



UNITED STATES DEPARTMENT OF COMMERCE  
The Under Secretary of Commerce  
for Oceans and Atmosphere  
Washington, D.C. 20230

SEP 21 2009

Ms. S. Elizabeth Birnbaum  
Director, Minerals Management Service  
U.S. Department of the Interior  
Washington, D.C. 20240

Dear Ms. Birnbaum:

The National Oceanic and Atmospheric Administration (NOAA) is pleased to provide comments on the Draft Proposed Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 2010-2015. According to the Draft program, the Department of the Interior, Minerals Management Service, is proposing a five-year plan to offer areas of the Federal Outer Continental Shelf for lease for oil and natural gas exploration and development. NOAA appreciates the opportunity to comment, and looks forward to continued coordination with MMS on this issue.

The comments and recommendations enclosed are based on NOAA's extensive science, management, and stewardship expertise related to oceans, coasts, and marine ecosystems. They are also based on NOAA's responsibilities under the Coastal Zone Management Act, the National Marine Sanctuaries Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act, the Marine Mammal Protection Act, the Oil Pollution Act of 1990, and the Coral Reef Conservation Act, as well as NOAA's statutory roles under the Outer Continental Shelf Lands Act, the Ocean and Coastal Mapping Integration Act, and the Hydrographic Services Improvement Act. In addition to the attached comments, NOAA believes the Draft Proposed Program must be consistent with forthcoming recommendations from the Ocean Policy Task Force, chaired by the Council on Environmental Quality under the President's June 12, 2009, memorandum for federal agencies on a National Policy for the Oceans, Our Coasts, and the Great Lakes, including effective coastal and marine spatial planning.

Sincerely,

A handwritten signature in black ink, appearing to read "Jane Lubchenco".

Jane Lubchenco, Ph.D.  
Under Secretary of Commerce  
for Oceans and Atmosphere

Enclosure



**ENCLOSURE — COMMENTS ON THE**  
**U.S. DEPARTMENT OF THE INTERIOR/MINERALS MANAGEMENT SERVICE**  
**DRAFT PROPOSED OUTER CONTINENTAL SHELF**  
**OIL AND GAS LEASING PROGRAM FOR 2010-2015**  
**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**  
**U.S. DEPARTMENT OF COMMERCE**

**September 21, 2009**

**BACKGROUND**

In a letter dated January 14, 2009, the Department of the Interior (Interior), Minerals Management Service (MMS), requested comments from the Department of Commerce (Commerce) on MMS' Draft Proposed Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 2010-2015 (Draft Proposed Program or "DPP") <http://www.mms.gov/5-year/2010-2015DPPComments.htm>. On February 10, 2009, the Secretary of the Interior extended the public comment deadline to September 21, 2009.

These comments are submitted by the National Oceanic and Atmospheric Administration (NOAA). NOAA appreciates the opportunity to comment and looks forward to continued coordination with MMS on this issue. The comments and recommendations are based on NOAA's extensive science, management, and stewardship expertise related to oceans, coasts, and marine ecosystems. They are also based on NOAA's responsibilities under the Coastal Zone Management Act, the National Marine Sanctuaries Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act, the Marine Mammal Protection Act, the Oil Pollution Act of 1990, and the Coral Reef Conservation Act, as well as its statutory roles under the Outer Continental Shelf Lands Act, the Ocean and Coastal Mapping Integration Act, and the Hydrographic Services Improvement Act.

There are a number of new ocean related initiatives that have been undertaken by the Administration since the release of the DPP, and should be considered in its review. One significant initiative is the Ocean Policy Task Force (OPTF), which is chaired by the Council on Environmental Quality (CEQ) under the President's June 12, 2009, memorandum for Federal agencies on a National Policy for the Oceans, Our Coasts, and the Great Lakes. The Interim Report of the OPTF was released to the public on September 17, 2009. This document contains National Priority Objectives that are highly relevant to the DPP, including: the need to adopt ecosystem-based management as a foundational principle for the comprehensive management of the ocean, our coasts, and the Great Lakes; the need to implement comprehensive, integrated, ecosystem-based coastal and marine spatial planning and management in the United States; and the need to address environmental stewardship needs in the Arctic Ocean and adjacent coastal areas in the face of climate-induced and other environmental changes. The work of the OPTF is scheduled to conclude in December 2009, with a final report to the President that will also contain recommendations on the framework for coastal and marine spatial planning. MMS

should consider any current or future recommendations and directives that come from the OPTF in advance of decision making on the DPP.

The DPP proposes for consideration a total of 31 OCS lease sales in 12 areas (4 areas off Alaska, 3 areas off the Atlantic coast, 2 areas off the Pacific coast, and 3 areas in the Gulf of Mexico). Ten of the sales are in 6 areas that were formerly under executive and/or congressional restrictions. While the DPP includes a schedule of sales (size, timing and location), the DPP is not recommending that any particular areas be in or out of the eventual final program. The DPP is intended to gather information, allowing the process to move forward while providing the new Administration with the maximum flexibility and information to decide how to balance energy needs with risks and benefits.

Along with soliciting information and comments on the areas proposed for lease consideration, the DPP poses several policy questions for comments:

1. **Buffer Zones** — Should there be buffer zones where certain activities are prohibited or restricted? If so, how large should they be? What criteria should be used for setting them? Should they be uniform in all new areas or vary by area according to issues of concern or technical constraints?
2. **Excluded Sensitive Areas** — Are there specific areas/subareas that should be excluded because they are particularly sensitive? Or, because oil and gas activities may significantly conflict, in area, with other uses for which the area/subarea might be better suited (e.g., alternative energy)?
3. **OCS Revenue Sharing** — What policies and programs should MMS, Congress and the Administration consider relative to OCS revenue sharing?
4. **Southern California Planning Area** — For those areas proposed for leasing consideration in the Southern California Planning Area, in deciding the next steps in the 5-year program preparation, should MMS include a requirement for mandatory unitization to potentially limit the number of structures in one or more of these areas?

NOAA is providing the following comments: General Comments, NOAA Response to MMS' Four Questions, and Specific Comments on the DPP.

## **NOAA COMMENTS — GENERAL COMMENTS**

### **Comment 1: Comprehensive Ocean Management/Marine Spatial Planning is Needed in the DPP**

In developing the DPP, MMS considered information related to other uses of the sea and seabed, including fisheries, navigation, military activities, navigation lanes, deepwater ports and a variety of energy projects. Given the many competing priorities and valuable uses for the OCS, NOAA believes that MMS should rely on comprehensive ocean management/Marine Spatial Planning (MSP) to determine where leases should occur. At a minimum, NOAA believes that lease areas should not be further considered in the DPP until the CEQ-led Ocean Policy Task Force has released its recommendations and directives.

NOAA believes that adopting an approach similar to MMS' Final Rule for its alternative energy program would be consistent with waiting for the Ocean Policy Task Force to complete its mission. In that Final Rule, MMS stated, in part, that

*MMS understands that this rule will be applied in conjunction with interagency-led planning activities that are undertaken to avoid conflicts among users and maximize the economic and ecological benefits of the OCS. These activities will include multifaceted spatial planning effort that will incorporate ecosystem based science and stewardship along with socioeconomics, research, and modeling in the context for demands for other ocean uses and functions. It is anticipated that the Council on Environmental Quality will help coordinate this interagency effort, with the National Oceanic and Atmospheric Administration (NOAA) playing a key role, along with MMS. Through this type of coordination and advance planning, we expect to be able to speed the process of developing renewable energy projects in the OCS.<sup>1</sup>*

MMS' DPP, combined with the establishment of MMS' new alternative energy program under the Outer Continental Shelf Lands Act (OCSLA) present a timely opportunity to develop a leasing program based on comprehensive MSP considerations. Using MSP could achieve greater predictability in determining appropriate and available locations for various OCS activities. Such upfront ocean planning could also help resolve user conflicts and could provide greater assurance for locating various types of energy projects. MSP would be particularly useful in addressing three of the four specific questions MMS asks for the DPP regarding Buffer Zones, Excluded Sensitive Areas, and the Southern California Planning Area. In addition, information and tools in the MMS-NOAA developed "Marine Cadastre" and "California Ocean Use Atlas," as well as the MSP data and maps developed by some of the coastal states, e.g., Massachusetts and Rhode Island are also useful resources for this process.

