Annual Progress Report on the Outer Continental Shelf (OCS) Oil and Gas Leasing Program 2012–2017

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U.S. Department of the Interior
Bureau of Ocean Energy Management

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Introduction

This is the second annual progress report on the 2012-2017 Outer Continental Shelf (OCS) Oil and Gas Leasing Program (Five Year Program). Information on the Five Year Program is available online at http://www.boem.gov/Oil-and-Gas-Energy-Program/Leasing/Five-Year-Program/2012-2017/Five-Year-Program.aspx.

In June 2012, the Secretary of the Interior (Secretary) published the Five Year Program, which became final on August 27, 2012, after the required 60-day congressional review period. Section 18(e) of the OCS Lands Act (OCSLA) states that:

> [T]he Secretary shall review the leasing program approved under this section at least once each year. He [or she] may revise and reapprove such program, at any time, and such revision and reapproval, except in the case of a revision which is not significant, shall be in the same manner as originally developed.

Historically, the annual review has been an internal process in which the Bureau of Ocean Energy Management (BOEM) reports to the Secretary any information or events that might result in consideration of a revision to the Five Year Program. However, in the Proposed Final Program (PFP) Decision Document for the 2012-2017 Five Year Program (available by clicking on "Proposed Final Program Decision Document" at the above web address), the Department of the Interior (DOI) stated its commitment to "publish an annual progress report on the Five Year Program that includes an opportunity for stakeholders and the public to comment on the program's implementation." The first annual report was published on November 1, 2013, and is available at http://www.boem.gov/Five-Year-Program-Annual-Progress-Report-2013/.

The 2014 report provides the public with information on what has occurred since the publication of the last report, in keeping with BOEM's commitment in the Proposed Final Program (PFP) for the 2012-2017 Five Year Program. Specifically, this report addresses the following:

- statistics of sales that have occurred in the previous year, including the number and location of lease blocks and the dollars collected on high bids;
- a tracking table of all relevant deferrals and mitigations;
- a summary of completed and ongoing safety and environmental studies;
- regulatory updates;
- a discussion of any significant new drilling activities;
- a summary of any significant incidents; and
- other relevant information.

Since the publication of the 2013 annual progress report, BOEM has begun the development of the 2012-2017 Five Year Program. The Five Year Program development process includes multiple opportunities for stakeholder comments.

Program Overview

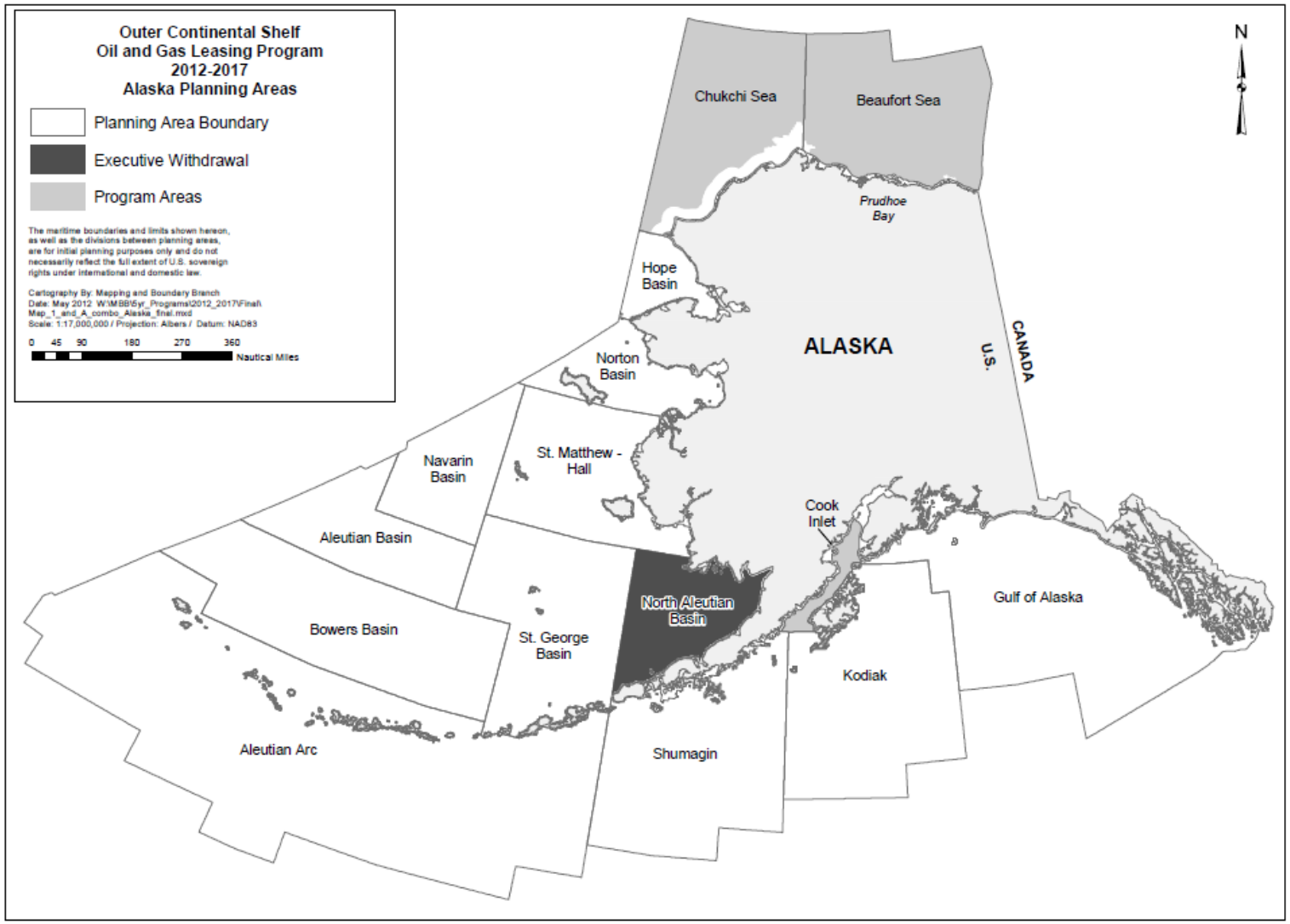
The 2012-2017 Five Year Program advances a comprehensive national energy policy that includes a focus on expanding safe and responsible domestic oil and natural gas production. This Five Year Program includes 15 potential lease sales in six OCS planning areas – the Western and Central Gulf of Mexico (GOM), the portion of the Eastern GOM not currently under congressional moratorium, and the Chukchi Sea, Beaufort Sea, and Cook Inlet planning areas offshore Alaska. These 6 planning areas were selected from BOEM's 26 OCS planning areas. The portion of each selected planning area that will be considered for leasing is designated as a program area. Maps A and B show the OCS planning areas and corresponding program areas proposed for leasing in the PFP. These planning areas include the richest and most promising areas for oil and gas exploration and development on the OCS, and together they include more than 75 percent of the total undiscovered, technically recoverable oil and natural gas resources estimated for the entire OCS.

