Proposed Program Outer Continental Shelf Oil and Gas Leasing Program 2007-2012

August 2006

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Appendix A

Abbreviations

AEDC	Anchorage Economic Development Council
AEO	Annual Energy Outlook
AEWC	Alaska Eskimo Whaling Commission
Alaska Maritime NWR	Alaska Maritime National Wildlife Refuge
AMCC	Alaska Marine Conservation Council
ANWR	Artic National Wildlife Refuge
API	American Petroleum Institute
bbl	barrels
BBO	billion barrels of oil
BBOE	billion barrels of oil equivalent
BCF	billions cubic feet of gas
Btu	British thermal unit
CZMA	Coastal Zone Management Act
DEIS	Draft Environmental Impact Statement
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DPP	Draft Proposed Program
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIA	Energy Information Administration
EIS	Environmental Impact Statement
EPA	Energy Policy Act
ESA	Endangered Species Act
ESI	Environmental Sensitivity Index
ESPIS	Environmental Studies Program Information System
FR	Federal Register
FWS	U.S. Fish and Wildlife Service
GDP	gross domestic product
GOM	Gulf of Mexico
LNG	liquefied natural gas
Mcf	thousand cubic feet
MMbbl	million barrels
MM	million
MMS	Minerals Management Service

	National Ambient Air Quality Standards
NAS	National Academy of Sciences
NASA	National Aeronautics & Space Administration
NEPA	National Environmental Policy Act
NEV	Net economic value
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOIA	National Ocean Industries Association
NPDES	National Pollutant Discharge Elimination System
NRC	National Research Council
NRDC	Natural Resources Defense Council
NWR	National Wildlife Refuge
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
PFP	Proposed Final Program
PFP PP	Proposed Final Program Proposed Program
PFP PP RFI	Proposed Final Program Proposed Program Request for Information
PFP PP RFI Tcf	Proposed Final Program Proposed Program Request for Information trillion cubic feet

Preface

Management of the oil and gas resources of the Outer Continental Shelf (OCS) is governed by the OCS Lands Act (OCSLA), as amended (Act), which sets forth procedures for leasing, exploration, and development and production of those resources. The Minerals Management Service (MMS) is the bureau within the Department of the Interior (DOI) that is responsible for implementing the requirements of the Act. Section 18 of the Act calls for the preparation of an oil and gas leasing program indicating a 5-year schedule of lease sales designed to best meet the Nation's energy needs.

The MMS is in the process of preparing a 5-year program for 2007-2012. This document constitutes the Proposed Program (PP), which is the second in a series of leasing proposals developed for public review before the Secretary of the Interior may take final action to approve the new 5-year program for 2007-2012. The document consists of the parts described below.

- Part I presents a summary of the PP as determined by the Secretary. It briefly relates the location and timing of OCS oil and gas lease sales proposed for 2007-2012 and discusses procedures for assuring the receipt of fair market value for leases as required by section 18.
- Part II describes the framework for developing the new program. It discusses the substantive and procedural requirements that are in place for preparing a program under section 18 and describes the MMS approach to meeting those requirements. This includes a discussion of the criteria relating to OCS oil and gas resources and environmental and social considerations that section 18 requires to be taken into account in deciding where and when to propose lease sales.
- Part III presents the options that the MMS prepared as a result of its analysis of the section 18 criteria. The options form the basis from which the Secretary chooses the PP for 2007-2012. Each set of options is prefaced with a brief summary of the relevant results of the section 18 analysis and the comments that the MMS received from interested and affected parties.
- Part IV presents the detailed section 18 analysis executed by the MMS to develop the options presented to the Secretary.
- Appendix A is a summary of all correspondence received by the MMS in response to its public request for comments on the Draft Proposed Program (DPP) that was issued in February 2006.

I. SUMMARY OF DECISION—PROPOSED PROGRAM FOR 2007-2012

Introduction

Section 18 of the Act requires the Secretary of the Interior to prepare and maintain a schedule of proposed OCS oil and gas lease sales determined to "best meet national energy needs for the 5-year period following its approval or reapproval." Preparation and approval of a 5-year program must be based on a consideration of principles and factors specified by section 18. Those criteria and the manner in which they have been considered in the preparation of the PP for 2007-2012, are summarized in part II of this document.

This Program is the second of three proposals to be issued for public review before a new 5-year program may be approved to succeed the current one, ending on June 30, 2007. It takes into account the comments received concerning the February 2006 DPP, the initial proposal. Issuance of the PP and accompanying draft environmental impact statement (EIS) is followed by a 90-day comment period. The full 5-year program preparation process is described in part II of this document.

The PP includes the same number of sales, but with area changes in the North Aleutian Basin and Chukchi Sea, Alaska; a small portion of the Central GOM; and off the coast of Virginia. The proposal is for a total of 21 OCS lease sales in 7 areas (4 areas off Alaska, 1 area off the Atlantic coast, and 2 areas in the GOM). Maps A and B show the areas proposed for leasing (proposed program areas).



Map A: Shows the Alaska Program Areas



Map B: Shows the U.S. Program Areas

Table A lists the location and timing of the proposed lease sales in areas that are available for leasing consideration, i.e., not withdrawn or subject to congressional moratoria. Table B lists the location and timing of the proposed lease sales in areas that are withdrawn and/or subject to moratoria.

Sale No.	Area	Year
204	Western Gulf of Mexico	2007
205	Central Gulf of Mexico	2007
193	Chukchi Sea	2007
206	Central Gulf of Mexico	2008
207	Western Gulf of Mexico	2008
208	Central Gulf of Mexico	2009
209	Beaufort Sea	2009
210	Western Gulf of Mexico	2009
211	Cook Inlet	2009
212	Chukchi Sea	2010
213	Central Gulf of Mexico	2010
215	Western Gulf of Mexico	2010
216	Central Gulf of Mexico	2011
217	Beaufort Sea	2011
218	Western Gulf of Mexico	2011
219	Cook Inlet	2011
221	Chukchi Sea	2012
222	Central Gulf of Mexico	2012

Table A: Draft Proposed Program for 2007-2012—Lease SaleSchedule for Available Areas

Table B: Draft Proposed Program for 2007-2012—PotentialLease Sale Schedule for Areas Subject to Restrictions*

Sale No.	Area	Year
214	North Aleutian Basin	2010
220	Mid-Atlantic	2011
223	North Aleutian Basin	2012

*Lease sales would only be held if the President chooses to modify the withdrawal in both areas and Congress discontinues the annual appropriations moratorium in the Mid-Atlantic.

Alaska Region

In the Alaska Region, the proposed program schedules multiple lease sales in the Beaufort Sea, Chukchi Sea, and North Aleutian Basin Planning Areas. Multiple sales are consistent with the Governor of Alaska's recommendations and the state's administration of its offshore oil and gas program.

The first sale in the Chukchi Sea is a carryover from the current program, due to the time needed to complete the necessary pre-lease steps and environmental documentation. In the Chukchi Sea, the proposed program area is altered from that of the DPP by the inclusion of a 25-mile buffer. This reflects the Secretary's intention that there be no leasing within 25 miles of the coastline where there is no existing oil and gas activity, unless the adjacent state(s) request that the area be offered.

The North Aleutian Basin Planning Area is currently withdrawn by presidential order under section 12 of the Act. In response to comments from the Governor of Alaska and a large majority of the local governments and tribal organizations, this program proposes sales only in the area offered in Sale 92 in 1988. With that limitation of area to be offered, the Governor of Alaska requested "that the President lift the withdrawal of the North Aleutian Basin planning area from the leasing program, and allow the scheduling of lease sales in the Sale 92 area in the 2007 - 2012 program." Therefore, the North Aleutian Basin is included in this proposal.

The Cook Inlet Planning Area is included on the schedule as a special interest sale area. The sales are proposed for 2009 and 2011, but before the MMS proceeds, it will issue a request for nominations and comments and will move forward only after consideration of the comments received in response to annual calls for information. If the responses to a call for information do not support consideration of a sale, the sale will be postponed and a request for nominations and comments will be issued again the following year, and so on through the 5-year schedule, until a sale is held or the schedule expires.

Maps 3-6, in part III, depict the specific Alaska OCS areas proposed for lease sales.

Gulf of Mexico Region

In the Central and Western GOM Planning Areas, which remain the two areas of highest resource potential and interest, the PP is the same as that of the DPP with the exception of the exclusion of a small area in the Central Gulf that is east of the military line (86° 41' W). The program continues to schedule annual areawide lease sales, as has been the customary practice and proposes a sale in 2007 of a portion of the area that was identified for Sale 181 in the 5-year program for 1997-2002. As a result of the reconfiguration of some planning areas to follow new administrative lines, some of the areas formerly included in the Eastern and Western Gulf Planning Areas are now part of the Central Gulf Planning Area. There are no lease sales scheduled in the Eastern Gulf Planning Area. The original Sale 181 area is not under presidential withdrawal and has not been subject to congressional moratoria. In addition, the area being considered for leasing will not include the area within 100 miles of the Florida coast that used to be part of the Eastern Gulf Planning Area. This will respect the commitment made by the Secretary. In the August 2005 Request for Information (RFI), the Secretary stated that she "had no intention of offering for leasing areas in the Eastern GOM Planning Area within 100 miles of the coast of the State of Florida." Subsequent annual Central Gulf sales may consider the area to the south of the Sale 181 area that is currently under presidential withdrawal and has been subject to annual congressional moratoria. In addition, pursuant to section 19 of the Act, no sale will be proposed until all affected states have the opportunity to comment.

Maps 7, 8, and 8(a), in part III, depict the specific GOM OCS areas proposed for lease sales.

Atlantic OCS

There are four planning areas in the Atlantic OCS—North Atlantic, Mid-Atlantic, South Atlantic, and Straits of Florida. As in the DPP, the PP proposes a special interest sale in the Mid-Atlantic in late 2011, which may proceed based on comments received in response to the call for information and whether the presidential withdrawal is lifted and the congressional moratorium is discontinued.

The area proposed for consideration is in the Mid-Atlantic Planning Area off the coastline of Virginia. Inclusion of this area in the PP will allow the gathering of additional information needed to decide whether to include this area in the Proposed Final Program (PFP). As in the Chukchi Sea, the proposed program area includes a 25-mile buffer from leasing as there is no existing oil and gas activity in the area and the State has made no request to include leasing closer to shore. In addition, no leasing is proposed in a wedge-shaped no-obstruction zone, intended to protect navigation activities in and out of the Chesapeake Bay. In addition, pursuant to section 19 of the Act, no sale will be proposed until all affected states have the opportunity to comment. This area is also under presidential withdrawal under section 12 and has been subject to congressional moratoria.

Map 9, in part III, depicts the specific Atlantic OCS area proposed for leasing consideration.

Assurance of Fair Market Value

Section 18 requires receipt of fair market value for OCS oil and gas leases and the rights they convey. The PP provides for setting minimum bid levels by individual lease sale based on market conditions and for continuing to use a two-phase post-sale bid evaluation process that has been in effect since 1983 to meet this requirement.

II. FRAMEWORK FOR FORMULATING THE PROPOSED PROGRAM FOR 2007-2012

A. Procedural Requirements

The PP is one of several steps in the process of preparing the new 5-year program. This document is the second of three draft proposals of OCS lease sales for the 2007-2012 timeframe. Before the new 5-year program may be approved and implemented, the MMS must accept and consider comments on the DPP, and issue for public review a PP and draft EIS, and then a PFP and final EIS. The key steps in preparing a new 5-year program under section 18 of the Act and section 102(2)(C) of the National Environmental Policy Act (NEPA) are described below.

Request for Comments and Suggestions

On August 24, 2005, the MMS published in the *Federal Register* a request for comments and suggestions on the preparation of a new 5-year program for 2007-2012 and announced the start of scoping for the EIS that will be prepared. The MMS also sent letters to the governors of affected states and the heads of interested federal agencies requesting their input by October 11, 2005.

Draft Proposed Program

After considering all the analyses of information relating to section 18 factors and principles and comments, the Secretary selected a DPP as the initial proposal for the 5-year program for 2007-2012. The MMS announced the DPP and notice of intent to prepare an EIS in the *Federal Register* on February 10, 2006, and distributed it to governors of affected states and interested and affected parties for a 60-day comment period (see appendix A for summarized comments).

Proposed Program

Preparation of a PP is based on further section 18 analysis and consideration of the comments received by the MMS concerning the DPP. The PP is the second draft of the Secretary's proposal. The MMS publishes the PP in the *Federal Register* and submits it along with a draft EIS to the Congress, the Attorney General, the governors of affected states, and other interested and affected parties for a 90-day comment period. The MMS also gives the governors written responses to their comments on the DPP. The Secretary's proposal is explained in part I of this document.

Proposed Final Program

Preparation of a PFP will be based on further section 18 analyses and consideration of the comments received by the MMS concerning the PP. The PFP is the third draft of the Secretary's proposal. The MMS will announce the PFP in the *Federal Register* and submit it to the President and the Congress along with summaries of any comments received and an explanation of the responses on any recommendations received from affected state and local governments and the Attorney General. The MMS will issue a final EIS with the PFP.

Program Approval

Sixty days after the PFP is submitted to the President and the Congress, the Secretary may approve the new 5-year program.

B. Substantive Requirements

Section 18 of the Act sets forth specific principles and factors to guide 5-year program formulation. Analysis of information relating to those principles and factors produces results that the MMS uses to develop reasonable options from which the Secretary may select a schedule of proposed lease sales indicating, as precisely as possible, the size, timing, and location of leasing activity determined to best meet national energy needs. A brief overview of those section 18 requirements is presented below.

Energy Needs

Section 18(a) states that the purpose of the 5-year OCS oil and gas leasing program is to help meet the Nation's future energy needs. Part IV.A presents an analysis of anticipated energy needs. The analysis includes discussions of the U.S. Department of Energy's (DOE) projections of national energy needs in the *Annual Energy Outlook 2006*, the potential contribution of OCS oil and gas production in meeting those needs, alternatives to OCS production, and considerations relating to regional energy needs.

Environmental Considerations

Section 18(a)(1) provides that in addition to examining oil and gas resources, the Secretary is required to consider the values of other OCS resources and the potential impacts that OCS oil and gas activities could have on those resources and on the marine, coastal, and human environments. Part IV.B presents the environmental issues and concerns that have been raised by commenters and presents information relating to safe and sound operations, as well as pertinent findings of the final EIS for the 5-year program for 2002-2007 and other relevant NEPA documents and environmental information.

Factors for Determining Timing and Location of Leasing

Section 18(a)(2) lists eight factors that are to be considered in deciding the timing and location of oil and gas activities among the different areas of the OCS. While some of these factors lend themselves to quantification to facilitate comparison among planning areas, others do not and need to be considered qualitatively. Each of the eight factors provided in 18(a)(2)(A) through (H) is listed below along with references to the parts of the DPP analysis that address them.

(A) Geographic, Geological, and Ecological Characteristics

The main source of information on geographic, geological, and ecological characteristics of the OCS planning areas considered in preparing the PP is the draft EIS for the 5-year program for 2007-2012, July 2006.

Other sources include recent NEPA documents prepared for leasing and operations activities, the MMS 2006 resource assessment and associated reports, the MMS cumulative effects report (97-0027), the 1994 Natural Research Council (NRC) report concerning information for Alaska OCS decisions, scientific study results, which are reported in the Environmental Studies Program Information System (ESPIS) database, and information submitted or cited by commenters.

(B) Equitable Sharing of Developmental Benefits and Environmental Risks

Part IV.C briefly analyzes the equitable sharing factor. It discusses the analyses and findings of previous 5-year programs and briefly cites new developments and their potential influence on the nature and distribution of benefits and risks associated with the size, timing, and location options available for consideration.

The analysis also describes the significant effect that the existing long-term withdrawal and/or moratoria of areas from leasing has on equitable sharing by effectively precluding expansion of the lease sale schedule to include areas that were not proposed for leasing in the approved 5-year programs for 1997-2002 and 2002-2007. The withdrawal and moratoria are described in part IV.C.

(C) Location with Respect to Regional and National Energy Markets and Needs

Part IV analyzes regional and national energy needs. Chapter III of the draft EIS describes the socioeconomic environment for each OCS region, including the existing oil and gas infrastructure and its relationship to new leasing. The recent lease sale EISs cited below also provide useful information relating to regional distribution and processing of OCS oil and gas.

(D) Location with Respect to Other Uses of the Sea and Seabed

Part IV.B discusses competing uses of the OCS. This summary is based on information provided in the draft EIS for the 5-year program for 2007-2012.

Other sources include the 1997 MMS cumulative effects report, the recent lease sale EISs and other NEPA documents cited above, ESPIS results, and information submitted or cited by commenters.

(E) Interest of Potential Oil and Gas Producers

Part IV.C describes industry interest as indicated in response to the February 2006, DPP that was issued by the MMS. The discussions of size, timing, and location options in part III also include summaries of industry interest (see appendix A for summarized comments received from the oil and gas companies and associations).

(F) Laws, Goals, and Policies of Affected States

The discussions of size, timing, and location options in part III include summaries of the relevant laws, goals, and policies—and federally approved coastal zone management programs and policies—that state governments identified in responding to the MMS request for comments (see appendix A for summarized comments received from state governors and government agencies).

(G) Environmental Sensitivity and Marine Productivity

Part IV.C analyzes environmental sensitivity and marine productivity based on the latest available information from the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service (NMFS).

(H)Environmental and Predictive Information

Part IV.B presents an analysis of environmental concerns that references relevant information and findings from the draft EIS for the 5-year program for 2007-2012, recent lease sale EISs and other NEPA documents, and other MMS reports and studies.

Balancing Potential Environmental Damage, Discovery of Oil and Gas, and Adverse Impact on the Coastal Zone

Section 18(a)(3) requires the Secretary to render decisions on the timing and location of OCS leasing that strike a balance between environmental and developmental principles based on a consideration of the factors comprising section 18(a)(2) listed above. Part IV.C addresses the balancing requirement by presenting a comparative analysis of all 26 planning areas.

The centerpiece of the comparative analysis is an estimation of net social value for each planning area that is derived by calculating the value of oil and gas resources minus the cost to industry and the environmental and social costs of developing those resources. The comparative analysis also ranks the planning areas according to quantified information relating to environmental sensitivity and marine productivity and according to the interest of potential oil and gas producers. The other section 18(a)(2) factors do not lend themselves as readily to quantification and are treated qualitatively. The comparative analysis also examines additional qualitative information pertaining to industry interest, the findings and purposes of the Act, the comments and recommendations of interested and affected parties, and other information relevant to striking a proper balance under section 18(a)(3).

The Act does not specify what the balance should be or how the factors should be weighed to achieve that balance, leaving to the Secretary the discretion to reach a reasonable determination under existing circumstances.

C. Judicial Guidance

The new 5-year program will be the seventh prepared by the DOI. The first three programs prepared and approved under section 18 were challenged in court—in 1980, 1982, and 1987. The U.S. Court of Appeals for the District of Columbia Circuit decided all of those lawsuits. The new 5-year program is being prepared in accordance with guidance provided in those decisions, which are cited as follows:

- California I [California v. Watt, 688 F2d 1290 (D.C. Cir. 1981)];
- California II [California v. Watt, 712 F2d 584 (D.C. Cir. 1983)];

- *NRDC* [Natural Resources Defense Council], *et al. v.* Hodel, 865 F2d 288 (D.C. Cir. 1988)]; and
- No lawsuits were filed against the 5-year programs approved for 1992-1997, 1997-2002, and 2002-2007.

D. Analytic Approach

The analysis for formulating the PP for 2007-2012 focuses on the size, timing, and location of leasing and the provisions for assuring fair market value that were adopted in the February 2006 DPP. This Program identified for further leasing consideration seven *program areas* consisting of all or parts of seven of the OCS planning areas (see maps A and B, in part I). This proposed program analysis examines and compares those selected areas in light of the criteria of section 18 of the Act. The same areas are analyzed in the draft EIS prepared to assess the effects of the proposed program pursuant to the NEPA.

Development of a new 5-year program for 2007-2012 is based on analysis of information relating to the criteria of section 18 of the Act, which governs preparation and maintenance of the Federal offshore oil and gas leasing program. Parts III and IV of this document discuss in detail the sources of information and the methodologies applied for the proposed program analysis. Also, as stated in the DPP, much information is incorporated by reference to pertinent documents. This information is listed below.

- Decision Document for the Draft Proposed Program for 2007-2012 (February 2006)
- Draft EIS for the 5-year program for 2007-2012 (July 2006)
- Decision Document for the Proposed Final Program for 2002-2007 (April 2002)
- Final EIS for the Proposed Final Program for 2002-2007
- Cook Inlet Planning Area Oil and Gas Lease Sales 191 and 199, Final EIS, OCS EIS/EA, MMS 2003-055, Volumes 1-3, 2003
- Structure-Removal Operations on the Gulf of Mexico Outer Continental Shelf, Programmatic Environmental Assessment, OCS EIS/EA, MMS 2005-013, 2005
- Gulf of Mexico OCS Oil and Gas Lease Sale 181, Eastern Planning Area, OCS EIS/EA, MMS 2001-051, 2001
- Gulf of Mexico OCS Oil and Gas Lease Sales 189 and 197, Eastern Planning Area, OCS EIS/EA, MMS 2002-056, 2002
- Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007, Central Planning Area Sales 185, 190, 194, 198, and 201, Western Planning Area Sales 187, 192, 196, and 200, Final EIS, OCS EIS/EA, MMS 2002-052, 2002

- Alaska Outer Continental Shelf Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195, and 202, Final EIS, OCS EIS/EA, MMS 2003-001, 2003
- Environmental Assessment—Proposed Oil & Gas Lease Sale 195 Beaufort Sea Planning Area, MMS 2004-028, 2004
- Geological and Geophysical Exploration for Mineral Resources on the Gulf of Mexico Outer Continental Shelf: Final Programmatic Environmental Assessment, OCS EIS/EA MMS 2004-054, 2004
- EIA Annual Energy Outlook 2006 http://www.eia.doe.gov/oiaf/aeo/index.html
- Undiscovered Oil and Gas Resources, Alaska Federal Offshore As of 2006 http://www.mms.gov/alaska/re/reports
- Assessment of Undiscovered Technically Recoverable Oil and Gas Resources on the Nation's Outer Continental Shelf, 2006 http://www.mms.gov/2005EnergyPolicyAct.htm#ImplementingInMMS

III. PROPOSED PROGRAM OPTIONS

A. Size, Timing, and Location Options

Introduction

This part presents the options from which the Secretary chooses the size, timing, and location of leasing for 2007-2012. The MMS has formulated these options based on its consideration of information relating to the section 18 criteria and based on the results of comments and consultation with interested and affected parties.

As noted in the DPP, the OCS is divided into 26 planning areas. Eight whole planning areas located off the East and West coasts and off Alaska, as well as most of the Eastern GOM Planning Area located off Florida, are withdrawn from disposition by leasing until after June 30, 2012. However, based on interest expressed by the governors of the States of Alaska and Virginia, some withdrawn areas off their coasts are included in the PP, although no sales could be held unless the presidential withdrawal was lifted for both areas and the congressional moratorium discontinued off the coast of Virginia. The annual congressional moratorium for Alaska's North Aleutian Basin was discontinued in fiscal year 2004. The other withdrawn areas have not been analyzed in light of the section 18 criteria and no program options were considered for them in the DPP. Eleven other planning areas located off Alaska were also not included for leasing consideration in the DPP, mainly because they have low resource value and are of little or no interest to the oil and gas industry at this time. None of these areas are analyzed in this document. This approach is consistent with *California II*, which found that "[i]f the Secretary has already determined that no leasing activity will occur in a particular area there is no need to fully evaluate that area." Maps 1 and 2 show the areas currently unavailable for leasing.

The section 18 objectives of formulating a program to "best meet national energy needs" and to assure the receipt of fair market value for leases and the rights they convey are significant determinants of the size, timing, and location options. The analyses of net social benefits and the factors specified by section 18(a)(2) provide a solid basis for developing options. Those analyses, which are presented in part IV, examine economic, social, and environmental values; oil and gas resource potential and industry interest; distribution of benefits and risks; competing uses of the OCS; regional energy needs; and the laws, goals, and policies of affected States. By considering that information for each area of the OCS available to be proposed for leasing in the next 5-year program, the MMS is able to weigh different resources, values, and policies in formulating reasonable options that can be selected by the Secretary to achieve the balance required by section 18(a)(3).



Map 1: Shows the Alaska Planning Areas



Map 2: Shows the National Planning Areas

Additional Considerations

The location and size of lease sales in a 5-year program are largely determined by the configuration of planning areas and program areas for leasing consideration. The OCS planning areas initially were established following the enactment of the Act Amendments of 1978 and have been reconfigured several times over the past 20 years, including the changes put forth in the DPP that correspond to the administrative lines announced in the *Federal Register* in January 2006. In general, the entire Central and Western GOM Planning Areas (with the exception of blocks in and around the Flower Garden Banks National Marine Sanctuary) have been included in OCS lease sales. Other planning areas have been subdivided to identify smaller areas of leasing consideration within them (i.e., program areas).

The PP options provide for scheduling lease sales in the Central and Western GOM Planning Areas, in defined program areas off Alaska, and in the Atlantic off the coast of Virginia. Each lease sale that is scheduled in the approved 5-year program for 2007-2012 will be subjected to an established prelease evaluation and decision process in which interested and affected parties may participate. That process examines the proposed lease sale, starting with the area identified as available for leasing consideration in the 5-year program, and considers reasonable alternative lease sale configurations within that area; therefore, no sale area may be larger than the original proposal. The prelease process leads to the final decision on the size, timing, and location of each OCS lease sale.

Size, timing, and location options are designed also to mitigate drainage of Federal oil and gas resources on unleased lands and associated revenue losses that could occur as a result of existing or anticipated development activity on adjacent state leases. Acquisition of new geological and geophysical data is a relevant consideration in that such data become available sooner, more frequently, and more predictably for the areas scheduled for lease sales in a 5-year program. Finally, the scheduling of lease sales must allow time for orderly and deliberate preparation for each sale, including the acquisition and analysis of relevant scientific information, and the completion of the prelease evaluation and decision process.

Proposed Program Options for Scheduling Lease Sales

This decision document offers options for scheduling lease sales for the seven areas proposed for lease sales in the DPP. Background information on the history of leasing and related activities in each area was included in the DPP and is not repeated in this document. Summaries of the key results of the comparative analysis and the comments of interested and affected parties precede each set of lease sale options. The comparative analysis summaries are condensed from part IV.C, and the comment summaries are adapted from the appendix A.

A discussion of the individual options follows each set of options. Each leasing option is discussed as to the anticipated benefits of the proposed leasing and ensuing production, as well as the potential environmental impacts that could be expected. As explained in part IV.C, the valuation of anticipated production differs from the total net benefits analysis. The former compares the value of all the resources available in each area, while the latter compares the value of only those resources that would reasonably be expected to be discovered and produced given the size and timing of the lease sale(s) specified in each option.

Relationship of Proposed Program Options to the Draft EIS Alternatives

The draft EIS analyzes eight alternatives that correspond to individual lease sale options as follows:

- Alternative 1—The Proposed Action—corresponds to the Proposed Program Option for the Western and Central GOM, Beaufort Sea, and Cook Inlet; Other Option 2 for the North Aleutian Basin and Chukchi Sea; and Other Options 2 and 3 for the Mid-Atlantic; and reflects the decisions made for the DPP.
- Alternative 2—Exclude Leasing in the North Aleutian Basin—would modify the proposal by excluding entirely the North Aleutian Basin (Other Option 1 for North Aleutian Basin).
- Alternative 3—Exclude Leasing in Cook Inlet—would modify the proposal by excluding entirely the Cook Inlet (Other Option 1 for Cook Inlet).
- Alternative 4—Exclude Leasing Offshore Virginia—would modify the proposal by excluding entirely the program area offshore Virginia (Other Option 1 for Offshore Virginia).
- Alternative 5—Exclude Leasing in 25-Mile Buffer in Some Planning Areas—would modify the proposal by excluding from leasing consideration a 25-mile area off the coastlines of the Chukchi Sea and Virginia (Proposed Program Option for both areas).
- Alternative 6— Exclude Leasing in No-Obstruction Zone Offshore Virginia—would modify the proposal by excluding from leasing consideration a no-obstruction zone from the mouth of the Chesapeake Bay off the coastline of Virginia (Proposed Program Option for Offshore Virginia).
- Alternative 7—Offer Only that Area Offered in Sale 92 in North Aleutian Basin—would modify the proposal by excluding all the Planning Area not offered in Sale 92 in 1988 (Proposed Program Option for North Aleutian Basin).
- Alternative 8—No Action—would schedule no sales (Other Option 1 for all areas).

ALASKA REGION

Draft Proposed Program Decision

The DPP scheduled the following lease sales in the Alaska OCS Region:

- Beaufort Sea—sales in 2009 and 2011;
- Chukchi Sea—sales in 2007, 2010, and 2012;
- North Aleutian Basin—sales in 2010 and 2012, if the presidential withdrawal is modified; and

• Cook Inlet—"special" sales in 2009 and 2011 in the planning area. See the discussion under the Proposed Program Option for a description of the proposed special sale process.

Proposed Program Options

BEAUFORT SEA

Key Comparative Results. The net benefits of anticipated production in this proposed program area are estimated at about \$6.58 billion. The area ranks 6th out of 7 in environmental sensitivity and 7th of 7 in primary productivity. Fifteen companies endorsed leasing in this area, a 40 percent increase over the number responding to the August 2005, RFI.

Selected Comments. The Governor of Alaska supports the proposed leasing programs in the Beaufort and Chukchi Seas contained in the DPP. He urges MMS to be mindful of subsistence whaling and other activities that are integral to life in the North Slope regions. The DOE's Office of Fossil Energy supported the MMS's development of the proposed 5-year plan, particularly the proposals related to the OCS in Alaska. The North Slope Borough and two Native entities opposed activities in this area. The Sierra Club, representing 28 groups, stated that the Alaska OCS leasing proposals would endanger a wide range of resources of national significance. Earthjustice, representing 16 groups stated that the MMS should not hold any more lease sales unless and until the industry demonstrates that it can clean up spilled oil and should exclude sensitive areas offshore of the National Petroleum Reserve Alaska. Alaska Watch wants the area reduced because of the potential for oil spills. The Anchorage Economic Development Council (AEDC) urged the MMS to expand planning in Alaska to advance economic diversification and concludes that impacts on whales and other sea animals can be fully mitigated. Numerous non-energy industry entities, from the agricultural sector to local Chambers of Commence, endorsed the DPP and asked for opening of more acreage. Fifteen companies expressed interest in this area.

Proposed Program Option

Proposal as in the DPP: two sales (in 2009 and 2011) in the program area depicted in Map 3.

Other Options Considered

(1) No sale.

Discussion

Proposed Program Option (2 Sales)

Valuation. The net benefits of anticipated production in the proposed program area are estimated at would be \$6.58 billion.

Environmental Impacts. This area is analyzed in the draft EIS under Alternative 1. A summary of the EIS findings follows.

Water Quality—Overall coastal and marine water quality impacts due to routine operations and operational discharges under the proposed action would be unavoidable. Oil spills in coastal waters of the Arctic subregion could reduce water quality and these impacts would be unavoidable, if spills occur. In the presence of cold temperatures and ice, cleanup activities could be more difficult than in more temperate environments. The magnitude of the impacts would depend on the specific location affected and the nature and magnitude of the activity/accident.

Air Quality—The concentrations of NO₂, SO₂, and PM₁₀ from any routine activities associated with the proposed 5-year program activities in the Beaufort Sea would be well within the National Ambient Air Quality Standards (NAAQS). Any air quality impacts from oil spills in the Arctic subregion would be localized and of short duration.

Marine Mammals—Some routine operations could affect marine mammals in the Arctic subregion. Noise generated during exploration and operation activities and by OCS-related vessels and helicopters may temporarily disturb some individuals, causing them to leave or avoid the area. Such effects would likely be short-term and not result in population-level effects. If the disturbance results in the temporary abandonment of young by adults, survival of young may be reduced. Collisions with OCS-related vessels may injure or kill some individuals. Existing permit requirements, regulatory stipulations, and MMS guidelines targeting many of the routine operations would generally limit the likelihood of marine mammals being affected by these operations. Oil spills may expose marine mammals to oil or its weathering products. The potential for a listed marine mammal species to be exposed to oil or its weathering products would be assumed to be less than for an unlisted marine mammal, although any adverse impacts to individuals of a listed species could potentially have a more significant population-level affect. Spill cleanup operations could result in short-term disturbance of marine mammals in the vicinity of the cleanup activity, while a collision with a cleanup vessel could injure or kill the affected individual. Disturbance of adults with young during cleanup operations could reduce survival of the young animals.

Terrestrial Mammals—The construction and normal operations of new onshore facilities associated with the proposed action could result in a variety of short-term and long-term impacts to terrestrial mammals. Short-term impacts may be incurred by a variety of species during facility and infrastructure construction. These impacts would largely be behavioral in nature, with affected animals avoiding or vacating the construction areas. Similarly, vehicle and aircraft traffic associated with the proposed action could temporarily disturb mammals near roadways or under flight paths. The presence of a new onshore pipeline may result in the displacement from preferred habitats to less suitable habitats for overwintering muskoxen, calving female caribou, and female caribou and their calves. While population-level effects may not be likely for caribou, local population-level effects may occur for muskoxen, if they are in the immediate area, because of the small population size in Alaska. In the event of an accidental spill, terrestrial mammals may be exposed via ingestion of contaminated food, inhalation of airborne oil droplets, and direct ingestion of oil during grooming. A variety of lethal and sublethal effects may be likely. However, because most spills would be relatively small (< 50 barrels (bbl)). relatively few individuals would likely be exposed. While some individuals may incur lethal effects, population-level impacts would not be expected for most species. Cleanup activities could temporarily disturb terrestrial mammals in the vicinity of the cleanup operation, causing those animals to vacate the area.

