, and retain top talent, create a

culture of creativity and scientific discovery, and enable the sharing of knowledge and information. Specific BOEM efforts to do this include:

- S**pecial Pay Rates for Critical Science/Engineering Professions:** Sustaining the Department's energy programs requires the ability to attract and retain qualified personnel in fields that are highly competitive for skilled professionals that are in scarce supply. The Department's ability to compete for talent in this dynamic sector of the economy is a problem across Interior's oil and gas development and inspection programs. Staff are hired at a junior level and trained, and about the time they become journeymen and fully performing, they are hired by industry. While recent annual appropriations legislation has allowed BOEM and BSEE to provide a special salary rate for geophysicists, geologists, and petroleum engineers in the Gulf of Mexico, the Department is actively working with the Office of Personnel Management to establish appropriate pay schedules to provide an administrative solution to meet this critical gap.

  The Department proposes to extend the authority established in the 2014 appropriation for special rates of pay for employees in the offshore oil and gas related field while a longer-term administrative solution is worked out. The current authority will expire at the end of FY 2015.

STRATEGIC OBJECTIVE PERFORMANCE INFORMATION

The FY 2014-2018 DOI Strategic Plan, in compliance with the principles of the Government Performance and Results (GPRA) Modernization Act of 2010, provides a collection of mission objectives, goals, strategies and corresponding metrics that provide an integrated and focused approach for tracking performance across a wide range of DOI programs. While the DOI Strategic Plan for FY 2014-2018 is the foundational structure for the description of program performance measurement and planning for the FY 2016 President's budget, further details for achieving the Strategic Plan's goals are presented in the DOI Annual Performance Plan and Report. Bureau and program specific plans for FY 2016 are fully consistent with the goals, outcomes, and measures described in the FY 2014-2018 version of the DOI Strategic Plan and related implementation information in the Annual Performance Plan and Report (APP&R).

Bureau Contribution. Within the DOI Strategic Plan for FY 2014–2018, BOEM is aligned under Mission Area Three: *Powering Our Future and Responsible Use of the Nation's Resources*. The conventional energy and renewable energy activities are both focus areas within the DOI Strategic Plan, and environmental studies, assessments, and other activities conducted by BOEM support both of these strategies. BOEM tracks and reports a total of three GPRA measures, and associated supporting performance measures, to the Department under the three separate strategies noted below.

Implementation Strategy and Performance Metrics. The following narrative provides insight into the three DOI Strategic Plan strategies BOEM supports as well as the performance metrics associated with those strategies. Please reference the DOI APP&R for additional information.

BOEM's conventional energy activities support Goal One: *Secure American's Energy Resources* and Strategy Three: *Manage Conventional Energy Development*. The specific GPRA measure, *Number of offshore lease sales held consistent with the Secretary's Five Year Program*, tracks the quantity of lease sales conducted during the current Five Year Program. The conventional energy GPRA measures and their supporting performance measures are noted in the following table.

Table 3: Performance: Manage Conventional Energy Development

Mission Area 3: Powering Our Future and Responsible Use of the Nation's Resources Goal #2: Sustainably Manage Timber, Forage, and Non-energy Minerals Strategy #3: Manage Non-energy Mineral Development								
Outputs, Supporting Performance Measures, and/or Milestones	**2010 Actual**	**2011 Actual**	**2012 Actual**	**2013 Actual**	**2014 Plan**	**2014 Actual**	**2015 Plan**	**2016 Plan**
GPRA Measure: Number of offshore lease sales held consistent with the Secretary's Five-Year Oil and Gas Program	1	-	2	3	3	3	2	3
Number of blocks/tracts evaluated	8,233	24,870	14,612	12,200	9,300	9,184	15,000	20,000
Maintain the ratio of 1.8 to 1 (+/-0.4) of accepted high bids to BOEM's estimated value [1]	1.8 to 1	N/A	2.013 to 1	2.116 to 1	1.8 to 1 (+/- 0.4)	1.84 to 1	1.8 to 1 (+/- 0.4)	1.8 to 1 (+/- 0.4)
Percent of Environmental Studies Program (ESP) projects rated "Moderately Effective" or better by BOEM internal customers	91% (10/11)	91% (21/23)	95% (21/23)	96% (22/23)	88% (N/A)	100% (16/16)	88% (N/A)	90% (N/A)

[1] This measure compares the accepted high bid on each tract to the government's estimated value for that tract. Industry corporate strategy with respect to acquiring specific acreage could lead to a company raising its bid above this analytical value to improve their chances of winning the lease. BOEM estimates are based on a discounted cash flow analysis of a tract and are not designed to predict the high bid. Therefore, the value of this indicator should always be greater than one to achieve fair value for OCS leases. The annual target ratio of 1.8 to 1 means that on average, the industry bids received are expected to be $1.80 (+/- 0.4) for every dollar of the estimated value for each tract.

BOEM's conventional energy activities also support Goal Two: *Sustainably Manage Timber, Forage, and Non-energy Minerals*, Strategy Three: *Manage Non-energy Mineral Development*. The specific GPRA measure, *Number of sand and gravel requests processed for coastal restoration projects*, tracks non-energy minerals development on Departmental lands and waters, such as gold, zinc, lead, copper, iron, salt, sand, potassium, phosphate, stone, gravel, and clay, which support a broad array of uses, including medical applications, computer production, coastal restoration, automobile production, and highway construction and maintenance. This is a newly established GPRA measure, and baseline results were collected during FY 2014 as reported in the following table.

Table 4: Performance: Manage Non-energy Mineral Development

Mission Area 3: Powering Our Future and Responsible Use of the Nation's Resources Goal #2: Sustainably Manage Timber, Forage, and Non-energy Minerals Strategy #3: Manage Non-energy Mineral Development								
Outputs, Supporting Performance Measures, and/or Milestones	**2010 Actual**	**2011 Actual**	**2012 Actual**	**2013 Actual**	**2014 Plan**	**2014 Actual**	**2015 Plan**	**2016 Plan**
GPRA Measure: Number of sand and gravel requests processed for coastal restoration projects	N/A	N/A	N/A	N/A	Baseline	5	5	7

The renewable energy functions support Goal One, Strategy Two: *Develop Renewable Energy Potential*. The specific GPRA measure, *Number of megawatts of approved capacity authorized on public land and the OCS for renewable energy development while ensuring full environmental review*, is a cumulative measure that tracks the cumulative number of approved megawatts based on the total capacity of the equipment to be installed, as specified in an approved construction and operations plan. The renewable energy GPRA measure and its supporting performance measures, which are reported within the DOI APP&R, are noted in the following table.

Table 5: Performance: Develop Renewable Energy Potential

Mission Area 3: Powering Our Future and Responsible Use of the Nation's Resources Goal #1: Secure America's Energy Resources Strategy #2: Develop Renewable Energy Potential								
Outputs, Supporting Performance Measures, and/or Milestones	**2010 Actual**	**2011 Actual**	**2012 Actual**	**2013 Actual**	**2014 Plan**	**2014 Actual**	**2015 Plan**	**2016 Plan**
GPRA Measure: Number of megawatts of approved capacity authorized on public land and the OCS for renewable energy development while ensuring full environmental review (cumulative) [1]	N/A	468 (cum)	468 (cum)	468 (cum)	498 (cum)	468 (cum)	498 (cum)	538 (cum)
Number of offshore renewable energy leasing or ROW/RUE grant processes initiated (i.e., first public notice issued)	1	4	4	5	2	2	2	3
Number of limited leases issued for offshore renewable energy testing and data collection, including §238 research leases	4	0	0	0	3	1	3	1
Number of commercial leases issued for offshore renewable energy generation	0	1	0	3	3	1	8	5
Number of right-of-way/right-of-use and easement grants issued for offshore renewable energy transmission	0	0	0	0	1	0	1	0
Number of offshore NEPA documents (EIS/EAs) finalized for Renewable Energy	1	1	1	4	5	5	8	8

[1] This measure is tracked as a part of the Department of Interior Renewable Energy Priority Goal. The actuals and planned targets displayed within the table reflect BOEM's contribution toward the Department-wide Priority Goal.

BOEM provides ABC data to its managers via an internal management report intended to keep management apprised of ABC data, performance measure targets and their associated results.

This report provides management information that supports decision-making and highlights successes and areas that may need improvement.

Use of Cost and Performance Information

BOEM continues to work toward integrating its budget and performance data to inform decision-making. One example of BOEM integrating the two sets of information can be seen in the data reported for research and development (R&D) investments, which BOEM identifies via several different reports throughout the fiscal year. These include the R&D crosscut for budget formulation, the Required Supplementary Stewardship Information report, and the semiannual R&D report to the National Science Foundation. The data for these reports are pulled from the Federal Business Management System using specific search criteria that focus on a suite of activity-based costing (ABC) codes that, combined, capture R&D activities. This methodology allows for repeatable, justifiable results to improve the accuracy and consistency of BOEM's reporting of the R&D investment information.

AGENCY PRIORITY GOALS

- **Renewable Energy**

Increase the approved capacity for production of energy from domestic renewable resources to support a growing economy and protect our national interests while reducing our dependence on foreign oil and climate-changing greenhouse gas emissions. By September 30, 2015, increase approved capacity authorized for renewable (solar, wind, and geothermal) energy resources affecting Department of the Interior managed lands, while ensuring full environmental review, by at least 16,500 megawatts (since 2009).

Bureau Contribution. BOEM supports the Renewable Energy Priority Goal primarily through its Office of Renewable Energy Programs, which advances a sustainable OCS renewable energy future through interactive site planning and environmentally responsible operations. Support for the Smart from the Start initiative to facilitate siting, commercial and limited leasing, and construction of new projects will spur the responsible development of offshore wind resources, consistent with this Priority Goal. Currently, the Cape Wind energy project off the coast of Massachusetts and the Block Island Transmission System off the coast of Rhode Island contribute to this Priority Goal.

One of the mechanisms used to monitor the renewable energy initiative and BOEM's contribution toward the renewable energy Priority Goal is through performance metrics. The Department employs a set of internal measures and milestones to monitor and track achievement of the Priority Goal. Progress is reported and reviewed throughout the year by the Department to identify and address any need for enhanced coordination or policy measures to address barriers

to the achievement of the Priority Goal. This Goal is supported by funding from the Renewable Energy activity, as well as renewable energy studies and assessments funded through the Environmental Programs activity. BOEM's performance measures, metrics, and additional information are contained within the DOI APP&R.

Implementation Strategy. As required by the Energy Policy Act of 2005, BOEM issues renewable energy leases and grants on a competitive basis unless it determines that no competitive interest exists. Leases and grants are generally issued through a competitive sale, but if it is determined that no competitive interest exists, then BOEM may proceed with the non-competitive lease or grant negotiation process. In either case, the developer must submit and receive approval of appropriate plans or, in the case of marine hydro-kinetic energy, FERC license applications prior to moving forward with their proposed activities. At the end of the lease or grant term, the developer must decommission facilities in compliance with BOEM regulations.

To issue leases, BOEM must conduct a multi-step process entailing information gathering, consultation with interested and affected parties, NEPA review and compliance, and analysis in light of other applicable Federal requirements for each affected state. BOEM finalized one offshore NEPA document (i.e., determination of NEPA adequacy, environmental impact statement or an environmental assessment) for Renewable Energy during FY 2012, four in FY 2013 and five during FY 2014. BOEM anticipates finalizing eight during FY 2015, and eight during FY 2016. BOEM also tracks the number of offshore renewable energy leasing or right-of-way/right-of-use grant processes initiated (i.e., first public notice issued). BOEM initiated five offshore renewable energy leasing or right-of-way/right-of-use grant processes during FY 2013 and two in FY 2014. BOEM anticipates issuing two during FY 2015 and three during FY 2016.

A **commercial lease** is a lease with terms and conditions that allow a person or entity to conduct commercial activities.

Commercial Leases. BOEM continues to make strides on renewable energy leasing activities. In November 2010, Secretary Salazar signed the Nation's first commercial lease for wind energy development on the OCS for the Cape Wind energy project. In April 2011, the Cape Wind Energy Project construction and operations plan was approved and announced by the Secretary with an approved capacity of 468 megawatts. The Bureau reported the approval of the construction and operations plan toward the Renewable Energy Priority Goal metric, which focuses on the number of megawatts of approved capacity for renewable energy development and tracks the cumulative number of approved megawatts based on the total capacity of the equipment to be installed, as specified in an approved construction and operations plan. BOEM anticipates cumulative approved capacities of 498 megawatts in FY 2015 and 538 megawatts in FY 2016.

BOEM issued no commercial leases during FY 2012, three during FY 2013 and one in FY 2014. BOEM anticipates being able to issue eight commercial leases during FY 2015 and five during FY 2016, pending the required public consultation and environmental analyses.

Limited Leases. A limited lease is a lease with terms and conditions which allow the lessee to conduct activities on the OCS that support the production of energy but without actually producing energy for sale, distribution, or other commercial use. The number of leases issued is highly dependent upon the amount of interest and demand for the leases, and this uncertainty can lead to variability in the issuance of leases from year to year. To date, BOEM has issued five limited leases. BOEM did not issue any limited leases during FY 2012 or FY 2013. In FY 2014, BOEM issued one research lease. BOEM anticipates issuing three limited leases during FY 2015 and one limited lease during FY 2016.

Offshore wind farm

Federal/State Task Forces. BOEM recognizes the importance of coordinating and consulting with state, local, tribal, and Federal stakeholders to develop a comprehensive renewable energy program for the OCS. BOEM established intergovernmental task forces in states where the Governor contacted BOEM to express interest in development of offshore renewable energy. Each task force collects and shares information for all stakeholders, including BOEM, for use in its decision-making process. Task forces have been extremely productive and have helped identify areas of significant promise and interest for offshore development, in addition to providing early identification and steps toward resolution of potential conflicts. As funding permits, BOEM will continue to respond to state interest in task forces along the East and West Coasts. During FY 2014, BOEM supported 12 Federal/state task forces for renewable energy development (Maine, Massachusetts, Rhode Island, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Oregon, and Hawaii). These task forces consist of representatives of Federal agencies and state, local, and Tribal governments to facilitate coordination throughout the OCS renewable energy leasing and development process. BOEM will continue to support these existing state task forces, as well as a newly established task force (Florida), and support new stakeholder collaboration each year. In addition, both New Hampshire and California have recently approached BOEM to discuss possible task force formation.

Performance Metrics. BOEM tracks and monitors performance metrics and milestones in support of the Renewable Energy Priority Goal, the results and targets for which are described above.

- **Climate Change Adaptation**

By September 30, 2015, the Department of the Interior will demonstrate maturing implementation of climate change adaptation as scored when carrying out strategies in its Strategic Sustainability Performance Plan.

Bureau Contribution. Climate change is a leading threat to natural and cultural resources across the country. The effects exacerbate existing threats from drought, floods and wildfires, presenting a growing challenge to the resilience of communities. BOEM is on the front lines addressing climate challenges, including more extreme weather events such as Hurricane Sandy. The 2016 budget request proposes funding to improve understanding of the impacts of climate change and adapt to these changes on the ground. BOEM supports the Climate Change Adaptation Priority Goal primarily through its marine mineral and environmental activities. BOEM's most significant opportunities to catalyze resilience to climate change include the following: identifying additional sand resources to provide protection against future storms, conducting research to better understand the physical and environmental characteristics of sand bodies so resource management can be enhanced and resources are conserved, and continuing to work with Federal, state, and local government partners to facilitate the flow of information and data to support the continuing sustainability of coastal communities.

Implementation Strategy. BOEM supports climate change resiliency through multiple activities. BOEM identifies and assesses climate change related impacts on and risks to BOEM's ability to accomplish its missions, operations and programs. BOEM recognizes that ongoing sea level rise and the potential for increased storm frequency and/or intensity resulting from climate change, will translate into increased coastal erosion and the need for additional sand resources to combat or recover from coastal erosion. Therefore, BOEM is actively engaged in delineating additional resources, leading a pilot effort to consider regional leases with states (thereby streamlining the leasing process), and conducting environmental studies to support effective protection of sensitive resources. BOEM is also focusing on enhanced resource management by analyzing data, conducting studies, and using tools such as GIS to manage risks associated with climate change, which could include sand resource depletion through increased demand from coastal restoration projects. BOEM supports climate-resilient investments by states, tribes, and local communities through technical assistance and cooperative agreements. BOEM also contributes to coordinated interagency efforts to support climate change preparedness and resilience at all levels of government, including collaborative work across regional agency offices and hubs, and through coordination of information, data, and tools. BOEM initiated, manages and funds the Marine Cadastre, which is a collaborative effort among a number of Federal agencies, regional planning bodies, state entities, and non-governmental organizations that provides an integrated marine information system. Additionally, when appropriate, BOEM factors climate change risks into environmental analyses and also partners with other agencies to leverage resources in this area. Examples of BOEM's recent partnering to further environmental efforts related to climate change include: involvement in the Interagency

Arctic Research and Policy Committee; contributing to the National Climate Assessment and the latest Intergovernmental Panel on Climate Change report; involvement with regional ocean councils and planning bodies; and partnering with the National Science Foundation and French agencies to co-fund the Arctic Science Education and Engineering for Sustainability program.

Performance Metrics. The DOI Climate Change Working group is responsible for the Climate Change Adaptation priority goal, and reports directly to the Department of the Interior's Office of Policy Analysis.

- **Youth Stewardship of Natural and Cultural Resources**

By September 30, 2015, the Department of the Interior will provide 40,000 work and training opportunities over two fiscal years (FY 2014 and FY 2015) for individuals age 15 to 25 to support the mission of the Department. The Department is proposing to expand this goal to provide 100,000 work and training opportunities over four fiscal years, FY 2014 through FY 2017, for individuals ages 15 to 35.

Bureau Contribution. BOEM actively supports the Youth Stewardship of Natural and Cultural Resources Priority Goal through the activities mentioned below.

Implementation Strategy. BOEM is actively engaged in youth initiatives and participates in the DOI Youth Initiative Coordination Team, and has developed an internal Youth Coordination Team. Furthermore, the engagement of young people is integral to BOEM's efforts to identify and recruit high-performing candidates for our future workforce, and it has the added benefit of encouraging youth to pursue science-based studies. BOEM is actively engaged in a number of recruitment, outreach, and engagement activities that target the next generation.

Performance Metrics. The Department of the Interior tracks youth engagement in four areas: Play, Learn, Serve, and Work. BOEM contributes to the Learn and Work targets, which is tracked through data calls and captured centrally through the Federal Personnel Payroll System. BOEM Learn data is collected by the Department annually, and Work data is collected by the Department quarterly.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Bureau Budget Tables

Table 6 : Budget at a Glance

Bureau of Ocean Energy Management

Budget at a Glance

Dollars in Thousands

	2014 Actual	2015 Enacted	Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2016 Request
Ocean Energy Management						
Renewable Energy	23,656	23,104	-10	+1,217	-33	24,278
General Reduction					[-33]	
Conventional Energy	49,441	49,633	-53	+7,349	+2,940	59,869
General Reduction					[-180]	
Staffing for Increased OCS Activity					[+620]	
Risk Management Program					[+2,500]	
Environmental Programs	63,218	65,712	-33	+4,166	-1,800	68,045
General Reduction					[-110]	
Staffing for Increased OCS Activity					[+310]	
Collaborative Efforts on Ecosystem Science					[+500]	
PEIS for 2017-2022 Program		[2,500]			[-2,500]	
General Support Services	14,320	15,002	-	-15,002	-	-
Executive Direction	16,256	16,319	-18	+2,270	+94	18,665
General Reduction					[-61]	
Staffing for Increased OCS Activity					[+155]	
TOTAL, OEM	**166,891**	**169,770**	**-114**	**-**	**+1,201**	**170,857**
Offsetting Collections						
Rental Receipts	-95,162	-94,868	-	-	+1,907	-92,961
Cost Recovery Fees	-2,729	-2,480	-	-	-1,181	-3,661
Total Offsetting Collections	**-97,891**	**-97,348**	**-**	**-**	**+726**	**-96,622**
NET APPROPRIATION, BOEM	**69,000**	**72,422**	**-114**	**-**	**+1,927**	**74,235**

Table 7 : Summary of Requirements

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

	2014 Actual		2015 Enacted		Fixed	Internal	Program Changes (+/-)		2016 Request		Changes from 2015	
	FTE	Amount	*FTE*	Amount	Costs	Transfers	*FTE*	Amount	*FTE*	Amount	*FTE*	Amount
Ocean Energy Management												
Renewable Energy	***47***	**23,656**	***47***	**23,104**	-10	+1,217	-	-33	***47***	**24,278**	-	+1,174
Direct Appropriation		10,799		10,799						11,791		
Offsetting Collections		12,857		12,305						12,487		
Conventional Energy	***255***	**49,441**	***268***	**49,633**	-53	+7,349	*+17*	+2,940	***285***	**59,869**	*+17*	+10,236
Direct Appropriation		26,680		29,872						34,556		
Offsetting Collections		22,761		19,761						25,313		
Environmental Programs	***155***	**63,218**	***150***	**65,712**	-33	+4,166	*+4*	-1,800	***154***	**68,045**	*+4*	+2,333
Direct Appropriation		14,353		17,838						18,096		
Offsetting Collections		48,865		47,874						49,949		
General Support Services	**-**	**14,320**	**-**	**15,002**	-	-15,002	-	-	**-**	**-**	-	-15,002
Direct Appropriation		4,642		3,324								
Offsetting Collections		9,678		11,678								
Executive Direction	***86***	**16,256**	***87***	**16,319**	-18	+2,270	*+1*	+94	***88***	**18,665**	*+1*	+2,346
Direct Appropriation		12,526		10,589						9,792		
Offsetting Collections		3,730		5,730						8,873		
Total, OEM	***543***	**166,891**	***552***	**169,770**	**-114**	-	***+22***	**+1,201**	***574***	**170,857**	***+22***	**+1,087**
Offsetting Collections		**-97,891**		**-97,348**				**+726**		**-96,622**		**+726**
Rental Receipts		-95,162		-94,868				+1,907		-92,961		+1,907
Cost Recovery Fees		-2,729		-2,480				-1,181		-3,661		-1,181
Net Appropriation, BOEM	***543***	**69,000**	***552***	**72,422**	**-114**	**-**	***+22***	**+1,927**	***574***	**74,235**	***+22***	**+1,813**

Table 8: Program and Financing (MAX Schedule P)

Program and Financing
(dollars in millions)

Treasury Account ID: 14-1917		FY 2014	FY 2015	FY 2016
Obligations by program activity - Direct program				
0003	Appropriations	65	66	72
0004	Offsetting collections	94	94	99
0192	Total direct program	**159**	**160**	**171**
0799	**Total direct obligations**	**159**	**160**	**171**
0802	Reimbursable support agreements	4	4	6
0900	**Total new obligations (direct & reimbursable)**	**163**	**164**	**177**
Budgetary resources - Unobligated balance				
1000	Unobligated balance brought forward, Oct 1[1/]	27	36	44
1010	Unobligated balance transferred to other accts (14-1700)[1/]	-1	-	-
1021	Recoveries of prior year unpaid obligations	6	3	3
1050	**Total unobligated balance**	**32**	**39**	**47**
Budgetary resources - Budget authority				
1100	Appropriations, discretionary	69	72	74
1160	**Appropriations, discretionary (total)**	**69**	**72**	**74**
1700	Collected - Offsetting collections	104	97	99
1710	Offsetting collections transferred to other accounts (14-1700)[2/]	-6	-	-
1750	**Offsetting collections, discretionary (total)**	**98**	**97**	**99**
1900	**Total budget authority**	**167**	**169**	**173**
1930	**Total budgetary resources available**	**199**	**208**	**220**
1941	**Unexpired unobligated balance, end of year**	**36**	**44**	**43**

Program and Financing (continued)

(dollars in millions)

Treasury Account ID: 14-1917		FY 2014	FY 2015	FY 2016
Change in obligated balance - Unpaid obligations				
3000	Unpaid obligations, brought forward Oct. 1	106	110	60
3010	Obligations incurred, unexpired accounts	163	164	177
3020	Outlays (gross)	-153	-211	-162
3040	Recoveries of prior year unpaid obligations, unexpired	-6	-3	-3
3050	**Unpaid obligations, end of year**	**110**	**60**	**72**
Change in obligated balance - Uncollected payments				
3060	Uncollected pymts, Fed sources, brought forward Oct.1	-2	-2	-2
3090	**Uncollected pymts, Fed. sources, end of year**	**-2**	**-2**	**-2**
3100	Obligated balance, start of year	104	108	58
3200	**Obligated balance, end of year**	**108**	**58**	**70**
Budget authority and outlays, net				
4000	**Budget authority, gross**	**167**	**169**	**173**
4010	Outlays from new discretionary authority	86	114	117
4011	Outlays from discretionary balances	67	97	45
4020	**Outlays, gross (total)**	**153**	**211**	**162**
4033	Offsetting collections from non-Federal sources (Rental receipts, cost recovery fees, royalty-in-kind)	-104	-97	-99
4040	**Total offsets against gross budget authority and outlays**	**-104**	**-97**	**-99**
4070	Budget authority, net discretionary	63	72	74
4080	Outlays, net discretionary	49	114	63
4180	**Total budget authority, net discretionary**	**63**	**72**	**74**
4190	**Total outlays, net discretionary**	**49**	**114**	**63**
Unexpired unavailable Balance: Offsetting Collections				
5090	Unavailable balance, start of year	[5]	[5]	[5]
5091	Unavailable balance, end of year	5	5	5

[1/] An unobligated balance of $108 million was brought forward from BOEMRE. In accordance with the reorganization of the former Minerals Management Service, funds were transferred to BSEE (account 14-1700) and ONRR (account 14-0102). FY 2012 was first year of independent BOEM operations.

[2/] Appropriations language in 2012 and 2013 required BOEM to collect BSEE's inspection fees and then transfer them from BOEM to BSEE. Public Law 113-76 amended this language beginning in 2014 so that the fees will be collected in BSEE's Offshore Safety and Environmental Enforcement account.

Table 9: Budget Object Class (MAX Schedule O)

Object Classification
(dollars in millions)

Treasury Account ID: 14-1917		FY 2014	FY 2015	FY 2016
Direct Obligations				
11.1	Personnel Compensation: Full-time permanent	54	56	66
12.1	Civilian personnel benefits	15	15	17
21.0	Travel and transportation of persons	1	1	1
24.0	Printing and reproduction	1	1	1
25.2	Other services from non-Federal sources	76	76	76
26.0	Supplies and materials	1	1	1
31.0	Equipment	4	2	2
41.0	Grants, subsidies, and contributions	7	7	7
99.0	**Subtotal, direct obligations**	**159**	**159**	**171**
Reimbursable Obligations				
41.0	Grants, subsidies, and contributions	4	5	6
99.0	**Subtotal, reimbursable obligations**	**4**	**5**	**6**
99.9	**Total new obligations**	**163**	**164**	**177**

Table 10: Fixed Costs and Internal Realignments

Bureau of Ocean Energy Management

Justification of Fixed Costs and Internal Realignments

(Dollars In Thousands)

Fixed Cost Changes and Projections	2016 Change
Change in Number of Paid Days Amounts here reflect changes in pay associated with the change in the number of paid days between the 2015 and 2016. In years where there is no change in paid days, the salary impact will be zero.	+271
Pay Raise The change reflects the salary impact of programmed pay raise increases.	+858
Seasonal Federal Health Benefit Increase The change reflects expected increases in employer's share of Federal Health Benefit Plans.	-
Employer Contribution to FERS The change reflects the OMB A-11 directed increase of 0.5% in employer's contribution to the Federal Employee Retirement System.	+26
Departmental Working Capital Fund The change reflects expected increases in the charges for centrally billed Department services and other services through the Working Capital Fund. This includes an assessment for the Department's IT Transformation initiative. These charges are displayed in the Budget Justification for Department Management.	-544
Departmental Working Capital Fund ITT The change reflects the changes in the charges for centrally billed Department services through the Working Capital Fund.	-
Worker's Compensation Payments The adjustment is for changes in the costs of compensating injured employees and dependents of employees who suffer accidental deaths while on duty. Costs for 2016 will reimburse the Department of Labor, Federal Employees Compensation Fund, pursuant to 5 U.S.C. 8147(b) as amended by Public Law 94-273.	-85
Unemployment Compensation Payments The adjustment is for 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.	-
Rental Payments The adjustment is for changes in the costs payable to General Services Administration (GSA) and others resulting from changes in rates for office and non-office space as estimated by GSA, as well as the rental costs of other currently occupied space. These costs include building security; in the case of GSA space, these are paid to Department of Homeland Security (DHS). 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.	-640
O&M Increases from Moves out of GSA-Space into Bureau Space In accordance with space maximization efforts across the Federal Government, this adjustment captures the associated increase to baseline operations and maintenance requirements resulting from movement out of GSA or direct-leased (commercial) space and into Bureau-owned space. While the GSA portion of fixed costs will go down as a result of these moves, 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.	-

Internal Realignments and Non-Policy/Program Changes (Net-Zero)	**2016 Change**
Realignment of General Support Services (from GSS Activity) This transfer will eliminate the General Support Services (GSS) activity, which is a relic of the MSS legacy organization, and reallocate those dollars to other activities. The distribution of GSS funds across the activites below is based on the proportion of positions within each budget activity.	-15,002
Realignment of General Support Services (to Renewable Energy) This realignment will constitute an internal transfer within the base budget from general support and administrative services to the Renewable Energy activity, and the revised budget structure will be reflected in FY 2016 and thereafter. These funds are used to pay for general administrative expenses and overhead and are not associated with any FTE.	+1,217
Realignment of General Support Services (to Conventional Energy) This realignment will constitute an internal transfer within the base budget from general support and administrative services to the Conventional Energy activity, and the revised budget structure will be reflected in FY 2016 and thereafter. These funds are used to pay for general administrative expenses and overhead and are not associated with any FTE.	+7,349
Realignment of General Support Services (to Environmental Programs) This realignment will constitute an internal transfer within the base budget from general support and administrative services to the Environmental Programs activity, and the revised budget structure will be reflected in FY 2016 and thereafter. These funds are used to pay for general administrative expenses and overhead and are not associated with any	+4,166
Realignment of General Support Services (to Executive Direction) This realignment will constitute an internal transfer within the base budget from general support and administrative services to the Executive Direction activity, and the revised budget structure will be reflected in FY 2016 and thereafter. These funds are used to pay for general administrative expenses and overhead and are not associated with any FTE.	+2,270

Total, Fixed Costs and Related Changes in 2016	**-114**

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Renewable Energy

Table 11: Renewable Energy Budget Summary

		2014 Actual	2015 Enacted	Internal Transfers (+/-)	Fixed Costs (+/-)	Program Changes (+/-)	2016 Request	Change from 2015 (+/-)
Renewable Energy	($000)	23,656	23,104	+1,217	-10	-33	24,278	+1,174
	FTE	*47*	*47*				*47*	-

SUMMARY OF 2016 PROGRAM CHANGES

Program Changes from 2015	Amount ($000)	FTE
Programmatic Reduction	-33	
Total Program Changes	**-33**	**-**

The FY 2016 President's Budget request for BOEM's Renewable Energy budget activity is $24.3 million and 47 FTE, a net increase of +$1.2 million from the 2015 enacted level. This change is comprised of an internal transfer of +$1.2 million, a decrease in fixed costs of $10,000, and the following:

Programmatic Reduction (-$33,000; 0 FTE). In order to support BOEM's highest priority needs in FY 2016, the Bureau proposes a general reduction in funding for renewable energy activities to be realized through administrative savings, such as increasing oversight and setting limitations on travel and training.