Table 1, below, lists the timing of the proposed lease sales in each of the program areas. Completed sales, as of October 2014, are shaded in grey. Each sale is assigned a unique number, although sales might not occur in numerical order. More information on the numbering system, program area selection, and scheduling criteria is given in the PFP.

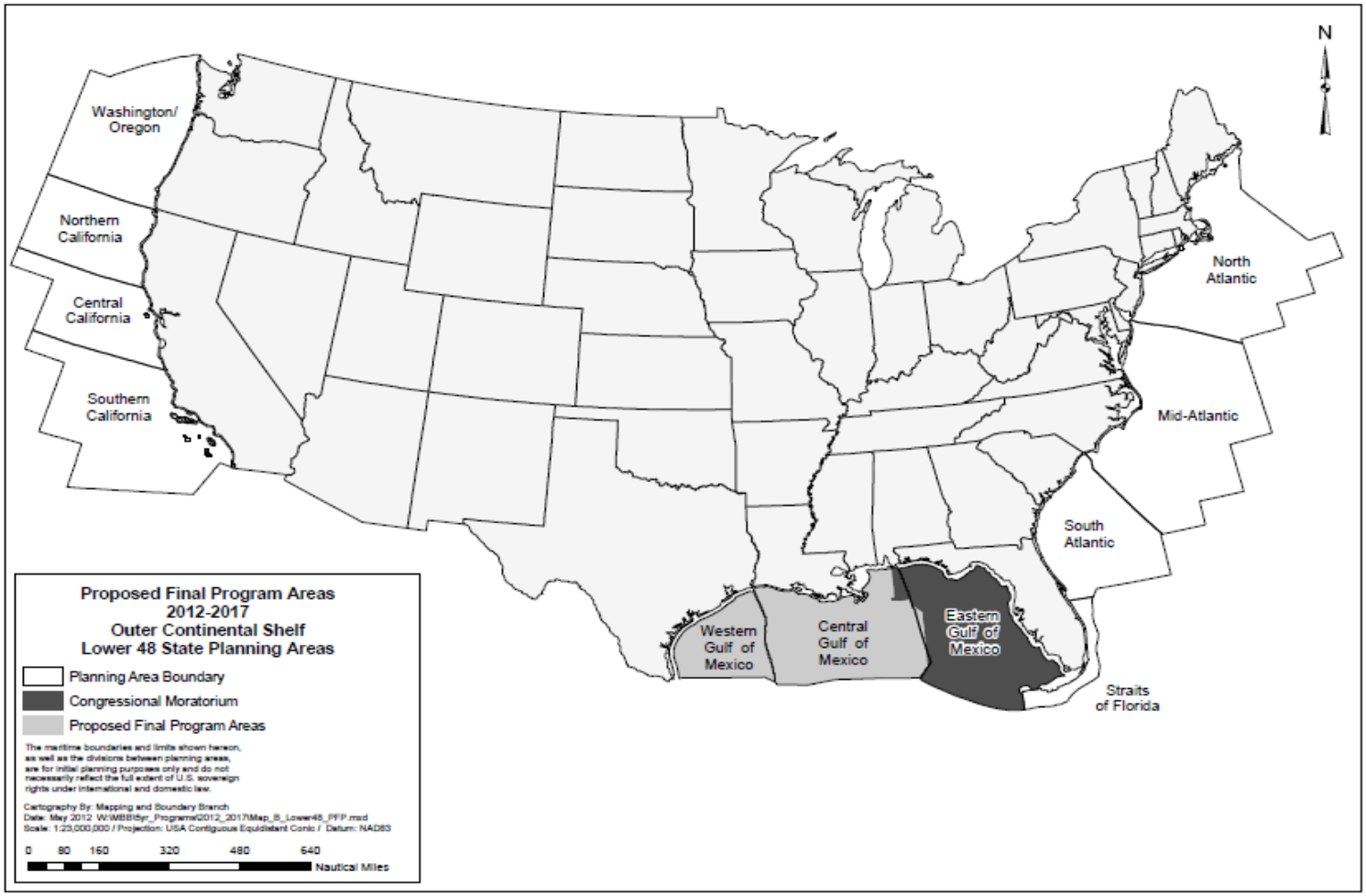
Table 1: Five Year Program Lease-sale Schedule