Marine and Coastal Birds—Marine and coastal birds in the Beaufort Sea Planning Area may be affected by the construction of onshore and offshore facilities; by boats, aircraft, and on-land vehicle traffic; and by noise and human activities during normal operations and maintenance activities. In most cases, affected birds would temporarily leave the area; while in other cases, the displacement could be long-term. Construction of onshore facilities and pipelines, offshore pipeline landfalls, and offshore gravel islands to support drilling platforms would result in the permanent disturbance of potential habitat within the immediate footprint of the new facilities and gravel excavation areas. Depending on the species present at and in the vicinity of the construction areas, the numbers of birds affected, and the activity whether nesting, molting, feeding or staging that the affected birds were undergoing at the time of disturbance, the displacement could reduce reproductive, foraging, and survival successes, and might result in population-level impacts.

Accidental spills represent the greatest potential for adversely impacting marine and coastal birds. Spills in offshore locations have the greatest potential for affecting the greatest number of birds, especially if a spill occurs in an area where birds have congregated and are carrying out important activities such as nesting, molting, and staging. Spills in terrestrial habitats would affect relatively few birds unless the spill was to reach a surface water body such as a stream, pond, or lake that provides an important brood-rearing, foraging, or staging habitat. Oil-spill cleanup activities may result in either short-term or long-term displacement of birds from habitats, depending on the size of the spill and the habitats affected.

Fish Resources and Essential Fish Habitat (EFH)—Assuming compliance with existing Federal, state, and local fisheries regulations, policies and consultations, most impacts to fish resources in the Arctic subregion will be minimized. Effects of accidental spills would depend on the location, timing, and volume of spills; distribution and ecology of affected fish species; and other environmental factors. Under most circumstances, any single large spill would affect only a small proportion of a given fish population; therefore, overall population levels would not be affected.

Coastal Habitats—Construction of infrastructure such as onshore support bases and pipeline landfalls could result in small areas being lost. Overall potential impacts are predicted to be minor, while impacts could be minor to moderate if oils spills occur and contact the coast.

Seafloor Habitats—Some impacts on other benthic communities in the Arctic subregion could occur due to routine operations and accidents under the proposed action. The magnitude of impacts from an oil spill would depend upon the location of the spill, spill size, the type of product spilled, effectiveness of cleanup operations, and other environmental conditions at the time of the spill. Impacts to the Stefansson Sound Boulder Patch community could occur as a result of routine operations and accidents under the proposed action. However, it is anticipated that planning procedures and permitting requirements would avoid or minimize the potential for impacts to the Stefansson Sound Boulder Patch community.

Areas of Special Concern—Development of national park lands in the Arctic planning areas is considered unlikely during the proposed action, thereby minimizing the potential for impacts from routine operations in these areas. Development may be possible in the Alaska Maritime National Wildlife Refuge (Alaska Maritime NWR) under the proposed action, but it is anticipated that reviews of individual lease sales would minimize the potential for impacts from

routine operations. Impacts from oil spills that occur adjacent to national park or national wildlife refuge boundaries would depend on spill location, spill size, type of product spilled, weather conditions, environmental conditions at the time of the spill, and effectiveness of cleanup operations. Large oil spills in areas adjacent to the Arctic National Wildlife Refuge may negatively impact coastal habitats and fauna and also affect subsistence use.

Population, Employment, and Income—Potential effects on population, employment, and regional income from routine operations and oil spills are expected to be limited except for local effects from a large oil spill.

Land Use and Existing Infrastructure—The greatest anticipated impact of the proposed action is to expose new areas to the potential effects from routine operations and accidents. Routine operations would impact land use in the vicinity of new facilities and their associated infrastructure. Impacts associated with platform and pipeline construction would be temporary. An oil spill could alter land use temporarily but would not likely result in long-term changes. The magnitude of the impacts would depend on the size and location of the spill.

Fisheries—Because commercial fisheries in the Arctic subregion are relatively small and localized, potential impacts due to routine operations under the proposed action are less likely unless they occur in the direct vicinity of these localized fisheries. Based on the oil-spill scenarios, most accidents assumed under the proposed action would potentially impact commercial fisheries, with larger spills resulting in greater and potentially more persistent impacts. All spills have the potential to result in reduced or no harvest that may impact local economies.

Sociocultural Systems and Environmental Justice—Potential direct and indirect impacts on sociocultural systems due to noise, visual, and traffic disturbances, as a result of offshore operations for the proposed action, are expected to be limited. Potential direct and indirect impacts on sociocultural systems due to routine operations of offshore pipelines for the proposed action will also be limited because of mitigation and consultation measures. Potential impacts on sociocultural systems from accidents under the proposed action could range greatly, depending on the location and timing of a spill. Alaska Native populations are present in many coastal areas of Alaska. It is possible that new onshore infrastructure could be located near these populations and produce adverse health or environmental impacts if there are impacts on subsistence resources and harvest patterns. In the case of an oil spill, it is also possible that the potential environmental and health impacts on Alaska Native populations could be disproportionately high or adverse depending on the geographical location of the spill and the effects this may have on subsistence resources and harvests.

Archaeological Resources—Assuming compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources in the Alaska region resulting from routine activities under the proposal will be avoided. Some impact may occur to coastal historic and prehistoric archaeological resources from accidental oil spills. Although it is not possible to predict the precise numbers or types of sites that would be affected, contact with archaeological sites would probably be unavoidable, and the resulting loss of information would he irretrievable, if spills should occur. The magnitude of the impact would depend on the significance and uniqueness of the information lost.

Other Information. The comments received, particularly during the scoping process for the draft EIS, concerns the deferral of areas in the Beaufort Sea program area. Of particular interest were the Barrow and Kaktovik deferral areas, as depicted oin Map 3. Deferrals are believed to be appropriate to consider at the presale stage as OCS deferrals can then be specific, timely, and more accurately tailored to be consistent with deferrals in Alaska State waters. Both of these areas were deferred from leasing consideration during the presale process in the two most recent sales, Sale 186 in September 2003 and Sale 195 in March 2005. These areas are being analyzed for exclusion from leasing consideration in the upcoming Sale 202, scheduled for March 2007.



Map 3: Shows the Beaufort Sea Program Area

Other Option 1 (No Sale)

Valuation. The net benefits of production would be zero since no activity would occur.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 8. A summary of the EIS findings follows.

The choice of this option would result in a lack of activities associated with other options proposing sales in the planning area. Environmental impacts from presale seismic activity, exploration drilling, placement of platforms and pipelines, and accidental oil spills would not occur. However, environmental impacts would occur elsewhere from importing energy to replace potential OCS production foregone if this option was selected. Activity and impacts from seismic, exploration, and development activity on leases purchased during past sales could continue. Potential effects on the Pacific Coast as a result of spills of oil produced from new Beaufort Sea leases and shipped by tanker to West Coast ports would be eliminated, but potential effects might occur from spills associated with tanker imports.

CHUKCHI SEA

Key Comparative Results. The net benefits of anticipated production in the Chukchi Sea proposed program area are estimated at \$6.05 billion. The area ranks 7th in environmental sensitivity and 6th in primary productivity. Fifteen companies endorsed leasing in this area, a 40 percent increase over the number responding to the August 2005, RFI.

Selected Comments. The Governor of Alaska supports the proposed leasing programs in the Beaufort and Chukchi Seas contained in the DPP. He urges the MMS to be mindful of subsistence whaling and other activities that are integral to life in the North Slope regions. The DOE's Office of Fossil Energy supported MMS's development of the proposed 5-year plan, particularly the proposals related to the OCS in Alaska. The North Slope Borough and two Native entities opposed activities in this area. The Sierra Club, representing 28 groups, stated that the Alaska OCS leasing proposals would endanger a wide range of resources of national significance. Earthjustice, representing 16 groups, stated that MMS has arbitrarily expanded access to the Chukchi Sea planning area and underestimated the sensitivity of the Chukchi shoreline. Alaska Eskimo Whaling Commission (AEWC) opposes offshore oil and gas leasing because it threatens the habitat and migratory patterns of the bowhead whale. If the whales become unavailable for native subsistence lifestyle, communities will be unable to provide for themselves. The AEWC states that the Secretary must exclude the Chukchi Sea from the program for the sole reason that too little is known about that sea and its capacity to rebound from environmental pressures of leasing activity. The AEDC urged the MMS to expand planning in Alaska to advance economic diversification and concludes that impacts on whales and other sea animals can be fully mitigated. Numerous non-energy industry entities, from the agricultural sector to local Chambers of Commence, endorsed the DPP and asked for opening of more acreage. Fifteen companies expressed interest in this area.

Proposed Program Option

Proposal as in the DPP, excluding the area within 25 miles of the coastline from any leasing consideration (25-mile buffer): three sales (in 2007, 2010, and 2012) in the program area depicted in Map 4.

Other Options Considered

- (1) No sale.
- (2) Offer the area in the draft proposed program, including the area within 25 miles of the coastline (25-mile buffer).

Discussion

Proposed Program Option (3 Sales)

Valuation. The net benefits of anticipated production in the proposed program area are estimated at \$ 6.05 billion.

Environmental Impacts. This area is analyzed in the draft EIS under Alternatives 1 and 5. A summary of the EIS findings follows.

Water Quality—Overall coastal and marine water quality impacts due to routine operations and operational discharges under the proposed action would be unavoidable. Oil spills in coastal waters of the Arctic subregion could reduce water quality and these impacts would be unavoidable, if spills should occur. In the presence of cold temperatures and ice, cleanup activities could be more difficult than in more temperate environments. The magnitude of the impacts would depend on the specific location affected and the nature and magnitude of the activity/accident.

Air Quality—The concentrations of NO_2 , SO_2 , and PM_{10} from any routine activities associated with the proposed 5-year program activities in the Chukchi Sea would be well within the NAAQS. Any air quality impacts from oil spills in the Arctic subregion would be localized and of short duration.

Marine Mammals—Some routine operations could affect marine mammals in the Arctic subregion. Noise generated during exploration and operation activities and by OCS-related vessels and helicopters may temporarily disturb some individuals, causing them to leave or avoid the area. Such effects would likely be short-term and not result in population-level effects. If the disturbance results in the temporary abandonment of young by adults, survival of young may be reduced. Collisions with OCS-related vessels may injure or kill some individuals. Existing permit requirements, regulatory stipulations, and MMS guidelines targeting many of the routine operations would generally limit the likelihood of marine mammals being affected by these operations. Oil spills may expose marine mammals to oil or its weathering products. The potential for a listed marine mammal species to be exposed to oil or its weathering products to individuals of a listed species could potentially have a more significant population-level effect.

Spill cleanup operations could result in short-term disturbance of marine mammals in the vicinity of the cleanup activity, while a collision with a cleanup vessel could injure or kill the affected individual. Disturbance of adults with young during cleanup operations could reduce survival of the young animals.

Terrestrial Mammals—The construction and normal operations of new onshore facilities associated with the proposed action could result in a variety of short-term and long-term impacts to terrestrial mammals. Short-term impacts may be incurred by a variety of species during facility and infrastructure construction. These impacts would largely be behavioral in nature, with affected animals avoiding or vacating the construction areas. Similarly, vehicle and aircraft traffic associated with the proposed action could temporarily disturb mammals near roadways or under flight paths. The presence of a new onshore pipeline may result in the displacement from preferred habitats to less suitable habitats for overwintering muskoxen, calving female caribou, and female caribou and their calves. While population-level effects may not be likely for caribou, local population-level effects may occur for muskoxen because of the small population size in Alaska. In the event of an accidental spill, terrestrial mammals may be exposed via ingestion of contaminated food, inhalation of airborne oil droplets, and direct ingestion of oil during grooming. A variety of lethal and sublethal effects may be likely. However, because most spills would be relatively small (<50 bbl), relatively few individuals would likely be exposed. While some individuals may incur lethal effects, population-level impacts would not be expected for most species. Cleanup activities could temporarily disturb terrestrial mammals in the vicinity of the cleanup operation, causing those animals to vacate the area.

Marine and Coastal Birds—Marine and coastal birds in the Chukchi Sea Planning Area may be affected by the construction of onshore and offshore facilities; by boats, aircraft, and on-land vehicle traffic; and by noise and human activities during normal operations and maintenance activities. In most cases, affected birds would temporarily leave the area; while in other cases, the displacement could be long-term. Construction of onshore facilities and pipelines, offshore pipeline landfalls, and offshore gravel islands to support drilling platforms would result in the permanent disturbance of potential habitat within the immediate footprint of the new facilities and gravel excavation areas. Depending on the species present at and in the vicinity of the construction areas, the numbers of birds affected, and the activity whether nesting, molting, feeding or staging that the affected birds were undergoing at the time of disturbance, the displacement could reduce reproductive, foraging, and survival successes, and might result in population-level impacts.

Accidental spills represent the greatest potential for adversely impacting marine and coastal birds. Spills in offshore locations have the greatest potential for affecting the greatest number of birds, especially if a spill occurs in an area where birds have congregated and are carrying out important activities such as nesting, molting, and staging. Spills in terrestrial habitats would affect relatively few birds unless the spill was to reach a surface water body such as a stream, pond, or lake that provides an important brood-rearing, foraging, or staging habitat. Oil-spill cleanup activities may result in either short-term or long-term displacement of birds from habitats, depending on the size of the spill and the habitats affected.

Fish Resources and EFH—Assuming compliance with existing Federal, state, and local fisheries regulations, policies, and consultations; most impacts to fish resources in the Arctic subregion will be minimized. Effects of accidental spills would depend on the location, timing,
and volume of spills, distribution and ecology of affected fish species, and other environmental factors. Under most circumstances, any single large spill would affect only a small proportion of a given fish population; therefore, overall population levels would not be affected.

Coastal Habitats—Construction of infrastructure such as onshore support bases and pipeline landfalls could result in small areas being lost. Overall potential impacts are predicted to be minor, while impacts could be minor to moderate if oils spills occur and contact the coast.

Seafloor Habitats—Some impacts on other benthic communities in the Arctic subregion could occur due to routine operations and accidents under the proposed action. The magnitude of impacts from an oil spill would depend upon the location of the spill, spill size, type of product spilled, effectiveness of cleanup operations, and other environmental conditions at the time of the spill.

Areas of Special Concern—Development of national park lands in the Arctic planning areas is considered unlikely during the proposed action, thereby minimizing the potential for impacts from routine operations in these areas. Impacts from oil spills that occur adjacent to national park or national wildlife refuge boundaries would depend on spill location, spill size, type of product spilled, weather conditions, environmental conditions at the time of the spill, and effectiveness of cleanup operations. Large oil spills in areas adjacent to the Chukchi Sea Unit of the Alaska Maritime NWR may negatively impact coastal habitats and fauna and also affect subsistence use.

Population, Employment, and Income—Potential effects on population, employment, and regional income from routine operations and oil spills are expected to be limited except for local effects from a large oil spill.

Land Use and Existing Infrastructure—The greatest anticipated impact of the proposed action is to expose new areas to the potential effects from routine operations and accidents. Routine operations would impact land use in the vicinity of new facilities and their associated infrastructure. Impacts associated with platform and pipeline construction would be temporary. An oil spill could alter land use temporarily but would not likely result in long-term changes. The magnitude of the impacts would depend on the size and location of the spill.

Fisheries—Because commercial fisheries in the Arctic subregion are relatively small and localized, potential impacts due to routine operations under the proposed action are less likely unless they occur in the direct vicinity of these localized fisheries. Based on the oil-spill scenarios, most accidents assumed under the proposed action would potentially impact commercial fisheries, with larger spills resulting in greater and potentially more persistent impacts. All spills have the potential to result in reduced or no harvest that may impact local economies.

Sociocultural Systems and Environmental Justice—Potential direct and indirect impacts on sociocultural systems due to noise, visual, and traffic disturbances, as a result of offshore operations for the proposed action, are expected to be limited. Potential direct and indirect impacts on sociocultural systems due to routine operations of offshore pipelines for the proposed action will also be limited because of mitigation and consultation measures. Potential impacts on sociocultural systems from accidents under the proposed action could range greatly, depending

on the location and timing of a spill. Alaska Native populations are present in many coastal areas of Alaska. It is possible that new onshore infrastructure could be located near these populations and produce adverse health or environmental impacts if there are impacts on subsistence resources and harvest patterns. In the case of an oil spill, it is also possible that the potential environmental and health impacts on Alaska Native populations could be disproportionately high or adverse depending on the geographical location of the spill and the effects this may have on subsistence resources and harvests.

Archaeological Resources—Assuming compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources in the Alaska region resulting from routine activities under the proposal will be avoided. Some impact may occur to coastal historic and prehistoric archaeological resources from accidental oil spills. Although it is not possible to predict the precise numbers or types of sites that would be affected, contact with archaeological sites would probably be unavoidable, and the resulting loss of information would be irretrievable, if spills should occur. The magnitude of the impact would depend on the significance and uniqueness of the information lost.



Map 4: Shows the Chukchi Sea Program Area

Other Option 1 (No Sale)

Valuation. The net benefits of production would be zero since no activity would occur.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 8. A summary of the EIS findings follows.

If no sales are scheduled in the Chukchi Sea program area, activities associated with other options proposing a sale in this area would not take place. Environmental impacts from presale seismic activity, exploration drilling, and placement of platforms and transportation of hydrocarbons would not occur. However, environmental impacts would occur elsewhere from importing energy to replace potential OCS production foregone if this option was selected. There are no existing OCS leases in the Chukchi Sea, so no other OCS activity except for the transit of tankers, service vessels, and possibly drilling rigs associated with leases in other planning areas would take place in the area.

Other Option 2 (Offer Entire Planning Area Including 25-mile Buffer in Program Area)

Valuation. The net benefits of anticipated production in this area are estimated at are \$6.37 billion, representing a 5 percent increase in economic resource potential over the proposed program area.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 1. A summary of the EIS findings follows.

This option would increase potential environmental impacts on resources within the 25-mile buffer zone in the Chukchi Sea. Overall impacts on water quality, air quality, marine mammals, marine and coastal birds, benthic communities, and fish resources would be increased. Impacts from vessel traffic, aircraft, offshore and onshore pipeline construction, and onshore support facilities would still exist. There might be gravel islands or ice roads constructed in the Chukchi Sea under this option, thus creating potential impacts arising from these facilities. Possible impacts to polar bears would be increased. The non-existence of a 25-mile buffer might increase the risk to the bowhead whales during their spring migration.

The potential for adverse impacts from oil spills would be increased compared with that for the proposed action. This option could also increase potential effects of a large oil spill on portions of Chukchi Sea Unit of the Alaska Maritime National Wildlife Refuge (Alaska Maritime NWR). Not establishing a 25-mile buffer would substantially increase potential impacts on Native subsistence. Possible adverse health or environmental impacts from changes in subsistence resources and harvest patterns would be increased. An increase in the likelihood of an oil spill would make adverse effects on Native subsistence resources and harvests more likely.

The impacts to terrestrial animals, coastal habitats, land use and existing infrastructure, population, employment, regional income, tourism, and recreation would be essentially the same as those for the proposed action since the need for onshore support facilities and pipelines would not change.

NORTH ALEUTIAN BASIN

Key Comparative Results. The net benefits of anticipated production in this program area are estimated at about \$7.7 billion. The area is ranked 2nd in environmental sensitivity and 3rd in primary productivity. Fourteen companies endorsed leasing in this area, a 27 percent increase over the number responding to the August 2005, RFI.

Selected Comments. The Governor of Alaska, recognizing the importance of Bristol Bay fisheries, concludes that lease sales should be limited to the Sale 92 portion of the North Aleutian Basin. Conditioned upon lease sales being limited to the Sale 92 area, the Governor requested that the President lift the withdrawal for the North Aleutian Basin Planning Area and allow the scheduling of lease sales in the 2007-2012 program. The DOE's Office of Fossil Energy supported MMS's development of the proposed 5-year plan, particularly the proposals related to the OCS in Alaska. Sixteen local or Tribal government organizations submitted resolutions in support of environmentally-sound oil and gas activities in this area. Three were opposed. The Alaska Marine Conservation Council (AMCC) is concerned about the potential ecological, cultural, and economic impacts of offshore oil and gas development in the Bristol Bay and eastern Bering Sea. Friends of Bristol Bay stated that offshore oil exploration is hazardous to the subsistence lifestyle as well as to commercial fisheries. The Bering Sea Fisherman's Association opposes MMS planning in the Alaska regions and cites the ecological significance of Alaska Current Coastal Flows. The Sierra Club, representing 28 groups, stated that the Alaska OCS leasing proposals would endanger a wide range of resources of national significance. Earthjustice, representing 16 groups, opposes MMS planning for the North Aleutian Basin due to the fact that Bristol Bay is home to large populations of marine mammals, seabirds, crab, and fish, including the world's largest sockeye salmon run. It also provides habitat for the endangered Steller's sea lion, threatened northern sea otters, and critically endangered North Pacific right whale, of which there may be only 100 left. Bristol Bay is home to large populations of marine mammals and due to concerns about the migratory patterns of whales, oil spill concerns, and important habitat considerations for polar bears and other animals. Noise disturbances are an issue of particular concern. The Sierra Club, for itself, strongly supports permanent protection for coastal and marine environments and notes that the buybacks in this area 10 years ago were needless and expensive and that the areas should be withdrawn from consideration. Yukon River Drainage Fisheries Association comments that drilling in the North Aleutian Basin threatens Yukon River and Western Alaskan salmon populations, with effects reaching to Interior Alaska.

The AEDC urged MMS to expand planning in Alaska to advance economic diversification and concludesd that impacts on whales and other sea animals can be fully mitigated. The Alaska Chamber of Commerce asked the MMS to consider this area for development. The Alaska Miners Association strongly supported increased MMS program planning in the North Aleutian Basin and viewed this as an incentive to attract companies to risk the time and money to explore the area. Trade groups and non-energy businesses in the lower 48 broadly endorsed MMS actions to expand planning in the North Aleutian Basin area. Fourteen companies expressed interest in the area.

Proposed Program Option

Offer for leasing consideration only that area offered in Lease Sale 92 held in 1988: two sales (in 2010 and 2012), in the program area depicted in Map 5.

Other Options Considered

- (1) No sale.
- (2) Offer the entire planning area as proposed in the DPP.

Discussion

Proposed Program Option (2 Sales in Sale 92 Area)

Valuation. The net benefits of anticipated production in the proposed program area are estimated at \$7.7 billion.

Environmental Impacts. This area is analyzed in the draft EIS under Alternative 7. A summary of the EIS findings follows.

The proposed program area option reduces the area that would be offered in a North Aleutian Basin lease sale to 990 blocks. However, it includes the entire geographic area in which program-related offshore oil and primarily gas activities were projected to occur under the Alternative 1 development scenario in the draft EIS. It is not expected to substantially affect the impact levels that would occur under Alternative 1, as discussed in Option 3. However, by limiting oil-related activities to the southern portion of the planning area, it would reduce slightly the already slim risk of adverse impacts to the Steller's sea lion and Steller's eider.



Map 5: Shows the North Aleutian Basin Program Area

Other Option 1 (No Sale)

Valuation. The net benefits of production would be zero since no activity would occur.

Environmental Impacts. This option is analyzed in the draft EIS under Alternatives 2 and 8. A summary of the EIS findings follows.

As a result of excluding the North Aleutian Basin Planning Area, there would be two fewer sales in the Alaska Region. The OCS oil and primarily gas activities associated with these sales would not occur. The small amount of liquid hydrocarbons assumed to be developed in the North Aleutian Basin under Alternative 1 of the draft EIS would be replaced with increased domestic production elsewhere or by increased imports. This amount of liquid hydrocarbons would not significantly affect the frequency of import tanker spills versus OCS spills.

Excluding North Aleutian Basin will forego the employment and income gains expected from Alternative 1. Up to 11,500 jobs and \$340,000,000 of income were estimated to result from the potential activity in the area during the life of the 2007-2012 program. Also, this option will mean foregoing the up to five trillion cubic feet of natural gas estimated to be developed in North Aleutian Basin and brought to shore via pipeline during the life of the 2007-2012 program. These local gas resources were identified during scoping as being important for the economic development of the area.

Other Option 2 (Offer Entire Planning Area)

Valuation. The net benefits of anticipated production from this area are estimated at \$7.7 billion, the same as the Proposed Program Option. The location of the largest untested prospects with the vast majority of economic resource potential occurs in the Sale 92 area.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 1. A summary of the EIS findings follows.

Water Quality—Normal operations in the North Aleutian Basin Planning Area could adversely impact coastal water quality. However, these impacts are expected to be local and temporary. Accidental spills to coastal waters could adversely impact water quality. Although impacts would generally be localized, the extent and magnitude of the impacts would depend on the type, size, location, and season of the spill.

Air Quality—Concentrations of NO₂, SO₂, and PM₁₀ from any routine activities associated with the proposed activities in the North Aleutian Basin Planning Area would be within the applicable maximum allowable increases. The concentrations of NO₂, SO₂, and PM₁₀, and CO would remain well within the NAAQS. Any air quality impacts from oil spills would be localized and of short duration. Expected emissions do not appear to be hazardous to human health. The impacts from in situ burning are also very temporary.

Marine Mammals—Marine mammals in the North Aleutian Basin Planning Area could be affected by noise, contaminants, human activity, and ship and helicopter traffic associated with routine OCS operations. Noise generated during exploration, construction, and some normal operations may temporarily disturb some individuals, causing them to leave or avoid the area.

Such effects would likely be short-term and would not be expected to result in population-level effects. While collisions with OCS-related vessels may injure or kill some individuals, collisions would be relatively unlikely because of the low level of traffic that could occur under the analyzed action. Althought the area is considered gas-prone, there could be accidental oil spills that may result in the direct and indirect exposures of marine mammals and their habitats to the oil and subsequent weathering products. Animals could be exposed by the inhalation or ingestion of oil or contaminated foods, which may result in a variety of lethal and sublethal effects. The fouling of fur of some species, such as sea otter and fur seal, could affect thermoregulation and reduce survival. The magnitude of effects from accidental spills would depend on the location, timing, and volume of the spills; the habitats affected by the spills, such as coastal habitats; and the species exposed. The greatest risk to marine mammals would be associated with large spills reaching rookeries and haulouts. Spill cleanup operations could result in short-term disturbance of marine mammals in the vicinity of the cleanup activity, while a collision with a cleanup vessel could injure or kill the affected individual.

Terrestrial Mammals—The construction and normal operations of new onshore pipelines and facilities could result in a variety of short-term and long-term impacts to terrestrial mammals. Construction activities and vehicle and aircraft traffic associated with such activities could temporarily disturb terrestrial mammals at construction sites and along pipelines, roadways, and flight paths. The disturbance of animals by these activities would be short-term in nature and not expected to result in population-level effects. Facility construction could result in the long-term loss of a relatively small amount of habitat and in the death of a few individuals, primarily small mammals such as mice and voles, which are unable to flee the construction areas. The amount of permanent habitat loss would be very small compared to habitat available throughout the planning area. Neither the loss of this small amount of habitat nor the loss of a few individuals within the construction areas are expected to adversely affect populations of the affected species. In the event of an accidental spill, terrestrial mammals may be exposed via ingestion of contaminated food, inhalation of airborne oil droplets, and direct ingestion of oil during grooming, which may result in a variety of lethal and sublethal effects. However, because of the small number and volume of potential spills, relatively few individuals would likely be exposed. Cleanup activities could temporarily disturb terrestrial mammals in the vicinity of the cleanup operation, causing those animals to move from preferred to less optimal habitats, which in turn could affect overall condition.

Marine and Coastal Birds—During exploration, seismic surveys could impact seabirds. Noise from airguns and disturbance from survey vessel traffic could displace foraging seabirds. Offshore exploration activities would not be expected to affect coastal, nearshore birds. Marine and coastal birds may be affected by the construction of onshore and offshore facilities, by boat and aircraft traffic servicing offshore platforms, and by noise and human activities during normal operations and maintenance activities. Potential impacts for many species associated would be short-term and not expected to result in population-level effects. However, depending on the time of year, construction activities near coastal habitats could disrupt nesting, foraging, and overwintering activities of some species, potentially impacting local populations. Although this area is considered gas-prone, in the event of an accidental oil spill, exposed marine and coastal birds may experience a variety of lethal or sublethal effects, and the magnitude and ecological importance of any such effects would depend upon the size and location of the spill, the species and life stage of the exposed birds, and the size of the local bird population. The threatened Steller's eider migrates along the coast of Bristol Bay in large numbers, and some individuals

overwinter within the bay. Thus, a moderate-to-large spill could potentially affect a relatively large number of birds in the area and result in population-level impacts for this species.

Fish Resources and EFH—Displacement of demersal fishes by discharges would be limited to the short time periods that discharges are being released. Offshore construction also could temporarily disturb and/or displace fishes near the construction activity. Any disturbance or displacement is expected to be short-term, hours to a few days, and limited to only the time of the construction activity and shortly thereafter. Although seismic surveys may kill or injure eggs and fry of some fishes, this injury is limited to within 1 or 2 meters of the airgun-discharge ports. Oiled intertidal areas could lead to considerable mortality of eggs and juvenile stages of some pelagic species in the affected areas, and studies indicate that impacted eggs and juvenile stages could lead to reduced adult survival. Although this area is considered gas-prone, several small spills or a single large oil spill could cause localized declines in the abundance of some fishes or shellfishes inhabiting the area, it is anticipated that there would be no long-term effects on overall populations in the area. Accidental oil spills could impact EFH and the species that depend upon them. Although it is not possible to predict the precise degree of potential effects, contact with some EFH resources from an oil spill would probably be unavoidable. The nature of the impact would be largely dependent on the size of the spill, its location, environmental factors, and uniqueness of the affected EFH.

Coastal Habitats—Routine operations could have impacts on coastal areas, barrier beaches, and dunes primarily as a result of pipeline construction, shore base construction, and vessel traffic. The magnitude of these impacts would depend on the location of new construction, the level of shipping activity in a specific area, and existing environmental conditions, such as ongoing shoreline degradation. Although the area is considered gas-prone, potential impacts from spills could occur to both surface and subsurface sands. The magnitude of these impacts would depend on a variety of factors, including the location and size of the spill, remediation efforts, beach conditions such as grain size, and natural localized erosional and depositional patterns. Cleanup operations themselves might also impact beaches and dunes.

Routine operations could have direct impacts on wetlands as a result of construction activities and indirect impacts as a result of poorer water and air quality and altered hydrology. The magnitude of these impacts would depend on the location and extent of new construction, construction practices, and existing environmental conditions. These also would have to be evaluated during site-specific analyses conducted for particular lease sales. Oil spills could also directly impact wetlands. The magnitude of these impacts would depend on a variety of factors, including the location and size of the spill, weather conditions, remediation efforts, and existing environmental conditions such as plant species or substrate type. Cleanup operations themselves could also impact wetlands.

Seafloor Habitats—Routine activities during exploration, development, and production probably would not measurably affect local populations of lower trophic-level organisms. Should a large oil spill occur, the spill and associated cleanup activities would be unlikely to greatly affect populations of lower trophic-level organisms in pelagic waters. However, a large spill could contact some shoreline areas, and lower trophic-level organisms in sensitive intertidal and shallow subtidal habitats could experience lethal and sublethal effects.

Employment, Population, and Income—Potential effects on population, employment, and regional income from routine operations and oil spills are expected to be limited except for local effects from a large oil spill. This is unlikely as the area is considered gas-prone.

Land Use and Existing Infrastructure—Routine operations would impact land use in the vicinity of new processing and transport facilities and their associated infrastructures. Impacts associated with platform and pipeline construction would be temporary. Impacts could result from an influx of workers to the region, as housing and expanded community infrastructure could be needed. Although the area is considered gas-prone, an oil spill could alter land use temporarily but would not likely result in long-term changes. The magnitude of the impacts would depend on the size and location of the spill.

Fisheries—Although there could be some localized, temporary effects on fishery resources, overall populations of biological resources that serve as the basis for recreational fisheries in the area are not expected to be affected by activities associated with routine operations. Although the area is considered gas-prone, the magnitude of effects from accidental spills would depend on the location, timing, and volume of spills, in addition to other environmental factors. Small spills that could occur under this option are unlikely to affect a large number of fish or have a substantial effect on recreational fishing before dilution and weathering reduced concentrations of oil in the water. Consequently, it is anticipated that small spills would not have long-term effects on recreational fishing in Bristol Bay. A large spill within the planning area would likely affect only a small proportion of a given fish population, and it is unlikely that overall fish populations in the area would be measurably affected. However, spills could have localized effects on recreational fishing as a consequence of contamination of fish tissues, damage to fishing gear, degradation of aesthetic values that attract anglers, or temporary closure of fishing areas.

Sociocultural Systems and Environmental Justice—Potential direct and indirect impacts on sociocultural systems due to noise, visual, and traffic disturbances, as a result of offshore operations for this option, are expected to be limited. Potential direct and indirect impacts on sociocultural systems due to routine operations of offshore pipelines will also be limited because of mitigation and consultation measures. Potential impacts on sociocultural systems from accidents could range greatly, depending on the location and timing of a spill. Alaska Native populations are present in many coastal areas of Alaska. It is possible that new onshore infrastructure could be located near these populations and produce adverse health or environmental impacts if there are impacts on subsistence resources and harvest patterns.

Although the area is considered gas-prone, in the case of an oil spill, it is also possible that the potential environmental and health impacts on Alaska Native populations could be disproportionately high or adverse depending on the geographical location of the spill and the effects this may have on subsistence resources and harvests.

