

Environmental Assessment

Proposed OCS Lease Sale 202 Beaufort Sea Planning Area

**Minerals Management Service
Alaska OCS Region**

August 2006

Finding of No New Significant Impacts

The Minerals Management Service (MMS) has prepared an Environmental Assessment (EA) for proposed Lease Sale 202 in the Beaufort Sea Planning Area of the Outer Continental Shelf (OCS). During February 2003, the MMS filed with the U.S. Environmental Protection Agency a multiple-sale Environmental Impact Statement (EIS) assessing the effects of Lease Sale 202 and two other Beaufort Sea lease sales in the 2002-2007 OCS Leasing Program—Lease Sales 186 and 195. This EA tiers from the multiple-sale EIS and the Lease Sale 195 EA, and incorporates much of the information by reference. It also reexamines the potential environmental effects of the Proposed Action and alternatives, based on new information regarding potential impacts or issues that were not available at the time the final EIS was prepared.

All of the information and analysis presented in the multiple-sale EIS was reviewed by MMS. Several topics were determined to have new information requiring a re-evaluation of the environmental impact analysis: subsistence and sociocultural systems, marine and coastal birds, local water quality, bowhead whales, polar bears, other resources, and the cumulative effect of climate change. The new information is summarized in the EA. The EA also analyzes whether this new information indicates that there are likely to be significant new impacts that were not addressed in the multiple-sale EIS. The EA concludes that the likelihood of one or more large oil spills occurring and contacting a land segment is still very low (e.g., less than 2 percent within 60 days). Due primarily to increased concentrations of polar bears on parts of the coast, the relative oil-spill risk to the population has increased since preparation of the multiple-sale EIS. The existing MMS operating regulations, the standard mitigating measures, and the following new Information to Lessees (ITL's), described fully in EA Section III.C.2, would moderate the spill risk to bears:

Proposed New Information to Lessees for protection of polar bears, entitled Planning for Protection of Polar Bears. It states in part that lessees are advised to consult with the U.S. Fish and Wildlife Service (FWS) and local Native communities while planning their activities and before submission of their Oil Spill Contingency Plans.

Revisions to Standard Information to Lessee Clauses:

Standard ITL No. 4, entitled Bird and Marine Mammal Protection. The revision in part adds polar bears to the list of species that have been proposed for listing under the Endangered Species Act.

Standard ITL No. 11, entitled Sensitive Areas to Be Considered in the Oil Spill Contingency Plans (OSCP). The revision explains in part that coastal aggregations of polar bears during the open water/broken ice period are particularly vulnerable to the effects of an oil spill, which lessees must account for in their OSCP.

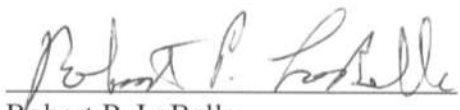
No new significant impact was identified for the proposed lease sale that was not already assessed in the multiple-sale final EIS. Therefore, MMS has determined that a supplemental EIS to the multiple-sale EIS is not required and is issuing this Finding of No New Significant Impacts.

Supporting Documents:

Environmental Assessment, Proposed OCS Lease Sale 202, Beaufort Sea Planning Area, OCS EIS/EA MMS 2006-001, dated July 2006.

Environmental Assessment, Proposed Oil and Gas Lease Sale 195, Beaufort Sea Planning Area, OCS EIS/EA MMS 2004-028, dated July 2004.

Final Environmental Impact Statement, Beaufort Sea Planning Area, Oil and Gas Lease Sales 186, 195, and 202, OCS EIS/EA MMS 2003-001, dated February 2003.



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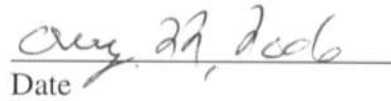

Date

TABLE OF CONTENTS

Abbreviations, Acronyms, and Symbols

I.	OBJECTIVES OF THE ENVIRONMENTAL ASSESSMENT, 1
II.	PURPOSE AND NEED FOR THE PROPOSAL, 1
III.	PROPOSED ACTION AND ALTERNATIVES, 1
III.A.	Proposed Action – Alternative VII, 1
III.B.	Potential Scenario, 2
III.C.	Mitigation, 4
III.C.1.	Standard Mitigation, 4
III.C.2.	Proposed New Mitigation, 4
III.C.2.a.	Proposed New ITL for Protection of Polar Bears, 5
III.C.2.b.	Revisions to Standard Information to Lessee Clauses, 5
III.D.	Leasing Incentives, 8
III.E.	Other Alternatives, 8
III.E.1.	Alternative I – The Area of Call, 8
III.E.2.	Alternative II – No Sale, 9
III.E.3.	Alternative III – Barrow Subsistence Whaling Deferral, 9
III.E.4.	Alternative IV – Nuiqsut Subsistence Whaling Deferral, 9
III.E.5.	Alternative V – Kaktovik Subsistence Whaling Deferral, 9
III.E.6.	Alternative VI – Eastern Deferral, 9
IV.	UPDATED IMPACT ANALYSIS, 9
IV.A.	Updated Information on the Physical Environment and Potential Operations, 10
IV.A.1.	Physical Oceanography, 10
IV.A.2.	Acoustic Environment, 12
IV.A.3.	Oil-Spill-Risk Analysis, 14
IV.A.4.	Oil-Spill Prevention and Response, 15
IV.A.5.	Seismic Surveying, 17
IV.B.	Updated Information on the Affected Environment, 18
IV.B.1.	Subsistence-Harvest Patterns and Sociocultural Systems, 18
IV.B.2.	Marine and Coastal Birds, 20
IV.B.3.	Local Water Quality, 21
IV.B.4.	Resources with Lower Levels of Effects, 22
IV.B.4.a.	Bowhead Whales, 22
IV.B.4.b.	Polar Bear, 24
IV.B.4.c.	Other Marine Mammals, 25
IV.B.4.d.	Fishes and Essential Fish Habitat, 27
IV.B.4.e.	Other Resources, 28
IV.B.4.e(1)	Local Air Quality, 28
IV.B.4.e(2)	Archaeological Resources, 29
IV.B.4.e(3)	Additional Resources, 29
IV.B.5.	Environmental Justice, 30
IV.B.6.	Land Use Plans and Coastal Zone Management, 31
IV.B.7.	Summary of Sections IV.A and IV.B, 32
IV.C.	Updated Effects of the Proposed Action, 32
IV.C.1.	Impact Significance Criteria and Major Findings, 32
IV.C.1.a.	Impact Significance Criteria, 33

