A Report by a Study Team of the

NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

for the Bureau of Safety and Environmental Enforcement

Bureau of Safety and Environmental Enforcement: Strategic Organizational Assessment

March 2017

National Academy of Public Administration ®

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Study Team

Joseph P. Mitchell, III
Pamela Haze*
Larry Novey
Sylvia Tognetti
Kim Thorsen
Emily Fay

** Academy Fellow*

National Academy of Public Administration
1600 K Street, N.W.
Suite 400
Washington, DC 20006
www.napawash.org

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FOREWORD

The Outer Continental Shelf (OCS) of the United States extends over 1.7 billion acres and holds vast reserves of oil and natural gas. The nation relies upon the U.S Department of the Interior's Bureau of Safety and Environmental Enforcement (BSEE) to ensure that this energy is effectively developed in a safe and environmentally sustainable manner. BSEE was created in October 2011 after the Deepwater Horizon incident that took 11 lives and caused significant damage to the economy and Gulf of Mexico ecosystem. BSEE works with other federal agencies and the private sector to fulfill its responsibilities to protect worker safety, ensure oil spill preparedness, protect coastal and marine resources, and develop energy resources with a fair return for the American public.

BSEE's efforts to enable the development of energy resources significantly contribute to the nation's economy. The OCS produced about 16 percent of the nation's domestic oil production, about 5 percent of domestic natural gas production, and $4.4 billion in revenues in FY 2015. Effective management of the OCS ensures the viability of local economies and sustains half a million jobs.

To assess its organizational progress over the past five years, BSEE contracted with the National Academy of Public Administration (the Academy), which assembled a study team assisted by an Expert Advisory Group of Academy Fellows, to review BSEE's organizational structure, relationships, systems, policies, and processes. This report presents the Academy's assessment results and a series of recommendations to build on the progress that BSEE has already made. Overall, the Academy study team concluded that BSEE has made significant progress, including aligning its organization and activities, developing management structures and systems, implementing a modernized regulatory framework, and building relationships to promote OCS resource stewardship. The team's recommendations to the U.S. Department of the Interior are intended to help address broader policy issues outside of the bureau's direct control, such as decommissioning facilities and equipment in the OCS, and those to BSEE are intended to increase the bureau's functioning and sustainability.

As a congressionally chartered non-partisan and non-profit organization with over 850 distinguished Fellows, the Academy's members and staff assist public organizations address their most critical challenges. We were pleased to conduct this review and appreciate the support of BSEE's managers and stakeholders. I thank members of the Academy Expert Advisory Group and the professional study team, led by Pamela Haze, for their work on this important project.

Teresa Gerton
President and Chief Executive Officer
National Academy of Public Administration

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ACRONYMS AND ABBREVIATIONS

Academy	National Academy of Public Administration
A-CER	Abbreviated Categorical Exclusion Review
APD	Application for Permit to Drill
AK	Alaska Region
APM	Application for Permit to Modify
ASLM	Assistant Secretary for Land and Minerals Management
ASPMB	Assistant Secretary for Policy, Management and Budget
BAST	Best Available and Safest Technology
BID	Bureau Interim Directive
BOP	Blow Out Preventer
BOEM	Bureau of Ocean Energy Management
BOEMRE	Bureau of Ocean Energy Management, Regulation, and Enforcement
BSEE	Bureau of Safety and Environmental Enforcement
CAA	Clean Air Act
CANUS	Canada-US Joint Marine Pollution Contingency
CER	Categorical Exclusion Review
CVA	Certified Verification Authorities
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DHC	Downhole Commingling
DNA	Determination of NEPA Adequacy
DOCD	Development Operations Coordination Documents
DOE	Department of Energy
DPP	Development/ Production Plans
DOI	Department of the Interior
DWH	Deepwater Horizon
DWOP	Deepwater Operations Plans
EAG	Expert Advisory Group
EC	Extraordinary Circumstance
ECD	Environmental Compliance Division
EDRC	Effective Daily Recovery Capacity
EED	Environmental Enforcement Division
EIS	Environmental Impact Statement
EP	Exploration Plan
EPA	Environmental Protection Agency
ERM	Enterprise Risk Management
ESA	Endangered Species Act
ESP	Environmental Studies Program
ETAC	Engineering Technology Assessment Center
FCC	Federal Communications Commission
FEVS	Federal Employee Viewpoint Survey

FLETC	Federal Law Enforcement Training Center
FOGRMA	Federal Oil and Gas Royalty Management Act of 1982
FONSI	Finding of No Significant Impact
FTE	Full-Time Equivalent
FWS	U.S. Fish and Wildlife Service
FY	Fiscal Year
GAO	Government Accountability Office
G&G	Geological and Geophysical
GCP	Gas Cap Productions
GOMR	Gulf of Mexico Region
ICCOPR	Interagency Coordinating Committee on Oil Pollution Research
ICR	Internal Control Review
INC	Incident of Non-Compliance
IPD	Interim Policy Document
IPRA	Integrity and Professional Responsibility Advisor
IRU	Investigations and Review Unit
ISM	International Safety Management Code
KM	Knowledge Management
LP	Office of Leasing and Plans, BOEM
MC	Management Council
MEXUS	Joint Mexico-US Marine Pollution Contingency
MLA	Mineral Leasing Act of 1920
MMPA	Marine Mammal Protection Act
MMS	Minerals Management Service
MODU	Mobile Offshore Drilling Unit
MOP	Management of Operations and Policy
MOU	Memorandum of Understanding
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPMM	National Program Management Model
NTL	Notice to Lessees or Operators
NUT	New and Unusual Technology
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
OE	Office of the Environment, BOEM
OESI	Ocean Energy Safety Institute
OIG	Office of Inspector General
OIR	Offshore Incident Reporting

OMB	Office of Management and Budget
ONRR	Office of Natural Resources Revenue
OORP	Office of Offshore Regulatory Programs
OPA	Oil Pollution Act
OPAA	Office of Policy and Analysis
OPM	Office of Personnel Management
OSPD	Oil Spill Preparedness Division
OSRO	Oil Spill Response Organization
OSRP	Oil Spill Response Plan
PAC	Pacific Region
PHMSA	Pipelines and Hazardous Materials Safety Administration
PINC	Potential Incident of Non-Compliance
RBI	Risk Based Inspections
RHA	Rivers and Harbors Act
ROD	Record of Decision
ROW	Right of Way
RPM	Revised Application for Permit to Modify
RPS	Renewable Portfolio Standard
RRI	Response Resource Inventory
RTM	Real Time Monitoring
SEA	Site- Specific Environmental Assessment
SED	Safety Enforcement Division
SEMS	Safety and Environmental Management System
SIID	Safety and Incident Investigations Division
SOP	Suspension of Production
SOPs	Standard Operating Procedures
SRI	Sensitive Reservoir Information
TIMS	Technical Information Management System
USCG	U.S. Coast Guard
USCOE	U.S. Corps of Engineers

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EXECUTIVE SUMMARY

The Department of the Interior's Bureau of Safety and Environmental Enforcement (BSEE) was established on October 1, 2011 after an exacting process that reformed the Department of the Interior's (DOI) management of outer continental shelf (OCS) energy development. The 2010 Deepwater Horizon explosion, fire, and oil spill in the Gulf of Mexico coalesced support for the separation of functions authorized by the Outer Continental Shelf Lands Act (OCSLA) into three separate entities: BSEE, the Bureau of Ocean Energy Management (BOEM), and the Office of Natural Resources Revenue (ONRR).

Today, DOI's management of energy development and production on the OCS is a closely coordinated effort in which BOEM manages the exploration and development of the nation's offshore energy and marine mineral resources; BSEE ensures the safe and responsible development of offshore energy resources; and ONRR collects, disburses, and verifies federal and Indian energy and other natural resources revenues. These agencies carry out the mandate of the Outer Continental Shelf Lands Act (OCSLA)[1] to conduct orderly development of the OCS, in an economically and environmentally responsible manner.

In the five years since its creation, BSEE has developed and strengthened programs and capacities to fulfill its mission. BSEE's organization, people, processes, and technology reflect maturation and all show improvement, though in varying amounts. BSEE issued its first strategic plan in October 2012 and, in December of 2015, issued its 2016-2019 Strategic Plan that includes a clear vision, goals, and strategies and is the basis for the bureau's ongoing initiatives for operational and organizational excellence. Guided by its 2013 Human Capital Management Strategic Plan, the bureau has achieved ambitious goals for recruitment and hiring, expansion of training programs, and special pay rates needed to attract and retain a highly skilled workforce. BSEE is modernizing its regulatory framework and issued guidance needed to promote high levels of safety for OCS workers and the environment. BSEE has also advanced its technological capacity, developing partnerships with academia and others to improve knowledge transfer and stay abreast of technology advances. BSEE has substantially addressed all of the areas of reform that were called for in DOI's 2010 implementation plan which set the goals the new bureau was intended to accomplish.[2]

In order to be best prepared for the challenges ahead, BSEE contracted with the National Academy of Public Administration (Academy) to assess its readiness and capability and inform the bureau's efforts to establish and institutionalize effective processes and practices. The Academy formed a study team that conducted a strategic organizational assessment, with input from an Expert Advisory Group. The Academy study team focused

[1] ***Outer Continental Shelf Lands Act***, 43 U.S.C. §§ 1331 et seq.

[2] U.S. Department of the Interior, ***Implementation Plan in Response to the Outer Continental Shelf Oversight Board's September 1, 2010 Report to the Secretary of the Interior***, issued September 4, 2010, p.6.

on BSEE's mission execution and operability as a separate bureau and its relationship with BOEM and other federal entities; its regulatory framework; emerging policy and operational issues; the results of a recent organizational realignment; strategic planning and organizational performance management; human capital management; governance, communication, and collaboration; and budgetary challenges.

In conducting this assessment, the Academy's study team received and reviewed an extensive array of documentation, including internal studies, reviews, and plans demonstrating a commitment for ongoing maturation and improvement. The study team also conducted numerous interviews with officials throughout BSEE and in several other government offices that interact extensively with the bureau. The assessment identifies and describes BSEE's completed improvements and those it has underway, charting the bureau's progress relative to its status at the time it was stood up in 2011. The study team also evaluated BSEE's current state as compared to its desired future state, and, based in part on recommendations made by other authorities and on best practices, the study team identified a number of opportunities for improvement.

Overview of the Report

The study team's analyses, findings, and related recommendations offered in this report are organized as follows:

- **Chapter 1: Introduction** – Includes an introduction to BSEE, an overview of the Academy study team's organizational assessment and summary results.
- **Chapter 2: Background** – Briefly reviews the history of oil and natural gas production on the OCS, the legislative authority for federal OCS energy management, reforms of DOI's OCS program leading to the creation of BSEE and its current role.
- **Chapter 3: A Mission for Safety, Environmental Protection, and Conservation** – Reviews BSEE's deconflicted mission and functionality as a separate bureau; the regulatory framework, policies, and processes; alignment of BOEM and BSEE in general and with regard to environmental compliance and renewable energy; coordination with other federal agencies and the Rigs to Reefs Program; and decommissioning.
- **Chapter 4: Strategic Alignment of the Organization** – Reviews BSEE's realignment to a national program management model; offices and programs including the Safety and Incident Investigations Program, Safety Enforcement Program, Integrity and Professional Responsibility Advisor, Environmental Compliance Program, Engineering Technology Assessment Center, and Data Stewardship Program; and knowledge management.
- **Chapter 5: Operational and Organizational Excellence** – Reviews BSEE's FY 2016-2019 Strategic Plan, organizational performance management, and enterprise risk management.
- **Chapter 6: Overcoming Human Resource Challenges** – Reviews BSEE's 2013 Human Capital Management Strategic Plan; human capital management including

accomplishments in recruitment, hiring, and training; succession planning; 2016 Federal Employee Viewpoint Survey results; and fostering an inclusive workplace.

- **Chapter 7: Adequate Resources for Safety, Environmental Protection, and Conservation Offshore** – Reviews BSEE's budget, inspection fees, rental receipts, cost recovery, and budgetary challenges.
- **Chapter 8: Facilitating Organizational and Cultural Change** – Reviews BSEE's organizational and cultural transformation efforts, leadership, governance structures and processes, communication, collaboration, and change management.

BSEE's leadership and employees are attentive to improvement and reform in pursuit of mission and management excellence. The Academy study team was impressed by the commitment of BSEE's employees to the organization and its mission. These valuable assets and the accomplishments made since 2011 are a sound foundation of support for BSEE's pursuit of strategic operational and organizational excellence goals. BSEE's continued diligence is needed to sustain and improve regulatory and enforcement capability for oversight of an oil and gas industry that is focusing on deep water operations and deploying cutting edge technology. BSEE will need to acquire or develop competencies to address new duties in regulating renewable energy offshore and continue to support a key role in the decommissioning of offshore infrastructure. BSEE also needs to continue to focus on people and processes to promote a unified inclusive and collaborative culture.

Recommendations

In the course of conducting the organizational assessment and evaluating BSEE's strengths, the Academy study team developed a set of recommendations to assist BSEE in improving operation of a sustainable and effectively functioning bureau. The majority of the recommendations are associated with areas where correction and/or mitigation are within the control of BSEE. Several recommendations, however, require heightened awareness and action by DOI, the Office of Management and Budget (OMB), and Congress.

3.1 Maintain a Deconflicted Mission

Background: DOI instituted reforms to its OCS energy program in 2010-2011 to address long-standing weaknesses and shortcomings and in consideration of extensive expert advice, including presidentially appointed commissions and review boards. Key among the reforms was the separation of DOI's OCSLA responsibilities, to avoid critical responsibilities being compromised by being combined in an entity with contradictory roles. Three entities – BOEM, BSEE, and ONNR – were created to effectively deliver on DOI's responsibilities for (1) managing the mineral resources on the OCS, (2) oversight and enforcement of safety and environmental regulations, and (3) collecting, accounting for, and verifying natural resources and energy revenues. Restructuring to combine these entities would risk reversing the gains made while also causing disruption, uncertainty, and delay.

Objective**:** *To ensure that safety, the environment, and conservation of OCS resources are effectively promoted by an entity that can focus on vigorous regulatory oversight and enforcement.*

Recommendation: BSEE should remain a separate entity with high levels of coordination with BOEM and ONRR.

3.2 Complete the Inventory and Updating of Bureau Guidance

Background: BSEE has been conducting an extensive inventory of policies, procedures, and guidance (including handbooks, directives, and Notices to Lessees), much of which was created before BSEE existed and dates back to the 1980s, in order to have a complete record. It has also been updating and creating new policies, procedures, and guidance and automating to facilitate their use internally and externally (by industry and others). BSEE has created a system of interim policies, procedures, and guidance for organization of current materials while it continues these efforts.

Objective**:** *To maintain an internal focus on completing the inventory; moving to a permanent set of policies, procedures, and guidance; and ensuring priority materials are updated and or created promptly.*

Recommendation: BSEE should continue its efforts to inventory, organize, and update policies, procedures, and guidance. It should assign realistic and enforceable timeframes to managers for updating these materials.

3.3 Support the Environmental Compliance Mission

Background: BOEM is responsible for environmental review under the National Environmental Policy Act (NEPA), including completion of environmental impact statements and environmental assessments. BSEE uses these materials to inform permit reviews and compliance and enforcement efforts.

Objective**:** *To ensure that BSEE has adequate environmental information on which to base permit reviews, development of mitigating actions, and conduct inspections and compliance reviews and enforcement actions.*

Recommendation: In instances when BSEE does not have adequate information needed to support environmental decisions associated with permitting and enforcement, this situation should be communicated to BOEM. The Memoranda of Agreement (MOA) and Standard Operating Procedures (SOPs) that BOEM and BSEE operate under should be revised or supplemented by the establishment of processes with timelines to ensure that expectations are clearly understood. These processes established by revision or supplementation of the MOAs and SOPs should also include robust procedures for the elevation of matters for resolution, when necessary, and for the periodic review of the process by which BSEE obtains needed information from BOEM to identify systemic issues and needed improvements.

3.4 Transfer Renewable Energy Compliance and Enforcement Responsibilities

Background: When BOEM and BSEE were created, BOEM was given the responsibility for management of the OCS renewable energy program. BSEE is working with BOEM to assume responsibility for safety and environmental oversight and regulation of OCS renewable energy.

***Objective*:** *To ensure that BSEE has the capacity and capability in place for an OCS renewable energy compliance and enforcement program, has the ability to fulfill responsibilities based on scheduled projects coming on line, and is planning and preparing for projected future program growth.*

Recommendation: BSEE should work with BOEM to accelerate the transfer of environmental oversight, facility inspection, and regulatory enforcement responsibilities for the OCS renewable energy program and develop a schedule to be monitored by the Assistant Secretary for Land and Minerals Management (ASLM). BSEE should consider these new responsibilities in the development of workforce plans and should ensure that resources are available for these efforts and, as necessary, requested in future budgets.

3.5 Maintain Alignment with BOEM

Background: BOEM and BSEE were created to separate conflicting OCSLA responsibilities and allow BSEE to develop and operate an effective safety and environmental compliance program. The two bureaus remain closely interconnected, by design, to ensure that each adequately supports the other, primarily in environmental compliance.

***Objective*:** *To establish sustainable mechanisms that enable BSEE and BOEM to more effectively provide mutual support in interdependent areas and to resolve issues timely and in a manner that best supports DOI goals.*

Recommendation: ASLM should establish formal, regularly scheduled reviews of ongoing BOEM and BSEE alignment, processes, and linkages. Among the most important issues to address immediately are updates to the Environmental Compliance MOA and SOPs, and transfer of environmental oversight, facility inspection, and regulatory enforcement responsibilities for the OCS renewable program from BOEM to BSEE. ASLM should seek assistance from the Assistant Secretary for Policy, Management and Budget (ASPMB), as needed, to provide support in matters that require a DOI-wide policy or economic review and in convening working groups to address specific matters.

3.6 Elevate Decommissioning Issues

Background: Operators in the OCS are required to plug wells, remove structures and pipelines, and take other actions to decommission once production has ended. When they enter into a lease, operators are required to demonstrate their financial ability to conduct these activities to ensure the OCS is returned to its original condition either through bonding or self-insuring for these costs. Under this complex regulatory program, which is administered in part by BSEE and in part by BOEM, financial-assurance and decommissioning requirements and the enforcement of these requirements are intended to ensure that facilities are decommissioned at no cost to the government. However,

depending on the policies applied, certain approaches to regulation and enforcement might have the unintended consequence of undermining some operators' financial stability, thereby increasing the risk that neither a responsible operator nor adequate bonding might be available to cover decommissioning costs in certain instances.

Objective**:** *To inform DOI leadership and national policy officials of the potential risks of unfunded decommissioning costs, and to facilitate consideration of options – including choices involving BOEM or BSEE regulatory or enforcement policies, or including possible proposed legislation – that might help mitigate those risks.*

Recommendation: BSEE should work with BOEM, ASLM, DOI's Office of the Solicitor, and others to elevate issues and provide supporting analyses related to the risk that financial stress in the oil and gas industry might result in some failure to conduct or fund needed decommissioning – issues include (1) choices in BOEM or BSEE regulatory or enforcement policy that might help mitigate those risks, and (2) the absence of a funding source for decommissioning in the event an operator is unable to pay these costs.

4.1 Improve Alignment with the National Program Manager Model

Background: BSEE implemented an organizational realignment based on the national program management model on November 4, 2015 that is intended to bring clarity, consistency, predictability, and accountability to BSEE's operations. Several successful models of national program implementation within BSEE demonstrate high levels of communication, collaboration, and understanding of the roles of headquarters and the regions. Other programs and initiatives have not progressed to a comparable level of national program management performance.

Objective**:** *To effectively implement BSEE's realignment and facilitate efforts to bring consistency to processes and practices based on the national program management model.*

Recommendation: BSEE should complete implementation of the national program management model incorporating best practices for organizational transformation tailored to the needs of individual programs and initiatives; the effort should be coordinated by a single individual or entity reporting to the Director or Deputy Director. The effort should incorporate lessons learned from the Safety and Incident Investigation and Data Stewardship Programs, in particular the high levels of collaboration, effective governance structures and processes, and training.

4.2 Complete the Environmental Compliance National Program Design

Background: BSEE's realignment to the national program management model changed the reporting relationship for regional environmental compliance staff that were direct reports to the headquarters Division Director and now report to the regional directors. This deviates from historical documents that were the basis for organization of the BSEE environmental enforcement function (now renamed environmental compliance). BSEE has not implemented a systematic approach to environmental stewardship as was envisioned in the establishment of the Environmental Stewardship Collaboration Group, which could optimize agency expertise and outcomes and improve compliance and enforcement. In

addition, there are differing views about the nature of the work and role of inspections in the Environmental Compliance Program.

Objective**:** *To (1) formulate an Environmental Compliance Program design that engages headquarters and the regions and considers the original design of the environmental enforcement function and the results of the Environmental Stewardship Collaboration Group's work, (2) make final decisions about the appropriate staffing and workforce composition, and (3) complete implementation of the national program and ensure high levels of collaboration and communication.*

Recommendation: BSEE should produce a program management design for the Environmental Compliance Program that considers the history of the program's organization and functions as well as the work of the Environmental Stewardship Core Group. The design should detail the activities, work streams, outputs, and outcomes. The design should include workforce plans for headquarters and the regions that can be the basis for staffing decisions, addressing gaps in competencies, and effective implementation of the national program. The process should include an assessment of risk related to reporting relationships as well as appropriate internal controls and risk mitigation measures to ensure the function can effectively achieve mission goals.

4.3 Improve Utilization of the Engineering Technology Assessment Center

Background: BSEE established the Engineering Technology Assessment Center (ETAC) to assist regions with maintaining up-to-date knowledge about emerging technology and support standards setting.

Objective**:** *To effectively utilize ETAC's resources for standards setting and national policy development and ensure high levels of knowledge transfer to and from the regions to inform operations, inspections, and permitting.*

Recommendation: BSEE should improve the linkage between ETAC and the regions by expanding outreach and engagement and developing a formal governance body and process to ensure high levels of two-way communication between the regions and the Office of Offshore Regulatory Programs (OORP).

4.4 Strengthen Data Stewardship with Knowledge Management

Background: BSEE's Data Stewardship Program is effectively working toward goals to increase the quality and consistency of data, but information and knowledge is not being effectively shared across all of BSEE's organizational units.

Objective**:** *To promote more effective information and knowledge sharing.*

Recommendation: BSEE should develop a knowledge management (KM) strategy that complements the existing Data Stewardship Program and IT program with tools that enable knowledge sharing and close gaps in the knowledge cycle. As part of this strategy, BSEE should consider establishing communities of practice for critical areas of knowledge to facilitate organizational knowledge retention, knowledge sharing, and learning. A KM

pilot for a critical area of knowledge can be used to demonstrate the benefits of KM and inform the strategy prior to full-scale implementation.

5.1 Reactivate the Strategic Plan Working Group

Background: BSEE convened a working group comprised of a cross-section of BSEE employees that participated in development of the 2016-2019 Strategic Plan, but disbanded the working group after the plan was completed.

***Objective*:** *To expand awareness of the plan and its use as the basis for ongoing strategic alignment of the organization, resources, priorities, and actions; to create a conduit for continuing input for strategic planning and management; and to facilitate collaboration.*

Recommendation: Establish a working group comprised of program and regional representatives, in order to promote improved awareness of and engagement in strategic planning, inform the process for annual priority setting, and expand the use of risk management. Selection of the members of the group should consider the ability of the members to be advocates and change agents within their organizations and the team should be operational in time to assist with BSEE's participation in the development of a new DOI strategic plan.

5.2 Continue the Foresight Initiative

Background: BSEE established the Foresight Initiative to help understand how changes in the energy landscape, geopolitics, technology shifts, workforce, and other factors may impact future activities and programs.

***Objective*:** *To inform strategic planning, program and budget development, and workforce planning and to better prepare for changes and challenges in the future.*

Recommendation: BSEE should institutionalize its Foresight Initiative to provide input to strategic planning and risk assessment and to help anticipate and guide BSEE's programs and operations.

5.3 Enhance Annual and Multi-year Planning

Background: BSEE conducts annual and multi-year planning to drive continuous improvement, advance operational and organizational strategic goals, and respond to stakeholders.

***Objective*:** *To effectively manage BSEE's annual and multi-year planning and thereby maintain momentum and focus on priority activities.*

Recommendation: BSEE should enhance its annual and multi-year planning to include prioritization and sequencing of tasks taking risk assessment into account, assignment of roles and responsibilities for leadership and participation, tracking of progress, and following up.

5.4 Expand Understanding and Use of Enterprise Risk Management

Background: BSEE developed an Enterprise Risk Management Program (ERM) to inform strategic planning and decision-making, strengthen internal controls, and clarify priorities. However, the program is not uniformly accepted, understood, or utilized because there are different conceptual approaches to management of risk found within existing program based initiatives, and there currently is not a common lexicon for risk communication.

***Objective*:** *To improve the capacity to systematically address organizational and operational risks.*

Recommendation: BSEE should establish communities of practice for management of strategic risks and develop a common lexicon that can be used for risk communication. To this end, the ERM program should incorporate learning from the results of the inspection pilot underway and other areas where risk management pilots can expand its use and improve capability. BSEE should also incorporate ERM into its planning (see recommendation 5-3).

6.1 Conduct Targeted Succession Planning for Senior Leadership

Background: BSEE's senior management cadre comprised of senior executives and GS-15's is small, with a number of individuals who are now or soon will be retirement eligible. BSEE established its Leadership Development Program to develop future leaders, but more targeted efforts are needed to prepare a cadre of individuals that could potentially assume senior leadership roles.

***Objective*:** *To help ensure effective succession in senior leadership.*

Recommendation: BSEE should continue to develop opportunities for GS-14 and GS-15 employees who can gain experience in order to be prepared to assume senior leadership positions and ensure continuity.

6.2 Increase Integration of Training Programs

Background: Training programs are conducted by four BSEE entities to support mission needs. Improvements in effectiveness and efficiency are possible with consolidation of training programs, or program components. The Training Governance Board oversees technical training, but does not oversee the other training programs.

***Objective*:** *To holistically address training needs for BSEE employees, to achieve improved effectiveness and efficiency, to improve tracking and reporting, and to increase integration of these programs.*

Recommendation: BSEE should create a training governance structure that encompasses oversight of all of BSEE's training programs, not just technical training, and should assess the benefits of consolidating or leveraging aspects of its training programs to ensure the highest levels of integration and efficiency across the bureau.

7.1 Increase Fees and Collections

Background: BSEE's resources are at risk due to declining collections that comprise approximately 57 percent of its budget and limitations on inspection fees charged to industry.

Objective**:** *To address a potential budget shortfall due to declining collections and inflexibilities in the inspection fee.*

Recommendation: BSEE, in cooperation with DOI and OMB, should finalize the cost recovery regulation and continue to seek proposed changes in inspection fees to align them with current program requirements. BSEE, in cooperation with BOEM, should formulate proposals to submit to DOI and OMB that fund the shortfall in collections. Timely action is needed so these additional regulatory fees can be included in future OCS leases and avoid impacts to BSEE's budget.

7.2 Budget for Renewable Energy Compliance and Enforcement

Background: BSEE is assuming responsibility for safety and environmental oversight of renewable energy projects that may require additional staff and competencies.

Objective**:** *To be prepared to assume renewable energy program safety and environmental oversight responsibilities.*

Recommendation: BSEE should consider funding requirements for the renewable program as part of FY 2018 budget formulation and in future budgets.

7.3 Budget for Decommissioning

Background: BSEE's decommissioning workload is increasing.

Objective**:** *To address an expanding workload in decommissioning.*

Recommendation: BSEE should consider funding requirements for the decommissioning program as part of FY 2018 budget formulation and in future budgets.

8.1 Implement a Change Management Strategy

Background: BSEE is actively working on operational and organizational reform aligned with the strategic plan, but lacks an integrated organizational change management program or strategy.

Objective**:** *To bring greater cohesiveness to BSEE's organizational and cultural change efforts and foster greater collaboration, employee engagement, and communication.*

Recommendation: BSEE should develop and utilize a more comprehensive change management strategy to support the development of a more unified, collaborative and proactive organizational culture, using tools that can strengthen capabilities for engagement, knowledge sharing, collaboration, and communication. The strategy should consider best practices and specific guidance provided by the study team, and address

special challenges with respect to leadership, culture, governance, collaboration, and communication. The study team suggests that a full-time change management advocate should lead this effort.

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CHAPTER 1: INTRODUCTION

The Department of the Interior's Bureau of Safety and Environmental Enforcement (BSEE) is responsible for promoting safety, protecting the environment, and conserving resources in federal offshore waters. BSEE executes this mission through vigorous oversight and enforcement of energy exploration and development activities that are conducted by industry across a large geographic area, and in close coordination with other federal agencies.

BSEE was established as a new federal entity on October 1, 2011,[3] approximately 18 months after the April 20, 2010 explosion, fire, and sinking of the Deepwater Horizon mobile offshore drilling unit 49 miles off the coast of Louisiana in the Gulf of Mexico. The incident led to the death of 11 men and injury of 16 others working on the Deepwater Horizon rig followed by the release of nearly 5 million barrels of oil into the Gulf of Mexico. The release of oil and gas continued for 87 days, ending on July 15, 2010 when the well, which was 3,000 feet below the water's surface, was capped.[4] Despite a focused response effort by federal trustees, states and others, an estimated 1,100 miles of shoreline were polluted and the impacts to the environment, and economy are still being compiled.[5]

Shortly after the Deepwater Horizon (DWH) incident, on May 19, 2010, Secretary of the Interior Ken Salazar announced the dissolution of the federal entity responsible for OCS energy management, the Minerals Management Service (MMS). He ordered the separation of MMS's functions into three separate entities to create clear lines of responsibility for planning and leasing, oversight and regulation, and revenue management. Over the next 18 months a deliberate and careful process was conducted to create three new entities to manage DOI's responsibilities in the OCS: BSEE, BOEM and ONRR.

To identify necessary reforms to DOI's OCS program and ensure effective functioning of these new entities, Secretary Salazar created the Outer Continental Shelf Safety Oversight Board[6] (Board) to provide recommendations for improved management and administration. The results of the Board's review, in conjunction with a Department of the Interior Office of Inspector General (OIG) investigation of management, regulation, and oversight of OCS operations,[7] were considered in the creation of BSEE. Other reviews and

[3] BSEE began to operate on October 1, 2011; this was subsequent to the May 19, 2010 Secretarial Order that directed the creation of BSEE as part of reforms to DOI's OCS program.

[4] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling***, January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.

[5] Encyclopaedia Brittanica, ***Deepwater Horizon Oil Spill of 2010***, May, 9, 2016 .

[6] U.S. Department of the Interior, ***Outer Continental Shelf Safety Oversight Board Report to Secretary of the Interior Ken Salazar,*** September 1, 2010, available at http://www.noia.org/wp-content/uploads/2015/12/DOI-OCS-Safety-Oversight-Board-Report.pdf.

[7] Office of the Inspector General, U.S. Department of the Interior, ***A New Horizon: Looking to the Future of the Bureau of Ocean Energy Management, Regulation and Enforcement***, Report No. CR-EV-MMS-0015-2010, December 2010, available at https://www.doioig.gov/sites/doioig.gov/files/A-New-Horizon-Public.pdf.

recommendations were also considered, including the results of a joint investigation of the DWH incident by the Departments of the Interior and Homeland Security,[8] and the review conducted by the Presidentially-convened National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.[9]

These investigations and reviews brought attention to significant gaps and shortcomings in MMS. They pointed primarily to MMS's challenge in balancing the competing statutorily directed requirements set by OCSLA to expedite offshore oil and gas production, regulate and enforce safety and environmental requirements, ensure the effective conservation of the nation's resources, and maximize revenues. The President's Commission concluded that balancing these conflicting and complex responsibilities for regulating a highly technical and sophisticated industry was unattainable because of the conflicting mission, insufficient funding, staffing, and technical expertise.[10] The gap in industry growth versus federal oversight is demonstrated by the numbers; industry exploration and development of offshore oil and gas increased by 200 percent from 1982 to 2007, while staffing for MMS declined by 6 percent during the same time period.[11]

BSEE's Creation

BSEE is the regulatory and enforcement authority that works in conjunction with BOEM to manage and protect 1.7 million acres of the OCS. BOEM is responsible for managing development of the nation's offshore resources, while BSEE is responsible for oversight of industry compliance with requirements to ensure the safety of offshore workers, environmental protection, and the effective recovery and measurement of OCS resources. These two bureaus oversee a vast potential for energy and minerals development. In Fiscal Year (FY) 2015, oil and gas development activities under their jurisdiction resulted in the production of over 550 million barrels of oil and 1.3 trillion cubic feet of natural gas, accounting for about 16 percent of the nation's oil production and about 5 percent of domestic natural gas production, the equivalent of the energy needed to power about 119 million U.S. households for one year.[12] The bureaus also help protect a wealth of natural resources – the OCS includes rich, productive marine ecosystems with fish and other species of significant commercial importance.[13]

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[8]U.S. Department of the Interior and Department of Homeland Security, ***Joint Investigation of the Marine Casualty, Explosion, Fire, Pollution, and Sinking of Mobile Offshore Drilling Unit Deepwater Horizon***, April 20-22, 2010, available at https://www.uscg.mil/hq/cg5/cg545/dw/exhib/DWH%20ROI%20-%20USCG%20-%20April%2022,%202011.pdf.

[9] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling***, January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.

[10] Ibid

[11]Stuart Theriot, ***Changing Direction: How Regulatory Agencies Have Responded to the Deepwater Horizon Oil Spill***, LSU J. Energy L. & Res. *Currents*, November 19, 2014.

[12] U.S. Department of the Interior, ***FY 2017 Budget in Brief, Departmental Highlights***, available at https://edit.doi.gov/sites/doi.gov/files/uploads/FY2017_BIB_DH035.pdf.

[13] U.S. Department of the Interior, ***Economic Report FY 2015***, June 17, 2016, available at: https://www.doi.gov/sites/doi.gov/files/uploads/fy2015_doi_econ_report_2016-06-17.pdf.

A third entity within DOI, the Office of Natural Resources Revenue, oversees and manages the revenues collected from OCS development. In FY 2015 receipts collected into the U.S. Treasury from OCS oil and gas totaled $4.4 billion.[14] Because of the efforts of BSEE, BOEM and ONNR, DOI can claim direct economic contributions to the Nation's economy of over $40 billion for FY 2015 from the oversight of OCS energy production and over $86 billion including secondary economic benefits gained from spending on goods and services.[15]

Strategic Organizational Assessment

BSEE contracted with the Academy to perform a strategic organizational assessment, identify gaps in capabilities, and provide recommendations to help improve functionality and sustainability. The strategic organizational assessment considered the following elements:

- Systems, structures, and people;
- Organizational resources and capabilities that enable execution of the strategic framework;
- Processes that deliver the organizational mission requirements;
- Technical programs (such as permitting, environmental enforcement, inspections) establishment and functioning; and
- Organizational technological solutions.