NOAA has substantial expertise and capabilities that it can contribute for MSP including:

- NOAA can contribute information on the geographic and temporal distribution of living marine resources, such as Essential Fish Habitat, marine mammal and endangered species habitat, sanctuary resources, important commercial fishing areas, coral reefs, deep-sea corals and sponge ecosystems, cultural resources, etc.;
- NOAA can share bathymetric and hydrographic data, which is essential information for mapping the seabed for resource management;
- NOAA can provide a direct link to the state coastal management programs and CZMA-related issues and state MSP initiatives;
- NOAA can provide information related to ocean and coastal observing and monitoring to provide long-term assessment on the health of marine ecosystems;
- NOAA's undersea vents programs may be able to contribute information about the geographical, geological and ecological characteristics (and archaeological information) as well as environmental sensitivity and marine productivity of regions of the OCS;
- NOAA can contribute information regarding coastal communities and economies, and human uses of the marine environment to reduce user conflict;

---

<sup>1</sup> 74 Fed. Reg. 19637-19871, 19643 (April 29, 2009)

- NOAA can provide substantial information related to oil spill risk and sensitive areas, particularly in the Arctic, including its MSP mapping and data management platform, the Environmental Response Management Application (ERMA); and
- NOAA's Integrated Ocean Observing System can presently provide interoperable, standardized data for 5 core variables (temperature, salinity, water level, ocean currents, and ocean color) derived from 700+ NOAA and non-NOAA partners' platforms for input to decision-making tools. A unique asset is the national High Frequency (HF) radar network providing 20,000 coastal current measurements per hour.

### **Comment 2: Monitoring and Adaptive Management is Needed in the DPP**

NOAA recommends that the DPP include leasing requirements that would establish a robust monitoring and adaptive management program that would require exploration and development and production infrastructure designs to be able to adapt to changing environmental and climatic conditions and observations as a result of monitoring during construction and operations. NOAA believes that such requirements could be developed in collaboration with MMS, NOAA, U.S. Coast Guard and the offshore oil and gas industry.

### **Comment 3: Arctic and Alaska Challenges**

NOAA is very concerned about potential impacts to living marine resources and their habitats, valuable commercial and recreational fisheries, and subsistence uses of marine resources as a result of future lease sales, exploration, and development in the North Aleutian Basin Planning Area and Chukchi Sea Planning Area of Alaska. The cumulative effects of installing associated infrastructure in these relatively pristine environments could be significant, as could the effects of OCS development and any accidental spills that may occur. Any proposals for OCS development in these areas should account fully for the associated environmental, economic, and social consequences to ensure the continued productivity of living marine resources for future generations.

***Oil Spill Risk and Response*** — MMS needs to more directly address the challenges of Arctic and subarctic spill response and review the reports discussed below before proposing further oil and gas development in Alaska. NOAA believes that no leasing should occur in the Arctic Sea under this proposed plan until additional information is gathered and additional research is conducted and evaluated regarding oil spill risk; adequate response and preparedness to spills in the Arctic; and possible human dimension impacts on Alaska Native cultures from oil and gas exploration activities and potential oil spills.

Offshore oil production poses a spill risk. A spill could have severe consequences on living marine resources at a regional or population level scale, as well as significant socioeconomic effects. A spill could impact valuable fisheries, severely degrade marine and coastal habitats, and have long term consequences for affected communities. Future project-specific NEPA documents should fully evaluate the potential impacts of worst case scenarios, such as a spill event during the summer salmon fisheries or winter crab fisheries.

The DPP does not focus on the challenges of spill response in Arctic waters, including the challenges of recovering oil from solid, broken and shorefast ice, stating only that “there is the potential for more widespread and long-term water quality impacts from large oil spills in ice covered waters, due to limited access and a slower decomposition and weathering process.” The challenges posed by Arctic conditions are greatly understated. Recovery rates of spilled oil in optimum situations (calm weather, in a harbor, rapid response) rarely exceed 20 percent, and response to spills in ice in remote areas is substantially more challenging. On-scene response efforts may take days to weeks to implement, and are rarely effective.

The lack of preparedness for Arctic spill responses has been highlighted by several recent reports. In January 2009, the University of New Hampshire and NOAA released a report entitled “Opening the Arctic Seas: Envisioning Disaster & Framing Solutions.”<sup>2</sup> The report detailed findings from a panel of experts and decision-makers from Arctic nation governments, U.S. Coast Guard and U.S. Arctic Research Commission, industry and indigenous communities, and concluded that more needs to be done to enhance emergency response capacity in the Arctic. The 2009 Arctic Marine Shipping Assessment<sup>3</sup> echoed many of the same concerns, stating that, “The current lack of marine infrastructure in all but a limited number of areas coupled with the vastness and harshness of the environment, make conduct of emergency response significantly more difficult in the Arctic.” The report also highlighted the adverse human dimensions of oil spills in these waters and the uneven distributions of risks and benefits among and within Arctic communities and regions.<sup>4</sup>

The 2009 Arctic Offshore Oil and Gas Guidelines<sup>5</sup> also cites the significant threat from offshore oil and gas activities, including the risk and potential impact of oil spills. According to the Arctic Council<sup>6</sup> the

Arctic has high sensitivity to oil spill impacts and the least capacity for natural recovery. During much of the year and under many conditions, response capabilities and methods

---

<sup>2</sup> [http://www.crrc.unh.edu/workshops/arctic\\_spill\\_summit/arctic\\_summit\\_report\\_final.pdf](http://www.crrc.unh.edu/workshops/arctic_spill_summit/arctic_summit_report_final.pdf)

<sup>3</sup> <http://arctic-council.org/filearchive/amsa2009report.pdf>

<sup>4</sup> For example, the report states that “human dimensions refer to the interrelationships of people and the environment, particularly with respect to environmental change” and that “Arctic residents today depend heavily on marine resources for subsistence and the local economy. . . . Remote indigenous coastal communities are especially vulnerable to marine accidents as they risk losing not only their vital marine resources, but the natural foundation of their cultures and way of life. . . . Oil spills are one of the largest concerns. Hunters are also concerned about the impacts of ships on the animals and on their hunting practices.” *Id.* at 133.

<sup>5</sup> <http://arctic-council.org/filearchive/Arctic%20Offshore%20Oil%20and%20Gas%20Guidelines%202009.pdf>

<sup>6</sup> The Arctic Council was established in 1996 and succeeded the Arctic Environmental Protection Strategy. It is a high-level intergovernmental forum that provides a mechanism to address the common concerns and challenges faced by the Arctic Governments and the Indigenous Peoples of the Arctic. The members of the Arctic Council are Canada, Denmark (including the Faroe Islands and Greenland), Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States. The Permanent Participants of the Arctic Council are: Aleut International Association (AIA); Arctic Athabaskan Council (AAC); Gwich'in Council International (GCI); Inuit Circumpolar Council (ICC); Russian Association of Indigenous Peoples of the North (RAIPON); and Saami Council. Observer status in the Arctic Council is open to Non-arctic states, inter-governmental and interparliamentary organizations, global and regional non-governmental organizations.

are limited by environmental conditions, lack of resources capable of responding in a timely manner, and limited technologies for responding to oil spills in ice conditions.<sup>7</sup>

Finally, the Transportation Research Board of the National Academies also reported in 2009 on their ongoing effort to conduct a risk assessment to reduce accidents and spills in the Aleutian Islands.<sup>8</sup> The report emphasized the challenges of response efforts in this region, finding that response efforts were, “Often ineffective because of the severe weather and a lack of appropriate infrastructure.” In addition, the report noted that traffic was expected to increase in the region, due in part to oil and gas exploration, but also due to the potential for increased commercial navigation from the retreating polar ice. Additional offshore supply vessels, offshore drilling units, seismic exploration vessels, and anchor handling tugs will add to the commercial and fishing vessel traffic in the region and increase the potential for collisions and spills.

