OCS Report
BOEM 2020-059

Outer Continental Shelf

Gulf of Mexico OCS Regulatory Framework

U.S. Department of the Interior
Bureau of Ocean Energy Management
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ABBREVIATIONS AND ACRONYMS

ac	acre
AQRV	Air Quality Related Values
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
CEQ	Council on Environmental Quality
CERA	categorical exclusion review with analysis
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIAP	Coastal Impact Assistance Program
CPA	Central Planning Area
CPS	coastal political subdivisions
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DOCD	development operations coordination document
DOI	Department of the Interior (also USDOI)
DPP	development and production plan
EA	environmental assessment
EFH	essential fish habitat
EIS	environmental impact statement
EP	exploration plan
EPA	Eastern Planning Area
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FLM	Federal Land Manager
FMP	Fishery Management Plan
FR	*Federal Register*
ft	feet
FWCA	Fish and Wildlife Coordination Act
FWS	Fish and Wildlife Service (U.S.)
GMFMC	Gulf of Mexico Fishery Management Council
GOM	Gulf of Mexico
GOMESA	Gulf of Mexico Energy Security Act of 2006
H.R.	House Resolution
ha	hectare
HABHRCA	Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014
IWG-HABHRCA	Interagency Working Group-Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014
km	kilometer

m	meter
MARPOL	International Convention for the Prevention of Pollution from Ships Protocol
mi	mile
MMPA	Marine Mammal Protection Act
MMS	Minerals Management Service
MPA	marine protected area
MPRSA	Marine Protection, Research, and Sanctuaries Act
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
nmi	nautical miles
NMSA	National Marine Sanctuaries Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NTL	Notice to Lessees and Operators
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
ONMS	Office of National Marine Sanctuaries
OPA	Oil Pollution Act of 1990
OSFR	oil-spill financial responsibilities
OSLTF	Oil Spill Liability Trust Fund
P.L.	Public Law
PM_{10}	particulate matter less than or equal to 10 μm
$PM_{2.5}$	particulate matter less than or equal to 2.5 μm
PSD	Prevention of Significant Determination
RCRA	Resource Conservation and Recovery Act
SIP	State Implementation Plan
SL	significance level
sVGP	small Vessel General Permit
TSS	traffic separation schemes
U.S.	United States
U.S.C.	United States Code
UNESCO	United Nations Education, Scientific and Cultural Organization
USACE	Corps of Engineers, U.S. Dept. of the Army
USCG	U.S. Coast Guard
USDOC	U.S. Department of Commerce
USDOI	U.S. Department of the Interior (also DOI)
USEPA	U.S. Environmental Protection Act
VGP	Vessel General Permit
VIDA	Vessel Incidental Discharge Act

WCR	Blowout Preventer Systems and Well Control Final Rule
WPA	Western Planning Area

1 OBJECTIVE

The objective of this document is to establish a current, comprehensive discussion describing the regulations that govern the environmental reviews for Bureau of Ocean Energy Management (BOEM) and Bureau of Safety and Environmental Enforcement (BSEE) offshore activities involving oil, natural gas, renewable energy, and marine minerals in the Gulf of Mexico (GOM). It will provide a framework of regulations and policies addressed in National Environmental Policy Act of 1969 (NEPA) documents required for the Outer Continental Shelf (OCS) oil and gas leasing program. Historically, these regulations and policies were discussed in past NEPA documents for BOEM's oil and gas lease sales, which contributed to lengthy documents.

2 INTRODUCTION

Federal laws mandate the OCS leasing program (i.e., the Outer Continental Shelf Lands Act [OCSLA]) and the environmental review process (i.e., NEPA). In implementing their responsibilities under the OCSLA, BOEM and BSEE must consult with numerous Federal departments and agencies that have authority to govern and maintain ocean resources pursuant to other Federal laws. Among these Federal entities are the U.S. Coast Guard (USCG), U.S. Environmental Protection Agency (USEPA), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (FWS), and the National Oceanic and Atmospheric Administration (NOAA) through the National Marine Fisheries Service (NMFS). Several Federal regulations establish specific consultation and coordination processes with Federal, State, Tribal, and local agencies (i.e., the Coastal Zone Management Act of 1972 [CZMA], the Endangered Species Act of 1973 [ESA], the Magnuson-Stevens Fishery Conservation and Management Act [MSFCMA], the Marine Mammal Protection Act [MMPA], and the National Historic Preservation Act of 1966 [NHPA], as amended [54 U.S.C. §§ 300101 *et seq*.]). Chapter 3 of this document identifies and summarizes the major Federal laws, Executive Orders, and Secretarial Orders that are relevant to the OCS oil and gas leasing process. These regulations are intended to encourage orderly, safe, and environmentally responsible development of oil, natural gas, renewable energy, and marine minerals on the OCS.

In addition to coordinating with Federal Government entities, BOEM and BSEE must coordinate and consult with any State governor or local government executives that may be affected by a particular lease, easement, or right-of-way. Each coastal state, with the exception of Alaska, has developed and implemented a federally approved coastal management program pursuant to the CZMA (16 United States Code [U.S.C.] §§ 1451 *et seq*.). The boundaries of each State's coastal zone are available on the Internet at https://coast.noaa.gov/czm/mystate/.

2.1 RULE CHANGES FOR THE REORGANIZATION OF TITLE 30: BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT AND BUREAU OF OCEAN ENERGY MANAGEMENT

On May 19, 2010, U.S. Department of the Interior (DOI or USDOI) Secretary Salazar announced in Secretarial Order 3299 (USDOI, 2010a) that the Minerals Management Service (MMS)

would be reorganized into two new bureaus within DOI, each reporting to the Assistant Secretary for Land and Minerals Management. These bureaus would come to be known as BOEM and BSEE. The mission of these new agencies was announced by the Secretary of the Interior (USDOI, 2010a). BOEM is to administer leasing and plans, environmental studies, NEPA analysis, resource evaluation, economic analysis, marine minerals, and the renewable energy programs. The mission of BSEE is to administer all field operations, including permitting and research, inspections, research, offshore regulatory programs, oil-spill response, training, and environmental compliance functions (*Federal Register*, 2011).

After the new organizations were announced on June 18, 2010 (USDOI, 2010b), the Secretary of the Interior issued Secretarial Order 3302 that, for the interim, changed the name of the former MMS to the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). In the period between the Secretary's announcement (USDOI, 2010b) and the beginning of Fiscal Year 2012 (October 1, 2011), BOEMRE planned for the reorganization and the separation of responsibilities under Title 30, Minerals Resources, of the Code of Federal Regulations (CFR), which had pertained to the former MMS. An announcement (*Federal Register*, 2011) promulgated a new rule that mapped the Title 30 regulations under the authority of the two newly formed bureaus. The rule pertained solely to the organization and codification of existing rules and related technical changes necessitated by a division of one agency into two separate agencies and made no changes to the substantive legal rights, obligations, or interests of the affected parties and, therefore, had no public comment period. Regulations administered by BOEM were grouped into a new Title 30 CFR Chapter V under this Bureau's name. Regulations administered by BSEE remain in Title 30 CFR Chapter II under this Bureau's name.

Recent BSEE Rules and Revisions

The BSEE published the Blowout Preventer Systems and Well Control Final Rule (the WCR) on April 29, 2016. The 2016 WCR consolidated the equipment and operational requirements for well control into one part of BSEE's regulations; enhanced blowout preventer, well design, and well-control requirements; and incorporated certain industry consensus standards. Most of the 2016 WCR provisions became effective on July 28, 2016. Although the 2016 WCR addressed a significant number of issues that were identified during the analysis of the *Deepwater Horizon* explosion, oil spill, and response, BSEE recognized that blowout preventer equipment and systems continue to improve technologically and that well-control processes also evolve. Additionally, following the 2016 WCR, BSEE continued to engage with the offshore oil and gas industry, Standards Development Organizations, and other stakeholders. During the course of those engagements, BSEE identified areas for regulatory improvement, and stakeholders expressed a variety of concerns regarding the implementation of the 2016 WCR. Accordingly, after thoroughly reexamining the 2016 WCR and experiences from the implementation process, BSEE published the 2019 Blowout Preventer Systems and Well Control Revisions, commonly referred to as the 2019 Well Control Rule (*Federal Register*, 2019).

On September 28, 2018, BSEE published the amended and updated Oil and Gas Production Safety Systems (Subpart H) Final Rule regarding oil and natural gas production safety systems on the OCS. This rule became effective on December 27, 2018. Operators may not commence oil and gas production until BSEE approves their production safety system application and conducts a pre-production inspection. This rulemaking addressed issues such as safety and pollution prevention equipment, subsurface safety devices, safety device testing, dry tree (surface) and subsea tree production systems, firefighting systems, shutdown valves and systems, valve closure and leakage, mechanical integrity of the fire tubes for tube-type heaters, and high pressure/high temperature (HPHT) well equipment. In addition, BSEE implemented the use of a lifecycle approach for safety and pollution prevention equipment; rewrote these regulations in more precise language; restructured these regulations to have shorter, easier-to-read sections and clearer, more descriptive headings; incorporated by reference new industry standards and updated the previous partial incorporation of other standards; and revised the existing regulation (30 CFR § 250.107(c)) that requires the use of Best Available and Safest Technology to follow more closely the OCSLA statutory language regarding Best Available and Safest Technology.

3 REGULATORY FRAMEWORK

3.1 OUTER CONTINENTAL SHELF LANDS ACT

The Outer Continental Shelf Lands Act of 1953 (OCSLA) (43 U.S.C. §§ 1331 *et seq.*), as amended, established Federal jurisdiction over submerged lands on the OCS seaward of State boundaries. The Act, as amended, provides the basis for implementing an OCS oil and gas exploration and development program and directs BOEM to study and consider coastal, marine, and human environmental impacts when making decisions on how to effectively promote economic development, promote environmental protection, and foster energy development and national security. The basic goals of the Act include the following:

- to establish policies and procedures for managing the oil and natural gas resources of the OCS that are intended to result in expedited exploration and development of the OCS in order to achieve national economic and energy policy goals, assure national security, reduce dependence on foreign sources, and maintain a favorable balance of payments in world trade;
- to preserve, protect, and develop oil and natural gas resources of the OCS in a manner that is consistent with the need;
  - to make such resources available to meet the Nation’s energy needs as rapidly as possible;
  - to balance orderly resource development with protection of the human, marine, and coastal environments;

  - to ensure the public a fair and equitable return on the resources of the OCS; and
  - to preserve and maintain free enterprise competition;
- to encourage development of new and improved technology for energy resource production, which will eliminate or minimize the risk of damage to the human, marine, and coastal environments; and
- to ensure that affected States and local governments have timely access to information regarding OCS activities and opportunities to review, comment, and participate in policy and planning decisions.

Under the OCSLA, the Secretary of the Interior is responsible for the administration of mineral exploration and development of the OCS. Within the Department of the Interior, BOEM is charged with the responsibility of managing and regulating the development of OCS oil and gas resources in accordance with the provisions of the OCSLA. BOEM's operating regulations are in 30 CFR parts 550 and 551 for oil and gas; 30 CFR part 585 for renewable energy; and 30 CFR part 580 for minerals other than oil, gas, and sulphur. The BSEE's operating regulations are in 30 CFR parts 250 and 254. Regulations shared between BOEM and BSEE are under 30 CFR part 251.

Enacted on August 8, 2005, the Energy Policy Act of 2005 amended Section 8 of the OCSLA (43 U.S.C. § 1337) to authorize the Secretary of the Interior to issue a lease, easement, or right-of-way on the OCS for activities that are not otherwise authorized by the OCSLA, or other applicable law, if those activities

- produce or support production, transportation, or transmission of energy from sources other than oil and gas; or
- use, for energy-related purposes or other authorized marine-related purposes, facilities currently or previously used for activities authorized under the OCSLA, except that any oil and gas energy-related uses shall not be authorized in areas in which oil and gas preleasing, leasing, and related activities are prohibited by a moratorium.

Section 11(a)(1) of the OCSLA states that, "[A]ny agency of the United States and any person authorized by the Secretary of the Interior may conduct geological and geophysical explorations in the Outer Continental Shelf, which do not interfere with or endanger actual operations under any lease maintained or granted pursuant to this Act, and which are not unduly harmful to aquatic life in such area." Section 11(g) specifies that permits for geological explorations shall be issued only if the Secretary of the Interior determines that "such exploration will not be unduly harmful to aquatic life in the area. . . ." BOEM regulations at 30 CFR § 551.6 state that permit holders for oil and gas geological and geophysical activities must not "cause harm or damage to life (including fish and other aquatic life), property, or to the marine, coastal, or human environment."

Under Section 20 of the OCSLA, the Secretary of the Interior shall ". . . conduct such additional studies to establish environmental information as he deems necessary and shall monitor the human, marine, and coastal environments of such area or region in a manner designed to provide time-series and data trend information that can be used for comparison with any previously collected data for the purpose of identifying any significant changes in the quality and productivity of such environments, for establishing trends in the area studied and monitored, and for designing experiments to identify the causes of such changes." Through the Environmental Studies Program, BOEM conducts studies designed to provide information on the current status of resources of concern and notable changes, if any, resulting from OCS Program activities.

In addition, the OCSLA provides a statutory foundation for coordination with the affected States and, to a more limited extent, local governments. At each step of the procedures that lead to lease issuance, participation from the affected States and other interested parties is encouraged and sought.

3.2 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. §§ 4321 *et seq.*) provides a national policy that encourages "productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man. . . ." The NEPA requires that all Federal agencies use a systematic, interdisciplinary approach to protection of the human environment; this approach will ensure the integrated use of the natural and social sciences in any planning and decisionmaking that may have an impact upon the environment. The NEPA also requires Federal agencies to prepare an environmental impact statement (EIS) to evaluate the potential environmental impacts of any proposed major Federal action that would significantly affect the quality of the human environment and to consider alternatives to such proposed actions. The DOI's regulations to implement NEPA can be found in 43 CFR part 46.

The intent of the NEPA process is to help public officials make decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment. In 1979, the Council on Environmental Quality (CEQ) established uniform guidelines for implementing the procedural provisions of NEPA regulations. These regulations (40 CFR §§ 1500-1508) provide for the use of the NEPA process to identify and assess the reasonable alternatives to proposed actions that avoid or minimize adverse effects of these actions upon the quality of the human environment.

BOEM produces NEPA documents for each of the major steps of energy development planning, i.e., from the overarching Five-Year Program EIS through each of the NEPA documents for the energy lease sales and the exploration, development, and production plans. BOEM completes a NEPA determination review to establish the level of NEPA analysis required on the activity being considered for approval. In some cases, a categorical exclusion review with analysis (CERA) may be utilized for the proposed activity. If the NEPA determination is a CERA, all applicable environmental reviews are completed and all applicable conditions of approval are applied, but an environmental

assessment (EA) is not required. If an EA is triggered for the proposed activity, applicable environmental reviews are completed, and an EA is prepared. If the prepared EA does not reach a Finding of No Significant Impact (FONSI), then an EIS will be required. Exploration plans (EPs) and development operations coordination documents (DOCDs) that are submitted for the Gulf of Mexico's Central and Western Planning Areas (CPA and WPA) may require either a CERA or an EA based on the NEPA determination. All EPs and development and production plans (DPPs) submitted for the Eastern Planning Area (EPA) will require, at a minimum, the preparation of an EA (a NEPA determination of CERA is not applicable in the EPA).