IV.C.1.b.	Major Findings, 34
IV.C.1.b(1)	Subsistence-Harvest Patterns and Sociocultural Systems, 34
IV.C.1.b(2)	Marine and Coastal Birds, 34
IV.C.1.b(3)	Local Water Quality, 34
IV.C.1.b(4)	Bowhead Whales, 35
IV.C.1.b(5)	Polar Bear, 35
IV.C.1.b(6)	Other Marine Mammals, 35
IV.C.1.b(7)	Fishes and Essential Fish Habitat, 36
IV.C.1.b(8)	Additional Resources, 36
IV.C.1.b(9)	Environmental Justice, 36
IV.C.2.	Update of Effects Analysis, 36
IV.C.2.a.	Subsistence-Harvest Patterns and Sociocultural Systems, 36
IV.C.2.b.	Marine and Coastal Birds, 41
IV.C.2.c.	Local Water Quality, 49
IV.C.2.d.	Bowhead Whales, 52
IV.C.2.e.	Polar Bear, 55
IV.C.2.f.	Other Marine Mammals, 64
IV.C.2.g.	Fishes and Essential Fish Habitat, 66
IV.C.2.h.	Additional Resources, 85
IV.C.2.i.	Environmental Justice, 88
IV.C.3.	Summary of Section IV.C, 92
IV.D.	Updated Effects of Other Alternatives, 93
IV.D.1.	Alternative I – The Area of Call, 93
IV.D.2.	Alternative II – No Sale, 93
IV.D.3.	Alternative III – Barrow Subsistence Whaling Deferral, 93
IV.D.4.	Alternative IV – Nuiqsut Subsistence Whaling Deferral, 94
IV.D.5.	Alternative V – Kaktovik Subsistence Whaling Deferral, 95
IV.D.6.	Alternative VI – Eastern Deferral, 95
IV.D.7.	Environmental Justice Summary for All Alternatives, 96
IV.D.8.	Summary of Effects of the Alternatives, 96
IV.E.	Updated Cumulative Effects of Proposed Sale 202, 96
IV.E.1.	Cumulative Scenario, 96
IV.E.2.	Resource-Specific Cumulative Effects, 97
IV.E.2.a.	Subsistence-Harvest Patterns and Sociocultural Systems, 98
IV.E.2.b.	Marine and Coastal Birds, 105
IV.E.2.c.	Local Water Quality, 107
IV.E.2.d.	Bowhead Whales, 107
IV.E.2.e.	Polar Bear, 109
IV.E.2.f.	Other Marine Mammals, 112
IV.E.2.g.	Fishes and Essential Fish Habitat, 114
IV.E.2.h.	Additional Resources, 115
IV.E.2.i.	Environmental Justice, 116
IV.E.2.j.	Overall Summary of Cumulative Effects, 120
IV.F.	Overall Summary of Section IV, 121
V.	OUTREACH AND GOVERNMENT-TO-GOVERNMENT CONSULTATION, 122
VI.	BIBLIOGRAPHY, 124

Figures

- Figure 1 Proposed Action and Alternatives, Proposed Sale 202, March 2007
Figure 2 Oil-Spill Impacts Model for Selected Fishes using Nearshore/Intertidal Substrates as Spawning and/or Rearing Habitats (e.g., pink or chum salmon, Pacific herring, capelin)

Tables

- Table III-1 Possible Sales-Related Activities, Updated with the Percentage of Leases Issued during Sales 186 and 195
Table III-2 Representative Development Schedule for Sale 202
Table III-3 Summary of Basic Exploration, Development, Production, and Transportation Assumptions for All Alternatives
Table III-4 Projected Number of State of Alaska and OCS Seismic Surveys in the Beaufort and Chukchi Seas between 2006 and 2010.

APPENDICES

- Appendix A Letters Commenting on Proposed Sale 202
Appendix B Standard Mitigation
Appendix C Oil-Spill Analysis
Appendix D Additional Resource Information
Appendix E Threatened and Endangered Species Consultation
Appendix F Coordination Meeting for Proposed Sale 202

Abbreviations, Acronyms, and Symbols

AAC	Alaska Administrative Code
ACIA	Arctic Climate Impact Assessment
ACMP	Alaska Coastal Management Plan
ACS	Alaska Clean Seas
ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
AEWC	Alaska Eskimo Whaling Commission
AMAP	Arctic Mapping and Assessment Program
ANCSA	Alaska Native Claims Settlement Act
ANIMIDA	Arctic Nearshore Impact Monitoring Development Area
ANWR	Arctic National Wildlife Refuge
AQCR	Air Quality Control Regions
bbbl	barrel(s)
BCB Seas	Bering-Chukchi-Beaufort Seas stocks (bowhead whales)
BE	Biological Evaluation
Bbbl	billion barrels
BLM	Bureau of Land Management
BPXA	British Petroleum (Exploration) Alaska, Inc.
BWASP	Bowhead Whale Aerial Survey Program
CANIMIDA	Continuation of Arctic Nearshore Impact Monitoring in Development Area
CBC	Center for Biological Diversity
CBS	Central Beaufort Sea (polar bear population)
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
chl-a	chlorophyll-a
CIP	Capital Improvements Project(s)
CZMA	Coastal Zone Management Act
dB	decibel(s)
DCED	Department of Community and Economic Development (State of Alaska)
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EO	Executive Order
ERA	Environmental Resource Area
ESA	Endangered Species Act
FR	<i>Federal Register</i>
FWS	Fish and Wildlife Service (USDOI)
G&G	Geological and Geophysical (permit)
ICAS	Inupiat Community of the North Slope
IHA	Incidental Harassment Authority
in	inch(es)
in ³	cubic inch(es)
IPCC	Intergovernmental Panel on Climate Change
ITL	Information to Lessees
IUCN/SSG	World Conservation Union/Species Survival Commission
IWC	International Whaling Commission
km	kilometer(s)
km ²	square kilometer(s)
LS	land segment
m	meter(s)
mi ²	square mile(s)
MMbbl	million barrels (of oil)
MMPA	Marine Mammal Protection Act
MMS	Minerals Management Service

NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NPR-A	National Petroleum Reserve-Alaska
NSB	North Slope Borough
NSBCMP	North Slope Borough Coastal Management Plan
NSBCP	North Slope Borough Comprehensive Plan
NTL	Notice to Lessees
NWAB	Northwest Arctic Borough
OBC	ocean-bottom cable (seismic surveys)
OCRM	Office of Resource Management (USDOC, NOAA)
OCS	Outer Continental Shelf
OSRA	Oil-Spill-Risk Analysis
PAH	polycyclic aromatic hydrocarbons
PBR	Potential Biological Removal
PBSG	Polar Bear Specialist Group
PEA	Programmatic Environmental Assessment
PINC	Potential Incident of Noncompliance
ppb	parts per billion
PSD	Prevention of Significant Deterioration
SBS	Southern Beaufort Sea (polar bear population)
TSS	total suspended solids
U.S.C.	United States Code
USDOC	U.S. Department of Commerce
USDOI	U.S. Department of the Interior
USEPA	Environmental Protection Agency
USGS	U.S. Geological Survey
Y-K Delta	Yukon-Kuskokwim Delta
<	less than
>	greater than
≤	less than or equal to
≥	equal to or greater than
2D	two-dimensional (seismic survey)
3D	three-dimensional (seismic survey)

I. OBJECTIVES OF THE ENVIRONMENTAL ASSESSMENT

The Minerals Management Service (MMS) prepared this Environmental Assessment (EA) to update the potential environmental and sociocultural effects of proposed Beaufort Sea Oil and Gas Lease Sale 202. The update is a step in a long sequence of assessments for numerous Beaufort Sea lease sales over the past two decades. The effects of reoffering the area through three proposed leases sales—186, 195, and 202—were assessed individually and cumulatively in the multiple-sale final Environmental Impact Statement (EIS) (USDOJ, MMS, 2003). The MMS responded to comments on the EIS and offered the area in Lease Sale 186 in September 2003. The potential effects of Sale 195 were updated with an EA, finding that there would be no new significant impact that was not already assessed in the multiple-sale EIS. The MMS responded to comments on the EA and reoffered the Beaufort Sea through Lease Sale 195 in March 2005. Partly because of the high price of oil, many tracts received bids, especially in the nearshore area.

This EA tiers from the two previous National Environmental Policy Act (NEPA) documents and updates the effects assessment for proposed Sale 202 (USDOJ, MMS, 2003). This EA will be available for public comment during midsummer 2006, and the proposed lease sale is scheduled for March 2007. Sections of this EA summarize the Purpose and Need for the Proposal, the Description of the Proposed Action and Alternatives, and the updated impact analysis, including updated information on the affected environment and effects. If Sale 202 is held and results in the issuance of leases, the potential effects of any specific proposals for operations (e.g., seismic exploration, exploratory drilling, construction of development structures, and/or pipeline burial) would be reviewed to determine if further NEPA analysis is needed. Although leasing is the first step towards oil production, numerous outer continental shelf sales conducted in the Beaufort Sea since 1979 have resulted in only one offshore field (Northstar) that extends into Federal waters. It is not realistic to assume that leasing will automatically result in development.

II. PURPOSE AND NEED FOR THE PROPOSAL

As explained in the Beaufort Sea multiple-sale final environmental impact statement (EIS) (USDOJ, MMS, 2003:Sec. I.A), the overall need for offshore oil and gas lease sales is identified in the Outer Continental Shelf Lands Act. It directs the Department of the Interior (USDOJ) to make such resources available to meet the Nation's energy needs as rapidly as possible and to balance the orderly energy resource development with protection of the human, marine, and coastal environments. Seven lease sales have been held in the Beaufort Sea, and the current 5-year schedule of lease sales includes one more—Sale 202.

The effects of the three sales were assessed in a Beaufort Sea multiple-sale final EIS. Sale 202 would help to reduce U.S. dependence on foreign petroleum sources. It would help also to moderate the rising price of oil and its negative effect on the economy. Further, the USDOJ has proposed additional lease sales in both the Beaufort Sea and Chukchi Sea Planning Areas under the proposed 2007-2012, 5-year oil and gas leasing program; thus, additional leases in the Beaufort Sea might help to moderate the high cost of exploring and/or developing prospects in the proposed lease-sale area.

III. PROPOSED ACTION AND ALTERNATIVES

This section includes a summary of the Proposed Action, a scenario of operations that reasonably might be expected to occur as a result of the Proposal, the mitigation measures and Information to Lessees (ITL's) that would help to moderate the potential effects, the proposed leasing incentives to stimulate industry interest in the Beaufort Sea, and alternatives to the Proposed Action (Fig. 1).

III.A. Proposed Action – Alternative VII.