***Deferring or Excluding the North Aleutian Basin*** — (See also below NOAA’s response to MMS’ question 2: Excluded Sensitive Areas.) NOAA is particularly concerned about the inclusion of the North Aleutian Basin in the DPP due to potential consequences for fish stocks, marine mammals, human users, and other components of the ecosystem. The North Aleutian Basin and its surroundings support extraordinarily valuable marine resources, including critical habitat for the highly endangered North Pacific right whale, Essential Fish Habitat for 34 species under the Magnuson-Stevens Fishery Conservation and Management Act, nationally significant commercial fisheries, and extensive subsistence use by Alaska Natives. As MMS described the North Aleutian Basin in its Final FY 2008 Alaska Annual Studies Plan for the Alaska Outer Continental Shelf Region (September 2007), “It would be difficult to identify an area in the Bering Sea, or possibly anywhere in the world that has greater fisheries, protected species, or human use issues than this proposed sale area.” The DPP does not provide sufficient information for NOAA to evaluate the types and extent of exploration and development that may be envisioned for the North Aleutian Basin, but we gather that such plans could include offshore activity that may potentially result in substantial harm to NOAA trust resources.

The proposed timing for the first lease sale scheduled in the North Aleutian Basin (2011) would prevent the acquisition of adequate and necessary baseline environmental information needed prior to any oil and gas activities in this area. These include the value of the North Aleutian Basin to the Nation’s commercial fisheries, and its wealth of marine mammals and other living marine resources. Recent large-scale changes within the Bering Sea ecosystem also underscore the need for an updated and comprehensive environmental inventory and assessment of this region relative to the potential impacts associated with oil and gas leasing, exploration, and development.

Oil spills can pose a significant threat to marine mammals. While most cetaceans have shown few if any effects from exposure to spilled oil, northern fur seals are extremely sensitive to spilled oil. Spilled oil from activities resulting from lease sales in the North Aleutian Basin represents the greatest population-level threat to northern fur seals originating from the Pribilof and Bogoslof Islands. Lactating northern fur seals forage along the western portion of the North

---

<sup>7</sup> <http://arctic-council.org/filearchive/Arctic%20Offshore%20Oil%20and%20Gas%20Guidelines%202009.pdf> at page 8.

<sup>8</sup> <http://onlinepubs.trb.org/Onlinepubs/sr/sr293.pdf>

Aleutian Basin annually from July through October. Weaned northern fur seal pups spend part of November in the western part of the North Aleutian Basin as well. Unimak Pass represents the most significant migratory corridor for northern fur seals during the spring and fall. The North Aleutian Basin should not be included in any lease sales without first completing an updated assessment that incorporates recent northern fur seal foraging, migratory, and population data available as a result of recent advances in telemetry. In addition, oil spill modeling and risk assessments should be updated with more recent physical oceanography and marine mammal telemetry data to determine the nature, extent and potential for effects. Particular emphasis needs to be placed on the Bogoslof Islands and Unimak Pass during any future oil spill response planning.

Several of the Nation's highest value commercial fisheries (i.e., crab, salmon, groundfish) occur in the North Aleutian Basin area, more commonly known as Bristol Bay and the Bering Sea shelf. Oil production and infrastructure could cause use conflicts with fishing activities, restrict areas available to fish, and increase the risk of fish exposure to oil.

Based upon 2005 fish harvest data summarized by North Pacific Fishery Management Council staff at the 2006 MMS North Aleutian Basin planning meeting in Anchorage, commercial fish harvests where the North Aleutian Basin overlaps NMFS regulatory areas accounts for: 55 percent of the flathead sole trawl fishery harvest; 40 percent of the Pacific cod trawl harvest, 28 percent of the Pacific cod pot fishery harvest; 11 percent of the Pacific cod longline fishery harvest; 21 percent of the walleye pollock trawl fishery harvest; and 4 percent of the rock sole trawl fishery harvest. Other fisheries also occur in the region, such as those for crab, rockfish, halibut, and scallops. Crab catch (ex-vessel) values exceed \$70 million annually. Further, a 2009 publication, *North Aleutian Basin Energy-Fisheries: Workshop Proceedings*, edited by Brian Allee, captures many facets of the importance of this area. The economic and ecological contributions of the North Aleutian Basin and adjacent areas are substantial and should not be overlooked.

As a result of all of these factors, NOAA recommends that the Presidential withdrawal be extended for the North Aleutian Basin in order to protect these valuable fisheries.

***Deferring or Excluding Certain Blocks in the Chukchi Sea*** — (See also below NOAA's response to MMS' question 2: Excluded Sensitive Areas.) NOAA strongly endorses the deferral of blocks in the Chukchi Sea Planning Area within 25 miles of the coast for three reasons:

1. To provide some degree of impact reduction for the endangered bowhead whale, as this population migrates through the nearshore lead system of the sea ice during its spring migration into the Beaufort Sea (the spring lead system is one of the most sensitive environments for these whales);
2. To afford some mitigation and avoidance for the Native villages along the Chukchi coast which depend on subsistence resources, especially marine mammals; and
3. To reduce the probability of seismic geophysical surveys occurring in the productive nearshore zone of the Chukchi Sea.

***Noise Impacts*** — Underwater noise associated with oil and gas leasing, such as seismic and drilling noise, represents a significant source of potential harassment for marine mammals.

However, there are gaps in our understanding of the biological significance of exposure to various levels of both continuous and impulsive oil and gas activity sounds. There are also gaps in our understanding of how some species utilize habitat in the Arctic and how behavioral responses to seismic airguns may or may not exclude marine mammal from these habitats, particularly in the face of potentially increasing levels of exploration and development. Continued research in these areas is necessary before implementing the DPP.

***Invasive Species*** — Few industrial activities occur in the North Aleutian Basin and Chukchi Sea Planning Area. The risk of invasive species being introduced from ballast water of large vessels would increase with OCS development in these areas, and should be evaluated in the final 5-year plan.

***Areas of Special Concern and Marine Mammals*** — (See also below NOAA's response to MMS' question 2: Excluded Sensitive Areas.) Significant numbers of endangered North Pacific right whales have been observed in the southeastern Bering Sea since 1996. These sightings indicate a large portion of the remaining right whales regularly occupy these waters for seasonal feeding and perhaps other life history requirements. Any exposure of these whales to seismic activity has some potential to cause abandonment of feeding habitat, with possible consequences to the entire North Pacific right whale population, which is very small. Such concerns are demonstrated through research on the related bowhead whales in the Alaskan Beaufort Sea, as well as the growing body of literature describing the distribution and behavior of right whales in the southeastern Bering Sea.

There is a potential for significant cumulative effects to the Western Arctic stock of bowhead whales from development in waters off Alaska. Such development would potentially subject these whales to repeated exposure to seismic (airgun) noise over a significant portion of their range; from the Canadian MacKenzie delta, through the U.S. Beaufort and Chukchi Seas, and into the Bering Sea. It is premature to characterize the cumulative impacts of seismic work to bowhead whales as not having population-level impacts without a comprehensive assessment, including the development of an acoustic integration model to consider multiple exposures over space and time.

#### **Comment 4: General Comment on National Environmental Policy Act Alternatives**

NOAA understands that the draft proposed 5-year program would schedule annual OCS lease sales for 2010-2015, and MMS would complete more detailed and geographically focused National Environmental Policy Act (NEPA) analyses as the program progresses from planning to lease sale to exploration and then development. In developing the draft plan for 2010-2015, MMS analyzed and considered leasing in all 26 planning areas of the OCS. However, the draft plan includes only portions of 12 planning areas. We recommend the final plan describe the screening process used to eliminate other OCS planning areas from consideration. According to CEQ guidance on implementing NEPA, a potential alternative need not be eliminated from consideration simply because it is presently in conflict with local or federal law, or subject to the various moratoria described in the draft plan. The draft plan states many OCS planning areas have little or no resource potential or are of no interest to industry at this time. For example, the Cook Inlet region is on the proposed 5-year schedule even though industry has shown little if any

interest in that area. In addition, because of proximity to infrastructure, even areas with relatively small potential may be important in meeting national goals. In our view, reducing potential lease sales to portions of these 12 planning areas unreasonably restricts the range of alternatives that may meet the stated objectives. We also suggest that MMS subdivide the planning areas into smaller units for analytical purposes to facilitate finer scale analyses of potential environmental impacts and other issues.