3.2.1 Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act

On July 16, 2020, CEQ announced its final rule titled "Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act." (*Federal Register*, 2020a). The final rule became effective on September 14, 2020, and will apply to any BOEM or BSEE National Environmental Policy Act Federal actions initiated thereafter. According to CEQ, the final rule modernized and clarified CEQ's regulations to facilitate more efficient, effective, and timely NEPA reviews by simplifying and clarifying regulatory requirements, incorporating key elements of the One Federal Decision policy, codifying certain case law and CEQ guidance, updating the regulations to reflect current technologies and agency practices, eliminating obsolete provisions, and improving the format and readability of the regulations. The final rule reduces unnecessary paperwork and delays, and promotes better decisionmaking consistent with NEPA's statutory requirements.

3.3 COASTAL ZONE MANAGEMENT ACT OF 1972

The Coastal Zone Management Act of 1972 (CZMA) (16 U.S.C. §§ 1451 *et seq.*) was enacted by Congress in 1972 to develop a national coastal management program that comprehensively manages and balances competing uses of and impacts to any coastal use or resource. The national coastal management program is implemented by individual State coastal management programs in partnership with the Federal Government. The CZMA Federal consistency regulations require that Federal activities (e.g., OCS lease sales) be consistent to the maximum extent practicable with the enforceable policies of a State's coastal management program. The Federal consistency regulations also require that other federally approved activities (e.g., activities requiring Federal permits, such as activities described in OCS plans) be consistent with a State's federally approved coastal management program. Non-Federal actions requiring the approval of a Federal agency (e.g., issuance of lease, easement, or right-of-way) also must be fully consistent with the enforceable policies of a State's coastal management program. The Federal consistency requirement is an important mechanism to address coastal effects, to ensure adequate Federal consideration of State coastal management programs, and to avoid conflicts between States and Federal agencies. The Coastal Zone Act Reauthorization Amendments of 1990, enacted November 5, 1990, as well as the Coastal Zone Protection Act of 1996, amended and reauthorized the CZMA. The CZMA is administered by the Office of Ocean and Coastal Resource Management within NOAA's National Ocean Service. The

NOAA's implementing regulations are found at 15 CFR part 930, with the latest revision being published in the *Federal Register* on January 5, 2006.

3.4 ENDANGERED SPECIES ACT OF 1973

The Endangered Species Act of 1973 (ESA; 16 U.S.C. §§ 1531 *et seq*.), as amended (43 U.S.C. §§ 1331 *et seq.*), establishes a national policy designed to protect and conserve endangered and threatened species and their habitat. There are approximately 1,930 species listed under the ESA, which are found in part or entirely in the United States and its waters. The National Oceanic and Atmospheric Administration's NMFS and the Department of the Interior's FWS share responsibility for implementing the ESA, with NMFS generally managing marine and anadromous species and FWS managing land and freshwater species. Section 7 of the ESA mandates that BOEM and all other Federal agencies consult with the Secretary of Commerce (via NMFS) and/or Interior (via FWS) to ensure that any "agency action" is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of an endangered or threatened species' critical habitat.

The consultation process begins when BOEM provides NMFS and/or FWS with details on the proposed activity, the ESA-listed species and designated critical habitat in the area, the best available information on the effects to species and habitat from the proposed action, and measures that will be required by BOEM to reduce or eliminate the potential for effects to occur (e.g., mitigation and monitoring measures). Formal consultation will occur for any activity that BOEM, NMFS, or FWS determine may adversely affect listed species or designated critical habitat. The consultation process ends with the issuance of a biological opinion by NMFS and/or FWS. This Biological Opinion documents whether the action BOEM proposes to authorize is likely to jeopardize listed species or adversely modify critical habitat. It may also provide an exemption for the taking of listed species and may outline measures deemed necessary to minimize impacts.

The FWS and NMFS programmatic Biological Opinions address all future lease sales and any approvals issued by BOEM and BSEE under both existing and future OCS oil and gas leases in the GOM over a 10-year period. The current FWS Biological Opinion was published on April 20, 2018, and noted that any future consultations may be informal, dependent upon the likelihood of take. On March 13, 2020, NMFS issued a Biological Opinion with related terms and conditions for oil and gas activities in the Gulf of Mexico. Applicable terms and conditions and reasonable and prudent measures will be applied at the lease sale stage; other specific conditions of approval will also be applied to post-lease approvals. The NMFS Biological Opinion can be found on NOAA Fisheries website at https://www.fisheries.noaa.gov/resource/document/biological-opinion-federally-regulated-oil-and-gas-program-activities-gulf-mexico. The appendices and protocols can be found at https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.

3.5 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1976 (16 U.S.C. §§ 1801 *et seq.*) established and delineated an area from the States' seaward boundary outward 200 nautical miles (nmi) (230 miles [mi]; 370 kilometers [km]) as a fisheries conservation zone for the United States (U.S.) and its possessions. The Act established national standards for fishery conservation and management. The Act established eight Regional Fishery Management Councils to exercise sound judgment in the stewardship of fishery resources through the preparation, monitoring, and revision of fishery management plans (FMPs). An FMP is based upon the best available scientific and economic data. The Act also included extensive provisions on individual fishing quotas and intended to end overfishing, help replenish the Nation's fish stocks, and advance international cooperation and ocean stewardship.

Congress amended and reauthorized the MSFCMA through passage of the Sustainable Fisheries Act of 1996. In January 2007, President George W. Bush signed the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006. The reauthorization promoted domestic commercial and recreational fishing under sound conservation and management principles, including the promotion of catch and release programs in recreational fishing and encouraged the development of currently underutilized fisheries. The reauthorization required that the Fishery Management Councils identify essential fish habitat (EFH). To promote the protection of EFH, Federal agencies are required to consult on activities that may adversely affect EFH designated in the FMPs.

3.5.1 Essential Fish Habitat

As of June 2020, there are FMPs in the Gulf of Mexico OCS region for shrimp, red drum, reef fishes, coastal migratory pelagics, stone crabs, spiny lobsters, corals, aquaculture, and highly migratory species. The Gulf of Mexico Fishery Management Council's (GMFMC) 1998 *Generic Amendment for Addressing Essential Fish Habitat Requirements* (GMFMC, 1998) amends the first seven FMP's listed above, identifying estuarine/inshore and marine/offshore EFH for over 450 managed species (about 400 in the Corals FMP). Although not part of the Gulf of Mexico Fishery Management Council's FMPs, separate FMPs have been finalized by NMFS for Atlantic tunas, swordfish and sharks, and the Atlantic billfish fishery (USDOC, NMFS, 1999a and 1999b).

The EFH boundaries were modified in 2004, reducing the extent of EFH relative to the 1998 Generic Amendment by removing the EFH description and identification from waters between 100 fathoms (183 meters [m]; 600 feet [ft]) and the seaward limit of the U.S. Exclusive Economic Zone (as deep as 3,200 m; 10,499 ft). Only highly migratory fish species now have EFH identified in areas deeper than 100 fathoms (183 m; 600 ft).

The 1998 Generic Amendment identifies threats to EFH and makes a number of general and specific habitat preservation recommendations for pipelines and oil and gas exploration and production activities within State waters and OCS areas. In 2005, a new amendment to the original EFH Generic Amendment was finalized (GMFMC, 2005). The purpose of this action was to amend

each of the nine Gulf of Mexico FMPs to (1) describe and identify EFH for the fisheries, (2) minimize to the extent practicable the adverse effects of fishing on such EFH, and (3) encourage the conservation and enhancement of such EFH. This is pursuant to the mandate contained in Section 303(a)(7) of the MSFCMA. To support the description and identification of EFH and to address adverse fishing impacts for all managed GOM species, the GMFMC undertook, over a 2-year period, a detailed analysis of the GOM's physical environment; oceanographic features; estuarine, nearshore, and offshore habitats; all fishery resources; and marine mammals and protected species. The analysis resulted in an EFH Final EIS (GMFMC, 2004) for the nine FMPs. As a result of the analysis from the EFH Final EIS, the GMFMC proposed actions to describe and intensify EFH, establish habitat areas of particular concern, and address adverse effects of fishing on EFH. The NMFS approved these revisions, and the rule implementing the changes became effective January 23, 2006. One of the most significant proposed changes in this amendment will reduce the extent of EFH relative to the 1998 Generic Amendment by removing the EFH description and identification from waters between 100 fathoms (183 m; 600 ft) and the seaward limit of the U.S. Exclusive Economic Zone (as deep as 3,200 m; 10,499 ft).

BOEM, BSEE, and NMFS have previously entered into a programmatic-level consultation agreement for EFH related to OCS oil- and gas-related activities in all of the lease areas. The EFH conservation measures recommended by NMFS serve the purpose of protecting EFH and include avoidance distances from topographic features and deepwater benthic communities, No Activity Zones, and live bottom pinnacle features. Additional conservation provisions and circumstances that require project-specific consultation have also been agreed to through this Programmatic Consultation. These agreements, including avoidance distances from topographic features and deepwater benthic communities, No Activity Zones, and live bottom pinnacle features appear in Notices to Lessees and Operators (NTLs) Nos. 2009-G39 and 2009-G40.

BOEM established the Topographic Features and Live Bottom (Pinnacle Trend) Stipulations to protect essential fish habitat such as seagrass communities, i.e., areas containing biological assemblages consisting of sessile invertebrates (e.g., sea fans, sponges, and corals). The purpose of the Topographic Features Stipulation protects the benthic habitat for coral reef community organisms. These communities could be severely and adversely impacted by OCS oil- and gas-related activities taking place on or near these communities. This stipulation establishes No Activity Zones and other operational restrictions.

The Live Bottom (Pinnacle Trend) Stipulation protects the "live bottom areas," defined as seagrass communities; or those areas that contain biological assemblages consisting of such sessile invertebrates as sea fans, sea whips, hydroids, anemones, ascidians, sponges, bryozoans, or corals living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography; or areas whose lithotope favors the accumulation of turtles, fishes, and other fauna. A bathymetry map is required prior to exploration and development activities. If the live bottom area might be adversely impacted by the proposed activity, the Regional Director will require the lessee to

undertake additional measures, such as relocating or monitoring the operations, to assess the impact of the activity on the live bottom area.

3.5.2 Essential Fish Habitat Consultation

The NOAA is responsible for administering the MSFCMA. The Sustainable Fisheries Act requires that BOEM and other Federal agencies consult with NOAA's National Marine Fisheries Service with respect to any action authorized, funded, or undertaken by that agency that may adversely affect any EFH. According to the final rule for the provisions (50 CFR part 600), NMFS will comment on the consultation, and the consulting agency then has 30 days to respond. Any conservation recommendations provided by NOAA Fisheries to the consulting agency are nonbinding. If the consulting agency chooses not to accept some or all of the conservation recommendations, it must provide an explanation to NMFS.

BOEM can initiate consultations for a category of actions or for specific proposals. The level of analysis and type of consultation are commensurate with the degree of impact. BOEM and other Federal agencies must consult on activities that may adversely affect EFH in order to comply with the legislative mandate. The EFH consultation, combined with other environmental reviews, must include a description of the proposed action and an analysis of the effects of the proposed action on EFH, the managed species, and their affected life stages and proposed mitigation, if applicable.

The EFH regulations at 50 CFR § 600.920(f) enable NMFS to make a finding that an existing consultation or environmental review procedure can be used to satisfy the MSFCMA consultation requirements. The required components of an EFH Assessment are (1) a description of the proposed action; (2) an analysis of the effects, including cumulative effects, of the proposed action on EFH; (3) BOEM and BSEE's views regarding the effects of the action on EFH; and (4) the proposed mitigations. BOEM received conservation recommendations to conclude formal programmatic EFH consultation from NMFS on July 10, 2017, for a 5-year period.

3.6 Marine Mammal Protection Act of 1972

Congress enacted the Marine Mammal Protection Act of 1972 (MMPA; 16 U.S.C. §§ 1361 *et seq*.) to prevent the decline of marine mammal species and populations. The MMPA specifically prohibits the "taking" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States.

BOEM petitioned NMFS for rulemaking under the MMPA (16 U.S.C. §§ 1361 *et seq.*) to assist industry in obtaining incidental take coverage for marine mammals due to oil and gas geological and geophysical surveys in the Gulf of Mexico in October 2016. On December 8, 2020, NMFS issued a final rule as a result of the petition. As a result, the NMFS' programmatic Biological Opinion, which is discussed in **Chapter 3.4**, could be amended and additional mitigation measures beyond what is currently within Appendices A and C of the Biological Opinion may be imposed through Letters of Authorizations under the rule. The appendices and protocols can be found at

https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.

3.7 CLEAN AIR ACT

Responsibility for air quality in the Gulf of Mexico is shared between BOEM and the USEPA. Originally under the OCSLA, the U.S. Department of the Interior was directed to enforce environmental laws on the OCS, including the Clean Air Act. Then, in 1990, Section 328 of the Clean Air Act Amendments directed the USEPA to establish requirements to control air pollution from OCS-related activities along the Pacific, Arctic, and Atlantic Coasts, and along the U.S. Gulf Coast off the State of Florida, eastward of 87°30' W. longitude. Air quality responsibility for the portion of the Gulf of Mexico where OCS oil- and gas-related activities were already well established, west of 87.5° W. longitude, remained with the U.S. Department of the Interior by way of existing OCSLA authority (Ramseur, 2012).

The 1970 Clean Air Act (CAA) (42 U.S.C. §§ 7401 *et seq.*) requires the USEPA to set National Ambient Air Quality Standards (NAAQS) for widespread pollutants from numerous and diverse sources considered harmful to public health and the environment. The NAAQS's primary standards are established to protect public health, and the secondary standards are established to protect public welfare. The CAA requires periodic review of the science upon which the standards are based and the standards themselves. Currently, the USEPA has set NAAQS for six principal "criteria" pollutants. Although the CAA is a Federal law covering the entire Nation, the states do much of the work to implement the Act. The law allows individual states to have more stringent pollution controls, but the states are not allowed to have less stringent pollution controls than those for the rest of the United States. The law recognizes that states should take the lead in carrying out the CAA because pollution control problems often require an in-depth understanding of local meteorology, industries, geography, housing patterns, etc.

If monitors in an area indicate a criteria pollutant is above the NAAQS, that area is designated as nonattainment and the state will be required to develop a State Implementation Plan (SIP) that explains how they will comply with the NAAQS. The states must involve the public, through hearings and opportunities to comment, in the development of the SIP. Usually in development of a SIP, the state will calculate emissions inventories for input into air quality photochemical modeling. The modeling will show what reductions or controls are needed to bring the area back into compliance with the NAAQS. The USEPA must approve the SIP, and if the SIP is not acceptable, the USEPA can take over enforcing the CAA in that state. The U.S. Government, through the USEPA, assists the states with air quality compliance by providing scientific research, expert studies, engineering designs, and money to support clean air programs.

The CAA established the Prevention of Significant Deterioration (PSD) program to preserve, protect, and enhance the air quality in special regions of the United States. Under the PSD program, these special air quality regions were designated as Class I areas. Class I areas are areas of special national or regional natural, scenic, recreational, or historic value, which the PSD regulations provide

special protection. The Federal Land Manager (FLM) for a Class I area is responsible for defining specific Air Quality Related Values (AQRV) for the area and for establishing the criteria to determine any adverse impact on the area's AQRV. If an FLM determines that a source will adversely impact the AQRV in a Class I area, the FLM may recommend that the permitting agency deny issuance of the permit; however, the permitting authority has the final decision to issue or deny the permit. In the Gulf of Mexico OCS region, FWS is the FLM for the Breton, St. Marks, Okefenokee, and Chassahowitzka Class I areas and the National Park Service is the FLM for the Everglades Class I area.

