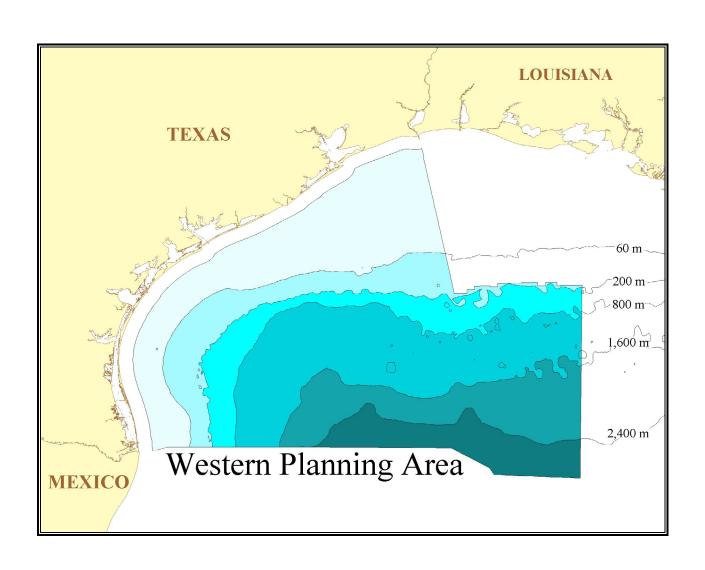


Environmental Assessment

Proposed OCS Lease Sale 192, Western Gulf of Mexico



Environmental Assessment

Proposed OCS Lease Sale 192, Western Gulf of Mexico

Author

Minerals Management Service Gulf of Mexico OCS Region

FINDING OF NO NEW SIGNIFICANT IMPACT

The Minerals Management Service (MMS) has prepared an environmental assessment (EA) for proposed Lease Sale 192 in the Western Planning Area (WPA) of the Gulf of Mexico Outer Continental Shelf (OCS) to determine whether MMS can make a Finding of No New Significant Impact or should prepare a supplemental Environmental Impact Statement (EIS). In November 2002, MMS filed with the U.S. Environmental Protection Agency a multisale Central and Western Gulf of Mexico (GOM) Final EIS covering Central Planning Area (CPA) Lease Sales 185, 190, 194, 198, and 201, and Western Planning Area Lease Sales 187, 192, 196, and 200 in the GOM. Because the multisale EIS examined the environmental impacts of a sale similar in size, nature, and potential level of development as Lease Sale 192, this EA tiers off the multisale EIS and incorporates much of the material by reference. It also reexamines the potential environmental effects of the proposed action and alternatives based on any new information regarding potential impacts or issues that were not available at the time the multisale EIS was prepared.

The purpose of the EA is to analyze whether new information indicates that there are likely to be significant new impacts that were not addressed in the Central and Western GOM multisale EIS. As part of the scoping process for the EA, MMS reviewed new information to determine if any resources should be reevaluated or if the new information would alter conclusions of the multisale EIS. It was determined that three resources (marine mammals, sea turtles, and snowy plover) should be reevaluated because of new information. The new information for these three resources presented in the EA is mitigation measures for protected species and a revised oil-spill probability for the snow plover.

In addition, the EA presents a study of the impacts of Hurricane Lili, updates of MMS's preparation of NEPA documents for seismic surveys and structure removal operations, more exact estimates of the abundance of cetaceans in the northern GOM, and additional scoping opportunities since the multisale EIS. This new information further supports or elaborates on analyses or information presented in the multisale EIS, but it does not change any of the analyses in the multisale EIS.

Based on the analyses in the EA, no new significant impacts were identified for proposed Lease Sale 192 that were not already assessed in the multisale EIS, nor is it necessary to change the conclusions of the kinds, levels, or locations of impacts described in that document. Therefore, MMS has determined that a supplemental EIS is not required and is issuing this Finding of No New Significant Impact.

Supporting Documents

EA for Proposed OCS Lease Sale 192, Western Gulf of Mexico (attached).

Final EIS for CPA Lease Sales 185, 190, 194, 198, and 201, and WPA Lease Sales 187, 192, 196, and 200 (available upon request).

MAR 1 6 2004

Date

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1. OBJECTIVES OF THE ENVIRONMENTAL ASSESSMENT

This environmental assessment (EA), which tiers off the Final Environmental Impact Statement (EIS) for Central Planning Area (CPA) Lease Sales 185, 190, 194, 198, and 201; and Western Planning Area (WPA) Lease Sales 187, 192, 196, and 200 (USDOI, MMS, 2002a) (multisale EIS), has been prepared to aid in the determination of whether or not newly available information indicates that the proposed sale would result in new significant impacts not addressed in the multisale EIS. This EA incorporates by reference all of the relevant material in the multisale EIS. The multisale EIS can be obtained from the Minerals Management Service, Gulf of Mexico OCS Region, Attention: Public Information Office (MS 5034), 1201 Elmwood Park Boulevard, Room 114, New Orleans, Louisiana 70123-2394 (1-800-200-GULF) or viewed on the Minerals Management Service (MMS) website at http://www.gomr.mms.gov. A list of libraries that have copies of the multisale EIS and their locations is also available on the MMS website. In preparation for this EA, MMS reexamined the potential environmental effects of the proposed action and alternatives based on any new information regarding potential impacts and issues not available at the time the MMS prepared the multisale EIS in November 2002. New information was reviewed to determine if any resources should be reevaluated or if the new information would alter conclusions of the multisale EIS. It was determined that three resources (marine mammals, sea turtles, and snowy ployer) should be reevaluated because of new information. The new information for these three resources is mitigation measures for protected species and a revised oil-spill probability for the snow plover.

Federal regulations allow for an agency to analyze several similar proposals in one EIS (40 CFR 1502.4). Since the WPA sale proposals and projected activities are very similar, if not almost identical each year, MMS prepared a single EIS for four WPA lease sales (Lease Sales 187, 192, 196, and 200) in the 5-Year Program (USDOI, MMS, 2002b). Lease Sale 184 was not addressed in the multisale EIS; a separate EA was prepared for that proposal. The multisale approach focuses the National Environmental Policy Act (NEPA)/EIS process on any differences between the proposed lease sales and on any new information and issues. Although the multisale EIS addressed four proposed WPA sale actions, the Secretary of the Interior (Secretary) makes only one WPA lease sale decision each year.

2. PURPOSE OF AND NEED FOR THE PROPOSED ACTION

Purpose of the Proposed Action

The purpose of this proposed action is to make available for leasing those areas that may contain economically recoverable oil and gas resources in the WPA of the GOM for energy use in the United States (U.S.). The proposed lease sale would provide qualified bidders the opportunity to bid upon and lease acreage in the GOM Outer Continental Shelf (OCS) in order to explore, develop, and produce oil and natural gas.

Need for the Proposed Action

The GOM constitutes one of the world's major oil- and gas-producing areas and has proved to be a steady and reliable source of crude oil and natural gas for more than 50 years. Oil from the GOM can help reduce the Nation's need for oil imports and reduce the environmental risks associated with oil tankering. Natural gas is generally considered to be an environmentally preferable alternative to oil, both in terms of the production and consumption.

3. ALTERNATIVES INCLUDING THE PROPOSED ACTION

3.1. ALTERNATIVE A — THE PROPOSED ACTION

Alternative A – The Proposed Action: This alternative would offer for lease all unleased blocks within the WPA for oil and gas operations (**Figure 1**), with the following exceptions: High Island Area East Addition, South Extension, Blocks A-375 and A-398 and portions of other blocks within the Flower Garden Banks National Marine Sanctuary are deferred from leasing. Sigsbee Escarpment Area Blocks 11, 57, 103, 148, 149, 194, 239, 284, and 331-341; portions of Sigsbee Escarpment Area Blocks 12-14,

58-60, 104-106, 150, 151, 195, 196, 240, 241, 285-298, and 342-349; and Keathley Canyon Blocks 978-980 are deferred from the proposed action under the "Treaty Between The Government of the United States of America And The Government Of The United Mexican States on the Delimitation Of The Continental Shelf In the Western Gulf of Mexico Beyond 200 Nautical Miles," which took effect in January 2001. The WPA encompasses about 35.9 million acres (ac) in water depths ranging from 8 to 3,000 meters (m) (**Figure 1**). The estimated amount of resources projected to be developed as a result of any one proposed WPA lease sale is 0.136-0.262 billion barrels of oil (BBO) and 0.810-1.440 trillion cubic feet (tcf) of gas.