Sale No.*	Program Area	Year
229	Western Gulf of Mexico	2012
227	Central Gulf of Mexico	2013
233	Western Gulf of Mexico	2013
225	Eastern Gulf of Mexico	2014
231	Central Gulf of Mexico	2014
238	Western Gulf of Mexico	2014
235	Central Gulf of Mexico	2015
246	Western Gulf of Mexico	2015
226	Eastern Gulf of Mexico	2016
241	Central Gulf of Mexico	2016
237	Chukchi Sea	2016
248	Western Gulf of Mexico	2016
244	Cook Inlet	2016
247	Central Gulf of Mexico	2017
242	Beaufort Sea	2017

* Sales are not in numerical order for various reasons. Completed sales as of October 2014 are shaded in grey.



Map A: Alaska Program Areas



Map B: Gulf of Mexico Program Areas

Lease Sale Statistics

Completed Sales

Since approval of the 2012-2017 Five Year Program, BOEM has held six lease sales, three of which have occurred since the last annual progress report. These six sales are as follows: Lease Sales 229, 227, 233, 225, 231, and 238.

Lease Sale 229 in the Western GOM was held on November 28, 2012. The sale offered 3,873 unleased blocks covering more than 20.7 million acres offshore Texas and Louisiana. In this sale, 13 companies submitted 131 bids totaling over $157 million on 116 lease blocks, covering 652,522 acres. Over $133 million was received in high bids, and after a two-phase postsale bid evaluation process under its bid adequacy procedures, BOEM determined that the value of each of the high bids was sufficient to provide the public with fair market value for the lease blocks. Of the 116 lease blocks receiving successful bids, 11 were in water depths less than 200 meters, none were in water depths 200 to less than 800 meters, 70 were in water depths 800 to less than 1,600 meters, and 35 were in water depths greater than 1,600 meters. Additional information and statistics on this sale are available at http://www.boem.gov/Sale-229.

Lease Sale 227 in the Central GOM was held on March 20, 2013. The sale offered 7,299 unleased blocks covering roughly 38.6 million acres, located from 3 to about 230 nautical miles offshore. The sale generated over $1.2 billion in high bids for 320 lease blocks covering over 1.7 million acres. Following the two-phase postsale bid evaluation process, BOEM awarded 307 leases on blocks covering 1.65 million acres with 13 bids rejected/withdrawn. Of the 320 lease blocks receiving bids, 85 were in water depths less than 200 meters, 7 were in water depths 200 to less than 400 meters, 19 were in water depths 400 to less than 800 meters, 78 were in water depths 800 to less than 1,600 meters, and 131 were in water depths greater than 1,600 meters. Additional information and statistics on this sale are available at http://www.boem.gov/Sale-227.

Lease Sale 233 in the Western GOM was held on August 28, 2013. The sale offered 3,864 unleased blocks covering roughly 20.7 million acres, located from 9 to more than 250 nautical miles offshore. The sale generated over $102 million in high bids for 53 lease blocks covering over 301,000 acres. Following the two-phase postsale bid evaluation process, BOEM awarded 51 leases on blocks covering 289,486 acres with 2 bids rejected/withdrawn. Of the 51 lease blocks receiving bids, 4 were in water depths less than 200 meters, 1 was in water depths 400 to less than 800 meters, 37 were in water depths 800 to less than 1,600 meters, and 11 were in water depths greater than 1,600 meters. Additional information and statistics on this sale are available at http://www.boem.gov/Sale-233.

The bids received for Western GOM Lease Sale 233 that were included in the U.S.-Mexico Transboundary Area were opened separately on March 19, 2014, following Congressional approval of the Transboundary Agreement. For these bids, the sale (designated as Sale 233-2) generated $21.3 million in high bids for 3 lease blocks covering 12,115 acres, all of which were in water depths greater than 1,600 meters. Following the two-phase post-sale bid evaluation, BOEM accepted the high bids on all 3 leases. Additional information and statistics on Sale 233-2 are available at http://www.boem.gov/Sale-233.

Lease Sale 231 in the Central GOM was held on March 19, 2014. The sale offered 7,511 unleased blocks covering roughly 39.6 million acres, located from 3 to about 230 nautical miles offshore. BOEM

received 380 total bids on 326 blocks of which BOEM accepted 320. Over 1.6 million acres were leased and the amount of high bids totaled over $845 million. Of the 326 blocks receiving bids, 131 were in water depths less than 200 meters, 21 were in water depths 200 to less than 400 meters, 9 were in water depths 400 to less than 800 meters, 57 were in water depths 800 to less than 1,600 meters, and 108 were in water depths greater than 1,600 meters. Additional information and statistics on this sale are available at http://www.boem.gov/Sale-231-Final-Bid-Recap/.

Lease Sale 225 in the Eastern GOM, offering 134 blocks covering 465,200 acres, was held on March 19, 2014, but no bids were received for this planning area. Additional information on this sale is available at http://www.boem.gov/Sale-225.