Archaeological Resources—Assuming compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources in the Alaska Region resulting from routine activities under the proposal will be avoided. Some impact may occur to coastal historic and prehistoric archaeological resources from accidental oil spills. Although it is not possible to predict the precise numbers or types of sites that would be affected, contact with archaeological sites would probably be unavoidable, and the resulting loss of

information would be irretrievable, if spills should occur. The magnitude of the impact would depend on the significance and uniqueness of the information lost.

COOK INLET

Key Comparative Results. The net benefits for this proposed program area are estimated at \$1.38 billion. The area is ranked 5th in environmental sensitivity and primary productivity. Six companies endorsed leasing in this planning area, double the number responding to the August 2005, RFI.

Selected Comments. The DOE's Office of Fossil Energy supports MMS's development of the proposed 5-year plan, particularly the proposals related to the OCS in Alaska. The Kenai City Council unanimously passed a resolution supporting the inclusion of the two Cook Inlet lease sales in the 2007-2012 Program. Earthjustice, representing 16 groups, stated that Cook Inlet supports vital fishing and that industry lacks interest in purchasing leases in this area; thus, the MMS should not offer it for lease. The Sierra Club, representing 28 groups, stated that the Alaska OCS leasing proposals would endanger a wide range of resources of national significance. The AEDC urged the MMS to expand planning in Alaska to advance economic diversification and concludesd that impacts on whales and other sea animals can be fully mitigated. Numerous non-energy industry entities, from the agricultural sector to local Chambers of Commence, endorsed the DPP and asked for opening of more acreage. Six companies expressed interest in the area.

Proposed Program Option

Proposal as in the DPP: two special interest sales (in 2009 and 2011) in the program area depicted in Map 6.

Other Options Considered

(1) No sale.

Discussion

Proposed Program Option (2 Sales)

Valuation. The net benefits of anticipated production for this proposed program area are estimated at \$1.38 billion.

Environmental Impacts. This area is analyzed in the draft EIS under Alternative 1. A summary of the EIS findings follows.

Water Quality—Normal operations in the Cook Inlet Planning Area could adversely impact water quality. However because of dilution, settling, and flushing, these impacts are expected to be localized and temporary. Similarly, spills to coastal waters could adversely impact water quality. The impacts of these spills will be localized and short term, unless chronic spills occur in a localized area. The extent and magnitude of the impact would depend on the size, location, and season of the spill. Recovery times could be decreased by oil-spill cleanup activities.

Air Quality—Concentrations of NO₂, SO₂, and PM_{10} from any routine activities associated with the proposed 5-Year Program activities in the South Alaska subregion would be within the applicable maximum allowable increases. The concentrations of NO₂, SO₂, PM₁₀, and CO would remain well within the NAAQS. Any air quality impacts from oil spills would be localized and of short duration. Emissions do not appear to be hazardous to human health. The impacts from in situ burning are also very temporary.

Marine Mammals—Noise, contaminants, human activity, and ship and helicopter traffic associated with routine OCS operations in the Cook Inlet Planning Area could affect marine mammals. Noise generated during exploration, construction, and operations may temporarily disturb some individuals, causing them to leave or avoid the area. Such effects would likely be short-term and would not be expected to result in population-level effects. While collisions with OCS-related vessels may injure or kill some individuals, collisions would be relatively unlikely because of the low level of traffic expected from the proposed action. Compliance with the Endangered Species Act (ESA) would further limit the likelihood of routine operations impacting listed marine mammals. Accidental oil spills may result in the direct and indirect exposure of marine mammals and their habitats to the oil and subsequent weathering products. Animals could be exposed by the inhalation or ingestion of oil or contaminated foods, which may result in a variety of lethal and sublethal effects. Fouling of fur of some species, such as sea otters could affect thermoregulation and reduce survival. The magnitude of effects from accidental spills would depend on the location, timing, and volume of the spills; the habitats affected by the spills, e.g., coastal habitats; and the species exposed. The greatest risk to marine mammals would be associated with large spills in coastal habitats. Spill cleanup operations could result in short-term disturbance of marine mammals in the vicinity of the cleanup activity, while a collision with a cleanup vessel could injure or kill the affected individual. Disturbance of adults with young during cleanup could reduce survival of the young animals.

Terrestrial Mammals—The construction and normal operations of new onshore pipelines and facilities could result in a variety of short-term and long-term impacts to terrestrial mammals. Short-term impacts would be largely behavioral in nature, with affected animals avoiding or vacating the construction areas. Similarly, vehicle and aircraft traffic from the proposed action in the Cook Inlet Planning Area could temporarily disturb mammals along pipelines or roadways or along flight paths. The disturbance of animals by these activities would be short-term in nature and not expected to result in population-level effects. Construction of new pipelines and facilities would also result in the long-term loss of some wildlife habitats, as well as the death of a few individuals, primarily small mammals, unable to flee the construction areas. The amount of permanent habitat loss would be relatively small compared to habitat available throughout the planning area, and not expected to result in population-level impacts. Similarly, the loss of a few individuals within the construction areas would not be expected to adversely affect populations of the affected species. In the event of an accidental spill, terrestrial mammals may be exposed via ingestion of contaminated food, inhalation of airborne oil droplets, and direct ingestion of oil during grooming, which may result in a variety of lethal and sublethal effects. However, because most spills would be relatively small (<50 bbl), relatively few individuals would likely be exposed. While some individual, especially oil-sensitive species, such as the river otter, may incur lethal effects, population-level impacts would not be expected for most species. Cleanup activities could temporarily disturb terrestrial mammals in the vicinity of the cleanup operation, causing those animals to move from preferred to less optimal habitats, which, in turn, could affect the overall condition. Such displacement would be limited to only those relatively few

animals in the vicinity of the cleanup activity and, thus, would not be expected to result in population-level effects.

Marine and Coastal Birds—Marine and coastal birds may be affected by the construction of onshore and offshore facilities, by boat and aircraft traffic servicing offshore platforms, and by noise and human activities during normal operations and maintenance activities. For most routine operations, the primary effect would be the disturbance of birds in the vicinity of the operation, causing them to temporarily leave the area. Depending on the time of year, construction activities near coastal habitats could disrupt nesting, foraging, and overwintering activities of some species, potentially impacting local populations. Compliance with ESA regulations and coordination with the National Marine Fisheries and U.S. Fish and Wildlife Services (FWS) would ensure that lease-specific operations would be conducted in a manner that avoids or greatly minimizes the potential for impacting these species. Accidental oil spills pose the greatest threat to marine and coastal birds, affecting both birds and their habitats. Exposed birds may experience a variety of lethal or sublethal effects, and the magnitude and ecological importance of any effects would depend upon the size and location of the spill, the species and life stage of the exposed birds, and the size of the local bird population. Spill cleanup activities may also disturb birds in the vicinity of the cleanup, causing them to leave the vicinity of the cleanup activity.

Fish Resources and EFH—Fishes could be disturbed and displaced from the immediate vicinity of drilling discharges for short time periods. Offshore construction also could temporarily disturb and/or displace fishes proximate to the construction activity. Although seismic surveys may kill or injure eggs and fry of some fishes, this injury is limited to within 1 meter or 2 meters of the airgun-discharge ports. Thus, seismic surveys probably would have no appreciable adverse effects on fish subpopulations. Oiled intertidal areas could lead to considerable mortality of eggs and juvenile stages of some pelagic species in the affected areas. Studies indicate that impacted eggs and juvenile stages could lead to reduced adult survival. Eggs and fry of some bentho-pelagic and demersal fishes could experience lethal and sublethal effects from oil contact. Although multiple small spills or a single large spill could cause declines of subpopulations of multiple species inhabiting the Cook Inlet Program Area, it is anticipated that there would be no long-term effects on overall fish populations in the central Gulf of Alaska. Accidental oil spills could impact EFH and the species that depend upon them. The nature of the impact would be largely dependent on the size of spill, location, environmental factors, and uniqueness of the affected EFH. Large spills that reach coastal streams and intertidal areas used for spawning by anadromous salmon could have more persistent impacts and require remediation.

Seafloor Habitats—Routine operations during exploration, development, and production activities under the proposed action probably would not measurably affect local populations of lower trophic-level organisms. In the event of a large oil spill, populations of lower trophic-level organisms in pelagic waters would not be greatly affected by the spill and associated cleanup activities. However, a large spill could contact some shoreline areas in Cook Inlet, and lower trophic-level organisms in sensitive intertidal and shallow subtidal habitats could experience lethal and sublethal effects.

Areas of Special Concern—Development of onshore facilities within national park lands in the Cook Inlet Planning Area is considered unlikely under the proposed action; thereby making impacts from routine OCS operations unlikely in these areas. However, offshore construction of pipelines and platforms could have temporary effects on wildlife due to noise and activity levels and on scenic values for park visitors. Development may be allowed in the Gulf of Alaska Unit of the Alaska Maritime NWR. However, it is anticipated that reviews of individual lease sales would minimize the potential for impacts from routine operations due to development activities. No OCS-related development would occur in the Alaska Peninsula Unit of the Alaska Maritime NWR. Effects from oil spills that occur adjacent to national park or NWR boundaries would depend on spill location, spill size, weather conditions at the time of the spill, and the effectiveness of cleanup operations. Large oil spills in areas adjacent to the Gulf of Alaska or Alaska Peninsula Units of the Alaska Maritime NWR could negatively impact coastal habitats and fauna and could also affect subsistence use, commercial or recreational fisheries, and tourism.

Employment, Population, and Income—Potential effects on population, employment, and regional income from routine operations and oil spills are expected to be limited except for local effects from a large oil spill.

Land Use and Existing Infrastructure—Routine operations from the proposed action would have a low impact on the land use and infrastructure of the affected areas of the Cook Inlet Planning Area. Accidents from the anticipated low level of activity also are expected to have minimal impact on land use and infrastructure.

Fisheries—Overall populations of biological resources that serve as the basis for commercial fisheries in the Cook Inlet Planning Area are not expected to be altered by routine exploration, development, or production activities conducted as a result of lease sales under the proposed action. The level of effects from accidental spills would depend on the location, timing, and volume of spills, spill response activities, and other environmental factors. Small spills that may occur under the proposed action are unlikely to have a substantial effect on commercial fishing. A single large spill could affect a small proportion of a given fish population within Cook Inlet, although substantial temporary effects on populations could occur if important habitat areas were contaminated. There could be effects on commercial fishing as a consequence of reduced catch, loss of gear, or loss of fishing opportunities during cleanup and recovery periods. The populations of biological resources that serve as the basis for recreational fisheries in the Cook Inlet are not expected to experience population-level impacts as a result of activities associated with routine operations. The magnitude of effects from accidental spills would depend on the location, timing, and volume of spills, in addition to other environmental factors. Spills could have localized effects on recreational fishing as a consequence of contamination of fish tissues, damage to fishing gear, degradation of aesthetic values that attract fishers, or temporary closure of fishing areas.

Tourism and Recreation—Routine operations would have limited effects on recreation and tourism, with potential adverse impacts to sightseeing, boating, fishing, and hiking activities. Temporary impacts would occur if a spill reached a recreational-use area. The magnitude of these impacts would depend on factors such as the size and location of the spill, and it would likely be greatest if the spill occurred during the peak recreational season.

Sociocultural Systems and Environmental Justice-Potential direct and indirect impacts on sociocultural systems due to noise, visual, and traffic disturbances, as a result of offshore operations for the proposed action, are expected to be limited. Potential direct and indirect impacts on sociocultural systems due to routine operations of offshore pipelines for the proposed action will also be limited because of mitigation and consultation measures. Potential impacts on sociocultural systems from routine operations under the proposed action would be limited but variable, with the least significant effects expected near the Cook Inlet Planning Area which is already experiencing oil and gas development. Potential impacts on sociocultural systems from accidents under the proposed action could range greatly, depending on the location and timing of a spill. A significant portion of the Alaska Native population is present in many coastal areas of Alaska. It is possible that new onshore and offshore infrastructure could be located near these populations and produce adverse health or environmental impacts if there are impacts on subsistence resources and harvest patterns. In the case of an oil spill, it is also possible that the potential environmental and health impacts on Alaska Native populations could be disproportionately high or adverse depending on the geographical location of the spill and the effects this could have on subsistence resources and harvests.

Archaeological Resources—Assuming compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources in the Alaska region resulting from routine activities under the proposal will be avoided. Some impact may occur to coastal historic and prehistoric archaeological resources from accidental oil spills. Although it is not possible to predict the precise numbers or types of sites that would be affected, contact with archaeological sites would probably be unavoidable, and the resulting loss of information would be irretrievable, if spills should occur. The magnitude of the impact would depend on the significance and uniqueness of the information lost.

Other Information. The Cook Inlet Planning Area is included on the schedule as a special interest sale area. The sales are proposed for 2009 and 2011, but before MMS proceeds, it will issue a request for nominations and comments and will move forward only after consideration of the comments received in response to annual calls for information. If the industry interest reflected in comments on a call for information do not support consideration of a sale, the sale will be postponed and a request for nominations and comments will be issued again the following year, and so on through the 5-year schedule, until a sale is held or the schedule expires.



Map 6: Shows the Cook Inlet Program Area

Other Option 1 (No Sale)

Valuation. The net benefits of production would be zero since no activity would occur.

Environmental Impacts. This option is analyzed in the draft EIS under Alternatives 3 and 8. A summary of the EIS findings follows.

The choice of this option would eliminate activities associated with other options proposing a sale or sales in the planning area. Impacts from presale seismic activity, exploration drilling, the placement of platforms and pipelines, and accidental oil spills would not take place. However, environmental impacts would occur elsewhere from importing energy to replace potential OCS production foregone if this option was selected. Activities and impacts from development on previously acquired OCS leases could take place. Choice of this option would result in somewhat reduced impacts locally. Impacts to birds, such as the Steller's eider, endangered short-tailed albatross, and Kittlitz murrelets would be less likely with less activity.

GULF OF MEXICO REGION

Draft Proposed Program Decision

The DPP scheduled annual areawide lease sales in the reconfigured Western and Central Planning Areas and one sale in 2007 in the Central Gulf Planning Area in that portion of the area that was identified for Sale 181 in the 5-year program for 1997-2002.

Proposed Program Options

WESTERN GULF OF MEXICO

Key Comparative Results. The net benefits of anticipated production in this proposed program area are estimated at about \$44.44 billion. The area is ranked 3rd in environmental sensitivity and 4th in primary productivity. Fifteen companies endorsed leasing in this planning area, a 50 percent increase over the number responding to the August 2005, RFI.

Selected Comments. The Governor of Texas strongly supports expanded leasing of the U.S. OCS. The two U.S. Senators from Texas and one representative expressed support for the DPP as did the Texas Railroad Commission. The DOE's Office of Fossil Energy supported MMS's development of the proposed 5-year plan, particularly the proposal to continue the annual offering of all the acreage in Central and Western GOM Areas. Numerous non-energy industry entities, from the agricultural sector to local Chambers of Commence, endorsed the DPP and asked for opening of more acreage. Fifteen companies expressed interest in this area.

Proposed Program Option

Proposal as in the DPP: five areawide sales (in 2007, 2008, 2009, 2010, and 2011) in the area depicted in Map 7.

Other Options Considered

(1) No sale.

Discussion

Proposed Program Option (5 Sales)

Valuation. The net benefits of anticipated production in this proposed program area are estimated at \$44.44 billion.

Environmental Impacts. The option for leasing in the Western GOM is analyzed under Alternative 1 in the EIS. A summary of the EIS findings follows.

Water Quality—Overall impacts to marine waters resulting from routine operations, including installation and removal of structures, and operational discharges under the proposed action would be unavoidable. These impacts would be localized and short-term. Compliance with the National Pollution Discharge Elimination System permit requirements would minimize or prevent most impacts to receiving waters caused by discharges from normal operations. Water quality would recover when discharges ceased because of dilution, settling, and mixing. Impacts of accidental releases to water quality would depend on the size of the spill, type of material or product spilled, and environmental factors at the time of the spill.

Air Quality—Routine operations associated with the proposed action would result in levels of NO₂, SO₂, PM₁₀, and CO that are well within national air quality standards. The contributions to O₃ levels, when the standards are exceeded, would be less than 1 percent of the total concentrations. Air quality impacts from accidental oil spills or in situ burning would be localized and short term.

Marine Mammals—Some routine operations could affect marine mammals in the northern GOM. Among the listed species reported in the Gulf, only the endangered sperm whale and West Indian manatee are present in sufficient numbers to potentially be affected by normal operations or spills. Effects to these species would be the same as those that could be incurred by any of the marine mammals that are present in the GOM planning areas. Noise generated during exploration and production activities, platform removal, and OCS-related vessels and helicopters may temporarily disturb some individuals. Collisions with OCS-related vessels may injure or kill some individuals. Many of the effects associated with noise and the presence of OCS-related vessels or structures would likely be short-term and not result in population-level effects. Existing permit requirements, regulatory stipulations, and MMS guidelines targeting many of the routine operations would greatly limit the impact of any potential effects on marine mammals.

Any of the oil-spill scenarios developed for the proposed action may expose marine mammals to oil or its weathering products. The magnitude of effects from accidental spills would depend on the location, timing, and volume of the spills; the environmental settings of the spills (e.g., restricted coastal waterway, deepwater pelagic location), and the species and its ecology exposed to the spills. Spill cleanup operations could result in short-term disturbance of marine mammals

in the vicinity of the cleanup activity, while a collision with a cleanup vessel could injure or kill the affected individual.

Terrestrial Mammals—In the Western GOM, there are no endangered terrestrial mammals that would be impacted by the proposed action.

Marine and Coastal Birds—Routine operations would impact some birds. The nature and magnitude of effects on birds would depend on the specific location, the timing, and the nature and magnitude of the operation, as well as the species and life stage that would be exposed to the operation. For most routine operations, the primary effect would be disturbance of birds in the immediate vicinity of the operation. Because birds tend to habituate to human activities and noise, potential impacts for many species associated with such disturbance would be short-term and would not be expected to result in population-level effects. However, depending on the time of year, construction activities near coastal habitats could disrupt breeding and nesting activities of colonial nesting birds, potentially impacting local populations. Some collision mortality may be expected for birds colliding with offshore platforms and, to a lesser extent, OCS-related helicopters. Collisions at offshore platforms may affect several thousand birds each year as they migrate across the Gulf in spring and fall. While routine operations could affect listed bird species in the same manner as unlisted species, primarily behavioral disturbance, compliance with ESA regulations and coordination with the NMFS and FWS would ensure that leasespecific operations would be conducted in a manner that avoids or greatly minimizes impacts to these species.

Accidental oil spills pose the greatest threat to marine, coastal, and migratory birds, and could affect both birds and their habitats. Exposed birds may experience a variety of lethal or sublethal effects, including reduced reproductive success that could result in population-level effects. The magnitude and ecological importance of any effects would depend upon the size of the spill, the species and life stages that are exposed, and the size of the local bird population. Dispersants used during cleanup may have toxic effects to birds that become inadvertently exposed, while human and vehicle activities may disturb nesting populations or habitats in nearby areas.

Fish Resources and EFH—Routine operations associated with the proposed action will not affect the overall fish population numbers or viability in the GOM. Effects of individual spills would depend on the location, timing, and volume of the spill, in addition to other environmental factors. Considering the small proportion of EFH area that could be affected, potential impacts on EFH due to routine operations under the proposed action would be limited. While most accidents assumed under the proposed action would be small and would have relatively small impacts on EFH, large spills that reach coastal wetlands could have more persistent impacts and could require remediation.

Sea Turtles—Some routine operations could affect individual sea turtles, but population-level impacts are not expected. Existing permit requirements, regulatory stipulations, and MMS guidelines and required mitigation measures targeting many of the routine operations could limit the seriousness of any potential effects on sea turtles. Any of the oil-spill scenarios developed for the proposed action may result in the exposure of one or more sea turtle life stages to oil or its weathered products. The magnitude of effects from accidental spills would depend on the location, timing, and volume of the spills; the environmental settings of the spills; and the species and life stages of sea turtle exposed to the spills. The rapid deployment of spill-response

teams and implementation of cleanup activities could limit the magnitude of impacts incurred by sea turtles in the event of an accidental spill; however, cleanup operations themselves could also impact sea turtle habitats.

Coastal Habitats—Routine operations could have direct impacts on wetlands as a result of construction activities and indirect impacts as a result of poorer water and air quality and altered hydrology. The magnitude of these impacts would depend upon the location and extent of new construction, construction practices, and existing environmental conditions. Oil spills could have direct impacts on wetlands. The magnitude of these impacts would depend on a variety of factors, including the location and size of the spill, weather conditions, remediation efforts, and existing environmental conditions, remediation efforts, and existing environmental conditions themselves could also impact wetlands.

Seafloor Habitats—Impacts on soft-bottom benthic communities could occur due to routine operations and accidents under the proposed action. The magnitude of impacts from an oil spill would depend upon the location of the spill, spill size, type of product spilled, effectiveness of cleanup operations, and other environmental conditions at the time of the spill. The potential risks of spills would have to be determined during site-specific analyses conducted for particular lease sales.

Areas of Special Concern—Overall, impacts on national parks, national wildlife refuges, national estuarine research reserves, and national estuary program sites due to routine operations are expected to be limited under the proposed action because these areas are restricted from development. Impacts from oil spills are unlikely because it is anticipated that 75 percent of the hydrocarbons developed as a result of the 2007-2012 leasing program in the GOM area will occur in deep water (> 330 m) usually located far from the shoreline. Should oil spills reach any of these sites, the impacts would depend on the location and size of the spill, the type of product spilled, weather conditions, effectiveness of cleanup operations, and other environmental conditions at the time of the spill.

Population, Employment and Income—Based on proposed action scenario assumptions, the employment and regional income impact of routine operations would likely be greatest in Texas and Louisiana. Even for the areas most affected, however, added employment demands would not likely tax the local labor market. In many cases, the added employment would maintain jobs that otherwise would be lost as a result of declining activity levels. In areas with a large proportion of impact sensitive industry, such as tourism, the potential incremental impacts of oil spills would likely result in a one-time seasonal decline in business activity.

Land Use and Existing Infrastructure—Impacts to land use and infrastructure from routine operations under the proposed action would occur in all the GOM. Oil spills that reach the coast or are in close proximity to the shoreline could also impact land use and existing infrastructure. The nature and magnitude of these impacts would depend upon the level of new construction, the degree to which the area is already developed, and, in the case of accidental spills, the size and location of the spill.

Fisheries—Biological resources that serve as the basis for recreational fisheries in the GOM are expected to be affected by activities associated with routine operations. The magnitude of effects from accidental spills would depend on the location, timing, and volume of spills, in

addition to other environmental factors. It is anticipated that small spills would not have substantial or long-term effects on recreational fishing in the GOM. Any single large spill would likely affect only a small proportion of a given fish population within the GOM, and it is unlikely that fish resources would be permanently affected. However, spills could have localized effects on recreational fishing as a consequence of contamination of fish tissues, degradation of esthetic values that attract fishers, or temporary closure of fishing areas.

Recreation and Tourism—Routine operations would have limited effects on recreation and tourism, with potential adverse aesthetic impacts to beach recreation and sightseeing and potential positive impacts to diving and recreational fishing. Temporary impacts would occur if an oil spill reached a beach or other recreational-use area. The magnitude of these impacts would depend on factors such as the size and location of the spill, and would likely be greatest if the spill occurred during the peak recreational season.

Sociocultural Systems and Environmental Justice—The greatest impacts to sociocultural systems that are anticipated from the proposed action are expected to result from the ongoing expansion of deepwater activities, which will create jobs that require longer, unbroken periods of work offshore, specialized skills, and in-migration of part of the workforce. Although these trends already exist in the OCS industry, the lease sales associated with the proposed 5-year program will contribute to them. The proposed 5-year program will result in levels of infrastructure use and construction similar to what has been occurring along the Gulf Coast during previous programs. While the distribution of offshore-related activities and infrastructure indicates that some places and populations in this region will continue to be of concern, the incremental contribution of the proposed 2007-2012 OCS Program is not expected to affect those places and populations. No Environmental Justice impacts from accidental oil spills are expected because of the movement of oil and gas activities further away from coastal areas and also, the demographic pattern of more affluent groups living in coastal areas.

Archaeological Resources—Assuming compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources resulting from routine activities under the proposal will be avoided. Based on the scenario for the proposal, some impact could occur to coastal historic and prehistoric archaeological resources from accidental oil spills. Although it is not possible to predict the precise numbers or types of sites that would be affected, contact with archaeological sites would probably be unavoidable, and the resulting loss of information would be irretrievable.



Map 7: Shows the Western Gulf of Mexico Program Area

Other Option 1 (No Sale)

Valuation. The net benefits of production would be zero since no activity would occur.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 8. A summary of the EIS findings follows.

The no sale option would result in five lease sales not occurring in the Western GOM. While this would result in no new impacts to the environment, impacts would still occur from the existing infrastructure. Not holding lease sales for the next 5 years would affect the sustainability of the current industry in this area. The loss of domestically produced oil and gas would result in an increase in imports, and for natural gas, an increase in onshore production, therefore environmental impacts would occur elsewhere.

CENTRAL GULF OF MEXICO

Key Comparative Results. The net benefits of anticipated production in the proposed program area consisting of the entire planning area are estimated at about \$103.93 billion. The net benefits of production in the Sale 205 program area are estimated at \$2.03 billion, which is also included in the larger area estimate. The area is ranked 1st in environmental sensitivity and 2nd in primary productivity. Seventeen companies endorsed leasing in this planning area, a 70 percent increase in the number responding to the August 2005, RFI. Some of that increase can be attributed to the inclusion of area in the Central Gulf that was previously in the Eastern Gulf, the area with the highest industry interest in response to the RFI.

Selected Comments. The Governor of Alabama's support for the MMS federal leasing program is contingent on all OCS activities in waters adjacent to Alabama's coast being carried out in full compliance with Alabama laws and in a manner consistent with Alabama's coastal program. Alabama's Governor supports opening the Sale 181 area and strongly believes that revenue sharing with the adjacent states is essential. The Governor specifically opposes the offering of blocks south and within 15 miles of the Baldwin County coastline. He raises concerns about the visible impacts. Fifteen local governments in Alabama supported expanded access to domestic resources. Louisiana focused on the leasing process and environmental documentation in particular. The State urges the MMS to expand the areas offered for sale and/or assessment and to provide for adequate sharing of federal mineral revenues with states. The Governor of Florida supports withholding lease sales within 100 miles of Florida's coast. The State and the majority of its congressional delegation oppose the new administrative boundary line because it removes nearly 9.4 million areas of water from the Eastern GOM Planning Area and opposes its use for consistency review pursuant to the Coastal Zone Management Act (CZMA). The DOE's Office of Fossil Energy supported MMS's development of the proposed 5-year plan, particularly the proposal to continue the annual offering of all the acreage in Central and Western GOM Areas. Reef Relief asked that the MMS cancel any activity in Lease Sale 181. The Sierra Club, representing 28 groups, stated that "retroactively" applying a pre-existing EIS for a prior Lease Sale 181 proposal would fail to address many important concerns, namely the well-known "Loop Currents" in the GOM. Numerous non-energy industry entities, from the agricultural sector to local Chambers of Commence, endorsed the DPP and asked for opening of more acreage, particularly in the Lease Sale 181 area in the former Eastern GOM Planning Area. Seventeen companies expressed interest in this area.

Proposed Program Option

Proposal as in DPP with the exception of the exclusion of a small portion that is east of the military line $(86^{\circ} 41' \text{ W})$: five areawide sales (in 2008, 2009, 2010, 2011, and 2012) in the area depicted in Map 8; and one sale in 2007 to include only that portion of the Planning Area depicted on Map 8(a).

Other Options Considered

(1) No sale.

Discussion

Proposed Program Option (6 Sales)

Valuation. The net benefits of anticipated production from the proposed program area are estimated at \$103.93 billion.

Environmental Impacts. The option for leasing in the Central GOM is analyzed under Alternative 1 in the EIS. A summary of the EIS findings follows.

Water Quality—Overall impacts to marine waters resulting from routine operations, including installation and removal of structures, and operational discharges under the proposed action would be unavoidable. These impacts would be localized and short-term. The greatest likelihood for adverse impacts would occur in this Planning Area, where most of the activities would occur. Compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements would minimize or prevent most impacts to receiving waters caused by discharges from normal operations. Water quality would recover when discharges ceased because of dilution, settling, and mixing. Impacts of accidental releases to water quality would depend on the size of the spill, type of material or product spilled, and environmental factors at the time of the spill.

Air Quality—Routine operations associated with the proposed action would result in levels of NO₂, SO₂, PM₁₀, and CO that are well within national air quality standards. The contributions to O₃ levels, when the standards are exceeded, would be less than 1 percent of the total concentrations. Air quality impacts from accidental oil spills or in situ burning would be localized and short term.

Marine Mammals—Some routine operations could affect marine mammals in the northern Gulf of Mexico. Among the listed species reported in the Gulf, only the endangered sperm whale and West Indian manatee are present in sufficient numbers to potentially be affected by normal operations or spills. Effects to these species would be the same as those that could be incurred by any of the marine mammals that are present in the GOM. Noise generated during exploration and production activities, platform removal, and OCS-related vessels and helicopters may temporarily disturb some individuals. Collisions with OCS-related vessels may injure or kill some individuals. Many of the effects associated with noise and the presence of OCS-related vessels or structures would likely be short-term and not result in population-level effects.

Existing permit requirements, regulatory stipulations, and MMS guidelines targeting many of the routine operations would greatly limit the impact of any potential effects on marine mammals.

Any of the oil-spill scenarios developed for the proposed action may expose marine mammals to oil or its weathering products. The magnitude of effects from accidental spills would depend on the location, timing, and volume of the spills; the environmental settings of the spills (e.g., restricted coastal waterway, deepwater pelagic location), and the species and its ecology exposed to the spills. Spill cleanup operations could result in short-term disturbance of marine mammals in the vicinity of the cleanup activity, while a collision with a cleanup vessel could injure or kill the affected individual.

Terrestrial Mammals—The four federally endangered Gulf Coast beach mice species and the federally endangered Florida salt marsh vole and their habitats would not be significantly affected by normal operations under the proposed action. Impacts are expected to be minimized through appropriate mitigation and the existence of these species' habitats in protected areas. Because of their locations on inner dunes, the habitats of the beach mice are unlikely to be affected by an accidental offshore oil spill. While the habitat of the Florida salt marsh vole could be affected by an oil spill, this species and its habitat are located far from areas where oil leasing and development may occur under the proposed action. Thus, it is highly unlikely that this habitat would be contacted by an accidental oil spill from OCS oil and gas activities.

Marine and Coastal Birds—Routine operations would impact some birds. The nature and magnitude of effects on birds would depend on the specific location, the timing, and the nature and magnitude of the operation, as well as the species and life stage that would be exposed to the operation. For most routine operations, the primary effect would be disturbance of birds in the immediate vicinity of the operation. Because birds tend to habituate to human activities and noise, potential impacts for many species associated with such disturbance would be short-term and would not be expected to result in population-level effects. However, depending on the time of year, construction activities near coastal habitats could disrupt breeding and nesting activities of colonial nesting birds, potentially impacting local populations. Some collision mortality may be expected for birds colliding with offshore platforms and, to a lesser extent, OCS-related helicopters. Collisions at offshore platforms may affect several thousand birds each year as they migrate across the Gulf in spring and fall. While routine operations could affect listed bird species in the same manner as unlisted species, primarily behavioral disturbance, compliance with ESA regulations and coordination with the NMFS and FWS would ensure that leasespecific operations would be conducted in a manner that avoids or greatly minimizes impacts to these species.

Accidental oil spills pose the greatest threat to marine, coastal, and migratory birds, and could affect both birds and their habitats. Exposed birds may experience a variety of lethal or sublethal effects, including reduced reproductive success that could result in population-level effects. The magnitude and ecological importance of any effects would depend upon the size of the spill, the species and life stages that are exposed, and the size of the local bird population. Dispersants used during cleanup may have toxic effects to birds that become inadvertently exposed, while human and vehicle activities may disturb nesting populations or habitats in nearby areas.

Fish Resources and EFH—Routine operations associated with the proposed action will not affect the overall fish population numbers or viability in the GOM. Effects of individual spills would depend on the location, timing, and volume of the spill, in addition to other environmental factors. Considering the small proportion of EFH area that could be affected, potential impacts on EFH due to routine operations under the proposed action would be limited. While most accidents assumed under the proposed action would be small and would have relatively small impacts on EFH, large spills that reach coastal wetlands could have more persistent impacts and could require remediation. Impacts on Gulf sturgeon associated with routine operations and accidents under the proposed action are expected to be minimal because there is relatively little overlap among the locations that could be affected by activities and the distribution of Gulf sturgeon.

Sea Turtles—Some routine operations could affect individual sea turtles, but population-level impacts are not expected. Existing permit requirements, regulatory stipulations, and MMS guidelines and required mitigation measures targeting many of the routine operations could limit the seriousness of any potential effects on sea turtles. Any of the oil-spill scenarios developed for the proposed action may result in the exposure of one or more sea turtle life stages to oil or its weathered products. The magnitude of effects from accidental spills would depend on the location, timing, and volume of the spills; the environmental settings of the spills; and the species and life stages of sea turtle exposed to the spills. The rapid deployment of spill-response teams and implementation of cleanup activities could limit the magnitude of impacts incurred by sea turtles in the event of an accidental spill; however, cleanup operations themselves could also impact sea turtle habitats.