Mustang Island Area Blocks 793, 799, and 816 have been considered crucial to Naval Mine Warfare Command operations and were deferred from past lease sales. The MMS has been informed by the Navy that these blocks are still used for testing equipment and for training mine warfare personnel; however, the Navy does not object to these blocks being offered for lease under the condition of no surface occupancy. Therefore, MMS proposes to offer those three blocks for leasing in Lease Sale 192 and to add the following to the Operations in the Naval Mine Warfare Area Stipulation. This will apply to Mustang Island Area Blocks 793, 799, and 816.

- (a) For below seabed operations, the lessee agrees that no activity including, but not limited to, structures, drilling rigs, pipelines, and/or anchoring will be located on the seabed or in the water column above within any portion of the lease. All exploration, development, and production activities or operations must take place from outside the lease by the use of directional drilling or other techniques.
- (b) Prior to the submission of Exploration Plans (EP) and Development Operations Coordination Documents (DOCD) regarding any operations on or under the seabed of these blocks, the lessee will consult with the Commander, Mine Warfare Command, in order to determine the compatibility of the lessee's plans with scheduled military operations. The EP and DOCD shall contain a statement certifying the consultation and indicating whether the Commander, Mine Warfare Command has any objection to activities and schedule of the EP or DOCD.

The addition of these three blocks does not change the range of resource projections and associated activities; therefore, it does not change any conclusions from the multisale EIS.

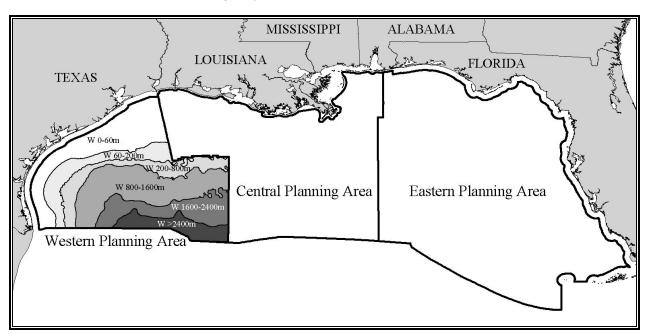


Figure 1. GOM OCS Planning Areas and WPA Offshore Subareas.

3.2. ALTERNATIVES TO THE PROPOSED ACTION

Alternative B - The Proposed Action Excluding the Unleased Blocks Near Biologically Sensitive Topographic Features: This alternative would offer for lease all unleased blocks in the WPA, as described for the proposed action, with the exception of any unleased blocks within the 200 blocks subject to the Topographic Features Stipulation.

Alternative \hat{C} – \hat{No} Action: This alternative is equivalent to cancellation of the proposed lease sale. The opportunity for development of the estimated oil and gas resources that could have resulted from the proposed action would be precluded or postponed.

3.3. MITIGATION MEASURES

The proposed action and all subsequent activities resulting from it are subject to the existing regulations and proposed lease stipulations designed to reduce environmental risks. Four stipulations (Topographic Features; Military Areas; Operations in the Naval Mine Warfare Area; and Law of the Sea Convention Royalty Payment Stipulations) are included in the multisale EIS. Chapter 2.4.1.3 of the multisale EIS discusses the effectiveness of these stipulations. An additional stipulation, Protected Species Stipulation, was adopted for Lease Sale 187 in August 2003, which was the first WPA lease sale addressed in the multisale EIS. In June 2003, MMS issued three Notices to Lessees and Operators (NTL) in order to reduce any potential impacts to protected species. The MMS superseded and replaced NTL 2003-G08, Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program, with NTL 2004-G01. The new NTL, which expands application of the seismic survey mitigation measures to include additional marine mammal species, becomes effective March 1, 2004. The Protected Species Stipulation and the NTL's were developed in consultation with the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Fish and Wildlife Service (FWS). The requirements of the NTL's apply to all existing and future oil and gas operations on the GOM OCS. These mitigation measures were not part of the multisale EIS because they were not in place at the time the EIS was completed. These mitigation measures would further reduce the potential for any impacts related to the proposed action that were described in the EIS. The analyses of potential proposed action impacts to marine mammals and sea turtles are presented in Chapter 4.3.2 of this EA.

3.3.1. Protected Species Stipulation

The Protected Species Stipulation is designed to minimize or avoid potential adverse impacts to federally protected species (e.g., sea turtles, marine mammals, and other listed species). To reduce the potential taking of federally protected species:

- (1) The MMS will condition all permits issued to lessees and their operators to require them to collect and remove flotsam resulting from activities related to exploration, development, and production of this lease.
- (2) The MMS will condition all permits issued to lessees and their operators to require them to post signs in prominent places on all vessels and platforms used as a result of activities related to exploration, development, and production of this lease detailing the reasons (legal and ecological) why the release of debris must be eliminated.
- (3) The MMS will require that vessel operators and crews watch for marine mammals and sea turtles, reduce vessel speed to 10 knots (kn) or less when assemblages of cetaceans are observed, and maintain a distance of 90 m or greater from whales and a distance of 45 m or greater from small cetaceans and sea turtles.
- (4) The MMS will require that all seismic surveys employ mandatory mitigation measures including the use of a 500-m "exclusion zone" based upon the appropriate water depth, ramp-up and shut-down procedures, visual monitoring, and reporting. Seismic operations must immediately cease when certain marine mammals are detected within the 500-m exclusion zone. Ramp-up procedures and seismic surveys

- may be initiated only during daylight unless alternate monitoring methods approved by MMS are used.
- (5) The MMS will require lessees and operators to instruct offshore personnel to immediately report all sightings and locations of injured or dead protected species (marine mammals and sea turtles) to the appropriate stranding network. If oil and gas industry activity is responsible for the injured or dead animals (e.g., because of a vessel strike), the responsible parties should remain available to assist the stranding network. If the injury or death was caused by a collision with your vessel, you must notify MMS within 24 hours of the strike.
- (6) The MMS will require oil-spill contingency planning to identify important habitats, including designated critical habitat, used by listed species (e.g., sea turtle nesting beaches, and piping plover critical habitat) and will require the strategic placement of spill cleanup equipment to be used only by personnel trained in less intrusive cleanup techniques on beach and bay shores.

3.3.2. Notices to Lessees and Operators

Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program (NTL 2004-G01)

The Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program NTL (NTL 2004-G01) details information on ramp-up procedures, observation methods, and reporting requirements to be followed by the seismic industry during certain geological and geophysical (G&G) survey operations. The conditions prescribed under this NTL aid in reducing the chance of harassment to nearby marine mammals. The report data received from the companies will be used to increase the knowledge base on species habitat.

For all seismic operations in water depths greater than 200 m in the WPA and CPA, and all water-depths in the EPA, this NTL requires the use of soft start or ramp-up and visual observers as required in the previous NTL's. This NTL includes requirements for

- (1) seismic vessels to have at least two visual observers on watch during all daylight hours when geophysical operations are being conducted;
- (2) visual observers to have completed a training course;
- (3) no additional duties to be assigned to visual observers during their watch;
- (4) limiting watch and duty hours for observers:
- (5) elements that must be included in the training course;
- (6) methods to be employed for visual observations;
- (7) "all clear" prior to ramp-up;
- (8) shutdown of seismic airguns when whales are within 500 m of the center of the airgun array;
- (9) restart of survey after shutdown; and
- (10) reporting required information, including types of reports and submission of reports to MMS.

This NTL contains special provisions for borehole, or vertical seismic profiling, operations. This NTL also contains a special mitigation exception for seismic vessels that employ experimental passive acoustic monitoring.