The CAA also delineates GOM air quality jurisdictional boundaries between the USEPA and DOI. Operations on the Gulf of Mexico OCS east of 87.5° W. longitude (off the coast of Florida) are subject to USEPA air quality regulations (Section 328 of the CAA) and those west of 87.5° W. longitude (off the coast of Texas, Louisiana, Mississippi, and Alabama) are regulated by BOEM (30 CFR §§ 550.302-550.304). In December 2011, air quality jurisdiction on the Arctic OCS in the Chukchi Sea and Beaufort Sea Planning Areas, adjacent to the North Slope Borough of Alaska, were transferred from the USEPA to the DOI when Congress revised Section 328 of the CAA and approved the Consolidated Appropriations Act, 2012.

The Clean Air Act Amendments of 1990 (Public Law [P.L.] 101-549) required BOEM to conduct a study to evaluate cumulative, onshore, air quality nonattainment area impacts from OCS petroleum resource development in the GOM. Subsequent to the completion of the air quality impacts study in 1995, the DOI Secretary consulted with the USEPA Administrator and determined that no new air quality requirements were necessary for the area under BOEM's jurisdiction. The requirement was satisfied with the publication of *Gulf of Mexico Air Quality Study: Final Report* (Systems Applications International et al., 1995). Since this report is now 25 years old, BOEM contracted and completed a new study (*Air Quality Modeling in the Gulf of Mexico Region*) that reevaluated the cumulative OCS oil- and gas-related activities' impacts to the onshore air quality in the GOM (Wilson et al., 2019).

BOEM's Air Quality Regulations and Rule

BOEM's air quality regulations are codified in 30 CFR part 550 subpart C. These regulations are used to assess and control OCS emissions that may impact air quality in onshore areas. In accordance with BOEM's air quality regulations, BOEM applies defined criteria to determine which OCS plans require an air quality review and performs an impact-based exemption threshold analysis on the selected plans to determine whether the emission source could potentially cause a significant onshore impact. Should the air emission source exceed the exemption threshold limits and require air quality modeling, either the Offshore and Coastal Dispersion model or the CALPUFF model should be used, depending on the distance to the shoreline. Modeling determines if a source would significantly impact the air quality of any state, and at that time, Best Available Control Technology would then need to be applied.

Air Quality Final Rule

On April 5, 2016, BOEM proposed regulations to update air quality regulations promulgated by the Secretary of the Interior almost 40 years ago. Pursuant to Executive Order 13795 (**Chapter 3.46**) signed by President Trump and Secretary's Order 3350 (**Chapter 3.53**), BOEM reviewed its 2016 Proposed Rule on Air Quality Control, Reporting, and Compliance. As a result of this review and analysis of comments received on the proposed rule, BOEM issued a final rule on May 14, 2020, which adopts the following notable changes.

- **Compliance with NAAQS**. As was the case with the proposed rule, this final rule adds a definition of the NAAQS. It also clarifies that DOI's reporting and compliance requirements apply to the emissions of all pollutants on the OCS for which a national ambient air quality standard has been defined.
- **Updating Significance Levels (SLs)**. The final rule replaces the table of SLs in BOEM's existing regulations – dating back to 1980 – with a revised table, which is based on values set forth in USEPA's regulations (40 CFR § 51.165(b)(2)). BOEM will continue to update the table of SLs as appropriate, which will save operators from having to search for the SLs in USEPA's regulations.
- **New Requirements for $PM_{2.5}$ and PM_{10}**. This final rule replaces the former criteria air pollutant "total suspended particulates (TSP)" modeling requirements with new modeling requirements for the criteria pollutants "particulate matter less than or equal to 10 μm" (PM_{10}) and "particulate matter less than or equal to 2.5 μm" ($PM_{2.5}$). BOEM is also updating its forms to enable lessees and operators to identify, report, and evaluate $PM_{2.5}$ and PM_{10} pollution in the air quality spreadsheets that they submit in connection with their exploration or development plans.
- **Emissions Exemption Thresholds**. The final rule also updates existing regulations that refer to emissions exemption thresholds to clarify that these formulas apply equally to DPPs and DOCDs. This update will not lead to a change in practice because BOEM has always applied its existing regulations on air quality to both DPPs and DOCDs.
- **Clarifying Terminology**. The final rule updates various terminology to better clarify the intent of the regulations. For example, the final rule replaces the term "air pollutant" with the term "criteria air pollutant." Under the OCSLA, BOEM regulates the emissions of criteria air pollutants since those represent pollutants for which the USEPA has defined a NAAQS. BOEM regulates only those emissions that could affect BOEM's obligation to ensure compliance of State air quality with the NAAQS; therefore, previously using the term "air pollutant" was not appropriate.

- **Air Quality Spreadsheets**. With the implementation of the new air quality rule, BOEM is also updating the Office of Management and Budget-approved air quality spreadsheets and BOEM's Forms BOEM-0138 (for exploration plans) and BOEM-0139 (for DOCDs and DPPs). The lessee or its designated operator must use these forms for proposed operations in areas of BOEM's air quality regulatory jurisdiction. Concurrent with these changes, BOEM is phasing out its previous practice of including the emissions from transiting support vessels in the emissions exemption thresholds calculations, consistent with BOEM's statutory mandates. Air quality modeling will henceforth only be required in situations when a regulated facility, exclusive of support vessels, exceeds the relevant emissions exemption thresholds.

On May 14, 2020, the U.S. Department of the Interior and BOEM announced a final rule to update air quality regulations for applicable BOEM activities in the central and western Gulf of Mexico. The final rule ensures that BOEM's Air Quality Regulatory Program remains in compliance with the OCSLA requirements by ensuring that BOEM uses up-to-date air quality standards (i.e., NAAQS) and benchmarks consistent with those already established by the USEPA. The new regulations provide a definition of the NAAQS and clarify that reporting and compliance requirements apply to all pollutants on the OCS that fall under the NAAQS; replace the table of Significance Levels in BOEM's existing regulations with a revised table, which is based on values set forth in the USEPA's regulations (40 CFR § 51.165(b)(2)); replace the former criteria air pollutant "total suspended particulates (TSP)" modeling requirements with new modeling requirements for the criteria pollutants "particulate matter less than or equal to 10 μm" (PM_{10}) and "particulate matter less than or equal to 2.5 μm" ($PM_{2.5}$); updates existing emissions exemption thresholds; clarifies various terminology; and updates reporting forms used by operators. The new rule does not change the pre-lease NEPA evaluation. The projected scenarios, such as the amount and location of activities and projected air pollutant emissions that were evaluated in the pre-lease NEPA document and used to reach the pre-lease conclusions, have not changed.

3.8 CLEAN WATER ACT

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principle law governing pollution control and water quality of the Nation's waterways. The object of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (33 U.S.C. § 1251), and it provides standards and enforcement, a number of regulatory programs with permits and licenses, and grants and revolving funds, as well as general provisions and provisions for research and related programs. The CWA establishes conditions and permitting for discharges of pollutants into the waters of the United States under the National Pollution Discharge Elimination System (NPDES) and gave the USEPA the authority to implement pollution control programs such as setting wastewater standards for industry and to set water quality standards for all contaminants in surface waters. The CWA made it unlawful for any person to discharge any pollutant from a point source into waters of the United States, unless an NPDES permit was obtained under its provisions.

Under Sections 301, 302, 304, and 306 of the CWA, the USEPA issues technology-based effluent guidelines that establish discharge standards based on treatment technologies that are available and economically achievable. Each USEPA Region issues permits that meet or exceed the guidelines and standards. The CWA also funded the construction of sewage treatment plants under the construction grants program and recognized the need for planning to address the critical problems posed by nonpoint-source pollution.

All waste streams generated from offshore oil and gas activities are regulated by the USEPA, primarily through general NPDES permits. The USEPA may not issue a permit for a discharge into ocean waters unless the discharge complies with the guidelines established under Section 403(c) of the CWA. These guidelines are intended to prevent degradation of the marine environment and require an assessment of the effect of the proposed discharges on sensitive biological communities and aesthetic, recreational, and economic values.

Direct dischargers (i.e., an OCS operator) must comply with the effluent limitation guidelines and the new source performance standards in the NPDES permits; indirect dischargers must comply with the pretreatment standards. The most recent effluent limitation guidelines for the oil and gas extraction point-source category were published in 1993. The USEPA also published new guidelines for the discharge of synthetic-based drilling fluids on January 22, 2001.

Existing point-source dischargers (i.e., exploratory wells and grandfathered development and production facilities) are regulated using technology-based effluent limitations guidelines (40 CFR part 435). Regulated wastes include drilling fluids and cuttings, produced water, sanitary wastes, and deck drainage among others. Three broad categories of pollutants, which are described below, are identified in the guidelines: conventional; toxic; and nonconventional. The level of required discharge control is dependent on the category of the pollutant.

Conventional pollutants are contained in the sanitary wastes of households, businesses, and industries. These pollutants include fecal coliform, total suspended solids, biochemical oxygen demand, pH, and oil and grease (e.g., hydrocarbons, fats, oils, waxes, and high-molecular fatty acids).

Toxic pollutants are pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the USEPA Administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformations in such organisms or their offspring. Toxic pollutants also include those pollutants listed by the USEPA Administrator under Section 307(a)(1) of the CWA or any pollutant listed under Section 405(d) of the CWA, which relates to sludge management.

Nonconventional pollutants are all pollutants that are not included in the list of conventional or toxic pollutants in 40 CFR part 401, such as chemical oxygen demand, total organic carbon, nitrogen, and phosphorus.

New point sources and existing point sources of pollutants have different NPDES regulations. New sources are subject to more rigorous effluent limits than existing sources based on the idea that it is cheaper to minimize effluent pollutants if environmental controls are considered during plant design than if an existing facility is retrofitted. New source discharges must comply with standards based on the performance of demonstrated technology with the greatest degree of effluent reduction. These new source performance standards should represent the most stringent numerical values attainable. The new source performance standards are based upon the best available demonstrated control technology and are at least as stringent as best available technology.

The NPDES guidelines define a new source as any area in which significant site preparation work is done. The USEPA interprets "significant site preparation" for offshore effluent guidelines as "the process of clearing and preparing an area of the ocean floor for purposes of constructing or placing a development or production facility on or over the site." Thus, development and production facilities at a new site would be new sources. Development and production facilities are existing sources if significant site preparation work took place before the new source performance standards became effective. Exploratory wells are not considered new sources because site preparation is not considered significant.

Section 316(b) of the CWA requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. The regulations are designed to minimize harmful impacts on aquatic life caused by cooling water intake structures. In Phase III implementation of the new standards, certain existing facilities and new offshore and coastal oil and gas extraction facilities are included. The USEPA has published the third and final part of this rule, which establishes categorical requirements under Section 316(b) of the CWA for new offshore oil and gas extraction facilities that have a design intake flow threshold of greater than 2 million gallons per day and that withdraw at least 25 percent of the water exclusively for cooling purposes. The USEPA Administrator signed this rule on June 1, 2006, and it was published in the Federal Register on June 16, 2006 (*Federal Register*, 2006). Liquefied natural gas facilities, which use seawater for warming rather than cooling, are not included in Phase III. The requirements were incorporated into the Region 6 permit upon reissuance on October 1, 2012, and will be incorporated into the Region 4 permit when it is reissued.

The USEPA issues general and individual NPDES permits for a 5-year period. These permits are subject to renewal for subsequent 5-year periods. General permits are written for a specific industrial category within a limited geographic area. The general permit allows for streamlining of the permitting process for similar activities. Individual permits enhance the protection of sensitive resources while still allowing the development of energy resources. Individual permits provide more opportunity for USEPA evaluation and input to OCS oil and gas facility developments.

Within the GOM, USEPA Region 6 has jurisdiction over Louisiana and Texas (i.e., all of the WPA and the majority of the CPA). The USEPA Region 4 has jurisdiction over the eastern portion of the GOM, including all of the EPA and part of the CPA off the coasts of Alabama and Mississippi. Each region has promulgated general permits for discharges that incorporate the 1993 effluent guidelines as a minimum. A site-specific permit may be requested by either Region 4 or 6.

The USEPA Region 4 final NPDES general permit for existing and new source discharges in the eastern portion of the Gulf of Mexico OCS (GMG460000) was issued on December 21, 2017; became effective on January 20, 2018; and expired on January 19, 2023 (USEPA, 2017a). The permit applies to operators of leases seaward of the 200-m (656-ft) water depth contour offshore Alabama in the Destin Dome lease blocks and offshore Florida and seaward of the outer boundary of the territorial seas for offshore Mississippi and Alabama in the Mobile and Viosca Knoll lease blocks.

The USEPA Region 6 NPDES OCS General Permit No. GMG290000 was reissued with an effective date of October 1, 2017, expiring at midnight on September 30, 2022 (USEPA, 2017b). The BSEE inspectors assist the USEPA with NPDES offshore platform compliance. Additionally, the USCG's Marine Safety Office conducts inspections.

Other sections of the CWA also apply to offshore oil and gas activities. Section 404 of the CWA requires a USACE permit for the discharge or deposition of dredged or fill material in all waters of the U.S., including ocean areas, estuaries, streams, ponds, rivers, lakes, and wetlands. Approval by USACE, with consultation from other Federal and State agencies, is also required for installing and maintaining pipelines in coastal areas of the GOM. Section 303 of the CWA provides for the establishment of water quality standards that identify a designated use for waters (e.g., fishing/swimming). States have adopted water quality standards for ocean waters within their jurisdiction (waters of the territorial sea that extend out to 3 nmi [3.5 mi; 5.63 km] off Louisiana, Mississippi, and Alabama, and 3 leagues [9 nmi; 10.36 mi; 16.67 km] off Texas and Florida). Section 401 of the CWA gives authority to the States and Tribes to review and approve, condition, or deny all Federal permits or licenses that might result in a discharge to State or Tribal waters, including wetlands. Section 402(b) of the CWA authorizes USEPA approval of State permit programs for discharges from point sources.

The USEPA issued the final 2013 Vessel General Permit (VGP) (USEPA, 2013) to regulate the 26 specific discharge categories contained in the 2008 VGP. This VGP contains numeric ballast water discharge limits for most vessels and more stringent effluent limits for oil-to-sea interfaces and exhaust gas scrubber washwater (USEPA, 2013). The permit generally aligns with requirements contained within the 2012 USCG ballast water rulemaking. Additionally, the final VGP contains requirements to ensure that ballast water treatment systems are functioning correctly. The USEPA published the small Vessel General Permit (sVGP) on September 10, 2014 (*Federal Register*, 2014), with an effective date of December 19, 2014, to provide NPDES permit coverage for discharges incidental to the normal operation of nonmilitary, nonrecreational (commercial) vessels less than 79 ft (24 m) (i.e., "small vessels") operating in a capacity as a means of transportation.

The U.S Congress approved the Frank LoBiondo Coast Guard Authorization Act of 2018, which incorporates vessel permits under Title IX–The Vessel Incidental Discharge Act (VIDA) and which was signed into law on December 4, 2018. The VIDA establishes a new framework for the regulation of vessel incidental discharges under Section 312(p) of the CWA. The VIDA requires USEPA to develop performance standards for those discharges within 2 years of enactment and requires the USCG to develop implementation, compliance, and enforcement regulations within 2 years of USEPA's promulgation of standards.