Lease Sale 238 in the Western GOM was held on August 20, 2014. The sale offered 3,925 unleased blocks covering roughly 21.6 million acres, located from 9 nautical miles offshore Texas and 3 nautical miles offshore Louisiana, to about 234 nautical miles offshore. The sale generated close to $110 million in high bids for 81 lease blocks covering roughly 433,822 acres, with one high bid rejected during post-bid evaluation. Of the 81 blocks receiving bids, 6 were in water depths less than 200 meters, 2 were in water depths 200 to less than 400 meters, 2 were in water depths 400 to less than 800 meters, 29 were in water depths 800 to less than 1,600 meters, and 42 were in water depths greater than 1,600 meters.

Upcoming Sales

BOEM is in various stages of the planning process for the other lease sales scheduled in the Five Year Program. Detailed information on lease sales and lease issuances can be found by following links on BOEM's Regional Leasing webpage at http://www.boem.gov/Oil-and-Gas-Energy-Program/Leasing/Regional-Leasing/Index.aspx.

Deferrals and Mitigations

BOEM has developed a tracking table to provide increased visibility into the consideration of comments and other input at each stage of the leasing process. This tracking table lists the alternatives, mitigations, temporal and spatial deferrals, and other areal concerns related to the 2012-2017 Five Year Program that the public identified to BOEM during the program development process. BOEM will continue to update the tracking table to reflect the status of these suggestions and include new suggestions that have been received since approval of the Five Year Program. For example, BOEM has incorporated substantive comments related to important subsistence areas in the Arctic, which are being analyzed and organized for use in environmental analyses at the lease-sale stage. The table can be found at http://www.boem.gov/Oil-and-Gas-Energy-Program/Leasing/Five-Year-Program/Lease-Sale-Schedule/Tracking-Table.aspx.

Safety Studies

The Bureau of Safety and Environmental Enforcement (BSEE) supports research to promote the continuous improvement of operational safety and pollution prevention. BSEE has focused its technology evaluation studies to identify Best Available and Safest Technologies, to develop tools to facilitate analysis of incidents and "near misses" on the OCS, and to inform future development of regulations and policy. BSEE uses several vehicles to obtain needed information on materials,

equipment, procedures, and systems used by the offshore oil and gas industry to maintain safe and environmentally sound exploration and development of the Nation's offshore oil and gas resources. These include Interagency Agreements, Cooperative Agreements, Joint Industry Projects, and open competitive contracts. Detailed descriptions of all BSEE research projects are found at http://www.bsee.gov/Research-and-Training/index/.

Environmental Studies

To help inform lease-sale decisions, BOEM draws on its own environmental studies, as well as scientific research undertaken by Federal, State, and local government and non-government organizations including academia. BOEM's Division of Environmental Sciences manages the Environmental Studies Program (ESP). The ESP develops, conducts, and oversees world-class scientific research specifically to inform policy decisions regarding development of OCS energy and mineral resources. Research covers physical oceanography, atmospheric sciences, biology, protected species, social sciences and economics, submerged cultural resources, and environmental fates and effects. (Environmental fates and effects studies evaluate the physical-chemical and biological processes that affect the impacts of oil and gas drilling and production discharges, spilled oil, and oil dispersants on biological communities.) BOEM is a leading contributor to the growing body of scientific knowledge about the nation's marine and coastal environments. Information on completed and ongoing BOEM studies is available at http://www.boem.gov/Studies/. Click on "Reports & Data Information" in order to view full electronic versions of completed ESP reports.

BOEM has highlighted a number of studies, including several BOEM studies, which have been completed since approval of the 2012-2017 Five Year Program and since last year's annual progress report. Bibliographic information on these relevant studies and literature is provided by OCS region below.

Studies Focused on Alaska Region Issues

- Blanchard, A.L. and H.M. Feder. 2014. Interactions of Habitat Complexity and Environmental Characteristics with Macrobenthic Community Structure at Multiple Spatial Scales in the Northeastern Chukchi Sea. Deep Sea Research Part II: Topical Studies in Oceanography 102:132-143.
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- Dunton, K.H., J.M. Grebmeier, and J.H. Trefry. 2014. The Benthic Ecosystem of the Northeastern Chukchi Sea: An Overview of its Unique Biogeochemical and Biological Characteristics. Deep Sea Research Part II: Topical Studies in Oceanography 102:1-8.
- Fox, A.L., E.A. Hughes, R.P. Trocine, J.H. Trefry, S.V. Schonberg, N.D. McTigue, B.K. Lasorsa, B. Konar, and L.W. Cooper. 2014. Mercury in the Northeastern Chukchi Sea:

Distribution Patterns in Seawater and Sediments and Biomagnification in the Benthic Food Web. Deep Sea Research Part II: Topical Studies in Oceanography 102:56-67.