Program Performance Change. The FY 2016 budget request supports the accomplishment of the Department's strategic goals and the Renewable Energy Priority Goal. BOEM is making great strides in moving towards the goals it establishes for itself for the priority goal as well as the supporting performance measures. These accomplishments are discussed within this chapter, as well as the General Statement. The reduction identified above does not affect programmatic performance, as shown within the table at the end of this chapter.

PROGRAM OVERVIEW

The OCS has significant potential as a source of new domestic energy generation from renewable energy resources. Section 388 of the Energy Policy Act of 2005 gave 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. Section 388 also authorized the Secretary to permit OCS activities that repurpose facilities currently or previously used for activities authorized under the OCS Lands Act. Renewable energy and alternate use projects may include wind, wave energy, and ocean current projects, as well as projects that make alternative use of existing oil and gas platforms in Federal waters.

Offshore renewable energy wind farm

In 2009, President Obama and Secretary Salazar announced the promulgation of BOEM's renewable energy regulations. These regulations established a framework for the Renewable Energy Program's planning, leasing and operations authorization processes that would allow for orderly, safe and environmentally responsible OCS renewable energy development and provide for a fair return for use of OCS lands. Also in 2009, the MMS and the FERC signed a memorandum of understanding that provided for joint regulation of potential OCS wave and ocean current projects. Following the reorganization of MMS, the Renewable Energy Program within BOEM continues to support these activities as part of the ongoing MOU. The agreement recognizes BOEM as having exclusive jurisdiction with regard to production, transportation, or transmission of energy from non-hydrokinetic renewable energy projects on the OCS as well as issuing leases, easements, and rights-of-way for hydrokinetic projects. According to the terms of the agreement, FERC has exclusive jurisdiction to issue licenses and exemptions for OCS hydrokinetic projects. BOEM and FERC will continue to work together in the coming years to regulate potential OCS wave and ocean current projects.

Since the regulations were put in place, BOEM has worked diligently to support the Administration's goal of promoting renewable energy development and respond to the rapidly growing state interests in pursuing offshore wind and wave development. To date, BOEM has issued seven commercial wind energy leases offshore (Massachusetts, Delaware, Rhode Island,

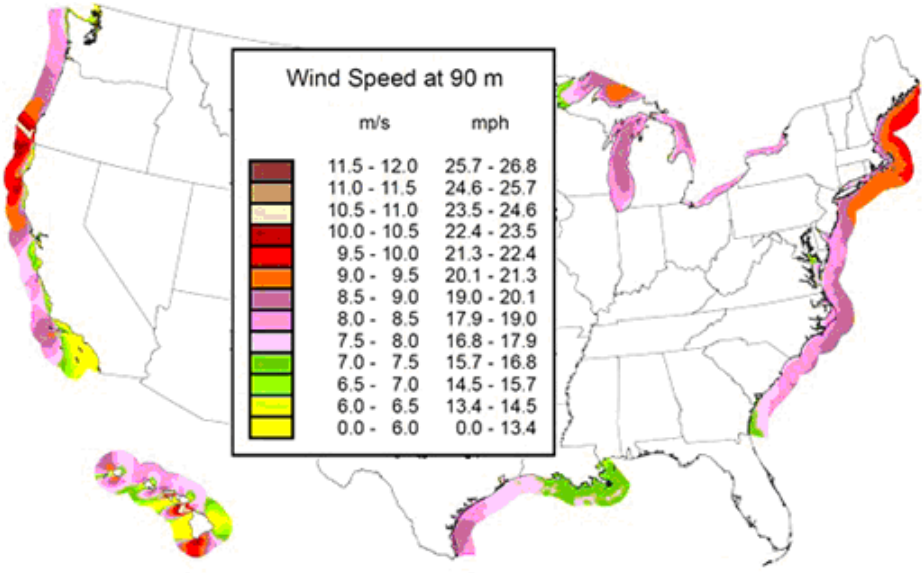
Virginia, and Maryland); conducted three competitive wind energy lease sales for areas offshore Rhode Island, Massachusetts, Virginia, and Maryland; and approved the Construction and Operations Plan for the Cape Wind project offshore Massachusetts. Additionally, BOEM has initiated auction planning for areas offshore New Jersey and Massachusetts, and is in the planning stages for areas offshore North Carolina, South Carolina, and New York. In June 2014, BOEM issued the first OCS lease for marine hydrokinetic technology testing offshore Florida, and in November 2014, BOEM offered its first transmission right-of-way grant offshore Rhode Island. On the West Coast, BOEM has established renewable energy task forces to consider areas offshore Oregon and Hawaii. BOEM is currently processing two unsolicited lease requests offshore Oregon: one commercial lease for an offshore wind demonstration project for floating turbines, and one research lease for a marine hydrokinetic technology testing facility.

In the foreseeable future, BOEM anticipates development of renewable energy on the OCS from three general sources: offshore wind, ocean waves, and ocean currents.

1. *Offshore Wind Energy*. Offshore wind turbines are being used in a number of countries to harness the energy of the moving air over the oceans and convert it to electricity. Offshore winds tend to flow at higher sustained speeds than onshore winds, making turbines more efficient than their onshore counterparts. As seen in Figure 2, offshore wind speeds along the Atlantic and Pacific coasts indicate those areas as having the greatest technical potential for offshore wind energy production.

Figure 2: Offshore Wind Speeds in Coastal Areas

Source: National Renewable Energy Laboratory



In 2011, the Department of the Interior and the Department of Energy produced the report "A National Offshore Wind Strategy: Creating an Offshore Wind Energy Industry in the United States." The report announced a National Offshore Wind Strategy with a scenario for achieving 54 gigawatts of deployed offshore wind generating capacity by 2030 and an interim scenario of ten gigawatts of wind capacity in the OCS and Great Lakes by 2020 (potential renewable energy development in the Great Lakes is under the jurisdiction of the adjacent states). Winds offshore the Atlantic Coast alone have the technical potential to produce an estimated 1,000 gigawatts of energy, the equivalent of what could be used to power 225 million to 300 million average U.S. homes. Wind offshore the Hawaiian Islands is considered to be a promising option in Hawaii, which has the highest electricity costs in America (Hawaii is almost exclusively dependent on oil/gas transported to the islands aboard ships and barges). Additionally, developers are proposing to use areas offshore Oregon and Virginia to demonstrate new technologies to support deepwater wind energy generation. The strategy seeks to harness a small portion of this potential by driving down the cost of offshore wind production to make it competitive with other electricity generating sources.

2. *Ocean Wave Energy (Hydrokinetic).* There is tremendous energy in ocean waves, and technology and project developers are evaluating existing and developing wave technology to garner this energy. Wave power devices extract energy directly from the surface motion of ocean waves. A variety of technologies such as point absorbers, attenuators, overtopping devices, and terminators, suitable for deployment on the OCS, have been proposed to garner that energy. Some of the more promising designs are undergoing demonstration testing. Two sites on the West Coast, one in California and one in Oregon, have received funding from the Department of Energy and are being evaluated as potential locations for a national wave energy testing facility. BOEM is currently evaluating a research lease request for the Oregon proposal.

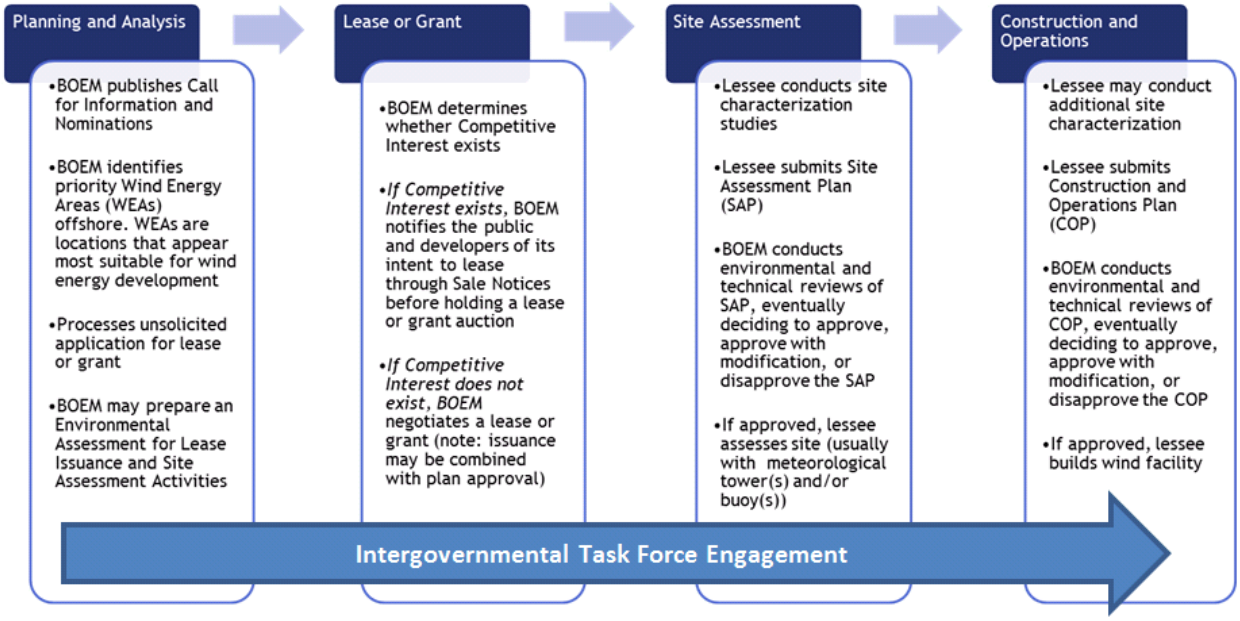
3. *Ocean Current Energy (Hydrokinetic).* Ocean currents also contain an enormous amount of energy that can be garnered and converted to a usable form. Some of the ocean currents on the OCS are the Gulf Stream, Florida Straits Current, and California Current. At this time, the area with the greatest potential for ocean current energy development is the Florida coast as a result of the relatively close proximity of the Gulf Stream and Florida Straits Current to the coast and the significant amount of energy potential they provide. Technology is still at an early stage of development, but it is likely that submerged water turbines similar to wind turbines may be employed to extract energy from ocean currents in the future. In June 2014, BOEM issued a lease focused on hydrokinetic technology testing offshore Florida. In December 2014, BOEM established the Florida Intergovernmental Renewable Energy Task Force to facilitate coordination

among Federal, state, local and tribal government organizations for potential renewable energy leasing efforts in Federal waters offshore Florida's Atlantic Coast.

RENEWABLE ENERGY AUTHORIZATION PROCESS

Current renewable energy activities on the OCS are focused on wind projects. Under the renewable energy regulations, the identification of Wind Energy Areas, the issuance of leases and subsequent review of energy development activities on the OCS is a staged decision-making process. BOEM's renewable energy leasing process is comprised of four distinct phases: (1) planning and analysis; (2) lease, right-of-way grant, or right-of-use and easement grant issuance; (3) site assessment; and (4) construction and operations. BOEM involves other Federal agencies (e.g., Department of Defense, U.S. Fish and Wildlife Service, U.S. Coast Guard, National Oceanic and Atmospheric Administration, etc.) and state, local and tribal governments throughout all phases of renewable energy development. Figure 3 below outlines BOEM's process for authorizing wind energy leases.

Figure 3: Phases of BOEM's Offshore Wind Energy Authorization Process



The Planning and Analysis phase seeks to identify suitable areas for wind energy leasing consideration through collaborative, consultative, and analytical processes that engage stakeholders, tribes, and state and Federal agencies. In this phase, BOEM conducts environmental compliance reviews and consultations with tribes, states, and natural resource agencies.

The Lease and Grant phase results in the issuance of a commercial wind energy lease or right-of-way grant for energy transmission projects. Right-of-way grants authorize the holder to install on the OCS cables, pipelines and associated facilities that involve the transportation or transmission of electricity or other energy products from renewable energy projects. Leases and grants may be issued either through a competitive or noncompetitive process. A commercial lease gives the lessee the exclusive right to subsequently seek BOEM approval for the development of the leasehold. The lease does not provide the lessee the right to construct any facilities; rather, the lease provides the right to use the leased area to 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.

The Site Assessment phase includes the submission of a site assessment plan, which contains the lessee's detailed proposal for the construction of a meteorological tower and/or the installation of meteorological buoys on the leasehold to conduct site assessment studies. The lessee's site assessment plan must be approved by BOEM before it conducts these "site assessment" activities on the leasehold. BOEM may approve, approve with modification, or disapprove a lessee's site assessment plan. It is during this phase that the lessee would conduct site characterization surveys to support the development of future plans.

The Construction and Operations phase consists of the submission of a construction and operations plan (COP), a detailed plan for the construction and operation of a wind energy project on the lease. BOEM requires a general activities plan, similar to a construction operations plan, for facilities constructed under a limited 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 regulations.

BOEM has established 13 intergovernmental task forces to enable representatives from state, local, and tribal governments and other Federal agencies to provide meaningful input into the OCS renewable energy planning process.

PLANNING AND ANALYSIS

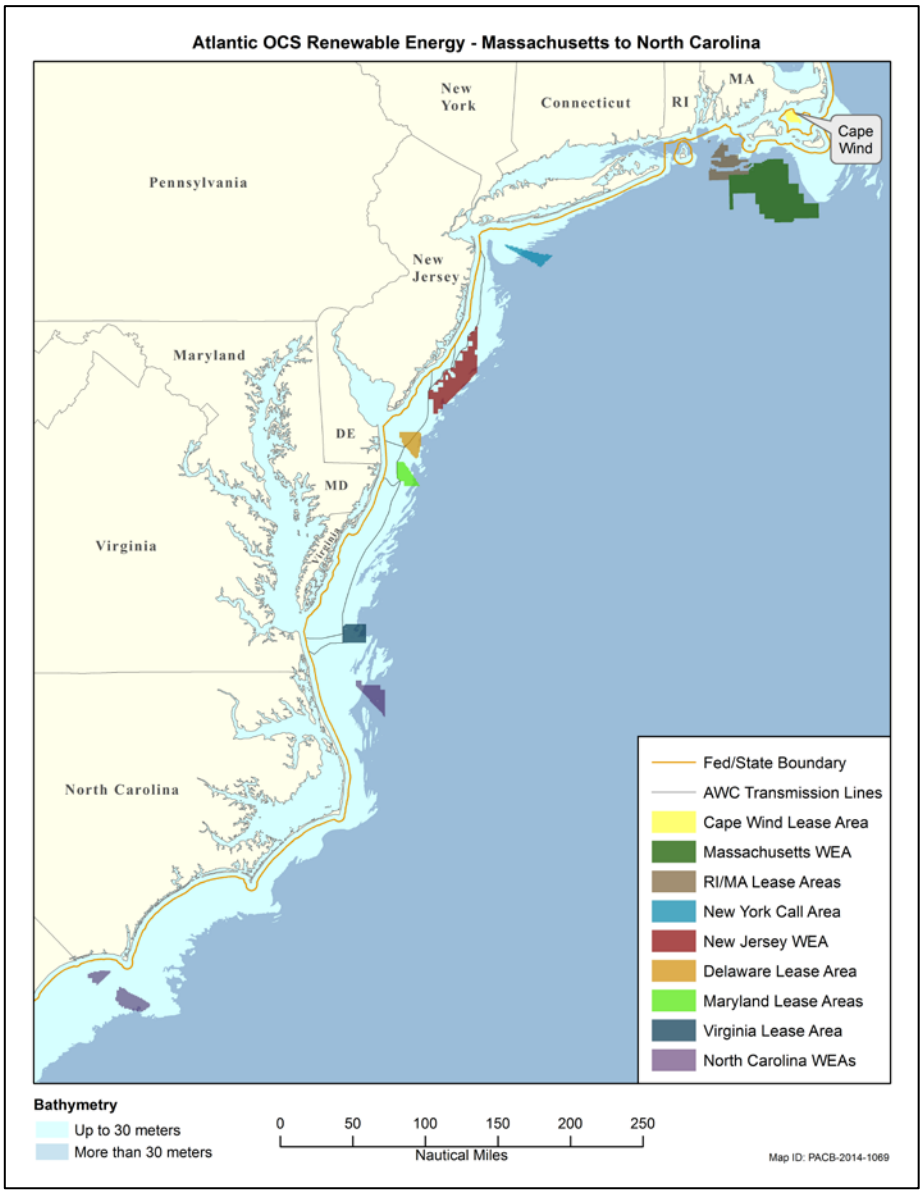
To help inform BOEM's planning and program decision-making processes, BOEM has established intergovernmental task forces in states where the Governor contacted BOEM to express interest in development of offshore renewable energy or at BOEM's suggestion after receipt of an unsolicited proposal offshore that state. Each task force collects and shares information for all stakeholders, including BOEM, for use in its decision-making process. BOEM intergovernmental task forces have been

established in Maine, Massachusetts, Rhode Island, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Oregon, Hawaii, and most recently in Florida. California has agreed to collaborate with BOEM to evaluate the potential benefits and impacts of renewable ocean energy projects off the West Coast. Task forces have been extremely productive and have helped identify areas of significant promise and interest for offshore development, in addition to providing early identification and steps toward resolution of potential conflicts.

- **Identification of Wind Energy Areas**

A key element of the Planning and Analysis stage is the identification and refinement of Wind Energy Areas, which are areas on the OCS that appear to be particularly suitable for renewable energy development due to fewer potential multiple-use and environmental conflicts, such as conflicts from commercial vessel traffic or fisheries, and feeding or calving areas for endangered species. Through consultation with BOEM's intergovernmental task forces and its Call for Information and Nominations (Call) process, BOEM has identified Wind Energy Areas on the OCS offshore Massachusetts, Rhode Island, New Jersey, Delaware, Maryland, Virginia and North Carolina. In FY 2015, BOEM expects to identify an area offshore New York, and in FY 2016, BOEM anticipates identifying areas offshore South Carolina. The existing Wind Energy Areas and Call areas are shown in the following map.

Figure 4: Identified Wind Energy and Call Areas along the Atlantic Coast



LEASE AND GRANT ISSUANCE

As required by the Energy Policy Act of 2005, BOEM will issue a renewable energy lease or grant on a competitive basis unless it determines that no competitive interest exists in obtaining that lease or grant. To issue competitive renewable energy leases and grants, BOEM will hold an auction, and the lease or grant is awarded to the winning bidder. In contrast, the noncompetitive process takes the form of a negotiation between BOEM and the one developer. In either case, the developer must be qualified to hold an OCS lease or grant and submit and receive approval

of appropriate plans (or FERC license applications for marine hydrokinetic projects) prior to moving forward with its proposed activities. In order to be qualified, developers must demonstrate their technical and financial capability to construct, operate, maintain, and terminate/decommission the project.

- **Commercial Leasing on the Atlantic OCS**

As a result of collaboration and coordination with intergovernmental task forces and outreach efforts with relevant stakeholders, BOEM's Renewable Energy Program has made significant progress in its planning and leasing process to date. As of December 2014, BOEM has issued seven commercial wind leases, covering over 300,000 acres on the OCS. If fully developed, these leases could generate enough energy to power 4.8 million homes and support more than 20,000 construction and operations jobs.

On August 19, 2014, BOEM held a lease sale for the Wind Energy Area offshore Maryland. This area covers approximately 80,000 acres and is located about ten nautical miles from Ocean City, MD. The sale generated $8.7 million in winning bids for two leases.

During the remainder of FY 2015, BOEM anticipates issuing six additional commercial wind energy leases through the holding of two lease sales for areas offshore Massachusetts and New Jersey, and BOEM could potentially issue another four commercial leases during FY 2016.

Prior to issuing commercial wind energy leases, BOEM conducts a review of reasonably foreseeable impacts of associated site characterization surveys and subsequent site assessment activities in a Wind Energy Area. If BOEM reaches a Finding of No Significant Impact, then it may proceed with issuing leases competitively or non- competitively in that Wind Energy Area. For example, BOEM's environmental assessment for the Wind Energy Areas offshore New Jersey, Delaware, Maryland, and Virginia supported the issuance of leases offshore Delaware, Maryland and Virginia, and will allow for a lease sale for areas offshore New Jersey to occur in FY 2015. In FY 2014, BOEM completed a similar environmental assessment that supported a lease sale for areas offshore Massachusetts on January 29, 2015. In FY 2015, BOEM will publish an environmental assessment for lease issuance and site assessment activities for the North Carolina Wind Energy Areas.

When a site assessment plan is submitted, BOEM determines whether the environmental assessment for that Wind Energy Area adequately considers the environmental consequences of the activities proposed in the lessee's site assessment plan. If BOEM determines that the analysis in the environmental assessment adequately considers these consequences, then no further NEPA analysis would be required before the site assessment plan is approved. If, on the other hand, BOEM determines that the analysis in the environmental assessment is inadequate

for that purpose, BOEM would prepare an additional NEPA analysis before approving the site assessment plan. If and when a lessee is prepared to propose wind energy generation on its lease, it will submit a COP and BOEM would prepare a separate site- and project-specific NEPA analysis. This may take the form of an environmental assessment or environmental impact statement and would provide additional opportunities for public involvement.

- **Limited and Research Leasing on the Atlantic OCS**

In November 2007, the former MMS established an interim policy as a measure to jumpstart resource data collection and technology testing activities on the OCS prior to the promulgation of final regulations. BOEM's policy allows for limited leasing, resource data collection, and technology testing activities. A limited lease is a lease with terms and conditions which allows a person to conduct activities on the OCS that support the production of energy but do not result in the production of electricity or other energy product for sale, distribution, or other commercial use exceeding a limit specified in the lease. These limited leases have a five-year term, require fee payment and provide no subsequent rights to commercial development. To date, BOEM has issued five such limited leases, three offshore New Jersey, one offshore Delaware, and one offshore Florida. BOEM is currently processing a request for lease offshore Georgia. As a requirement of these limited leases, the lessee must submit for BOEM review a project plan that provides details on fabrication methods, engineering specifications, and safety systems for any facility to be installed in Federal waters. The following describes the status of BOEM's limited leases.

- **New Jersey:** Two Interim Policy lessees deployed meteorological buoys off the coast of New Jersey, but those leases expired in November 2014. The other one Interim Policy lease issued for New Jersey was relinquished in 2012. (Note: there was a fourth lease offered but never executed.)

- **Delaware:** BOEM issued one Interim Policy lease for Delaware; however, this lease was relinquished in 2012.

- **Florida:** In August 2011, Florida Atlantic University submitted its final application to BOEM for an Interim Policy lease to conduct marine hydrokinetic technology testing. In April 2012, BOEM published an environmental assessment for public review that considers the environmental impacts of the University's proposed project, which would entail the installation and testing of submerged turbine generators. To address the comments received, BOEM published a revised environmental assessment in August 2013, and as a result of the analysis in the revised environmental assessment, issued a Finding of No Significant Impact for the project. In June 2014, BOEM issued the Interim Policy lease. The next step is for Florida Atlantic University to submit a project

plan.

- **Georgia:** On April 7, 2011, Southern Company submitted an Interim Policy lease application for the leasing of a three-block area on the OCS offshore Georgia for offshore renewable energy resource assessment activities. BOEM published a notice of intent to prepare an environmental assessment in the *Federal Register* in the first quarter of FY 2013. In FY 2014, BOEM published the environmental assessment for public review and initiated associated consultations. BOEM is currently considering the public comments in determining whether to issue a Finding of No Significant Impact or conduct additional NEPA analysis prior to offering a lease.

BOEM also has the authority to issue leases to other Federal agencies and to states for the purpose of conducting renewable energy research activities that support the future production, transportation, or transmission of renewable energy. In FY 2014 BOEM offered two such research leases offshore Virginia.

- **Virginia:** During FY 2012, BOEM received an unsolicited application for a research lease from the Virginia Department of Mines, Minerals and Energy, proposing to install meteorological towers to facilitate wind resource assessment within the Virginia Wind Energy Area. Research leases support the future production, transportation, or transmission of renewable energy and are only available for state and Federal Government entities, require no fees and have a negotiated lease term that could be unlimited. In FY 2013, BOEM sought public input on the research proposal and its potential environmental consequences and also determined, based on the responses, that there was no competitive interest in the project. Later that year, BOEM received a second application, also from Virginia, requesting another lease area outside of the western boundary of the Virginia Wind Energy Area to install two six-megawatt, grid-connected wind turbines as a demonstration project. In FY 2014, BOEM determined there was no competitive interest in the area where the Commonwealth proposed to conduct activities. The two determinations of no competitive interest cleared the way for BOEM to proceed with the noncompetitive research lease process for both of the state-proposed projects. Later in FY 2014, BOEM offered two leases to the Virginia Department of Mines, Minerals and Energy. Negotiations are ongoing, but BOEM expects to issue both leases in FY 2015.

  For one of the proposed leases, the Virginia Department of Mines, Minerals and Energy submitted a research activities plan for the Virginia Offshore Wind Technology Assessment Project. The plan details the proposed location and schedule and includes resource and assessment information and data collected to date in support of the planned design, construction, installation operation and maintenance of two 6 megawatt turbines

offshore Virginia. The plan also provides information related to the installation of approximately 27 nautical miles of submarine transmission cable as well as other ancillary facilities and improvements to terrestrial substations required to support the project. On December 2, 2014, BOEM published an environmental assessment for public comment. The environmental assessment analyzes potential impacts of approving the research activities plan. Consultations under the Endangered Species Act, National Historic Preservation Act, and Magnuson-Stevens Fishery Conservation and Management Act are ongoing.

- **Right-of-Way Grants on the Atlantic OCS**

BOEM has the authority to issue right-of-way grants that allow developers to build electricity transmission lines that connect renewable energy installations to the onshore electrical grid. In November 2014, after adopting the U.S. Army Corps of Engineers' environmental assessment, the Bureau offered a right-of-way grant for the Block Island Transmission System offshore Rhode Island. The cable project would support a wind project to be located in Rhode Island State waters, but whose transmission lines must cross the OCS. BOEM executed the grant in December 2014.

- **Commercial Leasing in the Pacific Region**

Full-scale prototype of WindFloat device.

In the Pacific Region, BOEM has received interest in commercial leases for wind and wave projects. In 2013, BOEM received a commercial wind lease request from Principle Power Incorporated for the WindFloat Pacific project offshore Coos Bay, Oregon. BOEM has determined there is no competitive interest in the requested area and is moving forward with the noncompetitive lease process. As of January 2015, BOEM is awaiting the submittal of the COP from Principle Power Incorporated and will move forward with lease issuance and plan approval concurrently. The COP is expected in summer 2015.