On October 26, 2020, the USEPA, in coordination with the USCG, published for public comment a proposed rule under VIDA (*Federal Register*, 2020b). The proposed rule would establish national standards of performance for marine pollution control devices for discharges incidental to the normal operation of primarily non-military and non-recreational vessels 79 ft (24 m) or greater in length into the waters of the United States or the waters of the contiguous zone. The specific discharge standards of performance would establish requirements for 20 separate discharges incidental to the normal operation of a vessel. These discharge-specific requirements are based on best available technology economically achievable, best conventional pollutant control technology, and best practicable technology currently available, including the use of best management practices, to prevent or reduce the discharge of pollutants into the waters of the United States or the waters of the contiguous zone. The proposed standards, once finalized and implemented through corresponding USCG regulations addressing implementation, compliance, and enforcement, would reduce the discharge of pollutants from vessels and streamline the current patchwork of Federal, State, and local vessel discharge requirements.

Under VIDA, all provisions of the VGP remain in force and effect until the USCG regulations are finalized. Therefore, commercial (nonmilitary, nonrecreational) vessels greater than 79 ft (24 m) in length must continue to comply with the requirements of the VGP, including submission of a Notice of Intent or retention of a Permit Authorization and Record of Inspection form and submission of annual reports. The VIDA legislation also repeals the sVGP so that any nonmilitary, nonrecreational vessels less than 79 ft (24 m) in length that discharge ballast water, including commercial fishing vessels, and that were covered by the sVGP must now comply with the requirements of the VGP (USEPA, 2019).

3.8.1 National Pollutant Discharge Elimination System for Onshore OCS-Related Infrastructure

The USEPA is responsible for implementing certain provisions of the CWA regulations, i.e., 40 CFR parts 122-125. The NPDES stormwater permit program requires operators of a construction site 1 acre (ac) (0.4 hectare [ha]) or larger to obtain authorization to discharge storm water under an NPDES Construction Stormwater Permit. The overall goal of this permit is to protect the quality and beneficial uses of the surface water resources from pollution in stormwater runoff from construction activities. This goal is achieved through the development and implementation of a Storm Water Pollution Prevention Plan and associated Best Management Practices.

Installation of the proposed onshore transmission lines and associated components would require an NPDES General Stormwater Construction Permit. An NPDES Notice of Intent for construction activities that includes general project information and certification that the activity would not impact endangered or threatened species would be submitted to the NPDES permitting authority. An application for an NPDES General Stormwater Construction Permit would be filed prior to commencement of construction.

3.9 HARMFUL ALGAL BLOOM AND HYPOXIA RESEARCH AND CONTROL ACT

The Harmful Algal Bloom and Hypoxia Research and Control Act (P.L. 108-456) was passed in 1998 in response to a surge in blooms nationwide, which resulted in fish kills, beach and shellfish bed closures, and manatee deaths. It was reauthorized by passing the Harmful Algal Bloom and Hypoxia Amendments Act of 2004 (P.L. 103-383). Both the 2004 and 2014 Amendments (U.S. Congress, 2004 and 2014) reaffirmed and expanded the mandate for NOAA to advance the scientific understanding and ability to detect, monitor, assess, and predict harmful algal bloom and hypoxia events. Congress most recently reauthorized the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 (HABHRCA) through the National Integrated Drought Information System (U.S. Congress, 2019). The amendments include a periodic review to evaluate program effectiveness. The Act required an assessment of the causes and consequences of hypoxia in the GOM and the development of a plan to reduce hypoxia. Six reports commissioned by the White House Committee on Environment and Natural Resources comprise the assessment. The Interagency Working Group on HABHRCA (IWG-HABHRCA) is tasked with coordinating and convening Federal agencies and their stakeholders to discuss harmful algal bloom and hypoxia events in the United States and to develop action plans and assessments of these situations. The NOAA co-chairs the IWG-HABHRCA with the USEPA. Other member agencies include the U.S. Food and Drug Administration, U.S. Department of Agriculture, Centers for Disease Control and Prevention, USACE, National Park Service, U.S. Geological Survey, BOEM, the U.S. Navy, National Institute of Environmental Health Sciences, and National Science Foundation.

More specifically, the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force was established in the fall of 1997 to understand the causes and effects of eutrophication in the Gulf of Mexico; coordinate activities to reduce the size, severity, and duration; and ameliorate the effects of hypoxia (Mississippi River/Gulf of Mexico Watershed Nutrient Task Force, 2001). Activities include coordinating and supporting nutrient management activities from all sources, restoring habitats to trap and assimilate nutrients, and supporting other hypoxia-related activities in the Mississippi River and Gulf of Mexico watersheds.

The Task Force includes Federal and State agencies and the tribes. Federal agencies include those with responsibilities over activities in the Mississippi River and its basin, and in the Gulf of Mexico. The role of the Task Force is to provide executive level direction and support for coordinating the actions of participating organizations working on nutrient management within the Mississippi River/Gulf of Mexico Watershed. The Task Force has designated members of a Coordinating Committee and solicits information from interested stakeholders.

3.10 OIL POLLUTION ACT OF 1990

The Oil Pollution Act of 1990 (OPA) (33 U.S.C. §§ 2701 *et seq.*) is comprehensive legislation that includes, in part, provisions to (1) improve oil-spill prevention, preparedness, and response capability; (2) establish limitations on liability for damages resulting from oil pollution; and (3) implement a fund for the payment of compensation for such damages.

The OPA, in part, revised Section 311 of the CWA to expand Federal spill-response authority; increase penalties for spills; establish a USCG prepositioned, oil-spill-response equipment site; require vessel and facility response plans; and provide for interagency contingency plans. Many of the statutory changes required corresponding revisions to the National Oil and Hazardous Substances Pollution Contingency Plan.

In October 1991, Executive Order 12777 delegated the provisions of OPA to various departments and agencies within the U.S. Government, including the USCG, USEPA, U.S. Department of Transportation, and DOI. In addition, Section 4 of Executive Order 12777, as amended, directed the President's authority to implement OPA provisions to the Department of Homeland Security, which the Coast Guard operates. Accordingly, this authority was redelegated by the Secretary of Homeland Security to the Coast Guard. In March 2013, Executive Order 12777 was further amended by striking and replacing Section 4 in its entirety.

The Secretary of the Interior was delegated Federal Water Pollution Control Act authority over offshore facilities and associated pipelines (except deepwater ports) for all Federal and State waters. The Secretary of the Interior's functions under the Executive Order include spill prevention, oil-spill contingency plans, equipment, financial responsibility certification, and civil penalties. Under Secretarial Order 3299, BOEM and BSEE exercise this authority on behalf of DOI.

If a spill or substantial threat of a spill of oil or a hazardous substance from a vessel, offshore facility, or onshore facility is considered to be of such a size or character to be a substantial threat to the public health or welfare of the U.S., under provisions of the Act, the President (through the USCG) now has the authority to direct all Federal, State, and private actions to remove a spill or to mitigate or prevent the threat of the spill. Potential impacts from spills of oil or a hazardous substance to fish, shellfish, wildlife, other natural resources, or the public and private beaches of the U.S. would be an example of the degree or type of threat considered to be of such a size or character to be a substantial threat to the U.S. public health or welfare. In addition, the USCG's authority to investigate marine accidents involving foreign tankers was expanded to include accidents in the U.S. Exclusive Economic Zone. The Act also established USCG oil-spill, district response groups (including equipment and personnel) in each of the 10 USCG districts, with a national response unit, the National Strike Force Coordination Center, located in Elizabeth City, North Carolina.

The OPA strengthened spill planning and prevention activities by providing for the establishment of interagency, spill contingency plans for areas of the U.S. To achieve this goal, Area Committees composed of qualified Federal, State, and local officials were created to develop Area

Contingency Plans. The OPA mandates that contingency plans address the response to a "worst-case" spill or a substantial threat of such a spill. It also required that vessels and both onshore and offshore facilities have response plans approved by the President. These plans were required to adhere to specified requirements, including demonstration that they had contracted with private parties to provide the personnel and equipment necessary to respond to or mitigate a "worst-case" spill. In addition, OPA provided for increased penalties for violations of statutes related to oil spills, including payment of triple costs by persons who fail to follow contingency plan requirements.

Pursuant to OPA, double hulls are required on all newly constructed tankers. Double hulls or double containment systems are required on all tank vessels less than 5,000 gross tons (i.e., barges). In the U.S., the use of single-hull tankers began being phased out in compliance with OPA since 1995. As of January 1, 2015, the U.S. will have phased out all single-hull tank vessels and all single-hull tank vessels with double sides or double bottoms that would operate by carrying bulk oil in both U.S. territorial waters, as well as the U.S. Exclusive Economic Zone.

The Oil Spill Liability Trust Fund (OSLTF), authorized under OPA and administered by the USCG, is available to pay for removal costs and damages not recovered from responsible parties. The Fund provides up to $1 billion per incident for cleanup costs and other damages. The OSLTF was originally established under Section 9509 of the Internal Revenue Code of 1986. It was one of several similar Federal trust funds funded by various levies set up to provide for the costs of water pollution. The OPA generally consolidated the liability and compensation schemes of these prior, Federal oil-pollution laws and authorized the use of the OSLTF, which consolidated the funds supporting those regimes. Those prior laws included the Federal Water Pollution Control Act, Trans-Alaska Pipeline Authorization Act, Deepwater Port Act, and OCSLA. On February 20, 1991, the National Pollution Funds Center was commissioned to serve as fiduciary agent for the OSLTF.

The Act further specifies that vessel owners, not cargo owners, are liable for spills. The OPA establishes certain dollar amounts above which a responsible party is not liable for paying for the costs of an oil spill. These limits are based on the type and tonnage of a vessel. If a responsible party pays or incurs removal costs or damages in excess of an applicable liability limit, the responsible party may present a claim for compensation of the excess amount. The limits of liability for oil removal costs and damages that result from discharges or substantial threats of discharge of oil from vessels, under OPA (33 U.S.C. § 2704), were amended by the Consumer Price Index Adjustments of Oil Pollution Act of 1990 Limits of Liability—Vessels and Deepwater Ports. The new amended limits are summarized below.

(1) For an oil cargo tank vessel greater than 3,000 gross tons with a single hull, including a single-hull tank vessel fitted with double sides only or a double bottom only, the liability limit is the greater of $3,200 per gross ton or $23,496,000.

(2) For a tank vessel greater than 3,000 gross tons, other than a vessel referred to in (1), the liability limit is the greater of $2,000 per gross ton or $17,088,000.

(3) For an oil cargo tank vessel less than or equal to 3,000 gross tons with a single hull, including a single-hull tank vessel fitted with double sides only or a double bottom only, the liability limit is the greater of $3,200 per gross ton or $6,408,000.

(4) For a tank vessel less than or equal to 3,000 gross tons, other than a vessel referred to in (3), the liability limit is the greater of $2,000 per gross ton or $4,272,000.

(5) For any other vessel, the liability limit is the greater of $1,000 per gross ton or $854,400.

(6) For a deepwater port, other than a deepwater port with a limit of liability established by regulation under 33 U.S.C. § 2704(d)(2), the liability limit is $373,800,000.

(7) For the Louisiana Offshore Oil Port, the liability limit is $87,606,000.

Offshore facilities are unique among the vessels and facilities covered under OPA. The OPA, at 33 U.S.C. § 2704(a), assigns unlimited liability to the responsible parties for removal costs resulting from an offshore facility oil-spill incident, and only limits their liability for the damages that result from such a spill and that are covered by OPA. The offshore facility limit of liability for OPA damages was raised on February 20, 2018, to $137.65 million (*Federal Register*, 2018). Under OPA, the responsible parties' liability for removal costs resulting from an offshore facility oil-spill incident remains unlimited.

In addition, willful misconduct, violation of any Federal operating or safety standard, failure to report an incident, or refusal to participate in a cleanup subjects the spiller to unlimited liability under provisions of the Act. The OPA also provides that parties responsible for offshore facilities demonstrate, establish, and maintain oil-spill financial responsibility (OSFR) for those facilities. The OPA replaced and rescinded the OCSLA oil-spill financial responsibility requirements. Executive Order 12777 assigned the OSFR certification function to DOI; the Secretary, in turn, delegated this function to BOEM. The minimum amount of OSFR that must be demonstrated is $35 million for covered offshore facilities located on the OCS and $10 million for covered offshore facilities located in State waters. A covered offshore facility is any structure and all of its components, equipment, pipeline, or device (other than a vessel or other than a pipeline or deepwater port licensed under the Deepwater Port Act of 1974) used for exploring for, drilling for, or producing oil, or for transporting oil from such facilities. The regulation provides an exemption for persons responsible for facilities having a potential worst-case oil spill of 1,000 barrels or less, unless the risks posed by a facility justify a lower threshold volume.

Certain types of vessels must also have a Certificate of Financial Responsibility before they can enter U.S. waters. The Department of Homeland Security now has the authority for vessel oil-pollution financial responsibility, and the USCG regulates the oil-spill financial responsibility program for vessels. A mobile offshore drilling unit is classified as a vessel. However, a well drilled from a mobile offshore drilling unit is classified as an offshore facility under this rule.

An Interagency Coordinating Committee on Oil Pollution Research was established by the provisions of the OPA and tasked with submitting a plan for the implementation of an oil-pollution research, development, and demonstration program to Congress. The plan was submitted to Congress in April 1992. This program addressed, in part, an identification of important oil-pollution research gaps, an establishment of research priorities and goals, and an estimate of the resources and timetables necessary to accomplish the identified research tasks. In 1992, the program plan was also provided to the Marine Board of the National Research Council for review and comment as required by OPA. Upon review, the Marine Board recommended that the plan be revised using a framework that addresses spill prevention, human factors, and field testing demonstration of developed response technology. This was accomplished in April 1997. The Chairman of the Interagency Committee is required, under Section 7001 of OPA, to submit to Congress every 2 years on October 30, a report on the activities carried in the preceding two fiscal years and on activities proposed to be carried out in the current two fiscal-year period. The last available report that tracks many of the lessons learned after the *Deepwater Horizon* explosion, oil spill, and response was published on June 12, 2012.

3.11 COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT OF 1980

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. §§ 9601 *et seq.*), modified by the 1986 Superfund Amendments and Reauthorization Act and Section 1006 of OPA, required the promulgation of regulations for the assessment of natural resource damages from oil spills and hazardous substances. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over 5 years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. The CERCLA

- established prohibitions and requirements concerning closed and abandoned hazardous waste sites,
- provided for liability of persons responsible for releases of hazardous waste at these sites, and
- established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions: short-term removals where actions may be taken to address releases or threatened releases requiring prompt response; and long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious but not immediately life threatening. These actions can be conducted only at sites listed on USEPA's National Priorities List.

The CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List.

The DOI was given the authority under CERCLA to develop regulations and procedures for the assessment of damages for natural resource injuries resulting from the release of a hazardous substance or oil spills (Natural Resource Damage Assessment regulations). These rulemakings are all codified at 43 CFR part 11. The CERCLA specified two types of procedures to be developed: type "A" procedures for simplified, standard assessments requiring minimal field observations in cases of minor spills or releases in certain environments; and type "B" site-specific procedures for detailed assessments for individual cases.

3.12 RESOURCE CONSERVATION AND RECOVERY ACT

The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. §§ 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, provides a framework for the safe disposal and management of hazardous and solid wastes. The OCS wastes taken to shore are regulated under RCRA. The USEPA has exempted many oil and gas wastes from coverage under the hazardous wastes regulations of the RCRA. Exempt wastes (exploration and production waste) include those generally coming from an activity directly associated with the exploration, drilling, production, or processing of a hydrocarbon product. The RCRA also requires hazardous waste treatment, storage, and disposal facilities to obtain permits and to demonstrate in their applications that design and operating standards established by the USEPA (or an authorized State) will be met. Therefore, most oil and gas wastes taken onshore are not regulated by the Federal Government but by various Gulf Coast States' programs. It is occasionally possible for a RCRA-exempt exploration and production waste to fail a State's exploration and production waste disposal regulations. If wastes generated on the OCS are not exempt and are hazardous, the wastes must be transported to shore for disposal at a hazardous waste facility.