The MMS identifies Alternative VII as the Proposed Action for Sale 202; the alternative would defer leasing within areas in which Barrow and Kaktovik residents conduct subsistence whaling. The Minerals

Management Service (MMS) received several comments in response to the Request for Information that was published in the *Federal Register* on October 28, 2005. Some of the comments expressed interest in leases within the whole Area of Call. That area, shown in Figure 1, includes 1,877 whole or partial blocks that encompass 9,770,000 acres (about 3,954,000 hectares). The MMS also received letters about the potential effects of operations in subsistence-whaling areas (Appendix A). The subareas that would not be offered for lease by Alternative VII consist of 54 whole or partial blocks, equaling approximately 259,000 acres, or 3% of the whole Area of Call. The deferrals were conceived as a way to reduce conflicts between subsistence whalers and outer continental shelf (OCS) operations. The deferral areas were discussed during public hearings on the North Slope and were the subject of comment letters on the multiple-sale final environmental impact statement (EIS) and Sale 195 Environmental Assessment. The deferrals were addressed recently in a letter about Sale 202 from the Alaska Eskimo Whaling Commission (AEWC) and about the 5-year program from U.S. Senator Murkowski. As explained in the AEWC letter (Appendix A), the Barrow and Kaktovik whalers hunt within areas larger than the deferrals. The MMS believes that conflicts between subsistence whalers and OCS operations within that larger area (and within the subsistence-whaling areas for Nuiqsut) can be moderated through mitigation measures.

III.B. Potential Scenario.

We assume that the Proposed Action would result in the production of 340-570 million barrels (MMbbl) of oil. For purposes of analysis, we use a single production estimate of 460 MMbbl of oil. The market price for oil is higher than when the multiple-sale EIS was completed. A future oil price range of \$18-\$30 per barrel was considered when determining an appropriate level of oil resources for analysis of the possible environmental consequences of a leasing program. Oil is a volatile commodity, and prices easily could drop in the future. Companies are very aware of the price volatility and, because development projects span several decades, they base their investment decisions on long-term average prices. The price for Alaska North Slope crude oil from 1996-2005 has averaged \$26.81 per barrel (*Anchorage Daily News*, 2006). Because scenarios are estimates of industry activities, it is realistic to base our analysis on long-term averages that better reflect industry decisions. This scenario is very optimistic when compared to historical trends in the Beaufort Sea, where leasing since 1979 has resulted in only one offshore development that partly tapped Federal OCS resources (Northstar in State waters). An optimistic development scenario ensures that the environmental analysis covers the potential effects at the "high end" of the range of petroleum activities, including those that could occur as a result of any increase in activities due to incentives. For these reasons, the exploration and development scenarios and environmental effects analysis presented in the multiple-sale final EIS are a reasonable estimate of the consequences of any Beaufort Sea sale as scheduled in the current 5-Year Offshore Oil and Gas Leasing Program.

In determining the amount of oil assumed to be developed and produced in this EA, MMS considers several factors for purposes of analysis. They include the technical and economically recoverable amounts of oil estimated from the MMS resource assessment to be contained in the geologic basin. Other factors include a calculation of the number and sizes of possible oil pools that feasibly could be developed.

Another significant factor is the MMS evaluation of the level of industry interest in the area. At the time that MMS originally estimated the exploration and development scenario for Sale 202, MMS' perception of industry interest was that no more than one field of approximately half a billion barrels (460 MMbbl) would be developed. This volume was based on the minimum economic field size needed for commercial development, after ensuring that an undiscovered oil pool of that size existed in our geologic database of prospects. With increases in oil price since that original estimate, a smaller field might be economic to develop. However, because we have not observed a corresponding increase in new exploration wells, new field development plans, or production from newly developed fields, our original estimate that one field would be developed from Sale 202 remains, in MMS' view, a reasonable and appropriate expectation.

In January, 2006, MMS published a new resource assessment (<http://www.mms.gov/alaska/re/reports/2006Asmt/index.HTM>). It showed a relatively small increase in technically recoverable oil resources from about 7-8 Bbbl in the Beaufort Sea. However, because of projected higher costs and improvements made to the estimating methodology, a substantial decline

occurred in economically recoverable resources at given oil prices, e.g. a reduction of about 80% at an oil price of \$30 per barrel. Nevertheless, the aggregate amount of economically recoverable resources for the geologic basin as a whole under the new assessment at the current higher oil price is above the earlier level of economically recoverable resources at the lower anticipated price.

What is germane here is the accuracy and relevance of the resources and level of development activity projected for this sale rather than for the planning area as a whole. In that regard, it is important to note that an unanticipated level of interest from a single major company resulted in a far larger than anticipated number of leases being issued in the second sale (Sale 195). Thus, offsetting the revised estimate of higher aggregate planning area resources is a higher proportional reduction in the remaining prospective acreage available to be offered than was originally projected for Sale 202, that is, acreage containing an identified geologic prospect that could contain oil. Only this remaining acreage can be offered in Sale 202. Of that, only a fraction is expected to be leased, and only a fraction of that is expected to be explored. Although multiple accumulations of hydrocarbon resources could be discovered, only one accumulation was previously expected to lead to development. Thus, despite changes in world petroleum market conditions and in our resource estimating methodology, our best judgment remains that a single field is likely to be developed from the leases issued in Sale 202.

In real terms, crude oil prices were even higher in the mid-1980's and many exploration wells were drilled in the arctic and elsewhere on the Alaskan OCS, but none resulted in development except for a few downhole locations from the Northstar island in State waters. It seems reasonable to assume that high hopes were brought on at least in part by high oil prices in the mid-1980's. The dashing of such high hopes by unsuccessful exploration and/or an eventual drop in prices is not uncommon in the oil and gas industry.