Vessel Strike Avoidance and Injured/Dead Protected Species Reporting (NTL 2003-G10)

The Vessel Strike Avoidance and Injured/Dead Protected Species Reporting NTL (NTL 2003-G10) provides the following guidelines to minimize the risk of vessel strikes to protected species and report observations of injured or dead protected species.

Protected Species Identification Training

Vessel crews are to use a GOM reference guide to identify marine mammals and sea turtles.

Vessel Strike Avoidance

The following guidelines are included:

- (1) Vessel operators and crews should maintain a vigilant watch for marine mammals and sea turtles and slow down or stop their vessels to avoid striking protected species.
- (2) When a whale is sighted, a distance of 90 m or greater from the whale should be maintained.
- (3) When sea turtles or small cetaceans are sighted, there should be an attempt to maintain a distance of 45 m or greater whenever possible.
- (4) When cetaceans are sighted while a vessel is underway, there should be an attempt to remain parallel to the animals' course. Excessive speed or abrupt changes in direction until the cetaceans have left the area should be avoided.
- (5) Vessel speed should be reduced to 10 kn or less when pods or large assemblages of cetaceans are observed near an underway vessel. Cetaceans at the surface may indicate the presence of submerged animals near the vessel.
- (6) Whales may surface in unpredictable locations or approach slowly moving vessels. When animals are sighted in the vessel's path or in close proximity to a moving vessel, speed should be reduced and the engine shifted to neutral. Engines should not be engaged until the animals are clear of the area.

Injured/Dead Protected Species Reporting

Vessel crews must report sightings of any injured or dead protected species (marine mammals and sea turtles) immediately to the Marine Mammal and Sea Turtle Stranding Hotline or the Marine Mammal Stranding Network. In addition, MMS must be notified within 24 hours of an injury or death by the operator of the vessel responsible. If oil and gas industry activity is responsible for the injury or death, the responsible parties should remain available to assist the respective salvage and stranding network as needed.

Marine Trash and Debris Awareness and Elimination (NTL 2003-G11)

The Marine Trash and Debris Awareness and Elimination NTL (NTL 2003-G11) provides guidance to reduce the accidental introduction of marine trash and debris into the GOM. This NTL requires the placement of marine debris elimination placards, with specified language, in prominent places on all fixed and floating production facilities that have sleeping or food preparation capabilities, and on all mobile drilling units engaged in oil and gas operations in the GOM OCS. This NTL also requires marine debris awareness training for all offshore employees and contractors actively engaged in offshore operations. This training includes (1) viewing a training video or slide show and (2) receiving an explanation from the company's management that emphasizes their commitment to achieve the objectives of the trash and debris containment requirement. This NTL describes certification guidelines including the preparation of an annual report to MMS from a company official that describes the marine trash and debris awareness training process and certifies that the training process has been followed for the previous calendar year.

4. IMPACT ANALYSIS

4.1. UPDATE OF PROJECTIONS OF POTENTIAL ACTIVITY FROM THE PROPOSED ACTION

4.1.1. Resource Estimates and Timetables

The multisale EIS discussed projections for activities associated with a typical proposed action. The estimated amounts of resources projected to be leased, discovered, developed, and produced as a result of the proposed lease sale are 0.136-0.262 BBO and 0.810-1.440 tcf of gas. Review of these projections carried out since the publication of the multisale EIS indicates that the information is still valid and is not only incorporated by reference, but still up-to-date. See **Chapter 5.1** for a description of the internal scoping process.

4.1.2. Hurricane Lili

As discussed in **Chapter 1.5** of the multisale EIS, criteria, models, and procedures for shutdown operations and the orderly evacuation of personnel prior to a pending hurricane have been in place on the GOM OCS for more than 30 years. Operating experience from extensive drilling activities and the presence of more than 4,000 platforms during the 30-plus years of the GOM OCS Program has proven the effectiveness and safety of securing wells and evacuating a facility in advance of severe weather conditions. This was evident in early October 2002 when Hurricane Lili, a Category 4 hurricane, passed near 800 OCS structures in the GOM. Of 800 structures, 6 were seriously damaged. All six were more than 20 years old. Of the 99 drilling rigs in the GOM at that time, 4 sustained substantial damage. About 25,000 offshore workers were safely evacuated (USDOI, MMS, 2002c).

Nine pollution events occurred as a result of Hurricane Lili. The only significant incident was a 350-barrel (bbl) oil spill at Ship Shoal Block 119. The other eight pollution events ranged from 0.14 gallons to 3 bbl. In August 2003, MMS published a report that recorded the transport and fate of oil spilled at Ship Shoal Block 119 during Hurricane Lili (USDOI, MMS, 2003a). The report states that the lessee mounted an appropriate response and the response was complicated by hurricane-related onshore conditions. Approximately 145 bbl of oil were recovered and 205 bbl of oil dissipated. No shoreline or wildlife impacts were reported. No birds were fouled. The unrecovered oil was removed from the surface of the water by natural weathering processes including evaporation, dissolution in the water, adsorption to particulate material, and biodegradation. The lessee, Murphy Exploration and Production Company, the U.S. Coast Guard, the Louisiana Oil Spill Coordinator's Office, oil-spill-response organizations, and MMS have discussed the response (Bedell, 2003). The group will explore issues including onshore infrastructure closure and the resumption of open routes to the GOM following the passage of a hurricane.

4.1.3. Seismic Surveys

Geophysical seismic surveys are performed to obtain information on surface and near-surface geology and on subsurface geologic formations. The MMS is currently completing a programmatic EA (PEA) on geological and geophysical exploration activities in the GOM (USDOI, MMS, in preparation), which includes a detailed description of seismic surveying technologies and operations. The PEA is expected to be published in the summer of 2004. Information from the Draft PEA on seismic surveying technologies and operations was used in the preparation of the multisale EIS and was summarized in **Chapter 4.1.1.2.1** of the multisale EIS.

4.1.4. Structure Removal Operations

The MMS is preparing a PEA to assess the potential impacts that decommissioning activities, related to the explosive and nonexplosive severing of seafloor obstructions and facilities (i.e., wellheads, caissons, casing strings, platforms, mooring devices, etc.), and subsequent salvage operations have on the GOM. Preparation of the PEA is an important step in the decision process for future permitting for the removal of offshore structures and for further consultation and coordination with other Federal agencies.

The PEA will be used as part of the rulemaking process by NOAA for the promulgation of incidental take regulations under Subpart I of the Marine Mammal Protection Act (MMPA) and to reinitiate consultation for explosive, structure removal operations under Section 7 of the Endangered Species Act (ESA). Topics of primary concern to be addressed in the PEA include removal technologies, industry needs related to water depth and location, and the potential impacts of structure removal operations on marine and socioeconomic environments. On April 16, 2003, MMS published a Notice of Preparation in the *Federal Register* requesting information or issues that should be addressed in the PEA. Structure decommissioning is discussed in **Chapter 4.1.1.4** of the multisale EIS.

On October 10, 2003, NOAA Fisheries issued a biological opinion (BO) regarding the use of de minimus charges of ≤5 lb for structure removal operations. The NOAA Fisheries concurred with MMS that the use of these small charges are not likely to adversely affect ESA-listed species under their jurisdiction. The BO listed several mitigation measures that if followed, will allow explosive contractors/operators the opportunity to conduct their own predetonation monitoring without aerial observations or NOAA Fisheries personnel.

4.2. UPDATE OF INFORMATION ON THE AFFECTED ENVIRONMENT

Chapter 3 and Appendix 9 of the multisale EIS provides a complete description as of 2002 of the affected environment for the proposed lease sale. For a number of resources (geology, meteorology, air quality, water quality, coastal barrier beaches and associated dunes, wetlands, deepwater benthic communities, topographic features, sea turtles, coastal and marine birds, fish resources, public services, infrastructure, land-use plans, sociocultural issues and environmental justice, commercial fisheries, recreational resources and beach use, archaeological resources, and coastal zone management plans), MMS has identified no new information since completion of the multisale EIS. The reader should refer to the multisale EIS for information regarding these resources.