- Harvey, H.R., K.A. Taylor, H.V. Pie, and C.L. Mitchelmore. 2014. Polycyclic Aromatic and Aliphatic Hydrocarbons in Chukchi Sea Biota and Sediments and their Toxicological Response in the Arctic Cod, *Boreogadus saida*. Deep Sea Research Part II: Topical Studies in Oceanography 102:32-55.
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- Konar, B., A. Ravelo, J. Grebmeier, and J.H. Trefry. 2014. Size Frequency Distributions of Key Epibenthic Organisms in the Eastern Chukchi Sea and their Correlations with Environmental Parameters. Deep Sea Research Part II: Topical Studies in Oceanography 102:107-118.
- Liu, F., J.R. Krieger, and J. Zhang. 2014. Toward Producing the Chukchi-Beaufort High-Resolution Atmospheric Reanalysis (CBHAR) via the WRFDA Data Assimilation System. Monthly Weather Review 142:788-805.
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- McTigue, N.D. and K.H. Dunton. 2014. Trophodynamics and Organic Matter Assimilation Pathways in the Northeast Chukchi Sea, Alaska. Deep Sea Research Part II: Topical Studies in Oceanography 102:84-96.
- National Research Council. 2014. Responding to Oil Spills in the U.S. Arctic Marine Environment. Washington, DC: The National Academies Press. 250 pp.
- Ravelo, A.M., B. Konar, J.H. Trefry, and J.M. Grebmeier. 2014. Epibenthic Community Variability in the Northeastern Chukchi Sea. Deep Sea Research Part II: Topical Studies in Oceanography 102:119-131.
- Rode, K.D., E.V. Regehr, D.C. Douglas, G. Durner, A.E. Derocher, G.W. Thiemann, and S.M. Budge. 2014. Variation in the Response of an Arctic Top Predator Experiencing Habitat Loss: Feeding and Reproductive Ecology of Two Polar Bear Populations. Global Change Biology. 20(1):76-88.
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- Shulski, M.D., J. You, J.R. Krieger, W. Baule, J. Zhang, X. Zhang, and W. Horowitz. 2014. Quality Assessment of Meteorological Data for the Beaufort and Chukchi Sea Coastal Region Using Automated Routines. Arctic 67(1):104-112.
- Souza, A.C., W.S. Gardner, and K.H. Dunton. 2014. Rates of Nitrification and Ammonium Dynamics in Northeastern Chukchi Sea Shelf Waters. Deep Sea Research Part II: Topical Studies in Oceanography 102:68-76.
- Souza, A.C., I. Kim, W.S. Gardner, and K.H. Dunton. 2014. Dinitrogen, Oxygen, and Nutrient Fluxes at the Sediment-Water Interface and Bottom Water Physical Mixing on the Eastern Chukchi Sea Shelf. Deep Sea Research Part II: Topical Studies in Oceanography 102:77-83.

- Trefry, J.H., R.P. Trocine, L.W. Cooper, and K.H. Dunton. 2014. Trace Metals and Organic Carbon in Sediments of the Northeastern Chukchi Sea. Deep Sea Research Part II: Topical Studies in Oceanography 102:18-31.
- Wilce, R. and K. Dunton. 2014. The Boulder Patch (North Alaska, Beaufort Sea) and Its Benthic Algal Flora. Arctic 67(1):43-56.
- Wu, Q., J. Zhang, X. Zhang, and W. Tao. 2014. Interannual Variability and Long-term Changes of Atmospheric Circulation over the Chukchi and Beaufort Seas. Journal of Climate 27:4871-4889. doi: 10.1175/JCLI-D-13-00610.1.

Studies Focused on Gulf of Mexico Region Issues

- Ali, A.O., C. Hohn, P.J. Allen, L. Ford, M.B. Dail, S. Pruett, and L. Petrie-Hanson. 2014. The Effects of Oil Exposure on Peripheral Blood Leukocytes and Splenic Melano-macrophage Centers of Gulf of Mexico Fishes. Marine Pollution Bulletin 79(1-2):87-93.
- Austin, D., B. Marks, P. Prakash, B. Rogers, C. Ware, K. McClain, J. Whalen, V. Phaneuf, T. McGuire, and B. McMahan. 2014. Offshore Oil and *Deepwater Horizon*: Social Effects on Gulf Coast Communities, Volume I: Methodology, Timeline, Context, and Communities. OCS Study BOEM 2014-617. New Orleans, LA: USDOI, BOEM, Gulf of Mexico OCS Region. 265 pp.
- Brette, F., B. Machado, C. Cros, J.P. Incardona, N.L. Scholz, and B.A. Block. 2014. Crude Oil Impairs Cardiac Excitation-contraction Coupling in Fish. Science 343(6172):772-776.
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- Evans, A.M., M.E. Keith, E.E. Voisin, P. Hesp, G. Cook, M. Allison, G. da Silva, and E. Swanson. 2013. Archaeological Analysis of Submerged Sites on the Gulf of Mexico Outer Continental Shelf. OCS Study BOEM 2013-01110. New Orleans, LA: USDOI, BOEM, Gulf of Mexico OCS Region. 432 pp.
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- Powers, S.P., F.J. Hernandez, R.H. Condon, J.M. Drymon, and C.M. Free. 2013. Novel Pathways for Injury from Offshore Oil Spills: Direct, Sublethal and Indirect Effects of the *Deepwater Horizon* Oil Spill on Pelagic Sargassum Communities. PLoS ONE 8(9):e74802.
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- Schwacke, L.H., C.R. Smith, F.I. Townsend, R.S. Wells, L.B. Hart, B.C. Balmer, T.K. Collier, S. De Guise, M.M. Fry, and L.J. Guillette, Jr. 2014a. Health of Common Bottlenose Dolphins (*Tursiops truncatus*) in Barataria Bay, Louisiana, Following the *Deepwater Horizon* Oil Spill. Environmental Science & Technology 48(1):93-103.
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- Wang, P. and T.M. Roberts. 2013. Distribution of Surficial and Buried Oil Contaminants Across Sandy Beaches Along NW Florida and Alabama Coasts Following the *Deepwater Horizon* Oil Spill in 2010. Journal of Coastal Research 291:144-155.

For more information on the scientific literature BOEM uses to inform lease-sale decisions, refer to lease-sale environmental analyses (http://www.boem.gov/Environmental-Stewardship/Environmental-Assessment/Index.aspx). In addition, several studies are being conducted in support of the Natural Resource Damage Assessment (NRDA) following the *Deepwater Horizon* explosion, oil spill, and response in the GOM (http://www.gulfspillrestoration.noaa.gov/). Most of the NRDA studies have not

yet been completed or released. BOEM has reviewed and will continue to review the latest scientific literature as part of environmental evaluations for all lease-sale decisions.