#### **Comment 5: Magnuson-Stevens Act Requirements for the Protection of Essential Fish Habitat**

The Magnuson-Stevens Act requires federal agencies to consult with the Secretary of Commerce, through NOAA, with respect to “any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat (EFH) identified under this Act.” 16 U.S.C. § 1855(b)(2). The regulations at 50 C.F.R. § 600.920 set forth the consultation process, which will allow NOAA to make a determination of the 2010-2015 OCS 5-Year Leasing Program’s effects on EFH and provide conservation recommendations to MMS on actions that would adversely affect such habitat pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Act. In the event MMS decides an action may adversely affect EFH, the EFH assessment must contain “a description of the action; analysis of the potential adverse effects of the action on EFH and the managed species; the federal agency’s conclusions regarding the effects of the action on EFH; and proposed mitigation, if applicable.” 50 C.F.R. § 600.920(e)(3).

NOAA encourages MMS to consider using the programmatic process described at 50 C.F.R. § 600.920(j) to help ensure an efficient and effective consultation process for any EFH consultations associated with the 2010–2015 Program. In addition, MMS should refer to two agreements that MMS signed with NOAA to facilitate environmental review and the consultation requirements of the MSA. These agreements include modified procedures for EFH consultations related to the preparation of NEPA documents as well as to address EFH issues related to operational activities, including pipeline rights-of-way, plans for exploration and production, and platform removal in the Gulf of Mexico OCS.

#### **Comment 6: Frequency of Spills is Understated in the DPP**

The DPP highlights the safety of the offshore oil production industry by using information on frequency of spills from the US Coast Guard Marine Casualty Pollution Investigations, “Oil Spill Compendium 1973-2004.” This time frame fails to include more recent information from many sources. Unfortunately, data from the USCG, MMS and the Congressional Research Service (CRS) show a substantial increase in spill volume in 2005, primarily due to spills associated with Hurricanes Katrina and Rita. Some of the damaged rigs and pipelines damaged during the 2004 and 2005 hurricane seasons continue to have episodic releases, and repairs have not been fully completed.

The MMS data<sup>9</sup> on hurricane incidents includes the following:

- More than 8 million gallons of oil were spilled from coastal oil storage facilities;
- Over 600,000 gallons (including an estimated 84,000 gallons from one platform incident) were spilled from federal offshore oil platforms and associated pipelines; and
- Approximately 3.3 million gallons were spilled from a tank barge, when it struck a submerged oil platform that had been damaged during the storms.

These incidents call into question the DPP statement that: “It has been many years since any substantial environmental impacts have been observed as a result of an oil spill caused by the OCS production and transportation activities.”

Improved technology and requirements implemented after the Oil Pollution Act of 1990 have reduced the frequency of major spills in the United States, but analysts including the CRS<sup>10</sup> have questioned the trend in spills, suggesting that “[r]ecent annual data indicate that the overall decline of annual spill events may have stopped” and that “[t]he threat of oil spills raises the question of whether U.S. officials have the necessary resources at hand to respond to a major spill. There is some concern that the favorable U.S. spill record has resulted in a loss of experienced personnel, capable of responding quickly and effectively to a major oil spill.”

#### **Comment 7: Climate Change is not Fully Evaluated in the DPP**

The DPP states:

Impacts from secondary impacts of climate change will not be considered because they are too speculative at this time. For example, impacts of climate change on components of the hydrologic cycle, such as precipitation, evaporation, river runoff, and the salinity balance of estuaries, will not be included because the expected direction and magnitude of these changes is too speculative to predict at this time.

NOAA believes that secondary impacts from climate change are important and should be included in the DPP. In particular, considering shoreline erosion is an important factor when siting a facility; for example, there are facilities in the Gulf originally built on land that are now in the water due to shoreline erosion. Therefore, the DPP should evaluate the effect of increased shoreline erosion on coastal communities, ports, and facilities, and the vessel activity in the Arctic from the seasonal reduction in sea ice.

#### **Comment 8: Environmental Impacts are Understated in the DPP**

The DPP’s analysis of the risk and impacts of accidental spills and chronic impacts are understated and generally not supported or referenced, using vague terms and phrases such as

---

<sup>9</sup> MMS, Petroleum Spills of One Barrel and Greater from Federal Outer Continental Shelf Facilities Resulting from Damages Caused by 2005 Hurricanes Katrina and Rita Including Post-Hurricane Seepage through December 2007 (revised June 23, 2008), at <http://www.mms.gov/incidents/>

<sup>10</sup> Congressional Research Service: Oil Spills in U.S. Coastal Waters: Background, Governance, and Issues for Congress (April 23, 2009).

“no substantive degradation is expected” and “some marine mammals could be harmed.” This is particularly problematic for expanding oil and gas production.

Several statements on oil impacts seem to directly conflict with studies of major spills, notably the assertion that “[t]he impacts (to rocky shorelines) are expected to be localized, and recovery to pre-exposure conditions would occur within several years.” And “[n]o substantive reductions in finfish or shellfish populations should result from either routine offshore activities or accidental oil spills,” and “[a]lthough some marine mammals could be harmed during OCS activities, no permanent change in the population of any species is expected to take place.” Studies of the Exxon Valdez spill have shown that recovery can be very lengthy. For example, the herring fishery in the Prince William Sound remains closed, and no trend suggesting healthy recovery has occurred.<sup>11</sup> Orca whale populations have also not recovered.<sup>12</sup> The unanticipated lingering oil from the Exxon Valdez is a reminder that we still have much to learn about spill behavior in Arctic and subarctic regions.

Given the extensive footprint of the oil and gas industry on the gulf coast, the statement that “no extensive land use impacts are expected” is contradictory to statements regarding the benefits of oil and gas development, notably that “exploration, development, and production—and many of the industries that support such activities—generally result in employment at higher-than-average pay, and the spending on these activities reverberates through the economy.” Clearly, substantial development will be required to support vessels, aircraft, pipelines, ports, and storage operations, especially in remote areas of Alaska that have little or no industrial infrastructure.

#### **Comment 9: Human Dimensions not Clearly Evaluated in the DPP**

The statement that, “Alaska natives may be disproportionately affected by OCS activities because of their reliance on subsistence resources and harvest practices. However, these effects are expected to be mitigated substantially, though not eliminated, with the use of appropriate available mitigation measures” is unsupported. It is unclear what mitigation measures are envisioned and whether the Alaska natives would find them acceptable.

Impacts to fisheries are only evaluated in terms of potential lethal or sub-lethal impacts on the fish with no mention of the potential that a spill could have on the seafood industry and markets. International markets for Alaskan seafood, for example, could be substantially impaired even by a small spill. These market impacts can be immediate and long-lasting. Concern over the potential tainting of Alaskan seafood has led the state to develop a zero tolerance policy.<sup>13</sup> The seafood processing industry in Dutch Harbor, Alaska, for example, was nearly shut down by the 2005 Selendang Ayu oil spill, even though the incident occurred over 50 miles from the seafood processing facilities.

---

<sup>11</sup> [http://www.evostc.state.ak.us/recovery/status\\_herring.cfm](http://www.evostc.state.ak.us/recovery/status_herring.cfm)

<sup>12</sup> [http://www.evostc.state.ak.us/recovery/status\\_orca.cfm](http://www.evostc.state.ak.us/recovery/status_orca.cfm)

<sup>13</sup> [http://www.dec.state.ak.us/SPAR/PERP/response/sum\\_fy05/041207201/fact/041207201\\_fact\\_zero.pdf](http://www.dec.state.ak.us/SPAR/PERP/response/sum_fy05/041207201/fact/041207201_fact_zero.pdf)

Alaska’s Zero tolerance policy outlines the responsibilities of fishing vessels, tenders, and processing facilities to ensure contamination of commercial finfish and shellfish species does not reach the consumer. Fishing vessel operators, tenders, buying stations, and seafood processors are required to undertake special inspection procedures when harvesting and processing seafood products from an area that may be impacted by an oil spill.