Scope and Methodology: The Academy formed a study team that received input from an Expert Advisory Group (EAG) of National Academy Fellows. The study team undertook a structured assessment of BSEE's organization, processes, people, technology, and culture by examining extensive documentation, conducting research, synthesizing results from evaluations conducted by others, and conducting structured interviews. BSEE provided over 2,500 pages of documents including reports, plans, presentation materials, and recorded notes of meetings. Over 40 structured interviews were held with BSEE leadership officials, managers, employees, and former employees, as well as the Government Accountability Office (GAO), the OIG, BOEM, and ASLM. Interviews were conducted on a not-for-attribution basis.

The study team assessed BSEE's current state to evaluate progress made since creation of the bureau and relative to BSEE's desired future state. The study team assessed BSEE's internal strengths and weaknesses that may be helping or hindering progress toward achievement of the mission and strategic goals. The team also assessed opportunities and threats in the external environment. In its assessment of BSEE the study team gauged progress on a continuum of maturity based on the degree to which the organization,

[14] U.S. Department of the Interior, ***FY 2017 Budget in Brief, Receipts by Source (Appendix I)***, available at https://edit.doi.gov/sites/doi.gov/files/uploads/FY2017_Appendix_I0001.pdf.
[15] U.S. Department of the Interior, ***Economic Report FY 2015***, June 17, 2016 available at https://www.doi.gov/sites/doi.gov/files/uploads/fy2015_doi_econ_report_2016-06-17.pdf

processes, culture, and other aspects of BSEE are institutionalized, sustainable, and effectively supporting mission goals.

BSEE's programs and activities are technically complex and geographically dispersed and the scope and timeframe for the organizational assessment did not allow the study team to assess all of BSEE's efforts. Following a review of documentation provided by BSEE and other sources and interviews, the study team identified key issues and challenges that BSEE faces in transitioning to the future state, which formed the basis for a gap analysis and roadmap that guided more in-depth research, consideration of best practices, and the development of detailed recommendations. The analysis identified and focused on the following priority areas:

- **Achieving strategic outcomes for safety, environmental protection, and conservation** through operation as a separate bureau focused on a deconflicted mission;
- **Strategic alignment of the organization** with continued implementation of BSEE's national program management model;
- **Advancing BSEE's strategic goals for operational and organizational excellence** through organizational program management that promotes integration and risk management;
- **Management of human resources** guided by the Human Capital Management Strategic Plan and implementation of strategies to improve hiring, retention, and training, and create an inclusive workplace;
- **Resolving budgetary challenges** to ensure that BSEE has stable and adequate resources to support mission accomplishment; and
- **Facilitating organizational and cultural change** through leadership, governance, communication, and collaboration.

Summary Results: BSEE has established itself as a new federal entity; strengthened programs for the protection of safety and the environment and the conservation of OCS resources; improved core mission responsibilities for inspection and permitting; enhanced relationships with other federal entities; modernized and addressed gaps in regulations and policy; realigned the organization to promote consistency and transparency internally and with stakeholders; nearly achieved recruitment and hiring goals to attract highly skilled employees; and established partnerships to promote technical competencies.

Although a relatively new organization, BSEE has taken major strides in formulating and using strategic direction to guide priorities. It has issued two strategic plans and a Human Capital Management Strategic Plan, deployed enterprise risk management, and developed a series of action plans to drive operational and organizational improvements. BSEE promoted ongoing reforms responsive to GAO and OIG recommendations, put in place an integrated information technology and business enterprise architecture, significantly expanded training to promote professional and leadership development and technical competencies, and implemented data stewardship to improve the accuracy and utility of information used internally and by industry.

BSEE's efforts have substantially addressed areas of reform identified in the 2010 implementation plan prepared by DOI in response to the recommendations of the Outer Continental Shelf Safety Oversight Board.[16] The areas are:

- Building new systems for processing and analyzing data;
- Performing risk assessments for permitting and environmental reviews;
- Designing and implementing a robust, effective, and aggressive safety and environmental enforcement regime;
- Creating new policies and guidance for both federal personnel and industry;
- Developing training programs and curricula;
- Recruiting of scores of new professionals;
- Establishing efficient, modern information systems; and
- Developing management structures and systems appropriate to the scale and missions of the new organization.

Conclusion

The creation of BSEE as a separate bureau significantly strengthened the federal government's ability to effectively oversee industry as it develops OCS resources. BSEE's establishment has helped ensure high levels of protection for worker safety and the environment and utilization of OCS resources in a manner that is in the best interests of the nation.

BSEE's creation also provides a strong foundation for improving what had previously been insufficient federal oversight of compliance monitoring (permitting and inspection), investigation and enforcement, and oil spill response preparedness. Over the past five years, BSSE has made significant headway in building capacity and competencies to support its mission. In addition, BSEE has developed an information technology infrastructure and business area that supports both BOEM and BSEE and developed capacity and infrastructure in order to deliver shared services to BOEM, BSEE and others in DOI in areas including human resources, acquisition, and financial services. BSEE demonstrates commitment to its mission; achievement of operational and organizational excellence; and transformation, maturation, and modernization.

The study team's recommendations are primarily focused on advancing and improving the efforts that BSEE has undertaken thus far, which are within BSEE's control. There are a few notable exceptions. These are areas that require the assistance of DOI, OMB, and the Congress:

- Most importantly, the study team recommends that BSEE should continue to operate as a separate entity to ensure a strong federal role.

[16] U.S. Department of the Interior, ***Implementation Plan in Response to the Outer Continental Shelf Oversight Board's September 1, 2010 Report to the Secretary of the Interior***, issued September 4, 2010, p.6.

- The study team recommends a more institutionalized process involving ASLM and potentially others in DOI for ensuring the alignment of BOEM and BSEE; the team also suggests that BOEM and BSEE accelerate the transfer of environmental oversight, facility inspection, and regulatory enforcement responsibilities for the OCS renewable program.
- The study team suggests that DOI should continue to address policy issues surrounding the decommissioning program, including risks associated with potential bankruptcies.
- BSEE faces budgetary challenges due to declining revenue collections and insufficient inspection fees that are a significant component of the budget. This issue requires actions by DOI, OMB and Congress. In addition, BSEE should address the budgetary implications of decommissioning and ensure there are adequate budgetary resources to enable the bureau to assume a larger role in oversight of renewable projects.

CHAPTER 2: BACKGROUND

The history of offshore drilling for oil and natural gas begins in the late 1800s with simultaneous development in the Pacific Ocean off the California Coast, the Gulf of Mexico, and the Great Lakes. As early as 1891, the first submerged oil wells were drilled from platforms built on piles in Grand Lake St. Marys, about 60 miles north of Dayton, Ohio.[17] Offshore development began in California in 1894 when Henry L. Williams drilled two wells on a beach near Santa Barbara. Observing promising results, Williams and his associates went on to develop a production platform in 1896 with a rig located on a 300-foot wooden pier connected to the shoreline. In 1911 the Gulf Refining Company used tugboats, barges, and floating pile drivers to drill on Caddo Lake, Louisiana. The first Caddo Lake Well, which was untethered to land, was drilled to a depth of 2,185 feet and produced 450 barrels of oil a day.[18]

Since the earliest discoveries of oil, industrious operators have pushed the boundaries of technology and geography. Today, offshore oil and gas production and exploration takes place in ultra-deep waters in the Gulf of Mexico and in frigid Arctic environments. In September 2016, Shell started production at Stones, the world's deepest oil and gas project, operating in 9,500 feet of water and connected to reservoirs nearly 30,000 feet below sea level.[19] Hilcorp Alaska operates Northstar on a five-acre, man-made island located in the Beaufort Sea, 12 miles northwest of Prudhoe Bay and six miles offshore. Renewable energy production on the OCS is now a reality as well. In late 2016, the first commercial offshore United States wind farm, Block Island, came on line, located in state waters three miles off the coast of Rhode Island.

The history of offshore energy development is a testament to American ingenuity and the ability of industry to overcome the challenges of remote locations, inhospitable climates, and unpredictable geological formations to extract energy to meet the nation's energy needs. The history of offshore development also includes reminders of the risks involved in energy exploration and development, the potential for disaster that can cost lives, wreak havoc on the OCS environment, and impact economies. Scientists are still investigating the effects of the Deepwater Horizon oil spill on the Gulf ecosystem. Recent studies found evidence of wetland loss accelerated by the oil spill, significant oil contamination in bottom sediments in the Gulf impacting marine ecosystems that may take decades to recover, and declines in annual oyster harvests.[20]

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[17] American Oil & Gas Historical Society, ***Ohio Offshore Wells***, available at http://aoghs.org/offshore-history/ohio-offshore-wells//.
[18] Ibid
[19] Offshore Technology.com, ***Stones Field, Gulf of Mexico, United States of America***, available at http://www.offshore-technology.com/projects/stones-field-gulf-mexico//.
[20] National Wildlife Federation, ***Five Years and Counting: Gulf Wildlife in the Aftermath of the Deepwater Horizon Disaster***, available at http://www.nwf.org/News-and-Magazines/Media-Center/Reports/Archive/2015/03-30-2015-Five-Years-And-Counting.aspx.

These reminders underscore the need for rigorous protections to ensure adequate safety for offshore workers, sustain sensitive and economically important marine environments, and effectively manage OCS resources that are held in trust by the federal government.[21]

The Outer Continental Shelf Lands Act

The drilling conducted offshore was regulated and managed by states until the 1930s, when a series of legal battles began between coastal states and the federal government for control over offshore oil and gas development.[22] In 1945, President Harry Truman proclaimed federal authority over the subsoil of the U.S. continental shelf in its entirety. [23] Congress clarified OCS ownership and control on May 22, 1953 with enactment of the Submerged Lands Act. The Act reaffirmed states' authority to grant leasing rights within state waters, generally three miles from shore (9 nautical miles for Texas and western Florida due to historical claims).[24]

Three months later, on August 7, 1953, Congress passed OCSLA, which affirms federal control of the OCS seaward of the state's offshore boundaries.[25] OCSLA provides direction for development of the OCS, stating that "the outer continental shelf is a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs"[26] Congress tasked the Secretary of the Interior with the administration of a leasing system for the outer continental shelf.[27] Congress did not specify how DOI should balance expeditious development with high levels of safety and environmental protection. The first leases of the OCS under OCSLA began in September of 1954, with the announcement of rights to explore 748,000 acres off the coast of Louisiana. Half of the available acreage was leased in the sale with winning bids totaling $130 million.[28] Federal OCS leasing continued and by 1970, 16.7 percent of domestic oil production and 15 percent of gas production was coming from offshore wells. By the end of 1970, over 7 million offshore acres had been

[21] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling, January 2011***, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.
[22] Craig, Robin Kundis, ***Treating Offshore Submerged lands as Public Lands: A Historical Perspective***, *Public Land and Resources Law Review*, Vol. 34, 2013.
[23] Proclamation 2667-Policy of the United States With Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf, September 28, 1945.
[24] Submerged Lands Act of 1953, 43 U.S.C. § §1301 et seq..
[25] Outer Continental Shelf Lands Act, 43 U.S.C. § 1331§ et seq.
[26] 43 U.S.C. § 1332(3)).
[27] 43 U.S.C. § 1334.
[28] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling***, January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.

auctioned by the federal government for more than $5.6 billion in bonus bids, royalty payments, and rental fees.[29]

DOI's management of OCS leasing, development, and production remained largely unchanged until the Santa Barbara Oil Spill in 1969. The spill led DOI to toughen its rules and helped to further congressional awareness of environmental issues leading to enactment of sweeping new environmental protection and resource conservation laws, starting with the National Environmental Policy Act (NEPA). Enactment of NEPA in 1970 changed the federal role in overseeing offshore oil and gas development requiring the disclosure and consideration of relevant information about proposed federal actions and reasonable alternatives. Amid these changes, Congress began to consider changes to OCSLA. [30]

The 1973 oil embargo caused nationwide shortages, price increases, and rationing, which prompted Congress to hold hearings on revamping the federal offshore leasing program.[31] In the process, Congress began to consider balancing of the potential for oil and gas discovery with environmental impacts. The hearings and discussions led to consideration and passage of the OCSLA Amendments of 1978. Reflecting congressional attempts to find a balance between the policy goals of energy independence and environmental protection, the amendments added detailed procedures governing leasing of rights to explore, develop, and produce OCS resources, defining four distinct stages: formulation of a leasing plan, leasing based on a five-year plan, exploration plans submitted by lessees for approval, and development and production plans submitted by lessees upon discovery of oil and gas for approval.[32]

The amendments required that lessees apply for approval before drilling any wells, pursuant to an approved exploration plan or, in most areas, pursuant to a development and production plan. The statute also underscored the importance of environmental safeguards, directing the Secretary of the Interior "to obtain a proper balance between the potential for environmental damage, the potential for discovery of oil and gas, and the potential for adverse impact on the coastal zone." Congress authorized an environmental studies program for the OCS. Congress also addressed the safety of workers, requiring the DOI and the U.S. Coast Guard to promulgate safety regulations and use of the Best and Safest Technology (BAST) to protect safety, health and the environment.[33] The regulations

[29] Kenneth Hendricks, Robert H. Porter, and Bryan Boudreau, Information, Returns, and Bidding Behavior in OCS Auctions: 1954-1969, The Journal of Industrial Economics, Vol. XXXV, June 1987.
[30] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling***, January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.
[31] U.S. Department of State, Office of the Historian, ***Oil Embargo 1973-1974,*** available at https://history.state.gov/milestones/1969-1976/oil-embargo.
[32] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling***, January 2011, https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.
[33] Outer Continental Shelf Lands Act**,** 43 U.S.C. §§ 1334(ee), 1347(b), as amended by the Outer Continental Shelf Lands Act Amendments of 1978.

issued under the OCSLA Amendments require offshore operators to use BAST whenever practical on all exploration, development, and production operations when failure of equipment would have a significant effect on safety, health, or the environment.[34] To implement this requirement, BSEE evaluates the performance of equipment and determines an appropriate performance level that technology must meet or exceed.[35]

Minerals Management Service

In 1981, an investigation of allegations of irregularities in oil and gas royalty payments led to appointment of a Commission on Fiscal Accountability of the Nation's Resources. The Commission called for an overhaul of royalty collection from federal and Indian lands, including submerged lands in the OCS.[36] Up until this time two entities within DOI were responsible for OCS energy management: the U.S. Geological Survey was responsible for oversight of offshore exploration and energy production while the Bureau of Land Management was responsible for collection of royalties for drilling on federal lands and waters.[37] Using the Commission's report as the basis for restructuring DOI's OCS management functions, on January 19, 1982, Secretary of the Interior James Watt created the Minerals Management Service (MMS).[38] The consolidation of offshore functions was accomplished under authority of Reorganization Plan No. 3 of 1950.[39]

Deepwater Horizon and Reorganization of DOI's OCS Programs

Beginning in 1982 and through 2010, DOI's MMS was the federal entity with primary responsibility for energy development in federal waters. Based on authority granted by OCSLA,[40] MMS had a broad scope of responsibilities (see Figure 2-1 below), including:

- Management and regulation of OCS activities;
- Administration of OCS leases;
- Compliance and enforcement related to the safety of offshore facilities;
- Protection of coastal and marine environments;
- Development of a renewable energy program to allow leasing on the OCS;[41]

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[34] 30 CC.F.R. § 250.107(c)).
[35] Bureau of Safety and Environmental Enforcement, ***Best Available and Safest Technology,*** https://www.bsee.gov/BAST.
[36] U.S. Department of the Interior, ***Fiscal Accountability of the Nation's Energy Resources***, January 1982, https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/T-2264.pdf.
[37] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling,*** January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.
[38] U.S. Department of the Interior, ***Secretarial Order 3071***, January 19, 1982.
[39] Congressional Research Service, ***Reorganization of the Minerals Management Service in the Aftermath of the Deepwater Horizon Oil Spill,*** November 10, 2010.
[40] Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331 et seq..
[41] U.S Department of the Interior, ***Budget Justifications and Performance Information, Fiscal Year 2011: Minerals Management Service,*** pp. 3-4.

- Oil spill response and research under authority of the Oil Pollution Act;[42] and
- Collection, accounting and disbursement of revenues from energy and mineral leases on the OCS and onshore federal and American Indian lands.[43]

Assistant Secretary – Land and Minerals Management	
Minerals Management Service	
Offshore Energy and Minerals Management	**Minerals Revenue Management**
5- Year Program (Oil and Gas)	Offshore/ Onshore Revenue Collection
Leasing Process Management	Audits/ Enforcement
Environmental Analysis and NEPA	State and Tribal Audits
Development, Exploration, Production Plan Management	Accounting/ Financial Reporting
Safety and Technical Review of Plans	Asset Valuation
Production Development Operations/ Resources Management	Economic and Market Analysis
Safety and Technical Inspections and Enforcement	
Environmental Inspections and Enforcement	
Safety and Environmental Research	
Oil Spill Response and Research	

Figure 2-1. Distribution of MMS Functions[44]

The April 20, 2010 explosion and fire that occurred on the Deepwater Horizon drilling rig and the resulting oil spill focused the nation's attention on MMS and was the catalyst for major reorganization and reforms in the manner in which DOI managed OCS energy development. Congress attempted to permanently authorize a reorganization of MMS and institute reforms. The congressional proposals, many of which were supported by the Executive Branch, sought to address long-standing issues, bureaucratic inadequacies, and shortcomings that undercut MMS's ability to ensure safe operations and insulate compliance and regulatory functions from industry pressures.[45] Bills were introduced in the House and Senate during the 111th Congress. Four of the bills, described below, proposed to separate out MMS's three conflicting missions of (1) managing the mineral resources on the OCS, (2) oversight and enforcement of safety and environmental regulations, and (3) collecting, accounting for, and verifying natural resources and energy revenues.

[42] Oil Pollution Act of 1990, 33 U.S.C. § 2701 et seq.
[43] U.S Department of the Interior, ***Budget Justifications and Performance Information, Fiscal Year 2011: Minerals Management Service***, p.4.
[44] U.S. Department of the Interior, ***Implementation Report: Reorganization of the Minerals Management Service***, issued July 14, 2010, with the addition of Oil Spill Response and Research omitted from original.
[45] Mulligan, James S., ***Case Study: Minerals Management Service***, *Institute for Environmental Diplomacy and Security at the University of Vermont*, September 2011 and Hayley Carpenter, ***Deepwater Horizon: Agency Reorganization and Appropriations in Offshore Oil Regulation,*** *Ecology Law Quarterly*, Vol. 42, Issue 2, November 1, 2015.

- H.R. 3534, the Consolidated Land, Energy, and Aquatic Resources Act of 2009 passed by the House on July 30, 2010. The bill would have abolished MMS and created three new units in DOI; one to manage the leasing and permitting of onshore and offshore federal lands, a second to carry out safety and environmental regulatory activities on all onshore and offshore federal lands, and a third to collect and disburse royalties and revenues from energy and mineral activities on onshore and offshore federal lands.
- S. 3516, the Outer Continental Shelf Reform Act of 2010 was reported out of committee and placed on the Senate calendar on July 28, 2010. The bill would have directed the Secretary of the Interior to use administrative authority to establish a new entity responsible for revenue and royalty management and two new entities dividing responsibilities for leasing, permitting, and safety and environmental regulatory functions and eliminate "to the maximum extent practicable…potential organizational conflicts of interest related to leasing, revenue creation, environmental protection, and safety.
- S. 3643, the Oil Spill Response Improvement Act, was placed on the Senate Legislative Calendar on July 22, 2010. The bill included the provisions of S. 3516 discussed above.
- S3663, the Clean Energy Jobs and Oil Company Accountability Act of 2010 was placed on the Senate Legislative Calendar on July 28, 2010. The bill included the provisions of S. 3516 discussed above.

These legislative proposals did not progress to enactment, and the Secretary of the Interior created three separate entities under the authority of a Secretarial Order.[46] Issued on May 19, 2010, Secretarial Order No. 3299 directed the division of MMS into three new entities: BOEM, BSEE and ONRR. As a first step, the largely intact revenue function that was MMS's Minerals Revenue Management Division moved to the Office of the Secretary under the supervision of the Assistant Secretary for Policy, Management and Budget and became ONRR effective October 1, 2010 (Figure 2-2).[47] ONRR's mission is to ensure the full and fair return to the American people of royalties and other monies owed for the utilization of public resources in the production of conventional and renewable energy and mineral resources both onshore and in the OCS.[48]

[46] U.S. Department of the Interior, ***Secretarial Order 3299***, May 19, 2010 executed under authority of Reorganization Plan No.3 of 1950.
[47] U.S. Department of the Interior, ***Secretarial Order 3299***, May 19, 2010.
[48] Department of the Interior, ***Implementation Report: Reorganization of the Minerals Management Service,*** July 14, 2010.

Assistant Secretary – Land and Minerals Management		Assistant Secretary- Policy, Management and Budget
Bureau of Ocean Energy Management	**Bureau of Safety and Environmental Enforcement**	**Office of Natural Resources Revenue**
Environmental Analysis and NEPA	Safety, Technical, and Environmental Review of Plans	Revenue Collections
5- Year Program (Oil and Gas)	Safety and Technical Inspections and Enforcement	Revenue Collections and Projections
Leasing Process Management	Production and Development Operations	Enforcement
Development/ Exploration/ Production Plan Management	Environmental Inspections and Enforcement	Accounting/ Financial Reporting
Resource Management	Rulemaking (for Safety and Environment)	Asset Valuation
Rulemaking (for Resource Utilization)	Safety and Environmental Research	Economic and Market Analysis
Environmental Studies	Oil Spill Response and Research	

Figure 2- 2. Post- Reorganization of OCS Functions Formerly in MMS[49]

The Secretary directed the restructuring of the remaining MMS functions that were at that point included in a newly named Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE).[50] The Secretary directed the creation of two entities: BOEM would exercise the conventional and renewable energy related management functions including, but not limited to activities involving resource evaluation, planning, and leasing. BSEE would exercise the safety and environmental enforcement functions of the MMS including, but not limited to the authority to inspect, investigate, summon witnesses and produce evidence, levy penalties, cancel or suspend activities, and oversee safety, response, and removal preparedness.[51]

After issuance of the Secretarial Order, the creation of BOEM and BSEE proceeded through a long and deliberate process that led to the design of the two bureaus. This design would allow the two bureaus to achieve mission separation, establish appropriate checks and balances, and ensure rigorous oversight while maintaining high levels of communication and coordination. This process progressed over the course of 18 months, and considered best practices gained from reviewing oil and gas management in other countries, multiple external reviews, and evaluation of other federal regulatory functions.

Two separate bureaus – BOEM and BSEE – reporting to the Assistant Secretary for Land and Minerals Management began operations on October 1, 2011 with defined and distinct

[49] U.S. Department of the Interior, ***Implementation Report: Reorganization of the Minerals Management Service***, issued July 14, 2010 with the addition of Oil Spill Response and Research omitted from original.
[50] U.S. Department of the Interior, ***Secretarial Order 3302***, June 18, 2010.
[51] U.S. Department of the Interior, ***Secretarial Order 3299***, May 19, 2010 executed under authority of Reorganization Plan No.3 of 1950.

missions. The actions taken by the Department in restructuring MMS addressed long-standing issues arising from three competing and conflicting missions. Under this design, BSEE has the responsibility to protect and improve worker safety, environmental compliance, and conservation of resources.

BSEE's Organizational Structure and Responsibilities

BSEE operates from a headquarters located in Washington, D.C. and through regional offices that oversee OCS development in the Gulf of Mexico, the Pacific Ocean, and waters off of Alaska. The three regions manage very different programs because of the environments in which they operate and the nature of energy development and production activities in the areas they oversee.

The Gulf of Mexico Region, headquartered in New Orleans, Louisiana, operates the largest program with 3,108 active leases including over 16 million acres.[52] The vast majority of OCS production comes from the Gulf of Mexico. Over 539 million barrels of oil were produced from the Gulf in 2015. Despite reduced oil and gas prices in recent years, production has steadily increased as new projects have come on line including five deep water projects that began production during 2015. The Gulf Region conducted 19,462 inspections in 2015 related to well operations, production facilities, pipelines, meters, and environmental compliance. Ensuring decommissioning and abandonment of facilities (once production has ended) are conducted in a safe and environmentally responsible manner is a significant component of the Gulf of Mexico Region's (GOMR) responsibilities.

The Pacific Region (PAC), headquartered in Camarillo, California, manages a program comprised of mature fields and aging infrastructure including 43 active leases and 217,669 acres.[53] PAC conducted 299 inspections in 2015 and is preparing for eventual decommissioning of multiple platforms and long-term preservation issues associated with shutdown of the main onshore arterial pipeline that transports 65 percent of the region's production for processing.[54] PAC is also involved in renewable energy projects off the coasts of Oregon and Hawaii.

The Alaska Region, headquartered in Anchorage, Alaska, manages 43 active leases and 204,949 acres where operations face unique issues related to operations in the Arctic environment.[55] BSEE's Alaska Region conducted 270 inspections in 2015 and currently oversees, in coordination with State regulators, production activities at the Northstar unit, located in the Beaufort Sea. Two primary interests for exploration in the Alaska Region (AK) are the Beaufort and Chukchi Seas, where there is an estimated 23 billion barrels of

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[52] U.S. Department of the Interior, ***Bureau of Ocean Energy Management Combined Leasing Report***, February 1, 2017, available at: https://www.boem.gov/2017-02-Combined-Leasing-Report//.
[53] Ibid
[54] Bureau of Safety and Environmental Enforcement, ***Annual Report 2015,*** available at https://www.bsee.gov/annual-report/safety/bsee-2015-annual-report.
[55] U.S. Department of the Interior, ***Bureau of Ocean Energy Management Combined Leasing Report***, November 1, 2015, https://www.boem.gov/Combined-Leasing-Reports-2015//.

technically recoverable oil and nearly 106 trillion cubic feet of natural gas. There is no exploration underway in these two areas and on December 20, 2016 President Barack Obama designated portions of U.S. waters in the Chukchi and Beaufort Seas as indefinitely off limits to offshore oil and gas leasing.[56] [57]

BSEE's Role in the OCS

BSEE's responsibilities are defined by OCSLA, which prescribes federal responsibility to promote safety, protect the environment, and conserve energy.[58] In carrying out these responsibilities, BSEE also ensures compliance with NEPA,[59] the Clean Air Act (CAA),[60] the Federal Oil and Gas Royalty Management Act (FOGRMA),[61] and the Oil Pollution Act of 1990 (OPA),[62] and others. BSEE uses the full range of authorities, policies, and technical knowledge to oversee OCS activities and perform the following functions:

- Oversight of production operations to ensure sound conservation, engineering, and economic practices to prevent waste and maximize recovery;
- Offshore regulation that establishes standards that emphasize a culture of safety;
- A technical review process that ensures risks are identified and minimized;
- Inspections of facilities, plans, and systems;
- Oil spill preparedness assessment that verifies operators have adequate plans and equipment in place;
- Technical and scientific research to enhance information and technology to sustain organizational, technical, and intellectual capacity;
- Investigation of incidents and allegations of unsafe and/or illegal conduct;
- Oversight to ensure that operators adhere to the stipulations of approved leases, plans and permits; and
- Monitoring compliance with and enforcement of applicable operational and environmental law, regulations, and policies.

BSEE's efforts in these areas are performed by highly skilled engineers, geoscientists, inspectors, biologists, investigators, and others who work with industry to evaluate plans, inspect facilities and equipment, verify operatory and contractor competencies, complete announced and unannounced inspections and exercises, apply standards and the results of research and development, and support ongoing refinement and improvement of

[56] BSEE, ***Alaska Regional Operations***, 12-20-16, available at https://www.bsee.gov/whoweare/our-organization/regional-offices/alaska/ak-regional-operations.
[57] The White House, ***United States-Canada Joint Arctic Leaders' Statement***, December 20, 2016, available at https://www.whitehouse.gov/the-press-office/2016/12/20/united-states-canada-joint-arctic-leaders-statement.
[58] Outer Continental Shelf Lands Act**,** 43 U.S.C. §§ 1331 et seq..
[59] National Environmental Policy Act**,** 42 U.S.C. §§ 4321 et seq.
[60] Clean Air Act**,** 42 U.S.C. § 7401 et seq.
[61] Federal Oil and Gas Royalty Management Act of 1982**,** 30 U.S.C. § 1701 et seq.
[62] Oil Pollution Act of 1990**,** 33 U.S.C. 40 § 2701 et seq.

technologies.

To implement its mission, BSEE works with other federal agencies, states, and local entities and other countries. Within DOI, BSEE works closely with BOEM promoting energy independence, environmental protection, and economic development through responsible science-based management of offshore conventional and renewable energy and marine mineral resources. BOEM studies the environment and leases resources on the OCS, while BSEE enforces the terms of the leases. BOEM and BSEE also collaborate on decommissioning and the Rigs to Reefs Program, which is explained in Chapter 3. BSEE works closely with ONRR in their efforts to collect and disburse royalty revenues generated by energy production on federal lands, including the OCS. BSEE performs meter inspections on behalf of ONRR to ensure companies are accurately reporting production totals. BSEE works closely with many other federal entities in the fulfillment of their mission. A summary of relationships with other federal entities is included in Appendix E.

BSEE's role in regulating offshore energy exploration, production, and development demands close productive relationships with industry and standards setting authorities to ensure that regulations, guidance, and oversight incorporate the latest technological requirements. BSEE participates in nearly 100 different standards development committees with organizations including the American Petroleum Institute (API), the American Society for Testing and Materials International, the American Society of Mechanical Engineers, and the National Association of Corrosion Engineers International.[63]

BSEE also engages with stakeholders from academia, industry, non-governmental organizations, and other governmental agencies to enhance the knowledge base of BSEE's programs and technical personnel. In 2013, BSEE established the Ocean Energy Safety Institute (OESI), a forum for dialogue, shared learning, and cooperative research in offshore-related technologies and activities to promote environmentally safe and responsible offshore operations. BSEE also established the Engineering Technology Assessment Center (ETAC), located in Houston, Texas, to assess novel and emerging technologies and enable BSEE to stay abreast of an increasingly complex industry. Through ETAC, the bureau works closely with original equipment manufacturers and standards-setting bodies.

BSEE's Oil Spill Preparedness Program advances research and development into new innovative methods to respond to oil spills and identify best available technologies for mechanical and alternative spill response, by engaging with the U.S. Coast Guard and other partners. BSEE operates the National Oil Spill Response Research and Renewable Energy Test Facility. Located in Ohmsett, New Jersey, the facility is designed to test and evaluate full-scale equipment for the detection of and response to spilled oil. It plays an important role in developing response technologies and preparing responders by training in a realistic setting.

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[63] U.S Department of the Interior, ***Budget Justifications and Performance Information, Fiscal Year 2017: Bureau of Safety and Environmental Enforcement***, p. 21.

BSEE's Budget and Staffing Profile

BSEE has an annual budget of $204.7 million, which represents nearly 1.7 percent of the DOI budget of $12.0 billon.[64] This includes $88.5 million in appropriations and $116.2 million in offsetting collections. BSEE is currently funded through the Further Continuing and Security Assistance Appropriations Act, 2017, P.L. 114-254 enacted on December 10, 2016. This authority extends funding levels and terms and conditions based on the FY 2016 Appropriations Act[65] through April 28, 2017 or until regular appropriations are enacted. The FY 2017 budget submitted to Congress on February 9, 2016 represents the most current proposal for BSEE (as of the time of the release of this report) and includes a request of $204.9 million, including $81.4 million in appropriations and $108.5 million in offsetting collections.

BSEE's staffing component totaled 802 Full-Time Equivalents (FTE) as of September 17, 2016. An FTE translates annual hours worked by BSEE's employees into an equivalent number of full time work years. There were 852 full-time employees on board as of September 17, 2016 and 871 employees in total.

[64] BSEE current authority for FY 2016, including offsetting collections, as compared to DOI current authority, regular appropriations.
[65] ***Consolidated Appropriations Act***, 2016, P.L. 114-113, Dec. 18, 2015.

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CHAPTER 3: A MISSION FOR SAFETY, ENVIRONMENTAL PROECTION, AND CONSERVATION

BSEE was created with a distinct mission focused on ensuring that industry operates in a manner that ensures high levels of worker safety, is compatible with protection of the environment, and effectively recovers and measures OCS resources. BSEE's creation reformed OCS management, establishing for the first time since Congress passed OCSLA in 1953 an authority that is deconflicted from the other OCSLA federal responsibilities to promote development and maximize revenues.

DOI's action to create three separate entities to administer its OCS program and undertake numerous reforms established a foundation for and precipitated a wide range of other improvements. These include the issuance of new and updated guidance to improve drilling safety, blowout preventer and well control, production safety systems, and Arctic drilling. In both regulatory and compliance initiatives, BSEE has applied modern regulatory concepts such as performance and risk-based requirements and advanced near-miss reporting, real-time monitoring, and third-party certification.

These actions and others have improved BSEE's capability to focus on attainment of strategic goals to advance a culture of safety, promote environmental stewardship, and conserve energy resources and maintain effective relationships with operators and the offshore energy industry. In FY 2015, BSEE conducted 20,031 inspections on more than 2,300 OCS facilities covering well operations, pipelines, meters, and environmental compliance and issued 2,483 violations for Incidents of Noncompliance. BSEE collected over $6 million in fines as a result of 57 civil penalty cases and initiated 71 investigations spanning multiple categories of oversight. In 2015, BSEE also reviewed 238 Oil Spill Response Plans, and completed 170 oil spill preparedness inspections, audits, verifications, or exercises.[66]

In FY 2015, BSEE launched its SafeOCS program, which collects and analyzes near-miss data from industry to save lives, reduce injuries, and help prevent potentially devastating environmental events on the OCS. BSEE's data collection protects confidentiality, promoting voluntary reporting to encourage learning and reporting within the offshore community and fosters a culture of transparency with industry and other stakeholders. BSEE closely tracks trends in industry-reported data and uses the results to inform and improve compliance, including the data reported below in Figure 3-1.

[66] Bureau of Safety and Environmental Enforcement, ***Annual Report 2015,*** available at https://www.bsee.gov/annual-report/safety/bsee-2015-annual-report.

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fatalities	5	12	4	12	3	1	4	2	1
Injuries	322	263	260	253	221	280	276	285	206
Loss of Well Control	6	7	7	4	5	3	8	5	3
Fires/Explosions	145	141	148	134	113	132	116	135	105
Collisions	26	28	26	14	11	13	21	16	9
Spills (greater than 50 barrels)[67]	7	33	7	9	4	5	10	5	7
Lifting	180	185	243	118	110	167	197	210	161
Gas/Hydrogen Sulfide Releases	14	22	33	20	17	27	21	21	21
Evacuation Musters	33	43	55	31	36	48	68	52	70
Total	738	734	783	595	520	676	721	731	583

Figure 3-1 Recordable Incidents Occurring in the OCS from FY 2007-2015[68]

BSEE's attainment of its strategic goals is also reliant on sustained, high levels of collaboration and cooperation with its federal partners. Alignment of BSEE and BOEM is of particular importance for successful collaboration of functions and systems relating to OCS energy and mineral development. BSEE's close collaboration with BOEM ensures high levels of information sharing, effectively functioning programs for environmental protection, and joint efforts to implement decommissioning responsibilities. The two bureaus are currently working to transfer the renewable energy responsibilities of environmental oversight, facility inspections, and regulatory enforcement from BOEM to BSEE.