Industry does not make development decisions based on the current price volatility, but instead bases decisions on longer term, average prices, which are considerably lower. Even if MMS would assume that today's relatively high oil prices are sustained in the longer run and we used estimates of \$46 or \$59 per barrel oil for our analysis in this EA, the single field development still likely would be reasonable, because numerous factors dictate what actual developments occur and these can collectively deflate the optimism motivated by high oil price expectations. Other factors affecting oil- and gas-company development decisions include the high geologic, economic, environmental, technical, regulatory, and political risks associated with such development, especially in an isolated frontier environment with very severe weather and ice conditions as commensurately high costs.

Additional factors also make development hard to achieve—lack of existing infrastructure (the Beaufort Sea OCS has no oil and gas infrastructure); the remoteness of tracts from Prudhoe Bay and other onshore infrastructure; high capital costs to support a development; the company's required time to achieve payback on any capital investment; uncertainty about the existence of a future gas pipeline to the lower 48 states and transportation costs of using the pipeline; the minimum economic field size for a given area; the competition the companies face in acquiring tracts; the competing alternative investment opportunities the companies have; potential future interest rate increases; let alone the fluctuations of the general economy, stock market values, inflation, etc.

In the Sale 202 analysis, the projected levels and types of activities associated with exploration and development are grouped into three geographic zones—the Near/Shallow-Water (Near) Zone, Midrange/Medium (Midrange) Zone, and Far/Deepwater (Far) Zone (Table III-1). The zones were delineated primarily on distance to existing infrastructure and secondarily on water depth. As explained in Section II.B.2 of the multiple-sale final EIS, we assumed that leasing and exploration work would occur primarily in the Near Zone as a result of Sale 186, and that there would be less industry interest in the more remote zones. This assumed pattern of leasing did not occur during Sale 186, in which nearly half of the total bids were located in the Far Zone, although it remains to be seen if exploration activities (marine seismic and drilling) will occur on these remote leases. In the long run, we believe the exploration and development estimates for the three zones ultimately will be validated after all three sales are held. Accordingly, for Sale 195, we expected leasing and eventual exploration activities to occur primarily in the Midrange Zone, with a smaller percentage occurring in the Near Zone and in the Far Zone. Table III-1 has been reviewed based on the leasing results from Sales 186 and 195. The MMS still expects that leasing,

exploration, and development activities will expand into more remote, deeper water during proposed Sale 202, and our estimates for the total sales-related activities remain unchanged.

We reviewed the previously projected timeframes for exploration and development as a result of proposed Sale 202—projections that were included in the multiple-sale final EIS. We concluded that likely timeframes for these activities would be similar to those that were anticipated previously. The total number of exploration and development wells drilled and the type of exploration and production platforms remain unchanged (Tables III-2 and III-3). The probable timing of exploration, development and production activities also remains unchanged. Exploration drilling is anticipated to begin in 2010, 3 years after the proposed sale. A commercial discovery is assumed to occur 5 years after the sale and installation of a production platform occurs 5 years later in 2018. Production from Sale 202 leases is forecast to continue until 2038, about 5 years beyond the end of Sale 186 production. Projected pipeline landfall sites for this sale are the same as for Sales 186 and 195—near Smith Bay, Harrison Bay, Oliktok Point, Gwydyr Bay, and/or Foggy Island Bay (USDOI, MMS, 2003:Map A-4b). Because potential new fields leased in Sale 202 could be possibly located farther from existing infrastructure, a new onshore support facility might be proposed for either the National Petroleum Reserve-Alaska (NPR-A) or the eastern North Slope. Plans have been proposed for an expansion of development surrounding the Alpine field and these facilities could gather oil production from the Beaufort OCS. Although a recent development plan (Exxon Corporation) has been postponed for the Point Thomson field, this area remains a likely site for industrial expansion on the eastern North Slope. Future onshore projects in the Point Thomson area are likely to be used as an onshore support facility for any eastern Beaufort Sea development.

III.C. Mitigation.

The following section both summarizes standard mitigation that has been approved and describes proposed new mitigation that has not yet been approved.

III.C.1. Standard Mitigation. The effects of any exploration and development would be moderated by approved mitigating measures and ITL's. The following is a list of mitigating measures; Appendix B contains a list of the ITL's that are in effect, plus references to the MMS web sites with the full texts of the stipulations and ITL's:

- Protection of Biological Resources
- Orientation Program
- Transportation of Hydrocarbons
- Industry Site-Specific Bowhead Whale-Monitoring Program
- Conflict Avoidance Mechanisms to Protect Subsistence Whaling & Other Subsistence Activities
- Pre-Booming Requirements for Fuel Transfers
- Lighting of Lease Structures to Minimize Effects to Spectacled and Steller's Eiders
- Permanent Facility Siting in the Vicinity Seaward of Cross Island
- Permanent Facility Siting in the Vicinity Shoreward of Cross Island

After the assessment of Sale 195, there was a slight change in the stipulation about lighting of OCS structures to minimize potential effects to spectacled and Steller's eiders. As explained in Appendix B, the protocol to minimize the outward radiation of light and, thereby, the attraction of migrating eiders, was modified slightly by MMS and the Fish and Wildlife Service (FWS).

III.C.2. Proposed New Mitigation. The proposed new mitigation includes an ITL for protection of polar bears and proposed revisions to two standard ITL clauses. The ITL's are focused on MMS rules in 30 CFR part 250.