In January 2013, BOEM received two draft commercial wind lease requests for an area on the OCS offshore the island of Oahu in Hawaii. Both lease requests are considered draft requests because the acquisition fee was never paid. In October 2014, BOEM received a revised draft lease request from a potential wind developer without a specific lease location included. Currently, the Department of Defense (DOD) and the developer are coordinating to finalize a specific area offshore Oahu to include with the lease request. Once an area is designated in the lease request, BOEM will initiate the

leasing process with a Request for Interest.

BOEM has received increased interest from potential wind developers offshore California. No unsolicited lease requests have been submitted at this time. The California State Lands Commission (SLC) has approached BOEM to discuss the formation of a BOEM/California intergovernmental renewable energy task force. The SLC is currently working with the California Natural Resources Agency to draft a letter for the Governor to submit to BOEM requesting a task force. California has indicated the request from the Governor will be finalized and sent to BOEM in early 2015.

Prior to issuing commercial wind energy leases, BOEM conducts environmental reviews of the lease areas. When Principle Power Incorporated submits their COP, BOEM will conduct an environmental review of the WindFloat Pacific project prior to making a decision on plan approval and lease issuance. BOEM expects to make a decision on lease issuance and plan approval in FY 2016. BOEM may also conduct an environmental review for lease issuance offshore Oahu, depending on the DOD and developer coordination results.

- **Research Leasing in the Pacific Region**

In November 2013, BOEM received a research lease request from the Northwest National Marine Renewable Energy Center, the research center at Oregon State University, for the Pacific Marine Energy Center-South Energy Test Site project. The project is a grid-connected wave energy test site proposed on the OCS offshore Newport, Oregon. BOEM has determined there is no competitive interest in the requested area and is moving forward with the noncompetitive lease process. Since the project is a wave energy test facility requiring a FERC license, BOEM is a cooperating agency with FERC on the environmental review of the proposal prior to making a leasing decision in FY 2016. BOEM is currently an active member of the Pacific Marine Energy Center-South Energy Test Site Collaborative Working Group, a group of Federal, state, local representatives and stakeholders brought together to assess information needs and facilitate project review and permitting. FERC completed formal scoping in July 2014 and BOEM is continuing to cooperate with FERC as an environmental assessment is prepared.

- **Right-of-Way Grants in the Pacific Region**

BOEM expects to receive requests for right-of-way grants in the future, including one to allow transmission through Federal waters between the islands of Oahu and Maui in Hawaii. One component of the state's Hawaii Clean Energy Initiative is an inter-island cable to transmit power from future energy-producing installations on various islands to Oahu, the main demand center. A portion of this cable will be on the OCS. BOEM is working with Hawaii and the Department of Energy on programmatic issues associated with the inter-island cable as part of a

programmatic environmental impact statement on Hawaii wind energy. BOEM anticipates receiving a right-of-way/right-of-use grant request for a Hawaii inter-island cable as early as FY 2015, with a final decision on the grant request as soon as FY 2017.

BOEM will initiate the right-of-way grant process upon receiving a request for an inter-island cable right of way. BOEM will make a competitive interest determination and conduct the appropriate environmental review prior to making a decision on the grant request.

- **Lease or Grant Payments**

As required by the Energy Policy Act of 2005, BOEM has established payment terms to ensure fair return to the U.S. Treasury for the rights conveyed by OCS renewable energy leases and grants. All lessees and grantees must pay rent, and lessees must pay an operating fee in lieu of rent when commercial electrical generation commences. The operating fee is based on the installed capacity of the wind turbine generators. In FY 2014, $1.7 million in rent payments were collected on OCS renewable energy leases. BOEM estimates annual rent payments of more than $4 million in both FY 2015 and FY 2016, in addition to bonus bids that may be collected from lease sales held in those years. To date, DOI has collected close to $13.4 million in bonus bids for the renewable energy leases it has issued. Actual data from FY 2014 and earlier is generated by the Office of Natural Resources Revenue (ONRR) and can be found on their website (http://statistics.onrr.gov/ReportTool.aspx).

- **Coordination and Collaboration**

In addition to the establishment of BOEM intergovernmental task forces, the Department also established memoranda of understanding relevant to offshore renewable energy coordination with the Department of Energy, the FERC, the Bureau of Safety and Environmental Enforcement, the U.S. Fish and Wildlife Service, the Department of Defense, the U.S. Coast Guard, and the NOAA. BOEM and FERC responsibilities intersect for marine hydrokinetic projects, with BOEM issuing commercial marine hydrokinetic leases and FERC issuing licenses for construction and operation of these projects. The agencies have worked together to achieve efficiencies for both the agencies and potential applicants. Another coordination mechanism BOEM is leading is the BOEM Ocean Action Team to coordinate Federal, state and local permitting processes for the WindFloat Pacific (offshore Coos Bay, OR) in an effort to ensure that the permitting decisions can be made efficiently and in a coordinated fashion to allow the project to meet the terms of its Department of Energy (DOE) grant. This grant is contingent on the project being operational by the end of 2017.

- **Regulatory Authority**

The Secretarial Order that created BOEM and BSEE (S.O. 3299A2) did not transfer the safety and environmental enforcement functions for renewable energy at the time of the reorganization, delaying that transfer until such time as the Assistant Secretary for Land and Minerals Management "determines that an increase in activity justifies transferring the inspection and enforcement functions" to BSEE. With construction of initial projects expected to commence in 2015, BOEM and BSEE are working together to plan and implement this transition. A BSEE/BOEM transition team is managing the effort to re-designate the renewable energy regulations in 30 Code of Federal Regulations (CFR) Part 585 between the two agencies by a direct final rule. The transition team is also developing a high-level flowchart to reflect the interactions and division of responsibilities between BSEE and BOEM on renewable energy projects after the re-designation. After the re-designation, BOEM and BSEE will revise the renewable energy regulations for OCS operations and update existing interagency MOUs accordingly. As part of the transition, BOEM and BSEE collaborated in the review of the Facility Design Report and Fabrication and Installation Report for the Cape Wind project.

RESEARCH, DATA COLLECTION AND STAKEHOLDER ENGAGEMENT

BOEM's Renewable Energy Program is supported by a substantial investment in research, data collection and stakeholder engagement. The areas that are appropriate for renewable energy development have likely never been studied for such development; in some cases, there is a dearth of information about the physical and biological environment. BOEM has worked closely with a broad spectrum of agencies, universities and stakeholders to identify the critical data gaps and independently or through partnerships sought to fund studies through its Environmental Studies Program. To benefit from lessons learned, BOEM has also reached out to European countries with more mature renewable energy programs.

The continued need to pursue information to ensure access to the OCS for renewable energy development and to ensure that such development is environmentally appropriate is a high priority for BOEM. BOEM's Environmental Studies Program has broadened its research since the Energy Policy Act of 2005 gave BOEM the authority to develop renewable energy resources on the OCS. This research augments what had been done previously for offshore oil and gas and marine minerals, but with an extra interest in renewable energy applications. To ensure full environmental review, BOEM has spent more than $43 million since FY 2007 on environmental studies that address renewable energy issues, either solely or in addition to other OCS resource activities. Efforts funded through BOEM's Environmental Studies Program are described in more detail in the Environmental Programs activity.

➢ Data Collection through Cooperative and Interagency Agreements

In accordance with the OCS Lands Act, BOEM is working 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 2014, BOEM continued or executed the following cooperative agreements with state partners, through matching funds, to inform future planning and decision-making:

- The Commonwealth of Virginia for continuing support to analyze baseline information about the surface and near surface geology of the Virginia Wind Energy Area and to produce fine-scale maps of important commercial and recreational fishing areas in and around the Virginia Wind Energy Area;
- The Commonwealth of Massachusetts for continuing support to collect baseline information on marine mammals, sea turtles, and birds in the Massachusetts and Rhode Island/ Massachusetts Wind Energy Areas;
- The University of Rhode Island to support the collection of information about lobsters in the Rhode Island/ Massachusetts and Massachusetts Wind Energy Areas;
- The University of North Carolina - Chapel Hill for fishing stakeholder meetings to identify access routes and fishing grounds in the three North Carolina Call Areas and hard bottom habitat surveys in Call Area Wilmington East to identify artificial reefs and archaeological sites;
- The State of South Carolina through Coastal Carolina University for geophysical mapping and identification of paleolandscapes and historic shipwrecks offshore South Carolina in and near potential wind energy areas; and
- The State of New York may enter into a cooperative agreement for collection of information about the migration of North Atlantic Right Whales in the New York Bight in FY 2015.

➢ Renewable Energy Workshops and Conferences

Stakeholder engagement is integral to BOEM's renewable energy planning and leasing efforts. Following are some highlights of recent and upcoming outreach events.

- **Workshop on Offshore Wind Energy Standards and Guidelines: Metocean-Sensitive Aspects of Design and Operations in the US.** In June 2014, BOEM and DOE co-sponsored a workshop in Northern Virginia attended by offshore wind industry representatives to discuss the current status of metocean design standards and methodologies. BOEM staff members gave presentations on current and proposed rulemaking, and experts from industry and universities discussed gaps in knowledge and

new modeling techniques, focusing on hurricane hazards unique to the Eastern Seaboard.

- **Renewable Energy Atlantic Tribal Conference.** In autumn 2015, the Bureau will host a Renewable Energy Atlantic Tribal Conference focusing on its activities on the Atlantic Outer Continental Shelf. The conference will provide a tribal-only forum for learning about BOEM's renewable energy program activities in the Atlantic Region. The conference also will allow for tribal input and discussion on BOEM's consultation practices under the Department of the Interior Tribal Consultation Policy. The discussions and feedback received at the conference will be incorporated into BOEM's decision-making for various programs, as well as BOEM's Atlantic Renewable Energy Tribal Consultation Plan.

As part of its outreach efforts, BOEM will be hosting a tribal conference during 2015 to provide a forum for tribes to learn about BOEM's renewable energy program activities in the Atlantic Region.

- **Lighting, Marking, and Paint Color Meeting.** The Bureau is planning to hold a meeting of Federal agencies in FY 2015 to consolidate and update existing guidance for offshore wind developers on the lighting, marking, and paint color for offshore wind facilities. The goal is to provide developers and Federal agencies with a standardized set of requirements that will result in greater efficiencies for the developers and reviewers of construction and operations plans through agreed to requirements.

- **Pacific Region Workshops.** BOEM held a public workshop in California in FY 2014. This workshop was conducted under a contract with the Department of Energy's National Renewable Energy Laboratory and provided information on technologies that are currently being developed and are specific to the Region (floating wind turbines and marine and hydrokinetic technology). The workshop provided California stakeholders knowledge of the status of offshore renewable energy technologies and sparked interest in forming a BOEM/state task force to plan for eventual deployment of offshore renewable energy facilities off California. The Region also conducts numerous stakeholder engagements on a project specific basis with targeted stakeholders such as commercial fishermen and other state and Federal agencies with permitting and consultation responsibilities.

- **Fishing/Offshore Wind Mitigation Measures Development Workshops.** BOEM is developing best management practices and mitigation measures for analysis and decision-making under the National Environmental Policy Act associated with wind energy development and activities on the OCS as they relate to interaction with commercial and recreational fishing practices. To address future conflicts between fishing and wind

projects on the OCS, BOEM sought input from commercial and recreational fishing industries, as well as fisheries management agencies and scientists, relative to proposed offshore wind energy development. In order to effectively engage the fishing industry and its many fisheries and technologies, as well as wind energy developers, eight stakeholder workshops were held from October 2012 to April 2014 from Maine through North Carolina to allow for dialogue among the parties. The Fishing/Offshore Wind Mitigation Measures Development Workshops contract resulted in a final report that was posted to BOEM's website in July 2014.

- **Guidelines for Developers and Applicants**

In FY 2013, BOEM posted guidelines for providing survey information on avian resources, spatial data, benthic habitats, fish, marine mammals, and sea turtles on the Atlantic OCS. The purpose is to clarify and provide a general understanding of the information that BOEM requires in order to adequately address the impacts of offshore renewable energy projects to the environment. The guidelines were developed with input from FWS, NOAA and the Marine Mammal Commission. The guidelines for avian and benthic habitat surveys were updated in November 2013.

In October 2014, BOEM revised its "Guidelines for Information Requirements for a Renewable Energy Construction and Operations Plan (COP)." This document provides updated guidance on information requirements for a COP for renewable energy activities related to a commercial lease on the Outer Continental Shelf. The updated guidelines replace those originally published in December 2010 and address project-specific information, supporting data requirements and information to provide the basis for the analysis of the environmental and socioeconomic effects and operational integrity of proposed construction, operation, and decommissioning activities and to assist BOEM in complying with the NEPA and other relevant laws when reviewing a COP. A lessee's COP must demonstrate that the project is being conducted in a manner that conforms to responsible offshore development per 30 CFR 585.621; this includes the demonstration of best management practices.

In FY 2015, BOEM plans to further update its "Guidelines for Providing Geological and Geophysical, Hazards, and Archaeological Information" and publish guidance on information requirements for site assessment plans.

- **Technology Assessment and Research Studies**

Recent projects continue to build on the lessons learned from developers of commercial wind projects offshore in Europe while focusing on the unique operating environment of the U.S. Outer Continental Shelf. International structural design standards have been reviewed and

research gaps have been identified that include 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. Much is known about the meteorological and oceanographic conditions in the Gulf of Mexico, but this data needs to be obtained in both the Atlantic and Pacific regions to ensure that these new structures are designed to the appropriate parameters. There are six studies currently being performed under this program. Two studies were funded for FY 2013; Design of Wind Turbine Monopiles for Lateral Loads, and Fatigue Design Methodologies Applicable to Fixed and Floating Offshore Wind Turbines. The four studies awarded in FY 2014 include: Offshore Wind Submarine Cable Spacing Guidelines, Offshore Substation Design Standards Model Testing to Evaluate Degradation of Axial Capacity from Cyclic Loading, and Development Met-Ocean Data and Hazard Curves for Wind Energy Areas off the Atlantic seaboard. All six projects will continue through FY 2015.

- **Outlook on Renewable Energy**

Through detailed planning and analysis and partnerships with other governmental agencies and stakeholders, BOEM has advanced the Renewable Energy Program nationwide and will continue to do so in 2016. Offshore wind leasing activities, including commercial leases, research leases and right-of-way grants, have increased, contributing to meeting the Administration's goal of promoting clean energy development. BOEM continues to demonstrate science-informed decision-making by initiating and funding research studies. The studies directly benefit BOEM, other energy and mineral programs, renewable energy stakeholders and individual states. State interest in pursuing offshore renewable energy development is readily apparent in the increased involvement by the states through BOEM's intergovernmental renewable energy task forces. BOEM anticipates the Renewable Energy Program will continue to grow and is prepared to support this valuable effort in response to the Nation's energy needs.

2016 PROGRAM PERFORMANCE

The FY 2016 request provides the resources needed to carry out the mission of BOEM, including renewable, conventional, and environmental program activities, and is in support of the FY 2014-2018 DOI Strategic Plan. The FY 2014-2018 DOI Strategic Plan is the foundational structure for the description of BOEM program performance measurement and planning for the FY 2016 President's Budget. The BOEM budget and program plans for FY 2016 are fully consistent with the goals, outcomes, and measures described within the DOI Strategic Plan. The following page contains the BOEM Program Performance Overview table. Further details for achieving the Strategic Plan's goals are contained within the DOI APP&R.

Table 12: Program Performance Overview Table

Mission Area 3, Goal 1: Secure America's Energy Resources							
Strategic Objective Metrics **Strategic Plan Measure / Efficiency or other Bureau-Specific Measure**	**2011 Actual**	**2012 Actual**	**2013 Actual**	**2014 Actual**	**2015 Plan**	**2016 Pres. Budget Request**
Strategic Plan Measures						
Number of megawatts of approved capacity authorized on public land and the OCS for renewable energy development while ensuring full environmental review (cumulative)	468 (cum)	468 (cum)	468 (cum)	468 (cum)	498 (cum)	538 (cum)
Comments: This measure is tracked as a part of the Department of Interior Renewable Energy Priority Goal. The actuals and planned targets displayed within the table reflect BOEM's contribution toward the Department-wide Priority Goal.						
Contributing Programs: Office of Renewable Energy Programs						
Efficiency or other Bureau-Specific Measures						
Number of offshore renewable energy leasing or ROW/RUE grant processes initiated (i.e., first public notice issued)	4	4	5	2	2	3
Comments: This metric quantifies the number of leasing processes initiated for Renewable Energy development. Leasing processes are initiated by publishing either Call/Request for Information or Call for Nominations in the Federal Register.						
Contributing Programs: Office of Renewable Energy Programs						
Number of limited leases issued for offshore renewable energy testing and data collection, including §238 research leases	0	0	0	1	3	1
Comments: A limited lease is a lease with terms and conditions which allow the lessee to conduct activities on the OCS that support the production of energy but without actually producing energy for sale, distribution, or other commercial use.						
Contributing Programs: Office of Renewable Energy Programs						
Number of commercial leases issued for offshore renewable energy generation	1	0	3	1	8	5
Comments: A commercial lease is a lease with terms and conditions that allow a person or entity to conduct commercial activities.						
Contributing Programs: Office of Renewable Energy Programs						
Number of right-of-way/right-of-use and easement grants issued for offshore renewable energy transmission	0	0	0	0	1	0
Comments: This metric quantifies the number of competitive or noncompetitive right-of-way (ROW)/ right-of-use (RUE) grants for transmission of renewable energy from the OCS.						
Contributing Programs: Office of Renewable Energy Programs						
Number of offshore NEPA documents (EIS/EAs) finalized for Renewable Energy	1	1	4	5	8	8
Comments: Comprehensive environmental analyses are an essential but lengthy part of the overall OCS lease planning process.						
Contributing Programs: Office of Renewable Energy Programs						

2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Conventional Energy

Table 13: Conventional Energy Budget Summary

		2014 Actual	2015 Enacted	Internal Transfers (+/-)	Fixed Costs (+/-)	Program Changes (+/-)	2016 Request	Change from 2015 (+/-)
Conventional Energy	($000)	49,441	49,633	+7,349	-53	+2,940	59,869	+10,236
[TIMS]		[5,925]	[5,979]		-	[+7,965]	[13,944]	[+7,965]
	FTE	*255*	*268*			*+17*	*285*	*+17*

SUMMARY OF 2016 PROGRAM CHANGES

Program Changes from 2015	Amount ($000)	FTE
Risk Management Program	+2,500	+13
Staffing for Increased OCS Activity	+620	+4
Programmatic Reduction	-180	-
Total Program Changes	**+2,940**	**+17**

The FY 2016 President's Budget request for BOEM's Conventional Energy budget activity is $59.9 million and 285 FTE, a net increase of +$10.2 million from the 2015 enacted level. This change is comprised of a decreased in fixed costs of $53,000, an internal transfer of $7.3 million, and the following:

Risk Management Program (+$2,500,000; +13 FTE). BOEM seeks $2.5 million and 13 new FTE to enable BOEM to begin transitioning the Program from a reactive to a proactive approach with respect to identifying and mitigating financial liabilities. The additional requested FTE would provide the technical expertise and support staff necessary to ensure that BOEM is able to continue developing a comprehensive Risk Management Program. BOEM currently has neither the expertise nor resources to support the continued development of the Risk Management Program, leaving the Federal Government and American taxpayers vulnerable to risks resulting from OCS resource development, use, and decommissioning. Resources will be used to procure new technical expertise both in the form of contractual support to aid in further developing a bureau level risk management protocol, as well as the personnel resources to implement and sustain the business processes once the Bureau implements the protocol. Funding would enable

BOEM to acquire the necessary subject matter expertise in several areas such as insurance risk analysis, legal, and credit analysis to name a few areas.

The additional funding will arm the Government with the information it would need to protect the taxpayers. Without the necessary risk management processes in place and experts to analyze the data provided by companies, the Government does not truly know the extent of the existing liabilities and cannot ensure that new liabilities are not created and shifted onto taxpayers. The requested funds enable BOEM to more completely develop risk management protocols and processes similar to those used by industry. Once the protocols and processes are in place, technical experts will have the tools necessary to not only identify and assess risk, but to also select the appropriate controls to remediate and mitigate risk.

Staffing for Increased OCS Activity (+$620,000; +4 FTE). BOEM's responsibilities with respect to activity on the OCS have been increasing over the last several years, and this trend is anticipated to continue as activity on the OCS increases. BOEM has seen a 36 percent increase in active deepwater drilling rigs in the Gulf of Mexico since 2010, and this has led to a steady increase in the number of plans BOEM must review. Furthermore, the plan review process has been substantially modified in recent years, adding several more requirements to an already involved process. The changes to the plan review process and the focus on improvements to the plan reviews have required BOEM to redirect personnel to meet those needs, requiring them to do both their new duties (plan reviews) and their old duties (other oil and gas analyses). This has left other functions under–supported and staff overworked. BOEM requests funding in FY 2016 to manage this increasing activity and the associated workload resulting from focusing personnel on the timely and thorough completion of reviews of exploration and development plans. The requested funds would provide the resources to staff critical functions so plan reviews and associated workloads do not accumulate, and to ensure they are timely completed. These funds would enable BOEM to focus on the increasing plans work and other interrelated critical areas resulting from increasing OCS activity.

Programmatic Reduction (-$180,000). In order to support BOEM's highest priority needs in FY 2016, the Bureau proposes a general reduction in funding for conventional energy activities to be realized through administrative savings, such as increasing oversight and setting limitations on travel and training.

Program Performance Change. The FY 2016 budget request supports the accomplishment of the Department's strategic goals. BOEM is making great strides in moving towards the goals it establishes for itself for these goals as well as the supporting performance measures. Budgetary changes are not the sole influence on performance measures tracked within this activity. The reduction identified above does not affect programmatic performance, as depicted by the

relatively steady targets for the performance measures contained within the table at the end of this chapter.

PROGRAM OVERVIEW

BOEM promotes energy independence, environmental protection and economic development through responsible, science-informed management of offshore conventional and renewable energy and marine mineral resources. Conventional energy development begins with BOEM's commitment to the responsible devlopment of the Five Year Outer Continental Shelf Oil and Natural Gas Leasing Program that 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 on OCS leases. Carrying out these responsibilities requires balancing the energy demands and mineral needs of the Nation with the protection of the human, marine, and coastal environments. As the Nation's offshore energy and mineral resource manager, BOEM administers a comprehensive oil and gas leasing program that begins with a progressive cycle of resource, economic and environmental analyses that provide decision makers with key information necessary for making informed decisions on the size, timing and location of OCS conventional energy leasing. BOEM's responsibilities are broad, beginning with identifying and calculating appropriate boundaries and legal descriptions; identifying, inventorying, and assessing the Nation's offshore energy and mineral endowment; developing a transparent, systematic, and comprehensive schedule for OCS oil and gas resource offerings; developing appropriate financial terms to ensure the Nation receives fair market value for its OCS resources; and carefully reviewing requests for approval of industry plans to explore, develop, and produce leased resources.

BOEM conducts a range of activities in order to successfully manage OCS oil and gas resources. A key initial step is the assessment of undiscovered technically and economically recoverable oil and gas resources of the Nation's OCS. The objective of this assessment is to identify areas on the OCS that offer the highest potential for the occurrence of oil and natural gas resources that may be considered for development. BOEM utilizes the most up-to-date resource assessment information in the preparation of a five-year schedule of proposed lease sales, which includes establishing the size, timing, and location of oil and gas lease sales and balancing the potential for environmental impacts, discovery of oil and gas, and impacts on the coastal zone. BOEM also researches, analyzes, and establishes lease terms and conditions that foster competition and ensure receipt of fair market value for the Nation's OCS resources.

BOEM authorizes industry to collect G&G data, which BOEM then may obtain and interpret to inform oil and gas resource assessments and to determine fair market value. Analysis of G&G data also allows BOEM to estimate discovered oil and gas reserves, undiscovered resources, and

to forecast industry activity levels in a particular region. This supports BOEM's fair market value analysis and determinations of the adequacy of high bids received for individual tracts offered in a lease sale.

BOEM also is responsible for the management of all OCS minerals other than oil and gas and plays a unique role in providing coastal resources protection and sustainable management through the conveyance of sand and gravel resources.

As of January 2015, BOEM administers more than 6,000 active oil and gas leases on nearly 33 million OCS acres. Production from these leases generated $7.4 billion of dollars in leasing revenue for the Federal Treasury and state governments in fiscal year 2014. The overall level of activity on the OCS related to this production, leasing revenue, drilling, and development of new projects is estimated to support employment associated with about 700,000 direct, indirect and induced jobs. In fiscal year 2014, OCS leases provided 519 million barrels of oil and 1,226 billion cubic feet of natural gas to energy markets, accounting for about 17 percent of domestic oil production and five percent of domestic natural gas production, almost all of which is produced in the Gulf of Mexico.

The Na Kika platform in deepwater Gulf of Mexico

Energy revenues generated from BOEM leasing actions and collected by ONRR are a significant source of revenue for the Federal Government.

LEASING

BOEM's leasing and planning activities include preparing the Five Year OCS Oil and Gas Leasing Program, leasing marine minerals, creating maps of the OCS boundaries, implementing the lease sale process, administering leases, and reviewing and approving (when appropriate) exploration and development plans.

➢ Five Year OCS Oil and Gas Leasing Program

Under the OCS Lands Act, the Secretary of the Interior has the responsibility to "prepare and periodically revise, and maintain an oil and gas leasing program" in order to "best meet national energy needs" while still balancing other important factors. The Department must prepare a

long-range 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 five-year period following its approval. The Five Year Program identifies the program areas, which are delineated areas of leasing interest where potential leases may be offered, and establishes a schedule of potential lease sales over the five-year period. Ultimately, the Five Year Program is designed to achieve the careful balance required under the OCS Lands Act. The effort ensures that "management of the Outer Continental Shelf shall be 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 Outer Continental Shelf and the marine, coastal, and human environments." BOEM cooperates and/or consults with partners and stakeholders (including Federal and state agencies, local communities, federally recognized tribes, energy and non-energy private industry, public interest groups, and the public) to develop a program that offers access to those areas of the OCS with the most promising potential for development of oil and gas resources in an environmentally responsible manner.

The 2012-2017 Five Year Program, as approved by the Secretary in August 2012, schedules 15 lease sales in six offshore planning areas with active leases and/or activity currently underway. Twelve of the fifteen scheduled lease sales are within the Gulf of Mexico, which remains the area of greatest interest and known potential. This is also where the infrastructure supporting the oil and gas industry, including resources to respond in the event of an emergency, are the most mature and well developed. The Central and Western Gulf of Mexico remain the two offshore areas with the highest levels of resource potential and industry interest.

The 2012-2017 Five Year Program also includes three sales in Alaska: Chukchi Sea Sale 237, Cook Inlet Sale 244, and Beaufort Sea Sale 242. These sales are proposed for calendar years 2016 and 2017, as shown in Table 14. All three Alaska sales utilize the targeted leasing model described in the June 2012 Proposed Final Five Year Program. The purpose of targeted leasing is to identify areas for leasing that have high resource potential and clear indications of industry interest, while appropriately weighing environmental protection and subsistence use needs. The overall goal is to focus oil and gas leasing on the most promising blocks, while protecting important habitats and critical subsistence activities. To achieve these goals, the targeted leasing model is designed to make certain determinations early in the sale process to identify the blocks within a planning area that are most suitable for leasing. The potential sale area is then defined before starting the draft environmental impact statement (EIS) and environmental consultations. The sale area is refined further through the remaining steps of the sale process.

The current Five Year Program does not include a scheduled sale in any Atlantic areas, but areas of the Atlantic will be considered for future Five Year Programs. BOEM is proceeding with a region-specific strategy to support future decision-making regarding whether – and, if so, where

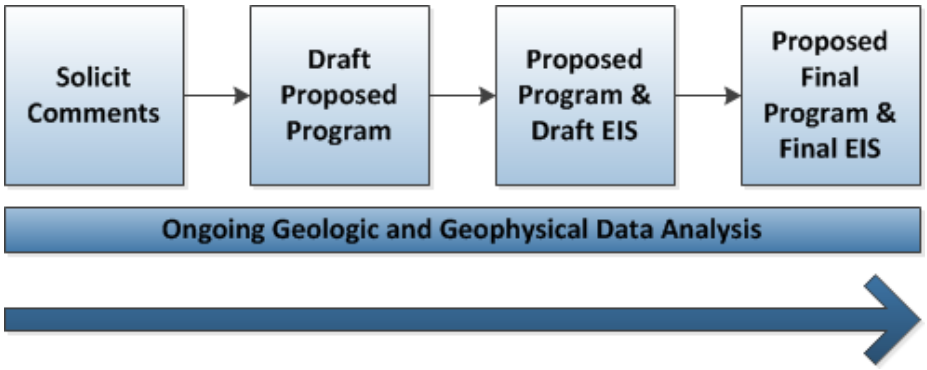
– potential offshore oil and gas lease sales in the Mid- and South Atlantic Planning Areas would be appropriate. In working toward the goal of supporting future decision-making, BOEM recently completed a final programmatic EIS relating to G&G surveys in the Mid- and South Atlantic Planning Areas. The programmatic EIS will facilitate decision-making and update resource evaluation in areas where current estimates are based on older data collected in the 1970's and 1980's. Information garnered from any new G&G surveys will provide valuable data to inform the development and implementation of future Five Year Programs.