BSEE shares jurisdiction in the management of OCS resources and regulation of activities on the OCS with multiple other federal partners, including, most prominently the U.S. Coast Guard (USCG), which shares responsibility in multiple areas including inspections and incident response and investigations. BSEE's long-standing relationships with the USCG and other federal partners promote efficient and consistent regulation and enhance information reporting and sharing.

A Deconflicted Mission

The establishment of BSEE was an exacting, multi-year undertaking. The nearly 18-month-long process included interviewing employees; collecting and analyzing data involving relevant processes, systems, and regulatory metrics; and developing and evaluating various models and options for restructuring and reforming the functions being assigned to the

[67] An oil barrel defined as 42 U.S. gallons.
[68] Bureau of Safety and Environmental Enforcement, ***Annual Report 2015,*** available at https://www.bsee.gov/annual-report/safety/bsee-2015-annual-report.

new bureau.[69] This deliberative process engaged teams of subject matter experts from MMS's offshore programs and included interviews with over 300 staff; surveys of all 1,000 MMS employees; analyses of and interviews with other nations' energy programs; and reviews of the structure and functioning of other federal programs involved in the regulation of industry. Through a process that included extensive working sessions led by a facilitator, decisions were made about the division of OCSLA-authorized functions. Ultimately the organization, reporting structure, and division of responsibilities were reviewed and approved by the senior officials in DOI and plans were developed to guide the implementation process. The Assistant Secretary for Policy, Management and Budget and a Senior Advisor to the Secretary were tasked with overseeing the reorganization.[70] A budget amendment submitted to the Congress on September 13, 2010 laid the groundwork for the reorganization, requesting additional resources and authority to proceed to reorganize OCS functions. Additional submissions[71] and reports about the ongoing restructuring were presented to Congress, which approved of the reorganization in appropriations legislation.[72]

BSEE was split off as a separate bureau in order to ensure that critical functions would not be compromised by being combined in an entity with contradictory missions. In their reviews following DWH, the OIG and others found troubling patterns where managers seemed to prioritize the dominant mission of meeting development targets at the expense of regulatory compliance functions.[73] Environmental and safety functions had been "historically slighted and underfunded within MMS", where management of OCS resources and enforcement of regulatory compliance were combined in a single entity; and "separating resource management from safety oversight" was seen as essential to the creation of BSEE as "an aggressive, tough-minded but fair regulator" with greater independence, more budgetary autonomy, and clearer senior leadership focus."[74] Although

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[69] See, generally, remarks of then-BOEMRE Director Michael R. Bromwich, available as "BOEMRE Director Discusses Future of Offshore Oil and Gas Development in the U.S. at Gulf Oil Spill Series, BOEMRE Office of Public Affairs, for release April 19, 2011, https://www.boem.gov/boem-newsroom/press-releases/2011/press0419-pdf.aspx.

[70] U.S. Department of the Interior, ***Salazar Names Interior Officials to Lead Minerals Management Service Restructuring,*** press release, May 13, 2010, available at https://www.doi.gov/news/pressreleases/Salazar-Names-Senior-Interior-Officials-to-Lead-Minerals-Management-Service-Restructuring.

[71] The White House, ***FY 2011 Budget Amendments for the Department of the Interior***, September 13, 2010, available at https://www.doi.gov/sites/doi.gov/files/migrated/budget/appropriations/2011/upload/BOEMRE_Budget_Amendment_09_13_10.pdf.

[72] Congressional Research Service, ***Reorganization of the Minerals Management Service in the Aftermath of the Deepwater Horizon Oil Spill*** (R41485, Nov. 10, 2010), https://fas.org/sgp/crs/misc/R41485.pdf; U.S. Congress, ***Department of Defense and Full-Year Continuing Appropriations Act***, 2011, Public Law 112-10, Div. A, sec. 1726, 125 Stat. 151 (April 15, 2011).

[73] U.S. Department of the Interior, Office of Inspector General, ***A New Horizon: Looking to the Future of the Bureau of Ocean Energy Management, Regulation and Enforcement,*** Report No. CR-EV-MMS-0015-2010, December 2010, pages 33-37.

[74] Bureau of Ocean Energy Management, Regulation, and Enforcement, Office of Public Affairs, ***BOEMRE Director Discusses Future of Offshore Oil and Gas Development in the U.S. at Gulf Oil Spill Series***, April 19, 2011, available at https://www.boem.gov/BOEM-Newsroom/Press-Releases/2011/press0419-pdf.aspx.

the hard work to fully establish all of BSEE's functions and processes is ongoing, and some regional personnel express nostalgia for the simpler chains-of-command that preceded the separation of BOEM and BSEE, the consensus view is that BSEE has established a substantially more robust and focused compliance program than existed before the separation. In interviews with the study team, employees who had worked in MMS explained that the separation allowed employees to more adequately conduct regulation and enforcement and operate in an environment free from these historical conflicts.

BSEE's efforts to mature the organization are evident and are consistent with the expectation early in the separation process that creation of the new OCS management authorities would take sustained effort over a number of years. Establishment of BSEE as a high-functioning separate organization was understood to be a complex, long-term process requiring ongoing support and adequate resources. For example, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling suggested that reorganization of MMS into three offices and enhancing their technical expertise would require a sustained effort over a period of years.[75]

Experts on public administration and government management consistently advise that it is extremely difficult to effectively implement a reorganization and that doing so requires close coordination with those inside and outside of the agency, including Congress, and takes many years to accomplish.[76] This puts in perspective criticisms of BSEE's shortcomings with regard to still maturing processes. In 2011, GAO designated DOI's OCS programs as high risk due, in part, to the challenges of restructuring.[77] GAO removed restructuring from the list of factors contributing to the high-risk designation for DOI's OCS programs in 2013 based on its assessment of progress made.[78] GAO's most recent high risk report issued on February 2017 broadens the areas under consideration adding back reorganization as an area of potential risk based on GAO's belief that BSEE has made limited progress addressing long-standing deficiencies in investigative, environmental compliance, and enforcement capabilities.[79] GAO based this conclusion on the findings in its

[75] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deepwater: The Gulf Oil Disaster and the Future of Offshore Drilling***, p. 254, January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.

[76] See, e.g., GAO, ***Government Efficiency and Effectiveness: Opportunities for Improvement and Considerations for Restructuring***, GAO-12-454T, March 21, 2012, page 10 ("implementation of a new organization is an extremely complex task that can take years to accomplish"); Alan Lomax, NAPA/ASPA Memos to National Leaders, ***Reorganizing the Federal Government,*** Oct. 25, 2012; NAPA forum, ***Government Reorganization? Why? How?*** March 8, 2011 (described in "The Rocky Road to Reorganization, from Nixon to Obama" GovExec.com, March 8, 2011); GAO, ***Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations,*** GAO-03-669, July 2003.

[77] Government Accountability Office, ***GAO's 2011 High-Risk Series, An Update***, GAO-11-394T, February 17, 2011.

[78] Government Accountability Office***, High Risk Series, An Update, NGA***-13-283, February 2013..

[79] Government Accountability Office. ***High-Risk Series: Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others,*** GAO-17-317, Feb. 15, 2017.

February 10, 2016 report.[80] In response to the findings in this report, BSEE put plans in place to address GAO's nine recommendations, of which four have already been completed.

Just as BSEE's maturation requires a continued commitment to addressing gaps and challenges, orderly development of energy resources in the OCS requires a regulatory environment that is sufficiently stable to be conducive to an ongoing commitment from industry. The business decisions of industry to invest in exploration and development of energy resources must consider market forces, the outlook for energy prices, and the ability to work within a stable and predictable business and regulatory environment. As BSEE continues to pursue strategic goals for operational and organizational excellence, it will be able to contribute to greater predictability and stability. And, although oil production is projected to increase to record high levels in 2017, decreasing profit margins and reduced expectations for a quick oil price recovery have prompted many operators to pull back on future deep water exploration spending.[81] Thus, a stable OCS environment with certainty and predictability could be a significant consideration in OCS development planning, arguing for continuation of the current alignment of responsibilities among BOEM, BSEE, and ONRR and continued deliberate efforts to mature these entities.

Further restructuring would most certainly reverse the gains made while also causing disruption and uncertainty for federal programs and industry. Although well-conceived and effectively implemented reorganizations can yield benefits, at least in the long run, reorganizations generally increase costs and disrupt operations in the near term, and reorganization is better thought of as a last-resort, rather than a first-resort, to address institutional challenges.[82] Reorganization can generally be expected to particularly impact the agency's stakeholders, due to the turbulence and decreased productivity that are likely during restructuring. Attention is diverted from the organization's longer-term mission goals, and employees become distracted by uncertainty and concerns about their own positions.[83]

Recommendation 3.1

BSEE should remain a separate entity with high levels of coordination with BOEM and ONRR.

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[80] Government Accountability Office, ***Oil and Gas Management: Interior's Bureau of Safety and Environmental Enforcement Restructuring Has Not Addressed Long-Standing Oversight Deficiencies,*** GAO-16-245, February 10, 2016.
[81] U.S. Energy Information Administration, ***Today in Energy***, February 18, 2016.
[82] Posner, Paul, ***Paul Posner, George Mason University***, Interview, Federal News Radio, Feb. 9, 2015, available at http://federalnewsradio.com/in-depth/2015/02/paul-posner-george-mason-university/; Alan Lomax, NAPA/ASPA Memos to National Leaders, op. cit.; NAPA forum on Government Reorganization, op. cit.
[83] Government Accountability Office, ***Government Efficiency and Effectiveness: Opportunities for Improvement and Reconsiderations for Restructuring***, March 12, 2012.

Regulations, Policies, and Processes

The Deepwater Horizon incident continues to shape the environment within which BSEE operates. BSEE responded to findings and recommendations from nine reviews that were conducted in the wake of DWH.[84] BSEE adopted recommendations and addressed concerns expressed by GAO, OIG, and many others, evidencing areas of transformation and improvement. As of October 2016, BSEE had completed actions on 79 recommendations for corrective actions resulting from GAO and OIG reviews and was tracking the 14 that remain, of which, 13 are scheduled for closure in 2017 and 1 is scheduled for closure in 2018. BSEE's strategic performance review that is conducted on a regular basis keeps focus on these efforts.

The evaluations conducted in the immediate aftermath of the Deepwater Horizon incident identified very substantial gaps and deficiencies in MMS's regulatory and procedural framework and recommended that major improvement would be necessary to adequately protect safety and the environment. These reforms were complex and many involved the development of capacities that did not exist or were inadequate. For example, the report of the Outer Continental Shelf Safety Oversight Board (Board) issued on September 1, 2010,[85] and the "New Horizon" report of the OIG issued in December 2010[86] addressed these areas:

- **OIG's Finding:** Gulf of Mexico district offices lacked a standardized protocol for reviewing their large number of complex permit applications.
- ***Recommendation:*** The development and compilation of standardized policies and practices.

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[84] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling***, January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf; and U.S. Department of the Interior Outer Continental Shelf Safety Oversight Board, ***Report to Secretary of the Interior Ken Salazar***, September 1, 2010; U.S. Department of the Interior Office of Inspector General, ***A New Horizon: Looking to the Future of the Bureau of Ocean Energy Management, Regulation and Enforcement,*** Report No.: CR-EV-MMS-0015-2010, December 2010; Ocean Energy Safety Advisory Committee, Federal Advisory Committee to the Secretary of the U.S. Department of the Interior, April 2011-January 2013; Transportation Safety Board Report 309, ***Evaluating the Effectiveness of Offshore Safety and Environmental Management Systems,*** 2012; and U.S. Chemical Safety and Hazard Investigation Board, ***Investigation Report Vol. 4, Drilling Rig and Explosion and Fire at the Macondo Well***, April 20, 2010; National Academy of Engineering and National Research Council, ***Macondo Well-Deepwater Horizon Blowout***, December 14, 2011; Joint Industry Subsea Well Control and Containment Task Force, ***Final Report on Industry Recommendations to Improve Subsea Well Control and Containment,*** March 13, 2012; and Bureau of Ocean Energy Management, Regulation and Enforcement/U.S. Coast Guard Joint Investigation Team, ***Deepwater Horizon Joint Investigation Team Report,*** September 14, 2011.

[85] U.S. Department of the Interior Outer Continental Shelf Safety Oversight Board, ***Report to Secretary of the Interior Ken Salazar***, September 1, 2010.

[86] U.S. Department of the Interior Office of Inspector General, ***A New Horizon: Looking to the Future of the Bureau of Ocean Energy Management, Regulation and Enforcement,*** Report No.: CR-EV-MMS-0015-2010, December 2010.

- **OIG's Finding:** There was no formal, bureau-wide compilation of rule, policies, or practices pertinent to inspection.
- ***Recommendation:*** A comprehensive handbook should be compiled of all policies and practices to assist inspectors, including clarification of policies under which unannounced inspections can be performed.
- **OIG's Finding:** There was no standard practice to address operators' ability to "shop around" for a favorable engineer or office to gain an advantage for regulatory approval.
- ***Recommendation:*** Procedures should be established to prevent such "engineer shopping."
- **OIG's Finding:** There was no adequate standardized protocol for activities of incident investigation and evidence-gathering, so that investigations lacked consistency and might be inadequate for serious accidents.
- ***Recommendation:*** The development and implementation of internal procedures, including basic investigation and evidence-gathering protocol, to fully conduct and document investigations.
- **OIG's Finding:** Substantive regulations generally did not distinguish between operations in deep water and in shallow water and regulations specifically addressing deep water activities were scattered and had gaps and inconsistencies.
- ***Recommendation:*** The development of a regulatory framework that addresses gaps and inconsistencies, and that is comprehensive and well organized.

Both before and soon after these findings and recommendations were issued, rules and procedures were already being developed and issued to fill the most significant gaps that had been identified.[87] In recognition of the role that well design, casing, and cementing had in the Deepwater Horizon disaster and future potential risks, a Drilling Safety Rule was issued, on an emergency basis, establishing standards for these and other elements of well-control, including blowout preventers. A Workplace Safety Rule was also put into place, requiring operators to systematically identify risks and establish measures to mitigate those risks. Work was also initiated to develop a comprehensive handbook of policies and practices for permit review and approval, risk-based inspection programs, investigative procedures, and other initiatives to improve and modernize the regulatory program.[88]

In the intervening five years, BSEE has continued to make substantial progress in its regulatory and procedural framework. BSEE's efforts include issuance of new or revised rules on drilling safety, decommissioning-costs reporting, blowout preventer and well

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[87] Bureau of Ocean Energy Management, Regulation, and Enforcement, ***BOEMRE Director discusses future of Offshore Oil and Gas Development in the U.S. at Gulf Oil Spill Series,*** April 19, 2011, available at https://www.boem.gov/Boem-Newsroom/Press-Releases/2011/press0419-pdf.aspx.

[88] Bureau of Ocean Energy Management, Regulation, and Enforcement, ***BOEMRE Director discusses future of Offshore Oil and Gas Development in the U.S. at Gulf Oil Spill Series,*** January 13, 2011,available at https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/attachments/110113_prepared_remarks.pdf .

control, production safety systems, and Arctic drilling. In both regulations and compliance initiatives, BSEE has been incorporating modern regulatory concepts such as performance- and risk-based requirements, near-miss reporting, real-time monitoring, and third-party certification.

Remaining gaps include national beneficial-use guidance and requirements as identified by the OIG in a June 11, 2009 Advisory issued to MMS;[89] renewable energy program regulations; measures on installation, maintenance, and decommissioning of pipelines; updating oil spill planning and response requirements; improvements in Safety and Environmental Management System (SEMS) rules regarding process safety; performance of audit and sharing of information; safety requirements related to helicopters and helipads on fixed platforms; and updated regulations for cranes.

There is, in addition, a significant workload for BSEE to implement recently issued regulations, establish a consistent performance-based and transparent process for determining BAST, and strengthen capability for estimating potential decommissioning costs to be covered in the event of operator bankruptcy or other contingencies.

BSEE also needs to finalize and codify national policies and procedures and to strengthen mechanisms for issuing and managing interpretations and exceptions. Policies and procedures governing certain key compliance functions have not been completed and nationally applied. GAO and the OIG continue to focus on gaps in BSEE's national policies for incident investigation, environmental compliance, safety enforcement, and permit review. Greater efforts to review and publish regulatory interpretations and guidance should also help foster consistent national policy and procedures, including in the issuance of Notices to Lessees and Operators (NTLs) and in the exercise of regional authority to approve exceptions. Improved collaboration and decision-making processes with balanced headquarters and regional involvement are vital for these efforts, to ensure that the regions are able to make guidance available to operators in a timely manner and to manage the significant workload associated with these efforts.

BSEE has evaluated its development and issuance of policies and implemented changes to improve the efficiency of these processes. Rulemaking efforts are prioritized based on a comprehensive review of existing oil and gas regulations, safety and environmental risks, new developments in industry practices and technology, research results, and information about changing circumstances. BSEE's ongoing collaboration with industry and industry groups on the development of industry standards also informs BSEE's regulatory development. BSEE's hybrid approach to regulating industry means that performance-based regulations will be used in lieu of standard checklists wherever performance-based regulations can be effectively implemented. This approach relies on industry use of SEMS, which is a performance-based tool to enhance the safety of operations by focusing operator

[89] U.S. Department of the Interior, Office of Inspector General, ***Inspection Report: BLM and MMS Beneficial Use Deductions,*** Report No. CR-IS-MOA-0004-2009, March 2010, available at https://www.doioig.gov/sites/doioig.gov/files/2010-I-00171.pdf.

attention and resources on recognizing and managing the impacts of human behavior; organizational structure; leadership; monitoring of critical equipment and processes; adoption of standards, processes and procedures; and an underlying safety culture to promote continuous improvements in safety and environmental performance.

BSEE inherited a legacy of guidance and other documentation that was not effectively organized or easily located. BSEE has a process underway to both inventory and update these policies, directives, and other policy statements. This is a significant workload, since legacy MMS directives date back to the 1980s and were not archived appropriately. BSEE's Office of Policy and Analysis (OPAA) has an organized approach to assist BSEE managers in this effort and BSEE instituted a transitional directives system to allow for continuous updating of the bureau's policy, procedures, and guidance. Senior managers should be given specific assignments with realistic timeframes in order to ensure that program offices with primary responsibility for updating the directives or that are still relying on legacy directives are engaged in this process and take the actions necessary for this process to be successful.

Recommendation 3.2

BSEE should continue its efforts to inventory, organize, and update policies, procedures, and guidance. It should assign realistic and enforceable timeframes to managers for updating these materials.

BOEM and BSEE Alignment and Coordination

BOEM and BSEE were created as separate bureaus for the overarching purpose of "separating resource management from safety oversight."[90] In the division of responsibilities between the two bureaus, BSEE was established as "an aggressive, tough-minded but fair regulator" that "can properly carry out the critical safety and environmental protection functions that are central to its mission" with "greater independence, more budgetary autonomy, and clearer senior leadership focus."[91] BOEM received the balance of the environmental science and environmental analysis resources to create "an organizational structure that ensures that thorough environmental analyses are conducted and that potential environmental effects of proposed operations are given appropriate weight during decision-making related to resource management," so that "leasing and plan approval activities are properly balanced and that environmental considerations are fully taken into account at early stages of the process."[92]

[90] Bureau of Ocean Energy Management, Regulation, and Enforcement, Office of Public Affairs, ***BOEMRE Director Discusses Future of Offshore Oil and Gas Development in the U.S. at Gulf Oil Spill Series,*** April 19, 2011, available at https://www.boem.gov/BOEM-Newsroom/Press-Releases/2011/press0419-pdf.aspx .
[91] Ibid.
[92] Ibid.

In implementing the separation, it was emphasized that BSEE and BOEM would have to remain interdependent, and that addressing "information-sharing and other linkages between BSEE and BOEM" would be "essential to ensure that the business and regulatory processes related to offshore leasing, plan approval, and permitting are not plagued by bureaucratic paralysis."[93] To achieve effective collaboration, BSEE and BOEM negotiated and agreed to a substantial body of Memoranda of Understanding (MOU), MOA, and associated standard operating procedures (SOPs). Many were developed in 2011 and two more were developed in 2014. This documentation spells out in detail the policies and procedures for BSEE's and BOEM's interactions in key areas such as: information sharing, enforcement, environmental assessments and NEPA, approval of plans and permits, bonding, and reimbursable administrative services to be provided by BSEE to BOEM.[94]

The framework established in these agreements was designed to be self-sustaining through the peer-to-peer efforts by the two bureaus. Appropriate officials within the two bureaus may modify the documentation. Any disputes are to be resolved by the two bureaus at the lowest organizational level possible. When all other options have been exhausted, the bureaus may elevate the issue to the Assistant Secretary for Land and Minerals Management for resolution.

Because BOEM and BSEE are interdependent, they must work together to effectively manage the OCS. Given the importance of maintaining close and functional relationships and ensuring close alignment, issues between the bureaus need to be resolved quickly. In addition to the MOU, MOA, and SOPs, linkages between the bureaus are maintained through individual relationships, coordination, and informal efforts. Moreover, issues that are not resolved at the staff level are elevated within BSEE and ultimately raised to the Deputy Director to resolve with BOEM's Deputy Director. Such dialogue between the BOEM and BSEE leadership frequently leads to resolution. However, areas of disagreement between the bureaus can remain without resolution because they are not elevated to the Assistant Secretary. An institutionalized process to address the divergence in views or to examine impacts of actions by one bureau on the other bureau's processes, workload, staffing, and budget would create additional opportunities to maintain the close and functional relationship.

Supporting the Environmental Compliance Mission: The challenges in the management of the BOEM and BSEE relationship and processes seem to have the greatest impact on BSEE's

[93] Department of the Interior, Press release, ***Fact Sheet: The BSEE and BOEM Separation: An Independent Safety, Enforcement and Oversight Mission***, January 19, 2011, available at https://www.doi.gov/sites/doi.gov/files/migrated/news/pressreleases/upload/01-19-11_Fact-Sheet-BSEE-BOEM-separation-2.pdf .

[94] See, generally, Bureau of Safety and Environmental Enforcement, ***Interagency Collaboration***, available at https://www.bsee.gov/newsroom/partnerships/interagency . Documentation referenced through that website include: a 2014 MOU between BOEM, BSEE, and ONRR on information sharing; a 2014 MOA between BOEM and BSEE on enforcement activities, a 2011 MOU between BOEM and BSEE providing an overall framework for the two bureaus to minimize duplication, promote consistency, and resolve disputes, and a series of 2011 MOAs, SOPs, etc., between BOEM and BSEE on specific functions and topics.

Environmental Compliance Program. In the creation of BOEM and BSEE, the decision was made to assign responsibility for NEPA compliance to BOEM. BOEM is responsible for environmental review under NEPA, the National Historic Preservation Act and other statutory and regulatory requirements, including the completion of environmental impact statements, environmental assessments, and other actions related to the development of the 5-year plan and lease sales, as well as in support of permits issued by BSEE. Differences can arise between the bureaus in implementing this process and if not resolved at the field or regional level, these differences can cause friction, additional workload, and additional costs.

Critically important decisions are made in the NEPA analyses supporting planning, leasing, and permitting, which are all functions of BOEM. Operational protocols are outlined in MOA and procedures are described in SOPs that were developed in 2011. The MOA may need to be refreshed to address maturation of process and areas of divergence between the two bureaus. As part of the refresh, BSEE needs to define information that is necessary to support environmental decisions associated with permitting and enforcement. There may need to be a process for mitigation, if BOEM is not able to provide this information or if the information is not adequate. In the current state, BSEE indicated that they may be filling these voids and assuming additional work and costs. In at least one instance where sufficient information was not available from BOEM, BSEE funded the completion of an environmental assessment. This approach will not be sustainable with tightening budgets.

Recommendation 3.3

In instances when BSEE does not have adequate information needed to support environmental decisions associated with permitting and enforcement, this situation should be communicated to BOEM. The Memoranda of Agreement (MOA) and Standard Operating Procedures (SOPs) that BOEM and BSEE operate under should be revised or supplemented by the establishment of processes with timelines to ensure that expectations are clearly understood. These processes established by revision or supplementation of the MOAs and SOPs should also include robust procedures for the elevation of matters for resolution, when necessary, and for the periodic review of the process by which BSEE obtains needed information from BOEM to identify systemic issues and needed improvements.

Renewable Energy Program Transition: BSEE is working with BOEM to transition the renewable energy program, as BSEE assumes responsibilities for environmental oversight, facility inspections, and regulatory enforcement. There were a small number of renewable projects in the initial planning stages in 2011 and the responsibility for renewable energy was assigned to BOEM. Since then, however, the extent and pace of OCS renewable energy development has changed and recent changes by a number of states to increase renewable energy as a component of their energy portfolio have the potential to expand renewable energy development.

Currently there are eleven commercial wind energy leases on the east coast. The first offshore wind farm—the Block Island Wind Farm—is operating in state waters although

the subsea cable is in federal waters. Several more wind energy projects are scheduled to be completed and begin operations in 2019. In December of 2016, BOEM held a wind energy lease sale for an area offshore New York. BOEM is also processing floating wind lease requests for offshore Hawaii and one offshore California, and is evaluating a lease request for a floating wind demonstration project offshore of Oregon. There is significant potential for future growth in renewable energy development on the OCS. On June 8, 2016, Hawaii updated its renewable portfolio standard (RPS) to set a goal for 100 percent renewable energy by 2045. In October 2015, California modified its RPS to require that retail sellers and publicly owned utilities procure 50 percent of their electricity from eligible renewable energy resources by 2030. In 2016, Oregon adopted a 50 percent RPS and requires that half of the state's electricity is to come from renewable sources by 2040.

BSEE has taken steps to prepare for assuming renewable energy related duties and addressed the increased momentum for renewable energy in its Foresight Initiative (discussed in Chapter 5). In order to prepare for the reassignment of responsibilities, a BOEM/BSEE team is re-designating renewable energy regulations between the two agencies. Once this is complete, BOEM and BSEE will revise regulations and update the MOA for the renewable energy program. BSEE has been involved in the review of the Block Island subsea cable facility designs and review of Department of Energy offshore demonstration projects, including oil spill response plans. BSEE is also developing a methodology for inspection of renewable energy facilities.

Based on the accelerating pace and potential for OCS renewable energy development, the study team suggests that the timeline for transition of the regulatory aspects of the program should be accelerated. In addition, a schedule for the transition should be developed and both bureaus and ASLM should be monitoring progress. Lastly, BSEE should be identifying the necessary competencies for the renewable program in its revised Human Capital Management Strategic Plan, incorporating additional needs for specialized expertise it will need in its workforce planning, and considering additional budgetary requirements for its budget. Chapter 8 addresses the budget issue in more detail.

Recommendation 3.4

BSEE should work with BOEM to accelerate the transfer of environmental oversight, facility inspection, and regulatory enforcement responsibilities for the OCS renewable energy program and develop a schedule to be monitored by ASLM. BSEE should consider these new responsibilities in the development of workforce plans and should ensure that resources are available for these efforts and, as necessary, requested in future budgets.

Virtual Organization and Collaboration: Much has been written about the increasing complexity of problems that government must address, including the prevalence of issues that cut across organizational boundaries and the quandaries this poses for managers. An approach of establishing effective and sustainable collaborative mechanisms among governmental entities is sometimes referred to as "virtual reorganization." For example, GAO's Managing Director for Strategic Issues has written that "in many cases today, concerns with federal organization should be less interested in ripping apart existing

agencies and creating new organizations in an endless and largely futile quest to find some theoretically right structural fit of related programs and initiatives. Rather, federal reorganization should be more focused on creating and sustaining what has been referred to as virtual organizations that use collaboration mechanisms to knit together various related programs and efforts...."[95]

To foster more effective and consistent coordination between BSEE and BOEM, the study team recommends that leadership in improved coordination be exercised at the Departmental level by ASLM. At a minimum, there should be periodic scheduled meetings between top leadership of BSEE and BOEM, convened by the Assistant Secretary to review ongoing processes and linkages between the two bureaus. This would also be a useful venue to revisit the consequences of decisions made by the bureaus and to assess resource demands. ASLM could draw on the resources available to the Assistant Secretary for Policy, Management and Budget (ASPMB) including economic and policy analysis and mediation and coordination specialists.

Recommendation 3.5

ASLM should establish formal, regularly scheduled reviews of ongoing BOEM and BSEE alignment, processes, and linkages. Among the most important issues to address immediately are updates to the Environmental Compliance MOA and SOPs, and transfer of environmental oversight, facility inspection, and regulatory enforcement responsibilities for the OCS renewable program from BOEM to BSEE. ASLM should seek assistance from ASPMB, as needed, to provide support in matters that require a DOI-wide policy or economic review and in convening working groups to address specific matters.

Rigs to Reefs and Other Interagency Collaboration

BSEE is the principal regulator of offshore exploration and production activities; however, numerous other agencies have significant overlapping regulatory roles, most prominently USCG. BSEE has strengthened and clarified relationships with many of these agencies to fulfill important initiatives, employing memoranda of understanding or agreement and interagency agreements to align roles and responsibilities. One of the most complex initiatives with extensive relationships is the Rigs to Reefs program, which deals with the disposition of unused drilling platforms.

Rigs to Reefs: Fish and other marine life congregate around the underwater portions of unused structures, which provide habitat in the same way as natural reefs.[96] MMS worked with the National Marine Fisheries Service (NMFS), state agencies, and the oil and gas industry to explore how decommissioned platforms and other structures might be

[95] Christopher J. Mihm, ***Virtual Reorganization: Results Mapping and Collaboration***, The Public Manager, June 15, 2011, available at: https://www.td.org/Publications/Magazines/The-Public-Manager/Archives/2011/Summer/Virtual-Reorganization-Results-Mapping-and-Collaboration.
[96] Bureau of Safety and Environmental Enforcement, ***ECD Rigs to Reefs*** (providing a general description of the reefs program), available at https://www.bsee.gov/what-we-do/environmental-focuses/rigs-to-reefs.

converted into beneficial artificial reefs. In 1984, NMFS published a National Artificial Reef Plan to guide the program. BSEE can approve the use of an obsolete structure as a reef if several conditions are satisfied:

- The state has a plan that complies with the National Artificial Reef Plan.
- The state agency obtains a permit from the U.S. Army Corps of Engineers (USCOE) for the obsolete structure to become part of the state program, and the state accepts title to and liability for the structure once it is situated to serve as a reef.
- The operator satisfies USCG navigational requirements.
- The proposal satisfies BSEE's engineering and environmental standards.

As of July 2015, 450 platforms had been converted to artificial reefs in the Gulf of Mexico. A typical large structure provides two to three acres of habitat, accommodating 12,000 to 14,000 fish and hundreds of different marine species.[97]

All of the Gulf of Mexico coastal states have approved artificial reef plans and have incorporated platforms into their programs, but Louisiana and Texas have the most incorporated platforms.[98] California also has adopted statutory authority for Rigs to Reefs, but, due to concerns expressed about the environmental impact of leaving rigs permanently on the OCS, no active Rigs to Reefs program exists in the state.

Other Interagency Collaboration: BSEE's role as the principal regulator of offshore exploration and production activities on the OCS requires effective collaboration and coordination with a number of other federal agencies. These relationships are supported by memoranda of understanding or agreement and interagency agreements as well as through ongoing coordination at headquarters and regional levels. BSEE continues to work on improving these relationships, which are described below and in additional detail in Appendix E.[99]

- **USCG**: The U.S. Coast Guard's responsibilities for oversight of safety and environmental protection overlap with BSEE's. While BSEE is focused primarily on the drilling and production aspects of OCS activity, the USCG focuses on maritime systems. Each agency has a relationship with industry and efforts to collaborate have helped to harmonize regulatory regimes to ensure consistency in standards and enforcement.
- **U.S. Department of Energy** (DOE): BSEE and DOE work closely together, primarily in areas of energy-related research, including through agreements with two of DOE's national laboratories.
- **U.S. Department of Transportation, Pipelines and Hazardous Materials Safety Administration** (PHMSA): Oil and gas produced on the OCS are generally

[97] Ibid.
[98] Bureau of Safety and Environmental Enforcement, ***ECD Rigs to Reefs*** (providing a general description of the reefs program), available at https://www.bsee.gov/what-we-do/environmental-focuses/rigs-to-reefs.
[99] Bureau of Safety and Environmental Enforcement, ***Interagency Collaboration***, available at https://www.bsee.gov/newsroom/partnerships/interagency.

transported to shore through pipelines regulated by PHMSA, and BSEE collaborates with PHMSA on safety, spill prevention and response, and pipeline rights-of-way.

- **U.S. Environmental Protection Agency** (EPA): BSEE and EPA work cooperatively to protect the environment using their respective statutory authorities.
- **U.S. Fish and Wildlife Service** (FWS) and the **U.S. Department of Commerce, National Oceanic and Atmospheric Administration** (NOAA): BSEE operates the Protected Species Program and monitors and protects species identified under the Endangered Species Act, which is administered by FWS and NOAA.

A report prepared in July 2013 by then-USCG Vice Admiral Brian Salerno, who was BSEE's Director from August 2013 through January 2017, includes a series of recommendations to strengthen and improve these interagency relationships.[100] It is primarily focused on BSEE's relationships with USCG but includes other helpful recommendations with regard to interactions between agencies and strategies to promote efficiency and effectiveness in the manner in which they carry out their responsibilities.

Decommissioning Responsibilities and Liabilities

When wells and pipelines become inactive or idle, federal regulations require that lessees and operators must permanently plug all wells, remove all platforms and other structures, clean or remove all pipelines, and otherwise clear the seafloor of obstructions created by operations.[101] Successful decommissioning is essential to avoid release of oil and gas and to otherwise maintain the ocean environment.

The potential cost of decommissioning facilities and equipment in the OCS is enormous. Approximately 2,996 active platforms exist in the OCS, more than 40 percent of which are more than 25 years old and approaching the end of their useful life.[102] The cost of decommissioning a deep water facility can run in the hundreds of millions of dollars. BSEE estimates that the liabilities for decommissioning facilities in the Gulf of Mexico would approximate $33 billion,[103] and, according to BOEM, the liability for decommissioning in the entire OCS could reach approximately $40 billion.[104]

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[100] Bureau of Safety and Environmental Enforcement, ***Building Stronger Connections, An Independent Look at BSEE's Interagency Partnerships and Their Regulatory Effectiveness***, July 5, 2013.

[101] See, generally, Bureau of Safety and Environmental Enforcement, ***Decommissioning,*** https://www.bsee.gov/site-page/decommissioning; Bureau of Safety and Environmental Enforcement, ***Decommissioning Liability Assessment Workshop***, available at https://www.bsee.gov/what-we-do/environmental-focuses/decommissioning; Government Accountability Office***, Offshore Oil and Gas Resources: Actions Needed to Better Protect Against Billions of Dollars in Federal Exposure to Decommissioning Liabilities,*** GAO-16-40, December 2015.

[102] Bureau of Safety and Environmental Enforcement, ***Environmental Focus: Decommissioning***, available at https://www.bsee.gov/what-we-do/environmental-focuses/decommissioning.