3.13 MARINE PLASTIC POLLUTION RESEARCH AND CONTROL ACT

The Marine Plastic Pollution Research and Control Act of 1987 (33 U.S.C. §§ 1901 *et seq.*) implements Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL). Under provisions of the law, all ships and watercraft, including all commercial and recreational fishing vessels, are prohibited from dumping plastics at sea. The law also severely restricts the legality of dumping other vessel-generated garbage and solid-waste items both at sea and in U.S. navigable waters. The USCG is responsible for enforcing the provisions of this law and has developed final rules for its implementation (33 CFR parts 151, 155, and 158), calling for adequate trash reception facilities at all ports, docks, marinas, and boat-launching facilities.

The GOM has received "Special Area" status under MARPOL, thereby prohibiting the disposal of all solid waste into the marine environment. Fixed and floating platforms, drilling rigs, manned

production platforms, and support vessels operating under a Federal oil and gas lease are required to develop waste management plans and to post placards reflecting discharge limitations and restrictions.

Waste Management Plans require oil and gas operators to describe procedures for collecting, processing, storing, and discharging garbage and to designate the person who is in charge of carrying out the plan. BOEM's regulations explicitly prohibit the disposal of equipment, cables, chains, containers, or other materials into offshore waters. Portable equipment, spools or reels, drums, pallets, and other loose items must be marked in a durable manner with the owner's name prior to use or transport over offshore waters. Smaller objects must be stored in a marked container when not in use. These rules also apply to all oceangoing ships of 12 m (39 ft) or more in length that are documented under the laws of the U.S. or numbered by a State and that are equipped with a galley and berthing. Placards noting discharge limitations and restrictions, as well as penalties for noncompliance, apply to all boats and ships 8 m (26 ft) or more in length. Furthermore, the Shore Protection Act of 1988 (33 U.S.C. §§ 2601 *et seq*.) requires ships transporting garbage and refuse to assure that the garbage and refuse is properly contained on-board so that it will not be lost in the water from inclement wind or weather conditions.

3.14 National Fishing Enhancement Act of 1984

The National Fishing Enhancement Act of 1984 (33 U.S.C. §§ 2101 *et seq.*), also known as the Artificial Reef Act, establishes broad artificial reef development standards and a national policy to encourage the development of artificial reefs that will enhance fishery resources and commercial and recreational fishing. It mandated that a long-term artificial reef plan be developed. The Secretary of Commerce provided leadership in developing the National Artificial Reef Plan that identifies the roles of Federal, State, local, and private agencies in the development of artificial reefs. It provides national guidelines on the siting, materials, design, regulatory requirements, construction, management, and liability of artificial reefs. It cites key documents, provides the best existing information, and lists future research needs. The Secretary of the Army issues permits under Section 10 of the Rivers and Harbors Act and Section 404 of the CWA to responsible applicants for reef development projects in accordance with the National Artificial Reef Plan, as well as regional, State, and local criteria and plans. The law also limits the liability of reef developers complying with permit requirements and includes the availability of all surplus Federal ships for consideration as reef development materials. The BSEE's regulations (30 CFR § 250.1730) allow retired platforms to be used for reefs when such platforms are permitted and designated for use by a State's artificial reef program and within areas established for the receipt of platforms for the enhancement of habitat for fish and other aquatic life.

3.14.1 Fishermen's Contingency Fund

Final regulations for the implementation of Title IV of the OCSLA, as amended (43 U.S.C. §§ 1841-1846), were published in the *Federal Register* on January 24, 1980 (50 CFR part 296). The OCSLA, as amended, established the Fishermen's Contingency Fund (not to exceed $2 million) to compensate commercial fishermen for actual and consequential damages, including loss of profit, due

to damage or loss of fishing gear by various materials and items associated with oil and gas exploration, development, or production on the OCS. This Fund, administered by the Financial Services Division of NMFS, mitigates most losses suffered by commercial fishermen due to OCS oil- and gas-related activities.

As required in the OCSLA, nine area accounts have been established—five in the GOM, one in the Pacific, one in Alaska, and two in the Atlantic. The five GOM accounts cover the same areas as the five BSEE, Gulf of Mexico OCS Region Districts. Each area account is initially funded at $100,000 and cannot exceed this amount. The accounts are initiated and maintained by assessing holders of leases, pipeline rights-of-way and easements, and exploration permits. These assessments cannot exceed $5,000 per operator in any calendar year.

The claims eligible for compensation are generally contingent upon the following: (1) damages or losses must be suffered by a commercial fisherman; and (2) any actual or consequential damages, including loss of profit, must be due to damages or losses of fishing gear by items or obstructions related to OCS oil- and gas-related activities. Damages or losses that occur in non-OCS waters may be eligible for compensation if the item(s) causing damages or losses are associated with OCS oil- and gas-related activities.

Ineligible claims for compensation are generally (1) damages or losses caused by items that are attributable to a financially responsible party; (2) damages or losses caused by negligence or fault of the commercial fishermen; (3) occurrences before September 18, 1978; (4) claims of damages to, or losses of, fishing gear exceeding the replacement value of the fishing gear; (5) claims for loss of profits in excess of 6 months, unless supported by records of the claimant's profits during the previous 12 months; (6) claims or any portions of damages or losses claimed that will be compensated by insurance; (7) claims not filed within 60 days of the event of the damages or losses; and (8) damages or losses caused by natural obstructions or obstructions unrelated to OCS oil- and gas-related activities.

There are several requirements for filing claims, including one that a report stating, among other things, the location of the obstruction, must be made within 5 days after the event of the damages or losses; this 5-day report is required to gain presumption of causation. A detailed claim form must be filed within 60 days of the event of the damages or losses. The specifics of this claim are contained in 50 CFR part 296. The claimant has the burden of establishing all the facts demonstrating eligibility for compensation, including the identity or nature of the item that caused the damages or losses and its association with OCS oil- and gas-related activity.

Damages or losses are presumed to be caused by items associated with OCS oil- and gas-related activities provided the claimant establishes that (1) the commercial fishing vessel was being used for commercial fishing and was located in an area affected by OCS oil- and gas-related activities; (2) the 5-day report was filed; (3) there is no record in the most recent U.S. Department of Commerce's NOAA, National Ocean Service nautical charts or weekly USCG Notice to Mariners of

an obstruction in the immediate vicinity; and (4) no proper surface marker or lighted buoy marked the obstruction. Damages or losses occurring within a one-quarter-mile radius of obstructions recorded on charts, listed in the Notice to Mariners, or properly marked are presumed to involve the recorded obstruction.

3.15 PORTS AND WATERWAYS SAFETY ACT OF 1972

The Ports and Waterways Safety Act of 1972 (33 U.S.C. §§ 1221 *et seq.*) authorizes the USCG to implement, in waters subject to the jurisdiction of the U.S., measures for controlling or supervising vessel traffic or for protecting navigation and the marine environment. Such measures may include, but are not limited to, reporting and operating requirements, surveillance and communication systems, routing systems, and fairways.

The Act authorizes the USCG to designate safety fairways, fairway anchorages, and traffic separation schemes (TSSs) to provide unobstructed approaches through oil fields for vessels using GOM ports. The USCG provides listings of designated fairways, anchorages, and TSSs in 33 CFR parts 166 and 167, along with special conditions related to oil and gas production in the GOM. In general, no fixed structures, such as platforms, are allowed in fairways. Temporary underwater obstacles such as anchors and attendant cables or chains attached to floating or semisubmersible drilling rigs may be placed in a fairway under certain conditions. Fixed structures may be placed in anchorages, but the number of structures is limited by spacing.

A TSS is a designated routing measure that is aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes (33 CFR § 167.5). The Galveston Bay TSS and Port Arthur TSS are the only two TSSs established in the WPA. The Lower Mississippi River TSS and Berwick Bay TSS are the only TSSs established in the CPA. The Tampa TSS is the only TSS located in the EPA.

3.16 MARINE AND ESTUARINE PROTECTION ACTS

The Sanctuaries and Reserves Division of the U.S. Department of Commerce's NOAA, National Ocean Service administers the National Marine Sanctuary and National Estuarine Research Reserve Programs. The marine sanctuary program was established by the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), and the estuarine research reserve program was established by the CZMA of 1972.

Marine sanctuaries and estuarine research reserves are designed and managed to meet the following goals, among others:

- enhance resource protection through the implementation of a comprehensive, long-term management plan tailored to the specific resources;
- promote and coordinate research to expand scientific knowledge of sensitive marine resources and improve management decisionmaking;

- enhance public awareness, understanding, and wise use of the marine environment through public interpretive and recreational programs; and
- provide for optimum compatible public and private use of special marine areas.

3.16.1 Marine Protection, Research, and Sanctuaries Act of 1972

The Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA) (33 U.S.C. §§ 1401 *et seq*.) established the National Marine Sanctuary Program, which is administered by the U.S. Department of Commerce's NOAA. The MPRSA, also known as the Ocean Dumping Act, regulates ocean dumping in territorial seas or the contiguous zone of the United States. Most of the dredged material disposed in the ocean is disposed at ocean dumping sites specifically designated by the USEPA for dredged material under Section 102 of the MPRSA. All ocean dumping sites are required to have a site management and monitoring plan. Appropriate management of ocean dumping sites is aimed at assuring that disposal activities will not unreasonably degrade or endanger human health, welfare, the marine environment, or economic potentialities. The EISs on these disposal sites describe impacts that are expected to occur over a period of 25 years. Under 40 CFR part 228, pursuant to Section 103 of the MPRSA, sites and times for ocean dumping of dredged and nondredged materials are issued by the USACE subject to USEPA approval. Under 33 U.S.C. § 1413 (33 CFR part 324), USACE reviews applications for permits to transport dredged and nondredged materials for the purpose of dumping it in ocean waters. On December 31, 1981, 33 U.S.C. § 1412(a) mandated the termination of ocean dumping of sewage sludge and industrial waste.

3.16.2 National Estuarine Research Reserves

The National Estuarine Research Reserve System is a network of protected areas established for long-term research, education, and stewardship. This partnership program between NOAA and coastal states has established five reserves (Grand Bay National Estuarine Research Reserve in Mississippi, Weeks Bay National Estuarine Research Reserve in Alabama, Rookery Bay National Estuarine Research Reserve and Apalachicola National Estuarine Research Reserve in Florida, and Mission-Aransas Reserve in Texas) in the GOM.

Grand Bay National Estuarine Research Reserve protects about 18,049 ac (7,304 ha) in Jackson County, Mississippi. Located between Pascagoula and the Alabama State line, it contains diverse habitats that support several rare or endangered plants and animals. The Grand Bay National Estuarine Research Reserve's fishery resources include oysters, fish, and shrimp. The area also has recreational resources and archaeological sites.

Weeks Bay National Estuarine Research Reserve protects a small estuary of approximately 9,317 ac (3,770 ha) in Baldwin County, Alabama. Weeks Bay is a shallow open bay with an average depth of less than 4.9 ft (1.5 m) and extensive vegetated wetland areas. The Bay receives waters from the spring-fed Fish and Magnolia Rivers and connects with Mobile Bay through a narrow opening.

Rookery Bay National Estuarine Research Reserve, at more than 110,000 ac (44,515 ha), protects a large mangrove-filled bay and two creeks, along with their drainage corridors. Management of the sanctuary is performed by the Florida Department of Environmental Protection's Coastal Office in cooperation with NOAA. A myriad of wildlife, including 150 species of birds and many threatened and endangered animals, thrive in the estuarine environment and surrounding upland hammocks and scrub found within the Reserve.

The Apalachicola National Estuarine Research Reserve, at about 234,715 ac (94,985 ha), is one of the largest remaining naturally functioning ecosystems in the Nation, and it is also the first sanctuary on the mouth of a major navigable river. Its establishment served to promote improved cooperation concerning river navigation among the States of Florida, Alabama, and Georgia. The oyster industry is the major business activity of the Apalachicola National Estuarine Research Reserve, which is located adjacent to the sanctuary. It is expected that the sanctuary will benefit this and other fishing industries by protecting the environment and by providing research information that will help assure the continued productivity of the bay/river ecosystem.

The Mission-Aransas National Estuarine Research Reserve protects 186,189 ac (75,153 ha) in Aransas and Refugio Counties, 30 miles northeast of Corpus Christi, Texas. It is a contiguous complex of wetland, terrestrial, and marine environments. The land is mostly coastal prairie with unique oak motte habitats. The wetlands include riparian habitat and fresh and saltwater marshes. Within the water areas, the bays are large, open, and include extensive tidal flats, seagrass meadows, mangroves, and oyster reefs. These unique and diverse estuarine habitats in the western GOM support a host of endangered and threatened species, including the endangered whooping crane.

3.16.3 National Estuary Program

In 1987, an amendment to the Clean Water Act, known as the Water Quality Act (P.L. 100-4), established the National Estuary Program. The purpose of the National Estuary Program is to identify nationally important estuaries, to protect and improve their water quality, and to enhance their living resources. Under the National Estuary Program, which is administered by the USEPA, the comprehensive management plans are generated to protect and enhance environmental resources. The governor of a state may nominate an estuary for the Program and request that a Comprehensive Conservation and Management Plan be developed for an estuary. Representatives from Federal, State, and interstate agencies; academic and scientific institutions; and industry and citizen groups work during a 3- to 5-year period to define objectives for protecting the estuary, to select the chief problems to be addressed in the Plan, and to ratify a pollution control and resource management strategy to meet each objective. Strong public support and subsequent political commitments are needed to accomplish the actions called for in the Plan; hence, the 3- to 5-year time period to develop the strategies. A total of 28 estuaries have been selected for the Program, 7 of which are in the GOM: Sarasota Bay, Charlotte Harbor, and Tampa Bay in Florida; Mobile Bay in Alabama; the Barataria-Terrebonne Estuarine Complex in Louisiana; and Galveston Bay and Coastal Bend Bay and Estuaries in Texas.

3.16.4 National Marine Sanctuaries Act

The National Marine Sanctuaries Act (NMSA) (16 U.S.C. §§ 1431 *et seq*.) was enacted in 1972 and is the legislative mandate that governs NOAA's Office of National Marine Sanctuaries (ONMS) and the National Marine Sanctuary System. Under the NMSA, the Secretary of Commerce is authorized to designate and manage areas of the marine environment as National Marine Sanctuaries. Such designation is based on attributes of special national significance, including conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or aesthetic qualities. Day-to-day management of National Marine Sanctuaries has been delegated by the Secretary of Commerce to NOAA's Office of National Marine Sanctuaries.

The primary mandate of the NMSA is resource protection. The NMSA provides several tools for protecting designated National Marine Sanctuaries. The NMSA provides the authority to issue regulations for each sanctuary and the system as a whole. The ONMS's regulations, codified at 15 CFR part 922, prohibit specific kinds of activities, describe and define the boundaries of the NMSs, and set up a system of permits to allow the conduct of certain types of activities. Permits are required for any action that includes activities otherwise prohibited by sanctuary regulations.

Section 304(d) of the NMSA requires that Federal agencies consult with ONMS for any Federal action internal or external to a National Marine Sanctuary that is "likely to destroy, cause the loss of, or injure any sanctuary resource." The purpose of the consultation is to prevent or minimize potential injury to any sanctuary resource by requiring assessment of the proposed Federal action before the initiation of any such action and allowing the ONMS the opportunity to recommend alternatives that would protect sanctuary resources. To streamline the sanctuary consultation process, ONMS may combine the process with environmental reviews required by other laws, such as NEPA. There is a Presidential Memorandum (July 14, 2008) that prohibits leasing in OCS areas designated as National Marine Sanctuaries as of July 14, 2008. This memorandum does not include any new sanctuary areas created after July 14, 2008.