Regulatory Updates

BOEM Regulatory Updates

BOEM's regulation information can be found at http://www.boem.gov/Regulations/index.aspx. Since approval of the 2012-2017 Five Year Program, BOEM has issued one final rule, one proposed rule, and one advance notice of proposed rulemaking related to the OCS oil and gas program:

- **The Final Rule on Consumer Price Index Adjustments of the Oil Pollution Act of 1990 Limit of Liability for Offshore Facilities.** This rule amends 30 CFR part 533 to add a new subpart G to the regulations on Oil Spill Financial Responsibility for Offshore Facilities, in order to increase the limit of liability for damages applicable to offshore facilities under the Oil Pollution Act of 1990 (OPA), as amended. This rule adjusts the limit of liability to reflect the significant increase in the Consumer Price Index that has taken place since 1990, and it establishes a methodology for BOEM to periodically adjust for inflation of the OPA offshore facility limit of liability. BOEM increased the limit of liability for damages from $75 million to $133.65 million. More information can be found at http://www.boem.gov/79-FR-73832.

- **The Proposed Rule on Allocation and Disbursement of Royalties, Rentals, and Bonuses—Oil and Gas, Offshore.** Working jointly with the Office of Natural Resources Revenue (ONRR), BOEM is amending the regulations on the distribution and disbursement of qualified revenues from certain leases on the GOM Outer Continental Shelf, in accordance with the provisions of the Gulf of Mexico Energy Security Act of 2006 (GOMESA). The first phase of revenue allocation and disbursement applied to fiscal years 2007-2016. These proposed regulations set forth the formulas and methodologies for calculating and allocating revenues during the second phase of revenue sharing (for fiscal year 2017 and thereafter) to the States of Alabama, Louisiana, Mississippi, and Texas; their eligible coastal political subdivisions; the Land and Water Conservation Fund; and the U.S. Treasury. Additionally, in this proposed rule, DOI moves GOMESA's Phase I regulations from BOEM's CFR Title 30, Chapter V, to ONRR's CFR Title 30, Chapter XII, and proposes additional clarification and minor definition changes to the current revenue-sharing regulations. More information can be found at https://federalregister.gov/a/2014-06848.

- **An Advance Notice of Proposed Rulemaking on Risk Management, Financial Assurance, and Loss Prevention.** BOEM sought comments and information regarding its effort to update its regulations and program oversight for OCS financial assurance requirements. Due to increasingly complex business, functional, organizational, and financial issues, and vast differences in costs associated with expanded and varied offshore activities, BOEM has recognized the need to develop a comprehensive program to assist in identifying, prioritizing, and managing the risks associated with industry activities on the OCS. BOEM intends to design and implement a more robust and comprehensive risk management, financial assurance, and loss prevention program to address these complex issues and cost differences associated with offshore operations. To do so, BOEM sought stakeholder comments regarding various risk management and monitoring activities pertaining to financial risks to taxpayers that may result from activities on the OCS. This notice specifically

discusses the bonding and financial assurance program for BOEM's offshore oil and gas program. More information can be found at https://www.federalregister.gov/articles/2014/08/19/2014-19380/risk-management-financial-assurance-and-loss-prevention.

BSEE Regulatory Updates

BSEE enforces compliance with laws, regulations and lease terms and periodically updates rules to reflect advancements in technology and new information. It issues notices to lessees and similar documents to provide guidance on its interpretation of its regulations. Detailed information about BSEE's regulations can be found at http://www.bsee.gov/Regulations-and-Guidance/index/.

Significant New Activities

Arctic

Chukchi Sea Lease Sale 193 Litigation

Lease Sale 193 in the Chukchi Sea was held in February 2008, but has been the subject of ongoing litigation, as summarized below:

- In January 2008, a coalition of conservation groups, a local government, a federally recognized tribe, and an Alaska Native organization filed suit challenging the lease sale. The plaintiffs did not seek to enjoin the lease sale, and the sale was held in February 2008.
- In 2010, the U.S. District Court for the District of Alaska remanded the case to the agency to remedy its NEPA deficiencies. The agency complied with the District Court remand and prepared a Supplemental Environmental Impact Statement (Supplemental EIS). The Secretary of the Interior reaffirmed the lease sale in October 2011.
- In February 2012, the District Court ruled in favor of DOI on the remand.
- In April 2012, the plaintiffs appealed the District Court decision to the U.S. Court of Appeals for the Ninth Circuit. The Ninth Circuit found that DOI's "reliance in the [Final Environmental Impact Statement] on a one billion barrel estimate of total economically recoverable oil was arbitrary and capricious." [Native Village of Point Hope v. Jewell, 740 F.3d 489, 505 (9th Cir. 2014)]. The Ninth Circuit concluded that "NEPA require[s] [the Agency] to base its analysis on the full range of likely production if oil production were to occur." *Id*. The Ninth Circuit remanded the EIS back to the District Court. [Native Village of Point Hope v. Jewell, No. 1:08-cv-00004-RRB.]

Soon after the Ninth Circuit's decision remanding this matter, BOEM began taking steps necessary to expeditiously remedy the deficiencies found by the Court. BSEE issued a suspension of operations for all 460 existing leases in the Chukchi Sea effective January 22, 2014, which remains in effect until BOEM meets its obligations consistent with the Ninth Circuit opinion and the direction of the District Court.