[103] Bureau of Safety and Environmental Enforcement, ***Fact Sheet, "Decommissioning Costs"***, November 2016, available at https://www.bsee.gov/sites/bsee.gov/files/fact-sheet//fact-sheet-decommissioning-costs-with-kevin-karl-and-jeremy-williams-revisions-october-27-2016-mbmns.pdf.

[104] Bureau of Ocean Energy Management, ***BOEM Announces Updated Financial Assurance and Risk Management Requirements for Offshore Leases: Notice To Lessees addresses facility decommissioning liabilities,*** July 14, 2016, available at https://www.boem.gov/press07142016//.

A regulatory program, administered in part by BSEE and in part by BOEM, seeks to ensure that lessees and operators fulfill their decommissioning obligations. When a company enters a lease or easement in the OCS, BOEM requires that the lessee provide financial assurance that it will be able to cover the estimated cost of decommissioning. This may require providing a bond or demonstrating the ability to self-insure. Then, when use of the facility is discontinued, it is BSEE's responsibility to ensure that wells are plugged, obsolete structures are cleared from the site, and pipelines are removed or cleaned. BSEE allows some platforms that meet stringent requirements to be toppled in place or towed for use as artificial reefs under the Rigs to Reefs program to attract and provide habitat for fish and other marine life.[105] Due to its role in overseeing decommissioning, BSEE is also responsible for estimating the costs and liabilities associated with decommissioning. BOEM relies on these estimates in determining the amount of bonding or self-insurance to require from lessees.

DOI considers platforms and other infrastructure on the OCS as potential liabilities, because, if lessees or operators cannot pay for decommissioning, the federal government might have to do so.[106] The risk of insolvency for some participants in the industry is exacerbated because continued low oil and gas prices have placed many operators under financial stress; and, while energy forecasts indicate that the oil and gas industry will eventually recover from its recent stagnation, this is not likely to happen quickly.[107] To protect the OCS and the taxpayer, both BSEE and BOEM have been taking a number of steps to reduce the risk of unfunded decommissioning costs:

- In December 2015, BSEE issued rules requiring operators to report summaries of their actual decommissioning costs for platforms, and in November 2016, BSEE issued rules to extend similar requirements for pipelines.[108] This information should allow BSEE to provide more accurate estimates of decommissioning costs, enabling BOEM to establish more realistic financial assurance requirements for lessees and operators.
- BSEE is updating its information management system and associated algorithms to generate more accurate cost estimates.

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[105] Bureau of Safety and Environmental Enforcement, ***What is Rigs-to-Reefs?,*** https://www.bsee.gov/faqs/what-is-rigs-to-reefs.

[106] Government Accountability Office, ***Offshore Oil and Gas Resources: Actions Needed to Better Protect Against Billions of Dollars in Federal Exposure to Decommissioning Liabilities***, GAO-16-40, December 2015, at pages 2-3.

[107] U.S. Energy Information Administration, ***Energy Forecast 2017***, January 5, 2017, http://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf.

[108] Bureau of Safety and Environmental Enforcement, ***BSEE Decommissioning Costs Reporting Rule Finalized***, December 3, 2015, available at https://www.bsee.gov/newsroom/latest-news/statements-and-releases/press-releases/bsee-decommissioning-costs-reporting; Bureau of Safety Environmental Enforcement, ***BSEE Releases Decommissioning Cost Reporting for Pipelines Rule,*** November 16, 2016, available at https://www.bsee.gov/newsroom/latest-news/statements-and-releases/press-releases/bsee-releases-decommissioning-cost.

- BOEM recently issued an NTL updating and clarifying its procedures and criteria for requiring financial assurance, in order to minimize the risk that inadequately bonded lessees and operators will be financially unable to pay decommissioning costs, which may have to be paid by the taxpayer.[109]
- BSEE is collaborating with BOEM, ONRR, DOI's Office of the Solicitor, and the Department of Justice to develop strategies for responding to potential or actual bankruptcy filings and to identify ways to reduce the risks to the OCS.

Even with these efforts, BSEE officials are concerned about potentially significant risks associated with operator bankruptcy and the potential consequences if operators are unable to fund the decommissioning for which they are responsible. Indeed, some industry representatives and consultants have stated that, while BOEM's tighter financial assurance guidance is intended to protect the OCS and the taxpayer against the consequences of operator bankruptcy, the new guidance "could possibly cause the very thing that it's trying to hedge against."[110] Moreover, the lack of funds to decommission OCS infrastructure may pose a particularly stark risk because no statutory funding mechanism is available to fill the void if no solvent operator can be identified to fund the decommissioning of infrastructure on the OCS. This contrasts with oil spills, for which cleanup can be funded through the Oil Spill Liability Trust Fund,[111] and hazardous contamination on land, for which cleanup can be funded through Superfund.[112]

The interplay of factors that must considered and balanced in addressing the risks posed by underfunded decommissioning costs, and the benefits and potential unintended consequences of possible measures to address those risks, pose substantial, national policy issues that are outside BSEE's mandate to resolve. Accordingly, the study team recommends that BSEE elevate these issues and possible solutions for the awareness and consideration by DOI and other national policy officials.

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[109] Bureau of Ocean Energy Management, Notice to Lessees and Operators***, Requiring Additional Security***, NTL No. 2016-N01, Effective Date: September 12, 2016, https://www.boem.gov/BOEM-NTL-2016-N01/. BOEM recently extended the effective date of the new requirements as to certain classes of lessees for several months. Bureau of Ocean Energy Management, ***BOEM Prioritizes Implementation of Risk Management and Financial Assurance Program: Provides Additional Time and Welcomes Stakeholder Engagement,*** January 06, 2017, available at https://www.boem.gov/note01062017//.

[110] Gallay, Annie, ***Gulf of Mexico: Shelf Life***, *Oil and Gas Investor,* January 5, 2017, available at http://www.oilandgasinvestor.com/gulf-mexico-shelf-life-1456941; ***Experts Predict Trouble Ahead for Gulf of Mexico Oil & Gas Operators,*** *Oil & Gas 360*, September 20, 2016, http://www.oilandgas360.com/experts-predict-trouble-ahead-for-gulf-of-mexico-oil-gas-operators; Josh Sherman, ***New BOEM Regulations Threaten Independent Gulf of Mexico Operators,*** *Offshore,* Sept. 12, 2016, available at http://www.offshore-mag.com/articles/print/volume-76/issue-9/departments/regulatory-perspectives/new-boem-regulations-threaten-independent-gulf-of-mexico-operators.html.

[111] Environmental Protection Agency, ***Oil Spill Liability Trust Fund***, available at https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/oil-spill-liability-trust-fund.

[112] Environmental Protection Agency, ***Superfund***, https://www.epa.gov/superfund.

Recommendation 3.6

BSEE should work with BOEM, ASLM, DOI's Office of the Solicitor, and others to elevate issues and provide supporting analyses related to the risk that financial stress in the oil and gas industry might result in some failure to conduct or fund needed decommissioning – issues include (1) choices in BOEM or BSEE regulatory or enforcement policy that might help mitigate those risks, and (2) the absence of a funding source for decommissioning in the event an operator is unable to pay these costs.

CHAPTER 4: STRATEGIC ALIGNMENT OF THE ORGANIZATION

BSEE is organized into national programs that align with its mission "to promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement."[113] Program managers, located in headquarters offices and divisions, oversee and direct activities for offshore operations and regulation, environmental compliance, safety enforcement, safety and incident investigations, oil spill preparedness, and administration. National program managers are also assigned to key initiatives for data stewardship, permitting, inspections, and SEMS.

BSEE's organizational alignment by program brings consistency to headquarters and regional structures and functions so they can be managed in a coordinated way to achieve strategic goals and provides a foundation for efforts to optimize and integrate activities. Effective program management, by design, integrates and aligns functions and stakeholders toward the common end of managing change.[114]

In 2015, BSEE completed an organizational realignment to put national program managers in place for all of the bureau's major functions. In doing so it standardized the organization and reporting relationships, and clarified roles and responsibilities for headquarters functions and three regions. In so doing, BSEE followed many generally accepted best practices for organizational transformations, sought and secured approval from appropriate stakeholders for organizational changes, and addressed a number of long-standing recommendations from external reviews.

The realignment included the addition of two new divisions to focus on responsibilities for safety enforcement and safety and incident investigations. This will help BSEE to realize its full potential to ensure accountability for "a robust, effective, and aggressive safety and environmental enforcement regime based on rigorous analysis of best practices and the challenges presented by industry" that was envisioned when BSEE was created.[115]

BSEE also restructured its internal and external investigatory functions to improve their effectiveness, expanded capability for developing expertise in technological innovations, and undertook a data stewardship initiative to effectively manage and use data.

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[113] Bureau of Safety and Environmental Enforcement, ***Strategic Plan FY 2016-FY2019,*** December 21, 2015, available at https://www.bsee.gov/sites/bsee.gov/files/agendas/public-engagement/2016-2019-bsee-strategic-plan.pdf.

[114] National Academy of Public Administration, ***Improving Program Management in the Federal Government,*** A White Paper by a Panel of the National Academy of Public Administration, Sponsored by the Project Management Institute, July 2015.

[115] U.S. Department of the Interior, ***Implementation Plan In Response to the Outer Continental Shelf Safety Oversight Board's September 1, 2010 Report to the Secretary of the Interior***, September 4, 2010.

Realignment of the Organization

In 2015, BSEE created two new organizations: the Safety Enforcement Division and the Safety and Incident Investigations Division. BSEE also changed the name of the Environmental Enforcement Division to the Environmental Compliance Division and changed the reporting relationship for the regional environmental compliance functions. Although the realignment made minimal changes to the organization chart, it significantly changed the manner in which programs are operated on a national basis. The current organization depicted in Figure 4-1 below includes these changes.

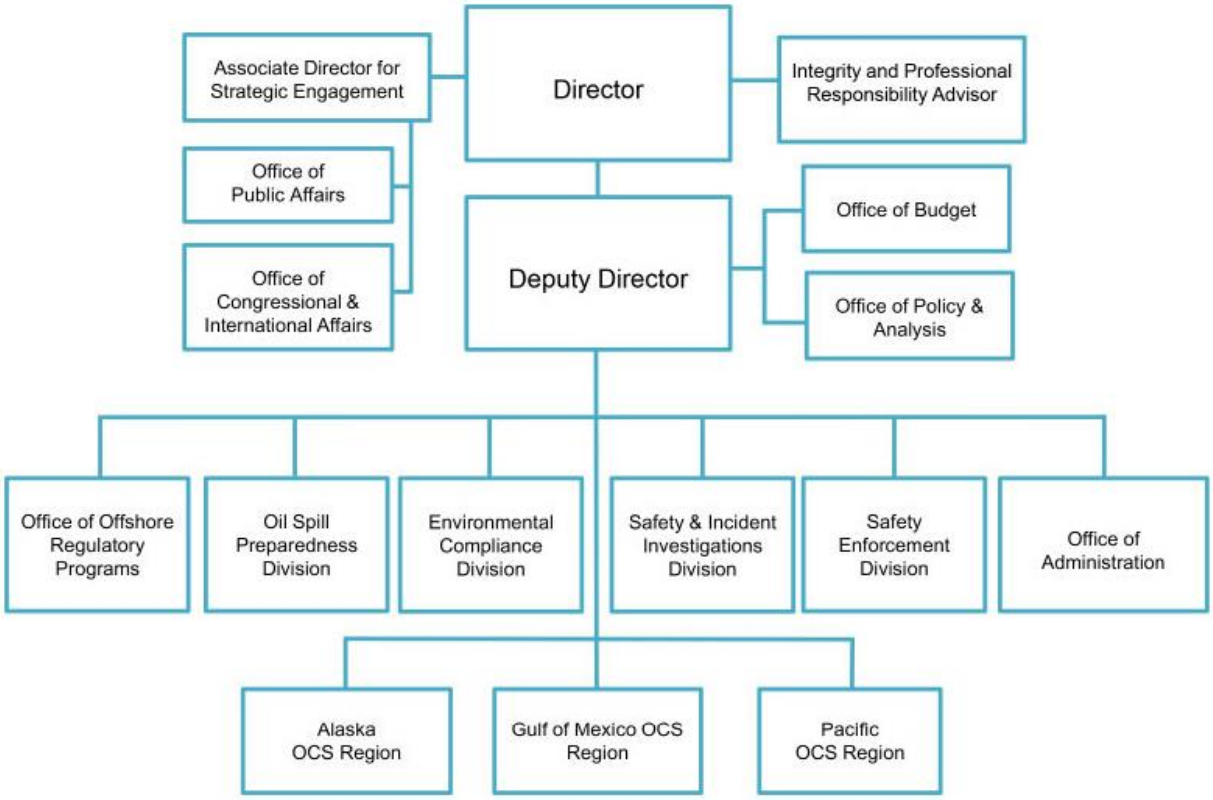

Figure 4-1 BSSE Organizational Chart 2016

The realignment implemented a national program management model to achieve consistent operations with national policy offices and regional operational entities. The realignment was the outcome of a deliberate process to modify the organization structure, roles and responsibilities, relationships, and processes in order to:

- Strengthen headquarters' policy development and strengthen field implementation across multiple BSEE divisions and mission areas.
- Establish clear roles and responsibilities in the divisions and enhance the organizational culture.
- Strengthen BSEE's capabilities to operate based on the guiding principles of BSEE's mission: transparency, consistency, predictability, and accountability.

BSEE's initial discussion of realignment began in December of 2013, when senior management used a structured process to systematically assess risks facing the bureau and align priorities for the future. The outcome of this process led to agreement on the need for better vertical alignment between headquarters and the regions on roles and responsibilities and better horizontal alignment among the regions. The discussion also identified the need to focus bureau efforts on key outcomes and create national programs for investigations, enforcement, technology, and data.

From these early discussions, BSEE began a process that involved extensive collaboration and consensus building with national and regional leaders and involvement of employees to refine plans for the realignment. A project team of subject matter experts led the effort, working with BSEE program and regional offices, to identify functional realignment options for data stewardship, investigations, and enforcement. Technology was addressed through a separate effort with creation of the Engineering Technology Assessment Center (ETAC), discussed later in this chapter.

Data stewardship was a focus area due to the importance of informed decision making that could be facilitated with modernized data systems, standardized data definition, and increased data accessibility. For investigations, the team identified a goal for more consistency through the increased use of data and clearly defined policy and standard operating principles—a key factor here was the use of information from the investigations to inform enforcement and inspection. The goals for enforcement included clear national policies and criteria for enforcement actions to increase consistency in taking action such as civil penalties and debarments. BSEE's project team evaluated the standard practices of private sector entities and other federal agencies with similar missions and functions and formulated organizational structure alternatives and courses of action.

In a June 2014 meeting, BSEE's leadership reviewed alternatives for restructuring and decided to adopt a national program management model. The model assigns to national program managers the responsibility for developing policy that would be consistently applied in the regions and field, while regional directors would be responsible for program execution in line with national policy. The decision was made to proceed with realignment planning for data stewardship, investigations, and enforcement programs and implementation planning teams were established to undertake the planning and design based on a set of milestones. Collaboration was specifically identified as a functional requirement for policy development in these national programs. The team completed their work and reported their results to BSEE leadership in September 2014.

As BSEE's implementation of the realignment progressed through the fall of 2014 and into the spring of 2015, Environmental Compliance was incorporated into the bureau's realignment planning and implementation efforts. BSEE leadership, interim program managers, and teams tracked and monitored the progress for implementation of the model for four programs: data stewardship, investigations, enforcement, and environmental compliance. The teams developed a management and governance dashboard that was used to guide decision making, monitor implementation progress, and identify and respond to

project risks. BSEE modified timelines and adapted the implementation process to incorporate briefings of stakeholders. During the spring of 2015 policies and procedures were drafted and reviewed and the Director communicated high-level details of the realignment to keep bureau employees informed. BSEE developed a change management plan to promote strategic communication, leadership engagement, employee engagement, and training, as well as a change impact assessment to track change management activities.

Based on decisions made at a March 31-April 2, 2015 Senior Management Team Meeting, employees were assigned to work on program-specific teams to help with completion of priority actions, while regional implementation liaisons facilitated collection of field input to the teams. In the summer of 2015 the teams participated in the development of internal bureau guidance in the form of Bureau Interim Directives (BIDs) for the Safety and Incident Investigations Division (SIID), Environmental Compliance Division (ECD), and Safety Enforcement Division (SED) that were completed in April 2016. The teams produced detailed direction for model implementation, next steps to guide future work, and progress reports. In this same timeframe, BSEE established the Data Steward position to lead the Data Stewardship Program and the Data Stewardship Council to oversee and govern the program. BSEE also established the Integrity and Professional Responsibility Advisor (IPRA), discussed later in this chapter. A number of BSEE's FY 2016 priority action plans included implementation of national programs that were tracked through quarterly status updates with BSEE leadership. Managers committed to work plans and the Management Council reviewed quarterly progress in achieving work plan milestones.

The realignment became effective on November 4, 2015 with the creation of two new divisions, SIID and SED; renaming of the Environmental Compliance Division (ECD); and realignment of regional environmental compliance staffs who became direct reports to the regional directors. In the current organization, SIID, SED, and ECD, along with the Office of Offshore Regulatory Programs (OORP), Oil Spill Preparedness Division (OSPD), and the Office of Administration (ADA), house the national program managers. There are also designated national program managers assigned to key initiatives for data stewardship, permitting, inspections, and SEMS. The realignment also formally eliminated the Investigations and Review Unit (IRU), and divided its responsibilities into two components: the investigation of OCS incidents assigned to SIID and investigations of internal personnel matters assigned to IPRA.

BSEE's national program management model is based on the structure and functioning of other federal agencies that oversee multiple programs operated by geographically dispersed regional and/or local entities such as the USCG. Implementation of the model has the potential to standardize program direction and operations across BSEE's three regions for consistent application to operators and to facilitate ongoing coordination with other federal agencies thereby achieving principles defined in BSEE's strategic plan – clarity, consistency, predictability, and accountability.

The national program managers are tasked with leading a collaborative effort with the regions to develop policies, procedures, and business rules and to implement data-driven oversight of program operations in the regions. With these designated responsibilities they

have the ability to become better informed; maintain current programmatic knowledge; represent and express the views of regional program experts in discussions at the bureau, Department and other levels; elevate important issues to bureau leadership; ensure adequate regional representation in establishing consistent national policy; and create a better melding of programs at the national and regional levels. This improved capacity for national oversight at the headquarters level addresses criticisms of MMS that headquarters had limited influence over regional and district operations.

Implementation of the National Program Management Model

During planning and preparation for the realignment, BSEE's Director maintained communications with employees to keep them informed about the status. Once the formal proposal for restructuring moved into the approval process in the summer and fall of 2015, the need to preserve decision-making space for DOI, OMB, and congressional stakeholders made it difficult for BSEE leadership to keep the organization fully informed.

Once the realignment was approved, BSEE did not provide the necessary support and follow through to ensure effective implementation in all programs and program initiatives By the time the realignment was approved, BSEE had disbanded its teams, discontinued use of the dashboard, and was not using tools that were developed during the early stages of the realignment including a change management strategy and a change impact assessment. Personnel changes in program leadership roles added to the implementation challenges in some of the programs.

Thus, BSEE's development of the national program management model and realignment efforts did not fully follow generally accepted best practices for managing change, which could have helped ease the transition to the new organizational structure and to changing roles and responsibilities.[116]

BSEE did follow best practices in the early phases of realignment planning, but implementation has faltered in some areas. An effective transformation process is important because employees and organizations need ongoing support for completing the realignment, which threatens the status quo and requires that employees break from traditional roles and practices. In interviews, the study team was told of continuing resistance to model implementation by some organizations and some individuals. This is likely due, in part, to inconsistent implementation, which makes it difficult for organizations and employees to assume their new roles. Even with fully effective implementation there can be resistance to organizational change. In a review of lessons learned from mergers and transformations, GAO found that there tend to be a relatively small group of employees in every organization who will resist change, refusing to engage

[116]Cohen, Dan and John Kotter, ***The Heart of Change,*** Boston: Harvard Business School Press, 2002; Government Accountability Office, ***Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations***, GAO-03-669, July 2003; Marc A. Abrahamson and Paul R. Lawrence, ***Transforming Organizations***, Lanham, MD: Rowman and Littlefield Publishers, 2001.

in transformation regardless of how compelling the case for change may be. This group of employees may try to "wait it out" in the hopes that the transformation will pass without taking hold.[117]

BSEE should take steps to uniformly implement the model throughout the bureau, provide support to organizations and individuals that are not successfully adapting to new roles, and ensure high levels of collaboration. Successful implementation of the model requires that individuals and organizations collaborate and adhere to consistent roles and responsibilities and understand the consequences of departing from bureau direction. A set of actions tailored to each program and initiative that are coordinated at a bureau level could help BSEE to re-energize implementation, assist organizations and employees who are having difficulty shifting to new roles, overcome resistance, and identify where areas of intransigence remain. Ultimately, successful implementation of the national program model also requires a shift in organizational culture away from the former organization and processes and toward support for and a common understanding of BSEE's strategic vision and principles and operations based on modified roles and responsibilities and processes. As described in Chapter 8, a change management strategy would advance cultural change and increase the organization's capacity for collaboration, communication, and knowledge sharing. Implementation of the model should be a focus of BSEE's change management efforts.

BSEE's actions should incorporate effective practices that are demonstrated by two programs. The Academy study team heard in multiple interviews that the Division Chief for SIID was able to effectively implement the model for a national incident investigations program. The Division Chief worked collaboratively with the regions, provided effective leadership, and made a convincing case for change. The extensive consultation involving the regions and stakeholders required time and effort on the part of the participants, however, the resulting program is one in which the headquarters, regions, and districts appear to have ownership and should be sustainable and effective. SIID augmented high levels of collaboration and two-way communication with the development of a training program focused on program requirements including the investigatory processes and procedures. The Data Stewardship Program is also considered to be a successful model for national program implementation. It has effectively deployed a formalized governance structure with clear roles for headquarters and regional components, with effective communications about the goals and purpose, and maintains high levels of engagement.

Per best practices guidance for organizational transformations (included as Attachment G), a focused effort by a single individual or entity reporting to the Director or Deputy Director is needed to manage the process. This central point of coordination can facilitate other key practices, which include keeping senior executives and program managers engaged in leading the effort, using the strategic plan mission and goals to guide the process,

[117] Government Accountability Office, Comptroller General of the U.S., ***Highlights of a GAO Forum Mergers and Transformation: Lessons Learned from the Department of Homeland Security and Other Agencies***, GAO-03-293SP, November 2002.

establishing a schedule with milestones, using performance management to define organizational and individual responsibilities and ownership, and communication to internal and external stakeholders with the compelling reasons for adopting new roles and responsibilities.

While leadership, communications, performance management, tracking and reporting need to be consistently managed at the bureau level, specific actions necessary for implementation and the tools used by each program will vary. Bureau-wide communications should inform employees and stakeholders. For example, a summary of national programs modeled on Appendix F could be posted on the internet, with more detailed SOPs for each program made available on the intranet. Performance management should be used consistently bureau-wide to define expectations and ensure accountability for organizations and individuals, while the specific elements and measures included in performance plans should be tailored to program needs. The level of governance should be determined based on specific program requirements.

For programs that require more structure, designation of a governance body, such as a workgroup or team, can add structure and process that may be helpful to empower individuals and organizations to participate more effectively. The governance structures and process can be formalized as they are in the Data Stewardship Program, which includes a Data Stewardship Council, a Chief Data Steward, designated divisional and regional data stewards, business data stewards, and subject matter experts. Alternatively, a council may not be necessary as is the case with the Safety and Incident Investigations Program that has been able to define roles and responsibilities for individuals and offices, SOPs, training, and other program requirements that ensure BSEE will be able to fulfill its mission. Training could be offered broadly in areas that can help to promote needed skills including program management, collaboration, teamwork, and developing shared values. In addition, program focused training should address the particular needs to build required competencies. For example, SIID developed a training program to improve the investigatory competencies of BSEE staff.

BSEE's selection of an individual or entity to facilitate and champion these actions should consider an individual with expertise in program management as recommended by a recent National Academy of Public Administration study. This study found that program management capabilities are helpful to integrate and align diverse groups whose normal incentives often militate against effective participation.[118]

The study team suggests that the national program management model transformation effort be the focus of a more comprehensive BSEE change management strategy that is

[118] National Academy of Public Administration***, Improving Program Management in the Federal Government,*** A White Paper by a Panel of the National Academy of Public Administration Sponsored by the Project Management Institute, July 2015. The study examined how to strengthen capabilities to undertake large, complex initiatives. The Panel determined that successful management of change depends on effective program management, a discipline that has evolved over the past few decades to address the challenges of managing such change initiatives.

focused on melding diverse cultures, improving collaboration, and building trust. Chapter 8 discusses the cultural change management proposal.

Recommendation 4.1

BSEE should complete implementation of the national program management model following best practices for organizational transformation tailored to the needs of individual programs and initiatives; the effort should be coordinated by a single individual or entity reporting to the Director or Deputy Director. The effort should be informed by lessons learned from the Safety and Incident Investigations and Data Stewardship Programs, in particular the high levels of collaboration, effective governance structures and processes, and training.

Investigations and Review Unit

BSEE's 2015 organizational realignment eliminated the Investigations and Review Unit (IRU) that was established in June 29, 2010 by Secretarial Order.[119] The IRU was originally created as a function within BOEMRE and was assigned to BSEE when responsibilities were divided between BOEM and BSEE. The IRU was created to:

- Respond to allegations or evidence of misconduct, unethical behavior, and unlawful activities, by employees and by members of the regulated industry;
- Oversee and coordinate internal auditing, regulatory oversight and enforcement systems and programs; and
- Assure swift response to emerging issues and assess significant incidents, including spills, accidents, and other crises.

The IRU also had a significant role in coordinating with the OIG and DOI's Ethics Office. The November 4, 2015 realignment separated the IRU's investigatory responsibilities into two separate components: (1) the Integrity and Professional Responsibility Advisor (IPRA) focused internally on organizational and employee conduct issues and (2) SIID focused on external investigations of reportable incidents by the regulated industry including coordination with OIG on investigatory matters. BSEE's Ethics Office, located in the Office of Administration is responsible for coordination with DOI's Ethics Office, BSEE's Office of Policy and Analysis is responsible for internal audit and coordination with the OIG related to audits. The balance of the duties of the IRU with respect to regulatory oversight, enforcement systems and programs, and response to emerging issues and incidents are now assigned to the national programs based on the nature of the matter.

The rationale for dividing the investigatory functions was to strengthen BSEE's ability to investigate industry incidents while preserving the independence of its internal review capabilities. The realignment and elimination of the IRU promotes greater consistency in the management of different types of investigations and allows for a focus on each. For the

[119] U.S. Department of the Interior, ***Secretarial Order 3304***, June 29, 2010.

investigation of incidents involving industry, the SIIDs investigation team in headquarters provides oversight of investigative activities supervised by regional and district managers. This arrangement fosters prompt responsiveness by avoiding the challenges of headquarters trying to supervise regional personnel. BSEE has established a tiered process for investigation and reporting of incidents, so that investigations are elevated to SIID under appropriate circumstances. Maintaining the initial investigation function in the field allows inspectors to apply the lessons learned to operations, a goal that was expressed by BSEE's Director early in the realignment process.

In interviews, the Academy study team was told that the separation of internal and external investigative functions removed a significant barrier for employees reluctant to elevate issues fearing that they would become a target for scrutiny. The team was also told that there are high levels of regional engagement with SIID in reporting and investigating operational incidents involving industry. This engagement is consistent with reports the study team heard about the extensive collaboration by SIID to develop roles and responsibilities, processes, and procedures for this program.

IPRA conducts investigations of employee misconduct, such as equipment misuse, inappropriate use of email, violations of the ethics code, travel violations, false statements, and hostile work environment allegations. IPRA also responds to employees about other matters referring them to other offices and individuals as necessary. IPRA is building increased understanding with employees about prohibited practices and resources available for employees and is undertaking a series of visits to the regions to inform and educate employees. In addition to advising BSEE employees and investigating incidents, IPRA also assists BOEM employees, through an interagency agreement.

The study team does not have a recommendation in this area, but encourages BSEE to continue development and maturation of the safety and incident investigations program as addressed by Recommendation 4.1 and to ensure high levels of coordination with IPRA.

Environmental Compliance Program

The BSEE realignment changed the name of the Division of Environmental Enforcement to the Division of Environmental Compliance. It also changed the reporting relationship for the regional staffs, which now report to the regional directors instead of the national program director in headquarters. These changes were not part of the initial realignment process that began in 2014, but were incorporated early in 2015 and subsequently included in implementation planning, communications, and briefings required to proceed through to approval and implementation.

Inclusion of the environmental program in the realignment brings a standard approach to all of the BSEE programs concerned with OCSLA oversight, regulatory compliance, and enforcement. That is, each program (OORP, SIID, ECD, and SED) includes a national policy function in headquarters and an operational component in the regions. The Oil Spill Preparedness Division, the Office of Administration (OA), and the Office of Public Affairs (OPA) do not fit this model because they have staff as direct reports to headquarters

physically located in the regions. The study team was informed that these anomalies relative to regional reporting are appropriate because OSPD, OA, and OPA operate under different legislative authorities and are not as tightly linked as the others.[120]

The original concepts for the organization of environmental functions were developed in working sessions held in 2010 and 2011, and much of the discussion focused on how the function would be parsed between BOEM and BSEE. The working papers from these sessions evidences a broad discussion about the need to structure the environmental functions in a manner responsive to criticisms of MMS that environmental programs had insufficient voice from the lease sale through the post-plan approval process. The discussions advocated for separation of environment and leasing at the regional level, and adding an environmental compliance and inspection capability to follow through on mitigation. In subsequent materials produced by an interagency implementation team, options were developed for the division of environmental responsibilities between BOEM and BSEE and an organization structure for BSEE was developed with regional environmental enforcement organizations and staff reporting directly to the headquarters Environmental Enforcement Division.

In FY 2016, BSEE undertook an effort to better integrate and communicate environmental protection and compliance activities with development of the Environmental Stewardship Collaboration Group. The Director requested participation by BOEM and BSEE employees in a core group and participation by inter-agency advisory members representing cooperating federal agencies. They were directed to clarify and describe an environmental stewardship vision and mission in alignment with the BSEE strategic plan operational excellence goal for environmental stewardship. They were also asked to identify new ways to enhance environmental stewardship throughout BSEE by inculcating it into all mission areas including permit reviews, inspections, enforcement, research, regulation and standards development, and oil spill response planning.

The core group and inter-agency advisors were directed to complete a report with consensus recommendations and actions regarding:

- BSEE's environmental stewardship responsibilities;
- Coordination efforts with agency partners on environmental stewardship; and
- Tracking and communicating BSEE's environmental stewardship successes.

In July of 2016 the Environmental Stewardship Collaboration Core Group Final Report was completed. The Director announced that actions would be initiated based on the report's recommendations. He also issued a definition that: Environmental Stewardship is the responsibility of all BSEE employees to carry out to the highest standards all duties that contribute, directly or indirectly, to the management, protection and care of the coastal, marine and human environment. The report identifies constructive methods to improve environmental stewardship such as strengthening the BOEM-BSSE relationship with regard

[120] OSPD operates under authority of the Oil Pollution Act of 1990, 33 U.S.C. § 2701 et*et seq*.

to environmental compliance, integrating BSEE's environmental experts into program decision making processes, and establishing an internal working group to strengthen collaboration agreements and MOA and MOU. The report includes appendices that provide specific recommendations for integration of environmental stewardship into all bureau programs and specific direction to modify MOA and MOU.

The Academy study team was told that the report received a mixed reception within BSEE and there was resistance at both the headquarters and the regional levels to implementation of the recommendations. As a result, the effort stalled and BSEE has not implemented a systemic approach to environmental stewardship that could optimize agency expertise and outcomes and improve compliance and enforcement.

The Academy study team considered this historical information, the February 2016 GAO review of BSEE's restructuring,[121] and interviews with BSEE employees. The study team was told that the current organization for regional environmental compliance staff reporting to the regional director could function effectively if lines of communication stay open to ensure issues are appropriately elevated within the regions and with headquarters, collaborative relationships are operating so that effective exchanges of information take place between headquarters and the regions, and there is sufficient input by regional subject matter experts in policy development and ongoing program direction. The study team believes that BSEE should conduct an examination of the BSEE environmental compliance function relative to the original division of responsibilities between BOEM and BSEE, alignment of the program with strategic goals, the recommendations of the Environmental Stewardship Collaboration Core Group, and consideration of alternative courses of action and risk assessment. This process should include a full vetting of proposals to combine environmental inspections with safety inspections, ensuring effective communication among the regions and with headquarters, and full involvement of environmental compliance staff in permit reviews. These actions require the engagement of headquarters and regional participants in an effectively coordinated process leading up to the completion of a formally documented decision about how the environmental compliance program will operate with defined activities, work streams, outputs, roles and responsibilities, and staffing plans for headquarters and the regions.

Once this process is completed, BSEE will be able to make staffing decisions. This process will also be the basis for effective implementation of the national program management model, which should include high levels of collaboration and communication between the regional environmental compliance functions and the headquarters function, clearly understood roles and responsibilities, and engagement of regional experts in the development of nationally applicable policies and procedures. An effort that engages headquarters and the regions and clearly communicates and documents rationales for

[121] Government Accountability Office, ***Oil and Gas Management: Interior's Bureau of Safety and Environmental Enforcement Restructuring Has Not Addressed Long-Standing Oversight Deficiencies***, GAO-16-245, February 2016.

decisions would allow for a more unified effort across BSEE and a transparent process for stakeholders.

Recommendation 4.2

BSEE should produce a program management design for the Environmental Compliance Program that considers the history of the program's organization and functions as well as the work of the Environmental Stewardship Core Group. The design should detail the activities, work streams, outputs, and outcomes. The design should include workforce plans for headquarters and the regions that can be the basis for staffing decisions, addressing gaps in competencies, and effective implementation of the national program. The process should include an assessment of risk related to reporting relationships as well as appropriate internal controls and risk mitigation measures to ensure the function can effectively achieve mission goals.

Regional Realignments

In order to support the national program management model and facilitate alignment with headquarters, the regional offices completed restructuring. The Academy study team did not have an opportunity to conduct a sufficiently detailed review of these changes in order to provide findings or recommendations.