A list of MMS GOM Region studies completed since the publication of the multisale EIS is presented Appendix and is available on the **MMS** Internet website in http://www.gomr.mms.gov/homepg/regulate/environ/techsumm/rec_pubs.html. Environmental Studies Program Information System (ESPIS) provides immediate access to all completed MMS ESP studies (http://mmspub.mms.gov:81/search.html). The ESPIS is a searchable, web-based, fulltext retrieval system allowing users to view online or to download the complete text of any completed MMS ESP report. A complete description of all ongoing GOM Region studies is available at http://www.gomr.mms.gov/homepg/regulate/environ/ ongoing studies/gom.html.

The following summarizes the affected environment for resources MMS has determined should be reevaluated because of new information that was unavailable during the preparation of the multisale EIS. This includes information on protective measures for protected species, and a revised oil-spill probability for the snowy plover.

4.2.1. Marine Mammals

Chapter 3.2.4 of the multisale EIS discusses nonendangered/nonthreathened and endangered/ threatened species of marine mammals known to occur in the GOM. Five mysticete (or baleen) whales (the northern right, blue, fin, sei, and humpback), one odontocete (or toothed) whale (the sperm whale), and one sirenian (the West Indian manatee) are listed as endangered. The sperm whale is common in oceanic waters of the northern GOM and is a resident species, while the baleen whale is considered rare or extralimital (Würsig et al., 2000). The West Indian manatee (*Trichechus manatus*) inhabits only coastal marine, brackish, and freshwater areas.

For over a decade, MMS has funded and participated in research on marine mammals in the GOM. Through this research, particularly the Gulf cetaceans (GulfCet) I, GulfCet II, and Sperm Whale Acoustic Monitoring Program (SWAMP) programs, the diverse cetacean community of the GOM has been documented, including the year-round sperm whale population. Many of these cruises included tissue sampling of numerous GOM cetacean species for genetic analysis.

New information from NOAA Fisheries concerning estimated population numbers for cetaceans in the northern GOM is presented in **Table 1** (USDOC, NOAA Fisheries, 2004). This information is essential for future MMS petitioning needs under the MMPA and for subsequent consultation requirements under Section 7 of the ESA. This is the first update by NOAA Fisheries in several years

and more specific than the relative occurrence estimates provided in the multisale EIS. Since the new estimates are in agreement with the relative occurrence estimates presented in the multisale EIS, no new analysis is required as a result of the new estimates.

Chapter 4.3.2.1 of this EA reevaluates the proposed action's potential impact on marine mammals with the protected species stipulation and NTL's described in **Chapter 3.3**.

Table 1
Estimated Abundance of Cetaceans in the Northern GOM Oceanic Waters

Species	Common Name	Estimated Number of Individuals
Balaenoptera edeni	Bryde's whale	42
Physeter macrocephalus	Sperm whale	1,315
Kogia spp.	Dwarf or pygmy sperm whale	809
Ziphius cavirostris	Cuvier's beaked whale	88
Unidentified ziphiid	Unidentified beaked whales	98
Feresa attenuata	Pygmy killer whale	443
Pseudorca crassidens	False killer whale	1,515
Orcinus orca	Killer whale	180
Globicephala sp.	Pilot whale	3,252
Peponocephala electra	Melonheaded whale	3,320
Grampus griseus	Risso's dolphin	1,777
Tursiops truncatus	Bottlenose dolphin	26,852
Steno bredanensis	Rough-toothed dolphin	2,469
Lagenodelphis hosei	Fraser's dolphin	698
Stenella frontalis	Atlantic spotted dolphin	39,545
Stenella longirostris	Spinner dolphin	11,550
Stenella attenuate	Pantropical spotted dolphin	93,174
Stenella clymene	Clymene dolphin	16,439
Stenella coeruleoalba	Striped dolphin	6,258

Source: USDOC, NOAA Fisheries, 2004.

4.2.2. Sea Turtles

Five species of sea turtles are known to inhabit the waters of the GOM: the green turtle, the loggerhead, the hawksbill, the Kemp's ridley, and the leatherback (Pritchard, 1997). All sea turtle species inhabiting the GOM are listed as either endangered or threatened under the ESA of 1973 (Pritchard, 1997). **Chapter 3.2.5** of the multisale EIS presents information on the distribution, habitat, feeding, and nesting of sea turtles. **Chapter 4.3.2.2** of this EA reevaluates the proposed action's potential impact on sea turtles with the protected species stipulation and NTL's described in **Chapter 3.3**.

4.2.3. Snowy Plover

Coastal and marine birds are discussed in **Chapter 3.2.7** of the multisale EIS. The snowy plover inhabits the areas identified in **Figure 2**. When commenting on the Draft EIS for Eastern Planning Area (EPA) Lease Sales 189 and 197, published after the multisale, FWS stated that snowy plover are present year round (USDOI, MMS, 2003b) as opposed to the period (February to August) that was used for the multisale EIS and the EPA Draft EIS. **Chapter 4.3.2.3** of this EA reevaluates the proposed action's potential impact on snowy plover given this new information.

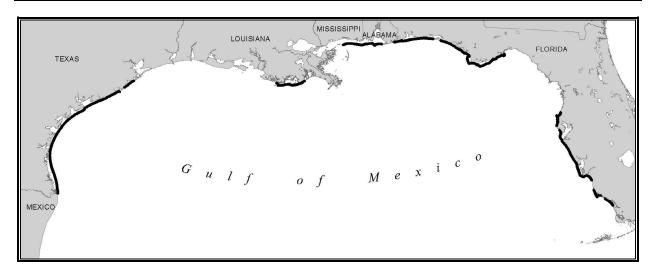


Figure 2. Snowy Plover Habitat.

4.3. IMPACTS FROM ALTERNATIVE A — THE PROPOSED ACTION

4.3.1. Summary of Analysis Incorporated by Reference from the Multisale EIS

The multisale EIS analyzed the effects of a typical WPA lease sale by presenting a set of ranges for resource estimates, projected exploration and development activities, and impact-producing factors for any of the proposed WPA lease sales held over the 4-year period. This EA tiers off the initial multisale EIS and incorporates that document by reference. All unleased blocks in the WPA will be available for lease under the proposed action (as described in **Chapter 3.1**). The MMS expects only a small percentage of blocks would be leased, and an even smaller percentage would actually produce oil and gas. The following is a summary of impacts to resources taken from the multisale EIS.

4.3.1.1. Impacts on Coastal Resources

No significant impacts to the physical shape and structure of barrier beaches and associated dunes are expected to occur as a result of the proposed action. Should a spill contact a barrier beach, sand removal during cleanup activities is expected to be minimal.

Adverse initial impacts and more importantly secondary impacts of pipeline and navigation canals are considered the most significant proposed-action-related impacts to wetlands. Although initial impacts are considered locally significant and are largely limited to where OCS-related canals and channels pass through wetlands, secondary impacts may have substantial, progressive, and cumulative adverse impacts to the hydrologic basin or subbasin in which they are found. Offshore oil spills resulting from the proposed action are not expected to significantly damage inland wetlands. The greatest threat to wetland habitat is from an inland spill from a vessel accident or pipeline rupture. While a resulting slick may cause minor impacts to wetland habitat, equipment and personnel used to clean up a slick over the impacted area may generate the greatest direct impacts to the area.

Normal OCS activities are expected to have little adverse impact on seagrass communities. Impacts from pipeline installation activities are expected to be very small and short-term. Inshore spills from vessel collisions or pipeline ruptures pose the greatest potential threat to seagrass communities.