On October 31, 2014, BOEM released its Draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193, which addresses the issues identified by the court. The public comment period on the Draft SEIS closed on December 22, 2014.

During the remand period, BOEM is authorized to receive, accept, and review any exploration plans (EPs) provided by lessees. BOEM may review, but cannot deem submitted nor approve, any EPs prior to the Secretary of the Interior's decision on the remand.

Alaska Exploration and Production Update

Since the release of the last annual progress report, Shell continued its pause in exploratory drilling of its Chukchi Sea leases following difficulties encountered during exploratory drilling between July and October of 2012 and has provided a revised EP for the Chukchi Sea. In addition, the company provided an Integrated Operations Plan (IOP), which was in response to the Department's March 2013 report, *Review of Shell's 2012 Alaska Offshore Oil and Gas Exploration Program* (60-day Report, March 8, 2013). The IOP provides agencies (including BOEM, BSEE, and the USCG) an "early look" at how the operator broadly describes its plan of operation in the Arctic.

In August 2014, BOEM received the revised EP for the Chukchi Sea from Shell. Under the conditions of the Lease Sale 193 EIS remand, BOEM is able to review the EP, but cannot deem it submitted nor approve it unless and until the Secretary of the Interior reaffirms the lease sale. BOEM and BSEE are also incorporating lessons learned from the Shell 2012 exploration drilling program into the proposed rule on Arctic drilling.

Hilcorp Exploration (Alaska) has also submitted a new Development and Production Plan for its Liberty Prospect leases in the Beaufort Sea. On December 31, 2012, BSEE approved a two-year Suspension of Production (SOP) for Liberty Prospect leases OCS Y-1585 and Y-1650 (in accordance with 30 CFR 256.73, 250.171, and 250.174), which allowed time to prepare and submit the new Development and Production Plan by December 31, 2014.

Atlantic

While there are no lease sales scheduled in the Atlantic in the 2012-2017 Five Year Program, the PFP states that "BOEM is proceeding with a region-specific strategy to support future decision-making regarding whether, and if so where, potential offshore oil and gas lease sales in the Mid- and South Atlantic Planning Areas would be appropriate." In working toward the goal of supporting future decision making, BOEM prepared a Programmatic EIS to evaluate potential significant environmental effects of multiple geological and geophysical (G&G) activities, including seismic surveys, on the Mid- and South Atlantic OCS. These activities will be important to update existing 30-year old data on the region's offshore resources. BOEM published the draft Programmatic EIS for public comment on March 30, 2012. Over a 90-day comment period, BOEM received more than 55,000 comments from a variety of industry, government and non-government stakeholder groups, and the general public, many with constructive, substantive suggestions. On March 7, 2014, BOEM published the final Programmatic EIS and received more than 67,500 comments. Through the public involvement process, BOEM also held 15 public meetings throughout the Mid- and South Atlantic to discuss the process and receive attendees' comments.

BOEM issued a Record of Decision (ROD) for the Programmatic EIS on July 11, 2014. The ROD is available for review at http://www.boem.gov/Record-of-Decision-Atlantic-G-G/. In the ROD, BOEM selected the preferred alternative from the Programmatic EIS, which establishes the highest practicable

level of mitigation measures and safeguards to reduce or eliminate impacts to marine life consistent with moving forward on appropriate G&G survey activities.

The ROD summarizes the Programmatic EIS alternatives considered; states the decision of the agency regarding the preferred alternative; identifies and discusses the factors involved in the decision; states the practical means to avoid or minimize environmental harm that have been adopted; and describes how mitigation measures will be enforced and monitored. The ROD does not authorize any G&G activities, but rather it establishes a framework for additional mandatory environmental reviews for site-specific actions and identifies broadly applicable measures governing any future G&G activities in the region. As new scientific information becomes available, these additional findings can be incorporated into the survey-specific environmental reviews through an adaptive management approach. BOEM will monitor implementation of these mitigations and, if warranted, will modify them as described in provisions of the Programmatic EIS addressing "adaptive management."

BOEM will consider permit applications or other proposed authorizations for G&G activities throughout the Mid-Atlantic and South Atlantic Planning Areas, consistent with the mitigation measures set forth in the Programmatic EIS for the Preferred Alternative. These Planning Areas extend from the Delaware Bay to just south of Cape Canaveral, and from the inner edge of Federal waters along that coastline to 403 miles offshore.

Additionally, BOEM continues to work with the Department of Defense on complex issues relating to potential use conflicts in certain Atlantic OCS areas. On January 9, 2013, BOEM and the Department of Defense signed a charter creating the Interagency Working Group on South and Mid-Atlantic OCS Planning Areas Spatial Conflict Minimization, and the Interagency Working Group on Passive Acoustic Monitoring in U.S. Atlantic OCS Waters. These groups will continue to work to minimize potential conflicts in these areas when and if seismic surveying activities are approved.

Gulf of Mexico

The Gulf of Mexico continues to experience successes in oil and gas exploration and development in a number of geological formations. Operators announced eight discoveries, predominantly in the Central Planning Area, in 2013, with an additional three announced discoveries in the Mississippi Canyon protraction area in 2014. The targets include:

Miocene Geologic Plays

- Amethyst (Mississippi Canyon 26): Stone Energy drilled a 90-foot net pay (i.e., oil) zone, suggesting a commercial discovery. Analysis of logging, coring, and fluid data confirmed the existence of natural gas, condensate, and natural gas liquids in the pay zone.
- Cardona South (Mississippi Canyon 29 #5 well): Stone Energy encountered over 275 feet of net oil pay in three separate sections.
- Dantzler (Mississippi Canyon 782): Noble Energy penetrated 120 feet of net oil pay in two high-quality Miocene reservoirs.