III.C.2.a. Proposed New ITL for Protection of Polar Bears:

Planning for Protection of Polar Bears. Lessees are advised to consult with the Fish and Wildlife Service (FWS) and local Native communities while planning their activities and before submission of their Oil-Spill Contingency Plans (OSCP's) to ensure potential threats to polar bears are adequately addressed based on the most current knowledge regarding their habitat use, distribution, and population status, and to ensure adequate geographic coverage and protection are provided under the OSCP. Coastal aggregations of polar bears during the open-water/broken-ice period are particularly vulnerable to the effects of an oil spill, which lessees must address in their OSCP's. For example, well-known polar bear aggregations have occurred at Kaktovik, Cross Island, and Point Barrow in close proximity to subsistence-harvested whale-carcass remains. Measures to ensure adequate timely geographic coverage and protection of polar bears may include, but are not limited to, the prestaging of oil-spill equipment at or near locations of polar bear aggregations to support oil-spill-response operations. Lessees are encouraged to consult and coordinate with FWS and the local Native communities to develop plans and mitigation strategies in their OSCP to prevent adverse effects to known bear aggregations. Making subsistence-harvested whale carcasses unavailable to polar bears on land during the fall open-water period may reduce polar bear aggregations and, thus, lower the potential for an oil spill to impact polar bears.

As part of the MMS review of proposed activities and mitigation measures, the Regional Supervisor Field Operations (RS/FO) will notify FWS at the review of proposed Exploration Plans and Development and Production Plans (and associated OSCP) and make copies of these documents available to the FWS for review and comment.

Lessees are encouraged to continue existing or initiate new training programs for oil-spill-response teams in local villages to facilitate local participation in spill response and cleanup. This effort allows local Native communities to use their knowledge about sea ice and the environment in the response process and can enhance their ability to provide protection to key resources, including polar bears.

As noted in ITL 4 Section (h), Bird and Marine Mammal Protection, the incidental take of marine mammals is prohibited unless authorization is obtained by those proposing the activity, whether or not the marine mammals are endangered or threatened. To protect polar bears and other marine mammals, MMS encourages OCS operators to obtain an incidental take authorization (ITA) from FWS under the Marine Mammal Protection Act (MMPA) prior to any operation. The ITA's must be requested annually. Obtaining an ITA will ensure that lessees' operations are planned and conducted with the most current knowledge of polar bears' habitat use, distribution, and population status.

Lessees are advised that polar bears may be present in the area of operations, particularly during the solid-ice period. Lessees should conduct their activities in a way that will limit potential encounters and interaction between lease operations and polar bears. Lessees are advised to contact FWS regarding proposed operations and actions that might be taken to minimize interactions with polar bears. Lessees also are advised to consult OCS Study MMS 93-0008, *Guidelines for Oil and Gas Operations in Polar Bear Habitats*.

Lessees are reminded of the provisions of the 30 CFR 250.300 regulations, which prohibit discharges of pollutants into offshore waters. Trash, waste, or other debris that might attract polar bears or might be harmful to polar bears should be properly stored and disposed of to minimize attraction of, or encounters with, polar bears.

III.C.2.b. Revisions to Standard Information to Lessee Clauses:

Standard ITL No.4 Section (h) Bird and Marine Mammal Protection. Lessees are advised that during the conduct of all activities related to leases issued as a result of this sale, the lessee and its agents, contractors, and subcontractors will be subject to the following laws, among others: the provisions of the Marine Mammal Protection Act (MMPA) of 1972, as amended (16 U.S.C. 1361 et seq.); the Endangered Species Act (ESA), as amended (16 U.S.C. 1531 et seq.); and applicable International Treaties.

Lessees and their contractors should be aware that disturbance of wildlife could be determined to constitute harm or harassment and, thereby, be in violation of existing laws and treaties. With respect to endangered species and marine mammals, disturbance could be determined to constitute a "taking" situation. Under the ESA, the term "take" is defined to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt to engage in such conduct." Under the MMPA, "take" means "harass, hunt, capture, collect, or kill or attempt to harass, hunt, capture, or kill any marine mammal." Violations under these Acts and applicable Treaties may be reported to the NOAA Fisheries or the FWS, as appropriate.

Incidental taking of marine mammals and endangered and threatened species is allowed only when the statutory requirements of the MMPA, the ESA, or both are met, depending on the species that is taken. Section 101(a)(5) of the MMPA, as amended (16 U.S.C. 1371(a)(5)), provides a mechanism for allowing, upon request and during periods of not more than 5 consecutive years each, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographic region, provided that NOAA Fisheries or the FWS finds that the total of such taking during each 5-year (or less) period would have no more than a negligible impact on such species or stock and will not have an unmitigable adverse impact on the availability of such species or stock for taking for subsistence uses.

Applicants can receive authorization to incidentally, but not intentionally, take marine mammals under the MMPA through two types of processes: the Letter of Authorization (LOA) process and the Incidental Harassment Authorization (IHA) process. In either case, under the MMPA, incidental take of marine mammals is prohibited unless authorization is obtained by those proposing the activity, whether or not the marine mammals are endangered or threatened.

Based on current guidance from the NOAA Fisheries' Office of Protected Resources web site, if the applicant can show that: (a) there is no potential for serious injury or mortality; or, (b) the potential for serious injury or mortality can be negated through mitigation requirements that could be required under the authorization, the applicant should apply for an IHA and does not need an LOA for the activity.

If the potential for serious injury and/or mortalities exists and no mitigating measures are available to prevent this form of 'take' from occurring, to receive authorization for the take, the applicant must obtain an LOA. The LOA requires that regulations be promulgated and published in the *Federal Register* outlining: (a) permissible methods and the specified geographical region of taking; (b) the means of effecting the least practicable adverse impact on the species or stock and its habitat and on the availability of the species or stock for subsistence uses; and (c) requirements for monitoring and reporting, including requirements for the independent peer review of proposed monitoring plans where the proposed activity may affect the availability of a species or stock for taking for subsistence uses.

In 1994, Section 101(a)(5) of the MMPA was amended to establish an expedited process by which citizens of the U.S. can apply for an authorization (an IHA) to incidentally take small numbers of marine mammals by harassment. Specific time limits for public notice and comment on any requests for authorization that would be granted under this new provision were established. According to the NOAA Fisheries Office of Protected Resources' Small Take web site: "In 1996 NOAA Fisheries published an interim final rule (50 CFR Part 216.101-108) implementing this aspect of the program. The interim rule will be amended and written upon completion of NOAA Fisheries' criteria for acoustic harassment" (www.nmfs.noaa.gov/prot_res/PR2/Small_Take/smalltake_info.htm#LOA).