Additionally, BOEM will continue to work with the Department of Defense on complex issues relating to minimizing spatial conflicts on the OCS. In January 2013, BOEM and the Department of Defense signed charters creating the Interagency Working Group on South and Mid-Atlantic OCS Planning Areas Spatial Conflict Minimization and the Interagency Working Group on Passive Acoustic Monitoring in U.S. Atlantic OCS Waters. These groups are working to minimize potential conflicts in these areas when, and if, seismic surveying activities are approved. During FY 2014, BOEM collaborated with these groups to ensure that all oil and gas related activities are coordinated through specific points of contacts who are responsible for overseeing ongoing and future activities on the OCS for the purpose of minimizing multiple use conflicts.

Preparation of the next Five Year Program, to encompass the 2017-2022 time period and beginning July 2017, commenced with a request for information and comments in June 2014. BOEM received almost half a million comments from various stakeholders, including Federal, state, local and tribal governments; energy and non-energy industry; public interest groups; and members of the general public. The next step is publication of the Draft Proposed Program (DPP), which Secretary Jewell released on January 27, 2015. Comments received during the request for information played a crucial role in the DPP, which reflects the same regionally-tailored leasing strategy BOEM is employing with the 2012-2017 Five Year Program. This approach balances the goals of developing the Nation's oil and gas resources while protecting marine, coastal, and human environments. A total of 14 potential lease sales in eight planning areas (10 within the Gulf of Mexico, three off the coast of Alaska, and one in a portion of the Mid- and South Atlantic) are included within the DPP. Nearly 80 percent of the undiscovered technically recoverable resources on the entire OCS are offered under the proposed DPP. The DPP is the first of three proposals required under the OCS Lands Act. The complexity of the program development process necessitates that BOEM begin planning for the next Program several years in advance. This includes an updated assessment of undiscovered technically recoverable oil and gas resources of the Nation's OCS, to be formally released in 2016. The information from the assessment will be used to inform estimates of undiscovered resource volumes, anticipated production, and associated exploration and development activities. This information is crucial in the preparation of the DPP, the Proposed Program, and the Proposed Final Five Year Oil and Gas Leasing Program.

The development of a Five Year Program began with the initial request for information and comment, to be followed by three program proposals, a draft and final programmactic EIS, culminating in approval of the Proposed Final Program by the Secretary. Pursuant to the OCS Lands Act, BOEM consults with all interested parties throughout the process, with particular consideration given to suggestions of affected state Governors and interested Federal agencies.

Figure 5: Five Year Program Development Process



As a result of this necessary coordination of stakeholder input, the entire process to develop a Five Year Program normally takes approximately two-and-a-half to three years. FY 2016 will be a critical year for Program development with publication of the Proposed Final Program with a 90-day comment period and publication of the draft EIS.

- **Oil and Gas Lease Sales**

BOEM held three sales during calendar year 2014: Eastern Gulf of Mexico Sale 225 and Central Gulf of Mexico Sale 231 held concurrently on March 19, and Western Gulf of Mexico Sale 238 on August 20. From these sales, BOEM issued 400 leases with bonus bids of over $960 million. Nine sales remain on the sale schedule through mid-2017. The next sales scheduled are Central Gulf of Mexico Sale 235 and Western Gulf of Mexico Sale 246; both lease sales are scheduled to be held during calendar year 2015. The following table shows the lease sales scheduled as part of the current Five Year Program. Upcoming sales are listed by calendar year. Sale numbers may not be listed in numerical order, as they are chosen as an administrative tool to identify individual proposals. Once a number has been assigned to a sale under a Draft Proposed Program, it cannot be reused in any subsequent revisions of that Five Year Program.

Table 14: Lease Sales in the 2012-2017 Five Year Program

Date of Sale	Area	Sale #	Amt. High Bids Received
11/28/2012	Western Gulf of Mexico	229	$133,767,974
3/20/2013	Central Gulf of Mexico	227	$1,214,675,536
8/28/2013	Western Gulf of Mexico	233	$102,351,712
		233-2*	$21,333,850
3/19/2014	Eastern Gulf of Mexico**	225	$0
3/19/2014	Central Gulf of Mexico	231	$850,809,921
8/20/2014	Western Gulf of Mexico	238	$109,951,644
3/18/2015	Central Gulf of Mexico	235	-
8/19/2015	Western Gulf of Mexico	246	-
2016	Eastern Gulf of Mexico	226	-
	Central Gulf of Mexico	241	-
	Chukchi Sea	237	-
	Western Gulf of Mexico	248	-
	Cook Inlet	244	-
2017	Central Gulf of Mexico	247	-
	Beaufort Sea	242	-

*The Western Gulf of Mexico Sale 233 received three bids on blocks located or partially located within three statute miles of the maritime and continental shelf boundary with Mexico (U.S.-Mexico transboundary area). BOEM elected to wait to open the bids until the agreement was approved by Congress in December 2013. BOEM opened the bids at the same time as the concurrent sales of Central Gulf of Mexico Sale 231 and Eastern Gulf of Mexico Sale 225 on March 19, 2014. A total of $21,333,850 in high bids was submitted on three tracts by one company. The transboundary bids resulted in BOEM issuing leases on all three blocks bid upon. Leases awarded as a result of these bids are subject to the terms of the U.S.-Mexico Transboundary Hydrocarbons Agreement.

**Eastern Gulf of Mexico sales only include those areas that are not currently subject to moratorium under the Gulf of Mexico Energy Security Act of 2006. Additionally, the Eastern Gulf of Mexico Sale 225 did not receive any bids.

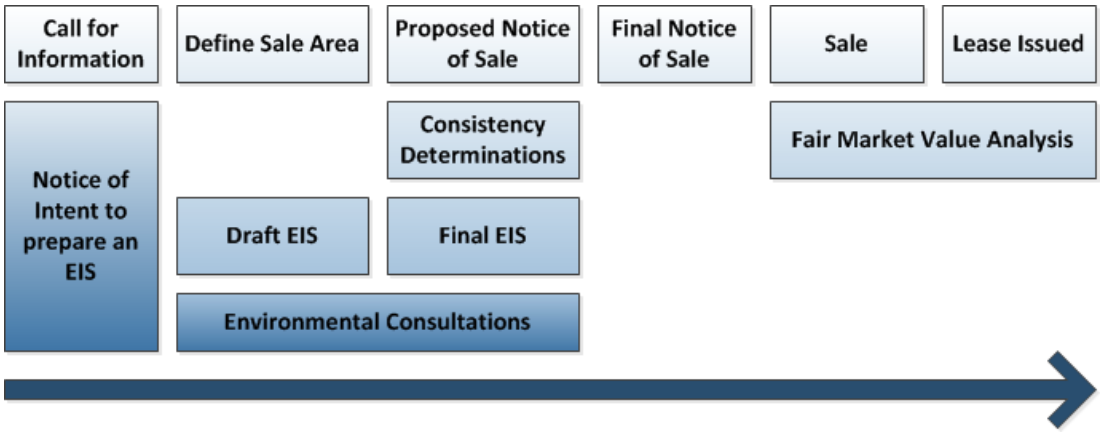
➢ Lease Sale Planning Process

The lease sale planning process includes activities ranging from outreach to stakeholders and tribal nations to environmental analyses to fulfilling numerous statutory considerations. BOEM conducts a detailed planning process for each lease sale scheduled in the Five Year Program. This may take two or more years, and thus, the planning process for a lease sale may start in parallel with development process for the Five Year Program in which that sale is included. These multi-tiered planning steps allow BOEM to meet multiple overlapping statutory requirements, including those of the OCS Lands Act, National Environmental Policy Act, and Coastal Zone Management Act.

The initial steps in the lease sale process vary slightly within the Gulf of Mexico Region and the Alaska Region. In the Gulf of Mexico Region, the first step in the sale process for an individual

area is to publish a call for information and nominations (Call) and a notice of intent (NOI) to prepare an environmental impact statement. In the Alaska Region leasing process, the Call comes first, the second step is the NOI. Subsequent steps in both Regions for BOEM include publishing the proposed and final notice of sale, providing consistency determinations and sale notifications to the affected states, and developing an EIS. An overview of the general process for conducting a lease sale is shown below in Figure 6. Although the basic requirements for lease sale planning are specified in the OCS Lands Act and the Code of Federal Regulations (30 CFR part 556), the specific timing and preliminary steps in the process may vary depending on the previous history of leasing within a sale area. The sale process in some areas such as Cook Inlet, Alaska, start with a request for industry interest. Staggering steps allows industry to indicate interest in the specific portions of the sale area before BOEM decides to proceed further with the sale process. Other modifications to the sale process may be appropriate for future sales in different frontier areas.

Figure 6: Planning for a Specific Lease Sale



- **Lease Administration**

The lease administration process encompasses a set of discrete business processes, which manages a lease from issuance to relinquishment, termination, or expiration. Once the lease officially 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. Also included within these processes are the 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.

To improve efficiency within the Bureau and to improve customer relations with industry users, BOEM implemented TIMS (Technical Information Management System) Web in August 2012.

This new web-based tool allows oil and gas industry users to submit online review and approval requests for company, qualification, merger, and bonding information. TIMS Web was designed to help expedite the process and reduce errors through data validation of submitted documents, and to improve operating efficiency with real-time access to industry information and data. BOEM also implemented TIMS Web Bonding, which is currently in production and utilized by some of industry as BOEM continues to market and improve its functionality.

- **Risk Management Program**

As a steward of OCS resources, BOEM manages a variety of risks associated with offshore activities. Some of these risks are intrinsically related to financial assurance and loss prevention to the U.S. Government and the American taxpayer. Robust and continuous risk monitoring is necessary to control impacts of financial uncertainty, credit risk, project failures, legal liability, accidents, and natural disasters. Standard mitigation strategies include risk transference, risk avoidance, risk reduction, and planned risk acceptance.

Emerging conditions on the OCS have prompted BOEM to develop enhanced risk management capabilities. Technological advances are outpacing programs, policies, and regulations: for instance, there is a lack of industry and government expertise in subsea decommissioning. In addition, characteristics of the companies operating on the OCS have changed over the years, with large companies transferring sunset properties to small and less experienced companies, and these less experienced companies are now entering the decommissioning market.

The cost of decommissioning a facility is based on the type and number of various components (e.g., wells, platforms, pipelines), various environmental factors (e.g., water depth, location), condition of the facilities (e.g., age, rust, toppled, damaged), and market conditions (e.g., rig availability, supply and demand). For instance, contingent liabilities associated with the decommissioning of all facilities in the Gulf of Mexico are estimated at a value of at least $50 billion, while estimates for decommissioning all facilities in the Pacific is almost $1.5 billion. In frontier territories, such as the Arctic, the cost of decommissioning a single platform may be twice that of a Gulf of Mexico facility in comparable depth due to climate, sea ice, and remoteness. Meanwhile, a single offshore renewable energy project may include more than 100 offshore structures and many miles of buried cable that will be subject to site clearance and costly decommissioning requirements. These are just several examples of the conditions that have spurred the need for the Government to take a more proactive approach to the development and management of a national risk policy and program.

BOEM has responded to this need by beginning to implement a comprehensive Risk Management Program to effectively manage, mitigate, and monitor Federal contingent liabilities related to energy and natural resource development on the OCS. Current resource levels do not

allow BOEM to respond adequately to emerging conditions, nor do they allow BOEM to be proactive in identifying and assessing associated risks. Funding increases proposed in FY 2016 will be used to establish baseline funding and to continue developing this Program. Managing these risks entails identifying, evaluating, ranking, and tracking business risks such as complex ownership and financing arrangements, decommissioning liabilities, non-payment of royalties and rents, risky business practices, bankruptcies and potential catastrophic losses. The Risk Management Program will develop risk governance structures, including new bonding and financial assurance regulations, to assess the financial strength of lessees and other entities; create policies and procedures based upon sound risk management principles; and monitor offshore activities and infrastructure to ensure that BOEM is requiring the proper level of bonding or other acceptable financial risk mitigation measures to protect taxpayers.

Funds requested for new FTEs will support the robust and responsible implementation of the Program within the Bureau. Personnel will be assigned at the headquarters and regional levels to assess operational risk and develop and implement financial analysis procedures, conduct assessments of companies' financial stability, and monitor offshore activities and infrastructure to ensure the proper level of bonding or other acceptable financial risk mitigation measures to protect taxpayers.

The requested funds will also enable BOEM to more completely develop risk management protocols and processes similar to those used by industry. A fully developed Risk Management Program will enable the Government access to information of use to protect aginst incomplete knowledge of the existing liabilities. Once the protocols and processes are in place, the technical experts will have the tools necessary to not only identify and assess risk, but to also select the appropriate controls to remediate and mitigate risk.

PLANS

For existing leases, BOEM conducts in-depth reviews of exploration plans, development and production plans, and development operation coordination documents for potential approval within required time frames to ensure that planned activities are conducted in accordance with applicable laws, regulations, and lease terms. BOEM works to ensure that the review process is rigorous, efficient, and transparent, while also being predictable to industry. For example, BOEM now designates specific plan coordinators to ensure consistency throughout the review process and is currently developing electronic systems to make the process more user-friendly and the status more transparent.

In conducting plan reviews, which include environmental analyses required by NEPA, BOEM examines a broad spectrum of issues and resources including shallow drilling hazards, resource

conservation, supplemental bonding, worst case discharge analysis, air quality, water quality, archaeological concerns, environmental resource concerns, subsistence use concerns, and military and security issues.

These analyses provide information that is needed to support plan decisions, including the development of approval conditions to help protect the environment and facilitate multiple use of the OCS. BOEM's regional offices, working closely with the Office of Strategic Resources and the Office of Environmental Programs, coordinate and manage the plan review process between the Conventional Energy and Environmental Programs activities. BOEM also coordinates its review of plans with BSEE, as well as with states that have approved Coastal Zone Management Programs, and with other appropriate state and Federal agencies. Figures 7 and 8 show the typical process for reviewing and approving exploration and development plans. Note, Figure 8 reflects the process for development plans in the Alaska Region. The Gulf of Mexico Region follows a similar process for development plans and receives Development Operation Coordination Documents rather than Development and Production Plans.

Figure 7: Processes for Development and Approval of Exploration Plans

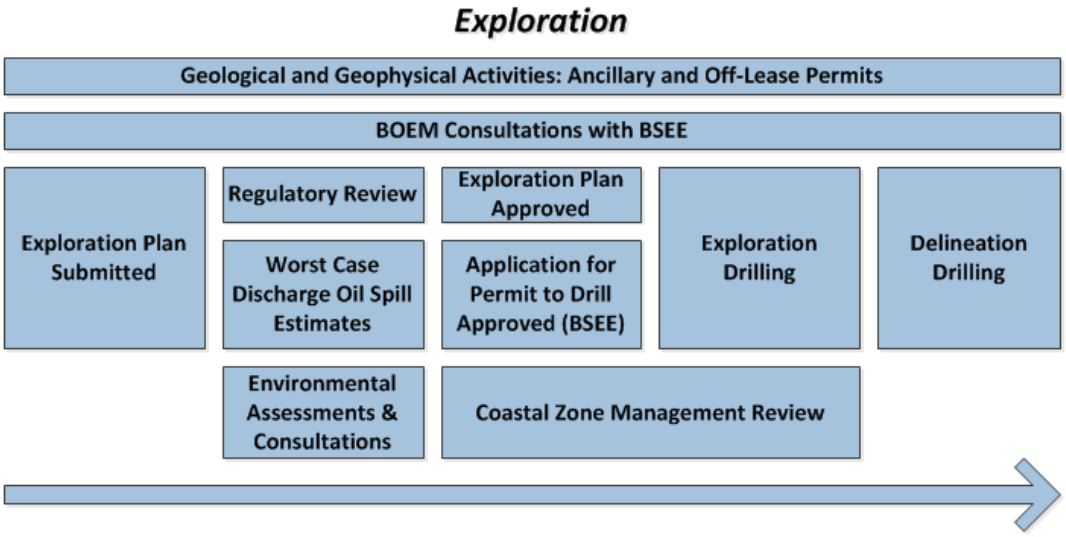
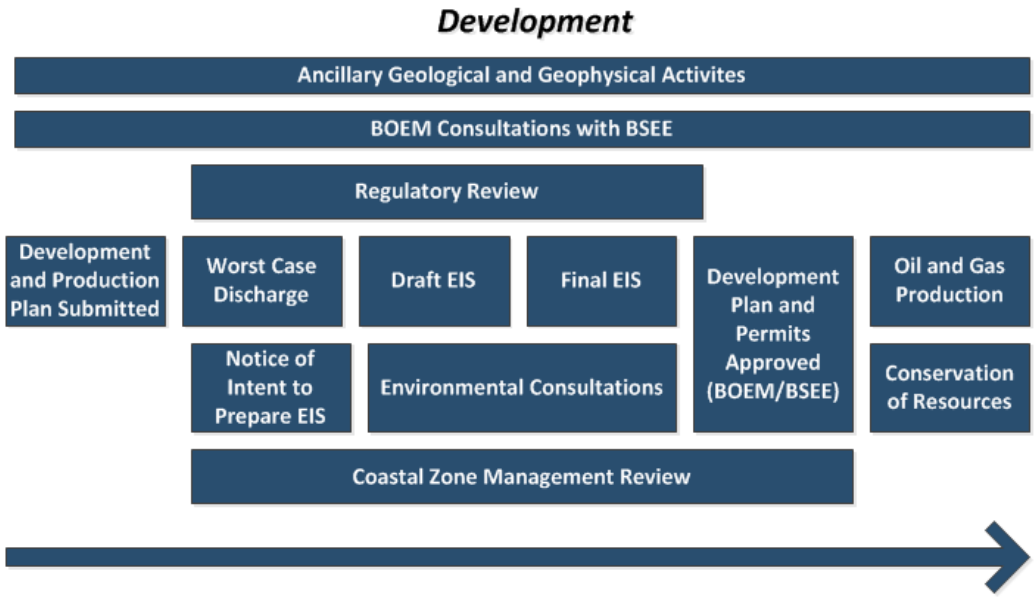


Figure 8: Processes for Development and Approval of Development Plans



BOEM continues to enhance its TIMS information technology system in order to develop an ePlans Portal that will digitize significant elements of the plan review process, creating significant efficiencies for both industry and government that would reduce plan processing time by up to 40 percent, yield financial savings, and improve data quality.

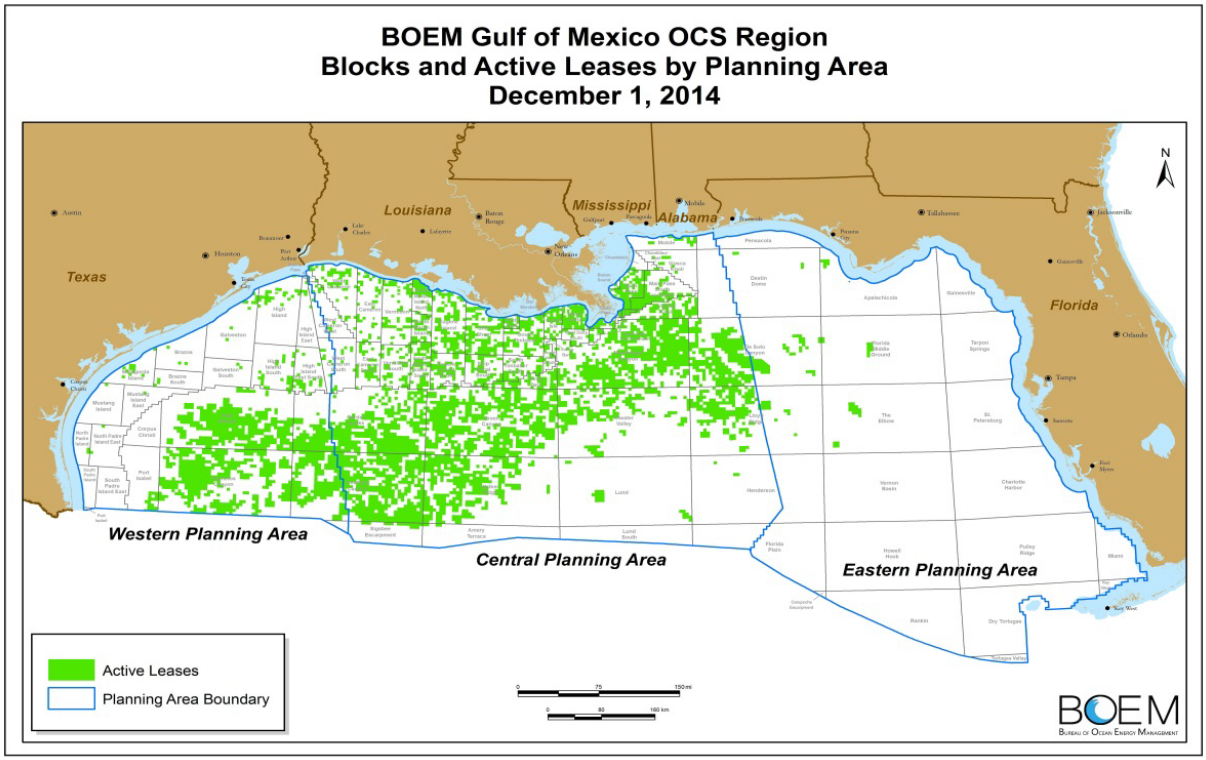
For example, BOEM expects that ePlans will significantly reduce the number of times that plans are returned to operators for revision, saving both government and industry staff time, and ultimately shortening the duration of the average plan review. For instance in the Gulf of Mexico Region, during FY 2014, BOEM received approximately 380 plan submissions. Of the plans submitted, approximately 230 required revisions. The average time required to process and approve initial plans with no revisions was 45 days. The approximately 230 plans requiring revisions added an average of 30 days to the review process. BOEM currently returns exploration and development plans to operators for revision an average of four times per plan – often due to errors such as incomplete fields and technical errors. With ePlans, applicants would be able to monitor the review process online and correct these types of errors in a timely manner in order to finalize their electronic transactions. BOEM expects this change to reduce the number of returns to an average of one per plan, and to focus the review process on substantive corrections.

In developing the portal, BOEM is coordinating closely with BSEE, which is simultaneously developing a complementary ePermits portal. The ePlans portal is a critical component of BOEM's efforts to improve and modernize its core mission processes, and to facilitate coordination and data-sharing between BOEM, BSEE, and other state and Federal regulatory

agencies. Through ePlans, information transfer can be managed effectively through a prescribed workflow for plan and NEPA reviewers, with timely decisions relayed back to the plans coordinator. System validation checks performed prior to plan submission will eliminate the need for plan coordinators and reviewers to perform these checks manually, allowing them more time to analyze non-routine plans.

Gulf of Mexico Region: As of January 2015, BOEM oversees 29,089 blocks in the Gulf of Mexico Region. Of these, 5,342 blocks are leased including 1,184 in the Western Planning Area, 4,052 in the Central Planning Area, and 106 in the Eastern Planning Area. Nine active leases are shared between the Central and Eastern Planning Areas, yielding a net total of 5,333 active leases within the Gulf of Mexico. A snapshot of the blocks and active leases within the Gulf of Mexico is provided below in Figure 9.

Figure 9: Gulf of Mexico Region Blocks and Active Leases by Planning Area



BOEM also reviews and processes all right-of-use and easement applications. Rights-of-use and easements 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. In FY 2014, the Gulf of Mexico Region completed 43 right-of-use and easement requests. BOEM anticipates approximately 45 requests in each FY 2015 and FY 2016.

BOEM anticipates its 2015 plans workload in the Region to be roughly the same as the 2014 level then remain steady for 2016, but this is dependent on a number of variables. For instance, if the number of rigs in the Gulf of Mexico increases, it could potentially increase the number of plan submittals and reviews processed by BOEM.

The following table shows all plan submittals – initial, supplemental, revised, modifications, amendments, and post approval – received from 2008 through 2014, as well as plans estimated to be received in calendar years 2015 and 2016.

Table 15: Plan Review Activities in the Gulf of Mexico 2008-2016

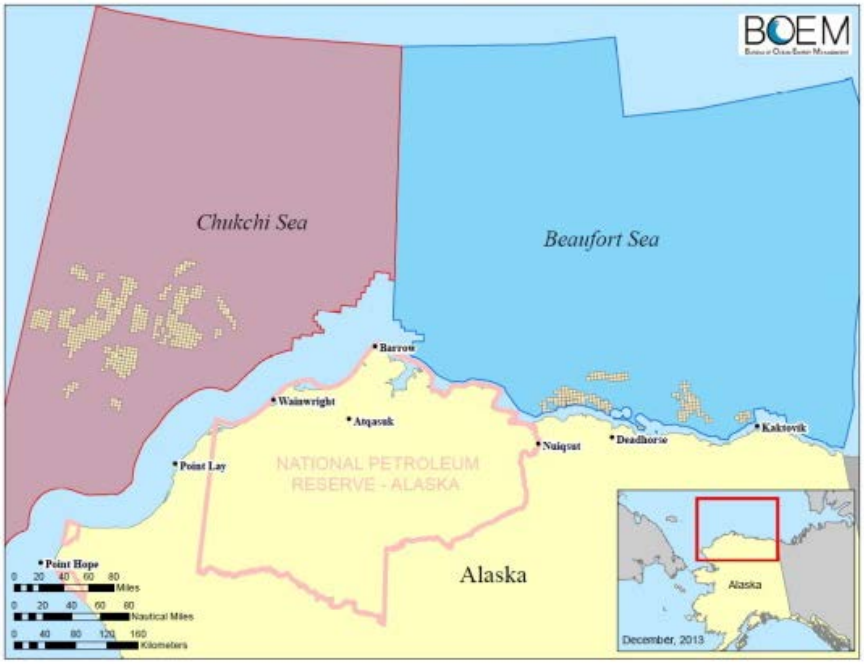
Calendar Year	# EPs	# DOCDs
2008	516	444
2009	619	350
2010	408	431
2011*	907	837
2012	170	327
2013	504	616
2014	509	601
2015**	500	600
2016**	500	600

* The increase in 2011 is due to heightened standards on information requirements on Exploration Plans (EP) and Development Operation Coordination Documents (DOCD) in the OCS.

** The number of plans noted in 2015 and 2016 are estimated.

Alaska Region: As of November 2014, the Alaska OCS contains 607 active leases encompassing approximately 3.36 million acres in the Beaufort Sea (147 leases) and Chukchi Sea (460 leases). The location of these leases offshore Alaska are shown in the figure below. In the coming years, BOEM anticipates receiving multiple requests to conduct ancillary activities and exploratory drilling on several of these leases, and ultimately requests for approval of development and production plans. These requests are complicated by Alaska's extreme Arctic conditions, remote location, and lack of infrastructure.

Figure 10: Alaska Region Active Leases



As industry interest in exploration and development on the U. S. Arctic is expected to increase in the coming years, BOEM will likely require additional staff to review and oversee offshore oil and gas drilling plans in the Beaufort and Chukchi Seas. Experiences during the 2012 season, more fully described in the "Report to the Secretary of the Interior: Review of Shell's 2012 Alaska Offshore Oil and Gas Exploration Program," underscore the importance of rigorous planning and oversight to ensure that industry meets high standards for operating in the Arctic.

In 2011, BOEM conditionally approved exploration plans from Shell Offshore, Inc. and Shell Gulf of Mexico, Inc. for multiple year and multiple well activities in the Beaufort and Chukchi Seas. In late 2012, Shell called a "pause" to exploration drilling activities in 2013 to resolve issues associated with its 2012 exploration program. In November 2013, Shell submitted a revised exploration plan for its Chukchi Sea leases; and, then, on August 28, 2014, Shell submitted another revised Chukchi Sea Exploration Plan (EP Revision 2). However, in accordance with an April 24, 2014, remand order whereby the Alaska District Court directed BOEM to conduct further analysis consistent with a Ninth Circuit decision identifying deficiencies in the 2007 Final EIS for Lease Sale 193 (from which Shell's and other companies' leases were issued), EP Revision 2 cannot be "deemed submitted" until after the Secretary of the Interior's decision on Lease Sale 193 is determined.