Engineering Technology Assessment Center

In 2015, BSEE established the Engineering Technology Assessment Center (ETAC) to facilitate its ability to keep pace with industry innovation and technology advances. The planning and strategic visioning for this action began in 2013. The goal was to develop a center of expertise to provide knowledge about emerging technology to BSEE's regions and collaborate with academic institutions, the Offshore Energy Safety Institute (OESI), API, and other standard setting bodies. Creation of ETAC was based on an evaluation of industry practices and an assessment of other federal agencies' actions to improve technological expertise by drawing on individuals and organizations in the public and private sector. In creating ETAC, BSEE responded to multiple OIG and OCS Safety Oversight Board recommendations to secure technical expertise needed to review and vet standards, evaluate equipment and operations in the context of the operating environment, and conduct comprehensive reviews of plans.[122]

ETAC is located in Houston, near oil and gas operators, regulators, and manufacturers. It is in its start-up phase, but when fully operational will be a focal point for evaluating emerging technology intended for use in offshore environments, increasing safety, and

[122] Department of the Interior, Office of Inspector General, ***A New Horizon: Looking to the Future of the Bureau of Ocean Energy Management, Regulation and Enforcement,*** December 2010 and U.S. Department of the Interior, Outer Continental Shelf Safety Oversight Board, ***Report to Secretary of the Interior Ken Salazar***, September 1, 2010.

decreasing risk from offshore oil and gas activities. It will provide an additional proficiency for BSEE to augment current technology assessment functions and assist headquarters and regions in developing new offshore oil and gas regulations and evaluating proposed industry standards. Finally, ETAC's engineering staff will be evaluating and using real-time monitoring information being developed by industry. With a small staff, ETAC will manage a flexible base of engineering contracts to support up-to-date expertise in offshore oil and gas technology, equipment development, failure analysis, and testing protocols. ETAC is also establishing professional relationships with equipment manufacturers in the Houston area to keep abreast of the latest developments in offshore oil and gas equipment technology. When the study team was conducting its assessment, ETAC was being staffed and had not yet become the resource it can be for programs and regions. In order to optimize use of the Center by BSEE's operational programs in the regions, there needs to be a greater effort to communicate why ETAC was created, the value it can add to BSEE's mission, and to establish relationships and communication channels between ETAC and the regions. A formal governance structure to create a mechanism for two-way communication between the regions and OORP (who operates ETAC) would be optimal.

Regional staff could be better informed about BSEE's relationship with OESI as well. OESI facilitates knowledgeable transfer in order to promote safety and environmental stewardship in offshore operations. In November of 2013, BSEE entered into an agreement with the Texas A&M Engineering Experiment Station's Mary Kay O'Connor Process Safety Center to manage the OESI as a forum for cooperative research among academia, government, industry, and other non-government organizations in offshore-related technologies.[123] OESI provides a venue for BSEE to draw from experts to improve understanding of scientific and technological developments in the offshore industry and continue to develop the competencies of BSEE's employees.

Recommendation 4.3

BSEE should improve the linkage between ETAC and the regions by expanding outreach and engagement and developing a formal governance body and process to ensure high levels of two-way communication between the regions and Office of Offshore Regulatory Program (OORP).

Data Stewardship and Knowledge Management

Information and knowledge are critically important for BSEE to achieve its mission. BSEE's strategic plan includes an organizational goal: "Information: We consistently collect, analyze, and use quality information to drive decision making." The goal is supported with

[123] Bureau of Safety and Environmental Enforcement, ***BSEE and Texas A&M Engineering Experiment Station Announce Agreement,*** November 7, 201, available at https://www.bsee.gov/newsroom/latest-news/statements-and-releases/press-releases/bsee-and-texas-am-engineering-experiment.

a strategy: "Enhance BSEE's decision-making through the collection, management, and analysis of high quality information."[124]

The Data Stewardship Program gives focus to BSEE's information-based efforts and treats data as an asset that should be effectively managed with consistent policies and procedures. The Program has established a common base of understanding in BSEE about the importance of quality data and has as its goals to ensure that (1) bureau staff all use the same data, (2) data is accurate, and (3) data is consistently captured, defined, and stored. BSEE's data stewardship philosophy includes consistency in definitions, shared responsibility by all employees for stewardship of the data, and ownership at the point of entry. The program's benefits extend beyond data management and include improved collaboration using common data sets, improved program oversight and management using data-driven approaches, and improved automation of processes to facilitate internal processes and both internal and external communications.

BSEE has the foundational elements in place for this program with a full-time Data Steward, clearly defined roles and responsibilities, and a Data Stewardship Council. BSEE developed common metadata standards, a data dictionary and taxonomy, SOPs for consistent data collection, a process for insuring data quality, data stewardship training, and a governance structure in which data needs are identified by the national program managers, largely based on data in past reports that have been found useful. In addition, BSEE has developed a detailed business and information technology (IT) architecture that maps business components, data ownership, data exchange, and subsystems.

While the Data Stewardship Program is increasing the quality and consistency of information, BSEE has also invested in upgrading its IT environment and applications and is developing a business intelligence tool to improve the assimilation of and access to information. Much progress appears to have been made toward goals for data quality and consistency and improved access through IT infrastructure. There are additional opportunities for BSEE to promote information sharing. A consistent theme heard in interviews conducted by the study team in this assessment was that there is reluctance, or even an inability, to share information across organizational units.

Many, if not most, of BSEE's activities require knowledge and information sharing, internally among BSEE offices, and externally with BOEM, industry, other agencies, and the public. Ultimately, information sharing should enable a feedback loop among programs that leads to continuous performance improvement. For example, inspections and SEMS audits may uncover incidents of non-compliance and evidence needed to inform investigation decisions. The outcome generates knowledge that may justify enforcement actions and strengthen oversight.

BSEE also collects and analyzes information provided by industry. For example, industry reports near-miss data through a third party that provides this information to BSEE in an aggregate form to protect confidentiality. BSEE then uses it as the basis for issuing safety

[124] Bureau of Safety and Environmental Enforcement, ***Strategic Plan FY 2016-2019,*** December 21, 2015.

alerts that help prevent recurrence of particular types of incidents and improve safety. BSEE relies on BOEM for information from NEPA assessments to carry out its environmental compliance mission. Permitting and regulatory decisions need to be informed by understanding of emerging technologies used by industry, and require the ability to evaluate their use in deep water and Arctic environments.

The effective use of information therefore depends on the bureau's capacity to share it. To advance knowledge sharing, BSEE could benefit from the development and piloting of a more proactive and structured knowledge management strategy that would complement the existing data stewardship and IT initiatives, with additional elements that enable or strengthen knowledge sharing and collaboration.

A fundamental best practice for knowledge management (KM) is to develop it in a staged process, beginning with pilots for selected critical areas of knowledge. The pilots should be guided by a framework tailored to organizational needs. The framework should identify components associated with four pillars: people, processes, technology, and governance. It is important to consider tools and processes that enable capture and sharing of tacit and context-specific knowledge, for example, through the establishment of communities of practice for critical areas of knowledge that develop KM plans specific to their knowledge areas.

For BSEE, the suggested initial scope and priority focus for KM is on internal knowledge sharing, which would also support organizational knowledge retention and learning. BSEE already has several elements of a KM framework, including the Data Stewardship Program and IT architecture, for which people, processes, technology, and governance are in place. The employee engagement survey (discussed in Chapter 8) documents challenges associated with knowledge sharing and the need for interaction across programs. It also suggests several supporting tools. Building on these, a more complete knowledge assessment should review the knowledge cycle to identify remaining gaps and tools that can be used to address them. Key questions for assessment are: What prevents the flow of information? What is needed to enable it? This information would be used to close important feedback loops in the flow of knowledge between programs, as well as between decisions and outcomes. It should also identify critical knowledge areas, which are suggested by the strategic risks identified as part of ERM.

A KM pilot would evaluate practices for capturing as well as sharing implicit and tacit forms of knowledge through face-to-face or online interactions, such as mentoring, "peer assists," wikis, blogs, after-action-reviews and various types of learning events or training. A more recent development in KM is the use of additional tools for leveraging collective knowledge to address complex challenges. These include joint sense-making exercises, which convene and engage appropriate people who can bring different perspectives to a

complex challenge, along with online crowdsourcing tools such as social media, wikis, and blogs, all of which enable leaders to draw on a wider base of thinking.[125]

Pilots are ideally selected for their ability to demonstrate the organizational benefits of KM and provide lessons that can be used for course correction. Full-scale implementation should be supported by a change management plan and an individual who serves as a facilitator for the program, with the support of a designated team that reports to a cross-organizational steering group or advisory council as discussed in Chapter 8.

BSEE may want to consider participating in the Federal Knowledge Management Community, which shares best practices and lessons learned across federal agencies. Among the recognized federal KM initiatives are those of the National Aeronautics and Space Administration (NASA), U.S. Agency for International Development, and U.S. Army.[126] The oil and gas industry is also a source of some important KM case studies.[127]

These cases provide a wealth of lessons from experience that may be relevant in developing a KM approach that is appropriate for BSEE. NASA's Knowledge Services Program may be of particular interest. NASA shares many challenges similar to those of BSEE in that it has a highly technical mission focused on managing risk and has been shaped by high profile defining events, beginning with the Challenger disaster in 1986. An important lesson from the Challenger and Columbia disasters was that, beneath the technical root causes, there was poor team communications and a lack of organizational learning. NASA's formal KM program was established in 2011, in response to a recommendation of the Aerospace Safety and Advisory Panel that found a need for a more systematic approach to capturing implicit and explicit knowledge. [128]

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[125] Dixon, Nancy M., ***The Three Eras of Knowledge Management–Summary***, *Common Knowledge Associates,* 2010, available at http://www.nancydixonblog.com/2010/08/the-three-eras-of-knowledge-management-summary.html.

[126] Hoffman, E. and Boyle, J., ***R.E.A.L Knowledge at NASA: A Knowledge Services Model for the Modern Project Environment***, *Project Management Institute,* 2015, available at: http://www.pmi.org/-/media/pmi/documents/public/pdf/white-papers/real-knowledge-nasa.pdf; Hoffman, E. and Boyle, J. 2014. ***Managing Mission Knowledge at NASA***, at https://www.td.org/Publications/Magazines/TD/TD-Archive/2014/07/Managing-Mission-Knowledge-at-NASA; Rogers, E.W. (CKO Goddard Space Flight Center), ***Building the Goddard Learning Organization: A knowledge management architecture of Learning Practices to help Goddard function more like a Learning Organization***, 2011; United States Agency for International Development, Learning Lab, ***Collaborating, Learning and Adapting Framework and Maturity Model***, October 27, 2016, available at <https://usaidlearninglab.org/library/collaborating%2C-learning%2C-and-adapting-cla-framework-and-maturity-matrix-overview; U.S. Army, ***Knowledge Management Principles***, available at http://usacac.army.mil/cac2/AOKM/AOKM2008/A4%20Doc%201%20AKM%20Principles%2025%20JUN%2020081.pdf.

[127] Gorelick, C., Milton N. and April K., ***Performance through learning: Knowledge Management in Practice***, New York: Routledge, 2004; Elsevier Butterworth-Heinemann, Oxford UK Chapter 7: British Petroleum's Knowledge Management Journey A Decade of Change. By Nick Milton and Carol Gorelick in conversation with Kent Greenes.

[128] Hoffman, E. and Boyle, J., ***R.E.A.L Knowledge at NASA: A Knowledge Services Model for the Modern Project Environment,*** *Project Management Institute*, 2015, available at http://www.pmi.org/-/media/pmi/documents/public/pdf/white-papers/real-knowledge-nasa.pdf.

The environmental compliance program might serve as a useful pilot program for BSEE to consider, given that it needs to better define information needed to support the mission both from BOEM and internally, from subject matter experts. Establishment of a community of practice would strengthen the capacity to share data and expertise across regions. A knowledge assessment and management strategy would also support the clarification of roles and responsibilities in this program.

Panel Recommendation 4.4

BSEE should develop a knowledge management (KM) strategy that complements the existing Data Stewardship Program and IT program with tools that enable knowledge sharing and close gaps in the knowledge cycle. As part of this strategy, BSEE should consider establishing communities of practice for critical areas of knowledge to facilitate organizational knowledge retention, knowledge sharing, and learning. A KM pilot for a critical area of knowledge can be used to demonstrate the benefits of KM and inform the strategy prior to full-scale implementation.

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CHAPTER 5: OPERATIONAL AND ORGANIZATIONAL EXCELLENCE

The Government Performance and Results Act of 1993 (GRPA) and GPRA Modernization Act of 2010, in combination with direction issued by OMB, establish requirements for the 24 federal departments and major agencies to publish strategic plans, annual performance plans, and annual performance reports and to operate a strategic review process as part of an effective performance program.[129][130] DOI complies with these requirements and issues a department-wide strategic plan and annual performance plans and reports. DOI also conducts a strategic review process as part of its performance program. DOI's FY 2014-2018 Strategic Plan is comprised of six mission areas. BSEE's mission is incorporated within the area focused on the responsible use of the nation's resources and BSEE's operational goals are subsumed within DOI Mission Area 3, Powering Our Future and Responsible Use of the Nation's Resources. BSEE's goals for organizational excellence align with a set of departmental principles and management goals.[131]

There is no statutory or other requirement for BSEE to issue a stand-alone strategic plan. In the five years since it began operations, BSEE has issued two strategic plans. BSEE's second strategic plan, issued in December of 2015, is significantly matured from the first plan issued in October of 2012. The current plan was developed through a collaborative process involving a broad representation of internal stakeholders and significantly engaged the senior leadership team. As OMB recommends in its direction regarding strategic planning for departments and agencies, BSEE considered risk in the planning process and is incorporating strategic foresight to inform planning and prepare for the future.

Also consistent with practices recommended by OMB, BSEE's performance management program includes a regular cycle of organizational performance reviews conducted with leadership to evaluate a consistent set of information and metrics. BSEE is continuing to refine and develop new performance measures to inform program management and uses the strategic plan long-term initiatives to guide prioritization of annual actions. BSEE also uses enterprise risk management to identify and manage risks to performance.

As OMB describes in Circular A-11, strategic planning serves a number of important management functions related to achieving an agency's mission, including:

- Communicating to agency managers, employees, delivery partners, suppliers, Congress, and the public a vision for the agency and its future;

[129] P.L. 103-62, 107 Stat 285, August 3, 1993 and P.L 111-352, 124 Stat. 3866, January 4, 2011.
[130] Office of Management and Budget, ***Circular No. A-11***, 2016, available at https://obamawhitehouse.archives.gov/omb/circulars_a11_current_year_a11_toc.
[131] U.S. Department of the Interior, Strategic Plan for Fiscal Years 2014-2018, available at https://www.doi.gov/sites/doi.gov/files/migrated/bpp/upload/DOI-Strategic-Plan-for-FY-2014-2018-POSTED-ON-WEBSITE.pdf.

- Aligning resources and guiding decision-making to accomplish priorities to improve outcomes;
- Informing agency decision-making about the need for major new acquisitions, information technology, strategic human capital planning, evaluations, and other evidence-building and evidence-capacity building investments; and
- Helping agencies invite ideas and stimulate innovation to advance agency goals.[132]

The actions that BSEE has taken thus far to use strategic planning to help drive organizational performance, maturity, and transformation are notable. The Academy study team identified areas where additional effort can advance these efforts.

FY 2016-2019 Strategic Plan

BSEE's current strategic plan, released in December 2015, establishes a vision for the bureau's future state and sets operational and organizational goals used by the bureau and its partners to guide collective efforts working toward this future state.[133] A summary presentation of the FY 2016-2019 Strategic Plan is shown in Figure 5-1 below.

The plan's operational excellence and organizational excellence goals cascade down to a set of strategies and initiatives. The three operational excellence goals for safety, environment, and conservation are supported by four strategies and 14 initiatives that focus on multi-year reforms in how BSEE does its work. The bureau uses these to guide the prioritization of annual actions with milestones to achieve interim results. BSEE's three strategic goals for organizational excellence focused on people, information, and transparency are supported by 6 strategies and 22 initiatives that also help the bureau set priorities for annual action plans. The strategies in the current plan are crosscutting to promote the integration of programs in areas including detecting noncompliance, risk-based decision making, and improving employee engagement. The initiatives in the plan that identify specific steps to support the strategies are intended to be dynamic and are reviewed regularly by BSEE leadership as they prioritize and sequence annual action plans.

BSEE's FY 2016-2019 Strategic Plan reflects maturation from the original (FY 2012-2015) plan, including more specific goals with greater definition of desired outcomes, and information about the goals that will be achieved. The current plan reflects the bureau's refinement of strategy, moving beyond the earlier plan's more output-focused operational goal to regulate, enforce, and respond to OCS development to three operational goals that focus on outcomes in safety, environmental stewardship, and conservation. Likewise the organizational goal in the original plan focused on establishing the bureau, including "building and sustaining" the organization, whereas the current plan includes three goals

[132] Office of Management and Budget, ***Circular No. A-11***, 2016, available at https://obamawhitehouse.archives.gov/omb/circulars_a11_current_year_a11_toc.
[133] Bureau of Safety and Environmental Enforcement, ***Strategic Plan FY 2016-2019***, December 21, 2015, available at https://www.bsee.gov/agendas/public-engagement/2016-2019-bsee-strategic-plan .

that envision a world-class organization and is an employer of choice, uses quality information, and promotes transparency.

Mission **To promote safety, protect the environment and conserve resources through vigorous regulatory oversight and enforcement** ***Vision*** **Fostering an agile, trusted, and collaborative organization dedicated to reducing risk offshore** ***Principles*** **Clarity, consistency, predictability, accountability**	
Operational Excellence Goals • **Safety:** We reduce risk to those working offshore by advancing a culture of safety that encourages industry to go beyond baseline regulatory compliance. • **Environment:** We promote environmental stewardship through integrated prevention, compliance, and preparedness activities. • **Conservation:** We actively identify and pursue opportunities to improve oil and gas recovery and ensure accurate production measurement.	**Organizational Excellence Goals** • **People**: We are an employer of choice: we value, engage, and support our people so they can excel. • **Information**: We consistently collect, analyze, and use quality information to drive decision making. • **Transparency**: We promote transparency through processes that ensure consistency, efficiency, accountability, and collaboration.

Figure5-1 BSEE FY 2016-2019 Strategic Plan

In the fall of 2013, BSEE leadership began to define its vision that evolved into the principles in the FY 2016-2019 Strategic Plan: clarity, consistency, predictability, and accountability.[134] Development of the plan began in December of 2014 and a project team was established in 2015 to develop a future state for BSEE that could advance these principles.

BSEE's plan development generally mirrors best practices, with planning across organizational operating units[135] including staff from all levels of the organization. Senior leadership, representing all of the organizational components, engaged in several phases of plan development including examination of the bureau's current state and visionary future state. Through an iterative process, BSEE developed goals and strategies to align bureau efforts to attain the visionary future state, vetted the draft strategic plan with programs, and informed employees about the plan through a sustained process of engagement.

[134] Bureau of Safety and Environmental Enforcement, ***Strategic Plan FY 2016-2019***, at https://www.bsee.gov/agendas/public-engagement/2016-2019-bsee-strategic-plan.
[135] Office of Management and Budget, ***Circular A-11/Section 230***, July 1, 2016.

Although there was significant input by internal stakeholders, the study team did not find evidence of outreach with external stakeholders, a practice that is recommended by OMB.

BSEE's plan development process included consideration of risks to ensure that the strategic direction and messaging embedded in the plan effectively support the bureau's priorities for safety, environmental protection, and conservation. These efforts to align goals, strategies, and initiatives based on risk, advanced BSEE's risk management competencies and the use of enterprise risk management (ERM). BSEE's deployment of an ERM program is responsive to OMB direction to identify and manage risks to performance and achievement of strategic objectives.[136]

With the advent of a new Administration, DOI will begin to develop a new strategic plan, as required by the GPRA Improvement Act.[137] OMB's timeline indicates that draft agency plans are due to OMB by June 2, 2017.[138] BSEE's strategic planning program will be well positioned to participate in this process, although a working group could help inform and communicate the results of this effort.

Performance Management

BSEE's Office of Policy and Analysis (OPAA) manages the strategic planning process and the ERM program. OPAA coordinates and leads BSEE's quarterly performance review process that involves BSEE's senior leadership and incorporates and integrates consideration of program performance metrics, funding and staffing resources, status of work plans and annual action plans, and the status of implementation of OIG and GAO audit recommendations. BSEE's organized approach to conducting regular, routine evaluations of performance and use of a set of organizational metrics is a best practice based on OMB[139] and GAO guidance.[140]

BSEE has actions planned and underway to mature the bureau's performance management framework, including the following:

- OPAA is working with program managers throughout the bureau to identify, pilot, and evaluate measures that support implementation of the FY 2016-2019 Strategic Plan. Once developed, the measures will expand on performance information and

[136] Office of Management and Budget, ***Circular A-11, Section 270,*** Performance and Strategic Reviews, July 1, 2016.
[137] ***Government Performance and Accountability Act of 2010***. Public Law 111-352, 124 Statute. 3866, January 4, 2011.
[138] Office of Management and Budget, ***Circular No. A-11***, 2016, available at https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/a11_current_year/s230.pdf.
[139] Office of Management and Budget, ***Circular A-11, Section 270 Performance and Strategic Reviews***, July 1, 2016.
[140] Government Accountability Office, ***Managing for Results: Practices for Effective Agency Strategic Reviews***, GAO-15-602, July 29, 2015.

strengthen the ability of national program managers to conduct data-driven performance and progress reviews.

- BSEE is developing a leadership dashboard to include a set of information that will keep leadership informed about performance outcomes, including information used in organizational performance reviews held with BSEE leadership.
- BSEE has developed a Foresight Initiative to inform its ability to prepare for the future. The Initiative considers energy development and operations in the coming decade with input from energy experts to identify trends and consider future threats and opportunities, assess risks, and inform strategic planning and the development of capacities and competencies.

BSEE's leadership demonstrates its commitment to use of the strategic plan and communication through the Director's messaging and distribution of the plan in the BSEE annual report. These efforts to improve employees' understanding of the plan and its relevance to their work has the potential to advance bureau efforts to improve collaboration and build consensus around the bureau's priorities. According to an employee engagement survey conducted in 2016, an overwhelming majority of employees (88 percent) stated that they are able to relate to BSEE's mission. However, only 45 percent of the employees surveyed said they have seen the strategic plan, and just 24 percent of employees outside of headquarters indicated that they had seen it. This is a lost opportunity since the plan communicates the bureau's vision, principles, and priorities and is a tool to increase employee engagement, align work efforts, and gain input to inform future planning. Reactivation of the working group that participated in developing the plan, comprised of cross-program and cross-regional representatives, could promote communication of the plan and improved understanding of bureau priorities and initiatives. Selection of the members of the group should consider the ability of the members to be advocates and change agents within their organizations.

BSEE is taking important steps to assess the needed future state beyond the scope of the current strategic plan and evaluating trends that will impact bureau programs. The study team recommends ongoing support for the Foresight Initiative, as this process can help BSEE to anticipate and guide the development of infrastructure and processes and put in perspective the current pace of development of oil and gas in the OCS, how that may change in the future, and the impact on BSEE's programs and workload. OMB recommends that agencies integrate strategic foresight in the planning process as BSEE has done.[141] This ability to look ahead and inform operational and organizational alignment is among GAO's seven practices that federal agencies can use to facilitate effective strategic reviews, including evaluation of what would constitute success in ten years for each strategic objective to better plan for and understand near-term progress toward long-term outcomes.[142] The study team also encourages BSEE to continue its careful and deliberate efforts to develop new performance measures that can help to inform managers and senior

[141] Office of Management and Budget, ***Circular A-11/Section 230***, July 1, 2016.
[142] Government Accountability Office, ***Managing for Results: Practices for Effective Agency Strategic Reviews***, GAO-15-602, July 29, 2015.

leadership and assist the national program managers to access data that can be used in performing their oversight roles.

Recommendation 5.1

Establish a working group comprised of program and regional representatives, in order to promote improved awareness of and engagement in strategic planning, inform the process for annual priority setting, and expand the use of risk management. Selection of the members of the group should consider the ability of the members to be advocates and change agents within their organizations and the team should be operational in time to assist with BSEE's participation in the development of a new DOI strategic plan.

Recommendation 5.2

BSEE should institutionalize its Foresight Initiative to provide input to strategic planning and risk assessment and to help anticipate and guide BSEE's programs and operations.

Annual Action Plans

BSEE's annual action plans guide completion of short-term operational and organizational initiatives and support interim progress in longer-term transformation, including the development of policies and procedures, regulatory updates, and program pilots. The identification and prioritization of these projects is dynamic, reflecting ongoing discussion by BSEE's Management Council and external and internal influences. In producing its 2016 Action Plan, BSEE's developed plans and timelines for 43 projects. The development of project work plans to lay out details and milestones for these projects demonstrates BSEE's commitment to improvement and reform and maintaining high levels of performance. The bureau realized that it was not feasible to expect that all of these projects could be completed within the specified timeframes given the competing demands on the individuals assigned these tasks, and subsequently the initiatives were prioritized and reduced in number – a positive step for focusing effort on a smaller set of achievable outcomes.

The study team suggests that a more rigorous process to prioritize and sequence BSEE annual actions over a multi-year period could help to ensure that results meet expectations and that commitments align with the capacity of managers and programs. Centralized development of annual plans and coordination of the multi-year planning process by OPAA should include prioritization and sequencing of tasks, taking risk assessment into account, assignment of roles and responsibilities for leadership and participation, progress tracking and reporting, and follow-up.

Recommendation 5.3

BSEE should enhance its annual and multi-year planning to include prioritization and sequencing of tasks, taking risk assessment into account, assignment of roles and responsibilities for leadership and participation, tracking progress, and following up.

Enterprise Risk Management

Risk management is at the core of BSEE's mission. BSEE recognizes the importance of risk with a strategic plan goal to "reduce risk to those working offshore" and a strategy to "incorporate risk-based decision making into our core safety functions." In support of this mission, BSEE is implementing an ERM Program.

The ERM Program is a bureau-wide initiative that is required by OMB in all federal agencies.[143] It offers a promising and innovative approach that is intended to proactively manage risk across programs, inform risk-based decision-making, drive continuous improvement in performance, and inform the strategic planning process. Ultimately, it should provide a feedback loop between management decisions and risk outcomes, as well as between leadership and field operations.

BSEE has been using risk assessments for internal control purposes, and is integrating ERM into the bureau's priority setting process. BSEE's ERM approach generally follows the ERM model as outlined in guidance developed by an interagency ERM working group[144] and includes key elements identified in guidance on good practices for managing risk:[145]

- **Align ERM to goals and objectives** – Ensure the ERM process maximizes the achievement of agency mission and results;
- **Identify risks** – Assemble a comprehensive list of risks including both threats and opportunities that could affect the agency in achieving its goals and objectives;
- **Assess risks** – Examine risks considering both the likelihood of the risk and the impact of the risk on the agency mission;
- **Select risk response** – Select the response (based on risk appetite) such as acceptance, avoidance, reduction, share/transfer, or maximize opportunity;
- **Monitor risks** – Monitor how risks are changing and if responses are successful; and
- **Communicate and report on risks** – Communicate risks to stakeholders and report on the status of addressing the risk.

BSEE's self-assessment indicates that the ERM Program is at Maturity Level 3, with all of the framework elements in place including a program charter, roles and responsibilities, risk maturity model, policy, methodology, process, and a handbook. Transition to the ERM software platform will facilitate progress to a higher level of maturity and ease further

[143] Enterprise Risk Management became a requirement for federal agencies in July 2016, Office of Management and Budget, Circular A123, available at https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m-16-17.pdf.
[144] United States Chief Financial Officers Council and the Performance Improvement Council. (US CFOC and PIC), ***Playbook: Enterprise Risk Management for the U.S. Federal Government***, 2016, available at https://cfo.gov/wp-content/uploads/2016/07/FINAL-ERM-Playbook.pdf.
[145] Government Accountability Office, ***Enterprise Risk Management: Selected Agencies' Experiences Illustrate Good Practices in Managing Risk***, GAO-17-63, December 1, 2016.

integration of data into the strategic planning process. BSEE has identified 84 current risk treatments and proposals for another 177 are being considered.

Enterprise risk includes all risks, both operational (external) and those related to internal controls within the organization, that could affect the ability of BSEE to achieve its mission.[146] BSEE's framework identifies 12 strategic risks:

- Jurisdiction – failure to interpret and apply
- High Technology and Unknowns – failure to understand leaves gaps in regulation
- Establish Regulations and Guidance – failure to address identified risks
- Production and Conservation – facilitate adequate and accurate production volumes and conservation
- Permitting – failure to adequately vet and approve permits
- Inspection/Audit Guidelines –failure to establish sufficient guidelines
- Inspection/Audit Deficiencies – failure to identify
- Response – failure to facilitate adequate response capabilities
- Investigations – failure to adequately identify causal event information to prevent recurrence
- Enforcement – failure to motivate industry to high level of compliance
- Decommissioning – failure to appropriately oversee/inform lease liability
- BSEE Internal – failure to maintain internal control

Top risks identified in BSEE's first full ERM cycle were permitting, high technology and unknowns, and decommissioning. Failure to maintain internal control was also high on the list. As BSEE undertakes its next cycle of ERM, these risks may shift. Based on a 2014 discussion by a panel of experts at the National Academy of Public Administration[147] some, but not all, aspects of BSEE's ERM align with best practices:

- Sets a tone at the top indicating that leadership understands the value of integrating risk into strategy setting;
- Communicates the value and raised awareness of ERM's importance;
- Integrates risk into performance management;
- Demonstrates the value of risk by using it to improve performance; and
- Broadly uses ERM as the basis for open dialogue between risk leaders and senior leadership.

The ERM Program is understood by some components within the agency, primarily headquarters, and is generally accepted among the leadership, but there is disagreement about the approach, the categorization of risks, and the degree of emphasis on organizational versus operational risk. Some BSEE units have trepidation about the

[146] Bureau of Safety and Environmental Enforcement, ***Enterprise Risk Management (ERM) Handbook,*** April 2016.
[147] National Academy of Public Administration/Ernst & Young, LLP***, From Enterprise Risk Management to Risk-Enabled Performance – a Conversation with Leaders***, May 7, 2014.

implications of being labeled a high risk and the additional requirements that are imposed for risk reduction and reporting. BSEE's ERM exists in parallel with program-based risk management initiatives that use different conceptual approaches, and there is disagreement regarding the classification of various types of risks. Part of the reason for this is the lack of a common lexicon or vocabulary for risk dialogue and communication.

Establishment of communities of practice for managing critical areas of knowledge associated with strategic risks (as suggested in Chapter 4 in support of a KM strategy) could promote dialogue about risk as well as shared understanding and development of a common lexicon. It would also enable those engaged in program-based risk management initiatives to provide input on the ERM approach and vice-versa.

The risk-based inspection initiative that BSEE is piloting is an example of a program-based risk management initiative that is intended to reduce risk associated with inspections, which was also identified as one of the strategic risks. Development of the initiative was initially based on a statistical analysis to target high-risk facilities. With input from regional staff, it evolved to include additional factors. Within BSEE there are differing views about conceptual approaches to risk assessment, specifically with regard to the acceptance of more subjective and qualitative approaches used for less quantifiable types of uncertainties. The use of subject matter expertise along with quantitative data should be viewed as complementary, recognizing the unavoidable role of informed even if subjective professional judgments in the context of limited information.

Among the insights drawn from the 2014 National Academy of Public Administration Panel discussion was that a dialogue about uncertainties might help to overcome resistance to dialogue about risk and ultimately lead to better articulation of risk. The Panel also suggested that pilot projects that use ERM to assess risks could be used to facilitate discussion of both risks and opportunities, which could be expected to improve understanding and acceptance of ERM. The Panel also suggested including the risk of maintaining the status quo in risk assessments. This would help to make the case for the change in organizational culture that is needed to adopt ERM, which should also be supported by a change management plan.

BSEE's risk-based inspection pilot could advance understanding of different and complementary approaches to risk assessment. It could also help demonstrate the value of risk assessment and risk-based decision making and ultimately facilitate institutionalization of ERM. It could also be a tool used in the development of a multi-year plan to guide prioritization and sequencing of BSEE efforts that compete for a limited amount of capacity.

Recommendation 5.4

BSEE should establish communities of practice for management of strategic risks and develop a common lexicon that can be used for risk communication. To this end, the ERM program should incorporate learning from the results of the inspection pilot underway and

other areas where risk management pilots can expand its use and improve capability. BSEE should also incorporate ERM into its multi-year planning (see recommendation 5-3).

CHAPTER 6: OVERCOMING HUMAN RESOURCE CHALLENGES

A 2010 implementation plan that was prepared to respond to the Report of the Outer Continental Shelf Safety Oversight Board described the actions that DOI would take to improve and strengthen management, regulation, and oversight of OCS operations. The plan described the efforts that would be necessary with the reorganization of these functions and the need to recruit scores of new professionals, develop training programs and curricula, and develop management structures and systems appropriate to the scale and mission of the new organizations.[148] When BSEE was established, it faced daunting human capital challenges, including significant staffing shortfalls, urgent training and employee development needs, competition for mission-critical skills, and inadequate systems and management structures. In addition to building core capacity for BSEE's mission execution, BSEE also needed to quickly expand its human resources capacity, deploy systems and processes, and provide human resource services to BOEM, ONRR and itself.

BSEE has made significant progress in these areas including completing a Human Capital Management Strategic Plan to guide the bureau's human capital programs and alignment with mission and strategic goals. BSSE established a Human Capital Council that promotes strategic alignment of human capital programs and priorities with operational needs. In addition, BSEE has improved hiring and retention; expanded training programs focused on technical and leadership development and specific skills gaps; modernized human capital systems; conducted workforce planning and data-driven reporting; and improved the organization's access to information that can be used to enhance workforce planning including demographic trends, competencies, and skills. BSEE's efforts in these areas have generated the following positive results:

- An increase in staffing of 679 employees or 28 percent, comparing employment as of October 2012 with September 17, 2016;
- An increase of 34 percent in the number of technical training courses delivered in FY 2015 as compared to FY 2014;
- Increased salaries for mission-critical technical positions in the Gulf of Mexico Region including petroleum engineers, civil engineers, geophysicists, geologists, and inspectors that allow up to 35 percent more than basic pay rates.

BSEE's human capital efforts evidence ongoing maturation based on a model of strategic human capital management developed by GAO that identifies eight critical success factors to gauge an organization's progress in addressing four challenges that create risk in federal agencies. Agencies are encouraged to use the model to promote human capital management that is fact-based, focuses on strategic results, and incorporates merit

[148] U.S. Department of the Interior, ***Implementation Plan In Response to the Outer Continental Shelf Safety Oversight Board's September 1, 2010 Report to the Secretary of the Interior,*** September 4, 2010.

principles.[149] BSEE's efforts to date and actions planned for the future indicate progression from a more prescriptive approach to a more innovative and flexible approach in most of these areas.

- Leadership – BSEE's leadership recognizes the importance of human capital to mission accomplishment and promotes the partnership of human capital professionals with agency leaders and program managers through the Human Capital Council.
- Strategic human capital planning – BSEE's strategic plan and Human Capital Management Strategic Plan support alignment of human capital approaches with bureau mission, vision, and strategic goals. BSEE uses data gathered on the workforce to drive decision making in acquiring, developing, and retaining talent.
- Acquiring, developing, and retaining talent – BSEE's investments in human capital including hiring and training are aligned with mission needs and BSEE has implemented flexible and innovative approaches to meet training needs.
- Results-oriented organizational cultures – BSEE promotes diversity and is working to improve the linkage of organizational performance with individual performance.

Continued maturation of human capital strategies and progression based on these critical success factors will facilitate achievement of BSEE's operational and organizational excellence strategic goals.