Adverse impacts on endangered/threatened and nonendangered/nonthreatened coastal and marine birds are expected to be sublethal. These effects include behavior changes, eating OCS-related contaminants or discarded debris, and displacement of localized groups from optimal habitats. Chronic sublethal stress, however, is often undetectable in birds. As a result of stress, individuals may weaken and be prone to infection or disease, have reduced reproductive success, or have disturbed migration patterns. Oil spills pose the greatest potential direct and indirect impacts to coastal and marine birds. If physical oiling of individuals or local groups of birds occurs, some degree of both acute and chronic physiological stress associated with direct and secondary uptake of oil would be expected. Low levels of

oil could stress birds by interfering with food detection, feeding impulses, predator avoidance, territory definition, homing of migratory species, susceptibility to physiological disorders, disease resistance, growth rates, reproduction, and respiration. Reproductive success can be affected by the toxins in oil. Indirect effects occur by fouling of nesting habitat, and displacement of individuals, breeding pairs, or populations to less favorable habitats. Dispersants used in spill cleanup activity can have toxic effects similar to oil on the reproductive success of coastal and marine birds. The air, vehicle, and foot traffic that takes place during shoreline cleanup activity can disturb nesting populations and degrade or destroy habitat

Impacts to coastal water quality from the proposed action are expected to be minimal. The primary impacting sources to water quality in coastal waters are point-source and nonpoint-source discharges from OCS support facilities and support-vessel discharges.

Emissions of pollutants into the atmosphere from the activities associated with the proposed action are not projected to have significant impacts on onshore air quality. Emissions from OCS activity are not expected to have concentrations that would change onshore air-quality classifications. Increases in onshore annual average concentrations of NO_x , SO_x , and PM_{10} are estimated to be less than the maximum increases allowed in the PSD Class II areas or the PSD Class I area.

The impact from the proposed action on Gulf Coast recreational beaches is expected to be minimal. The proposed action may result in an incremental increase in noise from helicopter and vessel traffic, nearshore operations that may adversely affect the enjoyment of some Gulf Coast beach uses, and some increases in beached debris; these impacts are expected to have little effect on the number of beach users. Impacts from oil spills are expected to be short-term and localized; a large volume of oil contacting a recreational beach could close the area to recreational use for up to 30 days.

Routine activities associated with the proposed action are not expected to impact coastal historic archaeological resources. It is very unlikely that an oil spill would occur and contact coastal historic archaeological sites from accidental events associated with the proposed action. The major effect from an oil-spill impact would be visual contamination of a historic coastal site, such as a historic fort or lighthouse. As historic archaeological sites are protected under law, it is expected that any spill cleanup operations would be conducted in such a way as to cause little or no impacts to historic archaeological resources. These impacts would be temporary and reversible.

The proposed action is not expected to result in impacts to coastal prehistoric archaeological sites; however, should such an impact occur, unique or significant archaeological information could be lost. It is very unlikely that an oil spill would occur and contact coastal, barrier island prehistoric sites as a result of the proposed action. Should a spill contact a prehistoric archaeological site, unique or significant archaeological information could be irreversibly damaged or lost; damage might include loss of radiocarbon-dating potential, direct impact from oil-spill cleanup equipment, and/or looting. Previously unrecorded sites could be impacted by oil-spill cleanup operations on beaches.

Activities resulting from the proposed action are expected to minimally affect the analysis area's land use, infrastructure, or demographic characteristics of the Gulf coastal communities. The proposed action is expected to generate less than a 1 percent increase in employment in the Texas, Louisiana, Mississippi, and Alabama subareas. Nowhere would these impacts be significant because demand will be met primarily with the existing population and available labor force. Accidental events such as oil or chemical spills, blowouts, and vessel collisions would have no effects on land use or demographics. Coastal or nearshore spills could have short-term adverse effects on coastal infrastructure requiring cleanup of any oil or chemicals spilled. The opportunity costs associated with oil-spill cleanup activities are expected to be temporary and of short duration.

In compliance with Executive Order 12898 on Environmental Justice, the proposed action is not expected to have a disproportionate effect on low-income or minority populations. Impacts related to the proposed action are expected to be economic and have a limited but positive effect on these populations. Accidental spill events associated with the proposed action are not expected to have disproportionate adverse environmental or health effects on minority or low-income people.

4.3.1.2. Impacts on Offshore Environments

Adverse impacts to topographic features from routine activities resulting from the proposed action are not expected because the Topographic Features Stipulation establishes requirements for setbacks from these features. Adverse impacts from accidental seafloor oil releases or blowouts are expected to be rare

because drilling and pipeline operations are not permitted in the vicinity of topographic features and because topographic features are small in size and dispersed within the areas that they occur; no community-wide impacts are expected. If contact were to occur between diluted oil and adult sessile biota, including coral colonies in the case of the Flower Garden Banks, the effects would be primarily sublethal and there would be limited incidents of mortality.

No adverse impacts to the ecological function or biological productivity of the widespread, low-density chemosynthetic communities or to the widespread, typical, deep-sea benthic communities are expected to occur as a result of a routine activities or accidental events resulting from the proposed action. The potential for adverse impacts to the rarer, widely scattered, high-density, Bush Hill-type chemosynthetic communities are expected to be greatly reduced by the requirement for OCS activities to avoid potential chemosynthetic communities by a minimum of 1,500 ft (NTL 2000-G20). High-density chemosynthetic communities could experience minor impacts from drilling discharges or resuspended sediments located at more than 1,500 ft away.

Impacts to marine water quality occur from discharges of drilling fluids and cuttings during exploration and production. Impacts to marine water quality are expected to be minimal as long as all regulatory requirements are met. Spills <1,000 bbl are not expected to significantly impact marine water quality. Larger spills, however, could impact marine water quality. Chemical spills, the accidental release of synthetic-based drilling fluids (SBF), and blowouts are expected to have temporary localized impacts on marine water quality.

Emissions of pollutants into the atmosphere from offshore facilities are not expected to significantly impact offshore air quality because of emission heights and rates. Accidents involving high concentrations of H₂S could result in deaths as well as environmental damage. Other emissions of pollutants into the atmosphere from accidental events as a result of the proposed action are not projected to have significant impacts.

The routine activities related to the proposed action are not expected to have long-term adverse effects on the size and productivity of any marine mammal species or population stock endemic to the northern GOM. Routine OCS activities are expected to have impacts that are sublethal. A small number of marine mammals could be harmed or killed by chance collisions with service vessels and by eating indigestible trash and plastic debris from proposed-action-related activities. Lethal "takes" due to explosive removal of OCS platform or production facilities are not expected because of established mitigation measures. Populations of marine mammals in the northern Gulf are expected to be exposed to residuals of oils spilled as a result of the proposed action during their lifetimes. Chronic or acute exposure may result in the harassment, harm, or mortality to marine mammals occurring in the northern Gulf. In most foreseeable cases, exposure to hydrocarbons persisting in the sea following the dispersal of an oil slick will result in sublethal impacts to marine mammals.

The routine activities resulting from the proposed action are unlikely to have significant adverse effects on the size and recovery of any sea turtle species or population in the GOM. Routine activities are expected to have impacts that are sublethal. Adverse impacts are localized degradation of water quality from operational discharges near platforms; noise from helicopters, service vessels platform, and drillship operations; and disorientation caused by brightly-lit platforms. Sea turtles could be harmed or killed from chance collisions with service vessels and from eating floating plastic debris from proposed-action-related activities. Lethal "takes" due to explosive removals of OCS facilities are expected to be rare due to established mitigation measures (e.g., NOAA Fisheries Observer Program). Accidental blowouts, oil spills, and spill-response activities resulting from the proposed action have the potential to impact small to large numbers of sea turtles in the GOM. Populations of sea turtles in the northern Gulf will be exposed to residuals of oils spilled as a result of the proposed action during their lifetimes. Chronic or acute exposure may result in the harassment, harm, or mortality to sea turtles occurring in the northern Gulf. In most foreseeable cases, exposure to hydrocarbons persisting in the sea following the dispersal of an oil slick will result in sublethal impacts to sea turtles. Death would likely occur to sea turtle hatchlings exposed to, becoming fouled by, or consuming tarballs.