Coastal Habitats—Routine operations could have direct impacts on wetlands as a result of construction activities and indirect impacts as a result of poorer water and air quality and altered hydrology. The magnitude of these impacts would depend upon the location and extent of new construction, construction practices, and existing environmental conditions. Oil spills could have direct impacts on wetlands. The magnitude of these impacts would depend on a variety of factors, including the location and size of the spill, weather conditions, remediation efforts, and existing environmental conditions such as plant species or substrate type. Cleanup operations themselves could also impact wetlands.

Seafloor Habitats—Impacts on soft-bottom benthic communities could occur due to routine operations and accidents under the proposed action. The magnitude of impacts from an oil spill would depend upon the location of the spill, spill size, type of product spilled, effectiveness of cleanup operations, and other environmental conditions at the time of the spill. The potential risks of spills will be determined during site-specific analyses conducted for particular lease sales.

Areas of Special Concern—Overall, impacts on national parks, national wildlife refuges, national estuarine research reserves, and national estuary program sites due to routine operations are expected to be limited under the proposed action because these areas are restricted from development. Impacts from oil spills are unlikely because we anticipate that 75 percent of the hydrocarbons developed as a result of the 2007-2012 leasing program in the GOM area are expected to occur in deep water (>330 m) usually located far from the shoreline. Should oil spills reach any of these sites, the impacts would depend on the location and size of the spill, the

type of product spilled, weather conditions, effectiveness of cleanup operations, and other environmental conditions at the time of the spill.

Population, Employment and Income—It is anticipated that the employment and regional income impact of routine operations would likely be greatest in Texas and Louisiana. Even for the areas most affected, however, added employment demands would not likely tax the local labor market. In many cases, the added employment would maintain jobs that otherwise would be lost as a result of declining activity levels. In areas with a large proportion of impact sensitive industry, such as tourism, the potential incremental impacts of oil spills would likely result in a one-time seasonal decline in business activity.

Land Use and Existing Infrastructure—Impacts to land use and infrastructure from routine operations under the proposed action would occur in all the GOM. Oil spills that reach the coast or are in close proximity to the shoreline could also impact land use and existing infrastructure. The nature and magnitude of these impacts would depend upon the level of new construction, the degree to which the area is already developed, and, in the case of accidental spills, the size and location of the spill.

Fisheries—Biological resources that serve as the basis for recreational fisheries in the GOM are expected to be affected by activities associated with routine operations. The magnitude of effects from accidental spills would depend on the location, timing, and volume of spills, in addition to other environmental factors. It is anticipated that small spills would not have substantial or long-term effects on recreational fishing in the GOM. Any single large spill would likely affect only a small proportion of a given fish population within the GOM, and it is unlikely that fish resources would be permanently affected. However, spills could have localized effects on recreational fishing as a consequence of contamination of fish tissues, degradation of esthetic values that attract fishers, or temporary closure of fishing areas.

Recreation and Tourism—Routine operations would have limited effects on recreation and tourism, with potential adverse aesthetic impacts to beach recreation and sightseeing and potential positive impacts to diving and recreational fishing. Temporary impacts would occur if an oil spill reached a beach or other recreational-use area. The magnitude of these impacts would depend on factors such as the size and location of the spill, and would likely be greatest if the spill occurred during the peak recreational season.

Sociocultural Systems and Environmental Justice—The greatest impacts to sociocultural systems that are anticipated from the proposed action are expected to result from the ongoing expansion of deepwater activities, which will create jobs that require longer, unbroken periods of work offshore, specialized skills, and in-migration of part of the workforce. Although these trends already exist in the OCS industry; the lease sales associated with the proposed 5-year program will contribute to them. The proposed 5-year program will result in levels of infrastructure use and construction similar to what has been occurring along the Gulf Coast during previous programs. While the distribution of offshore-related activities and infrastructure indicates that some places and populations in the region will continue to be of concern, the incremental contribution of the proposed 2007-2012 OCS Program is not expected to affect those places and populations. No Environmental Justice impacts from accidental oil spills are expected because of the movement of oil and gas activities further away from coastal areas and the demographic pattern of more affluent groups living in coastal areas.

Archaeological Resources—Assuming compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources resulting from routine activities under the proposal will be avoided. Based on the scenario for the proposal, some impact could occur to coastal historic and prehistoric archaeological resources from accidental oil spills. Although it is not possible to predict the precise numbers or types of sites that would be affected, contact with archaeological sites would probably be unavoidable, and the resulting loss of information would be irretrievable.

Other Information. The Governor of Alabama stated his opposition to leasing south and within 15 miles of the Baldwin County coastline. This type of deferral has been and will be addressed at the lease stage, taking into account the Governor's concerns.



Map 8: Shows the Central Gulf of Mexico Program Area



Map 8(a): Shows the Central Gulf of Mexico Program Area

Other Option 1 (No Sale)

Valuation. The net benefits of production would be zero since no activity would occur.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 8. A summary of the EIS findings follows.

The no sale option would result in six lease sales not occurring in the Central GOM. While this would result in no new impacts to the environment from the PP, for ease of comparison, the costbenefit analysis is designed to be a net analysis, and many effects of the No Action Alternative are hidden¹. For example, impacts would still occur from the existing infrastructure and from activities necessary to replace the foregone production. The loss of domestically produced oil and gas would result in an increase in domestic production elsewhere and in increased oil imports, with much of the imported oil being shipped into the GOM, posing the risk of oil spills from supertankers. Some of the foregone natural gas production would be replaced by imports of liquefied natural gas, which would not significantly reduce risks to the environment. The estimates as to how we would replace foregone production are show in table 4 in part IV.A. and are discussed in the surrounding text. However, there would be additional effects that are not discussed elsewhere. Not holding lease sales for the next 5 years would affect the sustainability of the current industry in this area, as companies went out of business, moved to other parts of the world, and moved or got rid of equipment. Skilled labor would be irrevocably lost to other areas or occupations. As the natural cycles of activity corresponding to higher and lower prices have shown, it is not easy, even in a developed area like the GOM, to adjust quickly to a higher level of OCS activity. Furthermore, both the peaks and valleys are costly to the communities that provide goods and services to the industry. The downturns create fiscal and social strains on local communities. Sudden upturns create unanticipated needs for local infrastructure and cause upheaval in the workforce and higher prices in the local economy. A 5-year period of no lease sales would have unprecedented effects on the local communities and their economies, which are highly integrated into the OCS industry.

ATLANTIC OCS REGION

Draft Proposed Program Decision

The DPP scheduled a special interest sale in 2011 in the Mid-Atlantic Planning Area offshore the coast of Virginia. See the discussion on special interest sales under the Proposed Program Option for Cook Inlet, Alaska.

Proposed Program Options

MID-ATLANTIC

Key Comparative Results. The net benefits of anticipated production in this proposed program area are estimated at about \$340 million. The area is ranked 4th in environmental sensitivity and

¹ The cost-benefits analysis is designed so that the No Action alternative shows no effects and each of the other alternatives shows the net difference. This allows the decision maker to focus more easily on the net differences among the various options and among the EIS alternatives.

1st in primary productivity. Twelve companies endorsed leasing in this area, a three-fold increase from the number responding to the August 2005, RIF.

Selected Comments. The Governor of Virginia is carefully considering the draft plan's option to hold a special interest sale in OCS waters offshore Virginia. The Governor of North Carolina protests including a possible special interest lease sale off the Virginia coast in 2011. He concludes that the coastal resources of North Carolina and Virginia are inextricably connected and the proposed sale area ends just miles from the State's border. The Governors of North Carolina, Connecticut, and New Jersey, and New Jersey congressional delegation continue to support the congressional moratoria and the presidential withdrawal. The Governor of New Jersey comments that the proposed special interest sale in the Mid-Atlantic violates the letter and the spirit of the moratoria and even proposed activities along the Atlantic coast are not to be federally funded. New Jersey does not agree with, questions the legitimacy of, and more importantly, does not believe the new boundaries can be used legally by the DOI. The Navy, on behalf of the Department of Defense (DOD), the National Aeronautical and Space Administration, and the Virginia Commercial Space Flight Authority have concerns about possible operational conflicts with energy activities in this area. The Alliance for a Living Ocean opposed the proposal in the Mid-Atlantic and in particular the areas off Virginia in waters that are less than 100 miles from the New Jersey Shore, based on the fact that drilling creates excessive amounts of waste and debris, some containing lead and mercury. The Clean Ocean Action strongly opposed inclusion of this area in the proposed program area and stated that the environmental risks are high for New Jersey and New York and that the potential dangers due to exploring and drilling for oil and gas outweigh the supposed benefits. The Sierra Club, representing 28 groups, stated that the 5-year plan should not include any areas protected by moratoria or executive withdrawal. The Sierra Club, for itself, strongly supported permanent protection for coastal and marine environments. In the Mid-Atlantic they noted that the Sierra Club strongly supports permanent protection for coastal and marine environments, that the buybacks of 10 years ago were needless and expensive, and that the areas should be withdrawn from consideration. Numerous non-energy industry entities, from the agricultural sector to local Chambers of Commence, endorsed the DPP and asked for opening of more acreage. Twelve companies expressed interest in this area.

Proposed Program Option

Proposal as in the DPP: one special interest sale in 2011, excluding the area within 25 miles of the coastline (25-mile buffer) and a no-obstruction zone from the mouth of the Chesapeake Bay off the coastline of Virginia, as depicted in Map 9.

Other Options Considered

- (1) No sale.
- (2) Include the area within 25 miles of the coastline (25-mile buffer). This option can be selected with Option 3.
- (3) Include a no-obstruction zone from the mouth of the Chesapeake Bay off the coastline of Virginia. This option can be selected with Option 2.

Discussion

Proposed Program Option (1 special interest sale)

Valuation. The net benefits of anticipated production in the proposed program area are estimated at \$340 million.

Environmental Impacts. This area is analyzed in the draft EIS under Alternatives 1, 5, and 6. A summary of the EIS findings follows.

The findings for the area in the DPP are itemized below as articulated in Alternative 1 of the draft EIS. The differences in impacts in the proposed program area are set out in these opening paragraphs.

The proposed program area option would reduce potential environmental impacts in resources within the 25-mile buffer zone off the Virginia coast. Overall impacts on water quality, air quality, marine mammals, marine and coastal birds, benthic communities, and fish resources would be reduced when compared to offering the entire area. However, impacts from vessel traffic, aircraft, offshore and onshore pipeline construction, and onshore support facilities would still exist. There still would be a risk of collisions between vessels and marine mammals, including the right whale. A reduction in the chance of a nearshore oil spill would also reduce possible longer term adverse effects on tourism. However, a risk of a large spill from tanker transport of oil would still exist. The 25-mile buffer would eliminate the potential visual impacts from beaches and other recreation sites. The impacts to terrestrial animals, coastal habitats, land use and existing infrastructure, population, employment, and regional income, would be essentially the same as those for Alternative 1 since the need for onshore support facilities and pipelines would not change.

Excluding the area near the mouth of the Chesapeake Bay, the so-called no obstruction zone, would affect impact levels only within the Mid-Atlantic proposed program area. It is assumed that the deletion of the wedge-shaped area offshore the entrance to the Chesapeake Bay would not significantly change the development scenario for the Mid-Atlantic area described under Alternative 1. Therefore, the potential impacts described for Alternative 1 would also remain unchanged under Alternative 6, with one minor exception. The low potential for direct physical impacts to archaeological resources from exploration and development activities under Alternative 1 would be reduced even further.

Alternative 1 findings from the draft EIS follow.

Water Quality—The overall impacts associated with development and production activities on marine water quality would be localized, short to medium term, and would most likely not result in long-term degradation to local water-quality conditions. These impacts would be unavoidable and primarily generated from drilling activities, platform installation and operation, and the routine discharges from support vessels and helicopters. Compliance with NPDES permit requirements would minimize or prevent most impacts to receiving waters caused by discharges from routine activities. Water quality would recover when discharges ceased because of dilution, settling, and mixing. Impacts of accidental releases to water quality would depend on the size of the spill, type of material or product spilled, and environmental factors at the time of

the spill. However, there would be no long-term, widespread impairment of marine water quality.

Air Quality—Concentrations of NO_2 , SO_2 , and PM_{10} from any routine activities associated with the proposed action in the mid-Atlantic would be within the applicable maximum allowable increases. The concentrations of NO_2 , SO_2 , PM_{10} , and CO would remain well within the NAAQS. Impacts from oil spills would be localized and short-term.

Marine Mammals—Underwater noise is expected to be the most prevalent potential impact associated with exploration, development, and production. However, all acoustic impacts are expected to be sublethal and non-debilitating. Vessel and aircraft traffic are expected to result in occasional startle reactions and avoidance responses. A limited number of probable lethal collisions between vessels and endangered whales could occur. However, no collisions would be anticipated between vessels and the smaller cetaceans occurring on the Atlantic OCS. The potential for impacts related to oil spills could lead to skin, respiratory, and digestive problems but are expected to be sublethal and nondebilitating. Other than measurable impacts to the extremely endangered right whale population if any individual is killed, such as in the event of a lethal vessel collision, no changes in population size, distribution, or behavior are expected from the proposed action.

Marine and Coastal Birds—Marine and coastal bird populations on the Mid-Atlantic Planning Area are not expected to be measurably affected by the routine activities assumed for the proposal. Because of the relatively low, estimated number of oil spills, there is a low risk of impact resulting in some losses of marine birds, particularly for pelagic birds and sea birds. The long-term effect could be a small reduction in population sizes for a few species. In the unlikely event that a large spill occurred, it is not expected that marine or coastal bird species would experience measurable impacts at the population level. However, local impacts could, under certain circumstances, be high depending on the location and time of year in which the spill occurred.

Fish Resources and EFH—Impacts on fish resources may result from the discharge of operational effluents, muds, and cuttings; platform and pipeline emplacement; structure removal; lights on offshore rigs; noise associated with routine drilling operations or geophysical surveys; and discharge of formation or produced waters. It is anticipated that individual finfish or shellfish are expected to experience sublethal impacts such as reduced biogenic activity, reduced metabolic functions, or disease. Deaths of a few individuals are also expected. However, no measurable decline in whole populations is expected.

Sea Turtles—Exploration, development, and production activities are not expected to measurably affect the populations of marine turtles in the Mid-Atlantic Planning Area. The generally inshore distribution of these animals, as well as their seasonal geographical distribution on the Atlantic OCS, substantially reduces the potential for impacts stemming from routine oil and gas activities offshore. Other than collisions with vessels and accidental oil spills, potential impacts are expected to be sublethal. A large oil spill could result in more measurable impacts and possibly affect sea turtle populations in the area.

Coastal Habitats—Development and production activities could have impacts on coastal barrier beaches and dunes primarily as a result of pipeline construction and vessel traffic. The magnitude of these impacts would depend on the location of new construction, the level of shipping activity in a specific area, and existing environmental conditions, such as ongoing shoreline degradation. The magnitude of impacts from a large spill would depend on a variety of factors, including the location and size of the spill, weather conditions, remediation efforts, beach conditions, e.g., grain size, existing environmental conditions such as plant species or substrate type, and natural localized erosion and deposition patterns. Cleanup operations themselves might also impact wetlands, estuaries, beaches, and dunes. Adverse impacts on coastal habitats from a large spill can range from insignificant to high degrees of damage, including extensive mortality and loss of habitat.

Seafloor Habitats—During the development and production stages, there would be some unavoidable localized, benthic population reductions due to changes in sediment characteristics from the discharge of drilling muds and cuttings and from the ingestion of spilled oil in sediment by benthic organisms. These effects would be most pronounced in areas of high biological productivity and increased ecological sensitivity, such as nearshore areas, hard bottoms, including reef structures and artificial obstructions, and the heads of submarine canyons. However, the lease stipulations that would be employed, the large area over which the activities would occur, and the extensive timeframe during which activities would likely occur should result in small, if any, adverse impacts to the environment.

Areas of Special Concern—It is unlikely that oil and gas development and production activities will significantly impact areas of special concern within the proposed lease area, although large spills have the potential to threaten protection efforts. Mitigation efforts and thorough contingency planning by multiple parties will minimize the risk to these areas.

Population, Employment and Income—The necessary expertise in development and production of oil and gas does not exist in the Hampton Roads area. Workers with these skills will have to be imported from other areas where offshore drilling is already being done. However, there is a large labor pool in the Hampton Roads area, including workers skilled in construction and maritime trades. These workers could provide support services in the drilling and pipe-laying phases, as well as in the construction of needed onshore facilities such as the service base, gas processing facility, and pipe coating yard. Any increase in population as a result of development and production is not expected to have a significant impact on the housing market or on the economy. Depending on the location, a large spill could affect the recreation, tourism, commercial fishing, and cruise ship economies; with a possible negative effect on the real estate market, resulting in temporary losses of jobs and income.

Land Use and Existing Infrastructure—Given the current level of activity in Hampton Roads, there will be minimum impact on land use or infrastructure as a result of exploration, development, and production activity. The existing industrial/maritime infrastructure in the Hampton Roads area can fulfill the requirements of a support base, as well as boat and helicopter traffic.

Fisheries—Impacts on fish resources may result from the discharge of operational effluents, muds, and cuttings; platform and pipeline emplacement; structure removal; lights on offshore rigs; noise associated with routine drilling operations or geophysical surveys; and discharge of
formation or produced waters. It is anticipated that individual finfish or shellfish are expected to experience sublethal impacts such as reduced biogenic activity, reduced metabolic functions, or disease. Deaths of a few individuals are also expected. However, no measurable decline in whole populations is expected.

Tourism and Recreation—Routine activities associated with oil and gas exploration, development, and production may result in visual, natural, and branding impacts on tourism and recreation. Except in extreme circumstances, impacts are expected to be small or temporary. An oil spill could result in temporary beach closures.

Sociocultural Systems and Environmental Justice—A wider range of activities would occur during development than during exploration. While most would occur in industrial-port areas and have limited sociocultural effects; some, such as pipeline landfalls, might occur outside of these areas. Because of the level of population diversity in the Hampton Roads area, opportunities for work would not be constrained by race or ethnic background and would probably not have a disparate impact on minorities or low-income families. Likewise, if a large oil spill occurred in the area, it probably would not have a disparate impact on minorities or low-income families.

Archaeological Resources—As a result of compliance with existing Federal, state, and local archaeological regulations and policies, most impacts to archaeological resources resulting from routine activities under the proposed action will be avoided. Based on the proposed scenario, some impact could occur to coastal historic and prehistoric archaeological resources from an accidental oil spill. Although it is not possible to predict the precise numbers or types of sites that would be affected, contact with archaeological sites would probably be unavoidable and the resulting loss of information would be irretrievable. The magnitude of the impact would depend on the significance and uniqueness of the information lost.



Map 9: Shows the Mid-Atlantic Program Area

Other Option 1 (No sale)

Valuation. The net benefits of production would be zero as no activity would take place.

Environmental Impacts. This option is analyzed in the draft EIS under Alternatives 4 and 8. A summary of EIS findings follows.

There would be no activity in the Mid-Atlantic area. The small amount of hydrocarbons estimated to be produced would have to be replaced by increased domestic production or increased imports, therefore, environmental impacts would occur elsewhere. Only a small level of activity and production was estimated to occur under Alternative 1; therefore, the level of impacts that would not occur without a sale and resulting activity would be small as well. No activity would eliminate the unlikely possibility of a collision with an endangered right whale by a vessel used in hydrocarbon activities, but could increase the likelihood of spills associated with tanker imports.

Other Option 2 (Include 25-mile buffer)

Valuation. The net benefits of anticipated production from this area would be negligible as the vast majority of the economic resource potential is located beyond 25 miles from shore.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 1. See the discussion of Alternative 1 findings under the Proposed Program Option above.

Other Option 3 (Include no-obstruction zone)

Valuation. The net benefits of anticipated production from this area would be negligible as the vast majority of the economic resource potential is located outside the no-obstruction zone.

Environmental Impacts. This option is analyzed in the draft EIS under Alternative 1. See the discussion of Alternative 1 findings under the Proposed Program Option above.

B. Fair Market Value Options

Introduction

Relevant considerations for formulating and selecting options to assure receipt of fair market value for OCS leases and the rights they convey are discussed below. The full range of options available for the Secretary's consideration in deciding on a PP for 2007-2012 is presented. A brief analysis of fair market value provisions is presented in part IV of this document.

Draft Proposed Program Decision

The DPP decision was to set minimum bid levels by individual lease sale based on market conditions and for continuing use of a two-phase postsale bid evaluation process that has been in effect, with modifications, since 1983 to meet this requirement.

A detailed description of the existing procedures for assuring the receipt of fair market value is presented in a *Federal Register* notice (64 *FR* 37560) that was published on July 12, 1999. Another source for information about fair market value procedures is *Summary of Procedures for Determining Bid Adequacy at Offshore Oil and Gas Lease Sales: Effective July 1999, with Sale 174* (available on the internet at *www.gomr.mms.gov.homepg/lsesale/fmv*).

Proposed Program Options

The MMS analysis of fair market value issues is an ongoing process, and no new options are included for consideration in this proposed program. Changes in the approach for determining the minimum bid level in combination with other policy changes might be considered for the PFP or in subsequent sale-specific documents. Also, as in previous 5-year programs, modifications may be made to the bid adequacy procedures to incorporate knowledge gained from their use in lease sales or in the event the basic underlying lease sale process changes.

Proposed Program Option

Proposal as in the DPP: Set minimum bid levels by individual lease sale based on market conditions and continue use of a two-phase postsale bid evaluation process

Other Options Considered

(1) Minimum bid levels could be specified that would apply to all sales held during the 2007-2012 program. However, this option would remove the flexibility to set minimum bid levels based on changing market conditions or to adjust those levels to conditions unique to specific program areas.

IV. PROPOSED PROGRAM ANALYSES

A. Analysis of Energy Needs

Introduction

Section 18 requires the Secretary to formulate an OCS leasing program to "best meet national energy needs for the five-year period following its approval or reapproval" [18(a)]. In formulating the program the Secretary must consider "the location of such [OCS] regions with respect to, and the relative needs of, regional and national energy markets" [18(a)(2)(C)]. The long lead times that are involved in OCS oil and gas leasing and permitting of exploration, development, and production activities, along with the extended life of oil and gas projects, dictate that the analysis of energy needs look at projections for a period longer than 5 years.

Forecast National Energy Needs

Petroleum and natural gas currently supply almost 65 percent of the Nation's energy needs. Furthermore, the Energy Information Administration (EIA) forecasts that the Nation is poised to become even more dependent on oil and natural gas in the next two decades. The EIA projections, shown in table 1 below, indicate that while the *share* of energy obtained from other sources is likely to increase slightly, the actual *amount* of oil and gas needed to meet the Nation's energy needs is expected to grow 29 percent by 2030.

	2005	2010	2015	2020	2025	2030
Petroleum	40.44	43.14	45.69	48.14	50.57	53.58
	(40.5%)	(40.0%)	(40.0%)	(39.9%)	(39.8%)	(40.0%)
Natural	22.64	24.04	26.67	27.70	27.78	27.66
Gas	(22.7%)	(22.3%)	(23.4%)	(23.0%)	(21.9%)	(20.7%)
Other	36.81	40.69	41.82	44.79	48.64	52.64
	(36.9%)	(37.7%)	(36.6%)	(37.1%)	(38.3%)	(39.3%)
Total	99.89	107.87	114.18	120.63	126.99	133.88

 Table 1: U.S. Energy Consumption (quadrillion British thermal unit (Btu))

Sources: Annual Energy Review 2005, Table 1.3, July 2006, DOE/EIA-0384(2005), for Year 2005 (preliminary historical data)

EIA Annual Energy Outlook 2006, Table A1, February 2006, DOE/EIA-0383 (2006), for Years 2010-2030 (projections)

Note: Numbers in parentheses are percentages of total; percentages may not sum to 100 due to rounding.

As the Nation continues to move towards even greater reliance on oil and natural gas to meet its energy needs, Federal lands can play a central and increasing role in supplying the oil and natural gas needs of the nation. For remaining U.S. technically recoverable oil and gas resources, U.S. Geologic Survey (USGS) estimates for Federal onshore and state offshore lands and the MMS estimates for Federal offshore lands indicate that most of the Nation's remaining resources lie on Federal lands. There is a clear need for a continued high level of leasing activity for oil and gas

in the GOM, the primary OCS region currently available for energy production and development activities. Increased exploration and new production from frontier areas, such as off Alaska and the Atlantic coast could reduce our dependence on imported energy.

Table 2 summarizes EIA's forecast of U.S. crude oil production from 2004 to 2030. It shows projected GOM crude production increasing from 1.48 million barrels (MMbbl) per day in 2004 to 2.41 million barrels per day by 2015 and then declining through 2030. Just as important is a consistent predicted decline of other domestic production after 2004. As a result, the GOM crude production is expected to reach and exceed a 40-percent share of total domestic crude production within 10 years. From a national energy and economic security standpoint,² the Gulf's production takes on even greater importance as the United States tries to maintain domestic oil supplies as a hedge against rising imports of both crude oil and refined products—which are projected to increase considerably over the period studied.

				0	1 57	
	2004	2010	2015	2020	2025	2030
Gulf of Mexico	1.48 (27.3%)	2.34 (39.8%)	2.41 (41.3%)	2.32 (41.8%)	2.12 (42.5%)	2.00 (43.8%)
Other	3.94 (72.7%)	3.54 (60.2%)	3.43 (58.7%)	3.23 (58.2%)	2.87 (57.5%)	2.57 (56.2%)
Total	5.42	5.88	5.84	5.55	4.99	4.57

Table 2: U.S. Crude Oil Production (MMbbl of oil per day)

Source: EIA Annual Energy Outlook 2006, Table A11 and Supplemental Table 101 (www.eia.doe.gov/oiaf/aeo/supplement/suptab_101.xls), February 2006 **Note**: Numbers in parentheses are percentages of total.

Table 3 summarizes EIA's forecast of U.S. natural gas production from 2004 to 2030. It shows projected GOM gas production increasing to 5 trillion cubic feet (Tcf) in 2015, then decreasing through 2030. While production from other supply regions is expected to grow over the next two decades, Gulf production will continue to be an important and stable source of natural gas for the Nation. Offshore natural gas production is projected to spike in 2014 due to the expected development of several deepwater fields, including Mad Dog, Entrada, and Thunder Horse.

² While oil prices are set on the world market, making it difficult to insulate the nation's economy from price changes, maintaining secure supplies of petroleum can help avoid temporary supply disruptions (or threats thereof), and consuming domestic supplies limits the amount of dollars sent overseas, reducing the balance of payments deficit.

	2004	2010	2015	2020	2025	2030
Gulf of Mexico	4.21 (22.8%)	4.28 (23.0%)	5.06 (24.9%)	4.69 (21.9%)	4.23 (20.0%)	3.95 (19.0%)
Other	14.25 (77.2%)	14.3 (77.0%)	15.3 (75.1%)	16.75 (78.1%)	16.93 (80.0%)	16.88 (81.0%)
Total	18.46	18.58	20.36	21.44	21.16	20.83

 Table 3: U.S. Natural Gas Production (Tcf of gas per year)

Source: EIA Annual Energy Outlook 2006, Table A13 and Supplemental Table 102 (www.eia.doe.gov/oiaf/aeo/supplement/suptab_102.xls)

Note: Numbers in parentheses are percentages of total.

The Annual Energy Outlook (AEO) 2006 forecasts increases in domestic energy production, energy imports, and energy consumption over the next 25 years. It also predicts a larger gap between domestic production and consumption than estimated in previous EIA forecasts. While there are many factors that simultaneously affect these forecasts, the primary engine behind the projected increase in this production-consumption gap are assumptions about economic growth. The average annual growth rate for the U.S. economy projected in AEO 2006 is 3 percent of real (inflation-adjusted) gross domestic product (GDP). Although the AEO 2006 forecast of the ratio of final energy expenditures to GDP represents an average annual decline of 1.8 percent, higher long-run economic growth is likely to result in increased domestic energy consumption, whether or not that trend toward a less energy-intensive economy continues. World oil demand is projected to increase as a result of strong demand in developing economies; therefore, world crude oil prices are projected to be about \$56.97 in 2030, as opposed to \$40.49 in 2004. This projection for 2030 has already been surpassed, and prices have remained well above that level all year. If price levels remain at or exceed, current high levels, they may reduce economic growth, which could also slow the growth of energy consumption.

Petroleum demand is projected to grow from 20.8 MMbbl per day in 2004 to 27.6 MMbbl per day in 2030—an average rate of about 1.1 percent per year—led by growth in the transportation sector, which accounts for more than two-thirds of U.S. petroleum consumption and is more than 95 percent reliant on liquid fuels. The growth rate in petroleum demand is lower than in previous forecasts, due to much higher prices than expected over the last year or two. If current high prices abate, consumption growth projections could be too low. Domestic crude oil production is projected to decline at an average annual rate of just over 0.65 percent from 2004 to 2030, to 4.6 MMbbl per day. Projected production is higher in the earlier years of the forecast when projected prices are higher, contributing to lower production later. Projected increases in natural gas plant liquids production and refinery gains generally offset the decline in crude oil production in the first part of the forecast, but neither these gains nor advances in exploration and production technologies offset declining oil production in the latter part of the forecast.

The U.S. natural gas production is projected to increase from 18.5 Tcf in 2004 to 21.6 Tcf in 2019 before beginning a slow decline. The estimate of 21.2 Tcf in 2025 is much lower than the Outlook 2004 estimate, which was 24.0 Tcf of domestic natural gas production in 2025. These estimates include Alaska natural gas, assumed to begin flowing through a new pipeline to be completed by 2015. Net pipeline imports of natural gas, primarily from Canada, are projected to

decline from 2.8 Tcf in 2004 to about 1.2 Tcf in 2030, due to reserve depletion effects and growing domestic demand in Canada. Net imports of liquefied natural gas (LNG) are expected to increase to 4.4 Tcf by 2030, although there are several applications to construct new LNG import terminals not included in the Outlook 2006 reference case assumptions.

Meeting Energy Needs

Contribution of OCS Oil and Gas

The OCS leasing and development program continues to play a very important role in meeting the Nation's energy needs. Natural gas from the OCS supplies about 20 percent of the Nation's domestic gas production. Offshore oil also accounts for about 30 percent of the Nation's domestic oil production. According to *AEO 2006*, net petroleum imports met 58 percent of demand in 2004 and are expected to increase to meet 60 percent of demand in 2025. Production of oil and gas from the OCS directly reduces the amount of oil that must be imported from abroad, much of it from politically unstable regions, thereby lessening the threat to the U.S. economy posed by supply disruptions and higher prices.³

Natural gas is the predominant hydrocarbon⁴ produced on the OCS and is a clean burning, environmentally preferred source of energy for electricity generation. In addition to supplying energy, natural gas is used as a chemical feedstock and is converted into final products like fertilizer, detergents, and glues. Natural gas consumption for electricity generation has increased significantly over the last decade as new generating capacity has been supplied by gas-fired plants. This increase in demand, as well as growing residential demand, raised concerns that the volumes of natural gas available from traditional sources, involving both domestic production and imports from Canada and Mexico, will have to increase dramatically to maintain adequate supplies in the future. The MMS report entitled, *Future Natural Gas Supply From the OCS: An Assessment of the Role of the OCS as Supplier of the Nation's Future Energy Needs (April* 2000), concluded that in 2020 Mexico will not be more than a minor supplier and that Canada's ability to export at the rate projected by EIA will depend heavily on future gas discovery and development on its eastern seaboard. Demand has not grown as sharply as expected in the first half of 2006, but it may grow considerably in the long term, and an especially hot summer or unusually cold winter, could put pressure on the traditional sources of supply.

The GOM OCS is commonly cited as a major source for the additional gas production needed to meet expected demand, and its role could be relatively greater if other sources do not meet expectations. As natural gas prices (an indicator of supply relative to demand) have remained consistently above \$5 per thousand cubic feet and peaked at three to four times that level since the end of 2004, several companies have applied for permits to build new terminals to gather and regassify imported LNG for the U.S. market. However, LNG can be shipped to the global

³ Because oil prices are set on the world market, domestic production cannot prevent most large swings in price. However, as demonstrated in the aftermath of Hurricanes Katrina and Rita, when OCS oil and gas production was disrupted, domestic production does influence prices faced by U.S. consumers, especially during times of crisis.

⁴ If barrels of oil and cubic feet of natural gas produced on the OCS are converted to British Thermal Units, a standard measure of heat content used to allow comparisons of energy sources that are measured in incomparable units, natural gas accounts for about 55 percent of OCS production

markets that command the highest prices and it remains to be seen whether LNG will become a reliable, long-term source of natural gas, sufficient to replace traditional sources during periods of high global demand.

Since 1995, oil production in the GOM has increased by about 35 percent. However, during the same period, deepwater Gulf production of oil has increased almost 500 percent, and gas production has increased more that 550 percent. Without this increase, declining overall domestic production in recent years would have been almost twice as severe. The trend of increasing deepwater production from the Gulf is attributable to the recent contribution of very large fields with high flow rates located in over 1,000 feet of water that have been discovered and developed using new technology. This trend is expected to continue, aided by royalty relief policies for deepwater production and production of gas located deep beneath the continental shelf.

Alternatives to the Contribution of OCS Oil and Gas

If no OCS oil and gas lease sales were held during the period to be covered by the new 5-year program, there would not be a reduction in the Nation's demand for energy equal to what would have been provided by the oil and gas resources anticipated to be discovered and produced as a result of those lease sales. Given increasing world demand for oil and gas, prices would be expected to rise over time should the nation's supply be cut by an amount equal to production anticipated to result from the new 5-year program. The lack of a new program to succeed the current one would lead to some reduction in oil and gas consumed in the United States, but most of the foregone production would be replaced by other sources.

The MMS uses its Market Simulation Model to estimate the amount and percentage of alternative sources of energy the economy would adopt in the unlikely case a particular 5-year program were not approved and implemented. The Model is based on estimates of price elasticities of demand and substitution effects. In this case, elasticity of demand is the extent to which consumers purchase less of a product when the price increases by a certain amount.