Also, the statement that “[i]n the Arctic area of Alaska, most offshore workers will commute from other areas, minimizing local employment and population impacts” seems to conflict with the statement 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.” In Alaska in particular, many of the offshore workers are likely to commute from Anchorage or from out of state and lease sales there will provide limited local employment. These employment patterns could have significant human dimension impacts by disrupting Alaska Native cultures in the Arctic and should be further evaluated.

NOAA recommends that the DPP include a more complete analysis of the potential human dimensions of offshore production, particularly in Alaska and the Bristol Bay region, where substantial human disruption could occur from spills, spill response, chronic impacts, and impacts to subsistence cultures through societal and environmental disruption to communities and marine resources.

#### **Comment 10: The DPP Needs to More Fully Evaluate Modeling Spills**

The DPP states that while “Analysts generally can calculate the risk of an oil spill occurring, it is not possible to predict the location of a spill or its path, and therefore it is not possible to predict which ecological, social, or economic resources would be affected and to what extent.” This statement is misleading, since many researchers have developed probability tools to predict the potential impacts of spills. The NOAA Trajectory Analysis Planner (TAP), for example, analyzes statistics from potential spill trajectories and predicts how an oil spill will spread and move within a local area. TAP displays shoreline segments that represent the locations of shoreline resources such as seabird colonies or marine mammal hauling grounds; sites of particular socioeconomic value, such as tourist beaches or large marinas; or areas where remediation measures would be difficult or expensive.

#### **Comment 11: Net Value Calculations Need to be Strengthened in the DPP**

It is not clear how variable logistics and existing infrastructure is used in social, environmental, and economic values and costs contained in the DPP. Prices seem to be nationally fixed and do not account for large logistical differences among planning areas, or innate differences in the value of crude oils from various formations. For example, the Gulf Coast has existing infrastructure to support offshore oil and gas, while most areas of western Alaska have no such infrastructure and in some cases lack harbors for anything larger than fishing vessels. The DPP should include realistic cost estimates for areas with no existing infrastructure, including life cycle costs for removing and restoring areas at the completion of the extraction activities.

#### **Comment 12: Shoreline Ranking is not an Appropriate Measure of Environmental Sensitivity**

The DPP ranks shoreline sensitivity based on the physical characteristics and ranking of shorelines in NOAA’s Environmental Sensitivity Index (ESI). While the maps contain extensive information on sensitive environments, MMS focused its analysis on the physical characteristics of the shoreline substrate. These factors alone are not an appropriate surrogate or measure for

sensitivity of coastal resources, nor does the analysis provide any information about the sensitivity of the sea surface, sea floor and water column resources within the planning areas.

The analysis is overly simplistic and does not reflect the presence of living natural resources or sensitive and endangered species in the region. The shorelines of Bristol Bay, for example, include large areas of mixed sand and gravel shorelines that are not particularly sensitive to the spreading of oil on a shoreline, but the offshore areas support some of the most productive fisheries and wildlife resources in the world. Bristol Bay supports one of the largest salmon runs in the world. Impacts of oil on salmon and commercial fisheries are well documented from the Exxon Valdez oil spill. In addition, Bristol Bay supports subsistence fisheries, spawning for king crabs, and marine mammals.

Use of NOAA's ESI in Alaska is problematic because the Alaska ESI's are low resolution, whereas the ESI's in the lower 48 states are high resolution. The low resolution impacts the relative scale and coverage of the maps. In most cases, the Alaskan shorelines are mapped at 1:63,360 scale, rather than the typical 1:24,000 scale for the lower 48 states. There are currently 463 ESI maps in Alaska. To cover Alaska at the same scale and resolution of the lower 48 states (at 1:24,000 scale) would require 4-5 times the number of ESI maps than currently exist. MMS should reconsider its use of the ESI data and work with NOAA to ensure that any derived products or analyses are reflective of the concerns outlined in this comment.

The DPP also fails to rank shorelines adjacent to several of the Alaskan areas: "Three Planning Areas in the Alaska OCS—Bowers Basin, Aleutian Basin, and Navarin Basin—are not ranked as they are not adjacent to a coastline." Since spilled oil can travel hundreds of miles, and logistical operations that also pose risks of spills may be staged from adjacent areas, MMS should consider the sensitivity of the nearest shorelines or likely harbor areas, along with the sea surface, seafloor and water column resources within the planning areas.

In addition to the shoreline rankings, the DPP also ranks planning areas by estimated primary productivity. However, how primary production factors into MMS planning decisions is unclear. The DPP should clearly state how such information is intended to be used. With regard to vulnerability to spills, areas with lower primary productivity are actually more likely to have longer recovery rates, and longer persistence of spilled oil because of slower degradation and weathering rates.

### **Comment 13: U.S. Extended Continental Shelf Project**

NOAA's National Geophysical Data Center (NGDC) is tasked to handle Data Management in the U.S. Extended Continental Shelf (ECS) Project to steward and archive all associated data. NGDC has identified fifteen areas within the potential ECS, ten of which overlap with areas suggested for MMS OCS lease sales. The NGDC is collecting data in several of these areas with future surveys planned for the next several field seasons. NOAA is concerned that if Lease Sales are awarded, the U.S. ECS Project might then be restricted from collecting data in these areas. NOAA requests clarification of this matter from MMS. Also, could data collected by MMS be used in the ECS submission or will it be proprietary?

## NOAA COMMENTS — NOAA RESPONSE TO MMS' FOUR QUESTIONS

### **1. Buffer Zones — Should there be buffer zones where certain activities are prohibited or restricted? If so, how large should they be? What criteria should be used for setting them? Should they be uniform in all new areas or vary by area according to issues of concern or technical constraints?**

NOAA recommends buffer areas around national marine sanctuaries, Habitat Areas of Particular Concern (HAPC), Critical Habitat for endangered and threatened species, major fishing grounds, and to provide visual buffers to coastal areas dependent upon tourism. The size of the buffers should vary depending on the site-specific needs.

Buffer zones are a useful tool to protect sensitive areas and ensure safety of marine users. They should be considered for all planning areas. MMS has enacted requirements similar to buffer zones for the avoidance of deep sea corals and other sensitive habitats during oil and gas activities in the Gulf of Mexico. The purpose of these “No Activity Zones” is to protect sensitive biological communities from the adverse effects of routine offshore oil and gas activities. The No Activity Zone stipulations are part of each lease and are binding. There are also required shunt zones, buffer zones associated with live bottom (pinnacle trend), and requirements for remotely-operated vehicle (ROV) surveys that help protect sensitive habitats such as deep-sea coral habitats. Similar protections should be considered in all planning areas in the DPP. Such protections will be of particular importance in the proposed South Atlantic Planning area, where vulnerable deep-sea coral communities are generally associated with topographic features.

Other criteria to be considered in setting buffer zones include the impacts of oil and gas activities on fish habitat, national marine sanctuary resources, and the proximity of oil and gas activities to other sensitive habitat areas such as deep sea corals, other live-bottom communities, and chemosynthetic communities (e.g., hydrothermal vents and cold seep communities). The necessary criteria for each buffer should be considered during the environmental reviews of region-, site-, project- or activity-specific stages of the program.

Coastal migratory corridors and the distribution of listed species should be considered when setting buffer zones. It is reasonable to expect that buffer zones will vary geographically, depending on the resources of concern and geography of the area. In the North and Mid-Atlantic, several species of listed whales and sea turtles use nearshore coastal waters as a migratory corridor. Ninety percent of North Atlantic right whale sightings have been observed within 30 nautical miles of the coast. In order to ensure that these animals are able to migrate freely throughout this area, NOAA recommends that MMS consider a 30 nautical mile buffer along the coast in their migratory range. NOAA recognizes that moving the potential lease sites further offshore may increase the exposure risk to species that occur in deeper offshore waters, such as sperm whales. However, such a buffer zone is likely to minimize the potential for exposure of concentrations of critically endangered North Atlantic right whales, as well as humpback whales and listed sea turtles.

In addition, NOAA recommends that MMS consider the potential siting of aquaculture production facilities when developing criteria that will be used to establish these buffer zones.