A less than a 1 percent decrease in fish resources and/or standing stocks or in essential fish habitat (EFH) would be expected as a result of the proposed action. Coastal and marine environmental degradation resulting from the proposed action is expected to have little effect on fish resources or EFH. Recovery of fish resources and EFH can occur from more than 99 percent, but not all, of the expected coastal and marine environmental degradation. Fish populations, if left undisturbed, would regenerate in

one generation, but any loss of wetlands as EFH would be permanent. Impacts are expected to result in less than a 1 percent change in commercial fishing "pounds landed" or in the value of landings. Oil spills estimated to result for the proposed action would cause less than a 1 percent decrease in standing stocks of any population, commercial fishing efforts, landings, or value of those landings. The resultant impact on fish populations and commercial fishing activities within the WPA would be negligible and indistinguishable from variations due to natural causes. Any affected commercial fishing activity would recover within 6 months.

Routine activities associated with the proposed action are not expected to impact offshore historic or prehistoric archaeological resources. The greatest potential impact to an offshore historic archaeological resource would result from direct contact between an offshore activity and a historic shipwreck. Offshore oil and gas activities resulting from the proposed action could contact a shipwreck because of incomplete knowledge on the location of shipwrecks in the Gulf. Although this occurrence is not probable, such an event could result in the disturbance or destruction of important historic archaeological information. Should an offshore prehistoric archaeological site be contacted by proposed-action-related activities, unique or significant archaeological information could be lost.

4.3.2. Updated Impact Analysis for the Proposed Action

The following chapters describe the potential impacts as a result of the proposed action for those resources (marine mammals, sea turtles, and snowy plover) where new information became available after MMS prepared the multisale EIS. The analyses for these resources have been reevaluated in light of the new information.

4.3.2.1. Marine Mammals

The multisale EIS stated that small numbers of marine mammals could be killed or injured by chance collision with service vessels and by eating indigestible debris, particularly plastic items, lost from service vessels, drilling rigs, and fixed and floating platforms. Deaths due to structure removals are not expected due to existing mitigation measures or those being developed for structures placed in oceanic waters. There is no conclusive evidence whether anthropogenic noise has or has not caused long-term displacements of, or reductions in, marine mammal populations. Contaminants in waste discharges and drilling muds might indirectly affect marine mammals through food-chain biomagnification, although the scope of effects and their magnitude are not known. The routine activities of the proposed action are not expected to have long-term adverse effects on the size and productivity of any marine mammal species or population stock endemic to the northern GOM.

Accidental blowouts, oil spills, and spill-response activities resulting from the proposed action have the potential to impact marine mammals in the GOM. Characteristics of impacts (i.e., acute vs. chronic impacts) depend on the magnitude, frequency, location, and date of accidents, characteristics of spilled oil, spill-response capabilities and timing, and various meteorological and hydrological factors. Populations of marine mammals in the northern GOM will be exposed to residuals of oils spilled as a result of the proposed action during their lifetimes. Chronic or acute exposure may result in the harassment, harm, or mortality to marine mammals occurring in the northern GOM. In most foreseeable cases, exposure to hydrocarbons persisting in the sea following the dispersal of an oil slick will result in sublethal impacts (e.g., decreased health, reproductive fitness, and longevity; and increased vulnerability to disease) to marine mammals.

The purpose of the Protected Species Stipulation (Chapter 3.3.1) is to reduce the potential taking of federally protected species. The three NTL's described in Chapter 3.3.2 serve to provide detailed guidance relative to the requirements of the Protected Species Stipulation. The Protected Species Stipulation and NTL's were not analyzed in the multisale EIS because they were not in place at the time the EIS was completed. These mitigation measures would further reduce the potential for any impacts related to the proposed action that were described in the EIS. Since there has been no data documenting that impacts are occurring, these mitigation measures are precautionary and intended to further reduce the potential for impacts to occur. With regard to the seismic NTL, NOAA Fisheries has stated that the requirements of the NTL will greatly reduce the potential for any serious adverse impacts to sperm whales and other marine mammals in the GOM from seismic airgun use.

4.3.2.2. Sea Turtles

The multisale EIS stated that routine activities resulting from the proposed action have the potential to harm individual sea turtles. These animals could be impacted by the degradation of water quality resulting from operational discharges; noise generated by helicopter and vessel traffic, platforms, and drillships; brightly-lit platforms; explosive removals of offshore structures; vessel collisions; and jetsam and flotsam generated by service vessels and OCS facilities. Lethal effects are most likely to be from chance collisions with OCS service vessels and ingestion of plastic materials. "Takes" due to explosive removals are expected to be rare due to mitigation measures already established (e.g., NOAA Fisheries Observer Program) and in development. Most OCS activities are expected to have sublethal effects. Contaminants in waste discharges and drilling muds might indirectly affect sea turtles through food-chain biomagnification; there is uncertainty concerning the possible effects. Chronic sublethal effects (e.g., stress) resulting in persistent physiological or behavioral changes and/or avoidance of impacted areas could cause declines in survival or fecundity, and population; however, such declines are not expected. The routine activities of the proposed action are unlikely to have significant adverse effects on the size and recovery of any sea turtle species or population in the GOM.

The purpose of the Protected Species Stipulation (Chapter 3.3.1) is to reduce the potential taking of federally protected species. The three NTL's described in Chapter 3.3.2 serve to provide detailed guidance relative to the requirements of the Protected Species Stipulation. The Protected Species Stipulation and NTL's were not analyzed in the multisale EIS because they were not in place at the time the EIS was completed. These mitigation measures would further reduce the potential for any impacts related to the proposed action that were described in the EIS. Since there has been no data documenting that impacts are occurring, these mitigation measures are precautionary and intended to further reduce the potential for impacts to occur.

4.3.2.3. Snowy Plover

According to FWS, the snowy plover is present at its identified habitats year round as opposed to only February through August. Therefore, the oil-spill probability for the snowy plover was recalculated for this EA. The recalculated probability of an oil spill $\geq 1,000$ bbl occurring and contacting snowy plover habitat within 10 days as a result of the proposed action is 3-5 percent. This is an increase from the February through August probability (2-4%) as shown on Figure 4-21 of the multisale EIS.

The multisale EIS stated that oil spills from the proposed action pose the greatest potential direct and indirect impacts to snowy plover. Birds that are heavily oiled usually die. If physical oiling of individuals or local groups of birds occurs, some degree of both acute and chronic physiological stress associated with direct and secondary uptake of oil would be expected. Small coastal spills, pipeline spills, and spills from accidents in navigated waterways can contact and affect the snowy plover. Lightly oiled birds can sustain tissue and organ damage from oil ingested during feeding and grooming or from oil that is inhaled. Stress and shock enhance the effects of exposure and poisoning. Low levels of oil could stress snowy plover by interfering with food detection, feeding impulses, predator avoidance, territory definition, susceptibility to physiological disorders, disease resistance, growth rates, reproduction, and respiration. Reproductive success can be affected by the toxins in oil. Indirect effects occur by fouling of nesting habitat, and displacement of individuals, breeding pairs, or populations to less favorable habitats. Dispersants used in spill cleanup activity can have toxic effects similar to oil on the reproductive success of snowy plover. The, air, vehicle, and foot traffic that takes place during shoreline cleanup activity can disturb nesting populations and degrade or destroy habitat.

4.4. ALTERNATIVE B — THE PROPOSED ACTION EXCLUDING THE BLOCKS NEAR BIOLOGICALLY SENSITIVE TOPOGRAPHIC FEATURES

Alternative B would offer for lease all unleased blocks in the WPA, as described for the proposed action, with the exception of any unleased blocks within the 200 blocks in the WPA that are subject to the Topographic Features Stipulation. All the assumptions including the potential mitigating measures and resource estimates remain the same as in the proposed action.

4.5. ALTERNATIVE C — NO ACTION

Alternative C is equivalent to cancellation of the proposed lease sale. The opportunity for development of the estimated of 0.136-0.262 BBO and 0.810-1.440 tcf of gas could have resulted from the proposed action would be precluded or postponed, and any potential environmental impacts resulting from the proposed action would not occur or would be postponed.