Meanwhile, BOEM is also working with Hilcorp LLC, which has acquired a portion of the Liberty and the Northstar Beaufort Sea projects from BP Exploration. Hilcorp is pursuing plans to develop the Liberty Project, located in OCS waters north of Prudhoe Bay. The Liberty

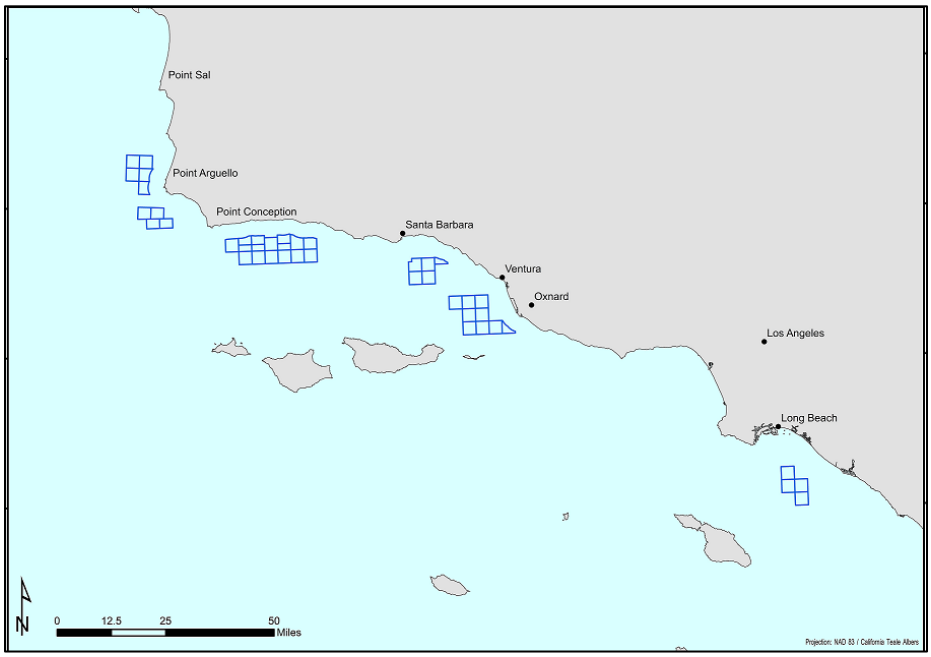
development will be the first solely Federal offshore oil and gas complex in the U.S. Arctic, and its development is expected to help lay the foundations for all future offshore oil and gas activity in the U.S. Arctic. Responsible and safe development of Liberty, as well as the same rigorous oversight used by BOEM during all OCS planning, will be essential. Hilcorp submitted a development and production plan for the project on December 30, 2014. In furtherance of this schedule, BP conducted ancillary activities in the Beaufort Sea during the winter and summer of 2013 and 2014, and Hilcorp plans to conducted additional ancillary activities in the Beaufort Sea during 2015 to confirm BP's findings.

Review of exploration and development and production plans requires additional environmental consultation with the U.S. Fish and Wildlife Service (FWS) and NOAA to ensure compliance with the Endangered Species Act and Marine Mammal Protection Act, as well as other laws protecting the environment. BOEM also consults with NOAA on marine mammals and essential fish habitat, and with the State Historic Preservation Offices on archaeology and historic preservation requirements. Per Executive Order, BOEM initiates and engages in government-to-government consultations with federally recognized tribes and Alaska Native Claims Settlement Act Corporations in planning activities that may have a substantial direct effect on Alaska Native communities.

BOEM anticipates requests to conduct seismic surveys for pre-lease exploration in the Cook Inlet and Beaufort Sea Planning areas where future lease sales are planned. BOEM has received one geophysical permit request to conduct a seismic activity in the Cook Inlet OCS sale area during 2015. The expectation is more permit requests will be received in 2016 for surveys in the Cook Inlet and Beaufort Sea Sale Areas. BOEM will acquire any new data and information as a result of the seismic activities for BOEM geoscientists to use for oil and gas resource assessment and Fair Market Value evaluation of any bids received in the sales. Exploration data and information and the evaluation of that information are the foundation for BOEM's mission of oversight of OCS mineral resources.

Pacific Region: While the current Five Year Program does not include lease sales in the Pacific Region, BOEM continues to oversee activity on 43 existing leases from previous sales. Proposed activities on these active leases periodically require an update or revision to development and production plans. Figure 11 below shows the location of these leases off the coast of Southern California.

Figure 11: Pacific Region Active Leases



During FY 2014, BOEM reviewed one such update, and expects one more in each FY 2015 and FY 2016. Federal Platform Irene, offshore north of Point Arguello, has, in the past, been proposed for use in development of state reserves in the Tranquillon Ridge field. If the California State Lands Commission provides the opportunity for a state lease and the operator of the adjacent Federal lease proposes this development from Platform Irene, BOEM will require review and revision to the existing Federal development and production plan. In addition, a Federal-state project is under consideration to redevelop state oil and gas reserves by drilling from Federal Platform Hogan into adjacent state leases in the Carpinteria Offshore field in the Santa Barbara Channel, requiring revision of the Federal development and production plan.

- **Oil Spill Financial Responsibility Program**

The financial responsibilities associated with the development of offshore resources are enormous. Just as BOEM must protect the American taxpayer from entities that fail to meet their lease, grant, or permit obligations, the Bureau 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 offshore facilities.

Under the Oil Pollution Act, BOEM is authorized to adjust the limit of liability for offshore facilities, including pipelines. In December 2014, BOEM published a final rule that increases this cap, based on adjustments for inflation. The new limit of liability for damages from offshore facility spills is capped at $133.65 million effective January 12, 2015. The liability cap will be

periodically adjusted for inflation. The liability for damages from offshore facility spills will be limited to the current cap amount unless it can be shown that the responsible party was guilty of willful misconduct, gross negligence, a willful failure to report the oil spill incident or to cooperate with removal activities, or that the responsible party violated applicable Federal safety regulations, in which case there would be no limit to any liability for damages. BOEM performs a thorough review and oversight 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 offshore 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, their designated agents and guarantors. The program currently oversees approximately 160 companies covering 7,500 facilities with financial coverage in excess of $11 billion.

- **Worst Case Discharge**

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 through the open wellbore. The package of reservoirs exposed to an open borehole with the greatest discharge potential is considered the worst case discharge scenario. Current regulations require operators and lessees to submit worst case discharge calculated volumes and associated data as part of every exploration plan and development plan.

Each Region is responsible for worst case discharge verifications and decision documentation associated with plans under their jurisdictions. 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 also used by BSEE in reviewing oil spill response plans and making Application for Permit to Drill (APD) decisions.

Gulf of Mexico Region: BOEM made determinations on 118 worst case discharge verifications in FY 2014. In each of 2015 and 2016, BOEM anticipates the number of worst case discharge analyses to remain the same, though the workload will depend on the level of drilling activity in deepwater. BOEM continues to develop trend parameters for deepwater exploration and development drilling for critical reservoir and fluid properties for the worst case discharge analysis in order to enhance the efficiency of the process while maintaining the regulatory oversight needed to ensure an adequate response to an uncontrolled blowout. BOEM participated in the Society of Petroleum Engineers (SPE) Worst Case Discharge Summit in New Orleans, March 16-18, 2014. The purpose of the Worst Case Discharge Summit was to provide best-practice guidelines for calculating the volume of an uncontrolled wellbore flow event, and to discuss and resolve complex issues encountered in various worst-case scenarios. BOEM built upon the Summit by contributing to the Society of Petroleum Engineers's "Technical Report on

Calculation of Worst-Case Discharge." This report will be available to the public in early 2015. In FY 2014, BOEM issued a broad agency announcement for research on two worst case discharge issues in order to improve the accuracy of calculating an uncontrolled blowout volume.

Alaska Region: The worst case discharge estimates have heightened importance in Alaska because there are no readily available oil spill response capabilities for the Arctic marine environment that operators can access and allow sharing of costs. For example, in the Gulf of Mexico, operators can obtain a membership in an oil spill response organization where the members can share the cost of the response capability needed to clean-up an estimated worst case discharge for their wells. Currently in Alaska, each operator must provide their own response capability to cover an estimated worst case discharge volume. Operators request numerous meetings with BOEM staff to clarify the various input parameters and assumptions in reservoir flow simulation software models that provide the worst case discharge estimates in their attempt to produce a valid estimate. Another first-time worst case discharge project for the Alaska staff will be evaluating the worst case discharge submittal for the proposed Liberty field development.

Pacific Region: Since there is no new leasing, the Region's worst case discharge analyses are for mature fields only. In FY 2014, the Region completed two worst case discharge verifications. The projected workload for worst case discharge reviews for FY 2015 and FY 2016 is anticipated to be between 2 to 3 annually.

- **Regulatory Reviews**

Regulatory reviews using G&G data are performed to evaluate drilling hazards posed by surface and subsurface geologic conditions and man-made obstructions (30 CFR 550.201-207). In addition, geophysical reviews are performed to evaluate shallow hazards (seafloor and near seafloor) on operator's applications for pipeline rights-of-way and associated permits (30 CFR 250.1007 (5)). These reviews include evaluation and verification of operator's interpretations, identification and assessment of potential geohazards in the area affected by exploratory and development drilling, installation of structures, laying pipelines, and other ancillary activities related to the plans. Based on G&G surveys from operators, geoscientists identify and evaluate potential risk of shallow faulting, shallow gas zones, shallow water flows, abnormal pressure zones, lost circulation zones, and other natural and manmade hazards. In addition, geoscientists evaluate the potential risk of encountering hydrogen sulfide (H_2S). The G&G reviews provide a detailed evaluation of operators' geohazards analyses and shallow hazards assessment and determine mitigations to be applied to plan and permit approvals.

Geoscientists conduct G&G evaluations that include broaching analyses that support BSEE reviews and approvals of operators' APDs for wells. The integrity of the well design is

evaluated by BSEE, and if a determination is made that the well may fail at a certain casing point, a broaching analysis is conducted by geoscientists. The broaching analysis evaluates subsurface stratigraphic and structural conditions to determine if escaping hydrocarbons from a failed casing shoe will be trapped in the formations or potentially reach the seafloor at some point in time.

Gulf of Mexico Region: In FY 2014, BOEM conducted 299 geological and 343 geophysical reviews in support of plans, renewable energy site characterization, and BSEE APD and pipeline responsibilities. Moving forward, increasingly complex analyses will be required for geohazard reviews due to higher resolution data collected for complex projects, especially those occurring in deepwater, and the additional workload of broaching analysis in support of the BSEE well integrity analysis. In FY 2014, broaching analyses were completed on 25 proposed wells in support of BSEE. BOEM anticipates completing approximately 20 broaching analyses in FY 2015 and 20 during FY 2016 in support of the BSEE well integrity analysis.

Alaska Region: Shell submitted a revised Chukchi Sea Exploration Plan (Revision 2) for exploratory drilling in FY 2015, but BOEM cannot take any formal action on the Exploration Plan Revision 2 until after the Secretary of the Interior's decision on Lease Sale 193.

MAPPING AND BOUNDARY

The Secretary of the Interior is charged by law with the administration of offshore submerged lands on the OCS for offshore energy and minerals leasing purposes. Various court decisions, treaties, legislation, policies, and procedures guide the boundary making process on the OCS. The offshore submerged lands of the OCS are subdivided into parcels referred to as OCS blocks. No submerged lands may be offered for leases that are not owned by the Federal Government, and no submerged federally-owned lands may be offered for lease or sale by either a foreign country or a U.S. Coastal State. For these reasons, accurate offshore lease boundary lines are a foundational requirement for all BOEM offshore leasing activities. Through its mapping and boundary functions, both in the headquarters and the regions, BOEM is responsible for producing and maintaining the official marine cadastre for the Federal OCS areas of the United States.

The current focus of this work is to modernize the tools and methods used to generate the blocks and boundary lines necessary to support leasing for offshore energy purposes. Customized Geographic Information Systems tools and mapping processes are being used for this effort, which will continue through 2017. The new tools will be used to generate maps of the Hawaiian Islands and to update official protraction diagrams in all regions.

On December 15, 2014, the U.S. Supreme Court approved a supplemental decree in United States v. California, No. 5 Original, which permanently immobilized ("fixed") the Submerged Lands Act (SLA) boundary, located 3 nautical miles offshore of California. Fixing the SLA boundary provides certainty to lessors, regulators, lessees, and operators of Federal and state mineral and renewable energy leases and will prevent future litigation concerning the submerged lands rights of both parties. The SLA boundary was previously fixed for the north coast of Alaska and all of the Gulf of Mexico states except for Florida. Oregon, Washington, and Alaska (Cook Inlet area) are interested in fixing their SLA boundaries, as are several Atlantic coast states. This recent action by the Supreme Court will hopefully render subsequent requests easier and faster to complete. BOEM is working with all interested coastal states to reach agreement on the location of their respective SLA boundary in anticipation of future efforts to fix other SLA boundaries.

MARINE CADASTRE

The MarineCadastre.gov project 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 large regional ocean planning efforts, as well as project-specific planning. Data is provided as immediate viewable map data, downloadable GIS formatted data, and as map services. Most data are available directly from the authoritative source, or are updated regularly from the source(s). MarineCadastre.gov was 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, and is also providing the geospatial framework needed for the broader ocean planning initiative called for in the National Ocean Policy. MarineCadastre.gov has three primary focus areas: web map viewers and ocean planning tools; spatial data registry; and technical support and regional capacity building.

MarineCadastre.gov products were designed for use by Federal regulatory agencies, regional marine planners, state intergovernmental task forces, the offshore wind energy industry and other users of the ocean.

In addition to the data sets provided by other authoritative data providers – such as NOAA, FWS, U.S. Geological Survey, U.S. Coast Guard, U.S. Navy, and others – the MarineCadastre.gov includes a variety of BOEM/BSEE data sets. Users inside and outside of BOEM have access to the most up to date versions of lease maps, protractions, lease blocks, boundaries, pipelines, wells, and other BOEM/BSEE generated GIS data important to BOEM's stakeholders for marine and energy development planning purposes. The data and services provided through the

MarineCadastre.gov project are used by a number of regional ocean portal projects, fulfilling BOEM's vision for the project to be the first place to find authoritative coastal and marine data.

BOEM's efforts on the MarineCadastre.gov have been recognized by the Center for Environmental Innovation and Leadership (CEIL) for "Success through Collaboration" with the NOAA's Coastal Services Center. The CEIL Awards recognize military and Federal teams and programs that have demonstrated exemplary performance in integrating environmental stewardship into day-to-day activities and turned sustainability ideas into reality. Awards highlight excellence in developing and implementing innovative environmental programs to improve environmental quality, reduce greenhouse gas emissions, or increase the use of renewable energy and bio-preferred products.

MarineCadastre.gov is constantly evolving and growing to include relevant issue-driven data and tools. Specialized maps in the "Gallery Page" of the project are available. Ocean planners can create custom data viewers by combining authoritative data from the Marine Cadastre Data Registry with more locally relevant web map services. Recent data updates to layers include navigational maps, BOEM boundaries, underwater infrastructure, wind/wave energy potential, oil and gas plays, seismic anomalies, bird, mammal, coral, and modelled data layers. BOEM is currently focusing on strengthening biodiversity and ocean use data by helping provide access to data from authoritative sources, educating the users about the data and its uses, and building decision support tools to support coastal and marine planning.

ECONOMIC EVALUATION

A critical component of BOEM's mission is to ensure the receipt of fair market value for offshore natural resources. To accomplish this, BOEM employs a team of interdisciplinary experts that provide economic analyses for the Department of the Interior, other Federal agencies, and Congress. To ensure fair market value, BOEM develops various resource-economic evaluation approaches and bid adequacy guidelines, determines economic inputs for tract evaluation, and coordinates reviews of appeals of bid rejection. 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 which generate significant supplies of domestic oil and gas and which result in the receipt of billions of dollars each year to the U.S. Treasury. BOEM also undertakes studies, as needed, to address specific policies and compilations of data required to analyze overall OCS program responsibilities and initiatives. BOEM's economic functions support all programmatic activities, conventional oil and gas, renewable energy, and mineral leasing.

With regard to renewable energy, BOEM sells tracts for development of wind energy resources through competitive offshore wind energy auctions. The auctions are held online, using a simultaneously ascending bidding format which requires specialized software and contract services. BOEM will conduct one or two such auctions for at least several more years, with the goal being to enable successful development of renewable energy resources on the OCS. A new contract is currently being prepared that will conform with Interior Department policies for cloud computing services. The role of the economics function also involves examining and potentially modifying policies and regulations that affect the auctions, and generally assisting with setting economic terms and conditions for wind energy leases.

- **Fair Market Value**

BOEM's geoscientists, engineers and economists develop, evaluate, and identify models, policies and parameters designed to ensure receipt of fair market value for the rights to explore and produce offshore energy and mineral resources.

The Bureau uses a post-sale **bid evaluation** process to ensure that fair market value is received for each OCS lease issued. The Bureau reviews all high bids received and evaluates all blocks using either tract-specific bidding factors or detailed tract-specific analytical factors. This bid adequacy process relies on both evidence of market competition and in-house estimates of tract value.

- **Bid Evaluation**

BOEM conducts analyses to support development of regulations and evaluation of policies for lease terms, conditions, and bidding systems for individual oil and gas lease sales, the Five Year Program, the Renewable Energy Program, and for the use of sites for construction of liquefied natural gas ports upon request of the U.S. Coast Guard. Under its bid adequacy procedures, the Bureau reviews all high bids received and evaluates all blocks using either tract-specific bidding factors or detailed tract-specific analytic factors to ensure that fair market value is received for each OCS lease issued. The bid adequacy process relies on both evidence of market competition and in-house estimates of tract value. If a bid is rejected and a company appeals the rejection, the staff reviews the appeal and makes a recommendation to the Director regarding the appeal. In addition to the fiscal terms and bid adequacy process, the Bureau establishes terms and conditions to assure diligent development of leases and environmentally safe and clean operations.

- **Receipt Estimates**

BOEM's economic experts review and design policies and methods for forecasting receipts from the offshore energy programs, including the estimation of the manner and rate at which reserves

and resources of oil and gas are discovered and produced. Through the economics function, BOEM generates the receipt estimates used to project revenue and offsetting collections amounts identified in the President's annual budget. These estimates also provide a means for forecasting the comparative share of receipts from offshore oil and gas that will be owed to the states under various revenue sharing programs, assist in assessing alternative operator diligence requirements, and contribute to policies for setting timely and efficient requirements for drilling initial wells and the decommissioning of existing wells and structures.

- **Economic Modeling for Policy and Decision-Making**

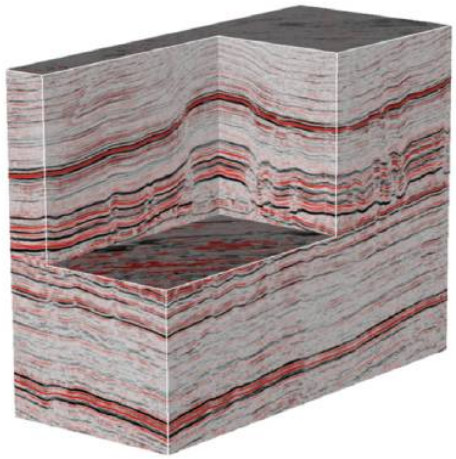
BOEM's efforts contribute significantly to the development of national energy strategies. BOEM develops and maintains economic and statistical models and databases that are the basis for sale design, Five Year Program formulation, resource evaluation, post-sale and operational activities, rulemaking, revenue sharing, and royalty relief programs. The economic assumptions and scenarios BOEM generates are used in post-sale tract evaluations, national resource assessment studies, and in applications submitted for royalty relief. Finally, BOEM provides economic analyses and fiscal forecasts for energy leasing policies, legal and legislative alternatives, and national energy strategies.

RESOURCE EVALUATION

BOEM's Resource Evaluation program conducts analyses to identify areas of the OCS that are the most promising for energy and mineral development (including methane hydrates). To accomplish this, BOEM:

- Acquires G&G data/information through the regulation of pre-lease 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 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 the 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 offshore development decision-making.



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

- **Resource Assessment**

As one of the first steps in the leasing process, BOEM must identify 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 the play's hydrocarbon potential and its economic viability with complex computer models and methodologies. The assessment process incorporates specific geologic, petroleum engineering, and economic data and information. In addition to the estimation of undiscovered hydrocarbon resources, these studies help identify environmental and operational constraints and assist in making leasing decisions. Comparing the data for acreage and resources offered illustrates that BOEM offers access to geologic areas on the OCS that have the highest potential for development of oil and gas. BOEM also estimates the amounts of oil and gas likely to be discovered and produced as a result of leasing; and, generates potential scenarios of future exploration, development, and production activities. BOEM measures both the resources and acres offered annually compared to what was planned for the year and analyzes the results to inform the Five Year Program and sale decisions. Resource estimates support analyses of potential impacts of policy options, legislative proposals, NEPA analyses, and industry activities affecting OCS oil and gas activities — both current and future.

The scale of the assessment activities range from large (regional or OCS-wide) to sale-specific, such as individual prospects and lease tracts. In the early stages of this process, the focus is on regional areas, but 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, (i.e., moratoria, marine sanctuaries, quantitative analysis of legislative proposals). Once a sale area has been identified, BOEM's geologists and geophysicists perform detailed subsurface mapping and analyses needed 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.

The *2011 Assessment of Undiscovered Technically Recoverable Oil and Gas Resources of the Nation's Outer Continental Shelf* was developed to support the 2012-2017 Five Year Program. In FY 2015, BOEM will initiate and complete the 2016 National Assessment of Undiscovered Technically Recoverable resources (2016 Assessment), which will provide the foundation to support activities related to the development of the 2017-2022 Five Year Program. Assessment activities associated with the Five Year Program will continue to examine specific plan related issues, such as individual sales.

***Gulf of Mexico Region and Atlantic OCS*:** During FY 2014, BOEM completed its analyses and updated its estimates of the undiscovered resource potential of the Atlantic OCS. BOEM's most recent comprehensive assessment of the undiscovered resource potential of the Gulf of Mexico was completed in 2011. An up-to-date resource assessment of the Gulf of Mexico is necessary to ensure that BOEM will be in a position to provide the best resource information available for upcoming analyses and decisions regarding the 2017-2022 OCS Oil and Gas Leasing Program. In FY 2015, the Region will initiate and complete the 2016 Undiscovered Resource Assessment of the Atlantic and Gulf of Mexico OCS. The completion of the analytical analyses and development of undiscovered resource volume estimates for the Gulf of Mexico and Atlantic OCS are structured to correspond with the target dates required for development of the 2017-2022 Five Year OCS Oil and Gas Leasing Program. The assessment will include exploration and development activity scenarios for both the Atlantic OCS and Gulf of Mexico OCS.

Alaska Region: In FY 2016, BOEM plans to reassess the oil and gas potential for both the Chukchi and Beaufort Seas Planning Areas in response to expected new well drilling in these sparsely drilled regions, as well as the Cook Inlet Planning Area, where new seismic surveys are planned. This data will be critical for fair market value determinations for BOEM sales currently scheduled in 2016 and 2017 and for an updated national assessment for the upcoming 2017-2022 Five Year Program. BOEM's Alaska Region is responsible for all reservoir and field analyses for BOEM and BSEE in Alaska, and also all the shallow hazard reviews for exploration and development plans and subsequent applications for permit to drill.

Pacific Region: In FY 2014, the Pacific Region published a detailed report of the geology and geologic play descriptions associated with the 2011 Pacific Outer Continental Shelf Assessment for Oil and Gas Resources.

- **Fair Market Value Determination**

Ensuring the receipt of fair market value on the Outer Continental Shelf is mandated by the OCS Lands Act and is one of BOEM's critical responsibilities. Regional offices, with headquarters coordination and oversight, perform the functions necessary to thoroughly assess the oil and gas

potential and fair market value of OCS tracts offered for lease. Only tracts located within leasing areas identified in the Five Year Program are available for lease. The bid review process incorporates G&G data along with reserve, resource, engineering, and economic information,

> Since 1984, **bid adequacy** reviews and fair market value determinations have resulted in an average rejection rate of bids of approximately 3.6 percent. Bid adequacy procedures have consistently resulted in higher returns in subsequent sales for tracts bid on in previous sales that have had their high bids rejected on grounds of bid insufficiency. From 1984 through 2014, BOEM rejected total high bids of approximately $628 million. Subsequently, the same blocks were re-offered and drew high bids of about $1.8 billion, for a total net dollar gain of about $1.2 billion, and for a return on rejected high bid amounts of almost 189 percent.

which is provided by BOEM economists, 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.

Gulf of Mexico Region: Under the current Five Year Program, two OCS oil and gas lease sales are scheduled for calendar year 2015, as indicated earlier in Table 14. The sales include: Central Gulf of Mexico Sale 235 and Western Gulf of Mexico Sale 246. Bids received during these lease sales will undergo rigorous fair market value determinations.

Alaska Region: Although no lease sales are planned in the Alaska Region until 2016, the Region still conducts valuable analyses for other Federal agencies. For instance, BOEM continues to provide the Bureau of Land Management (BLM) with fair market value analyses on National Petroleum Reserve–Alaska lease sales. It is estimated that this level of activity will continue as a result of single sales in the National Petroleum Reserve–Alaska in 2014 and 2015. To improve efficiency in these efforts and mitigate potential staffing shortages, BOEM is evaluating sophisticated software options to replace existing, cash flow modeling programs.

- **Reserves Inventory Program**

The OCS Lands Act 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." In order to meet this requirement, BOEM is required to develop 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. As activity increases on the OCS, so does the workload associated with the reserves inventory program. BOEM requested additional FTE resources to contribute toward the increased workload.

Reserve studies are critical inputs to determining the Nation's oil and gas endowment on the OCS, conducting resource assessments, generating analog information for bid adequacy determinations, and in the review of industry plans and requests. The geologic and engineering information supports other program activities within the Department as well as through cooperative efforts with the Department of Energy and its Energy Information Administration.

Gulf of Mexico Region: At the Regional level, reserves inventory personnel review conservation information document submissions. Conservation information documents are required 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 company-submitted 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. BOEM evaluated 21 requests during FY 2014 associated with well abandonment and bypassed zones to ensure that operators are following their conservation information document commitments. BOEM anticipates evaluating approximately 23 requests during FY 2015 and 25 during FY 2016.

During FY 2015, BOEM anticipates issuing a number of reports summarizing oil and gas reserves and production from Gulf of Mexico discovered fields. The calendar year 2012 and 2013 reports on "Estimated Oil and Gas Reserves Gulf of Mexico OCS Region" will be published on the BOEM website in FY 2015. In FY 2014, the calendar year 2010 and 2011 reports along with the associated calendar year 2010 and 2011 "Atlas of Gulf of Mexico Gas and Oil Sands Data" reports were published on the BOEM website. As required in the Energy Policy Act of 2005, the Region will provide support to headquarters in generating the *4th Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters off the Coasts of Texas, Louisiana, Mississippi, and Alabama*. Oil and gas resources located off the coasts of Texas, Louisiana, Mississippi and Alabama are important to the future domestic energy supply of the United States. These areas are available for leasing through various state and Federal leasing programs.

Alaska Region: BOEM continues to support BSEE in the oversight of production allocation issues for the Northstar field unit which produces oil from both State of Alaska and OCS leases. One such manner by which BOEM supports BSEE is through its participation in quarterly meetings with British Petroleum Exploration Alaska and BSEE to review and discuss production allocation issues.

Pacific Region: During FY 2014, BOEM generated its annual Field Reservoir and Reserve Estimate report, breaking down the Pacific Region's reserves and known resources by field and productive zone. Work on this annual report begins once production data is submitted by

companies, which is typically received by BOEM in the late spring or early summer. BOEM then must verify the data and perform a variety of analyses, which typically takes months to complete. The Field Reservoir and Reserve report provides a brief update on reserves and production between releases of the more comprehensive Estimated Oil and Gas Reserves report. BOEM anticipates publishing an annual Field Reservoir and Reserve Estimate report during FY 2015 and also FY 2016.

- **Regulation of Prelease Exploration**

Through regulation, BOEM works to ensure that prelease exploration, prospecting, and scientific research operations in Federal waters do not interfere with each other, with lease operations, or with other permitted uses of the area. Permits to acquire prelease geological and geophysical 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. For each approved application, the operator receives a signed copy of the permit that outlines policies regarding reporting, submission, inspection and selection of data, reimbursement, disclosure of information, possible sharing of data with affected states, contact information for coordinating activities with affected stakeholders, and policies regarding permit modifications. Adherence to these regulations ensures that exploration and research activities will be conducted in a safe and environmentally sound manner.

Gulf of Mexico Region: BOEM will continue to issue permits for both oil and gas exploration and marine minerals prospecting activities. During FY 2014, BOEM evaluated and issued 56 permits. During FY 2015, the BOEM anticipates evaluating and issuing approximately 100 permits, as well as various permit modifications, with the majority of the permits issued for deep penetration seismic surveys. BOEM estimates it will evaluate and issue approximately 125 permits during FY 2016. The challenge is to balance the increased need for coordination with NEPA and other environmental reviews while providing the permittee with timely access to permits to meet their business operation needs.

Alaska Region: BOEM will continue to issue permits for both oil and gas exploration and marine minerals prospecting activities (e.g. gold). Permit activity is expected to remain at two to six permits submitted per year, primarily seismic surveys for off-lease exploration. In addition to ensuring that all permittees adhere to statutory requirements (including the Marine Mammal Protection Act and the Endangered Species Act), BOEM also coordinates with other Federal agency efforts and promotes community involvement and government-to-government consultations (e.g., tribal consultations and Alaska Native Claims Settlement Act Corporations). Because of the outreach required (e.g., 229 of 564 federally recognized tribes are found in Alaska), these efforts involve a higher level of personnel resources and commitment to manage these permits. BOEM's workload in FY 2015 and 2016 will likely depend on the level of

activity in the Region, for instance scheduled OCS lease sales, particularly in the Cook Inlet where the last successful OCS sale was held in 1997, or if a major discovery is made in the Arctic OCS.