There may be specific areas/subareas that should be considered for exclusion from oil and gas activities because they may be better suited for aquaculture. In addition, aquaculture facilities that may be permitted by NOAA within the 5-year window of the leasing program may conflict with future oil and gas leases. MMS needs to consider the potential conflict between these two OCS uses.

**2. Excluded Sensitive Areas — Are there specific areas/subareas that should be excluded because they are particularly sensitive? Or, because oil and gas activities may significantly conflict, in area, with other uses for which the area/subarea might be better suited (e.g., alternative energy)?**

Exclusions are appropriate to protect specific sites. NOAA recommends avoiding oil and gas activities in national marine sanctuaries, marine monuments, HAPCs, major fishing grounds, and areas necessary for endangered species and species of concern. (*See also* above NOAA's General Comment 3 — Arctic and Alaska Challenges.)

The DPP should recognize that NOAA's regulations generally prohibit exploring for, producing, or developing hydrocarbons in national marine sanctuaries. The only two exceptions to this are:

- Oil and gas activities are allowed in Flower Garden Banks National Marine Sanctuary outside of No Activity Zones designated by MMS; and
- Laying pipelines associated with oil and gas activities outside sanctuaries is allowed in the Gulf of Farallones and Channel Islands national marine sanctuaries.

NOAA also recommends several areas be excluded from consideration due to their environmental sensitivity. These areas include the following:

- **North Atlantic Planning Area:** Seamounts and submarine canyons along the outer continental shelf and slope in the North Atlantic Planning Area should be excluded from lease sales in the 2010-2015 Plan. This area contains HAPCs for several fish species and other sensitive and rare habitat types, including deep-sea corals. The Western Jordan Basin, Mount Desert Rock Area, and the Georges Tower off the northern edge of Georges Bank in the Atlantic Ocean have also been identified by NOAA as areas with significant deep-sea coral habitats in the Planning Area. Areas where critically endangered North Atlantic right whales are known to concentrate should also be considered for exclusion. These areas would largely be excluded with the implementation of a 30 nautical mile buffer zone, but should include the following geographic areas off the coast of Massachusetts: the Off Race Point area bounded by 42°04'56.5"N; 070°12'W, 42°12'N, 070°12'W; 42°12'N, 070°30'W; 42°30'N, 069°45'W; 41°40'N, 069°45'W; and the Great South Channel area bounded by 42°30'N; 069°45'W, 42°30'N, 067°27'W; 42°09'N, 067°08'24"W; 41°00'N, 069°05'W; 41°40'N, 069°45'W.
- **Mid-Atlantic Planning Area:** Submarine canyons along the outer continental shelf and slope and the proposed South Atlantic Fishery Management Council Deepwater Coral HAPCs (Cape Lookout and Cape Fear *Lophelia* Coral Banks) should be excluded from lease sales in the 2010-2015 Plan. NOAA also recommends that the canyon areas in the existing Virginia Sale 220 in the Mid-Atlantic Planning Area be excluded from the 2010-2015

Program pending the results of proposed joint research between NOAA and MMS (“Exploration and Research of North- and Mid-Atlantic Deepwater Hard Bottom Habitats with Emphasis on Canyons and Coral Communities”). In addition, MMS should consider excluding a 30 nautical mile box around the entrance to Long Island Sound (waters bounded by 40°51’53.7”N, 070°36’44.9”W; 41°20’14.1”N, 070°49’44.1”W; 41°04’16.7”N, 071°51’21.0”W; 40°35’56.5”N, 071°38’25.1”W) and the area within a 30 nautical mile radius of the entrance to the New York Bight (40°29’42.2”N, 073°55’57.6”W), the entrance to Delaware Bay (38°52’27.4”N, 075°01’32.1”W), and the entrance to Chesapeake Bay (37°00’36.9”N, 075°57’50.5”W). Long Island Sound, the Chesapeake Bay, and Delaware Bay are all important developmental habitat for juvenile sea turtles. Available data on sea turtle observations and tracking should be used to develop an appropriate exclusion zone to protect these important habitats from the effects of offshore oil and gas development and to maintain seasonal migratory corridors.

- **South Atlantic Planning Area:** The South Atlantic Fishery Management Council has proposed a large Deepwater Coral HAPC that spans the Planning Area, and should be excluded from lease sales in the 2010-2015 Plan. This area contains many of the best developed and most extensive deep-sea stony coral “reefs” (bioherms) known in U.S. waters. It is also an area that has very incomplete mapping for bathymetry – a key prerequisite to identifying the location for these bioherms. For example, submersible dives in August 2009 off Cape Canaveral (28° 00’N - 28° 50’N) revealed previously unknown *Lophelia* coral mounds in 400-500 m depths with a high percentage of live coral cover and abundant commercially valuable finfishes (e.g., blackbelly rosefish) and golden crab. Deeper areas (800-900 m) included coral communities with significant abundance of the coral *Enallopsammia profunda*. Similar habitats are likely throughout the Planning Area. NOAA recommends MMS extend exclusion to coral and live/hardbottom EFH-HAPCs designated by the South Atlantic Fishery Management Council within the Charleston Bump and Gray’s Reef National Marine Sanctuary. NOAA further recommends that no lease sales be conducted without prior multibeam mapping of the seafloor, and that No Activity Zones be established to encompass identified topographic features. In addition, ROV survey plans to identify potential live-bottom communities should be required in this planning region.
- **Eastern Gulf of Mexico Planning Area:** There are numerous sensitive hardbottom habitats along the west Florida shelf from Panama City to the Dry Tortugas. The Florida Middle Grounds, Madison Swanson, and Pulley Ridge (a series of drowned barrier islands that form a ridge on the southwest Florida Shelf) are important habitats for fisheries species and have been identified as HAPCs. Deepwater coral mounds occur along the 500 m isobath of the west Florida Slope for approximately 20 km between 26° 20’N, 84° 45’W to 26° 30’N, 84° 50’W, with individual coral mounds between 5 and 15 m tall. Oil and gas activities should be excluded from these habitats. These lithoherms consist of limestone boulders and outcrops capped with 0.5-1.0 m tall thickets of the coral *Lophelia pertusa*, colonies of *Madrepora oculata*, and other associated organisms. NOAA recommends exclusion of the following EFH-HAPCs designated by the Gulf of Mexico Fishery Management Council: Flower Garden Banks, Florida Middle Grounds, Tortugas North and South Ecological Reserves, Madison-Swanson Marine Reserve, Pulley Ridge; and the following reefs and

banks of the Northwestern Gulf of Mexico: Stetson, McNeil, Bright Rezak, Geyer, Mcgrail Bouma, Sonnier, Alderice and Jakkula.

**3. OCS Revenue Sharing — What policies and programs should MMS, Congress and the Administration consider relative to OCS revenue sharing?**

With potential expansion of leasing activities, the Federal Government will need to ensure that it has sufficient funds to conduct the biological and geophysical work needed to adequately describe the new areas of OCS offered in this sale.

NOAA recommends the creation of an interest-bearing revolving fund to be supported by revenue earned by each oil and gas production lease holder issued or maintained under the Outer Continental Shelf Lands Act (43 U.S.C. § 1331 *et seq.*), each holder of an exploration permit, or an easement or right-of-way for the construction of pipeline in any area of the Outer Continental Shelf. Revenue generated from these activities would be used to fund a number of activities including habitat assessments, climate adaptation, habitat protection and restoration activities, and coastal management activities.

## **NOAA COMMENTS — SPECIFIC COMMENTS**

In addition to the general comments provided above, NOAA is providing the following specific comments on the DPP. Because the document does not contain an Environmental Impact Statement (EIS), there are few details that could be critically assessed. The majority of the specific comments address weaknesses in the DPP and areas where information seems to be missing.

### **I. SUMMARY OF DECISION—DRAFT PROPOSED PROGRAM FOR 2010-2015**

As noted in the Draft Proposed OCS Oil and Gas Leasing Program 2010-2015, the environmental sensitivity of any areas of the OCS newly available for leasing following the President's 2008 lifting of the withdrawal on offshore oil and gas exploration must be evaluated. As several of the newly available planning areas are located within designated essential fish habitat, the potential impacts of activities within the DPP to essential fish habitat must also be evaluated using the consultation process.