Canceling the proposed lease sale would eliminate the effects described for Alternative A (the proposed action). However, other sources of energy would substitute for the lost production. Principal substitutes would be additional imports, conservation, additional domestic production, and switching to other fuels. These alternatives, except conservation, would have substantial negative environmental impacts of their own. These substitutes and the effects are discussed in the multisale EIS and *Energy Alternatives and the Environment* (USDOI, MMS, 2001), and are incorporated by reference.

4.6. CUMULATIVE ANALYSIS

The cumulative analysis considers the effects of impact-producing factors related to the proposed action, prior and future OCS sales, State oil and gas activities, other governmental and private projects and activities, and pertinent natural processes and events that may occur and adversely affect environmental and socioeconomic resources. Descriptions of these activities and the analysis of the cumulative effects are included in the multisale EIS. Because of the lack of substantial new information concerning cumulative activities, the cumulative conclusions for marine mammals, sea turtles, and snowy plover, presented below, remain unchanged from the multisale EIS.

4.6.1. Marine Mammals

Activities considered under the cumulative scenario could affect protected cetaceans and sirenians. These marine mammals could be impacted by the degradation of water quality resulting from operational discharges; vessel traffic; noise generated by platforms; drillships; helicopters, and vessels; seismic surveys; explosive structure removals; oil spills; oil-spill-response activities; loss of debris from service vessels and OCS structures; commercial fishing; capture and removal; and pathogens. The cumulative impact on marine mammals is expected to result in a number of chronic and sporadic sublethal effects (behavioral effects and nonfatal exposure to or intake of OCS-related contaminants or discarded debris) that may stress and/or weaken individuals of a local group or population and predispose them to infection from natural or anthropogenic sources. Few deaths are expected from an oil spills, chance collisions with OCS service vessels, ingestion of plastic material, commercial fishing, and pathogens. Oil spills of any size are estimated to be recurring events that would periodically contact marine mammals. Deaths as a result of structure removals are not expected to occur because of mitigation measures (e.g., NOAA Fisheries Observer Program). Disturbance (noise from vessel traffic and drilling operations, etc.) and/or exposure to sublethal levels of toxins and anthropogenic contaminants may stress animals, weaken their immune systems, and make them more vulnerable to parasites and diseases that normally would not be fatal. The net result of any disturbance would be dependent upon the size and percentage of the population likely to be affected, ecological importance of the disturbed area, environmental and biological parameters that influence an animal's sensitivity to disturbance and stress, or the accommodation time in response to prolonged disturbance (Geraci and St. Aubin, 1980). Collisions between cetaceans and ships, though expected to be rare events, could cause serious injury or mortality.

The incremental contribution of impacts stemming from the proposed action is expected to be primarily sublethal (behavioral effects and nonfatal exposure to or intake of OCS-related contaminants or discarded debris). Effects of the incremental contribution of the proposed action combined with non-OCS activities may be deleterious, as stated in the multisale EIS, to cetaceans occurring in the GOM. Biological significance of any mortality would depend, in part, on the size and reproductive rates of the affected stocks, as well as the number, age, and size of animals affected.

4.6.2. Sea Turtles

Activities considered under the cumulative scenario may harm sea turtles and their habitats. Those activities include structure installation, dredging, water quality and habitat degradation, OCS-related trash

and flotsam, vessel traffic, seismic surveys, explosive structure removals, oil spills, oil-spill-response activities, natural catastrophes, pollution, dredge operations, vessel collisions, commercial and recreational fishing, human consumption, beach lighting, and power plant entrainment. Sea turtles could be killed or injured by chance collision with service vessels or eating marine debris, particularly plastic items, lost from OCS structures and service vessels. It is expected that deaths due to structure removals would rarely occur due to mitigation measures (e.g., NOAA Fisheries Observer Program). The presence of, and noise produced by, service vessels and by the construction, operation, and removal of drill rigs may cause physiological stress and make animals more susceptible to disease or predation, as well as disrupt normal activities. Contaminants in waste discharges and drilling muds might indirectly affect sea turtles through food-chain biomagnification; there is uncertainty concerning the possible effect. Oil spills and oil-spill-response activities are potential threats that may be expected to cause turtle deaths. Contact with, and consumption of oil and oil-contaminated prey, may seriously impact turtles. Sea turtles have been seriously harmed by oil spills in the past. The majority of OCS activities are estimated to be sublethal (behavioral effects and nonfatal exposure to intake of OCS-related contaminants or debris). Chronic sublethal effects (e.g., stress) resulting in persistent physiological or behavioral changes and/or avoidance of impacted areas could cause declines in survival or productivity, resulting in either acute or gradual population declines. The incremental contribution of the proposed action to cumulative impacts on sea turtles is slight.

4.6.3. Snowy Plover

The cumulative analysis considers the effects of impact-producing factors related to the proposed action; prior and future OCS sales; State oil and gas activity; crude oil imports by tanker; and other commercial, military, and recreational offshore and coastal activities that may occur and adversely affect snowy plover. It is expected that the effects will be detrimental to the snowy plover; however, the majority of effects from the major impact-producing factors on the snowy plover are sublethal (behavioral effects and nonfatal exposure to or intake of OCS-related contaminants or discarded debris) and will usually cause temporary disturbances and displacement of localized groups inshore. The net effect of habitat loss from oil spills, new construction, and maintenance and use of pipeline corridors and navigation waterways will reduce the overall carrying capacity of disturbed area(s) in general. The incremental contribution of the proposed action to the cumulative impact is negligible because the effects of the most probable impacts, such as sale-related operational discharges and helicopters and service-vessel noise and traffic, are estimated to be sublethal with some displacement of local individuals or groups. It is expected that there will be little interaction between OCS-related oil spills and the snowy plover. The cumulative effect on snowy plover is expected to result in declines in the numbers of birds that form localized groups.

5. CONSULTATION AND COORDINATION

5.1. Scoping for the Environmental Assessment for the Western Planning Area's Proposed Lease Sale 192

External Scoping: On November 19, 2003, MMS published a Federal Register notice announcing the preparation of this EA. In the notice, MMS requested that interested parties submit comments regarding any new information or issues that should be addressed in the EA. The comment period closed on December 19, 2003. No responses were received.

Although the scoping process was formally initiated by the publication of the Notice to Prepare the EA, scoping efforts and other coordination meetings continue throughout the lease sale process. The following are examples of the efforts conducted since the publication of the multisale EIS:

• To ensure conformance with State Coastal Zone Management (CZM) program policies and local land-use plans, MMS prepares appropriate consistency documents for each proposed OCS lease sale. In March 2003, MMS sent the Consistency Determination for WPA Lease Sale 187 to the Governors of Texas and Louisiana, and to the head of each State's CZM group. The States confirmed MMS's

- Consistency Statement for WPA Lease Sale 187. On September 4, 2003, MMS met with Louisiana's CZM group, and MMS met with Texas's CZM group on December 11, 2003.
- On June 4, 2003, MMS published a Notice of Preparation of an EA on proposed CPA Lease Sale 190. In the notice, MMS requested interested parties to submit comments regarding any new information or issues that should be addressed in the EA. No comments were received.
- The GOM Region held and participated in several meetings during the past year, which gave EIS analysts an opportunity to attend technical presentations and meet with Federal, State, and local agencies; industry; MMS contractors; and academia. The MMS held the GOM Region's annual Information Transfer Meeting on January 14-16, 2003. Sessions pertained to MMS's GOM OCS oil and gas program, as well as regional environmental, social, and economic concerns, and current OCS industry activities and technologies. The MMS co-hosted the International Offshore Pipeline Workshop on February 26-28, 2003, which brought together worldwide experience in operating and regulating offshore oil and gas activities in order to identify/disseminate pipeline issues and knowledge for continued safe and pollution free operations. On June 1-3, 2003, MMS participated in the Oceanology International Americas conference in New Orleans, Louisiana. The conference incorporated the following disciplines: marine science, technology, operational oceanography, policy, and education. On November 18-20, 2003, MMS participated in the Thirteenth Annual Clean Gulf Conference along with consultants, responders, and Federal and State agencies. The MMS made the following presentations: "The Oil Spill Response Equipment," "Oil Spill Exercises and Drills," "Updates of the MMS Worst Case Discharge for Blowouts and Pipelines," and "Ongoing Exploration Along the U.S./Mexican International Boundary."