Leadership Commitment to Human Capital Management

BSEE has strong leadership commitment to human capital, both in the Director's external and internal communications, and the ongoing deliberative effort by BSEE's senior leadership to support human resource programs and investments. In his first communication with BSEE on October 31, 2013, the Director identified human capital issues as a priority for the bureau and outlined a set of goals including leveraging existing bureau expertise with continued training; creating opportunities for employee advancement and fair compensation; and enhancing efforts to attract talent in a competitive job market. He shared his vision for a BSEE work environment that embraces diversity and in which employees have the tools to do their jobs, the opportunity to contribute and grow, and the confidence that they will be recognized for their work and accomplishments. This information was shared in an all-employee email along with a commitment that the BSEE 2013-2018 Human Capital Management Strategic Plan would be used as a roadmap to guide bureau efforts to attain these goals.

In subsequent communications, the Director continued to emphasize the importance of keeping a focus on the development of and support for human capital, which demonstrates a leadership commitment to ongoing improvement and engagement in the particulars of BSEE's efforts. This is evidenced in the Director's communications and in BSEE's leadership

[149] Government Accountability Office, ***A Model of Strategic Human Capital Management,*** GAO-02-373SP, March 2002.

team discussions about the imperative for succession planning; decisions to create the BSEE Human Capital Council to serve as a governance body that could oversee and provide ongoing support for human capital programs; creation of a leadership development program; increased technical training; and expanded workforce planning.

Strategic Human Capital Planning

BSEE's commitment to alignment of its human capital strategies in order to acquire, develop, and retain people to meet mission needs is evident in the strategic plan that includes an organizational excellence goal that is focused on people, specifically stating "We are an employer of choice, we value, engage, and support our people so they can excel." This goal is supported by two strategies that promote the creation of a high-performing and collaborative environment:

- Improve engagement with employees to foster a culture of collaboration within BSEE; and
- Develop and sustain a well-trained, high-performing and diverse workforce.

These strategies are supported by initiatives that seek to foster team building, collaboration and trust; implement an internal communications approach that encourages dialogue; assess and ensure training is provided; utilize recruitment and retention incentives and alternate appointment authorities; use processes that recruit, motivate, train, and reward the workforce in accordance with merit systems principles and federal regulations; and implement programs that promote a diverse and inclusive workplace.

The Human Capital Management Strategic Plan 2013-2018, issued in September 2013, depicts the environment within which BSEE operated in 2013 and identifies the challenges that the bureau faced at that time. A set of human capital goals and strategies present the actions that BSEE planned to take to overcome challenges and achieve recruitment, hiring, diversity, retention, and performance management goals for the workforce.

The plan includes data-driven analyses of hiring needs and describes external factors, like competition, that the bureau expected would challenge its ability to achieve hiring goals. The plan includes strategies for marketing, branding, and recruiting including filling vacancies in twelve mission-critical occupations; performance management to establish expectations and recognize good performance; succession planning to prepare for retirements over a five year period; retaining talent; and increasing diversity. The plan prescribes actions necessary to increase staffing by 28 percent overall (with October 2012 as the baseline for comparison), including hiring to address staffing shortages of up to 62 percent in some mission-critical occupations. At the time the plan was developed the bureau was facing a very competitive market for mission-critical occupations, challenging BSEE's ability to address priority hiring of inspectors, engineers, geophysicists, geologists,

and environmental specialists.[150] The plan also describes the challenges due to looming retirements, threats to knowledge retention, and the unique problems associated with performance of job functions that require specialized technical and local knowledge that can take years to acquire.

BSEE is in the process of updating the Human Capital Management Strategic Plan in recognition of the changing circumstances since it was prepared. The Academy study team was told that the updated plan will shift its focus from recruiting and hiring, which were urgent efforts in 2013, to focus on needed strategies to retain, motivate, and manage the workforce. BSEE is aware of potential external threats to its human capital management, including increased competition in the event that industry demand increases, as well the potential for reduced funding that could threaten its ability to maintain an adequate workforce and competencies.

Recruitment, Hiring, and Retention

Using the Human Capital Management Strategic Plan as a guide, BSEE has been successful in recruiting and hiring, nearly reaching its hiring goals as of the end of FY 2016. There were 679 employees on board as of October 2012 and 871 on board as of September 17, 2016, an increase of 28 percent. BSEE had planned additional hiring in 2017 that would allow them to reach full staffing by the end of Fiscal Year (FY) 2017.[151] However, a recently imposed federal hiring freeze will likely impact achievement of this goal.

To address hiring and retention goals, BSEE overcame significant pay and benefit disparities between federal compensation and industry pay rates. BSEE developed detailed analyses supporting the salary amounts that would be needed to effectively compete with industry for technical job series and shared them with DOI, OMB, and the Office of Personnel Management (OPM). Congress authorized special pay rate authority on an interim basis beginning in 2012. Authority for special pay rates was included in appropriations legislation on an annual basis for geophysicists, geologists, and petroleum engineers that allowed increases of up to 25 percent over basic pay.[152] In August 2015, OPM administratively authorized permanent special pay rates for technical positions in the Gulf of Mexico Region including petroleum engineers, civil engineers, geophysicists, geologists, and inspectors that allowed increases of up to 35 percent more than basic pay.[153] BSEE also sought and received OPM approval for similar salary rates for mission-critical positions in the Alaska and Pacific Regions. BSSE continues to closely monitor hiring, collect data, and report results in order to maintain support for the special pay rate

[150] Bureau of Safety and Environmental Enforcement, ***Human Capital Management Strategic Plan 2013-2018***, September 2013.
[151] Bureau of Safety and Environmental Enforcement, ***Annual Report 2015***, available at https://www.bsee.gov/annual-report/safety/bsee-2015-annual-report.
[152] Government Accountability Office, ***Oil and Gas Oversight: Interior Has Taken Steps to Address Staff Hiring, Retention, and Training But Needs a More Evaluative and Collaborative Approach***, September 2016.
[153] Ibid

authority. BSEE recently created an Office for Workforce Analysis and Planning within the Human Resources Division to focus on these matters.

BSEE's actions to address pay disparities with industry in order to achieve hiring goals and retain employees in very competitive occupations were recognized by GAO in 2014.[154] In testimony before the House Committee on Natural Resources, GAO recognized BSEE's use of special salary rates provided by Congress to retain geologists, geophysicists, and petroleum engineers; efforts to document the need for special salary rates with OPM; use of hiring incentives (albeit on a limited basis); reduced timeframes for hiring; and marketing to facilitate recruitment. In February 2015 when GAO evaluated these areas again, they found that progress had been made but that BSEE needed to do more.[155] In September 2016, GAO reviewed hiring, retention, and training for DOI oil and gas programs and found that BSEE had improved its use of hiring and retention incentives by substantially increasing the number of staff receiving retention incentive payments and student loan repayments. GAO also found that BSEE had taken steps to reduce the time to hire including adopting new human resources software to facilitate tracking the hiring process, issuing new hiring process guidance, and conducting training on the new guidance.[156]

The OIG also recognized BSEE's accomplishments, while suggesting that more could be done, in a November 2015 report that addressed BSEE's implementation of strategies to tackle human capital challenges. The OIG provided positive feedback about BSEE's efforts to work with DOI, OPM, and OMB to identify special salary enhancements to narrow the gap between the federal government and industry salaries and the use of existing authorities to offer recruitment, retention, and relocation incentives, and student loan repayments. The OIG also highlighted BSEE's use of recruitment teams to visit and build professional contacts at universities and engineering departments as well as at professional events and conferences, and to target engineers and scientists at entry level and mid-level grades. In addition, the OIG noted the use of DOI's cooperative agreement with the Partnership for Public Service to fund student ambassadors who provide peer-to-peer outreach on college campuses to increase knowledge about federal career opportunities. The OIG also reported on BSEE's use of position trackers for collecting data relevant to the overall hiring process, revised processes and tools to help track hiring timeframes, reduced applicant processing times, and decreased long-term operating costs.[157]

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[154] Government Accountability Office, Testimony Before the Subcommittee on Energy and Mineral Resources, Committee on Natural Resources, House of Representatives, Oil and Gas Management: Continued Attention to Interior's Human Capital Challenges is Needed, February 27, 2014.

[155] Government Accountability Office, ***High-Risk Series, An Update***, GAO-15-290, February 2015.

[156] Government Accountability Office, ***Oil and Gas Oversight: Interior Has Taken Steps to Address Staff Hiring, Retention, and Training But Needs a More Evaluative and Collaborative Approach***, September 2016.

[157] Department of Interior, Office of Inspector General, ***Inspector General's Statement Summarizing the Major Management and Performance Challenges Facing the U.S. Department of the Interior***, November 2015.

BSEE closely monitors its workforce and workforce trends with a dashboard that is issued at the end of each pay period and shared with BSEE leadership. The tool has been useful for BSEE to identify where delays happen and facilitate individual actions, educate managers in the process to increase their awareness and facilitate the steps for which they are responsible. However, according to GAO BSEE has not conducted systematic analyses of the data to improve processes such as reducing hiring times.[158] The need to accelerate hiring times is a consistent theme in GAO's recommendations to BSEE along with the need to conduct data-driven analyses to improve ongoing processes, and explore expanded use of recruitment, relocation, retention and other incentives. The Academy study team was told that BSEE's human resources program is focused on these efforts. BSEE has developed an 80-day hiring model consistent with OPM's goal for federal hiring. BSEE is also benchmarking hiring timeframes and conducting training for managers and others involved in the hiring process to achieve reforms and reduce the time it takes to hire. BSEE's 80-day model for hiring would reduce the time it takes to hire (as reported by GAO)[159] from the 197 days it took to hire a petroleum engineer in 2012. BSEE's Human Resources Division recently completed a supervisory guide on compensation flexibilities to assist managers and clarify regulations relating to the use of compensation flexibilities available including relocation payments, superior qualifications compensation, special hiring needs appointments, student loan repayment, and creditable non-federal/non-military service for leave accrual.

Succession Planning

Among the areas of focus in BSEE's Human Capital Management Strategic Plan is succession planning, including strategies to recruit, hire, and train employees to become future leaders and capturing corporate knowledge from experienced employees. BSEE recognized the need to build leadership competencies and has taken significant steps to develop managers with the creation of its three-track Leadership Development Program. Each of the three tracks is focused on a different stage in leadership. For example, BSEE's launch of an initial track, the Emerging Leaders Program, includes opportunities for rotations, coaching/mentoring, and experiential practical learning for BSEE employees who hold GS-11, GS-12, and GS-13 positions.

The plan also identified strategies for a formal mentoring program with a knowledge transfer component; selected management, leadership, and information courses to meet the needs of individual offices; and utilizing flexible position management to assist with

[158] Government Accountability Office, Testimony Before the Subcommittee on Energy and Mineral Resources, Committee on Natural Resources, House of Representatives, ***Oil and Gas Management: Continued Attention to Interior's Human Capital Challenges is Needed,*** February 27, 2014; Government Accountability Office, ***High-Risk Series, An Update,*** GAO-15-290, February 2015; Government Accountability Office, ***Oil and Gas Oversight: Interior Has Taken Steps to Address Staff Hiring, Retention, and Training But Needs a More Evaluative and Collaborative Approach***, September 2016.

[159] Government Accountability Office, Testimony Before the Subcommittee on Energy and Mineral Resources, Committee on Natural Resources, House of Representatives, ***Oil and Gas Management: Continued Attention to Interior's Human Capital Challenges is Needed***, February 27, 2014.

succession planning. The study team encourages BSEE to fulfill its commitment to launch the next two Leadership Development Program tracks while also considering immediate focused efforts, consistent with the strategies identified in the Plan, to prepare for retirements and potential gaps in bureau senior leadership.

BSEE has a modest cadre of senior leaders, many of whom are or will soon be eligible for retirement. These are crucially important positions that require technical knowledge, leadership skills, and management expertise. Consistent with its Human Capital Management Strategic Plan, BSEE should consider initiating targeted actions to prepare employees for future advancement and create opportunities for rotations, details, and temporary assignments for qualified individuals who have leadership potential and are interested in advancing their career. BSEE could also consider a flexible position management approach that has been used by other bureaus and the DOI Office of the Secretary. A co-director or co-chief is appointed and works side-by-side with the individual planning to retire for a six to twelve month period, which allows the newly appointed co-chief to learn from the incumbent and assume leadership responsibilities while being mentored and coached by the individual that will soon retire.

Recommendation 6.1

BSEE should continue to develop opportunities for GS-14 and GS-15 employees who can gain experience in order to be prepared to assume leadership positions and ensure continuity.

Employee Survey Results

BSEE's ability to attract and retain employees is highly dependent on the quality of the work experience and environment. Employees are able to communicate their views and attitudes through the annual Federal Employee Viewpoint Survey (FEVS). Through this not-for-attribution survey conducted by OPM, employees can voice their views about factors that impact their ability to do their jobs, their perceptions about treatment and respect, the degree to which their opinions are taken into consideration, and other factors. Many federal agencies actively encourage their employees to take part in order to gain feedback about employees' attitudes. Survey results provide valuable insight into the challenges agency leaders face in ensuring that their agencies have an effective workforce. BSEE evaluates the annual data, but could do more to use the results to help drive improved employee engagement and understand human resource challenges. For BSEE, a relatively new organization that is continuing to work on melding diverse cultures, FEVS is a good source of data about the attitudes and views of the workforce and individual organizations. This information can be used to improve the work environment, identify areas where employees are frustrated or feel they lack support, and areas where the bureau may experience employee retention problems in the future.

The most recent Federal Employee Viewpoint Survey (FEVS) was conducted in the spring of 2016.[160] About 49.1 percent of BSEE's employees participated in the FEVS, about the same rate as DOI employees overall (50.1 percent) and above the government response rate of 45.8 percent. In general, the scores are in line with those for the government, with notable exceptions. As compared to other federal agencies, BSEE employees report higher scores relating to resource sufficiency, reasonable workload, physical working conditions, assessment of training needs, recruiting people with the right skills, promotions based on merit, policies and programs promoting diversity, protections from health and safety hazards, and work/life programs. Scores for BSEE are below the overall government in areas including communicating the goals and priorities of the organization, communication from management, and collaboration across work units. See Figure 6-1 below.

	BSEE	DOI	Government
Areas where BSEE's scores are above the government scores (DOI shown for comparison):			
9. Sufficient resources	60.7%	41.5%	46.6%
10. Reasonable workload	65.7%	48.1%	57.5%
14. Physical working conditions allow employees to do their jobs well	76.2%	67.9%	65.7%
18. My training needs are assessed	62.6%	52.4%	52.9%
21. My work unit is able to recruit people with the right skills	47.2%	41.1%	42.6%
22. Promotions are based on merit	45.0%	37.9%	34.5%
34. Policies and programs promote diversity	66.9%	55.4%	57.8%
35. Employees are protected from health and safety hazards	80.2%	78.2%	76.0%
Areas where BSEE's scores are below the government scores (DOI shown for comparison):			
56. Managers communicate the goals and priorities of the organization	54.3%	52.9%	60.3%
58. Managers promote communication among different work units	48.1%	47.5%	52.0%
59. Managers support collaboration across work units	50.4%	53.0%	55.7%
64. Satisfaction with information received from management about what is going on	41.0%	45.6%	48.0%

Figure 6-1. 2016 FEVS -Comparison of BSEE, DOI and Government Results[161]

BSEE's 2016 scores in general improved over previous years, using 2014[162] scores for comparison.[163] The scores for years 2014 – 2016 reflect upward trends in considering

[160] U.S. Office of Personnel Management, ***Federal Employee Viewpoint Survey, Government wide Management Report; Bureau of Safety and Environmental Enforcement 2nd Level Subagency Comparison Report***, 2016.
[161] U.S. Office of Personnel Management, ***Federal Employee Viewpoint Survey Results, Bureau of Safety and Environmental Enforcement, 2016*** (Positive Results Reported)).
[162] U.S. Office of Personnel Management, ***Federal Employee Viewpoint Survey, Government wide Management Report***, 2014.
[163] Note: 2013 FEVS results were not sufficiently complete to use as a basis for comparison.

BSEE a good place to work, job satisfaction, and satisfaction with pay. There are areas where the scores declined including understanding how work relates to BSEE's goals and priorities, individual accountability, respect, and information. Figures 6-2 below presents these results. BSEE scores for how work relates to the agencies' goals and priorities are consistent with the results of an employee engagement survey conducted by BSEE that is discussed in Chapter 8.

	2014	2015	2016
Scores Increased:			
3. Encouraged to come up with new and better ways to do things	54.5%	57.7%	61.1%
40. Good place to work	61.4%	64.7%	64.7%
69. Job satisfaction	60.5%	68.9%	66.9%
70. Satisfaction with pay	51.0%	54.5%	61.8%
71. Satisfaction with organization	54.2%	58.8%	58.4%
Scores Decreased:			
12. I know how my work relates to the agency's goals and priorities	86.1%	84.0%	80.8%
16. I am held accountable for achieving results	85.6%	84.6%	80.4%
49. My supervisor treats me with respect	79.5%	81.8%	75.4%
64. Satisfaction with information received from management about what's going on	46.1%	43.7%	41.0%

Figure 6-2. 2016 BSEE FEVS Results- Comparison Across Years[164]

Notoriety surrounded the 2010-2011 reorganization of MMS because ethical lapses and misconduct of a small contingent of employees gained traction in the press and led to extreme, ongoing scrutiny of BSEE's employees.[165] BSEE's efforts to maintain employee awareness through training, internal controls, and improved transparency help sustain a positive environment and discourage ethical conflicts and misconduct. FEVS data can also help inform the bureau about the confidence that employees have that they can report concerns and/or suspected issues without reprisal. BSEE's scores in this area continue to be in an acceptable range as compared to the rest of government as shown below in Figure 6-3.

[164] U.S. Office of Personnel Management, ***Federal Employee Viewpoint Survey Results, Bureau of Safety and Environmental Enforcement, 2014, 2015, 2016*** (Positive Results Reported)).
[165] Department of Interior, Office of Inspector General, ***Investigative Report***, August 7, 2008.

	2014	2015	2016
17. I can disclose a suspected violation of law, rule or regulation without fear of reprisal Note: The 2016 DOI score is 59.4% and the government score is 62.1%	62.1%	63.0%	62.7%
37. Arbitrary action, personal favoritism and coercion are not tolerated Note: The 2016 DOI score is 54.6% and the government score is 53.1%	52.5%	55.3%	54.2%
38. Prohibited personnel practices are not tolerated Note: The 2016 DOI score is 67.7% and the government score is 66.7%	66.4%	66.9%	66.2%
54. Senior leaders maintain high standards of honesty and integrity Note: The 2016 DOI score is 47.1% and the government score is 51.8%	50.3%	55.0%	48.4%

Figure 6- 3. 2016 BSEE FEVS Results- Comparison Across Years[166]

Training Programs

The importance of training is evident in BSEE's strategic plan, which includes a strategy to "Develop and sustain a well-trained, high performing and diverse workforce" embedded within the goal for Organizational Excellence. The strategy is linked to two initiatives:

- Continuously assess critical training needs and ensure appropriate technical and leadership training is provided; and
- Ensure that processes are in place to recruit, motivate, train, and reward the BSEE workforce in accordance with merit system protection principles and federal regulations.

BSEE has developed and implemented multiple new training programs to promote leadership development, improved technical proficiency, familiarity with investigation techniques, oil spill preparedness, and new employee orientation. BSEE's Human Capital Council is responsible for aligning human capital programs with the bureau's mission, vision, goals, and priorities and oversees the full breadth of human resources activities including training.

In their 2010 reviews of DOI's OCS management, the OIG and the Outer Continental Shelf Safety Oversight Board recommended improvements in training and professional development for inspectors including:

- Develop a bureau-wide certification or accreditation program for inspectors;
- Consider partnering with the Bureau of Land Management and its National Training Center.

[166] U.S. Office of Personnel Management, ***Federal Employee Viewpoint Survey Results, Bureau of Safety and Environmental Enforcement, 2014, 2015, 2016*** (Positive Results Reported)).

- Develop a standardized training program to ensure inspectors are knowledgeable in all pertinent regulations, policies, and procedures.
- Ensure that annual training keeps inspectors up-to-date on new technology, policies, and procedures.
- Develop Individual Development Plans for inspectors designed to achieve career advancement strategies, promoting sound succession planning and fostering employee development and satisfaction.

BSEE's National Offshore Training Program (NOTP), which is operated by the Offshore Training Branch in OORP, provides comprehensive, multi-tiered, professional development for inspectors, engineers, and scientists focusing on deep water drilling, subsea operations, and training for other specialty areas. With classes on-site in the Gulf of Mexico Region, NOTP has established curricula and requirements tailored to develop and refresh skills for professions including inspectors and engineers. In addition to classes that address tailored requirements for inspectors and engineers, NOTP offers classes in aviation safety, general awareness security, and accident review that are required for all frequent offshore travelers. NOTP tracks and reports on the completion of training and shares this information to help managers ensure that their staff members complete required training. In FY 2015, BSEE held 106 training courses for 979 participants resulting in 23,980 training hours, a 34 percent increase in the number of courses, a 2.5 percent increase in participants, and 2.5 percent increase in hours over FY 2014.

Although BSEE does not currently require accreditation or certification of inspectors, BSEE requires that they meet established training requirements, which are tracked by their supervisors. BSEE has established training and competency requirements for inspectors to progress to higher skill levels. Course work and on-the-job training is required and approval to operate at Levels II and III is only given after evaluation and approval by a Supervisory Inspector who confirms that the inspector has the necessary knowledge and sufficiently demonstrated capability in the field.

With regard to partnering with BLM, BSEE staff attend BLM classes when this meets their training needs; GAO reported that 15 BSEE employees did so during the years 2012 to 2015. Under the terms of a recently executed BLM-BSEE interagency agreement, staff from either bureau can attend classes if the curriculum meets the other agency's training needs. In addition, BLM and BSEE cooperated in the development of a simulation course entitled *BSEET 3D Drilling Rig Tour*, and have agreed to continue collaboration. BSEE has also committed to higher levels of coordination with BLM and BOEM with regard to their training needs, evaluating training effectiveness, and pursuing potential opportunities for sharing training resources and developing technical competencies for all key oil and gas staff.[167]

[167] Government Accountability Office, ***Oil and Gas Oversight: Interior Has Taken Steps to Address Staff Hiring, Retention, and Training But Needs a More Evaluative and Collaborative Approach,*** GAO-16-742, September 2016.

BSEE is planning to review NTOP effectiveness and the need for improvements, including the possible addition of a certification component. This is responsive to GAO recommendations,[168] statutory requirements,[169] and OPM and DOI requirements for review of training programs to identify training needs and assess how well training efforts contribute to accomplishing the agency mission.

BSEE developed training programs responsive to OIG and Outer Continental Shelf Safety Board recommendations for improved expertise in investigations. Both entities recommended appropriate training in incident investigation. The Safety and Incident Investigations Division Chief implemented a new training program for personnel with investigatory responsibilities through the Federal Law Enforcement Training Center (a component of the Department of Homeland Security) in Charleston, South Carolina. Classroom and scenario based training is provided to personnel that may be involved with any phase of an investigation. This standardized training helps ensure that data collection is done in a consistent and repeatable manner. Coursework provides a practical understanding of how to plan, conduct, and conclude an incident investigation; it includes the methods and techniques used for data gathering, interviewing, and reporting investigative findings. The participants are provided classroom instruction, workshops, and case studies.

The National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling identified inadequate training as a key deficiency contributing to insufficient oversight by MMS. Among the Commission's recommendations was improved technical expertise within the staff responsible for reviewing and approving oil spill response plans. BSEE's Oil Spill Preparedness Division (OSPD) has created a Preparedness Analyst Qualification System that establishes the requirements whereby preparedness analysts satisfy training and qualification requirements, including standardized training, experience, and demonstrated performance. OSPD's program incorporates in-house classroom and on-line training.

One of the outcomes of BSEE's human capital planning was the identification of a critically important need to undertake succession planning and leadership training. BSEE's Human Capital Management Strategic Plan identified BSEE's age cohorts, which revealed a large number of employees over 50, a high percentage of BSEE's employees that were or would be imminently eligible for retirement, and a large cohort of young employees that would not be ready to assume leadership positions. Thus, preparing employees to assume leadership positions became a compelling need and BSEE developed a training program to address this need.

BSEE's Leadership Development Program achieves Strategic Plan goals for skills development for managers who can lead the bureau in the future. This program develops supervisory and managerial competencies and leadership skills to prepare employees to assume leadership positions; it also develops individual leadership skills to enhance overall

[168] Ibid.
[169] 5 U.S.C. § 4121, added by the Federal Workforce Flexibility Act of 2004.

effectiveness. There are three tracks within the program, each focused on different stages of leadership and organized around OPM's Leadership Framework, which consists of five executive core qualifications and 28 leadership competencies. Training of the first cohort of BSEE employees has begun in one track, Emerging Leaders, which is an 18-month program consisting of classroom training, coaching and mentoring, and experiential/practical learning. Two other tracks are being developed: the Excellence in Leadership Program and Leadership Fundamentals. BSEE has created an Office for Leadership Development and Engagement to support the development of leadership and mentoring programs.

Organization of BSEE's Training Programs: Federal agencies are encouraged to use the most appropriate mix of centralized and decentralized approaches for training and development programs. Centralized training programs can enhance consistency of training content and offer potential cost savings, standardize record keeping, and improve the accuracy of reporting. Alternatively, a decentralized approach can facilitate efforts to tailor training to meet specific needs. A combination of both centralized and decentralized approaches can be implemented with central management of reporting and record keeping.

Regardless of the approach selected, strategic training and development guidance recommends that agencies deploy mechanisms to effectively limit unnecessary overlap and duplication of effort and ensure delivery of integrated and consistent messages. It is important to ensure that training and development efforts are cost effective relative to the anticipated benefits and to incorporate performance measures that can be used to demonstrate contributions that these programs make to improve results. By incorporating valid measures of effectiveness into their training and development programs they offer, agencies can better ensure that they adequately address training objectives and thereby increase the likelihood that desired changes will occur in the target population's skills, knowledge, abilities, attitudes, or behaviors. [170]

Training programs in BSEE currently operate under the leadership and guidance of four programs: the Office of Administration, SIID, OORP, and OSPD. Consideration could be given to consolidating aspects of these programs in order to achieve efficiencies, standardize curriculum development, and simplify tracking and reporting. Such consolidation may facilitate BSEE's efforts to evaluate training needs of staff, develop technical competencies, and annually evaluate training, as required by OPM and directed in the DOI Departmental Manual.[171]

BSEE's Training Governance Board should engage all of these offices and divisions as an initial step to share expertise and lessons learned, establish comprehensive standard training requirements for employees, and become a BSEE resource for the identification of

[170] Government Accountability Office, ***Human Capital: A Guide for Assessing Strategic Training and Development Efforts in the Federal Government***, GAO-04-546G.
[171] GAO, ***Oil and Gas Oversight: Interior Has Taken Steps to Address Staff Hiring, Retention, and Training But Needs a More Evaluative and Collaborative Approach***, GAO-16-742, September 2016.

training and development improvements. This would help ensure that BSEE is achieving high levels of integration of its training programs.

Recommendation 6.2

BSEE should create a training governance structure that encompasses oversight of all of its training programs, not just technical training, and should assess the benefits of consolidating or leveraging aspects of its training programs to ensure the highest levels of integration and efficiency across the bureau.

Fostering An Inclusive Workplace

Strategic human capital management guidance depicts high performing agencies as those that are inclusive and foster an environment that empowers and involves employees. An inclusive workplace is at a competitive advantage for achieving results. One component of an inclusive workplace is striving to reduce the causes of workplace conflicts and ensuring that conflicts are addressed fairly and efficiently.

Maintaining an inclusive workplace is a challenge that all federal agencies confront. GAO examined this issue and found that federal agencies have been increasingly using alternative dispute resolution programs (ADR) to resolve workplace disputes. ADR can be a way to avoid the more formal dispute resolution process or as a supplement to traditional ways of handling disputes. Another factor in the increasing adoption of ADR practices has been a recognition that traditional methods of dispute resolution do not always get at the real or underlying issues involved between disputants and that methods that focus on the disputants' interests may have advantages. Options available to federal agencies include ADR, ombudsmen, mediation, dispute resolution boards, and peer panels. All appeared to be useful in resolving workplace disputes, thereby avoiding more formal avenues for resolution.[172] To complement ADR, organizations also invested in training efforts aimed at preventing disputes and equipping employees and managers with skills to resolve disputes.

Ombudsman positions provide significant benefits by helping employees to resolve issues that could impact their performance. Although federal employees are afforded opportunities for redress of workplace disputes, these traditional processes can become adversarial and impact the underlying relationships and harm the long-term productivity of the office and morale of employees. Ombudsmen provide an informal option to deal pragmatically with conflicts and other organizational climate issues.

In an evaluation of ten federal agencies, GAO found that ombudsmen deal with a wide range of workplace issues, helping employees get answers, listen to employee concerns, counsel them on alternative courses of action, and coach them in managing situations. At the same time, the ombudsmen can add value by bringing systemic issues to management's

[172] Government Accountability Office, ***A Model of Strategic Human Capital Management***, GAO-02-373SP, March 2002.

attention and thereby help correct organizational situations and develop strategies to prevent and manage conflict. Vital to this role is confidentiality, neutrality, and independence. Key aspects of the function include direct access to agency leadership and neutrality in dealings by not taking sides in disputes, but rather advocating for results through informal resolution.[173]

Within DOI, the Office of Collaborative Action and Dispute Resolution Office is the responsible office that can provide assistance in evaluating expanded use of ADR and/or establishing an ombudsman function or securing comparable services. The study team did not include a recommendation in this area because the team did not assess the degree to which BSEE already utilizes alternative dispute resolution and mediation. Rather, the study team suggests that BSEE could, if needed, expand its use of ADR and/or establish an ombudsman or procure ombudsman services.

[173] Government Accountability Office, ***Human Capital, The Role of Ombudsmen in Dispute Resolution***, GAO-01-466, April 2001.

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CHAPTER 7: ADEQUATE RESOURCES FOR SAFETY, ENVIRONMENTAL PROTECTION, AND CONSERVATION OFFSHORE

The National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling conducted an exhaustive analysis of the causes of the DWH disaster and recommended reforms to make offshore energy production safer. One of three core issues identified by the Commission was the need for adequate funding. The Commission recommended that Congress make it a priority to fund BOEM and BSEE to regulate offshore oil and gas development "in order to ensure a safer and more environmentally responsible industry in the future." Recognizing that a portion of the funding for these bureaus comes from offsetting collections, the Commission suggested that the oil and gas industry should provide more funding, including possibly through increased inspection fees or imposition of an annual regulatory fee or fees on new and existing leases.[174]

BSEE's FY 2016 budget of $204.7 million consisted of $88.5 million in appropriated funds and $116.2 million in offsetting collections ($59 million in inspection fees, $49.4 million in rental receipts and $7.8 million in cost recovery fees). This is also BSEE's approximate 2017 operating level under the continuing resolution that is currently in place.[175]

Between FY 2012 and 2016, BSEE's budget increased by a total of $7.3 million (3.7 percent). This includes increases of $12.2 million or 16 percent in appropriations, which were offset by reductions in offsetting collections of $4.9 million or 4 percent. These increases were added to a funding base for DOI's OCS programs that had been increased by Congress. Congress appropriated $29 million in 2010 for the restructuring of DOI's OCS programs. In 2010 Congress also provided new authority to charge annual inspection fees and continued authority to fund a portion of the budget from rental income collected on existing oil and gas leases. Together, inspection fees, rental income and other cost recovery fees comprised about 57 percent of BSEE's FY 2016 budget.

Originally intended to provide stability for BSEE's programs by leveraging appropriations, these funds from industry are now declining and in addition inspection fee authority does not provide the flexibility that BSEE needs to charge for follow-up and more complex inspections. BSEE and DOI, with support from OMB, proposed in the recent FY 2017 President's budget to address the challenge of declining collections and changes to the inspection fee program, however, Congress did not act on these proposals and BSEE continues to face a potential shortfall in funding.

In addition, expanding responsibilities for oversight of OCS renewable energy development and additional workload and other issues related to decommissioning are likely going to

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[174] Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling,*** January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.

[175] Further Continuing and Security Assistance Appropriations Act, 2017, P.L. 114-254, December 1010, 2016.

impact BSEE's budget and should be considered in BSEE's budget planning and identified, as appropriate, in future budget requests.

Budget Outlook

BSEE faces budgetary challenges because of a potential shortfall in funding resulting from a decline in collections that fund a significant portion of the budget. The 2017 budget included proposals to address the shortfall, but Congress did not enact 2017 appropriations. BSEE and most other federal agencies are funded through a continuing resolution that supports operations through April 28, 2017. The continuing resolution essentially continues the 2016 funding levels and authorities. In FY 2016, collections comprised 57 percent of BSEE's total budget; thus, a shortfall could significantly impact BSEE's ability to maintain its current capabilities.

The single largest source of collections to offset BSEE's budget comes from inspection fees. The annual appropriations act includes authority to charge inspection fees using a fee structure with variable fee amounts for inspections of drilling rigs and production facilities. The current legislation allows BSEE to charge a drilling rig inspection fee each time a drilling rig inspection is conducted. However, BSEE can only charge operators of production facilities for one annual inspection of such facilities regardless of whether or not follow up inspections are required in the same year.

To remedy this situation, the FY 2017 budget proposed to modify the inspection fee legislative authority to allow charges for additional facility inspections and thereby align the fee collections more closely with the actual requirements for inspection. Inspection of deep water facilities imposes additional costs. Because oil and gas operations in the Gulf of Mexico have increasingly shifted further offshore, deep water facilities account for a greater share of OCS production. As of January 2016, 80 percent of the total OCS production occurred in deep water. In addition, the bureau has placed greater emphasis on witnessing high-risk activities, which, again because of their complexity, consume more resources to inspect. Finally, new inspection initiatives require inspectors to spend more time conducting follow-up inspections on higher risk facilities, performing in-depth incident investigations, and preparing enforcement actions such as civil penalties. Currently, an inspection fee is not charged for any of these activities. There were approximately 1,000 follow up inspections conducted in FY 2015 and 1,600 in FY 2016 that BSEE was unable to charge a fee for under the current inspection fee language.

In addition, inspection fee collections are declining. In recent years, the amount authorized in the appropriations act for inspection fees has been constant at $65 million, but the bureau collected $58 million in FY 2014, $55.5 million FY 2015, and $50.1 million in FY 2016. The inspection fee language change request, as discussed earlier, is intended to align fee collections with the manner in which inspections are being performed and to ensure adequate funding for the inspection program. In action on the FY 2017 appropriation bills, the House and Senate provided $12 million in appropriated funding in lieu of approving the proposed inspection fee structure change. This is not a sustainable approach, particularly since the House stated that this would be the last time appropriated funds would be

provided to offset collection shortfalls and directed BSEE to prioritize program activities accordingly. This is an indication that BSEE may have to reduce its budget in the future in order to absorb the shortfall in funding caused by constrained fee authority.