#### **Page 8**

##### **Pacific Region**

Buffers should be required to protect the biota of the Southern California Ecological Preserve off Santa Barbara, even if directional drilling is required.

#### **Page 9**

##### **Gulf of Mexico**

The DPP proposes retaining the 75-mile buffer within which no permanent surface structures would be allowed, and no leases allowed east of the buffer zone. As a proxy for protection of NOAA trust resources, this buffer should be maintained throughout the five-year duration of the DPP. In the event the 75-mile buffer and leasing restrictions are lifted during the period of the DPP, NOAA recommends the siting criteria listed elsewhere in these comments should be applied to future lease sales or construction and operation of structures permitted by MMS.

##### **Atlantic OCS**

The DPP describes Sale 220, offshore Virginia, as containing a 50-mile buffer. NOAA recommends this buffer be preserved throughout the life of the DPP. In other lease sale areas not already protected by similar buffers, NOAA recommends the siting criteria described elsewhere in these comments be applied in order to protect NOAA trust resources from adverse impacts of offshore energy development.

### **II. INFORMATION ON LEASING AND DEVELOPMENT OF ALTERNATIVE ENERGY RESOURCES ON THE OCS DURING THE 2010-2015 TIME FRAME**

MMS is to be lauded for the inclusion of a section on alternative energy, since several states have already indicated their intentions to rely to some percentage on alternative energy in their coastal zones. NOAA supports the ongoing consideration and evaluation of renewable energy development in the marine environment in order to determine the contribution these technologies may make to national goals. NOAA also believes that MMS should regulate renewable uses in

the OCS in an ecosystem context and proceed in a precautionary manner in order to evaluate the implementation of new and emerging technologies in the marine setting. NOAA recommends that MMS, in coordination with NOAA and industry, pursue baseline environmental characterization and other environmental studies to gauge potential ecological effects from renewable energy development.

In considering areas for OCS renewable energy development, MMS should also assess the transferability of data from traditional oil and gas drilling, both in terms of determining the potential public resources to be leased and in terms of potential environmental impacts. Unlike the limited nature of traditional oil and gas reserves, renewable energy resources are potentially inexhaustible. However, knowledge of the total available OCS renewable energy resource and how much energy can be extracted without resulting in unacceptable ecological or socioeconomic harm does not exist at the scale necessary to make specific leasing decisions. This information is also necessary to ensure that the public receives a fair compensation for the use of OCS resources for private commercial gain. Determining the level and potential value of OCS renewable energy resources to guide future lease planning and decision making should be a priority in the 2010-2015 timeframe.

It is unclear from the plan how MMS will coordinate leases for oil and gas development and those for alternative energy. As the plan acknowledges, several states are proposing to develop alternative energy projects on the OCS. The final leasing plan should explain how the alternative energy leasing program and the oil and gas leasing program will be coordinated.

#### **Page 15**

##### **Paragraph 1**

Although MMS provides a substantial list of activities to be provided for alternative energy efforts, with respect to the last item (L) *Oversight, inspection, research, monitoring, and enforcement relating to a lease, easement, or right-of-way under this subsection*, NOAA is concerned about by whom and how the monitoring of these activities will be conducted. As these are new technologies, the monitoring will need to be designed to anticipate potential impacts that will vary with the technology used. The manner and choice of monitoring organization should be clearly stated.

#### **Page 16**

##### **MMS Alternative Energy Interim Policy**

FERC has Memoranda of Understanding with various states to designate offshore alternative energy activities compatible with state environmental concerns. These MOUs should be considered in the MMS leasing process.

#### **IV. DRAFT PROPOSED PROGRAM OPTIONS**

The planning areas identified in the DPP include areas designated as EFH under the Magnuson-Stevens Act. Although the DPP cannot predict specific oil and gas activities that will be undertaken, lease sale, exploration, development, and/or production activities ultimately resulting from the 5-Year Program likely will require EFH consultation as more specific plans are developed.

NOAA recommends that the 5-Year OCS Oil and Gas Leasing Program EIS include discussions of the following:

1. Consultation requirements of the Magnuson-Stevens Act and implementing regulations.
2. How consultations for future, site-specific activities that may adversely affect EFH will be carried out.
3. Use of the programmatic process to help streamline and expedite any EFH consultations.
4. A detailed description of all EFH and federally managed fish species present in areas identified for potential lease sales, including the newly available OCS areas, and an assessment of the potential adverse impacts of the proposed leasing activities to those resources.
5. A detailed description of the environmental stipulations and mitigation measures that MMS will employ within the planning areas to avoid, minimize, and offset adverse impacts to EFH and federally managed fish species.

#### **Page 34**

##### **Beaufort Sea**

The Beaufort Sea is experiencing warming, open seas, and a general change in climate, all of which may lead to unanticipated changes in the vulnerability of the biota. In an effort to encourage the other Arctic nations to reduce activities in the region, NOAA has begun to close fisheries until there is better understanding on how these changes may impact fish stocks. For example, NOAA recently approved a new fishery management plan for the Arctic to prevent the establishment of commercial fisheries until more information is available to support sustainable fisheries management. A similar precautionary approach for oil and gas activities should be considered.

#### **Page 35**

##### **Chukchi Sea**

Similar arguments to the Beaufort are applicable.

#### **Page 37**

##### **North Aleutian Basin**

The Presidential withdrawal should be extended because of the environmental sensitivity of the area and high value of commercial fisheries, particularly in Bristol Bay.

#### **Page 50**

##### **North Atlantic**

NOAA supports the original moratorium area because of the environmental sensitivity of the area.

#### **Page 61**

##### **Mid-Atlantic**

NOAA supports option (3) - buffer zone requirement to keep exploration in deeper waters.

#### **Page 64**

## **South Atlantic**

Considering the environmental and primary productivity rankings in this area, special attention should be placed on environmentally protective provisions if the lease sale is to proceed.

## **V. DRAFT PROPOSED PROGRAM ANALYSIS**

### **Page 78**

#### **Alternatives to the Contributions of OCS Oil and Gas**

The opportunity to develop alternative energy sources is supportable as long as the measures taken to ensure environmental protection are given strong emphasis at the onset.

### **Page 82**

#### **Climate Change**

In its analysis of environmental concerns, the Draft Proposed OCS Oil and Gas Leasing Program for 2010-2015 proposes considering climate change impacts in the draft Environmental Impact Statements under the cumulative impacts section. While the potential effects of climate change are somewhat speculative at this stage, NOAA suggests that MMS consider it in the future of OCS activities. Some waters formerly covered by ice have this summer been virtually ice-free. One of the aspects of oil and gas not discussed is the potential for tanker traffic in the Arctic and possible use of the Northwest Passage along Canada's northern boundary.

Other temporal cycles on the Pacific coast are well documented and should be considered and addressed in the context of environmental conditions that could exacerbate impacts of OCS development. While the text addresses concerns about hurricanes and the over dependence on Gulf of Mexico oil and gas, El Nino effects on the Pacific coast and hurricanes on the Atlantic coasts are similarly serious concerns for OCS development.

In addition, NOAA suggests that MMS consider addressing climate change in the Affected Environment section, and address climate change in the EFH Assessment.

#### **Consultation and Coordination**

It is unclear from the plan how MMS intends to engage NOAA in coordination regarding threatened and endangered species and marine mammals at the different stages in the leasing process. Under this section it appears that MMS does not intend to consult with NOAA under the authorities of the Endangered Species Act and the Marine Mammal Protection Act until the lease sale stage. MMS should clarify how coordination will occur so that effects of oil and gas development on listed species and marine mammals can be fully considered prior to any lease sale. MMS should consider implementing the task force program identified in MMS' April 2009 Renewable Energy Framework as a means to improve coordination and consultation during preliminary studies and lease sale through the site formation, site assessment, construction, use and decommissioning.

MMS should also clarify the procedures for pre-lease exploration activities, such as seismic surveys and other geophysical and geotechnical activities. As these types of activities can have

effects on listed species and marine mammals, NOAA encourages MMS to involve the agency in the planning phase of these activities.