- **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. These estimates are used to focus OCS leasing on areas of high potential, as well as to help 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 physically acquired by the oil and gas industry, which conducts exploration, development, and production activities on OCS lands. As a condition of the permit that BOEM issues prior to each industry activity (such as seismic data acquisition), companies are required to provide a copy of the G&G data to BOEM upon request after completion of data acquisition. BOEM uses these data internally, while maintaining them in a proprietary term that generally ranges from 2 to 25 years. The extensive amount of data and information acquired 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 fair market value of the leased tracts.

Atlantic OCS: In support of the strategy laid out in the Five Year Program approved by the Secretary in August 2012, BOEM is facilitating resource evaluation in the Mid- and South Atlantic planning areas. The region-specific strategy laid out in the Five Year Program was designed to support future decision-making regarding whether potential offshore oil and gas lease sales in the Mid- and South Atlantic planning areas would be appropriate, and if so, where future lease sales should be focused. By the end of FY 2016, BOEM expects to begin acquiring and maintaining new G&G data within the Mid- and South Atlantic. A total of ten pending permits from nine companies have been submitted as of November 2014. BOEM anticipates receiving one or two additional permits during FY 2015 and possibly two or three during FY 2016.

BOEM's strategy will support development of modern, robust scientific information about the scope and location of potential oil and gas resources in the Mid- and South Atlantic and to facilitate resolution of significant potential conflicts between oil and gas activity and other important OCS uses in these areas, including military, fishing, and vessel traffic uses as well as

environmental and infrastructure concerns.

Gulf of Mexico Region: Both BOEM and industry are expanding their use of three-dimensional technology to study and evaluate the complex geologic picture of the Gulf of Mexico OCS. The data provided by this technology is used by decision-makers to inform policies regarding offshore resource development in the Gulf of Mexico.

Because it oversees such a large number of active leases, the Gulf of Mexico Region acquires, analyzes and manages a vast collection of G&G data. As of January 2015, BOEM currently manages approximately 2,220 three-dimensional surveys, 506 two-dimensional surveys, and other critical data encompassing a total volume of 130 terabytes of 32 bit SEGY data. Data volumes grow at a rate of approximately 17 terabytes per year. To effectively manage the growing volumes, BOEM actively invests in data management solutions (servers, disk space, Hierarchical Storage Management, database development) needed to effectively 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).

Alaska Region: BOEM continues to acquire and manage critical data needed to support mission functions, such as the development of lease sale environmental impact statement scenarios, Five Year Program scenarios, and lease sale fair market value determinations. If exploration drilling increases in the U.S. Arctic, more staff time will be devoted to managing and protecting the increasing amounts of data and information critical for detailed analyses needed by both BOEM and BSEE. It is expected that this workload will increase in 2015 due to the possibility of U.S. Arctic drilling activities and pre-lease G&G permitted activities in preparation for lease sales scheduled in 2016 and 2017.

MARINE MINERALS PROGRAM

BOEM is responsible for the policy and guidance for the development of all OCS minerals other than oil, gas, and sulphur under Section 8(k) of the OCS Lands Act and is the sole responsible steward of OCS sand and gravel resources critical for the long-term success and cost-effectiveness of many shore protection, beach nourishment, and wetlands restoration projects along the Gulf and Atlantic coasts. The OCS Lands Act, as amended, authorizes BOEM to convey, on a noncompetitive basis, the rights to OCS sediment resources to Federal, state, and local entities for shore protection, beach or wetlands restoration projects, or for use in construction projects funded or authorized by the Federal Government. In addition to being a statutory responsibility, activities of the Marine Minerals Program also reflect a strategic investment in advance planning, sand resource evaluation, stakeholder coordination, and environmental assessment and study so that, when they are needed, OCS sand resources can be

made available in a responsible way.

The Marine Minerals Program provides the Bureau with the capability to provide sand and gravel resources to protect and improve coastal resources and the environment locally, regionally and nationally. To date, BOEM (and its predecessor the Minerals Mangement Service) has conveyed the rights to more than 92 million cubic yards of OCS sediment in 46 projects covering seven states and 256.5 miles of coastline.

In FY 2012, BOEM issued three noncompetitive agreements to provide more than 11 million cubic yards of OCS sand. During FY 2013, demand for these resources increased dramatically due to recovery and restoration efforts related to Hurricane Sandy. In FY 2013, BOEM negotiated eight noncompetitive agreements to provide more than 6.1 million cubic yards of OCS sand for coastal restoration/wetlands protection projects along the Atlantic and Gulf of Mexico. As construction of these projects continued into FY 2014, BOEM executed five new agreements conveying approximately 17.5 million cubic yards of OCS sand. An agreement for Long Beach Island, New Jersey was executed in July 2014 for seven million cubic yards of OCS sand to restore shoreline damaged by Hurricane Sandy. This agreement was the largest amount of OCS sand that BOEM has conveyed to date along the Atlantic coast. BOEM anticipates issuing approximately seven agreements in FY 2015, conveying over 30 million cubic yards of OCS sand.

In addition, BOEM anticipates receiving an increasing number of requests for OCS sand in FY 2016 and beyond as state sand resources are depleted or limited by environmental constraints and additional states look to the OCS for sand. In the Gulf of Mexico, increased availability of funds associated with Deepwater Horizon Event fines and penalties has increased the number of coastal restoration projects, many of which are barrier island restoration projects that will use OCS sand to help mitigate the damages to the ecosystem from the 2010 oil spill. BOEM is presently partnering with Lousiana on three of these projects that collectively will use approximately 20 million cubic yards of OCS sand in FY 2016.

BOEM is responsible for managing the use of mineral resources and ensuring that the conveyance of OCS sand resources does not result in adverse environmental impacts on the marine, coastal, or human environment. Each negotiated lease requires a NEPA analysis, including endangered species and essential fish habitat consultations with the National Marine Fisheries Service (NMFS) and the FWS, as well as coastal consistency and archaeological resources reviews. BOEM plans to continue to initiate studies to provide information to evaluate the effects of specific proposed dredging operations, as required under current environmental laws, and design mitigation measures that are incorporated, as appropriate, in lease requirements and stipulations for the dredging of OCS sands.

Many of the completed projects used sand from OCS borrow areas that were identified by the highly successful state cooperative offshore sand agreements that were in place from the mid-1990s to 2005. Sand deposits previously identified and evaluated by the program have been used for 17 beach nourishment projects in Maryland, Virginia, Louisiana, and Florida. Sand sources identified through the cooperative effort with Louisiana are the major source of material for restoration of barrier islands located in the southwestern and central Louisiana coastal area.

Coastal Impacts of Storms and Erosion

As Hurricane Sandy illustrated (shown in the images below), natural and developed coasts are frequently subject to major storm damage and severe erosion. OCS sand resources are often needed under urgent circumstances to restore damaged shorelines and wetlands to pre-storm condition, or are needed more strategically to protect coastal areas in advance of a storm, or to re-establish important biological habitat and ecological function. In some regions, like the Gulf of Mexico, sufficient volume of sand resources for use in the long-term ecosystem scale restoration of barrier islands and wetlands is only available on the OCS. Along Atlantic and Gulf Coasts, BOEM anticipates the demand for, and importance of, OCS sand resources will continue to rise because of climate-related changes in storm activity and accelerating sea level rise, as well as an increasing number of environmental and resource conflicts in state waters.

NASA Flight Facility at Wallops Island, Virginia

Sand resource identification and delineation is critically important because identifying marine mineral resources and determining the sand deposit characteristics (sufficient quantity, appropriate grain size, environmental conditions or proximity to the placement site) enables the responsible management of these resources. Moreover, G&G data with sufficient spatial

coverage are important to define OCS sand deposits and effectively manage potential conflicts with other OCS surface activites such as oil and gas or renewable energy infrastructure installation that could make the sand unavailable. Maintaining and expanding the inventory of OCS sand resources is critical to the Nation's coastal restoration and resiliency efforts. As the demand for these resources evolves, BOEM will seek to acquire new information about the availability and location of marine mineral resources on the OCS, as well as information on the environmental impacts associated with the removal of OCS sand.

- **Outlook on Conventional Energy**

In FY 2016, BOEM will continue to effectively and responsibly manage offshore oil, gas, and mineral resources. The management of these resources includes allowing for access to those resources, safeguarding a fair return to taxpayers, and applying the necessary environmental protection. Access to offshore energy and mineral resources will continue to be a high priority within BOEM, particularly the focused efforts to develop the 2017-2022 Five Year Plan, the execution of scheduled oil and gas lease sales, and addressing the increasing need for OCS sand and gravel for the purposes of coastal restoration. Financial responsibilities, reduction of risks, and economic evaluation and analysis of offshore natural resources will continue to be used to ensure the public receives a fair return for OCS energy resources. In addition, BOEM will continue to ensure the appropriate environmental protection measures are included in offshore activities including leasing of oil and gas and marine minerals. Looking forward, BOEM's Conventional Energy activities will continue to meet the high standards set forth by the Administration, Congress and the public through successful planning, execution and protection of the Nation's offshore resources in response to the Nation's energy needs.

2016 PROGRAM PERFORMANCE

The FY 2016 request provides the resources needed to carry out the mission of BOEM, including renewable, conventional, and environmental program activities, and is in support of the FY 2014-2018 DOI Strategic Plan. The FY 2014-2018 DOI Strategic Plan is the foundational structure for the description of BOEM program performance measurement and planning for the FY 2016 President's Budget. The BOEM budget and program plans for FY 2016 are fully consistent with the goals, outcomes, and measures described within the DOI Strategic Plan. The following pages contain the BOEM Program Performance Overview tables. Further details for achieving the Strategic Plan's goals are contained within the DOI APP&R.

Table 16: Program Performance Overview Table

Mission Area 3, Goal 1: Secure America's Energy Resources						
Strategic Objective Metrics						
Strategic Plan Measure / Efficiency or other Bureau-Specific Measure	**2011 Actual**	**2012 Actual**	**2013 Actual**	**2014 Actual**	**2015 Plan**	**2016 Pres. Budget Request**
Strategic Plan Measures						
Number of offshore lease sales held consistent with the Secretary's Five-Year Oil and Gas Program	-	2	3	3	2	3
Comments: This measure tracks the quantity of lease sales conducted during the current Five Year Program.						
Contributing Programs: Office of Strategic Resources						
Efficiency or other Bureau-Specific Measures						
Number of blocks/tracts evaluated	24,870	14,612	12,200	9,184	15,000	20,000
Comments: To determine the potential resources on the OCS and the fair market value of those resources, BOEM must conduct detailed evaluation of the blocks and tracts offered for lease each year as well as conduct regular resource assessment activities.						
Contributing Programs: Office of Strategic Resources						
Maintain the ratio of 1.8 to 1 (+/-0.4) of accepted high bids to BOEM's estimated value	N/A	2.013 to 1	2.116 to 1	1.84 to 1	1.8 to 1 (+/- 0.4)	1.8 to 1 (+/- 0.4)
Comments: This measure compares the accepted high bid on each tract to the government's estimated value for that tract. Industry corporate strategy with respect to acquiring specific acreage could lead to a company raising its bid above this analytical value to improve their chances of winning the lease. BOEM estimates are based on a discounted cash flow analysis of a tract and are not designed to predict the high bid. Therefore, the value of this indicator should always be greater than one to achieve fair value for OCS leases. The annual target ratio of 1.8 to 1 means that on average, the industry bids received are expected to be $1.80 (+/- 0.4) for every dollar of the estimated value for each tract.						
Contributing Programs: Office of Strategic Resources						

Table 17: Program Performance Overview Table

Mission Area 3, Goal 2: Sustainably Manage Timber, Forage, and Non-energy Minerals							
Strategic Objective Metrics **Strategic Plan Measure / Efficiency or other Bureau-Specific Measure**	**2011 Actual**	**2012 Actual**	**2013 Actual**	**2014 Actual**	**2015 Plan**	**2016 Pres. Budget Request**
Strategic Plan Measures						
Number of sand and gravel requests processed for coastal restoration projects	N/A	N/A	N/A	5	5	7
Comments: This measure tracks non-energy minerals development on Departmental lands and waters, such as gold, zinc, lead, copper, iron, salt, sand, potassium, phosphate, stone, gravel, and clay, which support a broad array of uses, including medical applications, computer production, coastal restoration, automobile production, and highway construction and maintenance. This is a newly established GPRA measure; baseline results were collected during FY 2014.						
Contributing Programs: Office of Strategic Resources						

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Environmental Programs

Table 18: Environmental Programs Budget Summary

		2014 Actual	2015 Enacted	Internal Transfers (+/-)	Fixed Costs (+/-)	Program Changes (+/-)	2016 Request	Change from 2015 (+/-)
Environmental Programs	($000)	63,218	65,712	+4,166	-33	-1,800	68,045	+2,333
	FTE	*155*	*150*			*+4*	*154*	*+4*

SUMMARY OF 2016 PROGRAM CHANGES

Program Changes from 2015	Amount ($000)	FTE
Staffing for Increased OCS Activity	+310	+2
Collaborative Efforts on Ecosystem Science	+500	+2
PEIS for 2017-2022 Program	-2,500	-
Programmatic Reduction	-110	-
Total Program Changes	**-1,800**	**+4**

The FY 2016 President's Budget request for BOEM's Environmental Programs budget activity is $68.0 million and 154 FTE, a net increase of +$2.3 million from the 2015 enacted level. This change is comprised of a decrease in fixed costs of $33,000, an internal transfer of +$4.2 million, and the following program changes:

Staffing for Increased OCS Activity (+$310,000; +2 FTE). In 1980, BOEM's predecessor agency promulgated the Department of the Interior's ambient air quality standards. The Department's mandate is to evaluate OCS activities to the extent that the activities authorized under OCS Lands Act significantly affect the air quality of any state. In 2011, Congress amended section 328 of the Clean Air Act to transfer authority for air emission regulation in the Chukchi and Beaufort Seas to BOEM compelling the agency to update its regulations. BOEM requests additional staffing capacity to respond to the increased workload that will result from the air quality regulations update expected to be issued in 2015 and potential updated exemption levels (also in the regulations) expected to occur in 2016. Each of these changes to the regulations will require more effort from subject matter experts in the Regional offices to review, verify and approve exploration and development and production plans.

Collaborative Efforts on Ecosystem Science (+$500,000; +2 FTE). The purpose of this initiative is two-fold: to support BOEM's engagement in Arctic Council efforts and to increase the Bureau's expertise on issues of interest to the Council, namely factors related to climate change resilience and adaptation.

BOEM's U.S. Arctic activities have contributed significantly to the work of the Arctic Council since its inception in 1996. BOEM was asked to contribute more expertise and leadership as the United States prepares to take the Chairmanship of the Arctic Council for the period of 2015-2017. BOEM will use the requested funding to continue building upon its Arctic knowledge and leveraging it with that of the other members of the Arctic Council.

One of the focus areas of the Arctic Council pertains to climate change resilience and adaptation in the Arctic. A major component of this area of study is the impact of ocean-atmospheric interactions, such as greenhouse gas (GHG) emissions, on marine ecosystems, ocean acidity, and the overall climate. An enhanced understanding of these interactions is needed in order to promote greater coordination among stakeholders and Federal and state agencies. This initiative would enable BOEM to deepen its policy and scientific expertise on atmospheric science, air quality, GHGs, and associated issues through research, analysis, and studies. BOEM currently does not have a formal program related to tracking and analyzing the impacts of GHG emissions resulting from activities on the OCS and requires the funds and FTE to build knowledge and internal expertise. Results from the GHG studies funded by this initiative will improve the quality and credibility of BOEM's impact assessments and analyses, and it will give BOEM the tools necessary to determine whether policy changes are needed to inform development of a national GHG program.

PEIS for 2017-2022 Program (-$2,500,000; 0 FTE). In FY 2015, BOEM received $2.5 million in funding to support a comprehensive PEIS that is required for BOEM's next Five Year Program (2017-2022). The PEIS is mandated by NEPA and is required in order to fulfill the requirements of the OCS Lands Act and BOEM's mission. The development of the PEIS involves scoping, development of alternatives, Federal and state agency coordination, public comment, comment analysis and response, as well as publication of the draft and final PEIS. The funding was required for and will be used in full in FY 2015, making it a one-time need.

Programmatic Reduction (-$110,000; 0 FTE). In order to support BOEM's highest priority needs in FY 2016, the Bureau proposes a general reduction in funding for environmental programs to be realized through administrative savings, such as increasing oversight and setting limitations on travel and training.

Program Performance Change. The FY 2016 budget request supports the accomplishment of

the Department's strategic goals. BOEM is making great strides in moving towards the goals it establishes for itself for these goals as well as the supporting performance measures. The budgetary changes identified within this request do not specifically affect funding for the Environmental Studies Program. For this reason, the environmental studies output, as identified in the table at the end of this chapter, is anticipated to remain relatively steady.

PROGRAM OVERVIEW

BOEM, in coordination with the BSEE, is responsible for assessing the impacts of and providing effective environmental safeguards for the exploration and development of energy and mineral resources on OCS. This includes oil and gas, renewable energy resources (e.g., wind, wave, and tidal energy), and non-energy minerals such as sand and gravel. BOEM is also responsible for managing and ensuring environmental protection for any OCS activities for "marine-related purposes" (e.g., alternate use program) using facilities currently or previously authorized under the OCS Lands Act.

BOEM's environmental work on the OCS is guided by key laws such as:
National Environmental Policy Act
Coastal Zone Management Act
Endangered Species Act
Magnuson-Stevens Fishery Conservation & Management Act
Marine Mammal Protection Act
Clean Air Act
Clean Water Act
National Historic Preservation Act
Migratory Bird Treaty Act

These responsibilities require BOEM to assess the environmental impacts of planned and proposed OCS development and to provide guidance to developers and other stakeholders concerning the place, time, and nature of activities to be authorized. BOEM addresses these requirements through the Environmental Programs Activity. This Activity is intended to inform decision-makers and the public about potential environmental impacts of OCS energy and mineral resource development, how to prevent or mitigate those impacts, and how to monitor impacts and measures for environmental protection. This information supports and guides decision-making not just within BOEM, but also by BSEE and by other government authorities.

The Program includes the environmental assessment and the environmental studies functions described below. The environmental staff incorporates diverse expertise including marine and

coastal biology, chemical and physical oceanography, avian and marine mammal biology, acoustic science, geology, meteorology, risk modeling, sociology, archaeology, environmental policy, and management. BOEM's environmental functions are organized administratively into the Office of Environmental Programs in the Washington, DC, area, including the Environmental Studies and Environmental Assessment Divisions; the Office of Renewable Energy Programs, also in the DC area; and the three BOEM regions: the Gulf of Mexico, Alaska, and the Pacific. While BOEM's science is managed as a single account through the Environmental Programs budget activity, it is the aim and practice of BOEM environmental staff to work in teams, with leadership provided by those whose backgrounds and capabilities best address the issues at hand. Furthermore, the Environmental Program is committed to continuous staff improvement through training and feedback and to recruitment and retention of the best talent available. The Program is also committed to partnerships and to genuine, continuing interaction with all stakeholders, including Federal, state, and local governments; tribes and other organizations of Native peoples; civil society; and business.

ENVIRONMENTAL ASSESSMENTS

BOEM's environmental assessment function addresses environmental impacts and the environmental requirements defined by a range of Federal statutes. Its work is informed by the best available science, drawing from the Environmental Studies Program and other research. The actions reviewed include authorization of G&G exploration activities; plans for leasing; lease sales and approvals; exploration plans; development and production plans; and development operations coordination documents. The activity also reviews more specific authorizations and permits, including facility decommissioning, which may be approved and enforced by BSEE, but whose environmental assessment is supported by BOEM. BOEM's environmental assessments not only take a hard look at environmental impacts and alternatives to proposed actions, but they also identify measures to mitigate impacts which can be translated into requirements for operators through regulatory vehicles such as permit stipulations, lease stipulations, and notices to lessees.

➢ Statutory Mandates

At the very core of BOEM's Environmental Program is its mission to carry out the direction set forth by numerous and diverse legislative statutes. Under the OCS Lands Act, BOEM considers impacts from OCS development on the marine, coastal, and human environments. The impacts include not only the area within the OCS where energy and minerals resources are produced, but also geographic areas well beyond the OCS that may be directly or indirectly impacted by OCS development. The marine environment extends landward to salt marshes and wetlands. The coastal environments include the terrestrial ecosystem from the shoreline inward to the

boundaries of the coastal zone, while the human environment includes the physical, social, and economic components that determine the state, condition, and quality of living conditions, employment, and health of those affected.

The OCS Lands Act and NEPA establish the overall framework for BOEM's studies, assessments, and standards for environmental protection in resource development on the OCS. Environmental standards established by the OCS Lands Act differ with activity, but include various key responsibilities for which BOEM and BSEE are now responsible. Among these is the responsibility to ensure that geological and geophysical activities will not be unduly harmful to aquatic life; that exploration for and production of oil and gas will not cause serious harm to the environment which cannot be modified to avoid the harm; that renewable energy production will be carried out in a manner that provides for protection of the environment; and that all applicable laws be complied with.

A cormorant perches near a Pacific OCS platform.

In accordance with NEPA and implementing regulations of the Council on Environmental Quality, BOEM and other Federal agencies prepare an EIS, which includes an evaluation of alternatives, before taking a major action that will significantly affect the quality of the human environment. NEPA is BOEM's principal vehicle for reviewing environmental impacts and engaging public participation in the process. Programmatic environmental impact statements may be prepared initially if a proposed action is broad in nature (e.g. approval of a Five Year Program) and then followed by more specific subsequent environmental reviews that are "tiered" to the programmatic statement. While NEPA is one of the principle statutes that guide BOEM's environmental activities, other Federal laws give protection to specific resources that may be impacted by OCS activities authorized by BOEM. Both the Endangered Species Act and the Marine Mammal Protection Act provide an important framework for ensuring the health and safety of coastal habitats and wildlife.

The Endangered Species Act requires that BOEM not take any action likely to jeopardize the continued existence of any species listed as endangered or threatened or to destroy or adversely modify critical habitat of listed species. If an action by BOEM may affect a listed species, BOEM is required to consult with either NMFS, for primarily marine species, or FWS, for species whose lives are more closely tied to land. As is the case for NEPA assessments, an Endangered Species Act consultation may be specific or programmatic. If any of the agencies

involved believe that a formal consultation is warranted under the Act, then BOEM will prepare a biological assessment to inform itself and other Federal partners about the presence of listed species and impacts of the action on them. NMFS or FWS then reply with a biological opinion, which gives an opinion on whether the action is likely to jeopardize a listed species or adversely modify its critical habitat. Carrying out the principles espoused by the Endangered Species Act requires the highest level of scientific depth and quality, clarity in assessment, and coordination with the NMFS and FWS.

The Marine Mammal Protection Act is similarly dependent on the best available science and assessments to accomplish its mission. Avoiding and mitigating the potential harm for acoustic surveys for oil and gas resources is an area of key focus for BOEM. The Marine Mammal Protection Act requires BOEM and other agencies to avoid injuring marine mammals or disrupting their behavior if there is more than "negligible impact" on the species. Recent efforts have focused specifically on the effects of air guns in seismic acoustic exploration on cetacean behavior.

A diver studies the shipwreck and ecosystem surrounding the World War II era German U-701 submarine off the coast of North Carolina.

BOEM's environmental assessment function also addresses the complex requirements of other laws including the Coastal Zone Management Act, with state program consistency generally required; the Magnuson-Stevens Fishery Conservation and Management Act, which requires review and protection of "essential fish habitat"; and the Clean Air Act, which nationwide is typically managed by the U.S. Environmental Protection Agency (EPA) at the Federal level but for which the OCS in parts of the Gulf of Mexico and offshore the Alaska North Slope is managed by BOEM and BSEE. Other laws addressed include the Clean Water Act, administered by EPA at the Federal level; the National Historic Preservation Act, with particular focus on identifying and protecting shipwrecks and submerged settlements on the OCS; and, the Migratory Bird Treaty Act, whose restrictions on taking migratory birds are implemented by the FWS.

Fulfilling these diverse and critically important statutory mandates for protecting the environment guides the work of BOEM's environmental program. BOEM's science and assessment has a well-developed structure and process, but the core, essential purpose of the program, to which BOEM closely hews, is straightforward: to fulfill the direction of Congress for protecting the Nation's environment as energy resources are developed.

- **Coordination with BSEE**

Coordination with BSEE requires an additional, relatively new, effort by BOEM's Environmental Assessment staff. Since May 21, 2010, when Secretarial Order 3299 allocated responsibilities of the former Minerals Management Service to BOEM, BSEE, and the Office of Natural Resources Revenue, BOEM has been responsible for more general decisions concerning OCS activities, such as approval of leasing programs, lease sales (includes stipulations for lessees), exploration plans (includes specific requirements), and development and production plans (includes specific requirements), and development operation coordination documents. Consistent with BOEM's decisions, BSEE has been responsible for more specific decisions including issuance of permits to drill and other specific authorizations, and conditions for operators, as well as enforcement of BOEM's requirements and stipulations.

Both BOEM and BSEE must comply with the laws generally applicable to Federal agencies, including NEPA, the Endangered Species Act, and the Marine Mammal Protection Act. In order to ensure maximum efficiency, BOEM and BSEE coordinate to avoid redundant reviews. As such, where there is common interest and the efforts lie within BOEM's scope and mission, BOEM will undertake or supplement studies, environmental assessments, and consultations with a view to providing the information and guidance needed for decisions by both BOEM and BSEE. For example, BOEM prepared more than 300 hundred environmental documents in 2014 to support BSEE decisions concerning pipeline applications and applications for structure removal. BOEM also led, working closely with BSEE, regional Endangered Species Act consultations in the Gulf of Mexico and Alaska OCS Regions. This new interagency relationship requires a new level of effort for coordination and procedural integration.

- **Major Cross-Cutting and Regional Assessments**

BOEM's environmental assessments include the development of programmatic environmental impact statements for the Bureau's Five Year Program, for renewable energy, and for all G&G activities. BOEM's growing role in marine planning is likely to increase the use of programmatic EISs and comprehensive planning. Marine planning identifies areas most suitable for various types or classes of activities in order to reduce conflicts among uses, reduce environmental impacts, facilitate compatible uses, and preserve critical ecosystem services to meet economic, environmental, security, and social objectives.

BOEM follows programmatic statements with individual EISs, environmental assessments, findings of no significant impact, or determinations that a categorical exclusion applies. In this phased process, BOEM prepares hundreds of additional site-specific NEPA documents annually for decisions on proposed oil and gas operations, including operators' plans for exploration and development, pipeline permit applications, geophysical survey and geological sampling permit

applications, structure removal, and other related industry activities. In FY 2014, BOEM completed over 600 environmental assessment documents for such activities.

In FY 2015, BOEM requested specific one-time funding to continue work on a programmatic EIS for the next Five Year Program (2017-2022). The programmatic EIS supports development of a new oil and gas leasing program. The programmatic EIS provides a concise assessment that addresses key issues throughout program implementation and provides information pertaining to environmental issues and Program alternatives. Additionally, the programmatic EIS provides insight and consideration regarding frontier areas in a Five Year Program. The funding supports contractor preparation of the programmatic EIS and also contractor facilitation of scoping meetings, public hearings, and government to government meetings. BOEM will enhance the traditional programmatic EIS through use of a new format in 2015 to improve the EIS's accessibility and use in decision-making. The EIS will be presented to portray a more focused analysis of potential environmental impacts using a geospatial analytical approach that presents impacts and issues largely through illustrative maps. This will allow BOEM to succinctly and effectively frame the most important issues related to the program decisions. The programmatic EIS will allow BOEM to more meaningfully communicate and interact with decision-makers and the public.

Assessments in the Atlantic: Although there is no formal Atlantic Region, BOEM conducts environmental assessments in the Atlantic for conventional and renewable energy activities, as well as marine mineral activities. In July 2014, BOEM issued a record of decision establishing environmental mitigation measures and safeguards for G&G survey activities off the Mid- and South Atlantic coast to update 30-year old data on the region’s offshore resources. With this framework in place, BOEM is reviewing permit applications for G&G activities throughout the Mid-Atlantic and South Atlantic Planning Areas, which extend from the Delaware Bay to just south of Cape Canaveral and from the inner edge of Federal waters along that coastline to 403 miles offshore. The programmatic EIS assessed G&G activities conducted under BOEM’s marine minerals, renewable energy and oil and gas programs, including deep-penetration and high-resolution seismic surveys, electromagnetic surveys, magnetic surveys, gravity surveys, remote-sensing surveys and geological and geochemical sampling. Individual G&G applications will be subject to separate, activity and site-specific environmental review. If the 2017-2022 Oil and Gas Leasing Program includes the potential for an Atlantic lease sale(s), initial planning for an Environmental Impact Statement will also begin.

Much of BOEM’s renewable energy efforts has centered on potential wind energy and hydrokinetic power development in the Atlantic. Environmental documents have been prepared to support leasing, meteorological testing, site assessment activities, as well as proposed construction and operation in the case of Cape Wind. BOEM finalized NEPA documents for leasing and site assessment in the Massachusetts Wind Energy Area, and the approval of

revisions to the Cape Wind Construction and Operations Plan in FY 2014. BOEM anticipates completing documents in FY 2015 and FY 2016 for additional wind energy leasing offshore Georgia and North Carolina, as well as the Virginia Offshore Wind Technology Advancement Project.