Lower Tertiary Geologic Plays

- Coronado (Walker Ridge 98): Chevron reported the well, located in 6,127 feet of water, and revealed more than 400 feet of net oil pay.
- Gila (Keathley Canyon 93): BP indicated the well penetrated multiple Paleogene-aged reservoir sands. Appraisal drilling, including completion of drilling through the Paleocene section, will be required to determine the size and potential commerciality of the discovery.
- Phobus (Sigsbee Escarpment 39): Anadarko targeted Lower Tertiary sands and encountered approximately 250 feet of high-quality net oil pay.
- Shenandoah (Walker Ridge 51): Anadarko drilled the Shenandoah #2 well and indicated that the well penetrated sands with excellent-quality reservoir and fluid properties.
- Troubador (Mississippi Canyon 699): Noble Energy indicated over 120 feet of net oil pay was encountered in Lower Tertiary targets.
- Yucatan North (Walker Ridge 95): Shell drilled over 120 feet of net oil pay in Lower Tertiary targets.

Jurassic Geologic Plays

- Rydberg (Mississippi Canyon 525): Shell encountered more than 400 feet of Jurassic net oil pay with an estimated resource base of 100 million barrels of oil equivalent.
- Vicksburg (Mississippi Canyon 393): Shell encountered more than 500 feet of net oil pay after being drilled to a depth of 26,385 feet.

Significant Incidents

OCSLA requires that the Secretary of the Interior conduct an investigation and issue a public report on deaths, serious injuries, fires, and pollution events that occur as the result of offshore oil and gas operations. BSEE carries out these investigations on behalf of the Secretary. More information on BSEE incident investigations is available at http://www.bsee.gov/Inspection-and-Enforcement/Accidents-and-Incidents/Incident-Investigations/.

Other Relevant Information

Agreement between the United States and Mexico Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico

The Agreement between the United States of America and the United Mexican States Concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico (Agreement) entered into force on July 18, 2014. The Agreement was negotiated between and signed by the United States and Mexico on February 20, 2012, and approved by Congress and the President as part of the Bipartisan Budget Act of 2014.

The Agreement establishes a framework for the cooperative exploration and exploitation of hydrocarbon resources that cross the United States-Mexico maritime boundary in the Gulf of Mexico (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, Petroleos Mexicanos (Pemex), in the joint exploration and exploitation of hydrocarbon resources. The Mexican market has long been closed to participation by international oil companies, but a 2008 energy reform law in Mexico opened a window for joint exploration and

exploitation with foreign entities, as long as it would take place pursuant to an international agreement on transboundary reservoirs. The Agreement takes advantage of that opening. It 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.

The Agreement allows leaseholders on the U.S. side of the boundary and Pemex to explore and exploit a transboundary reservoir as a "unit," as leaseholders are permitted to do on the U.S. side of the boundary. Unitization – where two or more leaseholders manage the exploration and exploitation of a resource as a unit through a single operator – promotes the rational, efficient production of a resource, and reduces waste and the drilling of unnecessary wells (and therefore reduces the corresponding environmental risk).

In cases where a unitization agreement is not reached, the Agreement ultimately allows for unilateral production by each side, up to the amount of hydrocarbons that exist on its side of the boundary. In addition, the Agreement provides a carefully calibrated mechanism to resolve disputes regarding the development of specific reservoirs.

Importantly, the Agreement also establishes a system of joint inspections. Each side regulates activity on its side of the boundary, but also has the ability, under an inspection system to be developed, to inspect activity that takes place under the Agreement on the other side of the boundary.

In sum, the Agreement provides a much needed mechanism to facilitate the safe and efficient exploration and exploitation of hydrocarbon resources along the maritime boundary and provides new opportunities for international oil companies.

Summary and Way Ahead: Development of the 2017-2022 Five Year Program

This report provides an overview of activities since approval of the 2012-2017 Five Year Program. BOEM will submit the report to the Secretary as part of the annual review of the 2012-2017 Five Year Program.

BOEM has also begun developing the 2017-2022 Five Year Program, pursuant to the requirements of OCSLA. BOEM published a Request for Information (RFI), the first step in the development process, in the *Federal Register* on June 16, 2014. The initial 45-day comment period for the RFI was extended by 15 days, and closed on August 15, 2014.

In the RFI, BOEM requested information and comments from States, local and tribal governments, Native American and Native Alaskan organizations, Federal agencies, environmental and fish and wildlife organizations, the oil and gas industry, non-energy industries, other interested organizations and entities, and the general public, for use in preparing the 2017-2022 Five Year Program. BOEM sought a wide array of information including, but not limited to, information associated with the economic, social, and environmental values of all OCS resources, as well as the potential impact of oil and gas exploration and development on other OCS resource values and the marine, coastal, and human environments.

The information received in response to the RFI was used to inform the Draft Proposed Program, which BOEM published on January 29, 2015. The publication of the Proposed Program is the next step in the Five Year Program development process. In order to make informed program decisions during the development of the 2017-2022 Five Year Program, BOEM also will prepare a Programmatic EIS in accordance with NEPA.

More information on the development of the 2017-2022 Five Year Program can be found at http://www.boem.gov/Five-Year-Program-2017-2022/.