The Flower Garden Banks National Marine Sanctuary, which was designated in 1992, is a sanctuary that exists in the northern GOM. The DOI has taken action to protect the biological resources of the sanctuary from damage due to oil and gas exploration and development activities. BOEM has established a "No Activity Zone" around the sanctuary and has established other operational restrictions as described in the Topographic Features Stipulation. Stetson Bank was added to the Flower Garden Banks National Marine Sanctuary in 1996 and is protected from OCS oil- and gas-related activities by a "No Activity Zone." Whole blocks and portions of blocks that lie within the boundaries of the Flower Garden Banks National Marine Sanctuary at the East and West Flower Garden Banks and Stetson Bank are excluded from leasing.

3.17 COASTAL BARRIER RESOURCES ACT

The Coastal Barrier Resources Act (16 U.S.C. §§ 3501 *et seq*.) of 1982 established that undeveloped coastal barrier islands, per the Act's definition, may be included in a Coastal Barrier

Resource System. The Coastal Barrier Resources Act prohibits all new Federal expenditures and financial assistance within the Coastal Barrier Resource System, with certain specific exceptions, including energy development. The purpose of this legislation was to end the Federal Government's encouragement for development on barrier islands by withholding Federal flood insurance for new construction of or substantial improvements to structures on undeveloped coastal barriers.

3.18 NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. §§ 300101 *et seq*.), recognizes that the preservation of historic properties is in the public interest and identifies Federal agencies' responsibilities towards the preservation and use of historic properties. The NHPA also provides for a National Register of Historic Places to include districts, sites, buildings, structures, and objects noteworthy in American history, architecture, archaeology, and culture. These items may bear national, State, or local significance. The NHPA provides funding for the State Historic Preservation Officers and their staff to conduct surveys and comprehensive preservation planning, establishes standards for State programs, and requires States to establish mechanisms for certifying local governments to participate in the National Register nomination and funding programs.

Section 106 of the NHPA (54 U.S.C. § 306108), as implemented in the Advisory Council on Historic Preservation regulations at 36 CFR part 800, "Protection of Historic Properties," as amended through 2004, requires that Federal agencies having direct or indirect jurisdiction over a proposed Federal, federally assisted, or federally licensed undertaking, prior to approval of the expenditure of funds or the issuance of a license, take into account the effect of the undertaking on any district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places. Implied in this legislation and Executive Order 11593 is that an effort must be made by the agency to locate such sites before development of an area. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation, established under Title II of this Act and appointed by the President, a reasonable opportunity to comment with regard to the undertaking. If an undertaking may affect historic properties that are of significance to Indian Tribes, then Federal agencies are required to consult with Indian Tribes on a government-to-government basis in a manner that is respectful of Tribal sovereignty. The regulations require Federal agencies to acknowledge the special expertise of Indian Tribes in determining which historic properties are of religious and cultural significance to them. Section 106 of the NHPA complements Section 101(b)(4) of NEPA, which states that it is the continuing responsibility of the Federal Government to preserve important historic and cultural aspects of our natural heritage, and Section 11(g)(3) of the OCSLA, as amended, which states that "exploration (oil and gas) will not . . . disturb any site, structure, or object of historical or archaeological significance."

An undertaking has an effect on a historic property when that undertaking has the potential to alter the characteristics of the property that qualified the property for inclusion in the National Register of Historic Places. The effects can include physical disturbance, noise, or visual effects. If an adverse effect on historic properties is found, BOEM would notify the Advisory Council on Historic Preservation, consult with the State Historic Preservation Office, and encourage the applicant to avoid, minimize, or

mitigate the adverse effects. Ground-disturbing activities associated with construction or decommissioning, as well as viewshed effects of OCS energy infrastructure (e.g., wind turbine generators), are subject to Section 106 review.

A Section 106 review refers to the Federal review process designed to ensure that historic properties are considered during Federal project planning and execution. The review process is administered on proposed activities by BOEM archaeologists, in consultation with State and Tribal Historic Preservation Offices, when necessary.

Historic properties (i.e., archaeological resources) on the OCS include historic shipwrecks, sunken aircraft, lighthouses, and prehistoric archaeological sites that have become inundated as a result of the 120-m (394-ft) rise in global sea level since the height of the last Ice Age (circa 19,000 years ago). While the U.S. has exclusive access to mineral resources within the Exclusive Economic Zone, the OCS is not federally owned land and the Federal Government has not claimed direct ownership of historic properties on the OCS (with the exception of U.S. Navy craft as defined in the Sunken Military Craft Act [10 U.S.C. §§ 113 *et seq*.]). Therefore, BOEM only has the authority under Section 106 of the NHPA to ensure that our funded and permitted actions do not adversely affect significant historic properties. This authority includes requiring industry to conduct surveys to locate, identify and, if necessary, investigate known or potential historic properties that may be or have been affected by their actions (30 CFR § 550.194). BOEM's authority to manage historic properties on the OCS, however, does not extend to entities other than those operating under a BOEM-issued permit or BOEM funding.

Section 110 of the NHPA (54 U.S.C. §§ 306101(a) and 306102) directs the heads of all Federal agencies to assume responsibility for the preservation of National Register listed or eligible historic properties owned or controlled by their agency, as well as those not under agency jurisdiction and control but that are potentially affected by agency actions. Federal agencies are directed to locate, inventory, and nominate properties to the National Register, to exercise caution to protect such properties, and to use such properties to the maximum extent feasible. Other major provisions of Section 110 include documentation of properties adversely affected by Federal undertakings (54 U.S.C. § 306103), the establishment of trained Federal preservation officers in each agency (54 U.S.C. § 306104), and the inclusion of the costs of preservation activities as eligible agency project costs (54 U.S.C. § 306109).

3.19 Annex Rules to the United Nations Education, Scientific and Cultural Organization's Convention on the Protection of Underwater Cultural Heritage

The United Nations Education, Scientific and Cultural Organization's (UNESCO) Convention on the Protection of Underwater Cultural Heritage was adopted in 2001 by UNESCO's General Conference and entered into force on January 2, 2009. The Convention is based on recognition of the international responsibility for States to protect underwater cultural heritage; to follow established

policies and scientific standards for research, recovery, and preservation; to prohibit commercial exploitation of underwater cultural heritage; and to cooperate with other States to protect underwater cultural heritage through training, education, and outreach (Varmer, 2014). The 2001 UNESCO Convention achieves these objectives by restricting activities that may directly or indirectly harm underwater cultural heritage and by authorizing activities directed at underwater cultural heritage only when they are compliant with the Annex Rules. For activities and investigations directed at underwater cultural heritage, the Annex Rules establish standards and practices for the following: project design; preliminary assessments; project objectives, methods, and techniques; funding; project duration; personnel qualifications; site conservation and management; documentation; safety; environment; reporting; curation; and dissemination. There are currently over 40 parties to the 2001 UNESCO Convention, and though the United States is not one of them, it does support the Convention's underlying purpose and the Annex Rules. Additionally, the United States enforces several laws and policies that are consistent with the obligations described in the 2001 UNESCO Convention (Varmer, 2014).

3.20 Rivers and Harbors Act of 1899

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §§ 403 *et seq.*) prohibits the unauthorized obstruction or alteration of any navigable water of the U.S. The construction of any structure in or over any navigable water of the U.S., the excavating from or depositing of dredged material or refuse in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters is unlawful without prior approval from the USACE. The legislative authority to prevent inappropriate obstructions to navigation was extended to installations and devices located on the seabed to the seaward limit of the OCS by Section 4(e) of the OCSLA of 1953, as amended.

Operators planning to install structures for the exploration, production, and transportation of oil, gas, and minerals on the OCS must apply for a Section 10 Permit. The USACE can authorize these activities by a standard individual permit, letter-of-permission, general permit, nationwide permit, or regional permit, and makes this determination at the time of application. Typically, the USACE authorizes the installation of these OCS structures under Nationwide Permit 8. Under a Nationwide Permit 8, such structures shall not be placed (1) within the limits of any designated shipping safety fairway or traffic separation scheme, except temporary anchors that comply with the fairway regulations in 33 CFR § 322.5(l), (2) within established danger zones or restricted areas as designated in 33 CFR part 334, or (3) within USEPA- or USACE-designated dredged material disposal areas.

3.21 Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act of 1970 (29 U.S.C. §§ 651-678) was enacted to assure, to the extent possible, safe and healthful working conditions and to preserve our human resources. The Act encourages employers and employees to reduce occupational safety and health hazards in their places of employment and stimulates the institution of new programs and the perfection of existing programs for providing safe and healthful working conditions. The Act

established the National Institute for Occupational Safety and Health, the Occupational Safety and Health Administration, and the National Advisory Committee on Occupational Safety and Health. The National Institute for Occupational Safety and Health is responsible for conducting research and making recommendations for the prevention of work-related injury and illness. The Occupational Safety and Health Administration is responsible for developing and enforcing workplace safety and health regulations. The National Advisory Committee on Occupational Safety and Health advises the Secretaries of Labor and Health and Human Services on occupational safety and health programs and policies.

The Act empowers the Secretary of Labor or his representative to enter any factory, plant, establishment, workplace, or environment where work is performed by employees and to inspect and investigate during regular working hours and at other reasonable times any such place of employment and all pertinent conditions and equipment therein. If, upon inspection, the Secretary of Labor or authorized representative believes that an employer has violated provisions of the Act, the employer shall be issued a citation and given 15 days to contest the citation or proposed assessment of penalty.

3.22 ENERGY POLICY ACT OF 2005

The Energy Policy Act of 2005 (P.L. 109-58) encourages increased domestic production of oil and natural gas, granted BOEM authority for Federal offshore alternate energy uses, and requires a comprehensive inventory of oil and gas resources on the OCS.

The Act granted BOEM responsibilities over Federal offshore renewable energy and related uses on the OCS. Section 388 of the Act provides an initiative to facilitate increased renewable energy production on the OCS.

Section 388 gives the Secretary of the Interior the authority to

- grant leases, easements, or rights-of way for renewable energy-related uses on Federal OCS lands,
- act as a lead agency for coordinating the permitting process with other Federal agencies,
- monitor and regulate those facilities used for renewable energy production and energy support services, and
- establish an interagency comprehensive digital mapping effort to assist in decisionmaking related to renewable energy activity.

Section 388 clarifies the Secretary of the Interior's authority to allow an offshore oil and gas structure, previously permitted under the OCSLA, to remain in place after OCS oil- and gas-related activities have ceased in order to allow the use of the structure for other energy and marine-related

activities. This authority provides opportunities to extend the life of facilities for non-oil and gas purposes, such as research, renewable energy production, aquaculture, etc., before being removed.

Section 388 does not modify any leasing, exploration, or development activities for oil or natural gas. Congressional moratoria and administrative withdrawals in effect remain unchanged.

The Energy Policy Act of 2005 created the Coastal Impact Assistance Program (CIAP) by amending Section 31 of the OCSLA. Under the provisions of the Act, the authority and responsibility for the management of CIAP is vested in the Secretary of the Interior. The Secretary has delegated this authority and responsibility to FWS.

Under Section 384, FWS shall disburse $250 million for each Fiscal Year 2007 through 2010 to eligible producing States and coastal political subdivisions (CPSs). The FWS shall determine CIAP funding allocations to States and CPSs using the formulas mandated by the Act (Section 31(b)), which requires a minimum annual allocation of 1 percent to each State and provides that 35 percent of each State's share shall be allocated directly to its CPSs. States eligible to receive funding are Alabama, Alaska, California, Louisiana, Mississippi, and Texas; 67 CPSs are eligible to receive CIAP funding.

The Energy Policy Act of 2005 (Section 31(d)(1)) stipulates that a State or CPS shall use CIAP funds only for one or more of the following authorized uses:

- projects and activities for the conservation, protection, or restoration of coastal areas, including wetland;
- mitigation of damage to fish, wildlife, or natural resources;
- planning assistance and the administrative costs of complying with CIAP;
- implementation of a federally approved marine, coastal, or comprehensive conservation management plan; and
- mitigation of the impact of OCS activities through funding of onshore infrastructure projects and public service needs.

In order to receive CIAP funds, States are required to submit a coastal impact assistance plan that FWS must approve prior to disbursing any funds; all funds shall be disbursed through a grant process. Pursuant to the Act, a State had to submit its coastal impact assistance plan no later than July 1, 2008.

Section 357 of the Act, entitled "Comprehensive Inventory of OCS Oil and Natural Gas Resources," calls for BOEM to conduct a comprehensive inventory of the estimated oil and natural gas resources on the OCS, including moratoria areas. The Act requires the use of "any available technology, except drilling, but including 3-D seismic surveys." The first report to Congress was required to be submitted within 6 months of enactment and will be publicly available and updated at

least every 5 years. To respond to this statutory directive, MMS (BOEM and BSEE's predecessor) published *Report to Congress: Comprehensive Inventory of U.S. OCS Oil and Natural Gas Resources* in February 2006 (USDOI, MMS, 2006). BOEM updated the inventory in 2009 with the *Second Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters off the Coasts of Texas, Louisiana, Mississippi, and Alabama, 2009* (USDOI, MMS, 2009) and in 2011 with the *Third Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters off the coasts of Texas, Louisiana, Mississippi, and Alabama, 2011* (USDOI, BOEM, 2011). BOEM published the *Fourth Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves Growth, and Undiscovered Resources in Federal and State Waters Off the Coasts of Texas, Louisiana, Mississippi and Alabama; Energy Policy Act of 2005 – Section 965(c)* (USDOI, BOEM, 2013) in 2013 per the requirements set forth in Section 357 of the Act. BOEM published the *Fifth Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters Off the Coasts of Texas, Louisiana, Mississippi and Alabama; Energy Policy Act of 2005 – Section 965(c)* (USDOI, BOEM, 2018) per the requirements set forth in Section 357 of the Act.

3.23 GULF OF MEXICO ENERGY SECURITY ACT OF 2006

On December 20, 2006, President Bush signed into law the Gulf of Mexico Energy Security Act of 2006 (GOMESA) (P.L. 109-432). The GOMESA repeals the Congressional moratorium on certain areas of the GOM, places a moratorium on other areas in the GOM, and increases the distribution of offshore oil and gas revenues to coastal states.

The GOMESA defines two areas in the GOM—the 181 Area and the 181 South Area. Approximately 2 million ac of the 181 Area are located in the CPA. Because this portion was not previously under moratorium, it was included in the CPA proposed actions analyzed in five agency EISs over the past 5 years and was offered for lease in EPA Lease Sale 224 (March 2009), EPA Lease Sale 225 (March 2014), and EPA Lease Sale 226 (March 2016).

The other area GOMESA defined is referred to as the 181 South Area. This area is located in what is now the CPA and is approximately 5.8 million ac. With the exception of 1.5 million ac beyond the U.S. Exclusive Economic Zone, the CPA lease sale area was expanded to include the remaining 4.3 million ac of the 181 South Area for CPA Lease Sale 208, which was held in March 2009, and has been included in all CPA lease sales to the present. While GOMESA repealed the Congressional moratorium on the 181 South Area in December 2006, MMS (BOEM and BSEE's predecessor) decided, because of the limited geological and geophysical data available to industry and the limited environmental review for this area, it would have been premature to offer this area prior to CPA Lease Sale 208, which was held in March 2009.