Alternative Sources of Oil and Gas. According to the research supporting the model, as shown in Table 4, oil lost from OCS production (should there be no 5-year OCS oil and gas program for 2007-2012) would be replaced by predominantly a substitution of supply sources and a small decrease in demand: 88 percent of OCS production would be replaced by increasing imports, 3 percent from increased onshore production, 4 percent from switching to natural gas, and 5 percent from reduced consumption. Natural gas production lost from the OCS would be replaced as follows: 28 percent from onshore production, 39-40 percent from switching to oil, 16 percent from increasing imports, and 16 percent reduced consumption.

Table 4 shows the most important results of runs comparing the PP to no action. In absolute terms, expectations would be for:

- onshore production to make up 300 million of the 12.1 billion barrels of OCS production lost,
- imports to account for 10.7 billion of the foregone barrels,
- consumption to decline by the equivalent of 600 million barrels, and
- switching to gas to account for the equivalent of 500 million barrels.

MarketSim deals with the oil and gas markets in isolation. In reality, if OCS production were curtailed, less OCS gas would lead to higher prices and more oil imports, more domestic onshore oil and gas production, and less overall consumption than the model shows.

Sector	% of OCS Production	Quantity Involved
Oil		
OCS Production (BBO)	-100%	-12.1
Onshore Production (BBO)	3%	0.3
Imports (BBO)	88%	10.7
Lower Consumption (BBOE)	5%	0.6
Switch to Gas (BBOE)	4%	0.5
Gas		
OCS Production (TCFG)	-100%	-36.3
Onshore Production (TCFG)	28%	10.3
Imports (TCFG)	16%	5.9
Lower Consumption (TCFGE)	16%	5.8
Switch to Oil (TCFGE/BBOE)	39%	14.3/2.6
Induced Oil Imports (BBO)	N/A	2.3

 Table 4: Results of the No Action Alternative

BBO = billion barrels of oil, BBOE = the Btu equivalent of billion barrels of oil, TCFG = trillion cubic feet of natural gas, TCFGE = the Btu equivalent of trillion cubic feet of natural gas. Totals may be less than 100 percent due to rounding.

All these amounts would substitute for the 12.1 billion barrels of oil lost through no action. The distribution of conservation and switching to gas by sector depends on the amount of consumption in each sector and the price elasticities of demand in each sector. Transportation accounted for 69 percent and industrial consumption 25 percent of U.S. oil use in 2004. Residential and commercial consumption accounted for about 6 percent (*AEO 2006*).

Other forms of energy cannot readily substitute for most of this oil in the near term. In the U.S. transportation sector, a consumption decline would probably involve a reduction in miles traveled, the purchase of more fuel-efficient cars, or both. Most energy projections indicate relatively little alternative fuel, such as ethanol, entering the transportation sector for many years. However, ethanol consumption in the transportation sector increased 350 percent from 1996 to 2004, and automobile companies have unveiled and/or announced plans for new gasoline-electric hybrid vehicles as they have gained popularity with customers. Significant additional fuel substitution in response to the relatively small price increase implied by the model would be unlikely. In addition to the modest price increase associated with these scenarios, the costs of replacing the present transportation fuel infrastructure further hinders efforts to extend the use of

alternative transportation fuels. On the other hand, if the current forces affecting supply and demand for oil and gas turn out to be indicative of the future, the loss of supply equivalent to anticipated production from the PP is likely to have a greater effect on prices than previously thought.

In the industrial sector, most uses for which there exists a ready substitute for oil have already converted to the substitute. Many industrial uses such as for products like asphalt and lube oils have few comparable substitutes. Oil use in the residential and commercial sectors is forecast to occur principally at locations without access to natural gas, so little fuel substitution can be expected.

The only applications where significant substitution is likely within a few years are industrial heat and steam and electricity generation. The degree of substitution in these sectors depends on whether oil is competing directly with gas for market share. In the recent past, natural gas and oil did not compete in the boiler market because gas was significantly cheaper on a price per thermal unit basis. Recently, when gas prices rose past the level of oil prices in these sectors, only a modest amount of fuel switching took place. Because of gas's greater efficiency, environmental superiority, and limitations to fuel switching in contemporaneous high efficiency plants, only moderate switching will likely occur unless gas prices rise significantly higher than oil on a thermal basis.

Table 4 also reveals that for OCS gas not produced because of no action, the MMS anticipates the following results in absolute terms:

- 10.3 Tcf of onshore gas production,
- 5.9 Tcf of gas imports (mostly from Canada),
- reduced consumption equivalent to 5.8 Tcf of gas, and
- switching to oil equivalent to 14.3 Tcf of gas.

Substituting for the 36.3 Tcf of OCS natural gas lost through lack of OCS production that would be anticipated as the result of a new 5-year program.

As a result of no action, an additional 13.0 billion barrels of oil (BBO) would have to be imported by the United States, 10.7 BBO to replace foregone oil production and 2.3 BBO to replace foregone natural gas production.

A detailed discussion of the model and alternative sources of energy is given in *Energy Alternatives and the Environment (MMS 2001-096)*. That publication has been updated in late summer for analysis conducted for the proposed program: *Energy Alternatives and the Environment 2007-2012*.

Many alternative sources will contribute to the U.S. energy future. This prediction is buoyed by the fact that the President signed the Energy Policy Act (EPA) of 2005 into law. That Act grants the DOI new responsibilities for renewable energy projects and other alternative uses of the U.S. OCS. Section 388 of that Act gives the Secretary, through MMS, the authority to: (1) grant leases, easements or right-of-ways for renewable energy-related uses on Federal OCS lands, (2) act as a lead agency for coordinating the permitting process with other Federal agencies, and (3)

monitor and regulate those facilities used for renewable energy production and energy support services.

On December 30, 2005, the MMS published an advanced notice of proposed rulemaking in the *Federal Register* (70 FR 77345) as the first step to promulgating rules and implementing the type of program authorized by the EPA. However, alternative energy technologies deployed in the OCS are not expected to make a significant contribution over the next 10 to 15 years.

The Federal or state governments might use taxes, subsidies, or specific measures, like requiring non-gasoline powered vehicles, to encourage or mandate a different mix of energy alternatives than the market would choose. Such government actions would most likely be directed at vehicle or electric generating plant fuels and fuel consumption. Any of these measures favoring a particular energy alternative probably would have important environmental consequences, some of which might be negative

Regional Energy Considerations

For 2004, the following table shows proportional petroleum and natural gas production and consumption by Census Division in the United States. It also shows total energy consumption as a percentage of total U.S. energy consumption for each Census Division.

Census Division*	Production (MBBLS; MMCF)		Consu (MBBLS	Total Energy Consumption (MMBTU)	
	Crude Oil % of U.S. total	Natural Gas % of U.S. total	Petroleum** % of U.S. total	Natural Gas % of U.S. total	% of U.S. total
New England	0.00	0.00	4.42	3.34	4
Middle Atlantic	0.14	1.29	10.83	10.78	11
East North Central	1.26	1.86	13.50	16.08	14
West North Central	3.48	2.21	7.00	5.93	7
South Atlantic	0.21	1.84	15.82	9.76	14
East South Central	1.39	2.81	6.42	5.02	6
West South Central	54.32	62.23	22.64	26.95	24
Mountain	8.97	23.79	5.64	7.29	6
Pacific	30.24	3.97	13.73	14.84	14

Table 5: Proportional Petroleum and Natural Gas Production and Consumptionby Census Division in 2004

* The nine census divisions are as follows:

- (1) New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont,
- (2) Middle Atlantic New Jersey, New York, and Pennsylvania,
- (3) East North Central Illinois, Indiana, Michigan, Ohio, and Wisconsin,
- (4) West North Central Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota,
- (5) South Atlantic Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia,
- (6) East South Central Alabama, Kentucky, Mississippi, and Tennessee,
- (7) West South Central Arkansas, Louisiana, Oklahoma, and Texas,
- (8) Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming, and
- (9) Pacific Alaska, California, Hawaii, Oregon, and Washington.
- ** This includes all petroleum-related products except natural gas.

Table 5 Sources:

- "Crude Oil Production" http://tonto.eia.doe.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_a.htm, December 22, 2005
- EIA Monthly Energy Review (MER) Thermal Conversion Factors, Tables A3 and A4, http://www.eia.doe.gov/emeu/mer/append_a.html
- Natural Gas Annual 2004, Table 3 and Table 15 http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_annual/nga.ht ml, January 4, 2006

Table 5 compares regions of the country regarding oil and gas production and consumption. One general theme is that the western part of the U.S. produces more hydrocarbons than it consumes while the opposite is true for the eastern United States. However, much of the oil production in the Pacific comes from Alaska, skewing the results there. The West South Central Census Division (Arkansas, Louisiana, Oklahoma, and Texas) produces and consumes more oil and gas, as well as overall energy than any other Census Division in the country.

Conclusion

The Nation's current energy situation is similar to the situations faced during the preparation of previous 5-year programs. Domestic petroleum production is continuing to decline and imports are continuing to increase. The *AEO 2006* and forecasts by the National Petroleum Council and others project that domestic consumption over the next 5 years and beyond will increase substantially. While alternative sources are expected to contribute a growing portion of the Nation's domestic energy production, no new technology is forecast to make a paradigm-shifting contribution to domestic energy production in the next 15 years. Crude oil and natural gas are expected to provide the lion's share of the Nation's energy for the foreseeable future. The OCS is one of the largest suppliers of crude oil for the United States, and is the second largest supplier of natural gas, after Texas. Without the huge increase in deepwater oil and gas production from the GOM OCS since 1995, the recent decline in domestic production would have been twice as severe. The Nation's current and projected energy situation will require continued leasing, exploration, and development of OCS lands in an environmentally sound manner.

B. Analysis of Environmental Concerns

Introduction

The Act, as amended, includes provisions for considering environmental protection in managing the Nation's offshore oil and gas resources. The law's amendments contain policies pointing to the importance of applying safeguards to help limit the risks of environmental damage and to protect the human, marine, and coastal environments. Section 18 of the Act mandates that decisions on managing the mineral resources of the OCS strike a proper balance between the potential for discovery and development of oil and gas resources and the potential for adverse environmental impacts. It is therefore important in developing a 5-year program to solicit comments relating to environmental concerns, to consider and analyze carefully the comments

received, and to make use of that information in the development of the EIS prepared for the program.

Environmental Analyses

The DPP identified and discussed environmental concerns associated with the OCS program, focusing on issues raised by commenters. The primary concerns identified have been raised and addressed during the preparation of each previous 5-year program. They include risk of accidental oil spills, ecological effects, and socioeconomic issues. The DPP discussed these concerns and generally summarized the findings of previous 5-year program EISs concerning potential impacts.

A draft EIS for the 5-year program for 2007-2012 has been prepared to accompany this decision document for the Secretary's consideration. Preparation of the EIS began with publication of a Notice of Intent to Prepare an Environmental Impact Statement in the *Federal Register* (65 *FR* 77667). That notice started the formal scoping process by calling for comments and information to be used to determine the scope of the planned EIS, and scoping continued through the close of the comment period on the DPP. The draft EIS analyzes the DPP's leasing schedule along with seven alternatives (see part III of this decision document and chapter 2 of the draft EIS for descriptions of the proposed action and alternatives). The potential environmental impacts that correspond to proposed and alternative lease sale options are summarized following each set of options presented in part III of this document.

There is additional information relating to environmental concerns in the analyses of social costs, environmental sensitivity and marine productivity, and other uses of the OCS presented in part IV.C below. Also, much pertinent information is available in other documents cited and incorporated by reference.

C. Comparative Analysis of OCS Planning Areas

Social Value

Introduction

This section presents the required comparative analysis of section 18 factors and considerations for the proposed program decision. The analyses address the section 18 criteria that lend themselves to quantification as well as those that do not. Factors that are quantified to facilitate comparison among OCS program areas include social benefits and environmental sensitivity and marine productivity. The other factors are addressed more qualitatively. The comparative analysis also takes into account comments received, other considerations pursuant to the Act and NEPA, and applicable judicial opinions.

The MMS divides the U.S. OCS into 26 "planning areas." In the DPP, the MMS used a variety of technical considerations to set the location and timing of a discrete number of specific lease sales in the most promising planning areas to arrive at a "Draft Proposed Program for 2007-2012."

One of these considerations was a cost-benefit, or "net benefits," analysis of the social value of all available resources in the 26 OCS planning areas. The analysis examined the benefits to society associated with OCS oil and natural gas production commensurate with the accompanying costs. Because society would receive benefits from past leasing and the resultant production of OCS oil and gas regardless of the program decision, only the net benefits from proposed new leasing are considered. For the PP, the MMS goes beyond the "relative ranking" of planning areas found in the DPP and performs a "valuation of program alternatives" analysis, which estimates net benefits of anticipated production from each of the EIS alternatives under which lease sales are proposed.⁵ For this net benefits analysis, the MMS estimates and compares the net benefits attributable to each program area, as well as (in table 4) the net benefits anticipated from each alternative.

Estimates of Hydrocarbon Resources and Anticipated Production

Resource estimates from the 2006 National Assessment provide the basis for MMS's evaluation of planning areas. The National Assessment projects the undiscovered, conventionally and economically recoverable oil and natural gas resources located outside of known oil and gas fields on the U.S. OCS. The assessment considers recent geophysical, geological, technological, and economic information and uses a play analysis approach to resource appraisal. A complete description of the methodology and results of resource estimation is available in the MMS report *Outer Continental Shelf Petroleum Assessment 2006*, which may be accessed on the internet at *www.mms.gov/revaldiv/RedNatAssessment.htm*.

Economically recoverable resource estimates from the National Assessment are combined with other information to derive estimates of anticipated production. This additional information includes estimates of the number of blocks expected to be leased, past statistics indicating the number of leased blocks that might be drilled, analyses regarding the number of these drilled blocks expected to yield discoveries, and expectations for discoveries large enough to be commercial. Ultimately, this information is combined in subjective estimates of anticipated production, which provide the basis for valuation of the PP and EIS analyses. Table 6 shows anticipated production estimates for the PP, along with the resulting estimates of Net Economic Value, Environmental Costs, Net Social Value, Consumer Surplus Benefits, and Net Benefits for each program area.

It should be noted that anticipated production can differ from economically recoverable resource estimates, which in turn differ from the technically recoverable estimates shown in the 2006 National Assessment. Technically recoverable estimates are determined without consideration of economic conditions, such as resource prices relative to the costs of exploration, development, production, and transportation. Economic conditions. Anticipated production estimates are a portion of the total economically recoverable resources in the program area that are likely to be developed in the foreseeable future and include only those parts of the planning area to be considered for leasing in a proposed 5-year program. They exclude development activities that

⁵ For the PP, and certainly for the valuation of program alternatives, the MMS usually considers "program areas," rather than "planning areas." Program areas are those portions of planning areas considered for leasing. Note, for example, that the net benefits for the Chukchi Sea Program Area would not include consideration of any resources in those parts of the Chukchi Sea Planning Area omitted from the program area.

are highly speculative or unlikely to occur as a direct result of the proposal under consideration. In mature areas like the GOM, this means that anticipated production estimates amount to a larger proportion of the total economically recoverable resources in the program area. However, in frontier areas, infrastructure constraints may substantially reduce anticipated production in a foreseeable time frame. For example, the 2006 National Assessment reports mean undiscovered, technically recoverable natural gas resources of 76.77 Tcf for the Chukchi Sea province and potentially economically recoverable resources of 7.91 Tcf at \$6.69 per Mcf (assuming a gas transportation system is available). Despite this large natural gas resource potential, table 6 does not indicate any natural gas production in the Chukchi program area. This is largely because there is no transportation system to carry the gas production to outside markets and it is unlikely that a pipeline system will be operational and have capacity to transport large volumes of Chukchi gas until at least 2025. It is possible that construction of gas transportation systems from northern Alaska will be delayed even longer. Therefore, the gas resources in Arctic OCS areas are considered "stranded" for the foreseeable future and are not anticipated to be produced as a result of this PP.

Program Area		Resources						
	Oil (BBO)	Gas (Tcf)	BBOE	Net Economic Value	Envl. Cost	Net Social Value	Consumer Surplus Benefits	Net Benefits
Sale 205 Area	0.149	0.557	0.248	1.70	0.0024	1.70	0.33	2.03
Central Gulf of Mexico	5.445	23.095	9.554	93.69	0.2584	93.43	10.50	103.93
Western Gulf of Mexico	2.021	16.200	4.904	39.36	0.2733	39.09	5.35	44.44
Cook Inlet	0.200	0.200	0.236	1.11	0.0156	1.09	0.29	1.38
Beaufort Sea	1.000	0.000	1.000	5.33	0.0465	5.28	1.30	6.58
Chukchi Sea	1.000	0.000	1.000	3.79	0.0463	3.74	2.63	6.37
North Aleutian Basin	0.200	5.000	1.090	5.48	0.0129	5.47	2.23	7.70
Mid-Atlantic	0.056	0.327	0.114	0.20	0.0018	0.20	0.15	0.34

Table 6: Anticipated Production for the Proposed Program

Note: Oil estimates are expressed in billions of barrels (BBO); natural gas estimates are expressed in Tcf. All dollar values represent net present value in billions of 2007 dollars.

Economic Analysis

Economic Assumptions. The PP is assumed to have a lifespan (leasing and subsequent exploration, development, and production) of approximately 40 years starting in July 2007. Given the uncertainty of future price levels, or the "price paths," and other variables, the MMS uses a price scenario approach in which the inflation-adjusted, or "real," prices for oil and gas are

assumed to remain constant throughout the time period considered for the analysis. This reduces the possible effects of incorrect price path forecasts on the value estimates and allows the decision maker to focus more clearly on comparative benefits.⁶ The MMS has chosen to base its estimates of anticipated production, exploration and development scenarios, and economic analysis on an oil price of \$46 per bbl and a natural gas wellhead price of \$6.96 per mcf. While the oil price is below recent open market prices, the MMS believes it to represent a realistic estimate of the kind of long-term prices the oil and gas industry will be using for making its development decisions. In addition, an examination of previous OCS lease sales and activity levels (including the effects of infrastructure and capital equipment constraints) indicates that current prices have reached a point at which higher price levels are unlikely to have a major effect on activities that result from sales under this PP. While lower prices could have an important effect on the results, it is fairly easy to adjust an approved 5-year schedule to consequent reductions in industry interest. A real discount rate of 7 percent was chosen for the PP analysis.

Figure 1 summarizes the components of the MMS net benefit analysis. The methodology for the economic analysis and the additional assumptions required for the valuation of the PP are described more fully in MMS Report 2006-056.



Figure 1: Components of the Net Benefits Analysis

^{*}The PP estimates are based on resources anticipated to be discovered, developed, and produced as a result of each EIS alternative.

Estimates of Net Economic Value. The net economic value of anticipated oil and gas production represents the net expected present (discounted) worth of oil and gas market values less the discounted real cost of exploring, developing, producing, and transporting the resources to market. The net economic value estimates for each planning area in the PP are based on

⁶ Because the MMS uses the common practice of discounting estimates of future costs and benefits to net present value, the timing of price increases or decreases, as well as the relative rates of price changes, could affect the Net Benefits values in ways that make it difficult for the decision maker to estimate the effects of alternate price assumptions.

production and infrastructure projections appropriate for the schedule of sales for that specific planning area. In addition, the number of wells, platforms, etc. (the exploration and development scenario) used in developing the net economic values are consistent with those used in the environmental cost analysis and the EIS.

Estimates of Environmental Costs. The development and production of OCS oil and gas resources and the transportation of those resources to onshore facilities entail risk of damage to the environment. A serious risk of damage to the Nation's coastal environments is also posed when imported oil is used as an alternative to production of OCS oil and gas resources. The estimation of these risks and the costs associated with resulting environmental damages or the prevention of those damages is the focus of the environmental cost analysis.

Environmental costs are the costs to society not directly considered in the calculation of net economic value. More specifically, they are costs not reflected in the (private) exploration, development, production, and transportation costs associated with getting OCS oil and gas to market. Such costs are referred to as external costs because they are not factored into normal market transactions and are instead imposed, at least in part, on people other than those who produce or purchase the goods and services from which the costs arise. The environmental cost analysis includes estimates of only such costs that are judged to be readily and accurately quantifiable in monetary terms. The MMS uses the Offshore Environmental Cost Model to estimate environmental costs. This is a nine-sector model that uses data from the latest research to estimate the impact of typical activities associated with OCS production and typical OCS oil spills. Other social and environmental costs that do not lend themselves to monetary quantification, while no less important, are examined in the 5-year program draft EIS.

Net Social Value. Net social value is a more or less complete estimate of net benefits on the supply side. In economic terms, net social value is a measure of net economic rent or net producer surplus from society's point of view.

Consumer Surplus Benefits. Economists refer to net demand-side benefits associated with a product, project, or program as consumer surplus. Consumer surplus is the difference between what consumers would be willing to pay for a service or product if they had to and the (lower) price actually charged. The MMS's estimates of consumer surplus are calculated using the recently updated MarketSim model, which includes simultaneous equation system models for the international oil market and the domestic natural gas market.

Total Net Benefits. The sum of supply- and demand-side net benefits constitutes the total net benefits associated with available program area resources and the program alternatives. The estimated total net benefits of resources in currently available program areas form one of the bases for developing program options.

Valuation of the Proposed Program. Table 7 shows the estimates of the components of the net benefit analysis for the available program areas in the PP. Table 7 compares the total estimated net benefits for each of the EIS alternatives in the PP.

Program Areas	Net Economic Value	Environmental Costs	Net Social Value	Consumer Surplus	Net Benefits
Alternative 1 (Proposed Action)	\$150,660	\$657	\$150,000	\$22,780	\$172,770
Alternative 2 (Exclude All Leasing in the North Aleutian Basin)	\$145,180	\$644	\$144,530	\$20,550	\$165,070
<i>Alternative 3</i> (Exclude All Leasing in Cook Inlet)	\$149,550	\$642	\$148,910	\$22,490	\$171,390
<i>Alternative 4</i> (Exclude All Leasing Offshore Virginia)	\$150,460	\$655	\$149,800	\$22,630	\$172,430
<i>Alternative 5</i> (Exclude Leasing in 25-Mile Buffer in Some Planning Areas)	\$150,660	\$657	\$150,000	\$22,780	\$172,770
<i>Alternative 6</i> (Exclude Leasing in No- Obstruction Zone Offshore Virginia)	\$150,660	\$657	\$150,000	\$22,780	\$172,770
<i>Alternative 7</i> Offer Only that Area Offered in Sale 92 in North Aleutian Basin)	\$150,660	\$657	\$150,000	\$22,780	\$172,770

Table 7: Valuation (Net Benefits) of Program Alternatives(All figures in the table are in discounted millions of 2007 dollars)

Environmental Sensitivity and Marine Productivity

Introduction

Section 18(a)(2)(G) of the Act requires the Secretary to consider the relative environmental sensitivity and marine productivity of the different areas of the OCS as one factor in determining the timing and location of potential natural gas and oil lease sales. To satisfy this requirement, the program areas are ranked in terms of their relative environmental sensitivity and marine productivity.

The marine productivity and environmental sensitivity analysis is not intended to reflect potential risks from offshore oil and gas activities, but is used by the Secretary as one of many considerations when developing the program. Analyses presented within this section are approximations using the best available information and will be further refined throughout the development of the 5-year program. Specific assessments of the potential risk from oil and gas

development have been addressed in the draft EIS for the 5-year program for 2007-2012, which has been prepared to accompany this decision document for the Secretary's consideration.

Relative Environmental Sensitivity

Spilled oil is a major environmental risk from offshore oil and gas activities. The natural resources of coastal ecosystems face the most significant environmental consequences from contact with spilled oil. The Environmental Sensitivity Index (ESI), developed by the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce (DOC) provides a systematic method for compiling data in standardized formats to map shoreline sensitivity to spilled oil. Coastal states and other Federal agencies, including the MMS, assist in ESI development efforts and use ESI products. The ESI ranking approach has a strong scientific basis, and it has proven to be effective as a planning and response tool for over two decades in the United States.

In developing the ESI, the NOAA has accumulated a large database identifying the location of sensitive resources for most coastal areas in the United States. This data is critical to establishing protection priorities and identifying clean up strategies in the event of a spill. Comparison of the standardized data over large areas can assist in identifying relative environmental sensitivity.

While a wide variety of factors contribute to the environmental sensitivity, the predominant factor is the physical characteristics of a coastal area. The ESI provides standardized definitions of shoreline characteristics and uses them to assign shoreline sensitivity rankings. These standards are uniform across all areas of the United States. This enables us to compare OCS planning areas and assess their relative environmental sensitivity in accordance with the Act.

Shorelines are ranked according to their sensitivity to oiling, the natural persistence of oil, and the ease of clean up. The ESI assigns each shoreline segment of the coastal United States a ranking between 1 and 10, where 1 represents shorelines least susceptible to damage by oiling, and 10 represents the locations most likely to be damaged. Examples of shorelines ranked as "1" include steep, exposed rocky cliffs and banks, where oil cannot penetrate into the rock and will quickly be washed off by the action of waves and tides. Shorelines ranked as "10" include protected, vegetated wetlands, such as mangrove swamps and saltwater marshes. See table 8 for a complete description of each ranking. Oil in these areas will remain for a long period of time, penetrate deeply into the substrate, and inflict damage to many kinds of plants and animals. More detailed information on the ESI ranking system can be obtained at www.response.restoration.noaa.gov/esi/esiintro.html.

ESI No.	Description				
	Low Sensitivity				
1	Exposed rocky shores, Exposed, solid man-made structures				
2	Exposed wave-cut platforms in bedrock, mud, or clay; Exposed scarps and steep slopes in clay				
3	Fine to medium-grained sand beaches; Scarps and steep slopes in sand				
4	Coarse-grained sand beaches				
5	Mixed sand and gravel beaches				
	High Sensitivity				
6	Gravel beaches; Riprap				
7	Exposed tidal flats				
8	Sheltered rocky shores and sheltered scarps in bedrock, mud, or clay; Sheltered, solid man- made structures; Sheltered riprap; Vegetated, steeply-sloping bluffs				
9	Sheltered tidal flats; Vegetate low banks				
10	Salt- and brackish-water marshes; Freshwater marshes, swamps; Scrub-shrub wetlands.				

 Table 8: ESI Rankings and Respective Description

The ESI data was obtained either directly from NOAA or through MMS's Coastal and Offshore Resource Information System. These ESI line data sets were aggregated or disaggregated as appropriate to represent respective planning areas. Each ESI value was weighted by the length of its line segment. An average rating for the planning area was calculated. For some planning areas, incomplete data sets were used as the best available data to represent that planning area.

The average index values for all the planning areas analyzed in the DPP ranged from a high of 9.6 for the Central GOM with its extensive wetlands to a low of 3.0 for the rocky coastline of the Aleutian Arc. Table 9 reflects the ordinal ranking of the program areas analyzed in the Draft Environmental Impact Statement (DEIS). An average index value for a planning area does not necessarily imply a high level of adverse effects from the OCS development. Even those areas ranked with lower index values have sensitive resources which will require consideration of specific environmental impacts at the sale stage.

	Planning Area		
Central Gulf of Mexico			
	North Aleutian Basin		
	Western Gulf of Mexico		
	Mid-Atlantic		
	Cook Inlet		
	Beaufort Sea		
	Chukchi Sea		

Table 9: OCS Program Areas by Relative Environmental Sensitivity

Relative Marine Productivity

Productivity means the primary productivity of marine plants. Primary productivity is the amount of plant tissue produced through photosynthetic fixation of carbon during a standard period of time. The most common example is simply a plant using energy from the sun to make organic matter. It is the basis for growth in most ecosystems. Phytoplankton, microscopic marine plants, and fixed or rooted plants contribute to the primary productivity of most OCS planning areas. Phytoplankton can occupy all surface waters of a planning area and fix carbon as long as sufficient light and nutrients are available. Inshore waters typically have a much higher primary productivity than most open-ocean waters because of the presence of increased nutrients and light penetration possible to the sediment-water interface allowing for the establishment of fixed vascular plants on the ocean floor. Farther from shore, fewer nutrients, primarily of terrestrial origin, are available for use by phytoplankton, and surface mixing due to wave action, down-dwelling, fronts, and convergence may push some phytoplankton down into the water column where insufficient light allows for photosynthesis to occur.

The methods of measuring phytoplankton productivity are relatively standard and results are normally expressed in terms of chlorophyll-a or the amount of carbon fixed during photosynthesis per square meter of ocean surface per unit time. It is important to note that measurements of phytoplankton can vary greatly both spatially and temporally resulting in significant differences in measurements within and between planning areas. As a result, the reader must be aware of the highly variable mosaic pattern of productivity estimates.

Rank	Program Area	Metric Tons/yr
1	Mid-Atlantic	139,781,399
2	Central Gulf of Mexico	110,234,566
3	North Aleutian Basin	84,251,465
4	Western Gulf of Mexico	31,331,220
5	Cook Inlet	24,152,550
6	Chukchi Sea	8,237,533
7	Beaufort Sea	4,591,039

 Table 10: Primary Production Estimates for Each Program Area

Source: CSA (1990, 1991)

There are two methods to provide an analysis for primary production-total estimated primary production and normalized or average per unit area production. In the first method, the size of the planning area is incorporated into the analysis and can greatly contribute to the overall relative rankings. Therefore, it is possible to have a highly productive on average, but small, planning area that would be lower ranked than a larger planning area with average productivity. In the second method, the sizes of the planning areas are not incorporated into the analysis and the planning areas with the highest average per square meter productivity would be higher ranked. To ensure a complete analysis of the primary productivity of each planning area, as required under the Act, both methods have been used.

Table 10 shows the estimates for the total primary productivity of each planning area in metric tons per year. Estimates range from the highest in the Mid-Atlantic Planning Area, yielding a total primary productivity of over 140 million metric tons of carbon per year to the lowest, 4.5 million metric tons of carbon per year in the Beaufort Sea. For the purposes of this analysis, the planning areas have been broken down into 4 different classes of estimated total primary production, with the first and highest being the Mid-Atlantic Planning Area.

The second group consists of planning areas with total primary productivity values ranging from 85 million to 110 million metric tons of carbon per year. This group includes the Central GOM and the North Aleutian Basin.

Two planning areas fall within the third category of estimated primary productivity, which ranges between values of 24 to 31 million metric tons of carbon per year. This group includes the Western GOM and Cook Inlet Planning Areas.

The fourth and lowest category of estimated primary productivity includes those planning areas with less than 9 million metric tons of carbon per year, the Chukchi Sea and Beaufort Sea Planning Areas.

Planning Area	Pro	ductivity Lev	el *	Variability	Confidence
	High	Medium	Low		
Mid-Atlantic	Х			High	Moderate - High
Central Gulf of Mexico					
Coastal	Х			High	Poor
Offshore		Х		High	Poor
North Aleutian Basin		Х			
Coastal Domain		Х		High	High
Central		Х		High	High
Sea Ice			Х	High	Poor - Moderate
Western Gulf of Mexico					
Embayments		Х		Unknown	Moderate
Coastal		Х		High	Moderate
Offshore		Х		Low	Poor
Cook Inlet	Х			High	Poor-Moderate
Chukchi Sea					
Coastal (Lisburne)		Х		Unknown	Poor-Moderate
Coastal (Barrow)			Х	Unknown	Poor-Moderate
Ice Algae			Х	Unknown	Poor-Moderate
Beaufort Sea			X	High	Poor-Moderate

 Table 11: Relative Annual Water Column Primary Productivity, Variability, and Confidence in Available Data for OCS Program Areas

Source: CSA, 1990

* Relative Phytoplankton productivity categories: High (200-500 g C/m²/year), Moderate (50 - 200 g C/m²/yr), and Low (<50 g C/m²/yr).

Table 11 shows the estimates for the primary productivity per square meter in each program area, broken down where possible in grams of carbon per meter square per year. The high productivity program areas are those with 200-500 g $C/m^2/year$. Two areas are included in this category the Mid-Atlantic and Cook Inlet. The confidence level associated with these estimates are poor to moderate with the exception of the Mid-Atlantic Program Area where the confidence level is moderate to high. The variability of productivity levels within these areas is high.

The moderate productivity program areas are those with ranging from 50-200 g C/m²/yr. The Western GOM, Central GOM and North Aleutian Basin are in this category. The variability of productivity levels within these areas is overall high. Similarly, the confidence level associated with these estimates is fairly poor with the exception of the North Aleutian Basin.

Two program areas, Beaufort Sea and Chukchi Sea fall in the least productive category where primary productivity is less than 50 g C/m2/yr.

References

- Continental Shelf and Associates. 1990. Comparison of Marine Productivity Among Outer Continental Shelf Planning Areas. U.S. Department of Interior, Minerals Management Service. Contract Number 14-35-0001-30487. Herndon, Virginia 20170.
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Industry Interest

Fifty-three companies and 22 trade associations submitted comments in response to the DPP. Table 12 shows how many companies identified a specific planning area for potential leasing in the 2007-2012 Oil and Gas Program. In this table, 19 companies showed interest in the Eastern GOM, 17 in the Central GOM, 15 each in the Western GOM, Chukchi Sea, and Beaufort Sea, 14 in the North Aleutian Basin, 12 in the Mid-Atlantic, six in Cook Inlet, and four in the South Atlantic Planning area. The other 17 planning areas received no specific interest, only broad statements of interest. Some of these areas are under leasing restriction due to the presidential withdrawal (see maps 1. and 2.) and other areas are not.