An additional significant source of funds that offsets BSEE's budget comes from rental receipts. Rental receipts are collected from active leases before they begin production. Collections from rental income have declined and are expected to continue to decline. This is because fewer leases are being sold in the Gulf of Mexico; fewer tracts will likely be leased; and the number of leases subject to rentals will likely decrease. The FY 2017 budget request proposed to change the allocation of offsetting rental receipt revenue between BOEM and BSEE moving from a 65/35 percent division respectively, to a 70/30 percent division. In anticipation of lower offshore rental receipts and fee collections, the request included an increase of $7.5 million in direct appropriations to address the projected shortfall. The shortfall for both bureaus in FY 2017 is estimated at $15.94 million when using FY 2016 estimates as a baseline and is expected to grow to $82.3 million by FY 2025.[176]

Although offsetting collections are anticipated to decline, overall OCS activity and programmatic requirements are not decreasing. Despite reduced oil and gas prices, production in the Gulf of Mexico has steadily increased as new long-term projects came on line in 2015 including five deep water projects that began production during 2015. Given the increasingly complex operations offshore, it is important for BSEE to maintain capacity to support expected levels of program activity and protect the important gains in safety and environmental protection that have been achieved in the last five years.

When collections are less than the amount programmed in the budget, the difference is funded by the General Treasury, ensuring that BSEE receives the amounts programmed in the budget. These amounts to fund the shortfall come from within the overall allocations for appropriations, causing a scoring problem for the Congress and OMB that has to be addressed within constrained budgetary amounts allowed for appropriations. This is an area of risk for BSEE because without increased appropriations to make up the shortfall, the budget for the bureau will have to be reduced and the gap between the amounts needed and anticipated collections is widening.

BSEE has, in recent years, been able to fund a portion of its non-recurring expenses with funds available from unobligated balances in prior years. However, these funds cannot serve to address this long-term problem of declining collections and potentially inadequate resources. Thus, a long-term strategy to avoid reductions to BSEE's budget is needed.

BSEE has assessed the potential impacts of a reduced budget, which include slowing or, in some cases, halting the progress made in improving safety, environmental compliance, and enforcement activities. Reduced levels of staffing could impact inspections, investigations,

[176] U.S. Department of the Interior, ***Budget Justifications and Performance Information, Fiscal Year 2017: Bureau of Safety and Environmental Enforcement***, pp. 44-46.

permitting, technology assessment and standards development, compliance and enforcement, and oil spill response planning and preparedness. Reduced staff could have an impact on the ability of the bureau to respond to industry requests and potentially impact timeframes to respond to industry with permit reviews and approvals for exploration and development. Budgetary reductions could impact research and capacity for independent assessment of technology to identity design defects. Reductions could also impact BSEE's efforts to develop initiatives such as data stewardship and support for modernization of information technology that will streamline the exchange of information with industry and improve transparency.

Alternative Funding Scenarios

In its 2011 recommendation that the oil and gas industry provide more funding, including possibly raising the inspection fee or imposing annual regulatory fees on new and existing leases, the President's Commission compared this fee proposal to the mechanism used by the Federal Communications Commission (FCC). In FY 2016 the FCC received $384 million[177] from regulatory fees imposed on interstate and international radio, television, wire, satellite and cable operators in all 50 states, the District of Columbia, and U.S. territories. An independent U.S. government agency overseen by Congress, the Commission is the United States' primary authority for communications law, regulation, and technological innovation. The FCC is authorized to obligate funds up to the amount approved in the annual appropriations act. Amounts appropriated are offset by fees collected from industry. Fee amounts collected in excess of the budget are not available to the FCC.

This is a similar arrangement to BSEE, whereby BSEE's annual budget is funded through appropriations and these are offset by the amounts collected into the General Treasury from inspection fees, rental income, and other fees. This arrangement ensures ongoing congressional oversight of the fees collected as well as the amounts made available to operate federal programs. An alternative arrangement whereby a new source of revenue is made available directly to BSEE with authorization to obligate in total, such as is available to some federal programs, would require congressional enactment of legislation to authorize the new source of funding and the use of funds by BSSE. Executive Branch and congressional approval would be required, but because it allows for reduced oversight it is unlikely that this arrangement would be acceptable to the Executive Branch or Congress.

The Commission suggested that an industry-based source of funds for BSEE would be an advantage in terms of long-term stability. They suggested that if regulation were funded by the industry instead of the taxpayers, Congress would have less incentive to reduce funding.[178] The Commission offered that Congress could instruct DOI to include lease

[177] U.S. Federal Communications Commission, ***FY 2017 Budget in Brief***, February 2016.
[178] National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, ***Deep Water: The Gulf Disaster and the Future of Offshore Drilling***, January 2011, available at https://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.

provisions that require the imposition of regulatory fees, which is permissible based on broad authority in OCSLA to include in leases "such rental and other provisions as the Secretary may prescribe at the time of offering the area for lease."[179]

DOI could impose a new fee or new fees through the leasing process through rulemaking. However, because of the comity between the Executive Branch and Congress it would be important to notify and solicit input from Congress before doing so. Imposing a new fee on industry would be preferable, because a proposal to seek funding for BSEE from current OCS funding streams, i.e. existing fees, rentals, royalties, or bonus bids would impact the amounts deposited into the General Treasury and already accounted for thereby creating a scoring problem and adding to the deficit.

In FY 2016, in addition to inspections fees and rental receipts, BSEE collected $7.8 million through cost recovery fees. Cost recovery is authorized by the Independent Offices Appropriations Act of 1952, which provides authority to federal agencies to recover the costs of providing services to the non-federal sector. There are 31 different services and activities conducted by BSEE for which there are charges including for example review of plans and applications by oil and gas operators.

BSEE recently conducted an in-depth review of these 31 services and pre-production site visits along with the associated cost recovery fees to determine whether the costs of providing each of the services supports the existing fee structure in the existing regulations. This review and associated proposal to align fees with costs complies with OMB requirements in Circular A-25, which requires that federal agencies assess charges to identifiable recipients of special benefits derived from federal activities beyond those received by the general public.[180] A Federal Register notice issued on November 17, 2016 is a result of this review and provides the basis to revise the fee schedule in order to:

- Increase 17 fees;
- Reduce 8 fees;
- Subdivide 6 fees into two tiers by complexity, with six of the subdivided fees increasing above the existing undivided fee, and six decreasing;
- Decrease certain fees for two of the facility production safety system applications for visits offshore and increase them for visits to facilities while in a shipyard; and
- Implement a new pre-production site visit fee for four facility production safety system applications that did not previously include site visit fees.[181]

[179] 43 U.S.C. § 1337(b)(6)).
[180] OMB Circular A-25 requires federal agency review of user charges to determine whether adjustments are necessary and to review other agency programs to determine whether new fees should be established for any services it provides, at: https://obamawhitehouse.archives.gov/omb/circulars_a025//.
[181] Federal Register, ***Proposed Rule - Adjustments to Cost Recovery Fees Relating to the Regulation of Oil, Gas, and Sulfur Activities on the Outer Continental Shelf***, November 17, 2016, pp. 81033-81049.

As stated in the Federal Register Notice, the results of BSEE's analysis of the costs of these services reflects the changes in offshore operations in the last ten years: offshore operations have moved into deeper, more complex, and more hostile environments. This evolution of offshore operations has resulted in increasingly technical and more complex requests submitted by operators. Reviewing and approving these requests requires extensive communication and collaboration among offshore operators, BSEE engineers, and BSEE subject matter experts. It also requires additional time and more experienced, senior-level staff. The costs of these services also reflect higher personnel costs than were included in the existing regulation due to the special pay rates for BSEE's geoscientists and engineers conducting this work.

Originally scheduled to close on January 17, 2017, BSEE extended the comment period on the proposal through February 16, 2017.[182] Once finalized the new regulation would adjust BSEE's estimated cost recovery to align with the costs of providing these services. The timing on the processing of public comments and finalization of the regulation is not known.

Stability in BSEE's funding would support continuity for the organization and retention of its highly skilled workforce. The Commission was not alone in recognizing the impact of inadequate resources on the ability of MMS to effectively regulate an industry with some of the most complex technology available in the energy field.[183]

Recommendation 7.1

BSEE, in cooperation with DOI and OMB, should finalize the cost recovery regulation and continue to seek proposed changes in inspection fees to align them with current program requirements. BSEE, in cooperation with BOEM, should formulate proposals to submit to DOI and OMB that fund the shortfall in collections. Timely action is needed so these additional regulatory fees can be included in future OCS leases and avoid impacts to BSEE's budget.

Renewable Energy: Assuming full responsibility for the regulatory aspects of the renewable energy program will result in increased workload and costs for BSEE. In particular, there are very likely unique skills and competencies needed that BSEE may not currently possess. In preparation for projects coming on line in FY 2019, resources should be included in BSEE's budget for this new set of responsibilities.

[182] Federal Register, ***Proposed Rule - Oil, Gas, and Sulfur Activities on the Outer Continental Shelf – Adjustments to Cost Recovery Fees***, January 5, 2017, pp 1284-1285.
[183] Stuart Theriot, ***Changing Direction: How Regulatory Agencies Have Responded to the Deepwater Horizon Oil Spill (Part I of II)***, *LSU J. Energy L. & Res. Currents,* November 19, 2014.

Recommendation 7.2

BSEE should consider funding requirements for the renewable program as part of FY 2018 budget formulation and in future budgets.

Decommissioning: Responsibilities for decommissioning are also an expanding area of responsibility for BSEE. Aging infrastructure in the OCS and a sustained period of low prices for oil and natural gas are driving a significantly increased workload. BSEE is responsible for working with operators and determining if existing structures will be left in place or removed, reviewing and approving permits, and conducting compliance reviews of the work done by operators. More than 40 percent of the platforms on the OCS are over 25 years old. Over the past decade industry has averaged 130 platform removals annually, however, the number of permits issued for platform removal in 2012 was three times this number.[184] There is also a significant workload for BSEE related to evaluating the liability and financial assurance associated with performance of decommissioning, including bankruptcy petitions and restructuring agreements. BSEE is working closely with BOEM, the Office of the Solicitor and others in DOI to identify liabilities and ensure that these costs do not revert to the government.

Recommendation 7.3

BSEE should consider funding requirements for the decommissioning program as part of FY 2018 budget formulation and in future budgets.

[184] BSEE Decommissioning Liability Workshop, New Orleans, LA, August 25, 2016 and Michael Saucier, BSEE Decommissioning Abandonment Summit, no date.

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CHAPTER 8: FACILITATING ORGANIZATIONAL AND CULTURAL CHANGE

BSEE has achieved substantial development since its establishment in 2011. BSEE was created for the explicit purpose of implementing reforms in management of the OCS, for which the need had long been recognized and the Deepwater Horizon event created a sense of urgency. The establishment of BSEE as a separate entity represents a change in DOI's national program focus towards balancing production with safety and environmental compliance and conservation. In support of this balanced program, BSEE has adopted a risk-based approach, giving greater attention to low probability, high consequence events and being more prepared to respond to new and emerging types of operational and organizational risks, which could impact the OCS and expose taxpayers to liability.

As detailed throughout this report, this shift in focus has led to the modification of BSEE's organizational structure and new capabilities, processes, and procedures necessary to support it. It has also led to the implementation of new and more effective, performance-based regulatory approaches. While BSEE faces a number of risks, continued progress toward attaining strategic goals and ongoing activities planned to keep pace with industry developments could help to reduce risk. Risk could also be reduced with a change management strategy that facilitates cultural change, communication and collaboration, and encourages alignment with BSEE's strategic vision.

A change management strategy can build on work that has already been done and be the mechanism to facilitate initiatives that are being implemented– the national program management model, environmental stewardship, and the communication and employee engagement strategy (discussed later in this chapter). The change management strategy can also integrate desired and/or planned changes to assume additional responsibilities for renewable energy regulation and enforcement. The results of internal reviews and evaluations can also inform a change management strategy as can actions recommended and directed by others including GAO and Congress.

Change management is an important component of implementing organizational realignments, as well as in establishing and strengthening governance and accountability procedures. It is also an essential element of ERM (discussed in Chapter 5), which relies on collaboration and knowledge sharing to support risk-based decision making, learn from risk-based pilot efforts, and adjust those efforts based on experience. As a cross-cutting initiative, ERM, can drive change by creating opportunities to integrate and connect program elements. Knowledge management, discussed in Chapter 4, shares a number of tools with change management that can be used to build a culture of collaboration.

Change Management

Change Management can be defined as a "deliberate set of activities that facilitate and support the success of individual and organizational change and the realization of its

intended business results."[185] Key elements of change management, as adapted by the Academy are:[186]

- Ensure top leadership drives the transformation
- Establish a clear vision and integrated strategic transformation goals
- Design the organizational structure that will enable the vision
- Create a sense of urgency, implement a timeline, and show progress from day one
- Communicate frequently through multiple channels to multiple stakeholders
- Dedicate a powerful implementation guidance team to manage the transformation process
- Engage employees to seek their improvement ideas, build momentum, and gain their ownership for the transformation
- Sustain the effort by nurturing a new culture, rewarding risk, and assessing progress

Appendix H includes a summary of widely accepted best practices for change management that could supplement the BSEE-tailored change management strategy described here.[187]

The study team's concept of a change management strategy is a structured group of activities designed to achieve and sustain desired outcomes and drive toward BSEE's desired future state. The change management strategy defines the transformation process that BSEE would use to achieve better integration across the organization, complete efforts that bring consistency and cohesiveness to operations, improve collaboration and communication, and better align multiple efforts to bring about more effective outcomes sooner and more efficiently.

As an organization in transition that is committed to strategic goals for operational and organizational excellence, BSEE is in an ideal position to implement change that is not only necessary but also unavoidable in a the rapidly shifting environment in which BSEE operates. Some of the core elements described above are in place: top leadership is driving transformation with a clear vision and strategic goals defined in the strategic plan. BSEE's principles for clarity, consistency, predictability, and accountability that are embedded in the strategic plan can help drive cultural and employee behaviors. Although it faces implementation challenges, the national program management model provides an organizational structure that is designed to enable the vision and promote maturity in program areas that GAO has criticized including investigations and enforcement. Implementation of the model is inextricably linked with and dependent on cultural change.

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[185] Association of Change Management Professionals, ***What is Change Management***?, available at http://www.acmpglobal.org/?page=WhatisCMhttp://www.acmpglobal.org/?page=WhatisCM.

[186] Adapted from Kotter 2002, in National Academy of Public Administration , **U.S. Coast Guard Modernization Study**, Washington D.C., April 2009.

[187] Cohen, Dan and John Kotter, ***The Heart of Change,*** Boston: Harvard Business School Press, 2002; Government Accountability Office, ***Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations***, GAO-03-669, July 2003; Marc A. Abrahamson and Paul R. Lawrence, ***Transforming Organizations***, Lanham, MD: Rowman and Littlefield Publishers, 2001.

A key challenge for BSEE in implementing planned change, including model implementation, is getting buy-in and ownership at all levels and in all units of the organization, particularly the larger units that have a substantial influence on the organization. This will require employee engagement and input as to the way to achieve the desired future state, as early in the process as possible. The strategic planning process can provide a basis for expanded engagement and getting buy-in for needed changes. Use of the Foresight process can engage the leadership in exploring more uncertain longer-term alternative scenarios that could affect the mission, and potential consequences of decisions in a changing environment.

An important aspect of getting buy-in will be to acknowledge and reconcile conflicting visions of the organization's immediate and long-term future, which might also be explored using Foresight tools. Particular differences that came to the attention of the study team pertain to the environmental compliance program, for which roles and responsibilities remain to be definitively decided, and between the conceptual approaches to risk management found in program-based initiatives and in ERM.

Another important aspect of buy-in is to make the case for specific changes that demonstrates their urgency and their benefits, for individual employees and programs as well as for the organization and its principal stakeholders - the regulated industry and the public. The strategic plan, combined with results of the Foresight process, and examples from the areas of success in collaboration and national program management model implementation – in SIID and data stewardship – should all be used to make the case for change and to engage all levels of the organization.

Implementation of the change management strategy will require the articulation of activities needed to achieve these benefits including an integrated timeline with milestones, guidance of a dedicated team (governance), and performance agreements linked to the roles that individuals have in the process. The entire process will need to be supported by leadership and a strategy for communication and ongoing employee engagement.

Design and Implementation of a BSEE Change Management Strategy

As discussed in Chapter 4, BSEE considered a change management plan in 2015 as a potential tool to support implementation of the national program management model. That initial change management plan suggests a number of useful initiatives including strategic communications, leadership engagement, employee engagement, and training to support BSEE's people through the transition. The initial change management plan was intended to support implementation of the program management model and so is likely not appropriate for BSEE's ongoing organizational and cultural transformation, but may provide a point of departure for the development of a more comprehensive strategy.

BSEE's change management strategy should build on its earlier efforts and on the best practices already discussed, incorporating specific guidance in the following areas:

- Leadership;
- Culture;
- Governance;
- Communication; and
- Collaboration.

The Leadership Component: BSEE has two large and highly influential entities that dominate its operations, culture, and norms. The Office of Offshore Regulatory Programs (OORP), located in headquarters, is significantly larger in size and scope than the Oil Spill Preparedness, Environmental Compliance, Safety and Incident Investigations, and Safety Enforcement Divisions. The Gulf of Mexico Region (GOMR) controls a field program that eclipses the Pacific and Alaska regional programs in size and scope of activity. Given their size and influence, OORP, GOMR and their leaders should have a significant role in leading change management efforts along with the other senior management team members.

All of BSEE's leaders and managers should be ensuring engagement in change efforts throughout all levels of their organization, making sure there are high levels of communication and collaboration, creating opportunities for teamwork and making training, coaching, mentoring and other tools available to facilitate this process. BSEE's 2015 change impact assessment underscored the need for strong collaboration between members of headquarters management functions and among the members of the Management Council. The assessment also recommended the use of strategies, tools, and resources to encourage teamwork and open communication in order to overcome a tendency of individual members to make decisions independent of other activities taking place across the bureau.

The Cultural Component: The Academy study team was told in interviews that cultural differences are impeding the ability of some organizations and individuals to work together as well as they should. The team was also told there is insufficient appreciation, understanding, and respect between headquarters and the regions and that collaboration is not practiced uniformly throughout the organization. Despite cultural differences and less than desirable engagement levels, however, BSEE's employees are committed to the organization and its mission. This is a positive force for change and a good foundation for integrating the efforts of BSEE's employees and organizations to work more effectively toward a common culture and BSEE's strategic goals.

The organizational culture is shaped by the underlying assumptions, beliefs, values, attitudes, and expectations shared by an organization's members. Culture change or perpetuation of a desired culture is a long- term effort that takes 5-10 years to complete and requires a combination of techniques. Of greatest importance is leadership, the

commitment from management in words and actions, and training to promote and develop skills.[188]

The following techniques were found to be useful by private sector companies in changing a culture and perpetuating a desired culture. Strong top management and a display of commitment and support for core values and beliefs are crucial.

- Display top management commitment and support for values and beliefs;
- Train employees to convey and develop skills related to values and beliefs;
- Develop a statement of values and beliefs;
- Communicate values and beliefs to employees;
- Use a management style compatible with values and beliefs;
- Offer rewards, incentives, and promotions to encourage behavior compatible with values and beliefs;
- Convey and support values and beliefs at organizational gatherings;
- Make the organization's structure compatible with values and beliefs;
- Set up systems, procedures, and processes compatible with values and beliefs;
- Replace or change responsibilities of employees who do not support desired values and beliefs;
- Use stories, legends, or myths to convey values and beliefs;
- Make heroes or heroines of exemplars of values and beliefs;
- Recruit employees who possess or will readily accept values and beliefs;
- Use slogans to symbolize values and beliefs;
- Assign a manager or group primary responsibility for efforts to change or perpetuate culture.[189]

BSEE's mission for safety, protecting the environment, and conserving resources through vigorous regulatory oversight and enforcement has been in place since 2011 and captures the bureau's core values. BSEE's efforts to bring about a melding of diverse cultures that exist within the bureau could be informed with the use of data-driven analyses of workforce composition and employee feedback both through the FEVS results (discussed in Chapter 6) and the employee engagement process discussed later in this chapter. This is an area that requires special attention in that BSEE's workforce includes a mix of employees who have many years of service and relatively new federal employees, more mature employees who are nearing retirement and millennials. About one-half of BSEE's employees have ten or fewer years of federal service and about one-quarter have more than 25 years of federal service. The single biggest cohort of employees is comprised of individuals with 5-9 years of service. Nearly one-half of the employees are in mission-critical series including engineers, geographers, geologists, geophysicists, and inspectors.

[188] Government Accountability Office, ***Organizational Culture: Techniques Companies Use to Perpetuate or Change Beliefs and Values***, GAO/NSIAD-92-105, February 1992.
[189] Government Accountability Office, ***Organizational Culture: Techniques Companies Use to Perpetuate or Change Beliefs and Values***, GAO/NSIAD-92-105, February 1992.

The spread of employees geographically is also not uniform, with the majority of employees in headquarters and GOMR.

The Governance Component: Governance is defined as the structures and processes that enable the organization.[190] Governance structures can improve the organizational and operational effectiveness of federal agencies and programs. Governance provides a structure for collaboration, information sharing, and decision making; promotes alignment and common understanding of the organization's vision, goals, and priorities; improves the deployment of resources; is a venue to resolve conflicts; provides representation for majority and minority views; and maintains a sense of urgency and focus.[191]

Governance structures and processes, in the form of councils, committees, boards and management teams should be a component of BSEE's change management strategy. In developing the strategy, BSEE should balance the value of additional governance structures and processes with the additional resources needed to support these structures and processes. BSEE's has formal governance structures and processes in place at the leadership level and for information technology (IT), data stewardship, human resources, and training.

The Management Council: Serving as BSEE's executive steering committee, the BSEE Management Council (MC) includes the senior managers in headquarters and the regions. It is a forum for interaction among the office, division, and regional directors and with the Director and Deputy Director. Meetings of the MC are regularly scheduled and consistently held. The MC has been a consistent source of direction, leadership, and strategic alignment for the bureau.

Although no longer in existence, the Management of Operations and Policy or MOP operated at the middle management level and as a forum for OORP and the regions to work through programmatic and operational issues. Although the Director and Deputy Director encourage senior managers to meet, this is not happening (at least not consistently) and does not substitute for a formalized, instituted governance structure. There continues to be an interest on the part of BSEE's senior managers to create a middle management body as a venue to share information and collaborate on programmatic and operational issues. There is no effort underway to establish a group and there is a lack of consensus about the scope and purpose because of concerns about convening a group that is too large to be functional and the need for focused discussion about individual program areas that does not require attendance by all members of the leadership team.

More informal governance structures in the form of communities of practice could help to address these needs. The study team recommends that BSEE establish communities of practice for critical areas of knowledge associated with strategic risks as part of a

[190] IBM Corporation, ***Defining Program Governance and Structure,*** 2005.
[191] State of Illinois Interoperability Project, ***Best Practices in Project Governance Research Summary***, February 2013.

knowledge management strategy, and in support of enterprise risk management as discussed in Chapters 4 and 5. The study team also recommends convening a strategic plan working group (recommended in Chapter 5) and governance bodies organized around national program managers (discussed in Chapter 4).

IT Governance: There is a governance framework for information technology (IT) including shared governance with BOEM to align and prioritize IT-enabled solutions and resources based on the goals, directives, and missions of the bureaus and with DOI plans. The BOEM/BSEE IT Technology Leadership Board includes representation from both bureaus and ONRR. It is the highest-level body that oversees and approves the shared IT portfolio, IT strategic plan, IT policies and budget, and makes determinations about identified risks. BOEM and BSEE each have a Requirements Priority Board that is the second level body that governs the bureaus' IT portfolio, the budget, and investments. The BSEE Requirements Priority Board is chaired by the Chief of the Office of Budget and includes other national program managers and regional directors. An Integrated Project Priority Team works on behalf of BOEM and BSEE, with representation from both bureaus, to manage individual projects and investments and integrate the efforts of separate BOEM and BSEE Project Priority Teams. For all of these entities, the Boards have been established and are operational, charters are in place, and roles and responsibilities are defined.

Human Capital Governance: Governance for human capital matters is also in place. The BSEE Human Capital Council is responsible for aligning Human Capital programs with the strategic plan; encouraging continuous improvement and management accountability; and ensuring that the bureau has the technical and managerial knowledge and skills needed to accomplish its goals. The Council is responsible for developing strategies for current and future needs, monitoring metrics to achieve goals, and benchmarking human capital programs. Membership includes a full complement of human resources, training and equal employment representatives as well as programs and regions, but not on a permanent basis. The consistent presence of a representative from a region and a program office (potentially this membership could rotate among the regions and programs) would add program perspective.

Data Stewardship Governance: The Data Stewardship Council was established to facilitate implementation of the Data Stewardship Program, provide management guidance on matters related to data and information assets, and other matters that relate to data and IT efforts that impact data stewardship. The Council promotes managing data as an asset to ensure that data are discoverable, accessible, and usable for BSEE's mission areas and that BSEE's efforts align with Departmental policy and implementation guidance.

Training Governance: The Training Governance Board is charged with oversight of the technical training program operated by OORP, including planning and evaluation to gauge effectiveness of the program. Expanded governance to provide oversight and program engagement in all training programs could help improve sharing of expertise and support, inform the development of curriculum and training requirements, evaluation, and ensure ongoing alignment with BSEE priorities. The study team recommends expansion of training governance in Chapter 6.

Additional BSEE governance could add opportunities for alignment of national policy development and oversight, program management and execution, and alignment with strategic goals, business process, budgetary resources, and acquisition plans, and identify impediments and risks to the ongoing program. Governance, in the context of this discussion about team-oriented, decision-making bodies, is also an opportunity to expand collaboration, communication, information dissemination, and education.[192]

The Communication Component: BSEE has deployed multiple types of communication to promote internal and external understanding and engagement. Employees can get information from the internet and intranet sites, the Director's corner, blog or Pipeline (a BSEE internal communication). External stakeholders have access to the internet site and informative annual reports for 2014, 2015, and 2016.[193] There are additional avenues for communication with BSEE for operators that are not addressed here. BSEE's strategic plan advocates for fostering a culture of collaboration and "intra-bureau interaction and team building through details among headquarters, regional, and district offices to enhance collaboration and trust and minimize barriers to productivity."[194]

In 2016 BSEE conducted a two-month, in-depth process to gain insights into effective communication and employee engagement. Employees were asked about the forms of communication that they would like to see. As part of the initiative, BSEE's Office of Public Affairs conducted over 100 employee interviews and more than 50 focus groups, making sure to include an adequate representation of BSEE organizations. A common theme emerged – employees have limited interaction with other programs and minimal knowledge of activities and people outside of their immediate office. The isolation of employees and limited flow of information contributes to low levels of engagement and collaboration.

As part of the employee engagement initiative, BSEE employees provided input on their use and the value of existing communication tools. Employees were very positive about the BSEE annual report. Based on the results of interviews and focus groups, the Public Affairs Office developed a set of recommendations to improve employee interaction and communication as well as promote team building, use of a trust model to deepen relationships, and executive and team coaching. In addition, a number of specific recommendations were made to develop tools that could increase collaboration including:

- An automated internal bureau-wide employee directory with current email addresses, telephone numbers, and profiles to reflect current roles.
- Organization charts with names and contact information to allow employees to see where other employees are located within the organization and understand the chain of command.

[192] IBM Corporation, ***Defining Program Governance and Structure,*** 2005.
[193] Bureau of Safety and Environmental Enforcement, ***Annual Report 2014, 2015, and 2016,*** at: https://www.bsee.gov/newsroom/library/annual-report.
[194] Bureau of Safety and Environmental Enforcement, ***Strategic Plan FY 2016-2019***, December 21, 2015.

- A formalized rotation program across the districts in the Gulf of Mexico Region and between headquarters and the regions to promote improved understanding of the bureau and its programs, develop professional relationships among employees, and for employees to be able to get developmental experience.
- A mentorship program to facilitate knowledge transfer and reduce knowledge loss and promote the development of individual development plans and a broader understanding of programs and activities.
- Brown bag sessions for senior staff to share knowledge on their area of expertise and to facilitate knowledge transfer.
- Cross-disciplinary teams that foster collaboration including in-person contact when possible or video teleconferencing to build professional relationships, foster improved understanding and information flow.
- Redesign of the BSEE Pipeline to improve ease of use.
- A newsletter or news brief to inform employees about current activities.

Additional recommendations were made to conduct employee orientation more frequently, develop a BSEE handbook for employees, and standardize the process for archiving work. Lastly, the initiative generated recommendations for improved communication by managers including regular staff meetings and open door policies, as well as consideration for staggered hours of operation because BSEE operates in multiple time zones and training for professional development.

BSEE has incorporated a number of the strategies in its Leadership Development Program, which will provide long-term benefits; however, some of these strategies could be deployed on a broader basis as part of the change management strategy. These strategies have the potential to build professional relationships and respect, advance knowledge management, and foster collaboration. Other agencies including the Transportation Security Administration and U.S. Secret Service have implemented employee engagement tools that allow employees to identify ideas and new ways of doing business using a web-based crowd-sourcing platform. The Secret Service's Spark! program encourages employees to submit ideas, suggestions, or recommendations for improved security, efficiency, costs savings, and morale. Employees indicate their support for posted suggestions, and depending on the ratings and potential impact, they are forwarded to managers for a response. Managers have 30 days to respond to the proposals and are responsible to vet and implement them.[195] Implementation of a tool like this and other KM tools described in Chapter 4 could help advance communication and collaboration as could implementation of recommendations made in the employee engagement process.

The Collaboration Component: BSEE advanced a vision for itself that involves high levels of collaboration and included it in the 2016-2019 Strategic Plan as follows: "Fostering an

[195] National Academy of Public Administration, ***United States Secret Service: Review of Organizational Change Efforts***, October 2016 at: http://www.napawash.org/2016/1825-united-states-secret-service-review-of-organizational-change-efforts.html.

agile, trusted, and collaborative organization dedicated to risk offshore."[196] The national program management model advances collaboration. BSEE has the tone-at-the-top for collaboration, but additional effort is needed to make it an ongoing practice that is embedded in how the bureau's employees work together on a day-to-day basis.

BSEE does not have mechanisms to monitor, evaluate, report, and reinforce accountability for collaboration. Thus, BSEE should be building goals for collaboration into performance plans and reviews. Effective performance management can help individuals to see the connection between their daily activities and organizational goals. Successful organizations use their performance management systems to support their strategic and performance goals, their core values, and transformational objectives.[197] A review of lessons learned for engaging millennials and other age groups identifies key drivers to enable employee engagement, which include constructive performance conversations, career development and training, work-life balance, inclusive work environment, employee involvement, and communication from management.[198]

BSEE's can increase efforts to foster collaboration by expanding employee engagement and communication, creating opportunities for teams to work together under the umbrella of a change management strategy. The national program management model has as one of its key values high levels of collaboration and BSEE's continued efforts to improve understanding and support for the model will also contribute to positive cultural change. BSEE's training programs will also foster cultural change, particularly leadership training, which includes rotations of employees. The knowledge management strategy recommended in Chapter 4 is explicitly designed to foster collaboration through knowledge sharing, and should be supported by a change management plan. BSEE's ability to create a culture of collaboration, face ongoing changes in its environment, and implement the recommendations in this report can be facilitated with a structured approach to organizational change management. A change management program and strategy should be the organizing framework to unify BSEE's efforts.

Recommendation 8.1

BSEE should develop and utilize a more comprehensive change management strategy to support the development of a more unified, collaborative and proactive organizational culture, using tools that can strengthen capabilities for engagement, knowledge sharing, collaboration and communication. The strategy should consider best practices and specific guidance provided by the study team, and address special challenges with respect to leadership, culture, governance, collaboration, and communication. The study team suggests that a full-time change management advocate should lead this effort.

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[196] Bureau of Safety and Environmental Enforcement, ***Strategic Plan 2016-2019,*** December 21, 2015.
[197] Government Accountability Office, ***Results Oriented Cultures: Creating a Clear Linkage Between Individual Performance and Organizational Success,*** GAO-03-488, March 2003.
[198] Government Accountability Office, ***Federal Workforce: Lessons Learned for Engaging Millennials and Other Age Groups***, GAO-16-880T, September 29, 2016.

APPENDIX A: EXPERT ADVISORY GROUP AND STUDY TEAM

EXPERT ADVISORY GROUP

Dan Blair,* — Mr. Blair is the former President and Chief Executive Officer of the National Academy of Public Administration. He has more than 26 years of federal public service and is a recognized expert and prominent leader in public service management, having served in top leadership positions in the Executive and Legislative branches as well as the regulatory sector. He received successive Presidential appointments to the Office of Personnel Management and the Postal Regulatory Commission and was unanimously confirmed by the Senate. Prior to joining OPM, he served on Capitol Hill, working for nearly 17 years on the staffs of both House and Senate committees charged with postal and civil service oversight. He received a Bachelor of Journalism degree from the School of Journalism at the University of Missouri-Columbia and his J.D. from the School of Law at the University of Missouri-Columbia.

Barry Rabe,* — Dr. Rabe currently serves as the J. Ira and Nicki Harris Family Professor of Public Policy, at the Gerald Ford School of Public Policy, at the University of Michigan. He is a former Visiting Professor at the University of Virginia's Miller Center of Public Affairs. He was a non-resident Senior Fellow in the Governance Studies Program of the Brookings Institution and President of the Federalism Section of the American Political Science Association. He held positions with the University of Michigan as the Director, Program in the Environment; Interim Dean, School of Natural Resources and Environment; President, Public Policy Section, American Political Science Association; Book Series Editor, American Governance and Public Policy, Georgetown University Press. Much of his recent research examines state and regional development of policies to reduce greenhouse gases, which has been conducted in collaboration with the Brookings Institution, the Miller Center of Public Affairs at the University of Virginia, and the Pew Center on Global Climate Change. In 2006, he became the first social scientist to receive a Climate Protection Award from the U.S. Environmental Protection Agency in recognition of his contribution to both scholarship and policy making. His 2004 Brookings book, *Statehouse and Greenhouse: The Evolving Politics of American Climate Change Policy*, received the 2005 Lynton Keith Caldwell Award from the American Political Science Association in recognition of the best book published on environmental politics and policy in the past three years. In 2007, he received the Daniel Elazar Award for Career Contribution to the Study of Federalism from the American Political Science Association.

*Academy Fellow

ACADEMY STUDY TEAM

Joseph P. Mitchell, Ph.D., *Director of Academy Programs* — Dr. Mitchell leads and manages the Academy's studies program and serves as a senior advisor to the Academy's President and Chief Executive Officer. He has served as Project Director for past Academy studies for the Government Printing Office, the U.S. Senate Sergeant at Arms, U.S. Agency for International Development/Management Systems International, the National Park Service's Natural Resource Stewardship and Science Directorate, and the USDA Natural Resources Conservation Service. During his 16 years at the Academy, Dr. Mitchell has worked with a wide range of federal cabinet departments and agencies to identify changes to improve public policy and program management, as well as to develop practical tools that strengthen organizational performance and assessment capabilities. As the Academy's studies director, he has provided executive-level leadership, project oversight, and subject matter expertise to over 60 highly regarded organizational assessments and studies, consulting engagements, and thought leader engagements. He holds a Ph.D. from the Virginia Polytechnic Institute and State University, a Master of International Public Policy from the Johns Hopkins University School of Advanced International Studies, a Master of Public Administration from the University of North Carolina at Charlotte, and a B.A. in History from the University of North Carolina at Wilmington.