The GOMESA also established the Military Mission Line (a north-south line at 86°41' N. latitude) as the new administrative boundary between the CPA and EPA for the purposes of OCS oil, gas, and wind administration by the Federal Government. Areas east of this line are closed to offshore

leasing until 2025, with the exception of the three EPA lease sales discussed above, which represent roughly 1.4 percent of the total acreage in the EPA.

The GOMESA establishes a moratorium on leasing, preleasing, and other activities in the following areas until June 30, 2022:

- the area within 125 mi (201 km) of the State of Florida in the EPA;
- the 181 Area in the CPA that is within 100 mi (161 km) of the State of Florida; and
- the area east of the Military Mission Line (a north-south line at 86°41' N. latitude).

The GOMESA also mandates that BOEM provide an option to exchange existing leases located in the unavailable areas listed above for leases in the available areas of the GOM.

Prior to GOMESA, the affected States received recurring annual disbursements of 27 percent of royalty, rent, and bonus revenues received within each State's 8(g) zone. The Act created revenue sharing provisions for the four GOM oil and gas producing States of Alabama, Louisiana, Mississippi and Texas, and their CPSs. The GOMESA funds are to be used for coastal conservation, restoration, and hurricane protection. There are two phases of GOMESA revenue sharing:

- **Phase I:** Beginning in Fiscal Year 2007, 37.5 percent of all qualified OCS revenues, including bonus bids, rentals, and production royalty, will be shared among the four States and their CPSs from those new leases issued in the 181 Area in the EPA (also known as the 224 Sale Area) and the 181 South Area. Additionally, 12.5 percent of revenues are allocated to the Land and Water Conservation Fund. The final regulations for Phase I revenue sharing were issued on December 23, 2008, and they specify that BOEM intends to disburse funds on or before March 31st of the fiscal year following the fiscal year to which the qualified OCS revenues were attributed.
- **Phase II:** The second phase of GOMESA revenue sharing began in Fiscal Year 2017. It expanded the definition of qualified OCS revenues to include receipts from GOM leases issued either after December 20, 2006, in the 181 Call Area or in the 2002-2007 GOM planning areas subject to withdrawal or moratoria restrictions. A revenue sharing cap of $500 million per year for the four GOM producing States, their CPSs, and the Land and Water Conservation Fund applies from Fiscal Years 2016 through 2055. The $500 million cap does not apply to qualified revenues generated in those areas associated with Phase I of the GOMESA program. The final regulations to implement Phase II of the GOMESA legislation were published in the *Federal Register* on December 30, 2015. The final rule was effective 30 days after its publication.

The GOMESA revenue-sharing allocations and other statistical information can be found at https://revenuedata.doi.gov/how-it-works/gomesa/.

3.24 MARINE DEBRIS RESEARCH, PREVENTION, AND REDUCTION ACT

The Marine Debris Research, Prevention, and Reduction Act (P.L. 109-449) was enacted in December 2006. The purposes of this Act are (1) to help identify, determine sources of, assess, reduce, and prevent marine debris and its adverse impacts on the marine environment and navigation safety; (2) to reactivate the Interagency Marine Debris Coordinating Committee; and (3) to develop a Federal marine debris information clearinghouse. The Act established, within NOAA and USCG, a Marine Debris Prevention and Removal Program to reduce and prevent the occurrence and adverse impacts of marine debris on the marine environment and navigation safety.

Under the NOAA's program, the Administrator shall (1) in consultation with relevant Federal agencies, undertake marine debris mapping, identification, impact assessment, prevention, and removal efforts, with a focus on marine debris posing a threat to living marine resources and navigation safety; (2) improve efforts to reduce adverse impacts of lost and discarded fishing gear on living marine resources and navigation safety; (3) undertake outreach and education of the public and other stakeholders (such as the fishing industry, fishing gear manufacturers, other marine-dependent industries, and the plastic and waste management industries) on sources of marine debris, threats associated with marine debris and its adverse impacts on the marine environment, and navigational safety, including outreach and education activities through public-private initiatives; and (4) acting through the Program, enter into cooperative agreements and contracts and provide financial assistance in the form of grants for projects to accomplish the purpose set forth in the Act.

Under the USCG's program, the Commandant, in consultation with the Interagency Committee, shall (1) take action to reduce violations of and to improve implementation of MARPOL Annex V and the Act to Prevent Pollution from Ships (33 U.S.C. §§ 1901 *et seq.*) with respect to the discard of plastics and other garbage from vessels; (2) take actions to cost-effectively monitor and enforce compliance with MARPOL Annex V and the Act to Prevent Pollution from Ships (33 U.S.C. §§ 1901 *et seq.*), including through cooperation and coordination with other Federal and State enforcement programs; (3) take actions to improve compliance with requirements under MARPOL Annex V and Section 6 of the Act to Prevent Pollution from Ships (33 U.S.C. § 1905) that all U.S. ports and terminals maintain and monitor the adequacy of receptacles for the disposal of plastics and other garbage, including through promoting voluntary government-industry partnerships; (4) develop and implement a plan, in coordination with industry and recreational boaters, to improve ship-board waste management, including recordkeeping, and access to waste reception facilities for ship-board wastes; (5) take action to improve international cooperation to reduce marine debris; and (6) establish a voluntary reporting for commercial vessel operators and recreational boaters to report incidents of damage to vessels, disruption of navigation caused by marine debris, and observed violations of laws and regulations relating to the disposal of plastics and other marine debris.

Nothing in this Act supersedes or limits the authority of the Secretary of the Interior under the OCSLA (43 U.S.C. §§ 1331 *et seq*.).

3.25 AMERICAN INDIAN RELIGIOUS FREEDOM ACT OF 1978

The American Indian Religious Freedom Act of 1978 (42 U.S.C. § 1996) establishes the policy of the Federal Government "to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including, but not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."

3.26 FEDERAL AVIATION ACT OF 1958

The Federal Aviation Act of 1958 (49 U.S.C. § 44718, 14 CFR part 77) requires that, when construction, alteration, establishment, or expansion of a structure is proposed, adequate public notice be given to the Federal Aviation Administration, as necessary, to promote safety in air commerce and the efficient use and preservation of the navigable airspace.

3.27 MIGRATORY BIRD TREATY ACT OF 1918

The Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712), provides that it is unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg or any such bird, unless authorized under a permit issued by the Secretary of the Interior. Some regulatory exceptions apply. Take is defined in regulations as "pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect." The Migratory Bird Treaty Act protects over 800 species of birds that occur in the United States. Where BOEM actions affect migratory birds, BOEM may coordinate with FWS to develop best management practices to reduce impacts or mitigate for negative impacts from OCS activities and/or structures. Efforts to improve migratory bird conservation in the Gulf of Mexico region continue through BOEM's Environmental Studies Program by contributing data from scientific research about the Nation's marine and coastal environment.

3.28 SUBMERGED LANDS ACT OF 1953

The Submerged Lands Act of 1953 (43 U.S.C. §§ 1301-1315 *et seq*.) grants States title to all submerged navigable lands within their historical boundaries and the natural resources on or within those lands seaward to 3 nmi (3.5 mi; 5.6 km) from the coastline. Texas and the Gulf Coast of Florida remain the only states to have boundaries that extend to 9 nmi (10.36 mi; 16.67 km). In passing the Submerged Lands Act, Congress sought to return the title to submerged lands to the states and promote the exploration and development of petroleum deposits in coastal waters.

3.29 49 U.S.C. § 44718: STRUCTURES INTERFERING WITH AIR COMMERCE

The Federal Aviation Administration's (FAA's) authority to promote the safe and efficient use of the navigable airspace, whether concerning existing or proposed structures, is predominately

derived from 49 U.S.C. § 44718. The regulations at 14 CFR part 77, "Objects Affecting Navigable Airspace," were adopted to establish notice criteria for proposed construction or alteration that would protect aircraft from encountering unexpected structures. These regulations apply to structures located within any state, territory, or possession of the U.S., within the District of Columbia, or within territorial waters (13.8 mi; 22.2 km) surrounding such states, territories, or possessions.

Any vertical structure greater than 200 ft (61 m) in height must have FAA approval to avoid or minimize obstruction to navigable airspace. The height of individual wind turbine generators would exceed this 200-ft (61-m) threshold (overall height of 440 ft [134 m] mean sea level) and, therefore, would require FAA-approved lighting/marking.

3.30 U.S. Coast Guard Regulations

Pursuant to 33 CFR § 66.01 and under provisions of 46 U.S.C. and 33 U.S.C. § 30, the USCG has safety and regulatory jurisdiction over projects located in navigable waters of the United States. The proposed wind turbine generators constitute a fixed structure in navigable waters of the U.S., which requires private aids to navigation marking. All wind turbine generators and the electrical service platforms are subject to USCG review for authorization to mark and light wind turbine generators and electrical service platforms.

3.31 Marking of Obstructions

The Marking of Obstructions (14 U.S.C. § 86) was enacted in January 2004. The USCG may mark, for the protection of navigation, any sunken vessel or other obstruction existing on the navigable waters or waters above the continental shelf of the U.S. in such a manner and for so long as, in his judgment, the needs of maritime navigation require. The owner of such obstruction shall be liable to the U.S. for the cost of such marking until such time as the obstruction is removed or its abandonment legally established or until such earlier time as the USCG may determine.

3.32 U.S./Mexico Transboundary Hydrocarbons Agreement and H.R. 1613–Outer Continental Shelf Transboundary Hydrocarbon Agreements Authorization Act

The U.S./Mexico Transboundary Hydrocarbons Agreement, signed on February 20, 2012, ratified by the Mexican Senate in April 2012, and entered into force, establishes a framework for the cooperative exploration and exploitation of hydrocarbon resources that cross the U.S./Mexico maritime boundary in the GOM (excluding areas under the jurisdiction of Texas). It allows leaseholders on the U.S. side of the boundary to cooperate with the Mexican national oil company, Pemex, in the joint exploration and exploitation of hydrocarbon resources. The Agreement also ends the moratorium on exploitation along the boundary in the Western Gap and provides U.S. leaseholders with legal certainty regarding the exploitation of transboundary reservoirs along the entire boundary so as to encourage investment.

House Resolution (H.R.) 1613, the OCS Transboundary Hydrocarbon Agreements Authorization Act, is a bill that would approve the agreement between the U.S. and Mexico regarding the development of oil and gas natural resources on the OCS in the area of the GOM where the two countries share a border. H.R. 1613 would amend the OCSLA to authorize the Secretary of the Interior to implement any agreement for the management of transboundary hydrocarbon reservoirs. H.R. 1613 passed in the House of Representatives on June 27, 2013, and has moved to the Senate for consideration.

3.33 FISH AND WILDLIFE COORDINATION ACT

The Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. §§ 661-666c), enacted March 10, 1934, is intended to protect fish and wildlife when Federal actions result in the control or modification of a natural stream or body of water. The FWCA provides the basic authority for the involvement of FWS in evaluating impacts to fish and wildlife from proposed water resource development projects. The FWCA requires that all Federal agencies consult with FWS, NMFS, and State wildlife agencies for activities that affect, control, or modify waters of any stream or bodies of water. The NEPA was originally proposed as an amendment to the FWCA, but it ultimately was enacted as an independent directive.

3.34 MERCHANT MARINE ACT OF 1920 (JONES ACT)

The Merchant Marine Act of 1920, or Jones Act, regulates coastal shipping between ports and inland waterways. The Jones Act provides that "no merchandise shall be transported by water, or by land and water …between points in the United States… in any other vessel than a vessel built in and documented under the laws of the United States and owned by persons who are citizens of the United States…" Therefore, the Jones Act requires that all goods shipped between different ports in the United States or its territories must be carried on vessels built and documented (flagged) in the U.S.; crewed by U.S. citizens or legal aliens licensed by the USCG; and owned and operated by U.S. citizens.

The rationale behind the Jones Act and earlier sabotage laws was that the United States needed a merchant marine fleet to ensure that its domestic waterborne commerce remained under government jurisdiction for regulatory, safety, and national defense considerations. The same general principles of safety regulations are applied to other modes of transportation in the United States. While other modes of transportation can operate foreign-built equipment, these units must comply with U.S. standards. However, many foreign-built ships do not meet the standards required of U.S.-built ships and, thus, are excluded from domestic shipping.

The U.S. Customs Service has determined that facilities fixed or attached to the OCS used for the purpose of oil exploration are considered points within the United States. The OCS oil facilities are considered U.S. sovereign territory and fall under the requirements of the Jones Act; therefore, all shipping to and from these facilities related to OCS oil exploration can only be conducted by vessels meeting the requirements of the Jones Act. Shuttle tankering of oil that is produced at OCS facilities

can only be legally provided by U.S.-registered vessels and aircraft that are properly endorsed for coastwise trade under the laws of the United States.

3.35 Outer Continental Shelf Deep Water Royalty Relief Act

The Outer Continental Shelf Deep Water Royalty Relief Act of 1995 directs the Secretary of the Interior to suspend royalties on existing leases in certain deepwater areas of the Gulf of Mexico OCS when a specific set of conditions are met. Upon receipt of a complete application, the Secretary of the Interior is to determine whether proposed new production would be economic while subject to the requirement to pay Federal royalties. The Outer Continental Deep Water Royalty Relief Act directs the Secretary of the Interior to consider in the determination the increased risk of operating in deep water and costs associated with exploring, developing, and producing. Lessees are required to submit a complete application, which provides the necessary raw and interpreted data on the field so that such a determination can be made.

There are two economic hurdles that a field must clear to be eligible for a royalty suspension. If, after reviewing the application, the Secretary of the Interior determines that the new production would be economic while paying Federal royalties, then royalty obligations will not be suspended. Further, a determination that no amount of royalty-free production would make the new production economically viable also disqualifies the field from a royalty suspension. Alternatively, if the field would not be economic while paying Federal royalties but some amount of royalty-free production would make the new production economically viable, the field would qualify for at least the minimum suspension volume. Should production from a field not be economical with a royalty suspension volume equal to the mandated minimum, the Secretary of the Interior must determine the precise volume of royalty-free production, which would make the production economic.

A two-part evaluation process has been devised to direct royalty relief to fields that appear uneconomic with royalties but that are potentially viable with royalty suspensions. The first part of the process is conducted by the royalty relief applicant and the second part is performed by BOEM.

3.36 Executive Order 11988: Floodplain Management, Amended by Executive Order 12148 (July 20, 1979)

This Executive Order, as amended, requires Federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, “each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities” for the following actions: acquiring, managing, and disposing of Federal lands and facilities; providing federally undertaken, financed, or assisted construction and improvements; and conducting Federal activities and programs affecting land use, including, but not limited to, water and related land resources planning, regulation, and licensing activities

3.37 Executive Order 11990: Protection of Wetland, Amended by Executive Order 12608 (September 9, 1987)

This Executive Order, as amended, establishes that each Federal agency shall provide leadership and take action to minimize the destruction, loss, or degradation of wetlands; and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. This Executive Order applies to the following Federal activities: managing and disposing of Federal lands and facilities; providing federally undertaken, financed, or assisted construction and improvements; and conducting Federal activities and programs affecting land use, including, but not limited to, water and related land resources planning, regulating, and licensing activities.

3.38 Executive Order 12114: Environmental Effects Abroad of Major Federal Actions

On January 14, 1979, President Jimmy Carter signed Executive Order 12114. This Executive Order requires that responsible officials of Federal agencies be informed of environmental considerations and take those considerations into account when making decisions on major Federal actions that could have environmental impacts anywhere beyond the borders of the U.S., including Antarctica.