In FY 2014, BOEM also completed an environmental assessment to support G&G shallow water survey activities that BOEM is funding following Hurricane Sandy to identify OCS sand resources for potential use in coastal restoration and beach nourishment projects. In FY 2014, BOEM worked cooperatively with the U.S. Army Corps of Engineers to prepare environmental assessments for the Long Beach Island (NJ) Storm Damage Reduction Project and Folly Beach (SC) Hurricane and Storm Damage Reduction Project. In FY 2015, BOEM will continue to support environmental reviews for projects along the Mid-Atlantic and South Atlantic coasts, from New Jersey south to Florida.

Assessments in the Gulf of Mexico Region: In the Gulf of Mexico, BOEM finalized four major NEPA documents in FY 2014: three supplemental EISs for lease sales considering new studies following the *Deepwater Horizon* explosion and oil spill, including available data from the Natural Resource Damage Assessment and Restoration process and the Atlantic G&G Programmatic Environmental Impact Statement. In FY 2015, BOEM also expects to prepare NEPA documents for decisions on Gulf Central, Eastern, and Western Planning Area lease operations, including G&G permit applications, pipeline applications, exploration plans, development operations coordination documents (including deep- and ultra-deep water activity), and facility decommissioning. In FY 2015, the Gulf programmatic environmental impact statement on G&G activities will continue to be developed with NOAA as a cooperating agency. The draft is expected to be published in early 2016. In FY 2014, BOEM prepared NEPA documents for 236 plans, of which 59 required a site-specific environmental assessment; 80 pipeline applications; 66 G&G permit applications, of which 41 required a site-specific environmental assessment; applications for 32 ancillary activities (all site-specific environmental assessments); and, applications for 209 structure removals. In FY 2015 and FY 2016, BOEM anticipates the number of environmental reviews to increase slightly each year.

Assessments in the Alaska Region: BOEM's 2012-2017 Five Year Program includes lease sales in the Cook Inlet, Beaufort Sea and Chukchi Sea Planning Areas. The Alaska Region will conduct NEPA and other environmental analyses as appropriate to support decisions regarding the lease sales in these areas. In FY 2014 BOEM conducted NEPA and other analyses for decisions regarding seismic and ancillary activities, and BOEM will conduct NEPA analyses in FY 2015 and 2016 to support decision-making on exploration plans, a development and production plan, and specific G&G permits as appropriate. Assuming industry interest will increase in the Alaska OCS, BOEM must work diligently to keep pace.

More generally, BOEM is working with other agencies and stakeholders to understand the impacts of OCS activities on the Arctic marine environment. BOEM has been a cooperating agency on several environmental documents: Bureau of Land Management's Supplemental EIS for Development – Greater Moose's Tooth Area in the National Petroleum Reserve-Alaska; and NMFS's programmatic EIS for Arctic G&G activities and exploratory drilling. The Alaska Region is committed to close interaction with Alaska Natives and the integration of traditional knowledge into interpretive documents and decision-making. To implement the National Strategy of the Arctic Region and to implement integrated Arctic management, BOEM works with other Federal agencies and is responsive to environmental reviews of other agencies' actions.

Assessments in the Pacific Region: BOEM's Pacific Region conducts environmental assessments for conventional and renewable energy activities. Here BOEM's conventional energy assessments focus on development and production from 23 existing OCS facilities, largely in support of BSEE. Support for BSEE includes NEPA documents, assisting in enforcement of mitigation measures, and review of the measures' effectiveness.

BOEM and the California State Lands Commission are jointly developing an environmental impact report/environmental impact statement for the various approvals for the Carpinteria Offshore Field Redevelopment Project. BOEM expects to finalize the NEPA document for the project during FY 2015 and FY 2016. The project involves the use of an existing Federal platform for oil production from state leases. Finalizing the project is dependent on actions taken by the industry applicant; however, final decisions by BOEM and the California SLC are expected to be completed no later than FY 2016.

BOEM will also continue working with agencies and other stakeholders to advance research and commercial renewable energy projects on the Oregon and Hawaii OCS. Principle Power, Inc. has submitted a commercial wind lease request to BOEM for a project offshore Coos Bay, Oregon, and the Bureau plans to complete an environmental review of the project by the first quarter of FY 2016 before making a decision on lease issuance. BOEM held public scoping meetings in Oregon after announcing plans to write an Environmental Assessment for the project and continues to meet on a regular basis with the BOEM/Oregon Task Force and fishermen in the affected area. BOEM has also received a research lease request for a grid-connected wave energy test facility on the OCS offshore Newport, Oregon. The lease requires a FERC license in addition to BOEM approval, and the Bureau plans to cooperate with FERC on the environmental review before making a leasing decision. BOEM joined with FERC as a cooperating agency for the Environmental Impact Statement that will be written for the project.

Two draft commercial wind lease requests were submitted to BOEM during 2014 for an OCS area offshore the island of Oahu, Hawaii. BOEM will conduct environmental assessments of the

requests, if the Department of Defense determines the proposed use of the area is compatible with national security and military operations. BOEM expects a final decision from the Department of Defense in FY 2015. BOEM also anticipates receiving a request in late 2015 to authorize placement of an interisland cable for transmitting electricity between the islands of Oahu and Maui in Hawaii. BOEM expects to complete an environmental review of the request in FY 2017.

ENVIRONMENTAL STUDIES PROGRAM

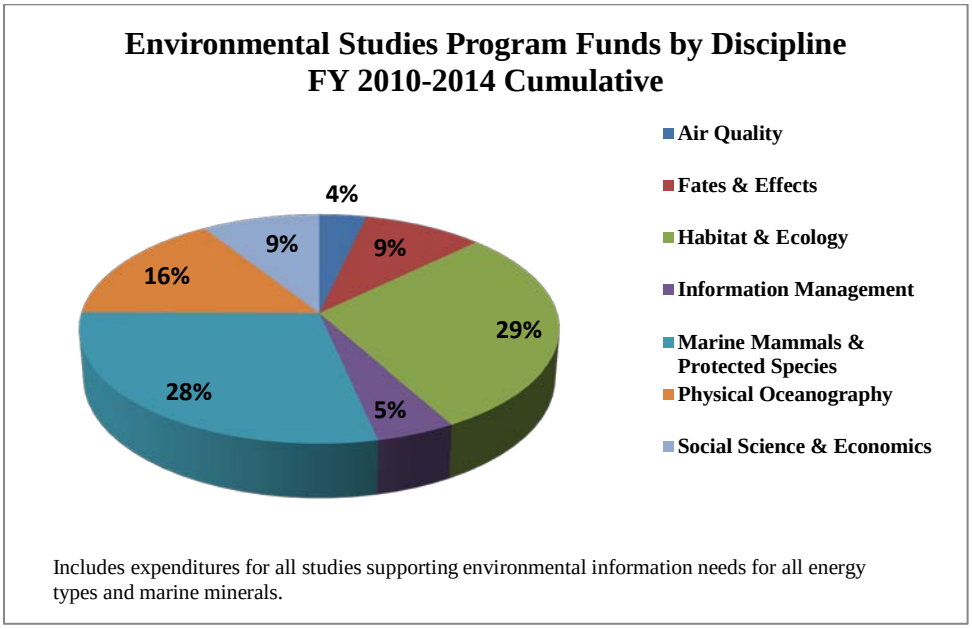
The Environmental Studies Program now managed by BOEM was first established in 1973 by the OCS Lands Act, which directed the Secretary of the Interior to –

- Establish information needed for the assessment and management of impacts on the human, marine, and coastal environments of the OCS and potentially affected coastal areas.
- Predict impacts on marine organisms resulting from a variety of factors: chronic low level pollution or large spills associated with OCS production; discharge of drilling muds and cuttings, as well as pipeline emplacement; and onshore development.
- Monitor human, marine, and coastal environments to provide time-series and data trend information for identification of significant changes in the quality and productivity of these environments.

BOEM's studies address each of these OCS Lands Act mandates. The discoveries and information generated through the Environmental Studies Program inform decisions by BOEM and BSEE concerning implementation of the OCS Lands Act, NEPA, the Endangered Species Act, the Marine Mammal Protection Act, and other applicable laws discussed above. The decisions include actions on regulations, measures for impact mitigation, stipulations to leases, notices to lessees, permits, and enforcement.

BOEM works to integrate science needs from multiple disciplines with respect to OCS energy and mineral resources (see Figure 12, below). In addition, BOEM considers studies independently underway to design and implement effective research for decision-making. A major, continuing emphasis is to understand the release, transport, fate, and effects of oil and other materials that may be discharged or spilled in the marine environment. Research on spill response is also a priority, conducted in close cooperation with BSEE's oil spill program.

Figure 12: Environmental Studies Program Funds by Discipline



Beginning in FY 2015, BOEM is developing a far-reaching, continuing collaboration with the National Research Council (NRC) of the National Academy of Sciences, with a view to establishing an NRC committee dedicated to the needs of BOEM. The committee's functions may include periodic comprehensive review of BOEM's programs; addressing questions of particular interest to the Bureau; participating in annual environmental study program reviews with the OCS Scientific Committee; providing peer review; facilitating stakeholder discussions of controversial issues; and informally advising on recruitment. BOEM anticipates beginning support for this collaboration in FY 2015 and continuing support in FY 2016. The first activity will be to establish the committee.

Because of its quality, scale, and duration, BOEM's Environmental Studies Program is a leading contributor to the growing body of scientific knowledge about the Nation's marine and coastal environment. BOEM is committed to the highest level of scientific and scholarly integrity, as set forth by the Department of the Interior's Scientific and Scholarly Integrity Policy, by the Office of Science and Technology Policy, and by the President.

- **Research Partnerships**

Many BOEM studies are partnerships, including, for example, research addressing seismic noise impacts on marine mammals, environmental effects of sand and gravel extraction, real-time monitoring of environmental parameters, and long-term ecosystem monitoring in the Gulf of Mexico and in Alaska. Partnerships with Federal partners are typically through memoranda of understanding or agreement with individual agencies and through the National Oceanographic

Partnership Program, a collaborative community of Federal agencies working to improve knowledge of the ocean environment. For example, BOEM is currently supporting ship-based marine mammal and bird studies in cooperation with the FWS and NOAA. In early FY 2015, BOEM and NOPP announced the award of the "Marine Arctic Ecosystems Study: A Multi-Agency Partnership." This multi-agency project is an integrated ecosystem research initiative intended to enhance arctic research coordination and improve regulatory decisions and NEPA analyses pertinent to lease sales in the Beaufort Sea, with the potential to include the Chukchi Sea. Initial tasks under this effort will include a pilot program to test the latest technologies in animal-mounted sensors (tags). Partners are being sought for this and other tasks. BOEM plans to initiate two new projects through the NOPP in FY 2015 to support marine biodiversity observing networks (MBON). The projects in Alaska and the Pacific will expand the networks of existing and emerging observatories to develop a prototype ecosystem-based MBON.

Walruses and kittiwake birds sighted on Chukchi Sea ice during BOEM's Hanna Shoal study mission.

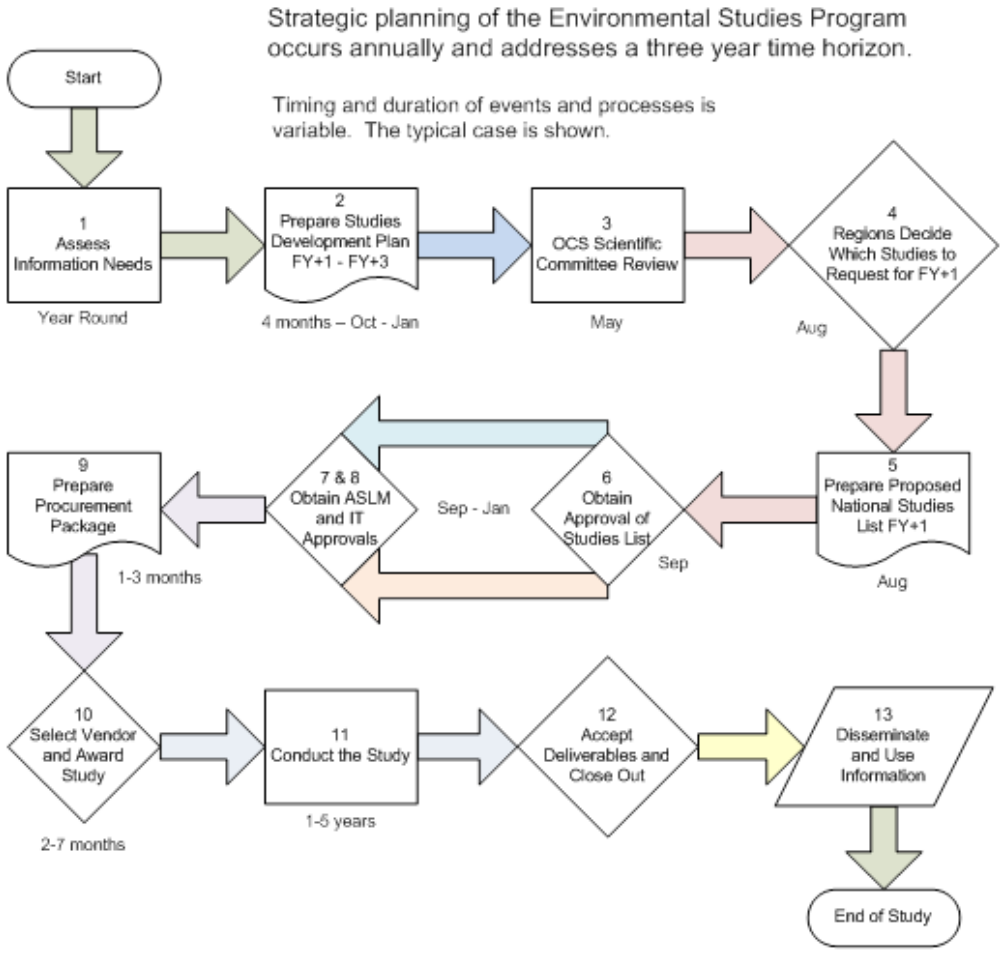
Collaborations with the academic community are undertaken through BOEM-supported Coastal Marine Institutes located at the University of Alaska-Fairbanks and at Louisiana State University, as well as through several units within the Cooperative Ecosystem Studies Unit Network. Through the Cooperative Ecosystem Studies Unit Network, BOEM is able to improve the scientific base for managing the OCS through access to a collaborative network of Federal and academic researchers and technical experts. These partnerships allow the contributing parties to leverage resources, extend the scope (both duration and area) of the research, and maximize the utility of results. Partners bring funds, equipment, facilities and personnel to support collaborative efforts. Many projects include opportunities to train students and contribute to the next generation of environmental science leaders.

- **The Studies Development Plan**

BOEM's environmental studies include multiple layers of review to ensure that the best projects are selected. Each year, BOEM environmental staff solicit input from stakeholders and identify priority studies based on scientific merit, feasibility, relevance to decision-making (including timing), and cost. Potential studies are presented in an annual studies development plan that addresses a three year time horizon. The diagram in Figure 13 below shows the step-by-step process the Environmental Studies Program follows in putting together and carrying out the

annual studies development plan.

Figure 13: Environmental Studies Program Process Overview



The study plan is peer reviewed internally through “subject matter expert” teams and others, and external review is provided by the OCS Scientific Committee, a Federal advisory committee whose 15 non-Federal members are appointed by the Secretary of the Interior. A representative from BOEM and a representative from NOAA serve as non-voting Federal members. The OCS Scientific Committee advises the Secretary, through the BOEM Director, on the feasibility, appropriateness, and scientific value of the program. Once proposed studies are critiqued by the OCS Scientific Committee, they are evaluated again before funding by program staff leadership, principally with reference to decision-making relevance, timing, and budget constraints. The study program is designed to be flexible and dynamic in order to accommodate changing circumstances or requirements. New information needs routinely arise outside the annual planning process, and, in response, proposed studies can be added, removed, or otherwise adjusted. This process of coordination ensures the acceptability of program products in the broader community and the applicability of the results to BOEM information needs, as well as

those of BOEM's contributors and partners.

- **National Studies**

The studies development plan includes research relevant to knowledge and decision-making at all levels of government organization, and many studies are of global interest. These studies are currently grouped under the heading of "national studies" in the development plan and managed centrally by BOEM's Office of Environmental Programs, although BOEM's regional offices and Renewable Energy Program staff participate in and may lead projects. The fundamental distinction of national studies is that they are intended to address issues of recognized broad interest rather than of more specific interest to a region or program.

The national studies include a long-term partnership with the Smithsonian's National Museum of Natural History to preserve biological specimens from federally-funded research, including sequenceable DNA, and to maintain and provide quality assurance for the databases associated with the specimens. In collaboration with NOAA, BOEM also supports MarineCadastre.gov – a website that allows visitors to view information concerning marine waters of the United States by geospatial units, including information on boundaries, infrastructure, human uses, energy potential, and other data sets. BOEM is specifically supporting work to enhance the website's public dissemination of environmental data sets, reports and other study products maintained by BOEM in its Environmental Studies Program Information System and in other systems.

Marine Biodiversity Observing Networks

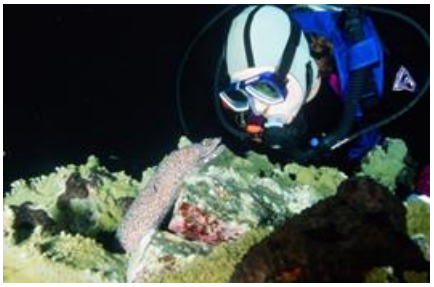
Biodiversity is a critical aspect of healthy, resilient ecosystems. In order to differentiate natural variability on the OCS from potential impacts from offshore energy development, BOEM requires comprehensive biodiversity monitoring across marine ecosystems. To that end, BOEM has joined with NOAA, National Aeronautics and Space Administration (NASA), Shell Oil Company, and academic partners to develop three demonstration marine biodiversity observing networks, or MBONs. The first three MBONs will be located in the Chukchi Sea, the Santa Barbara Channel, and within the National Marine Sanctuary network in the Florida Keys, Monterey Bay, and potentially the Flower Garden Banks. Funding for these three pilot MBONs began in FY 2015 and will continue for five years. There are future plans to incorporate these pilot networks into an expanded ecosystem monitoring program. These projects will be a valuable tool for environmental impact assessments in advance of new energy projects and can later serve as an adaptive management tool.

Information on the studies BOEM will undertake in FY 2015 is available through the BOEM website where the list of planned FY 2015 studies is available. Studies planned in FY 2015 range from addressing the impacts of explosive removal of structures and evaluating impacts from new renewable energy development to contributing to the expansion of MBONs and

continuing studies of protected species. Special focus this year is given to work on understanding ecosystems, birds, sound propagation, and long-term and cumulative impacts, with an emphasis on partnerships to conduct studies.

BOEM's renewable energy program works with many agencies, universities and other stakeholders to identify critical data gaps in assessing the environmental impacts of renewable energy development in areas where it is likely to occur. In FY 2014, BOEM initiated eight new studies to address Atlantic and Pacific Coast science needs for renewable energy development, and nine additional studies are planned in FY 2015. Current priorities are real-time observations of facility development, environmental and socioeconomic effects of port modifications, development impacts on marine mammals and birds, and effects of electromagnetic fields on biota. Several ongoing studies are expected to be completed in FY 2015 addressing noise producing activities; effects of development on fishing, recreation and tourism; archaeological resources; and bird and marine mammal surveys. The results of these studies will be used to inform BOEM decision-makers, environmental analysis, mitigation and monitoring protocols on environmental and cultural issues.

Gulf of Mexico Region Studies: Long-term environmental monitoring is combined with experimental research to give Gulf of Mexico OCS decisions a firm scientific base. Studies in the Gulf of Mexico Region analyze and explore the ecology of every ocean province – 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 is especially challenged to provide the information and oversight needed for developing these new frontiers where biological and other environmental information currently is sparse and often outdated, and the Bureau emphasizes studies addressing deep waters of the Gulf offshore both the U.S. and Mexico.



A moray eel and diver come face-to-face at the Stetson Bank, Gulf of Mexico.

One priority is additional deepwater current observations that can be used to validate the basin-wide ocean current model BOEM uses for the Gulf of Mexico. The *Deepwater Horizon* explosion and subsequent oil release have given impetus to revising baseline conditions and answering fundamental biogeochemical questions. For instance, a modeling effort to hindcast the *Deepwater Horizon* oil spill plume in vertical and horizontal directions and to validate these results with available observations will be completed in FY 2015. In addition to modeling efforts, more must be learned about the behavior of spilled oil and oil mixed with dispersants, particularly the interaction of dispersed oil with deepwater sediments. One BOEM study that will be completed in FY 2015 is investigating how oil/dispersed oil interact with sediments and how such interactions will impact the fate and

transport of oil components in the deepwater environment. Another ongoing study that will be completed in FY 2016 is examining microbial response to hydrocarbon and dispersant exposure on shipwrecks, demonstrated as important artificial reefs in the deepwater environment, in their surrounding sediments, and how the natural processes of wood degradation and metal corrosion may be impacted, in turn, potentially affecting their resident biological communities. Other long-term monitoring efforts include a new study to be procured in FY 2015. In partnership with the U.S. Geological Survey, this new study will quantify changes to infaunal communities associated with deepwater coral habitats and examine their potential recovery from the *Deepwater Horizon* spill over time.

Post-*Deepwater Horizon*, the proliferation of damage assessments, recovery studies, and restoration projects provides a unique opportunity to develop a long-term comprehensive monitoring network that unifies existing monitoring programs and fills gaps in current monitoring. The challenge is to meet the needs of multiple ocean uses with a large-scale, integrated monitoring system that operates under common scientific goals to protect the environment, detect natural and anthropogenic change, and assess recovery.

In the Mid- and South Atlantic planning areas, BOEM studies are underway and being developed to address the potential impacts of oil and gas exploration and development activities, including G&G surveys. Baseline studies are of especial importance in this frontier region and need to span the relevant geographic area of interest, all the way out to ultra-deep waters, and the variety of biological, chemical/physical, and socioeconomic issues of relevance to BOEM environmental assessments. Partnerships with other Federal agencies play an important role in ongoing baseline studies, including the Atlantic Marine Assessment Program for Protected Species, now in its second phase, and the Mid-Atlantic Deepwater Canyons and Shipwrecks study, involving agencies such as NOAA, NMFS, FWS, Navy, and USGS. In the future, 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/or human-induced variability. An interdisciplinary monitoring approach will be adopted to understand biological species densities and distributions, the physicochemical mechanisms driving change, and human use 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.

Alaska Region Studies: BOEM's study efforts in the Alaska Region currently focus on foundational research in the Beaufort and Chukchi Seas Planning Areas and new research in the Cook Inlet Planning Area. Strengthening collaborative research opportunities is a priority, including incorporation of traditional knowledge in research and interpretive materials. Other priorities are data synthesis; updating and improving oil spill risk analysis models; enhancing spill detection technologies and "nowcast" instrumentation; improving baseline monitoring of

Researchers came across this pod of orca killer whales in Alaska's Beaufort Sea during a BOEM-funded study.

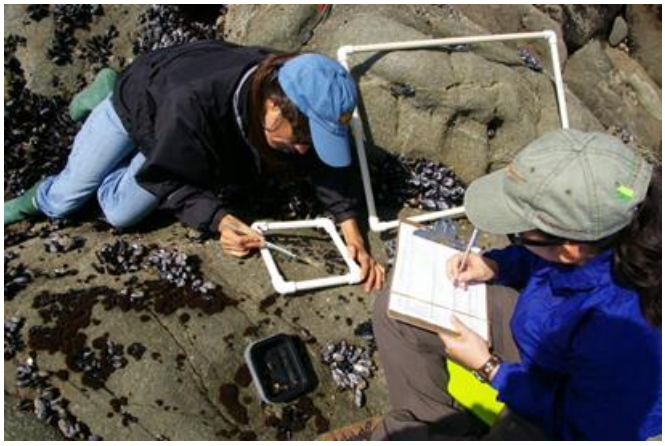
shore-zone habitats; improving ice forecast modeling; and generating a revised baseline for social indicators in North Slope communities.

Increasingly, Alaska Region studies are taking an integrated approach and using new technologies that facilitate research in harsh Arctic environments to examine the interdependence of biological, physical and social systems. The need to separate effects of development from other changes, especially the greater effect of climate change in the U.S. Arctic, requires BOEM establish monitoring baselines for the fish and lower trophic levels that support birds marine mammals and the people who depend on them and update impact monitoring for contaminants in development areas. The transfer to BOEM of authority to regulate industrial air emission in OCS areas of the Beaufort and Chukchi Seas has necessitated an increased focus on Arctic OCS air quality considerations and defining emission thresholds to ensure OCS facilities will not produce significant onshore ambient air concentrations.

Pacific Region Studies: In the Pacific Region, BOEM studies address the environmental impacts of oil and gas production, marine hydrokinetic wave energy conversion, and wind energy conversion. The area covered includes the OCS offshore California, Oregon, Washington, and Hawaii. Partners have a key role in Pacific Region studies: external stakeholders submitted eleven proposals in FY 2014, including joint or individual proposals from the National Park Service, U.S. Geological Survey, NOAA, and the states of Washington, California, and Hawaii. All the proposals were reviewed through the studies program process, and funding priority was given for acquiring baseline information in areas where information is non-existent or limited, for studies to anticipate direct impacts at potential lease sites, and for monitoring offshore energy structures and devices after installation.

For conventional energy, the Pacific Region's priorities are to acquire better information for oil spill trajectory modeling and a synthesis of 30 years of research concerning how fish and invertebrate populations at oil and gas production platforms influence the marine ecology of the Pacific coast. Renewable energy study priorities include several issues for the OCS offshore Hawaii and Oregon. In Hawaii, BOEM's focus is locating submerged and shoreline cultural sites, determining seabird presence and ecology, performing a biogeographic assessment of marine species, and mapping human uses from the shore to the exclusive economic zone limit. In Oregon, priorities include observing the effect of power cables on species sensitive to electromagnetic fields, assessing benthic environments where facilities may be installed, and improving understanding of seabird oceanic flight behavior.

In FY 2015, the Pacific Region, along with NASA and NOAA, will sponsor the development of a marine Biodiversity Observation Network in the Santa Barbara Channel with the University of California at Santa Barbara. The goals of this study are to integrate biodiversity data to enable inferences about regional biodiversity, to develop advanced methods in optical and acoustic imaging and genomics for monitoring biodiversity in partnership with ongoing monitoring and research programs, and to implement a tradeoff framework that optimizes allocation of sampling effort. The project execution entails many principal investigators and their laboratories.



BOEM and study partners participate in the award-winning Pacific Rocky Intertidal Survey and Monitoring of shorelines across the four counties bordering southern California oil and gas producing areas of the OCS.

➢ Outlook on Science and Environmental Programs

BOEM decisions and management of OCS oil and gas, marine minerals and renewable energy development will continue to be informed through the environmental assessments, studies and partnerships conducted through BOEM's Environmental Programs. These efforts are vital to ensuring that the impacts of OCS activities on the environment are understood and the appropriate protective measures are put to use effectively. In direct support of BOEM activities, the Environmental Program will continue to focus the use of cross-cutting and regional environmental assessments for all OCS activities and regions including renewable energy, conventional energy and marine minerals. Through its environmental assessments and environmental studies, BOEM will continue to integrate science needs across programs and resources in order to effectively and timely inform decision makers. To these ends, BOEM will continue to utilize partnerships and will align and develop those partnerships to create an informed collaborative community with interest in OCS resources and a desire to protect the environment. Looking forward, BOEM's focus and dedication to using the most informative and up-to-date environmental information will continue, providing effective environmental safeguards for the development of OCS resources.

2016 PROGRAM PERFORMANCE

The FY 2016 request provides the resources needed to carry out the mission of BOEM, including renewable, conventional, and environmental program activities, and is in support of the FY 2014-2018 DOI Strategic Plan. The FY 2014-2018 DOI Strategic Plan is the foundational structure for the description of BOEM program performance measurement and planning for the FY 2016 President's Budget. The BOEM budget and program plans for FY 2016 are fully consistent with the goals, outcomes, and measures described within the DOI Strategic Plan. The following page contains the BOEM Program Performance Overview table. Further details for achieving the Strategic Plan's goals are contained within the DOI APP&R.