Internal Scoping: Internal scoping is an ongoing activity for all environmental projects. Part of internal scoping involved reviewing oil-spill modeling results and resource estimates used in the preparation of the multisale EIS to determine if they are still valid. The MMS conducted a formal oilspill risk analysis (OSRA) to support the multisale EIS. The Headquarters' OSRA group confirmed that results from the OSRA model summarized in the multisale EIS and presented in a separate report (USDOI, MMS, 2002d), are still valid for the proposed lease sale. The oil and gas resource projections and associated activities used in the multisale EIS are based on the 2000 Assessment of Conventionally Recoverable Hydrocarbon Resources of the Gulf of Mexico and Atlantic Outer Continental Shelf as of January 1, 1999 (Lore et al., 2001). The MMS is currently in the process of updating the 2000 National Resource Assessment and has recently revised the deep gas resource estimate on the shelf. This revision is based on knowledge gained from recent deep drilling activity in this area, prompting the addition of a new "Deep Shelf Mesozoic" play to the assessment. Although MMS anticipates a significant increase in total undiscovered conventionally recoverable deep gas resources on the shelf as reported, a significant portion of these newly assessed deep gas resources are either currently under lease or are uneconomic at this time. Therefore, the GOM Region's Office of Resource Evaluation believes that the range of resource projections and associated activities used in the multisale EIS remain within the range to be expected for a "typical WPA sale" and are still valid for use in preparing this EA.

5.2. Consultation and Coordination Calendar

A complete description of all consultation and coordination activities and meetings is included in **Chapter 5** of the multisale EIS. A brief summary of these events follows:

Multisale EIS Process

September 12, 2001

The Call for Information/Notice of Intent (Call/NOI) for the proposed 2003-2007 CPA and WPA lease sales was published in the *Federal Register*. The required 30-day comment period closed on October 12, 2001. Additional public notices were distributed via newspaper notices, mailed notices, and the Internet. The MMS received four comment letters in response to the Call. Ten written scoping letters were received in response to the NOI.

October 25-22, 2001

The MMS held scoping meetings in Galveston and Houston, Texas; New Orleans, Louisiana; and Mobile, Alabama, to receive comments on the Draft EIS for the proposed 2003-2007 CPA and WPA lease sales. A summary of comments presented at the scoping meetings is provided in **Chapter 5.3** of the multisale EIS.

April 15 and 17, 2002

The MMS, by memorandum to FWS (April 15, 2002) and NOAA Fisheries (April 17, 2002), requested formal Section 7 consultation for CPA Lease Sales 185, 190, 194, 198, and 201, and WPA Lease Sales 187, 192, 196, and The consultation included all aspects of oil and gas exploration, development, production, and abandonment activities. The FWS concluded that the proposed actions are not likely to jeopardize the continued existence of listed species under FWS jurisdiction (whooping crane, Gulf sturgeon, brown pelican, Alabama beach mouse, Perdido Key beach mouse, loggerhead sea turtle, piping plover, and Kemp's ridley sea turtle) and are not likely to destroy or adversely modify their designated critical habitat, if any. For each species with designated critical habitat, the adverse effects that may occur to critical habitat would be temporary in nature and of low probability. The NOAA Fisheries concluded that implementation of the proposed actions will adversely affect, but not likely jeopardize, the continued existence of the sperm whale; leatherback, green, hawksbill, Kemp's ridley, and loggerhead sea turtles; and the Gulf sturgeon.

April 30-May 2, 2002

The MMS held public hearings in Houston, Texas; New Orleans, Louisiana; and Mobile, Alabama, to receive comments on the multisale EIS for CPA Lease Sales 185, 190, 194, 198, and 201, and WPA Lease Sales 187, 192, 196, and 200. One person attended the Houston hearing, but no comments were presented. Seven people attended the New Orleans hearing. Three individuals presented comments, which were summarized in **Chapter 5.5** of the multisale EIS. There were no attendees at the Mobile hearing.

November 2002

The MMS completed and filed the Final EIS for CPA Lease Sales 185, 190, 194, 198, and 201, and WPA Lease Sales 187, 192, 196, and 200 (multisale EIS) with USEPA. The MMS revised the document using information presented at the hearings and as a result of comments received on the Draft EIS (See **Chapter 5.7** of the multisale EIS for a complete discussion of comments and responses.).

WPA Lease Sale 192 EA Process

November 19, 2003

The MMS published a Notice of Preparation of an EA on proposed Lease Sale 192. In the notice, MMS requested interested parties to submit comments regarding any new information or issues that should be addressed in the EA. No comments were received.

6. REFERENCES

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A. PUBLICATIONS OF THE ENVIRONMENTAL STUDIES PROGRAM, GULF OF MEXICO OCS REGION, SINCE NOVEMBER 2002

Study Number	Title
2002-055	Northeastern Gulf of Mexico Chemical Oceanography and Hydrography Study
2002-063	Deepwater Program: Northern Gulf of Mexico Continental Slope Habitats and Benthic Ecology; Interim Report, Year 2
2002-064	Lagrangian Study of Circulation, Transport, and Vertical Exchange in the Gulf of Mexico
2002-072	Effect of the Oil and Gas Industry on Commuting and Migration Patterns in Louisiana: 1960-1990
2002-073	Emissions Inventories of OCS Production and Development Activities in the Gulf of Mexico, Final Report
2002-077	Offshore Petroleum Platforms: Functional Significance for Larval Fish Across Longitudinal and Latitudinal Gradients
2002-078	Deepwater Program: Bluewater Fishing and Deepwater OCS Activity, Interactions Between the Fishing and Petroleum Industries in Deepwaters of the Gulf of Mexico
2003-004	Dynamics of the Oil and Gas Industry in the Gulf of Mexico: 1980-2000, Final Report
2003-005	Proceedings: 21st Annual Gulf of Mexico Information Transfer Meeting, January 2002
2003-009	Rigs and Reefs: A Comparison of the Fish Communities at Two Artificial Reefs, a Production Platform, and a Natural Reef in the Northern Gulf of Mexico
2003-018	Modeling the Economic Impacts of Offshore Oil and Gas Activities in the Gulf of Mexico: Methods and Applications
2003-022	Labor Demand in the Offshore Oil and Gas Industry in the 1990's: The Louisiana Case
2003-029	Importance of Zooplankton in the Diets of Blue Runner (Caranx crysos) Near Offshore Petroleum Platforms in the Northern Gulf of Mexico
2003-030	Workshop on Deepwater Environmental Studies Strategy: A Five-Year Follow-Up and Planning for the Future
2003-031	Long-term Monitoring of the East and West Flower Garden Banks National Marine Sanctuary, 2000-2001
2003-040	Marine and Coastal Fishes Subject to Impingement by Cooling-Water Intake Systems in the Northern Gulf of Mexico: An Annotated Bibliography
2003-041	Changing Patterns of Ownership and Control in the Petroleum Industry: Implications for the Market for Oil and Gas Leases in the Gulf of Mexico OCS Region, 1983-1999
2003-048	Deepwater Observations in the Northern Gulf of Mexico from In-situ Current Meters
2003-049	and PIES, Final Report, Volume I: Executive Summary and Volume II: Technical Report
2003-063	Historical Reconstruction of the Contaminant Loading and Biological Responses in the Central Gulf of Mexico Shelf Sediments
2003-065	Preparation of an Interactive Key for Northern Gulf of Mexico Polychaete Taxonomy Employing the DELTA/INTKEY System
2003-069	Sperm Whale Seismic Study in the Gulf of Mexico, Annual Report: Year 1
2003-072	Selected Aspects of the Ecology of the Continental Slope Fauna of the Gulf of Mexico: A Synopsis of the Northern Gulf of Mexico Continental Slope Study, 1983-1988



The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.



Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.