Pamela Haze, *Project Director* — Ms. Haze has been a Fellow of the National Academy of Public Administration since 2012. She served as Project Director for the Academy's strategic plan development for the Urban Indian Health Program, a component of the Indian Health Service in the Department of Health and Human Services, and as a Senior Advisor on the Academy's evaluation of organizational reform efforts within the U.S. Secret Service and an assessment for the Farm Services Agency in the U.S. Department of Agriculture. Before joining the Academy staff, she served as the Deputy Assistant Secretary for Budget, Finance, Performance and Acquisition at the U.S. Department of the Interior (DOI). In addition, she served as the Director of DOI's Office of Budget. She spent the majority of her 34-year federal career with DOI and worked for the Fish and Wildlife Service, the U.S. Geological Survey, the Bureau of Land Management, and the Bureau of Outdoor Recreation. She is a recipient of the Elmer Staats Award for Personal and Professional Standards and the Meritorious and Distinguished Presidential Rank Awards. Ms. Haze received a Bachelor of Science in Biology and Masters of Science in Environmental Science from George Mason University.

Thorsen, Kim, *Senior Advisor* — Ms. Thorsen is a Senior Advisor at the Academy who previously served as Deputy Assistant Secretary for Public Safety, Resource Protection, and Emergency Services at DOI and before that as the Department's Director of Law Enforcement and Security. In those roles, she served as advisor to departmental leadership on law enforcement, intelligence, security, emergency management, aviation, wildland fire, and border activities. She has an extensive career in law enforcement having started her career as a criminal investigator at the Forest Service in the Department of Agriculture. She holds a Bachelor of Science degree from Humboldt State University and attended the senior Executive Fellows Program at Harvard University's John F. Kennedy School of Government.

Larry Novey, *Senior Advisor* — Mr. Novey joined the Academy as a Senior Advisor in May 2016 and, in addition to this project, is working on an assessment of governance and management reform at the National Nuclear Security Administration and on an update of EPA's framework for assessing community financial capability in clean-water compliance. Mr. Novey brings extensive experience as counsel to federal agencies, in private legal practice, and on Senate committee staff. Most recently, he served as Chief Counsel for Governmental Affairs for the U.S. Senate Committee on Homeland Security and Governmental Affairs, where he was responsible for legislative and policy development in cross-agency areas such as agency organization, regulatory policy and process, and human capital management. Previously, Mr. Novey was Washington Counsel at an international law firm, where he advised and assisted companies and coalitions regarding regulatory compliance and the resolution of mass claims from toxic-substance exposure. He has also worked as an attorney at government agencies on matters involving environmental protection and on processes for streamlined approval of energy projects. Mr. Novey received a J.D. from Columbia University and an A.B. from Harvard College.

Sylvia Tognetti, *Senior Advisor* — Ms. Tognetti is a Senior Advisor at the Academy working on environmental projects, including current work for the Environmental Protection Agency. She previously worked with the Academy as a Research Associate in 2000 on a study of innovation in environmental protection at the EPA. She also teaches World Physical and Cultural geography courses as an adjunct professor at the University of the District of Columbia Community College. She has held positions at the National Academy of Sciences and the former Congressional Office of Technology Assessment. She has consulted with a variety of non-profit and multi-lateral organizations as well as a private firm on matters of science and policy associated with land and water and climate change. Her work resulted in several reports and publications, including a chapter in the Millennium Ecosystem Assessment, for which she served as a lead author. She also held a position with the World Resources Institute's Food, Forests and Water program, Natural Infrastructure for Water initiative, helping to build the case and develop strategies for increased public and private investment in conservation and restoration of forests, wetlands and other ecosystems for their natural infrastructure values. She holds a Masters in Geography from the University of Maryland.

Emily Fay, *Research Associate* — Ms. Fay joined the Academy in August 2016. In addition to this project, she is working on Academy reviews for the National Nuclear Regulatory Commission and the Transportation Security Administration. She previously worked with the Peace Corps as a volunteer in Botswana and for the George Mason School of Policy, Government, and International Affairs. She received her Master's in Public Administration degree from George Mason University in December 2016 and holds a B.A. in International Affairs from James Madison University.

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APPENDIX B: PARTICIPATING INDIVIDUALS AND ORGANIZATIONS

(Titles and positions listed are accurate as of the time of the Academy's contact.)

UNITED STATES DEPARTMENT OF THE INTERIOR

Schneider, Janice – Assistant Secretary – Land and Minerals Management

Office of Inspector General

Carlson, Jeff – Director, Energy Audit Unit
Kendall, Mary – Deputy Inspector General

BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

Headquarters

Buffington, Sharon – Chief, Offshore Training Branch, Office of Offshore Regulatory Programs (OORP)
Dwarnick, Sue – Director, Offshore Safety Improvement Branch, OORP
Fish, David – Chief, Environmental Compliance Division
Fisher, Robert – Chief, Safety and Enforcement Division (Acting)
Keith, John – Senior Advisor
Mabry, Scott – Chief, Office of Administration (OA)
Madden, Molly – Chief, Office of Policy and Analysis
Middleton, Bob – Deputy Chief, OORP
Modrow, Eric – Chief, Office of Budget
Moore, David – Chief, Oil Spill Preparedness Division
Morris, Doug – Chief, OORP
Noem, Stacey – Chief, Safety and Incident Investigations Division
Pardi, Nicholas – Chief, Office of Public Affairs
Pittman, Michael – Chief, Risk Assessment and Permit Policy Division, OORP
Powers, Tim – Chief Data Steward, OA
Salerno, Brian – Director
Schneider, Margaret – Deputy Director

Alaska Region

Fesmire, Mark – Regional Director

Gulf of Mexico Region

Broussard, T.J. – Chief, Office of Environmental Compliance
Green, Susan – Senior Staff, Petroleum
Herbst, Lars – Regional Director
Karl, Kevin – Deputy Director for Production
Kovacs, Stephen – Chief, Office of Enforcement
Prendergast, Michael – Deputy Regional Director for District Operations, Investigations, Enforcement, and Environmental Compliance
Sanders, Ramona – Chief, Environmental Monitoring Unit

Trosclair, Troy – Deputy Regional Supervisor for District Operations

Pacific Region

Fesmire, Mark – Regional Director (Acting)

Bureau of Ocean Energy Management

Cruikshank, Walter – Deputy Director
Orr, Renee – Chief, Office of Strategic Resources

Stakeholders

Government Accountability Office

Rusco, Frank – Director, Natural Resources and Environmental Issues
Talbert, Matthew – Senior Analyst, Natural Resources and Environmental Issues

Van Ness Feldman LLP

Michael Farber

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APPENDIX D: MATRIX OF RECOMMENDATIONS OF THE NATIONAL ACADEMY STUDY TEAM

Topic	Background	Objective	Recommendation
A Mission for Safety, Environmental Protection, and Conservation			
3.1 Maintain a Deconflicted Mission	DOI instituted reforms to its OCS energy program in 2010-2011 to address long-standing weaknesses and shortcoming and in consideration of extensive expert advice, including Presidentially appointed commissions and review boards. Key among the reforms was the separation of DOI's OCSLA responsibilities, to avoid critical responsibilities being compromised by being combined in an entity with contradictory roles. Three entities – BOEM, BSEE, and ONNR – were created to effectively deliver on DOI's responsibilities for (1) managing the mineral resources on the OCS, (2) oversight and enforcement of safety and environmental regulations, and (3) collecting, accounting for, and verifying natural resources and energy revenues. Restructuring to combine these entities would risk reversing the gains made while also causing disruption, uncertainty, and delay.	To ensure that safety, the environment, and conservation of OCS resources are effectively promoted by an entity that can focus on vigorous regulatory oversight and enforcement.	BSEE should remain a separate entity with high levels of coordination with BOEM and ONRR.

Topic	Background	Objective	Recommendation
A Mission for Safety, Environmental Protection, and Conservation (cont.)			
3.2 Complete the Inventory and Updating of Bureau Guidance	BSEE has been conducting an extensive inventory of policies, procedures, and guidance (including handbooks, directives, and Notices to Lessees), much of which was created before BSEE existed and dates back to the 1980s, in order to have a complete record. It is also been updating and creating new policies, procedures, and guidance and automating to facilitate their use internally and externally (by industry and others). BSEE created a system of interim policies, procedures, and guidance for organization of current materials while it continues these efforts.	To maintain an internal focus on completing the inventory; moving to a permanent set of policies, procedures, and guidance; and ensuring priority materials are updated and or created promptly.	BSEE should continue its efforts to inventory, organize, and update policies, procedures, and guidance. It should assign realistic and enforceable timeframes to managers for updating these materials.

Topic	Background	Objective	Recommendation
A Mission for Safety, Environmental Protection, and Conservation (cont.)			
3.3 Support the Environmental Compliance Mission	BOEM is responsible for environmental review under the National Environmental Policy Act (NEPA), including completion of environmental impact statements and environmental assessments. BSEE uses these materials to inform permit reviews and compliance and enforcement efforts.	To ensure that BSEE has adequate environmental information on which to base permit reviews, development of mitigating actions, and conduct inspections and compliance reviews and enforcement actions.	In instances when BSEE does not have adequate information needed to support environmental decisions associated with permitting and enforcement, this situation should be communicated to BOEM. The Memoranda of Agreement (MOA) and Standard Operating Procedures (SOPs) that BOEM and BSEE operate under should be revised or supplemented by the establishment of processes with timelines to ensure that expectations are clearly understood. These processes established by revision or supplementation of the MOAs and SOPs should also include robust procedures for the elevation of matters for resolution, when necessary, and for the periodic review of the process by which BSEE obtains needed information from BOEM to identify systemic issues and needed improvements.

Topic	Background	Objective	Recommendation
A Mission for Safety, Environmental Protection, and Conservation (cont.)			
3.4 Transfer Renewable Energy Compliance and Enforcement Responsibilities	When BOEM and BSEE were created, BOEM was given the responsibility for management of the OCS renewable energy program. BSEE is working with BOEM to assume responsibility for safety and environmental oversight and regulation of OCS renewable energy.	To ensure that BSEE has the capacity and capability in place for an OCS renewable energy compliance and enforcement program, has the ability to fulfill responsibilities based on scheduled projects coming on line, and is planning and preparing for projected future program growth.	BSEE should work with BOEM to accelerate the transfer of environmental oversight, facility inspection, and regulatory enforcement responsibilities for the OCS renewable energy program and develop a schedule to be monitored by ASLM. BSEE should consider these new responsibilities in the development of workforce plans and should ensure that resources are available for these efforts and, as necessary, requested in future budgets.

Topic	Background	Objective	Recommendation
A Mission for Safety, Environmental Protection, and Conservation (cont.)			
3.5 Maintain Alignment with BOEM	BOEM and BSEE were created to separate conflicting OCSLA responsibilities and allow BSEE to develop and operate an effective safety and environmental compliance program. The two bureaus remain closely interconnected, by design, to ensure that each adequately supports the other, primarily in environmental compliance.	To establish sustainable mechanisms that enable BSEE and BOEM to more effectively provide mutual support in interdependent areas and to resolve issues timely and in a manner that best supports DOI goals.	ASLM should establish formal, regularly scheduled reviews of ongoing BOEM and BSEE alignment, processes, and linkages. Among the most important issues to address immediately are updates to the Environmental Compliance MOA and SOPs, and transfer of environmental oversight, facility inspection, and regulatory enforcement responsibilities for the OCS renewable program from BOEM to BSEE. ASLM should seek assistance from ASPMB, as needed, to provide support in matters that require a DOI-wide policy or economic review and in convening working groups to address specific matters.

Topic	Background	Objective	Recommendation
A Mission for Safety, Environmental Protection, and Conservation (cont.)			
3.6 Elevate Decommissioning Issues	Operators in the OCS are required to plug wells, remove structures and pipelines, and take other actions to decommission once production has ended. When they enter into a lease, operators are required to demonstrate their financial ability to conduct these activities to ensure the OCS is returned to its original condition either through bonding or self-insuring for these costs. Under this complex regulatory program, which is administered in part by BSEE and in part by BOEM, financial-assurance and decommissioning requirements and the enforcement of these requirements are intended to ensure that facilities are decommissioned at no cost to the government. However, depending on the policies applied, certain approaches to regulation and enforcement might have the unintended consequence of undermining some operators' financial stability, thereby increasing the risk that neither a responsible operator nor adequate bonding might be available to cover decommissioning costs in certain instances.	To inform DOI leadership and national policy officials of the potential risks of unfunded decommissioning costs, and to facilitate consideration of options – including choices involving BOEM or BSEE regulatory or enforcement policies, or including possible proposed legislation – that might help mitigate those risks.	BSEE should work with BOEM, ASLM, DOI's Office of the Solicitor, and others to elevate issues and provide supporting analyses related to the risk that financial stress in the oil and gas industry might result in some failure to conduct or fund needed decommissioning – issues include (1) choices in BOEM or BSEE regulatory or enforcement policy that might help mitigate those risks, and (2) the absence of a funding source for decommissioning in the event an operator is unable to pay these costs.

Topic	Background	Objective	Recommendation
Strategic Alignment of the Organization			
4.1 Improve Alignment with the National Program Manager Model	BSEE implemented an organizational realignment based on the national program management model on November 4, 2015 that is intended to bring clarity, consistency, predictability, and accountability to BSEE's operations. Several successful models of national program implementation within BSEE demonstrate high levels of communication, collaboration, and understanding of the roles of headquarters and the regions. Other programs and initiatives have not progressed to a comparable level of national program management performance.	To effectively implement BSEE's realignment and facilitate efforts to bring consistency to processes and practices based on the national program management model.	BSEE should complete implementation of the national program management model incorporating best practices for organizational transformation tailored to the needs of individual programs and initiatives; the effort should be coordinated by a single individual or entity reporting to the Director or Deputy Director. The effort should incorporate lessons learned from the Safety and Incident Investigation and Data Stewardship Programs, in particular the high levels of collaboration, effective governance structures and processes, and training.

Topic	Background	Objective	Recommendation
Strategic Alignment of the Organization (cont.)			
4.2 Complete the Environmental Compliance National Program Design	BSEE's realignment to the national program management model changed the reporting relationship for regional environmental compliance staff that were direct reports to the headquarters Division Director and now report to the regional directors. This deviates from historical documents that were the basis for organization of the BSEE environmental enforcement function (now renamed environmental compliance). BSEE has not implemented a systematic approach to environmental stewardship as was envisioned in the establishment of the Environmental Stewardship Collaboration Group, which could optimize agency expertise and outcomes and improve compliance and enforcement. In addition, there are differing views about the nature of the work and role of inspections in the Environmental Compliance Program.	To (1) formulate an Environmental Compliance Program design that engages headquarters and the regions and considers the original design of the environmental enforcement function and the results of the Environmental Stewardship Collaboration Group's work, (2) make final decisions about the appropriate staffing and workforce composition, and (3) complete implementation of the national program and ensure high levels of collaboration and communication.	BSEE should produce a program management design for the Environmental Compliance Program that considers the history of the program's organization and functions as well as the work of the Environmental Stewardship Core Group. The design should detail the activities, work streams, outputs, and outcomes. The design should include workforce plans for headquarters and the regions that can be the basis for staffing decisions, addressing gaps in competencies, and effective implementation of the national program. The process should include an assessment of risk related to reporting relationships as well as appropriate internal controls and risk mitigation measures to ensure the function can effectively achieve mission goals.

Topic	Background	Objective	Recommendation
Strategic Alignment of the Organization (cont.)			
4.3 Improve Utilization of the Engineering Technology Assessment Center	BSEE established ETAC to assist regions with maintaining up-to-date knowledge about emerging technology and support standards setting.	To effectively utilize ETAC's resources for standards setting and national policy development and ensure high levels of knowledge transfer to and from the regions to inform operations, inspections, and permitting.	BSEE should improve the linkage between ETAC and the regions by expanding outreach and engagement and developing a formal governance body and process to ensure high levels of two-way communication between the regions and Office of Offshore Regulatory Compliance (OORP).
4.4 Strengthen Data Stewardship with Knowledge Management	BSEE's Data Stewardship Program is effectively working toward goals to increase the quality and consistency of data, but information and knowledge is not being effectively shared across all of BSEE's organizational units.	To promote more effective information and knowledge sharing.	BSEE should develop a knowledge management (KM) strategy that complements the existing Data Stewardship Program and IT program with tools that enable knowledge sharing and close gaps in the knowledge cycle. As part of this strategy, BSEE should consider establishing communities of practice for critical areas of knowledge to facilitate organizational knowledge retention, knowledge sharing, and learning. A KM pilot for a critical area of knowledge can be used to demonstrate the benefits of KM and inform the strategy prior to full-scale implementation.

Topic	Background	Objective	Recommendation
Operational and Organizational Excellence			
5.1 Reactivate the Strategic Plan Working Group	BSEE convened a working group comprised of a cross-section of BSEE employees that participated in development of the 2016-2019 Strategic Plan, but disbanded the working group after the plan was completed.	To expand awareness of the plan and its use as the basis for ongoing strategic alignment of the organization, resources, priorities, and actions; to create a conduit for continuing input for strategic planning and management; and to facilitate collaboration.	Establish a working group comprised of program and regional representatives, in order to promote improved awareness of and engagement in strategic planning, inform the process for annual priority setting, and expand the use of risk management. Selection of the members of the group should consider the ability of the members to be advocates and change agents within their organizations and the team should be operational in time to assist with BSEE's participation in the development of a new DOI strategic plan.
5.2 Continue the Foresight Initiative	BSEE established the Foresight Initiative to help understand how changes in the energy landscape, geopolitics, technology shifts, workforce, and other factors may impact future activities and programs.	To inform strategic planning, program and budget development, and workforce planning and to better prepare for changes and challenges in the future.	BSEE should institutionalize its Foresight Initiative to provide input to strategic planning and risk assessment and to help anticipate and guide BSEE's programs and operations.

Topic	Background	Objective	Recommendation
Operational and Organizational Excellence (cont.)			
5.3 Enhance Annual and Multi-year Planning	BSEE conducts annual and multi-year planning to drive continuous improvement, advance operational and organizational strategic goals, and respond to stakeholders.	To effectively manage BSEE's annual and multi-year planning and thereby maintain momentum and focus on priority activities.	BSEE should enhance its annual and multi-year planning to include prioritization and sequencing of tasks taking risk assessment into account, assignment of roles and responsibilities for leadership and participation, tracking of progress, and following up.
5.4 Expand Understanding and Use of Enterprise Risk Management	BSEE developed an Enterprise Risk Management Program (ERM) to inform strategic planning and decision-making, strengthen internal controls, and clarify priorities. However, the program is not uniformly accepted, understood, or utilized because there are different conceptual approaches to management of risk found within existing program based initiatives, and there currently is not a common lexicon for risk communication.	To improve the capacity to systematically address organizational and operational risks.	BSEE should establish communities of practice for management of strategic risks and develop a common lexicon that can be used for risk communication. To this end, the ERM program should incorporate learning from the results of the inspection pilot underway and other areas where risk management pilots can expand its use and improve capability. BSEE should also incorporate ERM into its multi-year planning (see recommendation 5-3).

Topic	Background	Objective	Recommendation
Overcoming Human Resource Challenges			
6.1 Conduct Targeted Succession Planning for Senior Leadership	BSEE's senior management cadre comprised of senior executives and GS-15's is small, with a number of individuals who are now or soon could become retirement eligible. BSEE established its Leadership Development Program to develop future leaders, but more targeted efforts are needed to prepare a cadre of individuals that could potentially assume senior leadership roles.	To ensure effective succession in leadership.	BSEE should continue to develop opportunities for GS-14 and GS-15 employees who can gain experience in order to be prepared to assume leadership positions and ensure continuity.

Topic	Background	Objective	Recommendation
Overcoming Human Resource Challenges (cont.)			
6.2 Increase Integration of Training Programs	Training programs are conducted by four BSEE entities to support mission needs. Improvements in effectiveness and efficiency are possible with consolidation of training programs program components. The Training Governance Board oversees technical training, but does not oversee the other training programs.	To holistically address training needs for BSEE employees, to achieve improved effectiveness and efficiency, to improve tracking and reporting, and to increase integration of these programs.	BSEE should create a training governance structure that encompasses oversight of all of its training programs, not just technical training, and should assess the benefits of consolidating or leveraging aspects of its training programs to ensure the highest levels of integration and efficiency across the bureau.
Adequate Resources for Safety, Environmental Protection, and Conservation Offshore			
7.1 Increase Fees and Offsetting Collections	BSEE's resources are at risk due to declining collections comprising approximately 57 percent of its budget and limitations on inspection fees charged to industry.	To address a potential budget shortfall due to declining collections and inflexibilities in the inspection fee.	BSEE, in cooperation with DOI and OMB, should finalize the cost recovery regulation and continue to seek proposed changes in inspection fees to align them with current program requirements. BSEE, in cooperation with BOEM, should formulate proposals to submit to DOI and OMB that fund the shortfall in collections. Timely action is needed so these additional regulatory fees can be included in future OCS leases and avoid impacts to BSEE's budget.

Topic	Background	Objective	Recommendation
Adequate Resources for Safety, Environmental Protection, and Conservation Offshore (cont.)			
7.2 Budget for Renewable Energy Compliance and Enforcement	BSEE is assuming responsibility for safety and environmental oversight of renewable energy projects that may require additional staff and competencies.	To be prepared to assume renewable energy program safety and environmental oversight responsibilities.	BSEE should consider funding requirements for the renewable program as part of FY 2018 budget formulation and in future budgets.
7.3 Budget for Decommissioning	BSEE's decommissioning workload is increasing.	To address an expanding workload in decommissioning.	BSEE should consider funding requirements for the decommissioning program as part of FY 2018 budget formulation and in future budgets.

Topic	Background	Objective	Recommendation
Facilitating Organizational and Cultural Change			
8.1 Implement a Change Management Strategy	BSEE is actively working on operational and organizational reform aligned with the strategic plan, but lacks an integrated organizational change management program or strategy.	To bring greater cohesiveness to BSEE's organizational and cultural change efforts and foster greater collaboration, employee engagement, and communication.	BSEE should develop and utilize a comprehensive change management strategy to support the development of a more unified, collaborative and proactive organizational culture, using tools that can strengthen capabilities for engagement, knowledge sharing, collaboration, and communication. The strategy should consider best practices and specific guidance provided by the study team, and address special challenges with respect to leadership, culture, governance, collaboration, and communication. The study team suggests that a full-time change management advocate should lead this effort.

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APPENDIX E: BSEE'S COLLABORATIVE RELATIONSHIPS WITH FEDERAL AGENCIES

BSEE's works closely with federal and other partners in a variety of ways to leverage its resources. Roles and responsibilities are defined in memoranda of understanding or agreement and interagency agreements.

U.S. Department of the Interior

Within the Department of the Interior, BSEE works closely with BOEM to promote energy independence, environmental protection and economic development through responsible science-based management of offshore conventional and renewable energy and marine mineral resources. BOEM studies the environment and leases resources on the OCS, while BSEE enforces the terms of the leases. BOEM and BSEE also collaborate on decommissioning and the Rigs to Reefs Program. The Office of Natural Resources Revenue (ONRR) collects and disburses royalty revenues generated by energy production on federal lands, to include the Outer Continental Shelf. BSEE performs meter inspections on behalf of ONRR to ensure companies are accurately reporting production totals. BSEE works closely with the Fish and Wildlife Service and operates the Protected Species Program throughout offshore energy programs on the OCS. BSEE monitors and protects animals identified in the Endangered Species Act.

U.S. Coast Guard

BSEE and the U.S. Coast Guard (USCG) have aligned jurisdictional and regulatory responsibilities related to offshore energy development on the OCS. From offshore inspections to incident response and investigations, the two organizations collaborate extensively to reduce redundancy and ensure consistency and clarity for the regulated community. The two organizations work together under an overarching Memorandum of Understanding and several memoranda of agreement related to specific issues that touch on the organizations' shared operating space.

Department of Energy

BSEE and the Department of Energy (DOE) work together in the areas of spill prevention research, risk modeling, renewable energy initiatives, and technology research. BSEE leverages its resources through interagency agreements with two DOE national labs and pursues other areas of common interest to both organizations through a formal Memorandum of Collaboration.

U.S. Department of Transportation, Pipelines and Hazardous Materials Safety Administration

Oil, natural gas, and related liquids produced on the Outer Continental Shelf are transported to shore primarily through the use of pipelines regulated by the U.S.

Department of Transportation, Pipelines and Hazardous Materials Safety Administration (PHMSA). BSEE collaborates with PHMSA in the areas of pipeline safety, spill prevention and response and pipeline rights of way. BSEE entered into an Interagency Agreement with the Department of Transportation's Bureau of Transportation Statistics to develop and manage a voluntary and confidential "Near Miss" reporting tool for individuals working in the offshore oil and gas industry.

Environmental Protection Agency

BSEE and the Environmental Protection Agency (EPA) work cooperatively to protect the environment using different statutory authorities. BSEE coordinates with the EPA on compliance and enforcement matters related to energy development on the OCS. BSEE and EPA have regional memorandums of agreement in the Pacific and Gulf of Mexico OCS regions to coordinate compliance with EPA National Pollutant Discharge Elimination System permits, including facility inspections and enforcement of permit violations. Under statutory direction, BSEE conducts air monitoring directed by the Clean Air Act in the Alaska and Gulf of Mexico regions.

National Aeronautics and Space Administration

BSEE and the National Aeronautics and Space Administration (NASA) entered into a five-year agreement allowing BSEE to capitalize on the best risk management approaches from the aeronautics industry to inform stakeholders and further strengthen worker and environmental safety protections on the OCS. Probabilistic risk assessment is a technique used by NASA to quantitatively model risk. It was used in the modeling of the Space Shuttle Program and is presently being used for the International Space Station and Orion deep space capsule programs.

U.S. Department of Commerce, National Oceanic and Atmospheric Administration

BSEE works with the National Oceanic and Atmospheric Administration (NOAA) in the operation of the Protected Species Program throughout offshore energy programs on the OCS, monitoring and protecting animals identified in the Endangered Species Act and the Marine Mammals Protection Act. NOAA and BSEE also work together on decommissioning requests under the Rigs To Reef policy.

U.S. Army Corps of Engineers

BSEE and the U.S. Army Corps of Engineers coordinate on projects affecting the OCS and shorelines. Both agencies are involved when operators request permission to decommission facilities under the Rigs to Reefs policy.

Interagency Coordinating Committee on Oil Pollution Research

The Interagency Coordinating Committee on Oil Pollution Research (ICCOPR) serves as a forum for its federal members to coordinate and maintain awareness of ongoing oil

pollution research activities. The Interagency Committee is comprised of 14 members representing federal independent agencies, departments, and department components. The Coast Guard chairs the Interagency Committee and NOAA, BSEE, and EPA rotate assignments as the vice-chair every two years. The Oil Pollution Act of 1990 requires the Interagency Committee to prepare an Oil Pollution Research and Technology Plan to define the roles of each Federal agency involved in oil spill research and development and to promote cooperation with industry, universities, research institutions, state governments, and other nations.

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APPENDIX F: NATIONAL PROGRAM MANAGEMENT MODEL ROLES AND RESPONSIBILITIES

During the planning for implementation of the national program management model, BSEE developed a clear and consistent set of descriptions for all of the national program managers that is a useful communication tool for internal and external communications. As discussed in Chapter 4, this study recommends posting these descriptions on BSEE's website along with the current organization chart to help improve understanding of the model.

Safety Enforcement Division (SED)

- Collaboratively develops and maintains national compliance and enforcement policy under the guidelines of the Director's Compliance Enforcement Continuum
    - Establishes and maintains complementary procedures and business rules necessary for full implementation of the SED's national program including, but not limited to:
        - Staff training requirements;
        - Tracking and reporting obligations;
        - Setting and revising enforcement priorities;
        - Liaison roles and responsibilities
    - Monitors the execution and effectiveness of the bureau's safety enforcement role and purpose

Safety and Incident Investigations Division (SIID)

- Responsible for establishing the national policies related to the conduct of investigations by BSEE investigators regarding incidents on the OCS
    - Establishes national policies regarding required training for BSEE investigators
    - Establishes procedures for how investigations are conducted and documented, and how incident information is managed
    - Monitors execution and effectiveness of the investigation program

Environmental Compliance Division (ECD)

- Establishes national strategic goals of the environmental compliance program to increase the accuracy, effectiveness and consistency of its environmental compliance activities
    - Oversees environmental compliance activities in accordance with the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Outer Continental Shelf Lands Act (OCSLA), and other statutory requirements
    - Establishes national data needs for the environmental compliance program, maintains and monitors national performance standards, and sets national

policies regarding environmental compliance activities conducted by BSEE personnel
    - Monitors the execution and effectiveness of environmental compliance activity

Integrity and Professional Responsibility Advisor (IPRA)

- Responsible for promptly and credibly responding to allegation or evidence of misconduct and unethical behavior by BSEE employees
    - Works with the Office of Inspector General on internal matters the IPRA investigates
    - Pursues certain administrative investigations with the OIG's consent and knowledge
    - Advises the OIG of the status and results of IPRA investigations, as requested
    - Consults with the Department's Ethics Office and BSEE's Ethics Office with respect to matters the IPRA investigates regarding the Standards of Ethical Conduct for Employees in the Executive Branch (5 CFR Part 2635)
    - Fulfills the same responsibilities on behalf of BOEM with respect to BOEM employees

Office of Offshore Regulatory Programs (OORP)

- Responsible for regulatory, safety, and conservation compliance related to the development of the Nation's offshore resources
    - Develops and maintains regulations, policies, standards, and guidelines for best available and safest practices that govern industry's offshore operations nationwide
    - Promotes efforts to improve safety and environmental protections in offshore operations through policy development and program oversight, funding research into new technologies, and managing external partnerships with industry safety organizations
    - Provides oversight of bureau aviation management and the bureau's offshore training center
    - Manages information collection in compliance with the Paperwork Reduction Act and fulfills federal regulation liaison functions at BSEE
    - Monitors the implementation and effectiveness of activity areas within the program area

Oil Spill Preparedness Division (OSPD)

- Responsible for regulations, policies, standards, guidance, and oversight of oil spill preparedness and oil spill research

- Reviews and approves oil spill response plans, conducts government-initiated unannounced table top and/or deployment exercises, performs response equipment verifications, and exercises enforcement authority with respect to oil spill preparedness for regulated facilities in both Federal and state offshore waters of the U.S. (30 CFR Part 254)
- Manages Ohmsett, the National Oil Spill Response Research and Renewable Energy Test Facility, which supports both technology innovation and training
- Funds and independently conducts research to advance the understanding and efficiencies of mechanical and alternative oil spill response technologies
- Monitors the execution and effectiveness of the overall oil spill preparedness activity

Office of Administration (OA)

- Responsible for financial management and all administrative activities of BSEE
- Oversees the bureau's administrative functions including but not limited to:
  - Acquisition and federal assistance management
  - Human resource management and employee development
  - Data stewardship and information resources management
  - General office services
  - Delegations of authority

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APPENDIX G: GAO GUIDANCE ON MERGERS AND ORGANIZATIONAL TRANSFORMATIONS[199]

GAO reported key practices that federal agencies can follow to transform their cultures in response to governance challenges. Because no two merger, acquisition, or transformation efforts are exactly alike, the "best" approach for any given effort depends upon a variety of factors specific to each context. These key practices are:

1. Ensure top leadership drives the transformation. Leadership must set the direction, pace, and tone and provide a clear, consistent rationale that brings everyone together behind a single mission.

2. Establish a coherent mission and integrated strategic goals to guide the transformation. Together, these define the culture and serve as a vehicle for employees to unite and rally around.

3. Focus on a key set of principles and priorities at the outset of the transformation. A clear set off principles and priorities serves as a framework to help the organization create a new culture and drive employee behaviors.

4. Set implementation goals and a timeline to build momentum and show progress from day one. Goals and a timeline are essential because the transformation could take years to complete.

5. Dedicate an implementation team to manage the transformation process. A strong and stable team is important to ensure that the transformation receives the needed attention to be sustained and successful.

6. Use the performance management system to define responsibility and assure accountability for change. A "line of sight" shows how team, unit, and individual performance can contribute to overall organizational results.

7. Establish a communication strategy to create shared expectations and report related progress. The strategy must reach out to employees, customers, and stakeholders and engage them in a two-way exchange.

8. Involve employees to obtain their ideas and gain their ownership for the transformation. Employee involvement strengthens the process and allows them to share their experiences and shape policies.

9. Build a world-class organization. Building on a vision of improved performance, the organization adopts the most efficient, effective, and economical personnel, system, and process changes and continually seeks to implement best practices.

[199] GAO, Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations, GAO-03-669, July 2003

APPENDIX H: ORGANIZATIONAL CHANGE MANAGEMENT BEST PRACTICES

Heart of Change[200] (Kotter/Cohen)	**Implementation Steps to Assist Mergers and Organizational Transformations** (GAO July 2003)[201]	**Transforming Organizations** (Abramson/Lawrence)[202]
Create a sense of urgency so that people start telling each other, "Let's go; we need to change things!"	Ensure top leadership drives the transformation.	Select the right person.
Pull together a guiding team powerful enough to guide a big change.	Establish a coherent mission and integrated strategic goals to guide the transformation.	Clarify the mission.
Create clear, simple, uplifting visions and sets of strategies.	Focus on a key set of principles and priorities at the outset of the transformation.	Get the structure right.
Communicate the vision through simple, heartfelt messages sent through multiple channels so that people begin to buy into the change.	Set implementation goals and a timeline to build momentum and show progress from day one.	Seize the moment (urgency/right time).
Empower people by removing obstacles to the vision.	Dedicate an implementation team to manage the transformation process.	Communicate, communicate, communicate.
Create short-term wins that provide momentum.	Use the performance management system to define responsibility and assure accountability for change.	Involve key players.
Maintain momentum so that wave after wave of change is possible.	Establish a communication strategy to create shared expectations and report related progress.	Engage employees.
Make change stick by nurturing a new culture.	Involve employees to obtain their ideas and gain their ownership for the transformation.	Persevere.

[200] Dan Cohen and John Kotter, *The Heart of Change.* Boston: Harvard Business School Press, 2002.
[201] U.S. Government Accountability Office, *Report to Congressional Subcommittees, Results Oriented Cultures: Implementation Steps to Assist Mergers & Organizational Transformations* GAO-03-669. Washington, D.C.: July 2003.
[202] Marc A. Abrahamson and Paul R. Lawrence, *Transforming Organizations.* Lanham, MD: Rowman and Littlefield Publishers, 2001.

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1600 K Street NW
Suite 400
Washington, D.C. 20006
Phone: (202) 347-3190
Fax: (202) 223-0823
Website: www.napawash.org