Of those marine mammal species that occur in Alaskan waters, under the MMPA, the National Marine Fisheries Service (NMFS) is responsible for species of the order Cetacea (whales and dolphins) and the suborder Pinnipedia (seals and sea lions) except walruses; the FWS is responsible for polar bears, sea otters, and walruses. Thus, requests for ITA's should be directed towards the appropriate agency. Procedural regulations implementing the provisions of the MMPA are found at 50 CFR Part 18.27 for the FWS and at 50 CFR Part 216 for NMFS.

If an applicant is requesting authorization for the incidental, but not intentional taking of a marine mammal that is the responsibility of NOAA Fisheries, he/she must submit a written request to the NOAA Fisheries

Office of Protected Resources and the appropriate NOAA Fisheries Regional Office where the specified activity is planned. If an applicant is requesting authorization for the incidental, but not intentional, taking of a marine mammal that is the responsibility of the FWS, he/she must submit a written request to the FWS Regional Office where the specific activity is planned. More information on this process, and application materials, are available from the NOAA Fisheries Office of Protected Resources website (www.nmfs.noaa.gov/prot_res/PR2/Small_Take/smalltake.info.htm).

According to NOAA Fisheries Small Take web site, most LOA's and IHA's to date have involved the incidental harassment of marine mammals by noise. Activities with the greatest potential to harass by noise include seismic airguns, ship and aircraft noise, high-energy sonars, and explosives detonations.

Please note that the NOAA Fisheries web site on small-take authorizations indicates the following timetables for LOA and IHA decisions: "Decisions on LOA applications (includes two comment periods, possible public hearings and consultations) may take from 6-12 months. The IHA decisions normally involve one comment period and, depending on the issues and species involved, can take anywhere from 2-6 months" (www.nmfs.noaa.gov/prot_res/PR2/Small_Take/smalltake_info.htm#applications).

Section 7(b)(4) of the ESA allows for the incidental taking of endangered and threatened species under certain circumstances. If a marine mammal species is listed as endangered or threatened under the ESA, the requirements of both the MMPA and the ESA must be met before the incidental take can be allowed.

Of particular concern is disturbance at major wildlife-concentration areas, including bird colonies, marine mammal haulout and breeding areas, and wildlife refuges and parks. Maps depicting major wildlife-concentration areas in the lease area are available from the RS/FO. Lessees also are encouraged to confer with the FWS and NOAA Fisheries in planning transportation routes between support bases and lease holdings.

Lessees also should exercise particular caution when operating in the vicinity of species that are not listed under the ESA but are proposed for listing, designated as candidates for listing, or are listed as a "Species of Concern" (any such species are listed in ITL [j] below) or whose populations are believed to be in decline, such as the yellow-billed loon, walrus, and polar bear.

Generally, behavioral disturbance of most birds and mammals found in or near the lease area would be unlikely if aircraft and vessels maintain at least a 1-mile horizontal distance and aircraft maintain at least a 1,500-foot (ft) vertical distance above known or observed wildlife-concentration areas, such as bird colonies and marine mammal haulout and breeding areas.

For the protection of endangered whales and marine mammals throughout the lease area, MMS recommends that all aircraft operators maintain a minimum 1,500-ft altitude when in transit between support bases and exploration sites. The MMS encourages lessees and their contractors to minimize or reroute trips to and from the leasehold by aircraft and vessels when endangered whales are likely to be in the area.

Human safety will take precedence at all times over these recommendations.

Standard ITL No.11 Section (m) Sensitive Areas to Be Considered in the Oil-Spill Contingency Plans (OSCP's). Lessees are advised that certain areas are especially valuable for their concentrations of marine birds, marine mammals, fishes, other biological resources, or cultural resources, and for their importance to subsistence harvest activities, and should be considered when developing OSCP's. Coastal aggregations of polar bears during the open-water/broken-ice period are particularly vulnerable to the effects of an oil spill, which lessees must account for in their OSCP's. Identified areas and time periods of special biological and cultural sensitivity include:

- (1) the lead system off Point Barrow, April-June;
- (2) the saltmarshes from Kogru Inlet to Smith Bay, June-September;
- (3) the Plover Islands, June-September;

- (4) the Boulder Patch in Stefansson Sound, June-October;
- (5) the Camden Bay area (especially the Nuvugag and Kaninniivik hunting sites), January, April-September, November;
- (6) the Canning River Delta, January-December;
- (7) the Barter Island - Demarcation Point Area, January-December;
- (8) the Colville River Delta, January-December;
- (9) the Cross, Pole, Egg, and Thetis Islands, June-October;
- (10) the Flaxman Island waterfowl use and polar bear denning areas, January-December; (Leffingwell Cabin, a National Historic Site, is located on Flaxman Island);
- (11) the Jones Island Group (Pingok, Spy, and Leavitt Islands) and Pole Island are known polar bear denning areas, November-April;
- (12) the area from Brownlow Point to Barter Island;
- (13) the Sagavanirktok River delta, January-December;
- (14) the anadromous waters of the North slope identified as spawning and/or rearing habitat by NOAA Fisheries, year-round; and
- (15) coastal sandy beaches and adjacent nearshore waters along the Beaufort and Chukchi seas that might be used as spawning and/or rearing habitat by capelin or Pacific sand lance, year-round.

These areas are among areas of special biological and cultural sensitivity to be considered in the OSCP required by 30 CFR 250.300. Lessees are advised that they have the primary responsibility for identifying these areas in their OSCP's and for providing specific protective measures. Additional areas of special biological and cultural sensitivity may be identified during review of exploration plans and development and production plans.