3.39 Executive Order 12777: Implementation of §311 of the Federal Water Pollution Control Act of 1972

This Executive Order, as amended, implements the Oil Pollution Act of 1990 by outlining emergency response procedures for managing spills of oil and hazardous materials into the waters inside U.S. jurisdiction. The USEPA, USCG, and the Departments of Defense, Interior, Agriculture, Commerce, and Energy participate in contingency planning. Refer to **Chapter 3.11** for more information.

3.40 Executive Order 12898: Environmental Justice

The environmental justice policy, based on Executive Order 12898 of February 11, 1994, requires agencies to incorporate analysis of environmental and health effects into NEPA documents. The analysis addresses the characteristics of race, ethnicity, and poverty status of populations in areas potentially affected by the proposed Federal action. BOEM's existing NEPA process invites participation by all groups and communities in the development of its proposed actions, alternatives, and potential mitigating measures. Scoping and review for NEPA documents are an open process that provides opportunities for all participants, including minority and low-income populations, to raise new expressions of concern that can be addressed in the documents. Impacts to socioeconomic conditions, commercial fisheries, air quality, and water quality are considered in the analysis of effects of the proposed actions on local populations or resources used by local groups, including minority and low-income groups.

3.41 Executive Order 13007: Indian Sacred Sites

President Bill Clinton issued Executive Order 13007 on Indian Sacred Sites on May 24, 1996. This Executive Order requires Federal land managing agencies to accommodate access to and ceremonial use of sacred Indian sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. It also requires agencies to develop procedures for reasonable notification of proposed actions or land management policies that may restrict access to or ceremonial use of, or adversely affect, sacred sites. Federal agencies can use the Section 106 process of the NHPA to ensure that the requirements of Executive Order 13007 are fulfilled. While a Federal agency is not required to integrate the requirements of Executive Order 13007 in the Section 106 review process, it may be beneficial for both the agency and the Tribe to do so.

Sacred sites are defined in Executive Order 13007 as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site." This promotes greater protection for the physical integrity of such sites and maintains the confidentiality of such sites, where appropriate.

3.42 Executive Order 13089: Coral Reef Protection

President Bill Clinton issued Executive Order 13089 on Coral Reef Protection on June 11, 1998, as part of the Monterey National Ocean Conference. This Executive Order establishes the interagency U.S. Coral Reef Task Force, co-chaired by the Secretary of the Interior and the Secretary of Commerce through the Administrator of the National Oceanic and Atmospheric Administration. The U.S. Coral Reef Task Force is charged with developing and implementing a comprehensive program of research and mapping to inventory, monitor, and "identify the major causes and consequences of degradation of coral reef ecosystems." The first meeting of the Task Force was held on October 19-21, 1998, at Biscayne Bay National Park.

This Executive Order also directs Federal agencies to expand their own research, preservation, and restoration efforts. BOEM carries out the mission of Executive Order 13089 by supporting directed research and developing proper mitigating measures (i.e., the Topographic Features Stipulation and Live Bottom [Pinnacle Trend] Stipulation) in order to protect these fragile and biologically rich ecosystems.

The purpose of the Topographic Features Stipulation is to protect the benthic habitat for coral reef community organisms. These communities could be severely and adversely impacted by OCS oil- and gas-related activities taking place on or near these communities. The stipulation establishes No Activity Zones and other operational restrictions.

The Live Bottom (Pinnacle Trend) Stipulation protects the "live bottom areas," including corals living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography. A bathymetry map is required prior to exploration and development activities. If the live bottom might be adversely impacted by the proposed activity, the Regional Director will require the lessee to undertake additional measures, such as relocating or monitoring the operations, to assess the impact of the activity on the live bottom. Recently, NOAA listed 20 coral species as threatened under the ESA. Five of these corals are found in the GOM and seven are found in the Atlantic Ocean. BOEM will treat these as other protected species, though they are protected through NTL No. 2009-G39.

3.43 EXECUTIVE ORDER 13112: INVASIVE SPECIES

On February 3, 1999, President Bill Clinton issued Executive Order 13112. This Executive Order defines an "invasive species" as a species that is nonnative, or alien, to the ecosystem under consideration and whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health. This Executive Order requires all Federal agencies to do as follows:

- identify any actions affecting the status of invasive species;
- prevent the introduction of invasive species;
- detect, respond to, and control populations of invasive species in a cost-effective and environmentally sound manner;
- monitor invasive species populations accurately and reliably;
- provide for the restoration of native species and habitat conditions in invaded ecosystems;
- conduct research on invasive species and develop technologies to prevent their introduction, and provide for environmentally sound control of invasive species;
- promote public education on invasive species and the means to address them; and
- refrain from authorizing, funding, or carrying out actions that are likely to cause or promote the introduction or spread of invasive species unless the agency has determined that the benefits of such actions clearly outweigh the potential harm caused by invasive species and that all feasible and prudent measures to minimize risk of harm will be taken.

In addition, the Executive Order established the National Invasive Species Council, co-chaired by the Secretaries of Agriculture, Commerce, and Interior, and further comprising the Secretaries of State, Treasury, Defense, and Transportation, and the Administrator of the USEPA. The Council does the following:

- provides national leadership on invasive species;
- ensures that Federal efforts are coordinated and effective;
- promotes action at the local, State, Tribal, and ecosystem levels;
- identifies recommendations for international cooperation;
- facilitates a coordinated network to document and monitor invasive species;
- develops a web-based information network;
- provides guidance on invasive species for Federal agencies to use in implementing NEPA; and
- prepares an Invasive Species Management Plan to serve as the blueprint for Federal action to prevent introduction, provide control, and minimize economic, environmental, and human health impacts of invasive species.

BOEM requires that EISs prepared for major Federal OCS actions (e.g., the Five-Year OCS Leasing Program and OCS lease sales) contain an assessment of the proposed action's contribution to the invasive species problem.

3.44 Executive Order 13158: Marine Protected Areas

Signed on May 26, 2000, by President Bill Clinton, Executive Order 13158 strengthened and expanded the Nation's system of marine protected areas (MPAs). Specifically, consistent with domestic and international law, this Executive Order was to (1) strengthen the management, protection, and conservation of existing MPAs and establish new or expanded MPAs; (2) develop a scientifically based, comprehensive national system of MPAs representing diverse U.S. marine ecosystems as well as the Nation's natural and cultural resources; and (3) avoid causing harm to MPAs through federally conducted, approved, or funded activities. The South Atlantic Fishery Management Council (2011b) defines MPAs within its jurisdiction as a network of specific areas of marine environments reserved and managed for the primary purpose of aiding in the recovery of overfished stocks and to ensure the persistence of healthy fish stocks, fisheries, and associated habitats. Such areas may include naturally occurring or artificial bottom and water-column habitats, and may include prohibition of harvest on seasonal or permanent time periods to achieve desired fishery conservation and management goals.

3.45 Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This Executive Order, issued on November 6, 2000, recognizes the unique trust relationship that exists between the Federal Government and Indian Tribes, and emphasizes Indian Tribes' right to sovereignty and self-government, which has been established through the Constitution of the United States, treaties, statutes, and judicial decisions. Section 5 of the Executive Order outlines the Federal responsibility for government-to-government consultations and directs each agency to have "an

accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." On November 5, 2009, President Barack Obama issued a memo directing Federal agencies to develop plans to implement Executive Order 13175. On December 1, 2011, the Secretary of the Interior issued Secretarial Order 3317 to update, expand, and clarify the Department of the Interior Policy on Consultation with Indian Tribes in accordance with the provisions of Executive Order 13175.

3.46 Executive Order 13751: Safeguarding the Nation from the Impacts of Invasive Species

On December 5, 2016, President Obama signed Executive Order 13751, which serves as an amendment to Executive Order 13112 and directs actions to continue coordinated Federal prevention and control efforts related to invasive species. This Executive Order maintains the National Invasive Species Council and the Invasive Species Advisory Committee; expands the membership of the Council; clarifies the operations of the Council; incorporates considerations of human and environmental health, climate change, technological innovation, and other emerging priorities into Federal efforts to address invasive species; and strengthens coordinated, cost-efficient Federal action.

3.47 Executive Order 13783: Promoting Energy Independence and Economic Growth

This Executive Order, issued by President Donald Trump on March 28, 2017, established the Trump administration's policy for energy regulation. The Executive Order stated that "[i]t is in the national interest to promote clean and safe development of our Nation's vast energy resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation." Executive Order 13783 also called for an agency-wide review of all rules related to domestic energy development and rescinded a number of regulations concerning energy and climate policy.

3.48 Executive Order 13795: Implementing an America-First Offshore Energy Strategy

On April 28, 2017, President Donald Trump issued Executive Order 13795, which established a national policy to encourage energy exploration and production, including on the OCS, in order to maintain the Nation's position as a global energy leader and foster energy security and resilience for the benefit of the American people, while ensuring that any such activity is safe and environmentally responsible. The Executive Order directed the Secretary of the Interior to give full consideration to revising the schedule of proposed oil and gas lease sales so that it achieves the following:

- includes, but is not limited to, annual lease sales, to the maximum extent permitted by law, in certain OCS planning areas as designated by BOEM (Western GOM, Central GOM, Chukchi Sea, Beaufort Sea, Cook Inlet, Mid-Atlantic, and South Atlantic);

- ensures that those revisions do not hinder or affect ongoing lease sales currently scheduled as part of the 2017-2022 National OCS Oil and Gas Leasing Proposed Final Program, as published on November 18, 2016; and
- develops and implements, in coordination with the Secretary of Commerce and to the maximum extent permitted by law, a streamlined permitting approach for privately funded seismic data research and collection aimed at expeditiously determining the offshore energy resource potential of the U.S. within the planning areas.

Additionally, this Executive Order reduced existing presidential withdrawals to include only those of the North Aleutian Basin and National Marine Sanctuaries that were designated as of July 14, 2008.

3.49 Executive Order 13807: Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects

On August 15, 2017, President Donald Trump issued Executive Order 13807, which addresses the inefficiencies in current infrastructure project decisions, including the management of environmental review and permit decisions or authorizations, by changing the way it processes them. This Executive Order establishes a national policy to safeguard our communities and maintain a healthy environment and ensures that Federal authorities make informed decisions concerning the environmental impacts of infrastructure projects; develop infrastructure in an environmentally sensitive manner; provide transparency and accountability to the public regarding environmental review and authorization decisions; be good stewards of public funds, including those used to develop infrastructure projects, and avoid duplicative and wasteful processes; conduct environmental reviews and authorization processes in a coordinated, consistent, predictable, and timely manner in order to give public and private investors the confidence necessary to make funding decisions for new infrastructure projects; speak with a coordinated voice when conducting environmental reviews and making authorization decisions; and make timely decisions with the goal of completing all Federal environmental reviews and authorization decisions for major infrastructure projects within 2 years.

3.50 Executive Order 13840: Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States

On June 19, 2018, President Donald Trump signed Executive Order 13840. The Executive Order is intended to advance the economic, security, and environmental interests of the United States through improved public access to marine data and information, efficient Federal agency coordination on ocean-related matters, and engagement with marine industries, the science and technology community, and other ocean stakeholders, including Regional Ocean Partnerships. The Executive Order continues to require Federal agencies to coordinate activities regarding ocean-related matters for effective management of the ocean as well as promote lawful use of the ocean by agencies,

including the Armed Forces. The Navy continues to engage with regional and State ocean-planning entities. This Executive Order revokes and replaces Executive Order 13547, "Stewardship of the Ocean, Our Coasts, and the Great Lakes.**"**

3.51 EXECUTIVE ORDER 13868: PROMOTING ENERGY INFRASTRUCTURE AND ECONOMIC GROWTH

On April 10, 2019, President Donald Trump issued Executive Order 13868, which enables the timely construction of the infrastructure needed to move our energy resources through domestic and international commerce, and the Federal Government must promote efficient permitting processes and reduce regulatory uncertainties that currently make energy infrastructure projects expensive and that discourage new investment. Enhancing our Nation's energy infrastructure, including facilities for the transmission, distribution, storage, and processing of energy resources, will ensure that our Nation's vast reserves of these resources can reach vital markets. This will also help families and businesses in the States with energy constraints to access affordable and reliable domestic energy resources.

3.52 SECRETARIAL ORDER 3350: AMERICA-FIRST OFFSHORE ENERGY STRATEGY

Secretarial Order 3350, signed on May 1, 2017, was issued to further implement Executive Order 13795, Implementing an America-First Offshore Energy Strategy (April 28, 2017), by enhancing opportunities for energy exploration, leasing, and development on the OCS; establishing regulatory certainty for OCS activities; and enhancing conservation stewardship, thereby providing jobs, energy security, and revenue for the American people. The Secretarial Order directed BOEM to initiate development of a new National OCS Oil and Gas Leasing Program; work with NMFS to expedite authorizations needed for seismic survey permits and seismic data research, and expedite consideration of appealed, new, or resubmitted seismic survey permitting applications in the Atlantic; promptly complete BOEM's previously announced review of NTL No. 2016-NOl and provide a report describing the results of the review and options for revising or rescinding NTL No. 2016-NOl; and immediately cease all activities to promulgate the "Offshore Air Quality Control, Reporting, and Compliance" proposed rule (*Federal Register*, 2016) and all other rules and guidance published pursuant thereto as well as provide a report explaining the effects, if any, of not issuing a new rule addressing offshore air quality and providing options for revising or withdrawing the proposed rule.

3.53 SECRETARIAL ORDER 3351: STRENGTHENING THE DEPARTMENT OF THE INTERIOR'S ENERGY PORTFOLIO

Secretarial Order 3351, signed on May 1, 2017, established the position of Counselor to the Secretary for Energy Policy to ensure deliberate and active coordination of energy policy in the Department. As designated, the Counselor to the Secretary for Energy Policy is responsible for developing and coordinating strategies, policies, and practices that promote responsible development of all types of energy on public lands managed and administered by the Department; identifying

regulatory burdens that unnecessarily encumber energy exploration development, production, transportation; developing strategies to eliminate or minimize these burdens; promoting efficient and effective processing of energy-related authorizations, permits, regulations, and agreements, including prioritizing the work of bureaus or offices in developing and implementing energy policy and affairs; tracking progress of bureaus or offices; and resolving obstacles to energy exploration, development, production, and transportation concerns.

3.54 Secretarial Order 3355: Streamlining NEPA Reviews and Implementation of Executive Order 13807, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects"

Secretarial Order 3355, signed on August 31, 2017, was issued to (1) immediately implement certain improvements to NEPA reviews conducted by the U.S. Department of the Interior, (2) begin assessment of additional such opportunities, and (3) begin implementation of Executive Order 13807, which was issued on August 15, 2017. This Secretarial Order directs DOI to set page and timing limitations for the preparation of NEPA documents; incorporate additional NEPA Streamlining Reviews; and begin implementation of Executive Order 13807 by identifying impediments to efficient and effective reviews and ways to address them, actions that could be taken by CEQ to facilitate reviews, and proposals that could qualify for the "One Federal Decision" process.

4 CONCLUSIONS

BOEM consults with various Federal departments and agencies that have authority to govern and maintain ocean resources pursuant to other Federal laws. The OCS leasing process for oil, natural gas, or renewable energy can be a complex process. Federal laws mandate the OCS leasing program (e.g., the OCSLA) and the environmental review process (i.e., NEPA). Regulatory requirements are coordinated with Federal, State, and local agencies to encourage orderly, safe, and environmentally responsible development of energy sources on the OCS.

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The Department of the Interior Mission

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The Bureau of Ocean Energy Management Mission

The Bureau of Ocean Energy Management (BOEM) is responsible for managing development of U.S. Outer Continental Shelf energy and mineral resources in an environmentally and economically responsible way.