Table 19: Program Performance Overview Table

Mission Area 3, Goal 1: Secure America's Energy Resources									
Strategic Objective Metrics									
Strategic Plan Measure / Efficiency or other Bureau-Specific Measure	**2010 Actual**	**2011 Actual**	**2012 Actual**	**2013 Actual**	**2014 Actual**	**2015 Enacted**	**2016 Pres. Budget Request**	**Change from 2015 Enacted to 2016**	**Long Term 2018 Target**
Efficiency or other Bureau-Specific Measures									
Percent of Environmental Studies Program (ESP) projects rated "Moderately Effective" or better by BOEM internal customers	91% (10/11)	91% (21/23)	95% (21/22)	96% (22/23)	100% 16/16	88% (N/A)	90% (N/A)	+2%	90% (N/A)
Comments: This measure evaluates the effectiveness and timeliness of the Environmental Studies Program's projects. Performance results are very sensitive to the number and types of projects evaluated.									
Contributing Programs: Office of Environmental Programs									

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

General Administration

Table 20: General Administration Budget Summary

		2014 Actual	2015 Enacted	Internal Transfers (+/-)	Fixed Costs (+/-)	Program Changes (+/-)	2016 Request	Change from 2015 (+/-)
General Support Services	($000)	14,320	15,002	-15,002	-	-	0	-15,002
	FTE	*0*	*0*			-	*0*	-
Executive Direction	($000)	16,256	16,319	+2,270	-18	+94	18,665	+2,346
	FTE	*86*	*87*			*+1*	*88*	*+1*
TOTAL, General Administration	**($000)**	**30,576**	**31,321**	**-12,732**	**-18**	**+94**	**18,665**	**-12,656**
	FTE	***86***	***87***			***+1***	***88***	***+1***

General Administration has previously included funding for two activities: General Support Services and Executive Direction. This designation is a relic of legacy organizational divisions that no longer exist and it no longer accurately reflects Bureau operations. In FY 2016, BOEM proposes an internal transfer to eliminate the GSS activity and realign the associated funding to the supported budget activities. As shown in the table above, the FY 2016 budget provides no funding for the GSS activity and $18.7 million and 88 FTE for Executive Direction. This reflects a net increase of +$2.3 million and +1 FTE from the FY 2015 enacted level.

The General Administration designation will be eliminated in future budget requests and funds will instead be requested for the Bureau activities of Renewable Energy, Conventional Energy, Environmental Programs, and Executive Direction to include supporting administrative funding.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

General Support Services

SUMMARY OF 2016 PROGRAM CHANGES

Program Changes from 2015 Enacted	Amount ($000)	FTE
Internal Transfer (Realignment of General Support Services)	-15,002	-
Total Program Changes	**-15,002**	**-**

The FY 2016 President's Budget request proposes an internal transfer as a result of the realignment of BOEM's General Support Services activity. These funds are requested in the supported budget activities and they are shown as increases from internal transfers. The GSS activity does not support any associated personnel costs, and the proposed realignment requires no additional resources in FY 2016. The transfer will have an overall net zero budgetary impact.

PROGRAM OVERVIEW

The GSS activity has been used to partially fund BOEM's general administrative expenses and overhead, such as rent, telecommunications, information technology (IT), the administrative RSA with BSEE, the Department working capital fund, FBMS, unemployment, and worker's compensation. No FTE are directly funded by, or charged to, this activity.

The GSS activity was originally intended to support the Bureau's administrative expenses, and under MMS and later BOEMRE, it did. However, as seen in subsequent budget requests for the fiscal years 2013 - 2015, the GSS account does not fully cover all of these administrative costs. As reported in Appendix D, BOEM's FY 2015 administrative and IT costs were estimated to be more than $31.9 million. In FY 2014, BOEM's administrative and IT costs were $25.3 million, and in FY 2013, these costs were $28.0 million. In each year these amounts are nearly twice those of funds available in the GSS activity, creating a shortfall of administrative funding that has been borne each year by programmatic activities.

The FY 2016 budget proposes to realign funds previously requested for BOEM's GSS budget activity because it is a relic of the MMS legacy organization and does not accurately reflect

actual administrative costs, as evidenced by the discrepancy with Appendix D. The proposed realignment of funding associated with GSS activity will not result in expansions of administrative needs but rather afford BOEM some flexibility in assessing administrative costs. Program managers will have incentives to manage supported programs so as to minimize the impacts of administrative assessments to mission critical programmatic activities. It will also result in a more efficient execution of BOEM's budget and reduce confusion by removing the implication that the GSS activity can support all of BOEM's administrative costs. Oversight over the total administrative budget will continue to be closely managed by the Bureau.

To carry out this realignment, BOEM proposes to eliminate the GSS activity and reallocate those dollars to the other activities those funds directly support, as shown in the tables below. The distribution of GSS funds across the activities is based on the number of positions in each budget activity, which is consistent with the allocation of administrative costs associated with the BSEE administrative and IT reimbursable support agreements. This internal transfer will be reflected in FY 2016 and thereafter.

The following table shows BOEM's budget structure from FY 2012 through FY 2015 and the proposed internal transfers associated with the realignment of GSS funding within the FY 2015 base.

Table 21: Proposed Realignment of GSS Funding

Existing BOEM Budget Structure and Proposed Realignment						
BOEM	**2012 Enacted**	**2013 Enacted (w/ Sequester)**	**2014 Enacted**	**2015 Enacted**	**Proposed Realignment**	**Revised 2015 Baseline**
Ocean Energy Management						
Renewable Energy	22,685	18,537	23,656	23,104	+1,217	24,321
Conventional Energy	47,245	46,115	49,441	49,633	+7,349	56,982
Environmental Programs	62,016	60,578	63,218	65,712	+4,166	69,878
General Support Services	12,785	12,149	14,320	15,002	-15,002	-
Executive Direction	16,047	15,223	16,256	16,319	+2,270	18,589
Total, Budget Authority	**160,778**	**152,602**	**166,891**	**169,770**	**-**	**169,770**

By comparison, the following table shows how BOEM's budget would have looked and will look under the proposed structure. The italicized lines illustrate GSS activity funds spread among the four remaining activity areas.

Table 22: GSS Realignment as Applied to FY 2012-2015

BOEM Budget Assuming Realignment of Administrative Costs				
BOEM	**2012 Enacted**	**2013 Enacted (w/ Sequester)**	**2014 Enacted**	**2015 Enacted**
Ocean Energy Management				
Renewable Energy	23,722	19,522	24,817	24,321
General Support	*1,037*	*985*	*1,161*	*1,217*
Conventional Energy	53,508	52,067	56,456	56,982
General Support	*6,263*	*5,952*	*7,015*	*7,349*
Environmental Programs	65,566	63,952	67,195	69,878
General Support	*3,550*	*3,374*	*3,977*	*4,166*
Executive Direction	17,982	17,061	18,423	18,589
General Support	*1,935*	*1,838*	*2,167*	*2,270*
Total, Budget Authority	**160,778**	**152,602**	**166,891**	**169,770**

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Executive Direction

SUMMARY OF 2016 PROGRAM CHANGES

Program Changes from 2015 Enacted	Amount ($000)	FTE
Staffing for Increased OCS Activity	+155	+1
Programmatic Reduction	-61	
Total Program Changes	**+94**	**+1**

The FY 2016 President's Budget request for BOEM's Executive Direction is $18.7 million and 88 FTE. This reflects a net increase of +$2.3 million from the 2015 enacted level, comprised of an increase resulting from an internal transfer of $2.3 million, a decrease of $18,000 for fixed costs, and the following:

Staffing for Increased OCS Activity (+$155,000; +1 FTE). As activity on the OCS increases, so too does the need to administer and manage BOEM's work. The requested FTE would provide central support for programmatic activities through such efforts as budget, program coordination, and development of regulations. In order to properly manage offshore natural resources, BOEM must ensure regulations are appropriately developed and evaluated and that there is sufficient administrative support to carry out these activities.

Additional personnel within the Executive Direction budget activity go hand-in-hand with those requested for Conventional Energy and Environmental Programs. Centrally-located personnel will work directly with the Programs and Regions to support efforts such as the management of critical information and data, as well as the development of new and updated regulations.

Programmatic Reduction (-$61,000; 0 FTE). In order to support BOEM's highest priority needs in FY 2016, the Bureau proposes a general reduction in funding for Executive Direction activities to be realized through administrative savings, such as increasing oversight and setting limitations on travel and training.

PROGRAM OVERVIEW

The Executive Direction Activity comprises the following: the Office of the Director; Office of Public Affairs; Office of Congressional Affairs; Office of Policy, Regulation and Analysis; Office of Budget and Program Coordination; and the Investigations and Review Unit.

- **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 the BOEM organization, as well as managing official documents within the Office of the Director.

- **Office of Public Affairs**

The Office of Public Affairs is responsible for BOEM's media relations, communication strategies and outreach. The Office of Public Affairs coordinates the implementation of an effective and inclusive outreach program to numerous target audiences, including state and local governments, the energy industry, related trade associations, the environmental community, tribes, energy consumer groups, and the public.

- **Office of Congressional Affairs**

The Office of Congressional Affairs serves as the primary point of contact with Congress and is responsible for the coordination of all communication and outreach with Congressional offices, as well as ensuring the effective exchange of information. The Office of Congressional Affairs serves as the liaison for BOEM on all Congressional and legislative matters that relate to BOEM's programs, including managing coordination with the Department of the Interior and other Federal executive agencies.

- **Office of Policy, Regulation and Analysis**

The Office of Policy, Regulation and Analysis serves as the principal office to lead and manage BOEM's national regulatory and policy programs and provides the Director with independent review and analysis of programmatic and management issues. Additionally, the Office of Policy, Regulation and Analysis leads, coordinates, and monitors many cross-program initiatives, assuring consistent BOEM-wide implementation that directly supports Congressional, Presidential, Departmental and Bureau directives, laws, mandates, and guidance. The office also fulfills the Director's responsibilities in several critical areas including regulatory management,

activity-based costing, strategic and performance planning, policy, internal controls and program evaluation.

- **Office of Budget and Program Coordination**

The Office of Budget and Program Coordination is responsible for managing the budget planning and execution processes. The organization assesses current budgetary resources, provides recommendations for program and budget initiatives to senior BOEM executive staff, manages the personnel allocation system, and formulates and assists in the defense of BOEM's budget submissions to the Department, OMB, and Congress. In addition, the office 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.

- **Investigations and Review Unit**

During the transition, BOEMRE created the Investigations and Review Unit (IRU), which is composed of professionals with legal and law enforcement backgrounds or technical expertise who promptly respond to allegations or evidence of misconduct and unethical behavior by Bureau employees. The IRU also pursues allegations of misconduct against oil and gas companies involved in offshore energy projects when there is credible evidence that rules and regulations have been violated. The IRU is managed by BSEE, but provides service to both BSEE and BOEM.

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

FY 2016 Appropriations Language

In FY 2016, BOEM does not propose any significant changes to the Appropriations language included in the FY 2015 President's Budget. The language provided below reflects changes from the Public Law 113-235, Consolidated and Further Continuing Appropriations Act, 2015. As a general note, brackets indicate language to be deleted, and italics represent new language.

OCEAN ENERGY MANAGEMENT

For expenses necessary for granting 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 matching grants or cooperative agreements, [$169,770,000] *$170,857,000*, of which [$72,422,000] *$74,235,000*, is to remain available until September 30, [2016] *2017* and of which [$97,348,000] *$96,622,000* is to remain available until expended: *Provided*, That this total appropriation shall be reduced by amounts collected by the Secretary 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 [2015] *2016* appropriation estimated at not more than [$72,422,000] *$74,235,000*: *Provided further*, That not to exceed $3,000 shall be available for reasonable expenses related to promoting volunteer beach and marine cleanup activities. *(Department of the Interior, Environment, and Related Agencies Appropriations Act, 2015)*

Justification of Proposed Language Changes

BOEM does not propose any language changes in FY 2016.

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 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 authorizing statutes. For more detailed information on these statutes and the functions they permit, please refer to Appendix C, "Bureau Authorizing Statutes."

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 the Bureau 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 gives 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 matching grants or cooperative agreements,*

This language provides authority for BOEM to utilize matching grants or cooperative agreements 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. *…$170,857,000, of which $74,235,000 is to remain available until September 30, 2017 and of which $96,622,000 is to remain available until expended:*

This provision identifies the amount of BOEM's total budget authority for FY 2016 ($170,857,000). Of this total budget authority, $74,235,000 is designated as two-year money, to be available from FY 2016 through the end of FY 2017. Meanwhile, $96,622,000 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 like environmental studies.

6. *…Provided, That this total appropriation shall be reduced by amounts collected by the Secretary 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 previously, MMS and BOEMRE) 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 authorized by the OCS Lands 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 2016 appropriation estimated at not more than $74,235,000:*

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 the Bureau, so the language was amended to include this "safety clause" in FY 2014. The language is modeled after the Bureau of Land Management offsetting collections language in the Management of Lands and Resources Account. 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 (and previously, MMS and BOEMRE) to expend up to a certain amount for the promotion of volunteer beach and marine clean-up activities.

The language provided below reflects General Provisions that are directly applicable to BOEM. For a complete, detailed discussion of the Department's proposed General Provisions, please refer to the General Provision chapter of the Office of the Secretary FY 2016 budget justification.

GENERAL PROVISIONS, DEPARTMENT OF THE INTERIOR

BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT REORGANIZATION

SEC. **[**109**]***108*. The Secretary of the Interior, in order to implement a reorganization of the Bureau of Ocean Energy Management, Regulation and Enforcement, may transfer funds among and between the successor offices and bureaus affected by the reorganization only in conformance with the reprogramming guidelines **[**for division F in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act)**]** *described in the report accompanying this Act*.

Purpose: Sec. [109]108. The provision authorizes the Secretary to transfer funds among and between the successor offices and bureaus affected by the reorganization of the Bureau of Ocean Energy Management, Regulation and Enforcement.

Explanation of change: The Department proposes to modify the provision to require reporting in accordance with the reprogramming guidelines provided by the Appropriations Committees.

OFFSHORE PAY AUTHORITY EXTENSION

SEC. 118. Section 117 of Division G of Public Law 113–76 is amended by striking "and 2015" and inserting "through 2016".

Purpose: Sec. 118. The Department proposes to extend the authority established in the FY 2012 appropriation for special rates of pay for certain employees in offshore oil and gas related fields in the Gulf of Mexico through FY 2016 as it works with OPM on a longer-term administrative solution to recruitment and retention challenges for certain occupations.

OUTER CONTINENTAL SHELF LEASING REVIEW PERIOD

SEC. 424. Section 11 of the Outer Continental Shelf Lands Act (43 U.S.C.1340) is amended in subsection (c)(1) in the fourth sentence by deleting "within thirty days of its submission" and inserting in lieu thereof "within ninety days of its submission".

Explanation of Proposed Changes

The Department proposes to extend the review period for OCS exploration plans from 30 days to 90 days. The proposed extension is consistent with recommendations on strengthening leasing practices made by the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling and the Government Accountability Office, among others.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Proposals for Mandatory Accounts and Offsetting Collections

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 2016 Budget Justification.

Federal Oil and Gas Reforms – The 2016 budget includes a package of legislative reforms to bolster and backstop administrative actions being taken to reform the management of DOI's onshore and offshore oil and gas programs, with a key focus on improving the return to taxpayers from the sale of these Federal resources. These statutory and administrative changes fall into three general categories: advancing royalty reforms, encouraging diligent development of oil and gas leases, and improving revenue collection processes.

Royalty reforms include: evaluating minimum royalty rates for oil, gas, and similar products; adjusting the onshore royalty rates; analyzing a price-based tiered royalty rate; and repealing legislatively-mandated royalty relief. Diligent development requirements include shorter primary lease terms, stricter enforcement of lease terms, and monetary incentives to get leases into production through a new per-acre fee on non-producing leases. Revenue collection improvements include simplification of the royalty valuation process, elimination of interest accruals on company overpayments of royalties, and permanent repeal of DOI's authority to accept in-kind royalty payments. Collectively, these reforms will generate roughly $2.5 billion in revenue to the Treasury over ten years, of which nearly $1.7 billion will result from statutory changes.

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Bureau Authorizing Statutes

Outer Continental Shelf (OCS) Lands Program

43 U.S.C. 1331, et seq.	The Outer Continental Shelf (OCS) Lands Act of 1953, as amended, extended the jurisdiction of the United States to the OCS and provided for granting of leases to develop offshore energy and minerals.
P.L. 109-432	The Gulf of Mexico Energy Security Act of 2006 required leasing certain areas in the Central and Eastern Gulf of Mexico Planning Areas within one year of enactment (December 20, 2006); and established a moratoria on leasing in remaining areas in the eastern planning area and a portion of the central planning area until 2022.
P.L. 109-58	The Energy Policy Act of 2005 amended the OCS Lands Act to authorize the Department of the Interior to issue leases, easements and rights-of-way to develop renewable energy on the OCS and for certain other energy- and marine-related purposes using OCS facilities.
P.L. 133-67	The Bipartisan Budget Act of 2013 amended OCSLA by authorizing the Secretary to take actions necessary to implement the U.S.-Mexico Transboundary Agreement with specific authority to carry out the agreement's provisions governing unitization, confidential information, inspections and dispute resolution.
43 U.S.C. 4321, 4331-4335, 4341-4347	The National Environmental Policy Act of 1969 required that Federal agencies consider in their decisions the environmental effects of proposed activities and that Agencies prepare environmental impact statements for Federal actions having a significant effect on the environment.

16 U.S.C. 1451, et seq.	The Coastal Zone Management Act of 1972, as amended, established goals for ensuring that Federal and industry activity in the coastal zone be consistent with coastal zone plans set by the States.
16 U.S.C. 1531-1543	The Endangered Species Act of 1973 established procedures to ensure interagency cooperation and consultations to protect endangered and threatened species.
42 U.S.C. 7401, et seq.	The Clean Air Act, as amended, was applied to all areas of the OCS except the central and western Gulf of Mexico and the State of Alaska (as amended by P.L. 112-42). OCS activities in those non-excepted areas will require pollutant emission permits administered by the EPA or the States.
P. L. 112-42, Section 432	The Consolidated Appropriations Act of 2012 amended the Clean Air Act by transferring air quality jurisdiction from the EPA to the Department of the Interior for OCS activities in the Beaufort Sea and Chukchi Sea Planning Areas of the Arctic Outer Continental Shelf.
16 U.S.C. 470-470W6	The National Historic Preservation Act established procedures to ensure protection of significant archaeological resources.
30 U.S.C. 1601	The Policy, Research and Development Act of 1970 set forth the continuing policy et seq. of the Federal Government to foster and encourage private enterprise in the orderly and economic development of domestic mineral resources and reserves.
33 U.S.C. 2701, et seq.	The Oil Pollution Act of 1990, as amended, requires the responsible party for an offshore facility to maintain evidence of financial responsibility. It also provides for DOI to make inflation adjustments every three years to the $75 million limit on a responsible party's liability for damages for an unlawful oil discharge from an offshore facility.

43 U.S.C. 1301	The Marine Protection, Research, and Sanctuaries Act of 1972 provided that the Secretary of Commerce must consult with the Secretary of the Interior prior to designating marine sanctuaries. BOEM provides information and comments regarding the mineral resource potential in areas being considered for designation as marine sanctuaries.
16 U.S.C. 1361-1362, 1371-1384, 1401-1407	The Marine Mammal Protection Act of 1972 provides for the protection and welfare of marine mammals.
P.L. 104-58	The Deepwater Royalty Relief Act provides royalty rate relief for certain offshore drilling leases in deepwater areas of the Gulf of Mexico.

General Administration

31 U.S.C. 65	Budget and Accounting Procedures Act of 1950
31 U.S.C. 3901-3906	Prompt Payment Act of 1982
31 U.S.C. 3512	Federal Managers Financial Integrity Act of 1982
5 U.S.C. 552	Freedom of Information Act of 1966, as amended
31 U.S.C. 7501-7507	Single Audit Act of 1984
41 U.S.C. 35045	Walsh Healy Public Contracts Act of 1936
41 U.S.C. 351-357	Service Contract Act of 1965
41 U.S.C. 601-613	Contract Disputes Act of 1978
44 U.S.C. 35	Paperwork Reduction Act of 1980
44 U.S.C. 2101	Federal Records Act 1950
40 U.S.C. 4868	Federal Acquisition Regulation of 1984
31 U.S.C. 3501	Privacy Act of 1974

31 U.S.C. 3501	Accounting and Collection
31 U.S.C. 3711, 3716-19	Claims
31 U.S.C. 1501-1557	Appropriation Accounting
5 U.S.C. 1104 et seq.	Delegation of Personnel Management Authority
31 U.S.C. 665-665(a)	Anti-Deficiency Act of 1905, as amended
41 U.S.C. 252	Competition in Contracting Act of 1984
18 U.S.C. 1001	False Claims Act of 1982
18 U.S.C. 287	False Statements Act of 1962
41 U.S.C. 501-509	Federal Grant and Cooperative Agreement Act of 1977
41 U.S.C. 253	Federal Property and Administrative Services Act of 1949
41 U.S.C. 401	Office of Federal Procurement Policy Act of 1974, as amended
15 U.S.C. 631	Small Business Act of 1953, as amended
15 U.S.C. 637	Small Business Act Amendments of 1978
10 U.S.C. 137	Small Business and Federal Competition Enhancement Act of 1984
15 U.S.C. 638	Small Business Innovation Research Program of 1983
10 U.S.C. 2306(f)	Truth in Negotiations Act of 1962 Authorization
Secretarial Order No. 3299, Amendment No. 1	Establishment of the Bureau of Ocean Energy Management (BOEM), the Bureau of Safety and Environmental Enforcement (BSEE), and the Office of Natural Resources Revenue (ONRR) in accordance with the authority

	provided by Section 2 of the Reorganization Plan No. 3 of 1950 (64 Stat. 1262).
Secretarial Order No. 3304	Establishment of the Investigations and Review Unit (IRU) within the Bureau of Ocean Energy Management, Regulation and Enforcement in accordance with the authority provided by Section 2 of the Reorganization Plan No. 3 of 1950 (64 Stat. 1262), as amended.
Proclamation 5030	Establishment of an Exclusive Economic Zone by the United States will advance the development of ocean resources and promote the protection of the marine environment, while not affecting other lawful uses of the zone, including the freedoms of navigation and overflight, by other States; 48 FR 10605, 3 CFR, 1983 Comp., p. 22

Oil Spill Research

33 U.S.C. 2701, et seq.	Title VII of the Oil Pollution Act of 1990 authorizes the use of the Oil Spill Liability Trust fund, established by Section 9505 of the Internal Revenue Code of 1986, for oil spill research.
33 U.S.C. 2701, et seq.	Title I, Section 1016, of the Oil Pollution Act of 1990 requires a certification process which ensures that each responsible company, with respect to an offshore facility, has established, and maintains, evidence of financial responsibility in the amount of at least $150,000,000 to meet potential pollution liability.
43 U.S.C. 1331, et seq.	Section 21(b) of the Outer Continental Shelf Lands Act, as amended, requires the use of the best available and safety technologies (BAST) and assurance that the use of up-to-date technology is incorporated into the regulatory process.
Executive Order 12777	Signed October 18, 1991, assigned the responsibility to ensure oil spill financial responsibility for OCS facilities to the Secretary of the Interior (Bureau of Ocean Energy Management, Regulation and Enforcement).

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Section 403 Compliance

Section 403 of Public Law 113-235, the Consolidated and Further Continuing Appropriations Act, 2015, states:

> *DISCLOSURE OF ADMINISTRATIVE EXPENSES*
>
> *The amount and basis of estimated overhead charges, deductions, reserves or holdbacks, including working capital fund and cost pool 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.*

To improve efficiency, BOEM uses a shared services approach 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, 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 for more than 30 years. This latest effort between BOEM and BSEE is another step forward in this direction and will have the added benefit of implementing standardized practices that will further increase the productivity for highly skilled resources in both bureaus. By utilizing the shared services model, BOEM and BSEE can continue to improve their best practices and maximize the use of administrative funds in the future.

BSEE regularly evaluates these support arrangements jointly in quarterly meetings with BOEM, 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 by the

respective agencies. Because these costs are regularly reevaluated, estimated outyear costs – shown in the table below – are based on prior year actuals and billing from the First Quarter of the current year (FY 2015). As such, amounts shown in the table below are estimates only and may not reflect final agreements or end of year obligations. These changes would not be presented as a reprogramming. The following table displays amounts charged in FY 2014 and estimated costs in fiscal years 2015 and 2016.

Bureau of Ocean Energy Management
Deductions, Reserves, or Holdbacks
(dollars in thousands)

Deductions, Reserves, or Holdbacks	FY 2014 Actual	FY 2015 Estimated	FY 2016 Estimated
External Bureau Assessments			
Multiple Activities			
Administrative RSA with BSEE	18,511	18,504	18,504
IT RSA with BSEE	6,826	13,418	13,418
Executive Direction			
ASLM Support	158	160	180
IT Transformation	136	74	74
General Support Services			
Working Capital Fund Centralized Billing	1,969	2,587	2,042
Working Capital Fund Direct Billing	1,250	793	169
Zantas	35	35	35
NARA	50	65	65
Subtotal, External Assessments	$ 28,935	$ 35,636	$ 34,487
Internal Bureau Assessments*			
Renewable Energy	9,081	1,837	2,589
Conventional Energy	3,546	8,237	15,637
Environmental Programs	3,318	6,586	8,865
Executive Direction	976	2,490	4,831
General Support Services	8,417	12,772	
Subtotal, Internal Assessments	$ 25,337	$ 31,922	$ 31,922

* Amounts shown reflect obligations (actual and estimated) associated with both new budget authority and carryover.

Internal bureau assessments are associated with the costs of the administrative and IT RSAs with BSEE. The IT costs are anticipated to increase significantly between fiscal years 2014 and 2015

due to increased costs for the Bureau's Mission IT Support Contract. The enhanced contract will continue to manage, operate, maintain and enhance the TIMS investment, and it will also benefit customer agencies through an enhanced service catalog, granular control of development, modernization and enhancement work and detailed financial reporting. The contract will be based on a firm fixed price model, which transfers operational risk to the contractor and provides a means to limit out-of-scope changes to the system.

This page intentionally left blank.

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

Employee Count by Grade

(Total Employment)

	2014 Actuals	2015 Estimate	2016 Estimate
Executive Level V	0	0	0
SES	5	6	6
Subtotal	**5**	**6**	**6**
SL - 00	0	0	0
ST - 00	0	0	0
Subtotal	**0**	**0**	**0**
GS/GM -15	40	41	41
GS/GM -14	126	135	135
GS/GM -13	191	188	192
GS -12	79	90	107
GS -11	38	40	33
GS -10	3	3	3
GS - 9	36	24	27
GS - 8	9	9	9
GS - 7	17	16	19
GS - 6	3	2	2
GS - 5	9	7	9
GS - 4	2	2	2
GS - 3	3	3	3
GS - 2	0	0	0
GS - 1	0	0	0
Subtotal	**556**	**560**	**582**
Other Pay Schedule Systems	0	0	0
Total employment (actuals & estimates)	**561**	**566**	**588**

Notes on this table:

- Amounts shown in this table are consistent with amounts reported by the Department of the Interior as of September 20, 2014. It should be noted that between September 20 and September 30, BOEM hired four new employees, bringing BOEM's total employee count

to 565 as of October 1, 2014. This reflects BOEM's efforts to fill mission-essential positions.

- BOEM is working diligently to fill mission-essential positions as part of a broader workforce planning effort. The employee count for FY 2015 is only an estimate, but as of December 2014, BOEM's total onboard count had increased by seven individuals to a total of 573.
- 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 (PMRS) termination provisions of Public Law 103-89 (former PMRS employees).

FY 2016 PERFORMANCE BUDGET

Bureau of Ocean Energy Management

List of Acronyms

ABC	Activity Based Costing
AMBON	Arctic Marine Biodiversity Observing Network
APD	Application for Permit to Drill
APP&R	Annual Performance Plan and Report
BLM	Bureau of Land Management
BOEM	Bureau of Ocean Energy Management
BOEMRE	Bureau of Ocean Energy Management, Regulation & Enforcement
BSEE	Bureau of Safety and Environmental Enforcement
CEIL	Center for Environmental Innovation and Leadership
CFR	Code of Federal Regulations
COP	Construction and Operation Plan
CR	Continuing Resolution
DOD	Department of Defense
DOCD	Development Operation Coordination Document
DOE	Department of Energy
DOI	Department of the Interior
DPP	Development and Production Plan
DPP	Draft Proposed Program
EIS	Environmental Impact Statement
EP	Exploration Plan
EPA	Environmental Protection Agency
ESPIS	Environmental Studies Program Information System
FERC	Federal Energy Regulatory Commission
FTE	Full Time Equivalent
FWS	U.S. Fish and Wildlife Service
FY	Fiscal Year
G&G	Geological and Geophysical
GHG	Greenhouse Gas
GIS	Geographical Information System
GPRA	Government Performance and Results Act
GSA	General Services Administration
GSS	General Support Services
IRU	Investigations and Review Unit
IT	Information Technology

MBON	Marine Biodiversity Observing Network
MMS	Minerals Management Service
MOU	Memorandum of Understanding
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOPP	National Oceanographic Partnership Program
NRC	National Research Council
OCS	Outer Continental Shelf
OEM	Ocean Energy Management
OMB	Office of Management and Budget
ONRR	Office of Natural Resources Revenue
PEIS	Programmatic Environmental Impact Statement
P.L.	Public Law
R&D	Research and Development
RFI	Request for Information
ROW	Right-of-Way
RSA	Reimbursable Service Agreement
RUE	Right-of-Use and Easement
SLA	Submerged Lands Act
SLC	State Lands Commission
TIMS	Technical Information Management System
U.S.C.	United States Code
USGS	U.S. Geological Survey
WCD	Worst Case Discharge