There was a slight increase in the number of company and trade associations commenting on the DPP compared to the response to the initial August 24, 2005, RFI. The rankings of planning areas changed only slightly. As a result of the DPP comments, the North Aleutian Basin ranked slightly lower compared to the earlier RFI planning area rankings. The other rankings were similar. The Mid-Atlantic planning area had a greater increase in interest than any other planning area. A summary of all industry comments are included in the appendix A.

Planning Area	Number of Companies Expressing Interest for a Specific Planning Area
Eastern Gulf of Mexico	19
Central Gulf of Mexico	17
Western Gulf of Mexico	15
Chukchi Sea	15
Beaufort Sea	15
North Aleutian Basin*	14
Mid-Atlantic*	12
Cook Inlet	6
South Atlantic*	4
North Atlantic*	0
Straits of Florida	0
Southern California*	0
Central California*	0
Northern California*	0
Washington-Oregon*	0
Gulf of Alaska	0
Kodiak	0
Schumagin	0
Aleutian Arc	0
St. George Basin	0
Bowers Basin	0
Aleutian Basin	0
Navarin Basin	0
St. Matthew Hall	0
Norton Basin	0
Hope Basin	0

Table 12: Industry Interest

*These planning areas were withdrawn under section 12 of the Act by an executive withdrawal issued in June 1998 until 2012. For a planning area to be considered for leasing in the 2007-2012 Oil and Gas Leasing Program, the executive withdrawal would need to be revoked.

Equitable Sharing of Developmental Benefits and Environmental Risks

Introduction

Section 18(a)(2)(B) of the Act requires that the Secretary base the timing and location of OCS exploration, production, and development on a consideration of, among other things, "an equitable sharing of developmental benefits and environmental risks among the various regions." Because developmental benefits and many environmental risks often accrue outside the OCS regions, which are portions of land lying under the ocean, analysis of this factor usually goes beyond the strict requirements of the Act and considers the sharing of benefits and risks to the onshore U.S population, particularly in the coastal areas near producing regions of the OCS.

Section 18 does not require that the leasing program achieve an equitable sharing of developmental benefits and environmental risks, nor have the courts set a specific standard of equitable sharing that the Secretary is to achieve. As the court recognized in *California I* and *California II*, the degree to which a proposed 5-year schedule of lease sales might achieve an equitable sharing of benefits and risks must be considered in light of a number of other factors, many of which are not under the control of the Department and some of which greatly affect the options available.

Benefits and Risks

Some benefits and risks of OCS leasing are shared widely while others are concentrated in regions adjacent to areas of OCS oil and gas activity. The benefits that accrue primarily to producing regions and nearby onshore areas are derived primarily from reduced risk of accidents involving tankers carrying imported oil and from expenditures on the factors of production, i.e., labor, land, materials, and equipment. Benefits flowing from Federal government revenues (e.g., royalties) obtained through OCS-related activities tend to be widely distributed among the geographic onshore regions of the United States, including those near OCS oil and gas exploration and production. Financial rewards for profitable operations in the form of stock dividends and increased stock values also tend to be widely distributed, as owners live throughout the country. The benefits of an improved balance of trade are shared nationally as well. The immediate environmental risks of OCS oil and gas activities are borne primarily by producing regions and nearby onshore areas, while some of the financial consequences of those risks (e.g., compensation by responsible parties for natural resource damage and payments into funds established to provide compensation for losses not attributable to specific parties) are shared by companies and individuals throughout the Nation.

The nature of developmental benefits and environmental risks associated with the OCS oil and gas program, as summarized above, has been well documented in previous 5-year program analyses. Those analyses went on to conclude that the 5-year program has a certain innate equity in that the geographic areas bearing the greatest risks also receive a higher share of the benefits while certain financial aspects of both benefits and risks are shared somewhat widely. However, the Secretary can consider those factors mentioned in the previous paragraph that do lead to greater benefits and/or risks for local areas when oil and gas activities occur nearby. Once the Secretary decided on the specifics of the DPP—size, timing, and location—a specific equitable sharing analysis of the decision and each alternative is begun for the proposed program.

The previous equitable sharing analyses also have noted that there are actions that may be taken independent of the 5-year program to influence the equitable sharing of developmental benefits, environmental risks, or both. One such influential development that has occurred since the approval of the 5-year program for 2002-2007 is the enactment of the EPA of 2005, providing for distribution of additional Federal revenues as impact assistance to most coastal states and localities near OCS activity. The coastal impact assistance provisions of the Act are to be funded at \$1 billion over 4 years, differing from a previous version of coastal impact assistance legislation in that the funding is no longer subject to annual appropriations legislation. The Congress can expand, extend, or otherwise revise these provisions during the period covering the next 5-year program, if it believes that doing so would further the equitable sharing of developmental benefits and environmental risks.

The executive withdrawal of huge sections of the OCS, including two entire OCS regions (the Atlantic and the Pacific), from disposition by leasing severely restricts the Secretary's ability to make decisions that retain or enhance equitable sharing. However, in the DPP issued February 2006, the Secretary proposed three sales that could be held in two restricted planning areas, should the President choose to modify the withdrawal affecting those areas. One of these proposed sales would be in Mid-Atlantic Planning Area in the Atlantic OCS Region. The others would be in the North Aleutian Basin in the Alaska OCS Region. Sales in either planning area could lead to oil and gas activities that would result in a broader sharing of both developmental benefits and environmental risks. While some OCS oil and gas activities on leases won in previous sales will continue in the Pacific OCS Region, the level of activity there would not be affected by the proposed program.

Possible Effects of Different 5-Year Program Decisions

Decisions determining the size, timing, and location of OCS leasing in the 5-year program for 2007-2012 can affect the distribution of associated developmental benefits and environmental risks among the coastal regions of the United States. Environmental risks are discussed in great detail in the 5-year program Draft EIS, and environmental impacts associated with specific decision options are summarized in part III.A, which also describes the relationship of EIS alternatives and program decision options. (Decision options usually are offered for individual program areas, and the EIS alternatives are program-wide aggregations of these options.) Developmental benefits—as measured by effects of the Program on employment and personal income—are discussed below.

As in previous 5-year programs, this analysis examines the distribution of developmental benefits among coastal regions near planning areas proposed for OCS lease sales. Due to the long-term withdrawal of the east and west coasts from leasing, Regions III (Florida), IV (Alabama, Mississippi, Louisiana, and Texas) and VII (Alaska) are the only coastal regions examined in the main analysis. In addition, there will be some discussion of Region I (Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia) in case the presidential withdrawal on lease sales in the Mid-Atlantic Program Area is rescinded or otherwise modified such that the proposed Mid-Atlantic lease sale can be held. All other States, coastal and inland, are part of a grouping characterized as the "Rest of the United States," which is included for comparative purposes. The MMS used its recently updated regional economic impact models to estimate the relative economic effects on each of these regions that might result under the alternatives

analyzed in the Draft EIS. These models are the same as those used to estimate employment and income effects for EISs prepared by the MMS, and the updated models have a more integrated approach to such modeling across the OCS regions.

The analysis has determined that the proposed program would have its greatest economic effect in Region IV, which comprises the States adjacent to, and near, the Central and Western GOM OCS Planning Areas. Region IV would receive roughly 65 percent of the employment and personal income generated by the proposed program. Region VII (Alaska) would receive about 6 percent, Region III (Florida) could receive as much as 3 percent, and the rest of the United States would receive the remainder, a little more than a quarter of the total. Should the proposed Mid-Atlantic sale be held and exploration, development, and production activities ensue, the MMS estimates that Region I would receive less than 1 percent of the employment, income, and total economic output generated by the proposed program. These results depend upon the existence and discovery of oil and/or natural gas resources in economic quantities. As described in the Draft EIS, the employment and related effects in the coastal Mid-Atlantic States would be minor, given the lack of established oil and gas infrastructure in the area. If production in the Mid-Atlantic does occur, there would be a gradual buildup of such infrastructure, and more developmental benefits would flow to communities along the East Coast.

These results are consistent with the existence of current infrastructure and the expected location of most of the offshore activity likely to result from the proposed program. Not coincidentally, it is the vicinity of Region IV that is expected to face the most environmental risk as well. It should be noted that the *per capita* share of these developmental benefits is greater for Alaska than for the States in Region IV. Also, to the extent that Alaska continues to develop the means to supply the goods and services needed for offshore oil and gas activities, Region VII would be expected to increase its share of the developmental benefits flowing from the 5-year program for 2007-2012. Because no near-shore areas directly off the coast of Florida are proposed for leasing, it is not expected that much economic activity would result in Region III, and the associated environmental risks would be minimal, if any. However, there are opportunities for Florida industries to benefit from supplying goods and services to the OCS industry operating in the eastern portion of the Central Gulf. Many such opportunities would require investments in related infrastructure.

An analysis of the groups of program options labeled Alternatives 2-7 and 8 in the Draft EIS shows similar patterns of sharing of economic activities. Only the first 2 alternatives would be likely to affect the distribution of developmental benefits to an appreciable extent, and even their effects should be minor in the context of the entire proposed program. Alternative 2, which would exclude the North Aleutian Basin Program Area sales, could cut the Alaska proportion of expected economic activity by 1 or 2 percentage points. (The shares of benefits accruing to Region IV (the 4-State GOM region) and to the Rest of the U.S. would therefore increase slightly.) Likewise, Alternative 3, which would exclude the Cook Inlet Program Area sale, would reduce Region VII's share of developmental benefits but by a smaller amount, probably by less than 1 percentage point. Alternative 4, which would exclude the Mid-Atlantic Program Area sale, should not have much effect on the distribution of developmental benefits, because of the small amount of expected activity and because of the fact that most of the activities in the Mid-Atlantic are likely to be staged out of Region IV unless and until the level of OCS activity increases to the point that it justifies infrastructure development. The alternatives 5, 6, and 7

would not likely change resulting OCS activity levels and, thus, should not affect the distribution of development benefits.

Conclusions

The general findings and conclusions of previous equitable sharing analyses are still valid. Since the distribution of benefits associated with factors of production is linked significantly to the location of OCS oil and gas support industries—which exist primarily along the GOM, Southern California, and Alaska coasts-the Secretary's decision on an OCS leasing schedule for the period 2007-2012 would not be expected to alter substantially the distribution of benefits and risks achieved under previous 5-year programs unless the presidential withdrawal of Pacific and Atlantic planning areas from disposition by leasing were to be lifted and no congressional moratoria on leasing were to be imposed in its place. The exception among the three coastal areas mentioned above has been Southern California, whose exclusion from the three previous programs (1992-1997, 1997-2002, and 2002-2007) has precluded it from sharing in direct benefits and risks resulting from those programs. Despite that fact that the New England, Mid-Atlantic, and South Atlantic States account for over 25 percent of the Nation's oil and natural gas consumption and for only a small percentage of its production, the Atlantic remains the only one of the four OCS regions without any oil and gas activities. Because the Secretary is considering a sale in the Mid-Atlantic Program Area for the proposed program, it would be possible to further equitable sharing by retaining that sale in the proposed schedule, assuming that the current restriction is lifted and no new ones are put in place.

The Federal revenues that traditionally have accrued to adjacent onshore areas, as a result of OCS oil and gas activities will be augmented by the newly enacted impact assistance program, and the additional revenues are to be used for purposes related to mitigation of associated impacts. In addition, the Congress could choose to extend the impact assistance provisions to include states that currently do not meet the definition of "producing states" under the new law. Also, measures such as the implementation of new lease stipulations and operating regulations remain available to reduce the risks borne by the affected areas and foster more equitable sharing, as appropriate.

If the long-term executive withdrawal of Pacific and Atlantic areas from leasing consideration remains in place, the availability of OCS planning areas for leasing consideration in the new 5-year program is severely limited. Under these circumstances, the best attempt at achieving an equitable sharing of benefits and risks would be to continue to focus on the Central and Western GOM, while also including sales in promising areas of the Alaska OCS. Should restrictions be rescinded for all or part of those areas now included, leasing in the Atlantic, and even in the Pacific, could further the long-term equitable sharing of developmental benefits and environmental risks.

Other Uses of the OCS

Section 18(a)(2)(C) requires the Secretary to examine the location of areas considered for leasing with respect to other uses of the resources and space within those areas. Other uses of the OCS that could affect or be affected by oil and gas leasing and ensuing activities are described below. The following types of uses are addressed:

- Subsistence (hunting and fishing activities by Alaska Natives);
- Commercial Fishing;
- EFH and Habitat Areas of Particular Concern [pursuant to section 303(a)(7) of the Magnuson-Stevens Fishery Conservation and Management Act, as amended, and implementing regulations];
- Other Areas of Special Concern (onshore and offshore areas designated for special uses and protections, such as parks and sanctuaries);
- Tourism and Recreation;
- Military and NASA (operating areas in the GOM and Atlantic Regions);
- Liquefied Natural Gas (GOM Region); and
- Nonenergy Marine Mineral Activities.

The information presented below summarizes detailed regional descriptions of the environment that are included in the 5-year program draft EIS. The discussion of options in Part III includes pertinent summaries including "other uses" comments, and all comments that the MMS received are summarized in the appendix.

Alaska Region

Subsistence. Subsistence activities have value in the context of culture, lifestyle, society, and community. Subsistence activities in the Beaufort Sea marine and coastal area focus on the bowhead whale as well as caribou, freshwater and ocean fish, ducks and geese, and bearded seals. Species subject to subsistence activities in the Chukchi Sea area include bowhead whale, beluga whale, caribou, seal, walrus, polar bear, fish, duck, and goose. Bowhead whaling is the single most valued activity in the North Slope subsistence economy today. In the North Aleutian Basin area, subsistence activities focus on fish (salmon and herring), marine mammals (seals and walrus), waterfowl, and shellfish offshore, and caribou and moose onshore. Widely varying subsistence patterns in the vicinity of Cook Inlet reflect the area's diverse population. Generally, the inhabitants of small traditional villages harvest saltwater and freshwater fish and small sea mammals in the summer and fall, moose in the fall, and invertebrates and some sea mammals year round. In the larger industrial communities, the people generally fish in the summer and hunt in the fall, and more households do not partake in subsistence activities. Due to recent declines in the population of beluga whales in Cook Inlet, their harvest is now subject to comanagement by NMFS and the Cook Inlet Marine Mammal Council, which represents Native subsistence hunters. The current comanagement agreement allows for the harvest of one beluga by the Tyonek Native community located on the upper northwest shore of Cook Inlet.

Commercial Fishing In the Beaufort Sea area there is one family operating a commercial fishery focused primarily on cisco and whitefish in the Colville River Delta during summer and fall. The port of Barrow also documented a small amount of commercially landed salmon in 1999. There are currently no commercial fisheries in the Chukchi Sea. Commercial fisheries for

salmon, ground fish, and shellfish are the major economic base in the North Aleutian Basin area. Commercial fishing is an important segment of the local economy of the Cook Inlet region, focusing mainly on salmon and to a lesser degree on crab, shrimp, and halibut.

EFH and Habitat Areas of Particular Concern. EFH has been designated in all of the areas off Alaska that are proposed for leasing. In the Beaufort Sea and Chukchi Sea areas, essential habitat has been established for all five salmon species. Several habitats of particular concern are located in the North Aleutian Basin. In Cook Inlet the habitat designations cover 42 species. The Stefansson Sound Boulder Patch in the Beaufort Sea Planning Area is a designated Habitat Area of Particular Concern. Several Habitats of Particular Concern are located in the North Aleutian Basin.

Other Areas of Special Concern All of the areas proposed for leasing off Alaska are adjacent to coastal portions of National Parks or Wildlife Refuges. The Beaufort Sea program area is adjacent to the Arctic National Wildlife Refuge (ANWR). The Chukchi Sea program area is located off the Alaska Maritime NWR, Chukchi Sea Unit. The North Aleutian Basin area is adjacent to or near the Alaska Maritime NWR, the Alaska Peninsula National Wildlife Refuge, the Izenbek Lagoon National Wildlife Refuge, the Aniakchak Crater National Monument and Preserve, the Bechar of National Wildlife Refuge, the Katmai National Park and Preserve, and the Togiak National Wildlife Refuge. The Cook Inlet program area is near Lake Clark National Park and Preserve, and the Shelikof Strait, which is south of the program area.

The NOAA-Fisheries issued a final rule (50 CFR Part 226) to revise the critical habitat for the northern right whale by designating additional areas in the Northern Pacific Ocean, which include the Bering Sea.

Tourism and Recreation. In the Beaufort Sea and Chukchi Sea areas, recreation activities take place mainly in the summer and include fishing, boating, hunting, hiking, sightseeing, camping, and picnicking. Most nonresident activity is by tour groups that visit Barrow and Deadhorse, both of which have lodging available. Hikers and river rafters also visit ANWR. In the North Aleutian Basin area there is very little developed tourism or recreation, but the area has significant potential due to its scenic coastline and the historic sites. The Cook Inlet area offers abundant high quality tourist and recreation resources that attract numerous State, national, and international visitors. Additional information relating to tourism and recreation in Alaska is available in the draft EIS description of areas of special concern.

Military. Although there are military use areas within the Alaska Region, OCS oil and gas leasing and related activities are not expected to interfere with military operations.

Nonenergy Marine Mineral Activities. There is no current development of offshore nonenergy minerals in any of the Alaska OCS program areas under consideration for oil and gas leasing. There are sand and gravel deposits in the Beaufort Sea, but their value as a construction material is not known.

Gulf of Mexico Region

Commercial Fishing. The GOM produces more fish than any other region of the United States, and the Gulf fisheries are very important to the economies of the adjacent coastal States. The GOM commercial fisheries include nearly 100 species from 33 families. Menhaden is the most important finfish harvested, followed by nine other species of significant value. Shrimp is the most important shellfish, along with various oyster, lobster, and crab species. Louisiana ranked first among Gulf States in total commercial fisheries landed in 1999, followed in descending order by Mississippi, Texas, Florida (west coast), and Alabama.

EFH and Habitat Areas of Particular Concern. Approximately 33 percent of the species managed by the GOM Fisheries Management Council have been selected for Essential Fish Habitat designation. They include invertebrate and reeffish species, red drum and other coastal pelagic species, and highly migratory species such as swordfish, tunas, and sharks. The Management Council has designated nine Habitat Areas of Particular Concern in the Gulf. Only the Flower Garden Banks National Marine Sanctuary, which is located in the Western Gulf Planning Area, is located in an area proposed for leasing.

Other Areas of Special Concern. Special areas in the GOM include a National Marine Sanctuary, National Park System units, National Wildlife Refuges, a National Estuarine Research Reserve, and National Estuary Program areas. The Flower Garden Banks National Marine Sanctuary covers a 124-square kilometer area located 177 miles offshore within the Western GOM Planning Area (including the addition of Stetson Bank in 1996). National Park System units along the Gulf coast that are adjacent to areas considered for leasing include Jean Lafitte National Historic Park and Preserve in Louisiana, Padre Island National Seashore off Texas, and Gulf Islands National Seashore off Mississippi and Alabama. There are 28 National Wildlife Refuges located along the coast from Texas to Alabama. The Weeks Bay National Estuarine Research Reserve encompasses a small estuary in the vicinity of Mobile Bay adjacent to the Central GOM Planning Area. National Estuary Program areas include the Galveston Bay and Corpus Christi Bay systems in Texas, and the Barataria-Terrebonne Estuarine Complex, and Lake Pontchartrain Basin Program in Louisiana.

Tourism and Recreation. The northern GOM coastal zone is one of the major recreational regions of the United States, particularly in connection with marine fishing and beach-related activities. The shorefronts along the Gulf States offer a diversity of natural and developed landscapes and seascapes. The coastal beaches, barrier islands, estuarine bays and sounds, river deltas, and tidal marshes are extensively and intensively used for recreational activity by residents of the Gulf States and tourists from throughout the Nation, as well as from foreign countries. Publicly owned and administered areas, such as national seashores, parks, beaches, and wildlife lands, as well as specially designated preservation areas, such as historic and natural sites and landmarks, wilderness areas, wildlife sanctuaries, and scenic rivers, attract residents and visitors throughout the year. Commercial and private recreational facilities and establishments, such as resorts, marinas, amusement parks, and ornamental gardens, also serve as primary interest areas and support services for people who seek enjoyment from the recreational resources associated with the GOM.

Military. The GOM is the most important over-water testing and training area in the United States, with areas designated for air to surface and air to missile testing, surface vessel testing,

and training for air, surface, mine, and submarine operations. Areas used by the military include the Corpus Christi Operating Area off Texas (mine warfare and aircraft carrier landing training), the New Orleans Operating Area off Louisiana (naval live firing maneuvers), and the Pensacola Operating Area off Alabama and Florida (aircraft carrier landing training, naval vessel shakedown testing, and live firing exercises). The DOI and the DOD coordinate activities and reduce use conflicts according to procedures established in a longstanding Memorandum of Agreement.

Liquefied Natural Gas. Natural gas is liquefied to concentrate a much greater volume of product in a given space to facilitate storage and transportation. In the GOM LNG terminals have been planned, approved and built on the OCS. These facilities will offload LNG from tankers into the existing offshore natural gas pipeline system. Currently in the GOM, more than 10 or these facilities are at the planning or permitting stages. One, the Gulf Gateway facility, began operation 214 kilometers (116 miles) off the coast of Louisiana in 2005.

Nonenergy Marine Mineral Activities. Several minerals in the north-central GOM have the potential to be developed. Two salt and sulphur operations exist on the OCS offshore Louisiana, and other deposits of salt and sulphur are known to occur in the north-central GOM. Sand deposits located in Federal waters in the Ship Shoal area off Louisiana are being considered for use in restoring barrier islands to protect the State's coastal wetlands. Sands in Federal and State waters off Mississippi and Alabama have the potential to be developed for glass production and for coastal restoration uses including beach replenishment.

Mid-Atlantic Region

Commercial Fishing. Commercial fisheries are managed via the Mid-Atlantic Council. Commercial fishery landings are substantial along the Atlantic coast. The entire Atlantic seaboard represents 16.6 percent of the volume and 36.1 percent of the total value of all commercial U.S. landings in 2004 (USDOC, NMFS, 2006). The most productive states were represented by Maine with a total landing value of over \$367 million followed by Massachusetts with \$327 million and Virginia with \$160 million in landings. Virginia had the highest commercial landings weight of all Atlantic states with the total of over 481 million pounds in 2004 valued at over \$24 million dollars. The dominant species making up this total was Atlantic menhaden with a weight of approximately 400 million pounds landed in 2004. The next largest landing totals were blue crabs with 26 million pounds and sea scallops with 19.6 million pounds. The most valuable species throughout the Atlantic states is the American lobster valued at nearly \$366 million in 2004 (only for north Atlantic states and especially for Maine) followed closely by sea scallops valued at over \$321 million. Other species landed in 2004 valued at over \$25 million for all Atlantic states included Atlantic surf clams, quahoq clams, blue crabs, summer flounder, goosefish, Atlantic menhaden, squids, and white shrimp.

EFH and Habitat Areas of Particular Concern. There are numerous EFH designated by the Mid-Atlantic Fishery Management Council. Managed species vary between different fisheries management councils. For the Mid Atlantic states including New York, Pennsylvania, New Jersey, Maryland, Delaware, Virginia, and North Carolina, managed species include Atlantic mackerel, long finned squid, short-finned squid, butterfish, bluefish, spiny dogfish, surf clam, ocean quahoq clam, summer flounder, scup, black sea bass, tilefish, and monkfish. The Highly Migratory Species division of the NMFS manages Atlantic highly migratory species including

tunas, sharks, swordfish, and billfish. For the New England and Mid-Atlantic regions, EFH has identified for a total of 59 species covered by 14 fishery management plans, under the auspices of the New England, Mid-Atlantic, South Atlantic Fisheries Management Councils or the NMFS.

One federally threatened and endangered species, the Shortnose Sturgeon; and a Species of Concern, the Atlantic Sturgeon are found in this area.

Other Areas of Special Concern. There are national marine sanctuaries, national seashores, parks, wildlife refuges, estuarine research reserves, and estuaries within the Mid-Atlantic area. The Monitor National Marine Sanctuary has been established. Three National Park Service sites include Assateage Island, Maryland; Cape Hatteras, North Carolina: and Cape Lookout, North Carolina. There are 27 National Wildlife Refuges located along the coastline or within coastal areas of the Mid-Atlantic area. National Estuarine Research Reserves located adjacent to the program area are Chesapeake Research Reserves in Maryland and Virginia. Adjacent National Estuary Program sites include Back Bay, Chincoteague Island, the Eastern Shore of Virginia, Wallops Island, Fisherman Island. The Delaware Inland Bays, Maryland Coastal Bays, and the Chesapeake Bay are proximate to the program area.

Tourism and Recreation. The Mid-Atlantic coastal region is a popular recreational destination. Beach related activities, recreational fisheries, resorts and seasonal homes are a major attraction. Public lands are intermingled with developed areas. Ocean front counties accounted for 17 percent of the travel and tourism expenditures in North Carolina. The coast of North Carolina is almost exclusively barrier island system stretching over 300 miles and are a mixture of private holding, wildlife refuges, and parks. There are no State or Federal parks in the Atlantic coast of the Delmarva peninsula however, south of the mouth of the Chesapeake lies Virginia Beach, one of the most popular tourist destinations in the mid-Atlantic.

Military. Important DOD facilities are located in the vicinity, including U.S. naval and air force facilities. The Virginia Capes Operations Area is used for training, testing and evaluations by the Navy, Army, Air Force and Marine Corps. The National Aeronautics & Space Administration (NASA) Goddard Space Flight Center Wallops Flight Facility operates a Research Range off of Virginia's Eastern Shore. It is utilized by several Federal Government and DOD tenants. The range is also used by the Mid-Atlantic Regional Spaceport, an economic development through aerospace projects and commercial space launch operations.

Warning and Operating Areas of the U.S. Atlantic Fleet are offshore Norfolk, Virginia and extends northward to the Narragansett Bay Operating Area. Six submarine lanes and portions of two Fleet operating Areas (Virginia Capes and Cherry Point Operating Areas) are offshore North Carolina. Operating Areas are normally established in areas with superadjacent airspace designated as a warning area. A warning area includes airspace of defined dimensions outside of U.S. territorial waters in which a hazard to aircraft exists.

Operations off the Virginia Capes Operating Area include gunnery exercises, airborne mine countermeasures, general subsurface operations, surface-to-air weapon delivery including strafing, rockets and bombs, and antisubmarine rocket and torpedo firing. Activities in the Cherry Point Operating area are primarily air oriented. Air Force activities include readiness training for tactical fighters and interceptor aircrafts, refueling operations, basic fighter

maneuvering, air combat training, and air-to-air intercepts. The NASA uses the Wallops Island Flight Test Center in Virginia.

Nonenergy Marine Mineral Activities. Sand has been dredged from a number of offshore areas in both State and Federal waters for beach nourishment. All of these areas are less than 10 miles from shore. In addition, large deposits of gravel, salt, phosphate, calcium carbonate, manganese, titanium, and other industrial minerals have been identified in the Atlantic OCS.

Between 1995 and 2006, several States in the Mid-and South Atlantic OCS have benefited from OCS resources. The states of South Carolina, Virginia, Maryland, and Florida used over 23 million cubic yards of OCS sand for restoration and protection efforts. The MMS funded studies that investigated the impacts associated with sand removal and placement. Maintenance of beaches is a high priority with Maryland and since 1988, over ten million cubic yards of sand has been placed on the beaches from Ocean City northward to the Delaware line. In addition, the U.S. Army Corps Engineers and the National Park Service recently completed restoration work on Assateague Island beaches. In 1996, sand from this shoal was used to nourish the beach and construct a berm to protect the U.S. Navy's Combat Training Facility at Dam Neck against severe impacts caused by hurricanes. A total of 4 million cubic yards of OCS sands have been used to restore Virginia beaches. Other mid-Atlantic states have investigated suitable sources of OCS sand in leiu of diminishing onshore sources.

References

U.S. Dept. of Commerce. National Marine Fisheries Service. 2006. Information and databases on fisheries landings. Internet website, latest data for 2004: http://www.st.nmfs.gov/st1/commercial/landings/annual_landings.html

Balancing Considerations under Section 18

Introduction

Section 18(a)(3) of the Act requires the Secretary to "select the timing and location of leasing, to the maximum extent practicable, so as to obtain a proper balance between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone." Striking this balance based on a consideration of the principles and factors enumerated in section 18(a) is essentially a matter of judgment for which no ready formula exists. Section 18 requires the consideration of a broad range of principles and factors rather than imposing an inflexible formula for making decisions. Thus, previous 5-year programs have scheduled as many as 37 lease sales in 22 planning areas and as few as 16 sales in 8 planning areas.

Some of the factors that section 18 specifies for consideration are embodied in the benefit-cost analysis, i.e., resource potential and certain environmental values. Others are not as readily quantifiable and are therefore described qualitatively. For example, environmental considerations such as aesthetics or concerns for certain species are extremely difficult to translate into accurate economic estimates. In order to provide the Secretary full and appropriate information for the proposed program decision, this document is supplemented by relevant NEPA documents and other analyses that present information relating to such environmental
factors and other qualitative considerations. This supplemental information, which is identified in part II.A, is incorporated by reference.

Judicial Guidance

The U.S. Court of Appeals for the D.C. Circuit has elaborated in great detail on the statutory criteria for the balancing decision required by section 18(a)(3). Pertinent excerpts from the Court's opinions on litigation concerning previous 5-year programs are presented below.

The Court has stated the following concerning the weight to be accorded the three elements of section 18(a)(3).

That the Act has an objective—the expeditious development of OCS resources persuades us to reject petitioners' view that the three elements in section 18(a)(3) are "equally important" and that no factor is "inherently more important than another." The environmental and coastal zone considerations are undoubtedly important, but the Act does not require they receive a weight equal to that of potential oil and gas discovery. A balancing of factors is not the same as treating all factors equally. The obligation instead is to look at all factors and then balance the results. The Act does not mandate any particular balance, but vests the Secretary with discretion to weigh the elements so as to "best meet national energy needs." The weight of these elements may well shift with changes in technology, in environment, and in the Nation's energy needs, meaning that the proper balance for 1980-1985 may differ from the proper balance for some subsequent five-year period. (*California I*, 668 F.2d, p. 1317)

The following three statements of the Court pertain to the analysis of the section 18 factors and the Secretary's discretion in weighing the results of that analysis.

(1) The Act recognized the difficult burden the Secretary must shoulder by stating that the selection of timing and location of leasing must strike the proper balance "to the maximum extent practicable." The Secretary must evaluate oil and gas potential, which can be quantified in monetary terms, in conjunction with environmental and social costs, which do not always lend themselves to direct measurement. Because of this, they must be considered in qualitative as well as quantitative terms.

Although the secretarial discretion described is broad, as a result of both the general wording of the statute and the nature of the task the Secretary is asked to perform, the Secretary's discretion is not unreviewable. The policies and purposes of the Act provide standards by which we may determine whether the Secretary's decision was arbitrary, irrational, or contrary to the requirements of the Act. To do so, we consider "whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." (*California I*, 668 F.2d, p. 1317)

(2) In deciding whether to include an area, the Secretary weighed qualitative factors as well as quantitative factors. The Secretary listed among qualitative factors "national security, industry interest, and equitable sharing of development costs and benefits." The Act specifically directs the Secretary to weigh such qualitative factors in his balance.

Taking qualitative factors into account implies that the inclusion of areas with a calculated estimated net social value of zero may nonetheless be compatible with section 18(a)(3). (*NRDC*, 865 F.2d, p. 307)

(3) The Secretary must make a good-faith effort to balance environmental and economic interests. So long as he proceeds reasonably, however, his decisions warrant our respect. (*NRDC*, 865 F.2d, pp. 308-309)

The Decision on the Proposed Program for 2007-2012

Programmatic balancing decisions must also take into account that development of a 5-year program represents a very early stage of planning in the overall process governing OCS oil and gas activity, which entails preparing the leasing schedule, implementing that schedule with individual lease sales, and permitting of exploration and development and production. The PP is followed by two more steps in the 5-year program preparation process—PFP, and ultimate approval of the new program.

In formulating the 5-year programs, the tendency has been to include more areas for consideration early in the process and reduce the scope of the program later in the process or even following its approval. The rationale for such an approach is that it would be better to defer decisions to exclude areas until later, because the information on which to base such decisions becomes more reliable and geographically focused as the planning process progresses. Further, this rationale held that as program activities progress, there are numerous occasions to refine areas under consideration when the program is implemented and as projections of hydrocarbon potential, levels of OCS activities, and possible environmental effects become more specific.

It is possible that the Secretary will decide to make some substantive revisions before the new program is approved. For example, in developing the 5-year program for 1997-2002, the Secretary chose to analyze expansion of the program area of the Eastern GOM that was selected for leasing consideration in the DPP. After analyzing that expansion in the PP, draft EIS, PFP, and final EIS, the Secretary selected the expanded area in the approved program for 1997-2002. Any revisions or additional options considered will be the subject of a thorough analysis in the EIS accompanying the program, as well as the remaining stages of the section 18 process.

Other Considerations

Other relevant considerations that have implications for balancing environmental and socioeconomic issues and concerns with potential benefits of OCS activity are discussed in this document, the DEIS prepared for the 5-year program for 2007-2012, and in other referenced documents. Such considerations are summarized below.

Findings and Purposes of the Act. Title I of the Act Amendments of 1978 sets forth a number of findings and purposes with respect to managing OCS resources. Those principles generally pertain to recognizing national energy needs and related circumstances and addressing them by developing OCS oil and gas resources in a safe and efficient manner that provides for environmental protection; fair and equitable returns to the public, state, and local participation in policy and planning decisions; and resolution of conflicts related to other ocean and coastal resources and uses.