Industry should consult with FWS or State of Alaska personnel to identify specific environmentally sensitive areas within National Wildlife Refuges or State special areas that should be considered when developing a project-specific OSCP.

Consideration should be given in an OSCP as to whether use of dispersants is an appropriate defense in the vicinity of an area of special biological and cultural sensitivity. Lessees are advised that prior approval must be obtained before dispersants are used.

III.D. Leasing Incentives.

Leasing incentives are intended to encourage activities leading to commercial production of oil resources and to partially offset the high cost and financial risks for operations in challenging areas. The MMS reduced the required minimum bid amount and rental rates for tracts leased in Sales 186 and 195. The agency also offered a royalty-reduction incentive that varied with the price of oil. It was offered through the price range (\$18-30 per barrel in constant dollars) that was used to prepare the assessment scenario. However, at very high prices (above \$39 per barrel), the royalty reduction was not offered and would not be needed to spur exploration and development activity. This assessment was prepared with the same scenario and assumptions about leasing incentives that were used for the assessments of Sales 186 and 195. As noted previously, there was strong industry interest in Sale 195, especially in the areas near existing infrastructure. The AEWC is concerned about greater levels of activity in the nearshore subsistence-whaling areas (Appendix A); however, the weak industry interest in remote areas indicates that there still is a need for incentives in the remote areas to promote industry interest.

III.E. Other Alternatives.

The following are the six alternatives to the Proposed Action.

III.E.1. Alternative I – The Area of Call. The area is illustrated in Figure 1 and includes 1,877 whole or partial blocks that encompass 9,770,000 acres (about 3,954,000 hectares). This alternative was described as the Proposed Action in the multiple-sale final EIS.

III.E.2. Alternative II – No Sale. This alternative would cancel proposed Sale 202 and defer leasing until after 2007 as part of the next 5-Year Program.

III.E.3. Alternative III - Barrow Subsistence Whaling Deferral. This alternative is similar to Alternative VII, except that it would exclude (not offer for lease) only a subarea within which Barrow residents conduct subsistence whaling. The area that would be removed by the Barrow Subsistence Whaling Deferral (Figure 1) consists of 26 whole or partial blocks equaling approximately 138,000 acres, or 1% of the Area of Call. The full rationale for the deferral is explained in the multiple-sale final EIS (USDOJ, MMS, 2003:Sec. I.C.2.a(3)). Protection of the Barrow subsistence area was requested during Sales 186 and 195 by the AEW, Inupiat Community of the Arctic Slope (ICAS), and North Slope Borough (NSB). Protection of the area was requested again by the AEW in a letter about proposed Sale 202 (Appendix A). A letter from Senator Murkowski to Secretary Norton, dated August 24, 2005, about the 2007-2012 5-year leasing program being developed, referred to future deferral of the subsistence-whaling area. Senator Murkowski acknowledges that MMS has stipulations to protect biological resources, to require a bowhead monitoring program, and to require conflict avoidance agreements, but requests that MMS use lease deferrals in addition to these stipulations to protect Native whaling.

III.E.4. Alternative IV – Nuiqsut Subsistence Whaling Deferral. This alternative is similar to Alternative VII, except that it would not offer for lease a subarea within which Nuiqsut residents conduct subsistence whaling to the northeast of Cross Island. The area that would be removed by the Nuiqsut Subsistence Whaling Deferral (Figure 1) consists of 30 whole or partial blocks equaling approximately 162,000 acres, or 2% of the Area of Call. The full rationale for the deferral is explained in the multiple-sale final EIS (USDOJ, MMS, 2003:Sec. I.C.2.a(4)). Protection of the Nuiqsut subsistence area was requested during Sales 186 and 195 by the AEW, Native Village of Nuiqsut, ICAS, and NSB. As noted above, protection of subsistence-whaling areas was requested also by the AEW in a letter about proposed Sale 202 and by Senator Murkowski in a letter about future leasing.

III.E.5. Alternative V – Kaktovik Subsistence Whaling Deferral. This alternative is similar to Alternative VII, except that it would not offer for lease only a subarea within which Kaktovik residents conduct subsistence whaling. The area that would be removed by the Kaktovik Subsistence Whaling Deferral (Figure 1) consists of 28 whole or partial blocks equaling approximately 121,000 acres, or 1% of the Area of Call. The full rationale for the deferral is explained in the multiple-sale final EIS (USDOJ, MMS, 2003:Sec. I.C.2.a(5)). Protection of the Kaktovik subsistence area was requested during Sales 186 and 195 by the AEW, Native Village of Kaktovik, ICAS, and NSB. As noted above, protection of subsistence-whaling areas also was requested by the AEW in a letter about proposed Sale 202 and by Senator Murkowski in a letter about future leasing.

III.E.6. Alternative VI - Eastern Deferral. This alternative is similar to Alternative I, except that it would not offer for lease a subarea within which bowheads feed. The area that would be removed by the Eastern Deferral (Figure 1) consists of 60 whole or partial blocks equaling approximately 283,000 acres, or 3% of the Area of Call. The full rationale for the deferral is explained in the multiple-sale final EIS (USDOJ, MMS, 2003:Sec. I.C.2.a(6)). Deferral of this area was requested during Sales 186 and 195 by the AEW, Native Village of Kaktovik, ICAS, and NSB. As noted above, protection of the area also was requested by the AEW in a letter about proposed Sale 202 and by Senator Murkowski in a letter about the 2007-2012 5-Year Program being developed.

IV. UPDATED IMPACT ANALYSIS

The multiple-sale final EIS (USDOJ, MMS, 2003) concluded that, in the unlikely event of a large oil spill, there could be significant effects on subsistence-harvest patterns and sociocultural systems, several bird species, and local water quality. It concluded also that the potential cumulative effects on several resources, including bowhead whales, would be a primary concern and would warrant continued close attention and effective mitigation practices.