It is our understanding that comments provided on this plan will be used as scoping comments for the development of an EIS. As such, NOAA concurs with the need to consider effects on listed species including marine mammals protected under the MMPA. MMS should consider not only the effects on individuals (i.e., whether a particular activity could harm an individual whale), but the potential for offshore oil and gas development to disrupt migratory movements or alter migratory corridors. In addition to the issues outlined for consideration, MMS should also consider the effects of not only noise associated with seismic exploration but also general construction and operation. Further, MMS should consider the following impacts: marine debris, and the effect of construction and operation on habitats, including substrate and forage.

The planning areas identified in the Draft Proposed Plan include areas in the Gulf of Mexico for which there exists a Fishery Management Plan under the Magnuson-Stevens Act that permits aquaculture operations. Therefore, NOAA recommends that MMS discuss how consultations for future, site-specified activities will be carried out that may adversely affect species managed under the aquaculture Fishery Management Plan or under other types of permits issued by NOAA or other federal agencies.

## **Page 83**

### **Risks of Accidental Oil Spills**

MMS assures that oil spill cleanup will be available as a requirement of the industry and that cleanup supplies will be available on land. This latter consideration is of concern because the lack of on land supplies and maintenance of those supplies contributed to the severity of the Valdez spill. *See* NOAA's General Comments discussing oil spills.

### **Ecological Issues**

All the issues raised in this paragraph are reasonable concerns. One additional issue which should be considered is a bonding requirement for Arctic area exploration and development to assure the cleanup of wastes stored on the ice.

The use of seismic technology associated with oil and gas exploration on the OCS may affect future aquaculture production. NOAA requests that where appropriate, MMS consult with NMFS to identify how seismic activity affects species cultured on the OCS, and ways to reduce potential adverse impacts on these areas and on fishery resources.

## **Page 84**

### **Environmental Analysis**

The DPP makes a number of statements regarding the minimal level of adverse impacts to resources and habitats, yet does not provide citations/supporting information. For example, MMS makes several statements regarding the impacts of oil and gas extraction on the OCS on water quality, wildlife, and shoreline and seafloor habitats. MMS should provide analyses and citations for the following statements: "Although some marine mammals could be harmed during OCS activities, no permanent change in the population of any species is expected to take place;" "No substantive reductions in finfish...should result from either routine offshore

activities or accidental oil spills;” and “marine turtles along the Atlantic coast could be affected by routine operations...but no identifiable changes in the numbers or distribution of turtles are expected.”

NOAA recommends that significantly more detailed information be included in the DEIS. In addition, the environmental consequences section should include anticipated shore side infrastructure and potential onshore development impacts resulting from increased OCS development, and not be limited to oil spill impacts.

### **Use of Previous 5-Year Programs’ Environmental Impact Statements**

The Draft Proposed OCS Oil and Gas Leasing Program 2010-2015 describes its intention to use the findings of Environmental Impact Statements prepared for previous 5-Year Programs in its analysis of environmental concerns. Previous EISs developed 5 years ago may be founded upon data that was 5+ years old at the time. Findings may change significantly based on new information. NOAA suggests that MMS consider reviewing monitoring reports from previous activities to determine actual impacts of previous Programs, and conduct a review of relevant literature before determining if it is adequate to use previous EISs.

### **Page 85**

#### **Water Quality**

*Rapid dilution of discharge materials...*

Discharges should be limited and carefully assessed for metals such as mercury and chrome that can be toxic at very low concentrations.

NOAA recommends more discussion from MMS on how potential impacts from the program may affect water quality on potential marine finfish and shellfish aquaculture activities, both offshore and nearshore. Comments on the effects of spills and the effects of currents containing discharged materials on aquaculture operations are especially needed.

#### **Wildlife**

Some mention should be made of vessel collisions with whales as a result of increased vessel traffic on the Atlantic and Pacific coasts.

### **Page 86**

#### **Shoreline and Seafloor Habitats**

Paragraph 1

*In the GOM, some wetlands may be lost to erosion from vessel traffic and canal maintenance.*

In light of ongoing loss of this important habitat type, NOAA recommends that MMS also address the cumulative effects of their activities on wetlands. Oil and gas vessel traffic, canalization, and pipeline arrays have been a chief cause of wetland loss in the GOM. The industry should be careful to avoid damage to these sensitive and ecologically important habitats.

Paragraph 3

*In Alaska, impacts from routine operations and oil spills to most seafloor habitats are expected to be short term and localized. Impacts to the Stefansson Sound Boulder Patch area from oil spills could result in some temporary disruptions to the kelp beds there and to the existing*

*composition of benthic species.*

The validity of this statement depends heavily on the amount and grade of oil spilled.

## **Page 87**

### **Coastal Communities**

*Since no infrastructure currently exists along the Atlantic, OCS development could result in new pipelines, onshore facilities, and roads.*

The Atlantic coasts pose some of the same concerns as the Gulf of Mexico. Wetlands in this region are vulnerable to pipelines and canalization, and industry should be careful to avoid damage to these sensitive and ecologically important habitats.

### **Cultural and Subsistence Activities**

*An oil spill could render subsistence resources unavailable or undesirable for one or two years. See NOAA General Comments 3 (Arctic and Alaska Challenges) and 9 (Human Dimension) on human dimension impacts and cultural and subsistence activities.*

### **Tourism and Recreation**

This section should include the consideration of closures and buffers as mitigating measures to protect tourism.

### **Fishing**

The description of potential impacts of offshore drilling and exploration on fisheries and fishery resources is very brief and very general. The potential impacts of a spill on fishery resources are likely underestimated. That is particularly true with regard to the prosecution of sustainable fisheries. MMS comments in the DPP state that a spill would “affect only a small proportion of a given fish population in a region,” and since fish populations are spread out over a given leasing area, that the adverse effects would be minimized. This may be partially true in terms of species extinction, but for short- to medium-term damage to those resources, that may not be the case. A spill may have more of an effect on marine organisms that do not have widely dispersed larvae. In addition, for aquaculture production facilities, all cultured species are located in a single distinct area and thus spills may adversely affect an entire operation and all species being cultured may be affected. MMS should take net pen operations that are anchored to the seabed into consideration when formulating the final EIS for the 5-year program.

Further discussion under this section should also include the impact of drill discharges and the food web effects that can occur over time.

## **Page 88**

### **Recent NEPA Documents**

*The last Atlantic and Pacific OCS lease sale Final EIS's were prepared in 1985 and 1984, respectively.*

Conditions on both coasts are changing rapidly and may be causing coastal habitats to become increasingly vulnerable to increased climate interactions. MMS needs to begin an update of field data in order to determine to what extent these habitats and their biota have changed.

### **Preparation of an EIS for the New 5-Year Program Additional Environmental Considerations**

*The Notice requests information from interested and affected parties that could be used to assist in developing the scope of the EIS, the significant issues to be addressed, and alternatives to be considered.*

It is unlikely that sufficient information for both coasts is readily available at a scale needed to make an assessment of lease sales. Gaps should be identified and measures taken to conduct field assessments.

**Page 94**

**Net Social & Environmental Costs**

*Given the increased concern over the degree to which GHG may contribute to climate change, MMS will consider adding a climate change module to the OECM. However, it would entail considerable effort and uncertainty, because to do so, MMS would have to predict where oil and gas imports would originate and estimate emissions at each origin as well as emissions produced in transporting the resources to U.S. waters.*

NOAA recommends MMS include climate change effects in future planning and analysis.

**Page 96**

The Draft Proposed OCS Oil and Gas Leasing Program 2010-2015 used the Environmental Sensitivity Index - Shoreline developed by NOAA to determine the environmental sensitivity of shorelines to spilled oil. The Proposed Program does not consider the sensitivity of marine habitats in the outer continental shelf to oil spills or other activities associated with oil and gas exploration, development, or production. NOAA suggests that MMS broaden the scope of its environmental sensitivity analysis to consider the impacts of all activities in the Draft Proposed OCS Oil and Gas Leasing Program 2010-2015 to essential fish habitat, corals, and commercial and recreational fish harvests, and protected resources such as listed marine mammals. NOAA is prepared to share data on these resources.

END