Industry Interest. Interest, as indicated in the comments responding to the DPP, is summarized in table 10. Industry interest is a key criterion for deciding whether to propose an area for a lease sale. However, it is not the sole and absolute indicator of the potential of an area to contribute oil and gas resources for regional and national use. Therefore, as with all of the balancing information discussed in this part, industry interest should be weighed with other considerations in deciding where and when to propose OCS leasing. The presentation of size, timing, and location options in part III includes discussions of industry interest along with other significant considerations. Summaries of all industry comments are provided in appendix A.

Information Incorporated by Reference. Documents pertaining to geographical, geological, and ecological characteristics, to local and national energy markets and needs, and to environmental and predictive information, as cited in part II, are incorporated by reference.

Laws, Goals, and Policies of Affected States. Relevant laws, goals, and policies identified by affected states are summarized in the options part of this document, as appropriate, and in appendix A.

Issues Raised in Comments. All comments received in response to the DPP are summarized in appendix A in this document. Those that correspond more specifically to program options are described in part III.

D. Assurance of Fair Market Value

Introduction

The 5-year program includes general provisions for assuring the receipt of fair market value in accordance with section 18(a)(4). Those provisions pertain to setting a minimum bid level and to maintaining a process for reviewing the adequacy of bids received for OCS oil and gas leases. In addition to the minimum bid requirement and bid adequacy process, the MMS establishes lease terms and conditions to assure receipt of fair market value. Those more specific measures are designed and implemented based on ongoing reviews and evaluations that are independent of the 5-year program preparation process.

Minimum Bid Requirement

The minimum bid levels that currently apply to GOM OCS lease sales are \$25 per acre in water depths of less than 400 meters and \$37.50 per acre in water depths of 400 meters or greater, the water depths in which leases have a 10-year primary term. On the Alaska OCS, recent minimum bid levels differ by planning area and are \$25 per hectare (around \$10 per acre) in the Cook Inlet and \$25 per hectare in Zone B or \$37.50 per hectare (around \$15 per acre) in Zone A in the

Beaufort Sea. The Part III discussion of minimum bid options describes the effects of maintaining those requirements as well as the effects of adopting alternative minimum bid levels.

Bid Adequacy Process

The 5-year program for 2002-2007 continued the two-phase post-sale process for determining bid adequacy that essentially has been in effect since 1983. The process was instituted with the implementation of the areawide leasing policy and has undergone several refinements to address specific concerns pertaining to fair market value. The most recent revision was published in the *Federal Register* on July 12, 1999 (64 *FR* 37560).

The bid adequacy process now in effect consists of two phases for distinguishing those bids that reflect competitive market forces assuring receipt of fair market value and those that require further detailed analysis. Part III describes the current post-sale process and also briefly discusses the alternative of using a presale bid evaluation process to assure receipt of fair market value. A more detailed description of the existing bid adequacy process—*Summary of Procedures for Determining Bid Adequacy at Offshore Oil and Gas Lease Sales: Effective July 1999, with Sale 174*—is available on the internet at www.gomr.mms.gov/homepg/lsesale/fmv/74-3.pdf.

APPENDIX A

Summary of Comments to the February 10, 2006, *Federal Register* Notice Concerning the Draft Proposed 5-Year OCS Oil and Gas Leasing Program for 2007-2012

Introduction

Section 18 of the Act, 43 U.S.C. 1344, requires the DOI to prepare a 5-year OCS oil and natural gas leasing program. As an intermediate step in the preparation of the 5-year program for 2007-2012, the MMS issued a *Federal Register* Notice (*71 FR 7064*) soliciting comments. This appendix is a summary of all comments received in response to that Notice. Due to the high number of responses, submittals have been condensed to express summaries of all of the ideas received by the MMS by responder category. Responder Categories are listed below along with the number of comments received in that Category. A Summary of Comments compiled by Category follows.

Number of Comments by Category

Governors, State Elected Officials, and State Agencies	
Local Governments, Tribes and Alaska Native Corporations	43
Members of Congress and Federal Agencies	19
Environmental and Other Public Interest Organizations	24
Oil and Gas Companies and Associations	73
Non-Energy Industry Interests and Business Groups	
General Public	39,207
Total	39,494

Summary of Comments by Category

Governors, State Elected Officials, and State Agencies

The 63-page submission from the State of Alaska contains numerous local government statements and resolutions. A list of individual localities, tribes and municipal subdivisions is listed below and named localities, tribal and municipal subdivision comments are summarized in this compilation. The Governor advises the MMS that the Alaska OCS could play a significant role in meeting future U.S. energy supply needs. The Governor supports the proposed leasing programs in the Beaufort and Chukchi Seas contained in the DPP. The Governor urges MMS to be mindful of subsistence whaling and other activities that are integral to life in the North Slope regions. The Governor urges the MMS to amend the DPP to include special interest sales for the Hope Basin and Norton Basin. The Governor discusses the Bristol Bay fisheries and the North Aleutian Basin planning area including the Sale 92 area, and concludes that lease sales should be limited to the Sale 92 portion of the North Aleutian Basin. Conditioned upon the lease sales being limited to the Lease Sale 92 area, the Governor requests that the President lift the withdrawal for the North Aleutian Basin planning area and allow the scheduling of lease sales in the Sale 92 area in the 2007-2012 program. The Governor's submission includes the following

entities: Aleutian East Borough, Bristol Bay Borough, Aleutian/Pribilof Islands Association, Inc., Southwest Alaska Municipal Conference, Qagan Tayagungin Tribe, Nelson Lagoon Tribal Council, Unga Tribal Council, Agdaagux Tribal Council, Akutan Traditional Council, City of Cold Bay, City of Sand Point, City of False Pass, Bristol Bay Native Corporation, The Aleut Corporation, Nelson Lagoon Corporation, Shumagin Corporation, Becharof Corporation, Peter Pan Seafood, Inc., The Alliance, and the Alaska State Chamber of Commerce.

Alaska State Majority Whip strongly supports the MMS proposed 5-year plan and urges the MMS to expand offshore leasing in the rural areas of Western Alaska.

Alaska State Senator Green supports the MMS proposals and lists the benefits to Alaska as jobs and tax revenue

The Governor of Alabama's support for the MMS federal leasing program is contingent on all OCS activities in waters adjacent to Alabama's coast being carried out in full compliance with Alabama laws and in a manner consistent with Alabama's coastal program. The Governor supports opening the Sale 181 area and strongly believes that revenue sharing with the adjacent states is essential. The Governor notes that the MMS is constrained by current laws and until changes are made, enhanced revenue sharing cannot be achieved. The Governor supports H.R. 4761 and passage of legislation to allow improved revenue sharing with affected states would remove the reservations the Governor has regarding opening new areas, as long as other elements of the program were balanced, reasonable and environmentally sound. The Governor repeated his reservations about the administrative boundaries, and cited his earlier letter with more detailed comments on this matter. Specifically, the Governor opposes the offering of blocks south and within 15 miles of the Baldwin County, Alabama coast. He raises the concern of the visible impact of drilling and production structures on this tourist area and requests that the MMS exclude these blocks from the 2007-2012 program. Sensitive environments in the OCS off Alabama's coast are also a major concern.

Representative McMillan of District #96 in the Alabama State House of Representatives strongly supports enlarging the areas offered for sale in the leasing program for 2007-2012.

Alabama State Representative Buskey supports the MMS programs and would like to see expanded access to the OCS.

Alabama State Representative Thigpen supports the MMS proposed 5-year plan and urges the MMS to use technology to expand leasing to as many offshore areas as available.

Senator Tanner of District #35 in the Alabama State Senate strongly supports enlarging the areas offered for sale in the leasing program for 2007-2012.

Alabama State Senator Dial is supportive of expanded leasing on the OCS. The MMS is urged to take bold action and to expand the program to all possible areas.

The Governor of California supports efforts to make the moratorium and the Presidential deferrals for California permanent. For 24 years the moratorium has been in place in California and this protection of the California coast enjoys the support of the people of California, according to the Governor. In keeping with this support, OSC "inventory" activities associated

with the 5-year program are opposed by the Governor. The comment outlines California's energy efficiency initiatives, and renewable energy promotions. The Governor repeats that he strongly opposes any new oil and gas leasing off the California coast.

Administrative boundaries are a primary concern to Connecticut's Department of Environmental Protection. Whereas under the previous lines, Connecticut was situated on the boundary between the North Atlantic and the Mid-Atlantic Planning areas, now, it is centrally within the North Atlantic area. Despite this change, Connecticut intends to exercise the prerogative to comment on all areas. Connecticut continues to support the moratoria and the withdrawal. Also of concern are the sensitive environmental needs of the sea scallop fisheries and potential impacts of OCS development on these fisheries and other marine habitats. In summary, Connecticut believes that within the context of the moratoria, the OCS development of renewable and nonrenewable resources is permissible provided that such development is carried out in a manner consistent with the protection of habitats and living marine resources in all waters potentially affected by development, including Long Island Sound.

Governor Bush of Florida writes that the MMS proposal contains a number of acceptable proposals, specifically no leasing in the South Atlantic and the Straits of Florida and continuing the presidential withdrawal in most of the Eastern GOM and withholding lease sales within 100 miles of Florida's coast. However, the Governor opposes the new administrative boundary line because it removes nearly 9.4 million areas of water from the Eastern GOM Planning area. Governor Bush opposes the lines for uses related to federal consistency review pursuant to the CZMA. The comment states that the previous boundary lines are preferred. The Governor states that tourism drives the economy and industrial activities are not compatible with the state's objective to preserve the natural value of its coastal areas.

The Florida Attorney General seeks to prohibit oil and gas exploration and production off the Florida coasts and to return the western boundary of the Eastern GOM Planning area to its previous location. The Attorney General urges the MMS to hold additional public meetings on its EIS's and do so in Florida's coastal communities.

The State of Kansas submitted Resolution No. 5030 urging the federal government to lift the moratorium on offshore drilling for oil and natural gas.

The State of Louisiana attaches 2 previous comments. One comment, dated October 7, 2005 focused on the leasing process and environmental documentation in particular. The State urges the MMS to expand the areas offered for sale and/or assessment and to provide for adequate sharing of federal mineral revenues with the States. Written comments were presented at the Scoping Meeting held on March 29, 2006, and are also attached. The comments focus on information needed for Consistency Determinations under the Program. Absent a complete vetting of the issues and positions expressed by the State, documentations supporting the MMS activities may be insufficient for the State to move forward under the CZMA. Furthermore, lack of an appropriate response by the MMS could lead to delays. Maximizing coordination and cooperation with the State is an urgent request by the State as the MMS moves forward.

Chairman Damico of the Louisiana House Committee on Environment strongly supports increased domestic oil and gas production in the areas included in the proposed plan and in many

areas not included in the current plan. He is committed to the proposition that Louisiana is entitled to an appropriate share of the federal revenues generated by this production.

Louisiana State Senator Max Malone strongly supports increased domestic oil and gas production and urges the MMS to greatly enlarge the areas offered for sale.

Louisiana State Senator Mike Michot strongly supports increased domestic oil and gas production in the U.S. OCS. The Senator urges greater expansion than the MMS set forth in the 2007-2012 proposed plan.

Maine's Governor reviewed the MMS Proposal and determined that the North Atlantic Planning Area is not included among the areas proposed for leasing. Therefore, satisfied with this exclusion, the State of Maine has no comments at this time.

North Carolina's Governor objects to the Draft Proposed OCS oil and gas leasing program for 2007-2012 stating that it includes a possible special interest lease sale off the Virginia coast in 2011. This comment concludes that the coastal resources of North Carolina and Virginia are inextricably connected, and the proposed sale area ends just miles from North Carolina's border. The Governor restates North Carolina's longstanding support for the congressional moratorium and the presidential withdrawal and respectfully requests that any sale off the Virginia coast be removed from consideration.

North Carolina's Department of Environment and Natural Resources took no position on MMS planning except to restate past comments. Specifically, North Carolina continues to support a moratorium on offshore oil and gas activity. A particular concern for direct, indirect and cumulative impacts associated with offshore activities on EFH was addressed. Also, the Department commented on the lack of standing political boundaries have on environmental management decisions.

The Governor of New Jersey urges the MMS not to take any steps that would undermine the existing moratoria and presidential withdrawal. The Governor further comments that the proposed special interest sale in the Mid-Atlantic violates the letter and the spirit of the moratoria and even proposed activities along the Atlantic coast are not to be federally funded. Lastly, the Governor comments that the DPP notes that New Jersey is no longer adjacent to the Mid-Atlantic Planning Area under the new administrative boundaries. New Jersey does not agree with, and questions the legitimacy of the boundaries; and, more importantly, the State does not believe the new boundaries can be used legally by the DOI. New Jersey will continue to have a direct interest in any proposed resource evaluation in the Mid-Atlantic region.

Oklahoma State Senator Adkins strongly supports expanded leasing and would support additional acreage for lease. The Senator calls for revenue sharing and supports congressional efforts to provide a fair share to localities and states adjacent to offshore activities.

Oregon's Governor is pleased that the coast of Oregon is not considered for new leases through 2012.

South Carolina House Committee on Labor, Commerce and Industry, Chairman Cato urges the MMS to expand its program to include a greater portion of all OCS regions, with particular attention to the Southern Atlantic. The Chairman notes that he was joined by 33 of his colleagues in introducing bipartisan legislation to provide for a study committee to assess the feasibility of accessing the deepwater natural gas resources off shore South Carolina.

The Governor of Texas strongly supports expanded leasing of the U.S. OCS. The Governor supports congressional efforts to provide for revenue sharing derived from OCS leasing and production. The Governor urges the MMS to adhere to strong environmental standards.

Texas Senate Committee on Natural Resources Chairman Averitt supports expanded oil and gas leasing on the OCS to ensure that U.S. consumers have adequate energy supplies at affordable prices. This commenter notes that offshore development must be conducted in an environmentally safe manner and also is very supportive of revenue sharing.

The Chairman of the Texas House Committee on Energy Resources wholeheartedly supports leasing in the 21 lease sale areas considered in the MMS DPP. This comment supports revenue sharing, and environmentally sound development.

Texas Railroad Commission strongly supports the MMS proposed 5-year plan and urges the MMS to expand leasing, specifically offshore Alaska, the GOM and the Atlantic. This comment calls for localities and states adjacent to offshore leasing zones to be provided with a fair share of the revenues and all development activities to be conducted within safe environmental standards.

The Governor of Virginia is carefully considering the draft plan's option to hold a special interest sale in OCS waters offshore Virginia.

The Virginia Commercial Space Flight Authority is a political sub-division of the Commonwealth of Virginia and opposes the proposed Mid-Atlantic area off the coast of Virginia based on risk factors including safety risks, risk to high value equipment, interference with civil and military launch operations, and air traffic, presence of undersea equipment. This comment elaborates on general operational concerns, and describes necessary support to U.S. Navy missions.

Interstate Oil & Gas Compact Commission (IOGCC) is a congressionally chartered compact of 30 natural gas and oil producing states. The IOGCC supports revenue sharing and encourages the MMS to expand its communications program to increase public understanding of OCS development. The IOGCC discusses the North American Coastal Alliance and the history of coastal regulation, including the 5-year planning window. While States embrace a longer planning window, the financing and decision-making window of actual projects is even longer. Congress should be informed with background information about offshore potential where currently there is no development; this involves investment and research and would result in maximizing conservation. The IOGCC attaches "Untapped Potential: Offshore Oil and Gas Resources Inaccessible to Leasing."

Local Governments, Tribes and Alaska Native Corporations

The Agdaagux Tribal Council provided Resolution No. 06-05 that supports oil and gas leasing in the North Aleutian Basin and recommends that the 1998 presidential withdrawal prohibiting leasing for a small portion of the North Aleutian Basin be withdrawn. Resolution 06-05 requests federal funding and adequate lease stipulations to address social and environmental affects.

The Akutan Traditional Council provided Resolution No. 2006-07 supporting oil and gas leasing in the North Aleutian Basin and recommending that the 1998 presidential withdrawal prohibiting leasing for a small portion of the North Aleutian Basin be withdrawn. Resolution 2006-07 requests federal funding and adequate lease stipulations to address social and environmental affects.

Alaska Inter-Tribal Council representing the Bristol Bay region opposes offshore exploration in the Bristol Bay and strongly supports maintaining the moratorium on offshore oil and gas leasing. This comment provides a summary of federal decisions related to Bristol Bay sale area (92) beginning in 1982 and ending in 2003.

Aleutians East Borough attached Resolution No. 06-19 and submitted comments that support oil and gas leasing in the OCS of the North Aleutian Basin, provided maximum protection is given to fishery resources and lease stipulations are included to safeguard local interests.

Bristol Bay Borough Resolution 2006-05 supports the process and may be able to support oil and gas leasing in the North Aleutian Basin, provided that maximum protection and priority be given to fishery resources.

Bristol Bay Coastal Resource Service Area (BBCRSA) is generally opposed to the MMS actions related to Bristol Bay leasing. Threats to the marine resources caused by development planning would outweigh benefits to the region according to BBCRSA. With respect to the EIS, the following concerns are addressed: Monitoring offshore production is an important element of planning prior to a lease sale. The strength of environmental safeguards depends on solid regulation and monitoring. Furthermore, the feasibility of providing low-cost natural gas to the communities of Bristol Bay may be explored as a local incentive to development.

Bristol Bay Native Corporation strongly supports offshore oil and gas leasing to provide employment and business opportunities, recognizing the risks to commercial and subsistence activities.

City of Cold Bay (AK) provided Resolution No. 06-10 specifically addressing its support for oil and gas leasing in the North Aleutian Basin provided certain protections and stipulations are included requiring companies to employ residents of the Aleutians East Borough. Additional recommendations include a request for federal funding.

The City of Emmonak (AK) on behalf of Emmonak, Kotlik, Alakanuk and Nunam Iqua, requests the leasing program for Norton Sound OCS oil and gas leasing to be extended. The AFN convention resolution #03-80 is enclosed along with letters and policy documents referencing dialogue with Lower Yukon Delta Region to support oil and gas exploration.

The Lake and Peninsula Borough (AK) has provided for MMS review Resolution 06-05 expressing support for the MMS Program for 2007-2012. The Resolution identified five areas of concern: 1. Off-shore loading of tankers; 2. Commercial fishing gear conflicts; 3. Spill prevention measures; 4. Awareness of critical habitat areas; 5. Revenue sharing at the local level.

The City of False Pass (AK) provided Resolution No.2006-05 that supports oil and gas leasing in the North Aleutian Basin and recommends that the 1998 presidential withdrawal prohibiting leasing for a small portion of the North Aleutian Basin be withdrawn. Resolution 2006-05 requests federal funding, adequate lease stipulations to address social and environmental affects.

Kenai City Council (AK) unanimously passed a Resolution (provided) supporting the inclusion of the two Cook Inlet Lease Sales in the 2007-2012 Program.

City of Sand Point (AK) supports the MMS proposed 5-year plan and sent Resolution 06-01 confirming its support for oil and gas leasing in the North Aleutian Basin, provided conditions such as federal funding, environmental protection, adequate stipulations, and consultation be in place.

The Nelson Lagoon Corporation (AK) provided Resolution No. 2006-0029 that supports oil and gas leasing in the North Aleutian Basin and recommends that the 1998 presidential withdrawal prohibiting leasing for a small portion of the North Aleutian Basin be withdrawn. Resolution 2006-0029 requests federal funding, adequate lease stipulations to address social and environmental affects.

Mayor Itta of the North Slope Borough (AK) submitted comments containing specific information about the history of comments from his Borough and the testimony provided on a number of relevant topics. Long-standing strenuous objections are referenced for the 5 sales scheduled in the area. The MMS failures include: failure to identify meaningful alternatives to the full planning area leasing proposal, failures in "development scenarios," failed oil spill risk estimates, and a general overstatement of technological capabilities. This comment expresses frustration and lack of confidence in the MMS process.

Olgoonik Corporation (AK) provides Resolution No. 06-03 that strongly opposes any accelerated plans to open up further oil exploration and seismic surveys within the 50-mile areas of the North Slope coastline. The resolution cites the concern for seismic surveys in the quantities that will jeopardize the subsistence harvest of marine renewable resources in the Arctic Ocean. Furthermore the Corporation requests significant consultation meetings to better understand and mitigate the hazards faced by the Arctic's indigenous people.

Pauloff Harbor Tribe (AK) supports inclusion of a small portion of the North Aleutian Planning area, limited to the area previously described and leased by the MMS during the 1985 Sale as Sale 92. Citing job opportunities, expanded local infrastructure and improved air transportation systems and marine harbors, Pauloff Harbor makes the case for positive impacts on the community. This comment urges the MMS to provide support for the people after the oil and gas are depleted and to provide federal funds for studies. Pauloff Harbor supports lifting the moratorium for the offshore leasing in the North Aleutian Basin.

The Qagan Tayagungin Tribe (AK) provides Resolution No. 06-04 that supports oil and gas leasing in the North Aleutian Basin and recommends that the 1998 presidential withdrawal prohibiting leasing for a small portion of the North Aleutian Basin be withdrawn. Resolution 06-04 requests federal funding, adequate lease stipulations to address social and environmental affects.

Shumagin Corporation (AK) submits Resolution No. 2006-3 confirming its support for oil and gas leasing in the North Aleutian Basin and recommends that the Governor of Alaska request the President of the United States eliminate the 1998 withdrawal prohibiting oil and gas leasing for a small portion of the North Aleutian Basin (Sale 92). Federal funding is requested and lease stipulations should be in place as needed.

Ukpeaguik Inupiat Corporation (UIC) (AK) presents the view that industry is not prepared to develop OCS resources due to inadequate logistical support, inadequate deep water ports and spill response technologies. Furthermore, global warming trends should prevent further efforts to develop this sensitive environment. The UIC supports continuation of existing and proposed expanded deferral areas.

The Unga Tribal Council (AK) confirms its support for the MMS proposed 5-year plan with Resolution 06-10. This comment calls for localities and states adjacent to offshore leasing zones to be provided with a fair share of the revenues and all development activities to be conducted within safe environmental standards.

Yupiit of Andreafski (AK) opposes expanded leasing on the OCS. Offshore development threatens vital subsistence needs, including commercial fisheries and cultural resources. Salmon is endangered and many people are forced to depend on State welfare.

City of Brent, City of Brundidge, and Chambers County Commission (AL) support the MMS proposed 5-year plan and urges MMS to expand leasing as a high priority.

City of Cullman (AL) opposes the MMS proposed 5-year plan and urges the MMS not to expand leasing but rather to become more conservative, and use our natural resources more efficiently.

City of Eufaula (AL) writes in support of MMS planning and urges the MMS to include additional acreage for lease to ensure adequate oil and gas supplies for U.S. consumers. This city supports increasing acreage in Alaska and the Atlantic, and in the Eastern Gulf of Mexico.

City of Mobile (AL) writes in support of MMS planning and urges the MMS to include additional acreage for lease to ensure adequate oil and gas supplies for U.S. consumers. This city supports increasing acreage in Alaska and the Atlantic.

The Mayor and each of the five Moulton City (AL) Council Members support developing oil and natural gas resources and support the MMS plan. The MMS is urged to open Sale 181, expand available areas for lease in Alaska, The GOM and the South Atlantic region.

City of Sylacauga (AL) supports the MMS proposed 5-year plan.

City of Tuskegee (AL) supports the MMS planning and urges the MMS to greatly enlarge the acreage for lease to ensure adequate oil and gas supplies for U.S. consumers. This comment supports increasing acreage in Alaska and the Atlantic. Development and economic growth are important to City of Tuskegee.

Colbert County Commission (AL) writes in support of the MMS planning and urges the MMS to include additional acreage for lease to ensure adequate oil and gas supplies for U.S. consumers. This city supports increasing acreage in Alaska and the Atlantic, and in the Eastern GOM.

The Conecuh County Commission (AL) supports developing more domestic oil and natural gas resources off the coast by greatly enlarging the areas offered in the leasing program. This group references advanced technology as a reason to expand U.S. oil and gas production.

Rev. Howard Esteb Detroit Council Member (AL) supports the MMS proposed 5-year plan and urges MMS to expand leasing in all OCS areas, specifically Sale 181 area, the GOM, acreage in Alaska, and other areas where the MMS should initiate dialogue with states in the South Atlantic region.

Marengo County Commission (AL) supports the MMS proposed 5-year plan and urges the MMS to expand leasing.

Montgomery County Commission (AL) supports the MMS proposed 5-year plan and urges MMS to expand leasing as a top priority. From the point of view of the consumers, all OCS areas should be open, specifically Sale 181 area, the GOM, acreage in Alaska, and other areas where the MMS should initiate dialogue with states in the South Atlantic region in a manner similar to Virginia.

Town of Baker Hill (AL) supports the MMS proposed 5-year plan and urges the MMS to expand leasing as a high priority.

Mendocino County (CA) sent Resolution No. 06-044 affirming its support for continued protection of the Mendocino, California coast. The Resolution supports U.S. Senate Bill 2239 as well as supports S. 2294, and HR 4782, for permanent protection.

The City of St. Petersburg (FL) enclosed a resolution passed to support the "Permanent Protection for Florida Act of 2006." Res. No 2006-112. The resolution opposes MMS proposed plan and supports the "Permanent Protection for Florida Act of 2006."

The Board of County Commissioners of Monroe County (FL) provided Resolution No.139-2006 that strongly supports maintaining the moratorium on offshore oil and gas leasing for all waters outside of Lease Sale 181 and further resolves that the assistance of the Florida congressional delegation and the Governor is enlisted in this effort. Resolution 139-2006 cites disastrous social and environmental effects on Floridian communities and especially residents of the Florida Keys, of exploration and development of offshore oil and gas resources on Florida's coasts.

Members of Congress and Federal Agencies

The New Jersey delegation of 12 Members opposes provisions in the proposal that would open the OCS off the coast of Virginia for oil and gas drilling. Congressional Representatives are strongly opposed to the Administrative Boundaries drawn earlier this year. Similarly, Members are opposed to any potential MMS actions related to congressional moratoria, presidential withdrawal, and to limited public hearing locations.

Florida's Congressional delegation and other Members oppose the draft proposal and object to the plan's proposal to alter the Eastern GOM Planning Area Boundary. The Delegation objects to the call for sales within Lease Sale 181, five separate times during the program. Citing the change in administrative boundaries, the MMS is urged to restore the Eastern and Central GOM Planning Area Boundaries to their original location and to remove the additional two million acres of Lease Sale 181 from consideration.

Federal legislators from 25 States signed on to a letter to fully support inclusion of additional areas in federal waters offshore Alaska, the GOM and areas of the Atlantic and the Pacific Oceans, provided that the process adheres to environmental safeguards.

Mr. Pallone (NJ-D), Ms. Capps (CA-D) and Mr. Davis (FL-D) comment on the process the MMS is conducting to develop the 5-year program. The concern is that the process is being undermined by the MMS to only hold public meetings in pro-drilling states like Alaska, Louisiana and Texas.

John J. Duncan, Jr. (TN-R) expresses strong support for expanded leasing, including areas available in federal waters offshore Alaska, the GOM, and all areas available in the Atlantic and Pacific Oceans, provided that the process adheres to environmental safeguards.

Representative Lois Capps (CA-D) is strongly opposed to the MMS 5-year proposal. Ms. Capps urges the MMS to support bipartisan policies and to reject any proposal to allow oil and gas leasing in areas now off limits to development.

Congressman Kenny Marchant (TX-R) strongly supports expanded leasing.

Representative Katherine Harris (FL-R) has serious concerns about the proposed 100-mile buffer zone. She supports making the existing moratorium permanent. Enclosed is a statement for the record supporting more control by the State of Florida over waters that surround the State.

Senator Jim Bunning (KY-R) supports the proposed MMS program and urges the MMS to include areas available in federal waters offshore Alaska, the GOM, and the Atlantic and Pacific Oceans.

Senator James M. Inhofe (OK-R) strongly supports expanded leasing for a variety of reasons related to national security and economic prosperity.

Senator James M. Talent (MO-R) supports expanded leasing on the OCS. He raises natural gas prices as a concern for his constituency.

Senators Kay Bailey Hutchison (TX-R) and John Cornyn (TX-R) strongly support expanded leasing on the OCS.

The DOE's Office of Fossil Energy supports MMS's development of the proposed 5-year plan, particularly the proposal to continue the annual offering of all the acreage in Central and Western GOM Areas, proposals related to the OCS in Alaska, and efforts to pursue resource characterization and estimations in all OCS areas, including those currently under moratoria, as directed by the EPA of 2005. The DOE supports more flexibility in the new plan and urges the MMS to consider advances in technology in assessing resource potential in the OCS and in assessing environmental impacts of future development. Cooperation between the states and the Federal government was stated as a goal in the development of ocean resources. The DOE does not recommend that MMS consider issuing gas-only leases. The DOE attached DOE's Annual Energy Outlook 2006.

The DOI's FWS office in Alaska offers general concerns for potential impacts of oil spills related to trust resources in Alaska. Recommendations include: spill prevention systems, spill modeling capabilities, risk assessment, research, mitigation, stipulations related to oil and gas activities, studies, and Incidental Take Program participation. Technical information was provided related to Alaska Refuges, Seabirds, Waterfowl, Marine Mammals, Threatened and Endangered Species, Anadromous Fish. Great emphasis is placed on Federal, State, Local, and Tribal cooperation and dialogue.

The NASA provides technical data on restricted airspace, range hazard areas, adjacent Department of Defense designated warning areas, and target missions related to the Wallops Flight Facility off the coast of Virginia. The NASA outlines risk factors including safety risks, risk to high value equipment, increased ship and air traffic, presence of undersea equipment, risks to surface skimming missiles. General operational concerns are enumerated and NASA support to U.S. Navy missions is described. Mapping was provided, showing NASA Wallops Range Area.

The Navy offers serious concerns about the Mid-Atlantic/Virginia area of the proposal. However, the Navy foresees no OCS-use conflicts within the lease sale areas proposed for the Alaska Planning Areas, and only minimal conflicts with the proposed lease sale areas in the Gulf of Mexico. Mapping is provided. Lease stipulations for the Eastern GOM Sale 197 are provided.

The DOC, NOAA's NMFS provides detailed technical comments specific to the Alaska and Southeast Regions. Comments focus on Marine Sanctuary, Protected Resources, Coastal Zone Management, and EFH. Comments submitted 9/21/05 are considered appropriate for inclusion.

Department of Homeland Security, U.S. Coast Guard, comments that the MMS proposal was reviewed and no issues have been raised relevant to U.S. Coast Guard activities or policies.

Environmental and Other Public Interest Organizations

1000 Friends of Florida opposes the inclusion of specific tracts in the program. This comment states a preference that the current moratorium now in place in the eastern portion of the Central Planning Area be amended to include this same tract. Potential oil and gas reserves at this site

do not justify the great threat posed by development in this area. A primary focus of this comment is public involvement in local decision-making. The time and location of the April 6 scoping forum as well as the difficulty commenting electronically are troublesome to this commenter.

The AEWC opposes offshore oil and gas leasing because it threatens the habitat and migratory patterns of the bowhead whale. If the whales become unavailable for native subsistence lifestyle, communities will be unable to provide for themselves. The Secretary must exclude the Chukchi Sea from the program for the sole reason that too little is known about that sea and its capacity to rebound from environmental pressures of leasing activity. With respect to the MMS cumulative impacts analysis, the MMS must focus on vessel traffic noise effects and multiple simultaneous seismic operations. The Bureau of Land Management must be consulted and the State of Alaska must be consulted. Furthermore, the DOI Secretary's obligations to balance exploitation of the resources of the federal OCS with the welfare of the human environment mandate that he or she consider exclusion areas as well as areas to include in the program.

The AMCC is concerned about the potential ecological, cultural and economic impacts of offshore oil and gas development in the Bristol Bay and eastern Bering Sea. The concerns raised go well beyond concerns with the effects on the fisheries industry, to include the combined threats of oil and gas development on the unparalleled resources of marine and coastal Alaska and the communities that depend on them. The AMCC urges the MMS to maintain the presidential withdrawal. Raising the concern of increasingly destructive storms in the eastern Bering Sea, and citing ecologically sensitive and economically important waters of Bristol Bay, AMCC urges the MMS to pursue policies focus on conservation and renewables.

Alaska Watch opposes the MMS planning in the Alaska OCS. The AEWC opposes offshore oil and gas leasing because it threatens the habitat and migratory patterns of the bowhead whale. If the whales become unavailable for native subsistence lifestyle, communities will be unable to provide for themselves. The Secretary must exclude the Chukchi Sea from the program for the sole reason that too little is known about that sea and its capacity to rebound from environmental pressures of leasing activity. This comment sites spills to demonstrate the inability to control or minimize oil spills in Alaska due to weather and water conditions.

Alliance for a Living Ocean addresses the proposed Areas in the Mid-Atlantic and in particular the areas off Virginia in waters that are less than 100 miles from the New Jersey Shore. Opposition to oil and gas drilling is based on the fact that drilling creates excessive amounts of waste and debris, some containing lead and mercury. Other pollutants such as Benzene and arsenic and some radioactive materials are often also raised during drilling. Alliance for a Living Ocean sees the MMS proposal as a step backward.

Center for Biological Diversity opposes the MMS planning and sees oil and gas development as having site specific regional and global environmental impacts and risks. Greenhouse gas pollution is chief among the risks outlined in this comment. Requirements of the ESA and of NEPA are outlined in this comment. Furthermore, the requirements of the Global Change Research Act are discussed with specific reference to scientific assessment. The Center hopes the MMS will produce an EIS that will fully and accurately analyze each of the project's environmental impacts, including greenhouse gas emissions and global warming. The Center for Energy, Marine Transport and Public Policy at Columbia University supports MMS planning and the decision to expand access to the OCS. A primary focus of this comment is the new technologies and development techniques that enable offshore operations to increase recovery rates while protecting the environment.

Clean Ocean Action strongly opposes inclusion of the Mid-Atlantic Region in the proposed program area. Violation of the current moratoria is the primary objection to the MMS program. Clean Ocean Action states that the environmental risks are high for New Jersey and New York and that the potential dangers due to exploring and drilling for oil and gas outweigh the supposed benefits. Specific risks to Commercial Fishing, Recreational Fishing, Surfing, and Tourism are outlined. Studies showing limited reserves in this area are noted. Lastly, the Administrative Boundaries are "arbitrary, and are not supported by many coastal states." Thus, Clean Ocean Action believes that the boundaries cannot be used by the DOI to delineate the proposed boundaries for any MMS lease sales, or schemes related to revenue sharing, CZMA authority or any other purpose.

Earthjustice represents 16 groups. Earthjustice opposes the MMS planning for the North Aleutian Basin due to the fact that Bristol Bay is home to large populations of marine mammals and due to concerns about the migratory patterns of whales, oil spill concerns, and important habitat considerations for polar bears and other animals, Noise disturbances are an issue of particular concern. The MMS has arbitrarily expanded access to the Chukchi Sea planning area and underestimated the sensitivity of the Chukchi shoreline. With respect to the Beaufort Sea, the MMS should not hold any more lease sales unless and until the industry demonstrates that it can clean up spilled oil. The MMS should exclude sensitive areas offshore of the National Petroleum Reserve Alaska. Cook Inlet supports vital fishing and therefore should be excluded. Also, the industry lacks interest in purchasing leases in this area and thus, the MMS should not offer it for lease. No "special interest" sales should be offered. Seismic surveys are not impactfree and the MMS should complete a comprehensive NEPA process in connection with seismic activities.

Friends of Bristol Bay attach 14 resolutions from local Tribes and a consortium of Tribes in Bristol Bay. All agree that offshore oil exploration is hazardous to the subsistence lifestyle as well as commercial fisheries. Seismic testing will adversely affect the availability of the clams and crab which the indigenous people depend on, and which the walrus and seals also depend on. Discharge of waste products will affect the quality of salmon of which generations have so greatly depended on for a main source of food. The threat of an oil spill will greatly (adversely) affect the region and all living things in the region. Specifically, the MMS is urged not to let Lease 92 be open for sale.

Manasota, a Project for Environmental Quality 1968-2088, finds the MMS proposal "environmentally unsatisfactory" citing environmental impacts, limited spill response ability by the industry and the Federal government, and risks of drilling in sensitive areas.

Ocean Protection Coalition submitted a brief comment in support of Sierra Club's letter opposing the MMS proposal.

Partnership for the West (PFW) supports developing more domestic oil and natural gas resources on both onshore and offshore public lands. However, the MMS Proposal is not sufficiently bold enough to support future economic growth. The PFW is an alliance of citizens who support safeguarding the environment and promoting the economy.

Reef Relief is a local non-profit membership organization that protects coral reefs and submits this comment in opposition to the MMS planning. Reef Relief urges the MMS to oppose any new offshore oil and gas leasing, exploration, drilling activities and seismic inventories affecting Florida's coast; permanently cancel the 90 (plus) existing and active leases; support new congressional moratoria; encourage extension of the Presidential Executive Order that bans leasing off America's East and West coasts and parts of Alaska from 2012 to 2020; and, cancel any activity in Lease Sale 181 and establish a 150 mile buffer zone against drilling on Florida's east coast.

Sierra Club strongly supports permanent protection for coastal and marine environments. The MMS should protect sensitive coastal waters by withdrawing the proposal to open up new areas to drilling. Areas currently protected should be permanently protected. The MMS revision of state "Seaward Boundary Lines" was done arbitrarily and without public comment. Concentration of leasing activity off the West Coast of Florida is opposed by Sierra Club members. The protected public lands, state parks, beaches and wetlands make this area off-limits to drilling. In the Mid-Atlantic region and the Alaska region, Sierra Club notes that the buybacks 10 years ago were needless and expensive and that the areas should be withdrawn from consideration.

The list of organizations represented by this comment is found below. On behalf of millions of members, Sierra Club submitted comments that raise 8 points of concern, opposing the MMS program. 1. New Administrative Boundaries are inequitable, illegal, not subject to proper notice and comment and unacceptable. 2. The 5-year plan should not include any areas protected by moratoria or executive withdrawal. 3. Such areas should be granted permanent protection. 4. No permits for "air gun" inventories should be issued for protected areas. 5. "Gas-Only-Leasing" proposals are inappropriate and deceptive because they open the door for oil drilling. 6. Retroactive application of a pre-existing EIS for a prior Lease Sale 181 proposal would fail to address many important concerns, namely the well-known "Loop Currents" in the GOM. 7. Alaska OCS Leasing proposals would endanger a wide range of resources of national significance. 8. "Royalty relief" provisions enacted in the EPA of 2005 fail to meet the test of ensuring fair return for the U.S. taxpayer. This comment opposes many aspects of the MMS proposal and furthermore, opposes policies and laws outside the authority of the MMS. This Comment was submitted on behalf of the following groups: Sierra Club, Oceana, Defenders of Wildlife, North Carolina Coastal Federation, The Ocean Conservancy, Legasea, Environmental Defense, Alaska Wilderness League, Florida Public Interest Research Group, Reef Relief, Alaska Oceans Program, World Wildlife Fund, Ocean Mammal Institute, Pacific Environment, Planning and Conservation League, Greenpeace, Earth Island Institute, U.S. Public Interest Research Group, Surfrider Foundation, KAHEA, The Hawaiian Environmental Alliance, Cook Inlet Keeper, Animal Welfare Institute, Seaflow, The Whaleman Foundation, Farallones Marine Sanctuary Association, Clean Ocean Action, Ocean Protection Coalition

Oil and Gas Companies and Related Associations

Many energy companies submitted comments. By and large the commenters already conduct OCS operations or have some direct operating experience with OCS leases. Certain companies expressed views that reflect longstanding OCS experience and business interests that are forward-looking in terms of investment projections into the term of the next 5-year program. The clear majority of energy companies strongly supports an expanded leasing program on the OCS, and urges the MMS to expand the proposed program further. The following summaries comprise a review of all comments received.

The American Petroleum Institute (API) comments strongly in support of the MMS DPP and strongly urges the MMS to appreciate that the Plan will not adequately meet America's energy needs now or going forward. The MMS is urged to expand the program to include all OCS areas. The API states that the Plan should be as flexible as possible so that the Federal government can be responsive to changing circumstances and needs of the country. Discussion of the Act supports the notion that the Plan should be broader and the Secretary is intended to support energy development. In addition, the MMS is asked to use equitable principles in determining the lateral boundaries of Georgia. The principle of equidistance, which was used to determine the boundaries. Most other energy companies sign onto the API comments and repeat positions. Some energy companies support revenue sharing.

The Alliance (AL) comments that fishing and oil and gas industries coexist better today due to technology advances, and the MMS is encouraged to consider seasonal operating restrictions in order to further reduce risks to the region's fishing industry. Environmental risks, revenue sharing and the Bristol Bay communities were discussed in this comment.

American Gas Association (AGA) supports increased domestic oil and gas production in the OCS and urges the MMS to open the following areas: "Sale 181" including the northern segment known as the "stovepipe", Eastern GOM areas and Alaskan areas. The AGA urges the MMS to expand the program to include further assessment of as many of the remaining OCS planning areas as possible, and comments that the dialogue begun with Virginia is a model for dialogues with Georgia and the Carolina's.

American Public Gas Association (APGA) notes that Administrative Boundary issues in Florida should not restrict significant potential in terms of natural gas development. The major concern of APGA is the current price of natural gas.

Anadarko Petroleum Corporation comments that domestic production trends will be marked by the development of new deepwater fields and that any increase in domestic production will be the result of 15-20 years of investment. Anadarko's comments urge the MMS to make available more and greater OCS areas, specifically the North Aleutian area and the Eastern GOM. Anadarko believes that the MMS has failed to provide sufficient access to offshore resources.

Double-E, Inc. supports the MMS proposal and urges expanded leasing opportunities in all OCS areas. This comment features support for reversing the moratoria, establishing revenue sharing and enforcing environmentally safe practices.

Draka supports expanded leasing on the OCS. Offshore development must be conducted in an environmentally safe manner. Draka also supports revenue sharing.

Drill Cool Systems strongly supports the MMS planning and urges the MMS to include additional acreage for lease to ensure adequate oil and gas supplies for U.S. consumers.

Tiorco supports removal of the moratoria, increasing acreage in Alaska and the Atlantic, revenue sharing, and strong environmental standards.

The Empire State Petroleum Association notes that the Plan should be broader, and the MMS should not prejudge the plan in the Notice by limiting the areas.

Eni Petroleum supports the MMS proposal and urges expanded leasing opportunities in all OCS areas. This comment focuses on deepwater operations and supports reliable, consistent sales. Eni supports the concept of reversing the moratoria, eliminating the "Restricted Bidders List" in certain areas, and enforcing environmentally safe practices.

Exxon Mobil Exploration Company, a division of Exxon Mobil Corporation supports the program proposals; however, the programs should be "more robust." Specifically, congressional and administrative moratoria and withdrawals that limit energy development should be reversed. The MMS should consider offering larger blocks and longer term leases in high-risk exploration acreage.

Giant Yorktown, Inc. owns and operates Virginia's sole refinery and supports the MMS program in full. Virginia's OCS region would produce over 500 BCF of natural gas per year and would result in thousands of new jobs in the area.

Global Geophysical Services supports the MMS proposed 5-year plan and urges MMS to expand leasing dramatically to include all federal OCS areas.

Hydril Company LP urges the MMS to expand the proposal beyond the plan presented for comment. The comment refers to MMS actions as a failed policy of limited access that does not consider the full potential of the Nation's offshore resources.

International Association of Geophysical Contractors (IAGC) is the international trade association of the industry that provides geophysical services to the oil and gas sector. The IAGC supports NOIA's comments and supports the DPP. The IAGC discusses the technology of seismic data acquisition and its processing and urges the MMS to access modern seismic data noting that this is a long-term process over many, many years. Concerns about cost, coverage, timing, capacity are provided. The IAGC advises the MMS not to prejudge the planning process by stating "no intention" of offering for lease some areas of the Eastern Gulf. The IAGC states that the OCSLA and other federal policies call for MMS to expeditiously open the OCS to activity.

Keer-McGee supports the MMS proposed 5-year plan and urges the MMS to expand leasing in the 89 percent of the OCS that is "off limits." Kerr-McGee believes it is not necessary to limit certain areas to "gas only" leasing.

The IOGCC supports extended leasing in the U.S. OCS in areas of the GOM, offshore Eastern United States and in Alaskan waters.

Newfield Exploration Company supports the MMS DPP but finds the plan falls short of including all of the critical planning areas. Newfield opposes the parts of the plan that restrict exploration from areas that have a positive impact the ability of the Secretary of the Interior to best meet national energy needs for the 5-year period.

North Carolina Petroleum Marketers Association supports the MMS program planning and views expanded access to our offshore resources as vitally important to American energy independence.

Piedmont Natural Gas Company supports expanded leasing on the OCS. North Carolina needs the exploration and development of resources and has experienced significant loss of manufacturing jobs, particularly related to energy costs. Offshore development is essential and must be expanded in all areas.

Powell Petroleum Inc. supports the MMS proposed 5-year plan and urges MMS to expand leasing. This comment calls for localities and states adjacent to offshore leasing zones to be provided with a fair share of the revenues and all development activities to be conducted within safe environmental standards.

Seismic Exchange, Inc. offers a concept called "focused leasing" for particular areas, whereby if current restrictions are lifted, then the sales in these areas could go forward. Seismic urges the MMS to analyze more areas and not to prejudge the planning process. In fact they support the inclusion, analysis and use of an environmental impact statement for all federal OCS areas.

Tesoro Alaska strongly supports the MMS proposed 5-year plan and urges the MMS to expand leasing in the Chukchi and Beaufort Seas, as well as Bristol Bay and Cook Inlet.

Texas Oil and Gas Association supports the MMS proposal and urges expanded leasing opportunities in all OCS areas. This comment features support for reversing the moratoria, and establishing revenue sharing.

The TGS strongly supports the MMS DPP. The TGS requests as flexible a plan as possible in order that the federal government will be able to respond to changing circumstances. The TGS reviews OCSLAA mandates and cites the hurricanes as demonstrating problems related to concentrating OCS development in a small area. One lesson from Katrina and Rita should be "equitable sharing" among off-shore regions. The TGS questions the national view of the MMS and recommends the program be reviewed to fully account for the socioeconomic impacts of all the American people.

Virginia Natural Gas asks the MMS to include the Mid-Atlantic Planning Area in the 5-year Plan and that MMS use equitable principles in determining the lateral boundaries of the Commonwealth of Virginia. Washington Gas supports enactment of legislation introduced in the Commonwealth by Frank Wagner S. B. 262 to encourage Governor Tim Kaine to seek relief from the current moratorium on the exploration and development of natural gas off the Virginia coast.

WesternGeco strongly supports expanded leasing on the OCS. Offshore development must be conducted in an environmentally safe manner. WesternGeco also supports revenue sharing. These comments are from the perspective of citizen consumers and also the farming and manufacturing industries.

Non-Energy Industry Associations and Business Groups

Agriculture and chemical businesses and the industry associations representing these sectors are among the most numerous commenters in this category. Fertilizer companies, which account for about 20 percent of the total number of comments, express concern about inadequate OCS development and uniformly offer price competitiveness arguments to urge the MMS to expand the program. These comments have been condensed to show only the representative concepts. Chambers of Commerce are also well-represented. A majority of the commenters support a 5-year plan that offers additional acreage for offshore oil and gas production and development. Commenters were concerned about environmental impacts of leasing activity, however, most entrusted resource protection to existing governing authorities and urged the MMS to proceed with expeditious development within these guidelines.

AG Processing Inc supports the MMS proposal and views the plan as "not sufficiently bold enough to support future economic growth." The MMS is urged to expand its plan to include all planning areas.

Agricultural Retailers Association supports the MMS in expanding the OCS program because of pressure in the agricultural industry. Energy supply shortages are harming U.S. agriculture. The ARA identifies specific areas that MMS should open for planning purposes, including the Central and Western Gulf, all the "original Sale 181 area" in the Eastern and Central Gulf, the Atlantic Planning area and areas in Alaska.

Agricultural Energy Alliance (AEA) represents over 106 companies who support expanded access to the OCS for the development of energy resources comments that price and short supply of natural gas harms farming communities. The AEA specifies areas where an expanded the MMS program is needed in almost all 26 areas of the federal OCS.

Alabama's Independent Automobile Dealers Association supports the MMS proposed 5-year plan and urges the MMS to expand leasing.

The largest salmon fisherman's association in Bristol Bay, Alaska opposes the MMS efforts to open offshore oil and gas drilling in the North Aleutian Basin. Due to the sensitivity of the area, weather conditions and volcanic activity, this group is strongly opposed.

Alaska Miners Association strongly supports increased domestic oil and gas production on the OCS. This comment provides specific locations for the MMS program expansion in Alaska and generally recognizes that all areas of the North Aleutian Basin need to be expanded in a manner that attracts companies to risk the time and cost to explore the areas.

Albemarle-Pamlico Economic Development Council recognizes that its coastal residents are struggling with the issue of OCS development at this time. Prior to making a decision to drill off the North Carolina coast, officials need to determine the actual resource capability and to encourage the involvement of other coastal communities. The APEC supports inclusion of the North Carolina OCS in addition to the Virginia coastal waters already identified in the plan.

American Chemistry Council (ACC) urges the MMS to return to the "first principles" stated in the Act and Amendments -- to make key public resources available expeditiously, and to facilitate greater development. The ACC describes a "crisis" in natural gas prices and urges the MMS to open all OCS areas to consideration, to give priority to natural gas sales, to lease immediately all of the Sale 181 area, to inventory OCS resources, to streamline the review process, and to accelerate the leasing into the initial years of the 5-year Plan.

American Highway Users Alliance strongly supports expanded leasing on the U.S. OCS and supports consideration of additional acreage in all available Federal offshore waters, specifically in the Eastern GOM and throughout the Atlantic. On behalf of the transportation sector, alleviating energy price increases and supply shortages is the primary reason to access domestic energy resources.

American Iron and Steel Institute strongly supports increased domestic oil and gas production on the OCS. This comment provides specific locations for expansion -- generally recognizing all areas that need to be expanded in the Program, and notes today's sophisticated and safe technologies.

American Trucking Associations (ATA), Inc. supports increased domestic oil and gas production on the OCS. This comment provides numerous examples of America's need for energy and the costs associated with the energy supply needs of residential, commercial and industrial uses. The ATA notes specific locations for the MMS program expansion -- generally recognizing that all areas need to be expanded. The ATA notes today's sophisticated and safe technologies will allow for exploration and development without harm to the environment.

The ADEC supports expanded leasing on the U.S. OCS. This group states that the impact to whales, and other sea mammals is a concern, however, economic diversification is needed in the area as well. Protection of the natural resources is important in the process of lifting the moratoria to allow exploration and production activities. Congressional proposals regarding revenue sharing are supported.

The Arkansas Grocers and Retail Merchants Association supports the MMS proposed 5-year plan and finds that the MMS program is not bold enough. The major concern of the Arkansas Grocers and Retail Merchants Association is price and availability of domestic resources. The comment points out that new estimates of untapped resources are being made available by using new seismic and computer modeling technology.

Associated General Contractors of Mississippi strongly support expanded access to federal waters in the period 2007-2012. Raising concerns about energy prices and jobs, this trade association urges the MMS to expand leasing opportunities.

Associated Industries of Florida supports enhanced exploration and drilling for oil and natural gas in the Eastern GOM. This comment discounts the harm to tourism and to interference with military training missions.

The Bering Sea Fisherman's Association opposes the MMS planning in the Alaskan region. The comment sets forth the goals of the organization which are: to help take the opinions and ideas of the Bering Sea Fishermen to the state, nation, and world; to work with agencies on issues related to Bering Sea Fishermen; and to inform fishermen of new political, economic and technological developments which may affect their livelihoods. The comment notes the ecological significance of the Alaska Coastal Current flows and the ecosystems and habitats local to the Bering Fisherman's Association. The harm to populations of marine mammals is the primary focus of the comments. The commenters will not support federal programs which unnecessarily endanger renewable resources.

Boise Paper supports the MMS proposal and urges expanded leasing opportunities in all OCS areas. This comment addresses hurricane-related price spikes, supports reversing the moratoria and calls for expansion of access to the OCS during the next lease agreement.

Celanese Ltd. supports the MMS planning but feels that the program is too limited. The MMS is encouraged to maximize the options, and only limit planning by legislative action, not by restrictions within the scope of agency authority. Across a 4-year outlook, natural gas factors changed dramatically. It is prudent for the DOI to refrain from limiting potential supply areas when making determinations through 2012.

The CF Industries urges the MMS to open more areas to OCS development, commenting that the MMS should expand the availability of resources in all OCS areas, and include new areas in Alaska, and the Atlantic region. The CF Industries explains that nitrogen fertilizer (the main ingredient of which is natural gas) is their dominant concern.

As a major consumer of natural gas, the chemical sector seeks more moderate gas prices and a more predictable gas marketplace. Chemical Industry Council of Illinois urges the MMS to expand leasing opportunities (particularly for Sale 181 area), to streamline the leasing process and, to become a catalyst for changing the policies and perceptions of offshore exploration and development.

Chickasaw Distributors, Inc. strongly supports the MMS proposed 5-year plan and urges the MMS to expand leasing in all available lease sale areas.

Council of Industrial Boiler Owners (CIBO) supports the development of more domestic oil and natural gas resources off our coasts. The CIBO raises the supply/demand imbalance as a problem in domestic energy markets. The CIBO advocates for numerous specific areas to open to analysis and leasing, urging the MMS to take bold action to make as many off shore areas available as possible.

Consumer Energy Alliance (CEA) supports development of all domestic energy resources and finds that high energy prices negatively impact consumers and the U.S. economy. The CEA supports the MMS plans to access domestic resources and discusses how safe U.S. operations are compared to oil and gas operations worldwide. The CEA provides data about the OCS

inventory, hurricane shut downs, and safety/environment policies. Specifically, CEA urges the MMS to open Alaska, the Pacific, the Atlantic, and the GOM to offshore oil and gas development and to initiate revenue sharing between the federal government and individual localities.

Continental Airlines comments in favor of the MMS actions to aggressively pursue new sources of domestic oil production, to help stem the price of crude oil.

Council for A Better Louisiana (CABL) supports expanded leasing and notes that Louisiana benefits from oil and gas exploration and production. This comment strongly supports federal legislation to allow Louisiana to receive OCS revenue. Lastly, CABL supports additional areas in the GOM, understanding that such development will be done in an environmentally safe manner.

Dow Chemical Company supports the MMS proposed 5-year plan and urges the MMS to expand leasing. This comment outlines a negative investment outlook because of the restrictions on energy resources in the United States. Dow is concerned that the policies of Florida and California place a tax on the rest of the country. Dow supports leasing all the current Sale 181 area, and supports streamlining permitting processes to accelerate supply availability.

DuPont supports the 5-year Leasing Program. As a major consumer of natural gas, the chemical sector seeks more moderate gas prices and a more predictable gas marketplace in order to produce a wide range of innovative products and services including apparel, electronics, communications and other items. DuPont urges the MMS to expand leasing opportunities in numerous specific areas, to streamline the leasing process and, to become a resource for changing the perceptions of offshore exploration and development, by highlighting the safety records and other positive benefits of the program.

Edison Electric Institute (EEI) focuses on natural gas production and supports an expanded OCS gas-leasing program. This comment discusses how gas-fired electric generation is run by units that have no alternatives and in most cases, no ability to maintain operations when natural gas is either unavailable or very expensive. The EEI urges the MMS to open more OCS areas to gas exploration and development.

Farm Bureau of Arkansas supports the MMS proposed 5-year plan and urges the MMS to expand leasing.

Federal Covers and Textiles, Inc. supports expanded oil and gas leasing on the OCS to ensure that U.S. consumers have adequate energy supplies at affordable prices. This comment notes that offshore development must be conducted in an environmentally safe manner and Federal Covers and Textiles, Inc. also is very supportive of revenue sharing.

Florida Retail Federation supports domestic energy development, specifically supporting the MMS planning with the continued expectation that the MMS be equally responsible in "protecting our important coastal and natural resources." This comment refers to the one in five workers in Florida that are involved in the retail industry, the continued inaction on bringing more Americans oil and gas supplies, and regulatory oversight needed to protect Florida's coast and the views of the coasts.

Florida United Business Association supports the MMS program, but believes the areas covered are not enough for our future energy needs. The MMS should expand oil and natural gas production as a high priority in all areas, including the Sale 181 area and the "stovepipe." Expansion in Alaska, the GOM and the South Atlantic region is important. Loss of Florida manufacturing jobs and fertilizer costs to farmers is of concern to this commenter.

Harvey Canal Industrial Association strongly supports leasing in the 21 lease sale areas proposed in the MMS draft 5-year plan and requests additional acreage for additional leasing.

Industrial Energy Consumers of America (IECA) supports increased domestic oil and gas production on the OCS. This comment provides numerous examples of America's need for energy and the costs associated with the energy supply needs of consumers. The IECA notes specific locations for the MMS program expansion -- generally recognizing that all areas need to be expanded. The IECA notes today's sophisticated and safe technologies will allow for exploration and development without harm to the environment.

International Paper supports the MMS expansion of OCS oil and gas leasing and efforts to analyze OCS lands currently under presidential withdrawal or congressional moratoria. However, this comment notes that the MMS does not propose a leasing strategy capable of satisfying the Nation's growing energy demands. For this reason, the MMS should promote greater domestic production through its leasing programs. At a minimum, the MMS should consider opening the remaining portions of the Lease 181 area in the GOM, and expand acreage offered for lease in the Beaufort and Chukchi Seas and the North Aleutian planning areas.

Louisiana Association of Business and Industry (LABI) supports expanded leasing on the OCS from 2007 to 2012. The LABI presents a state-wide approach to a program with national objectives, pointing out that the distribution of OCS activity be much wider in order to prevent an over-concentration on the central and Western Gulf. Offering acreage in the federal waters off Alaska and in the Atlantic and Revenue sharing are essential. Environmental safeguards are also important and LABI supports direct OCS revenues from offshore activities to fund efforts for environmental monitoring, mitigation, and enforcement. This comment focuses on the long-term needs of the entire country to justify its request that the MMS develop OCS planning areas other than off "our own coast."

McKenzie Tank Lines, Inc. supports the MMS planning and urges the MMS to expand the program to include federal waters offshore Florida, as well as all available leasing areas in the GOM and certain areas of the Atlantic. McKenzie is concerned about rising costs and related impacts to local economies. McKenzie Tank Lines, Inc. supports revenue sharing and specifically mentions the Florida areas known as Florida's Panhandle.

Michigan Railroad Association (MRA) strongly supports increased domestic oil and gas production on the OCS. This comment provides numerous examples of America's need for energy and the costs associated with the energy supply needs of railroads. The MRA notes specific locations for the MMS program expansion -- generally recognizing that all areas need to be expanded.

Mississippi Asphalt Pavement Association (MAPA), Inc. represents 63 firms engaged in the highway, commercial, and residential construction and maintenance industries. The MAPA members, including 4,238 employees support expanded access to development on the OCS areas.

The National Association of Manufacturers (NAM) comments from the perspective of the manufacturing sector, namely the chemical manufacturing industry, which is hard-hit by the price spikes in natural gas in recent times. The NAM comments that the DPP does not adequately increase domestic supplies of natural gas and oil and does not address overwhelming public support for an expanded OCS plan. Specific areas to expand the plan include the entire Lease/Sale 181 area, including the area known as the "stovepipe" and the so-called "Eastern Bulge." This comment discusses the estimated reserves in the OCS and finds the OCS contains substantial energy resources.

National Defense Council Foundation (NDFC), a military think tank, strongly endorses the MMS plans to expand access to the OCS. Interference with military exercises is a concern that is unwarranted. Lease stipulations and other tools are available to regulators and lessees to advance development but maintain safe military operations in the nearby areas. The NDFC finds that the leasing program is an urgent national priority and more areas should be under consideration, namely the GOM, Alaska and the Atlantic. Development of the OCS is a military necessity. Resource Security Institute joins these comments.

New York Economic Development Council (NYEDC) supports the MMS program planning and views expanded access to our offshore resources as vitally important to American energy independence. The business sector seeks more moderate gas prices and a more predictable energy marketplace. The NYEDC urges the MMS to expand leasing opportunities (particularly for Sale 181 area and other areas in Alaska and in the GOM, and the South Atlantic region).

Ports Association of Louisiana strongly supports the MMS planning and urges the MMS to include additional acreage for lease to ensure adequate oil and gas supplies for U.S. consumers. Ports Association of Louisiana supports removal of the moratoria, increasing acreage in Alaska and the Atlantic, revenue sharing, and strong environmental standards.

Service Station Dealers of America and Allied Trades urge the MMS to open the following areas: "Sale 181" including the northern segment known as the "stovepipe," Eastern GOM areas and Alaskan areas, and to start dialogue with states in the Atlantic region in a manner similar to Virginia.

Simmons & Company strongly supports the MMS planning and urges the MMS to include additional acreage for lease to ensure adequate oil and gas supplies for U.S. consumers. Simmons & Company supports removal of the moratoria, increasing acreage in Alaska and the Atlantic, revenue sharing, and strong environmental standards.

South Central Louisiana Industrial Business group supports the MMS actions and moreover, urges the MMS to look at local conditions and to compensate Louisiana interests for impacts for current and future drilling prior to approving any new lease sales. A critical issue is to appropriately compensate Louisiana interests through oil revenues before further burdening Louisiana with increased impacts from new lease sales.

Port of Corpus Christi supports the MMS in efforts to increase U.S. oil and gas production and to expand production opportunities in new areas.

USA Rice Federation represents members that are major consumers of natural gas and seek more moderate gas prices and a more predictable gas marketplace. The USA Rice urges the MMS to expand leasing opportunities (particularly for Sale 181 area and other specific areas in Alaska and the Atlantic and the GOM), to streamline the leasing and assessment process. Yukon River Drainage Fisheries Association opposes the MMS planning and believes that drilling on the North Aleutian Basin threatens Yukon River and Western Alaska salmon populations. This comment provides a discussion of the Exxon Valdez spill and the impacts on the local ecosystems. Biological threats to salmon populations are the most urgent concern noted in this comment. The MMS does not adequately consider impacts on Western and Interior Alaska. Environmental justice concerns are presented and discussed. Mitigation measures are raised as a major concern; cash payments, as a mitigation measure is inadequate to replace the vital economic and socio-cultural role salmon play for Western Alaskan communities.

The Alaska Chamber of Commerce supports the MMS and urges the MMS to include additional acreage for lease to insure that adequate supplies of oil and natural gas are available to U.S. consumers. Specifically the Chamber asks MMS to consider Bristol Bay for development.

The Anchorage Chamber of Commerce supports the MMS proposals and agrees that balancing development with other concerns requires adherence to strong environmental standards. This comment mentions long lead times required to develop energy resources.

Arkansas State Chamber of Commerce and the Associated Industries of Arkansas, Inc. support the MMS program, but feel it is not bold enough for our future energy needs. The MMS should expand oil and natural gas production as a high priority in all areas, including the Sale 181 area and the "stovepipe." Expansion in Alaska, the GOM and the South Atlantic region is important. Loss of manufacturing jobs and energy costs to farmers is of concern to these cementers.

Greater Woodland Park (CO) Chamber of Commerce supports the MMS proposed 5-year plan and urges the MMS to expand leasing. Citing hurricane statistics, this comment makes the point that modern development activities are conducted within strong environmental standards and even after the 2005 storm season, there was no loss of life and no significant spills related to offshore facilities.

While Houma-Terrebonne Chamber of Commerce (LA) supports the MMS on the proposed 5-year leasing plan, the Chamber is extremely concerned with the use of revenues generated by oil and gas activities. Local communities do not receive adequate compensation to mitigate the heavy impacts of supporting the oil and gas industry. The MMS should recognize this in its report. Therefore, this commenter's support is contingent on the State of Louisiana and Terrebonne Parish receiving significant additional revenue sharing off the coast in federal waters. This position is consistent with that of the State Governor Kathleen Blanco.

Michigan Chamber of Commerce supports increased domestic oil and gas production on the OCS. This comment provides numerous examples of America's need for energy and the costs associated with the energy supply needs of residential, commercial and industrial uses. The comment notes specific locations for the MMS program expansion -- generally recognizing that

all areas need to be expanded. As an energy importer state, Michigan relies on other states and countries for transportation and heating fuels. Michigan Chamber of Commerce sees the leasing program as insufficient to support future economic growth.

Mobile Area Chamber of Commerce represents 2040 businesses in southwest Alabama and strongly supports expanded leasing in the U.S. OCS. Attached to this comment is an energy policy statement passed by the Chamber that provides a comprehensive position on goals to increase energy supplies and improve the regulatory climate. The Chamber supports giving coastal states the option to allow natural gas production off their coasts by providing access to the OCS for exploration and development.

National Black Chamber of Commerce supports the MMS program planning and views expanded access to our offshore resources as vitally important to American energy independence and urges the MMS to expand leasing opportunities (particularly for Sale 181 area and other areas in Alaska and in the GOM, and the South Atlantic region).

St. Petersburg Area Chamber of Commerce opposes the MMS proposed 5-year plan and specifically urges the MMS not to open leasing area 181 to drilling. St. Petersburg Area Chamber of Commerce supports the bipartisan effort, S. 2239 the Permanent Protection of Florida Act.

The Chemical Industry subcommittee of the Tennessee Chamber addresses faltering exports from US chemical companies as a direct result of natural gas shortages and the sharp rise in natural gas prices. As a further result, U.S. competitiveness declines and domestic expansion is curtailed. Thus, any potential new investment and jobs are projected to be moved overseas. The MMS is urged to "immediately reverse that trend line." The MMS should expand exploration and production opportunities, streamline procedures and provide a public information resource about the safety of operations and the need for expanded operations.

The U.S. Chamber of Commerce (USCC) supports the MMS planning for the OCS and provides a detailed discussion of the congressional and Presidential authority over OCS areas currently off-limits. While the U.S. Chamber applauds the MMS for consideration of 2 planning areas that are currently under moratoria or presidential withdrawal, the Chamber finds the DPP a disappointment because it does not go far enough. The USCC finds that the Plan does not adhere to the requirements of the Act. The USCC also concludes that the need for domestic production is greater than ever and that oil and gas resources can be safely and responsibly recovered at this time.

General Public

In response to the DPP, the MMS received almost 39,500 comments in total, of which over 27,200 comments are in favor of the MMS planning and over 12,300 are opposed. Most comments from private citizens were received regarding the 5-year program as a result of what appeared to be mass mail campaigns generating form letters for each respondent to sign and mail. Therefore, there appeared to be a uniformity of opinion focused on the following themes: "domestic production is needed to sustain American businesses and residential energy needs," "conservation rather than resource development is beneficial to Americans," "fragile marine

environments should not be impacted for energy production," and "oil and gas development must be a primary goal – not environmental protection."

A majority of the commenters, about 70 percent, supported a 5-year plan that offers increased acreage for offshore oil and gas development planning. These comments focus on the instability in the Middle East, American military operations in Iraq and high energy prices in the United States. A small subset of these comments urged Federal government resources to be used to develop alternative resources.

Approximately 30 percent of the private citizens who wrote letters oppose development of the domestic OOCS and view the environmental hazards to the local marine life too great a risk for limited energy resources.



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.