



# MARINE MAMMAL COMMISSION

11 April 2011

Mr. Craig Perham  
U.S. Fish and Wildlife Service  
Office of Marine Mammals Management  
1011 East Tudor Road  
Anchorage, Alaska 99503

Dear Mr. Perham:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Fish and Wildlife Service's proposed rule published in the 11 March 2011 *Federal Register* (76 Fed. Reg. 13454) and the application from Alaska Oil and Gas Association seeking authorization under section 101(a)(5)(A) of the Marine Mammal Protection Act. The applicant is seeking authorization to take small numbers of polar bears and Pacific walruses incidental to year-round oil and gas operations in the Beaufort Sea and the adjacent northern coast of Alaska. Oil and gas operations would include offshore and onshore exploration, development, and production. The final rule would be effective for five years from the date of issuance. The Marine Mammal Commission previously has commented on similar proposed rules for these activities, most recently in 2006.

## RECOMMENDATIONS

The Marine Mammal Commission recommends that the Fish and Wildlife Service issue the final rule, provided that it—

- advise the applicant of the desirability of initiating a conference for the walrus to help fulfill the applicant's obligations under the Endangered Species Act for the five-year period of the final rule;
- prior to issuing the final rule, describe all updated information for the four sites in question and reassess the risk of oil spills to polar bears for the Northstar and Liberty sites, where updated information is available;
- prior to issuing the final rule, assess the risk of an oil spill to polar bears at Oooguruk and Nikaitchuq sites; and
- require applicants for letters of authorization under the final rule to incorporate those updated oil spill projections in their applications, when available.

## RATIONALE

The Fish and Wildlife Service proposes to issue regulations authorizing the taking of 150 polar bears and 10 walruses per year by Level B harassment incidental to oil and gas exploration, development, and production. Exploratory drilling operations are planned only at three sites, and production would occur at another five sites (two of which have yet to commence production) during the five-year duration of the final rule. The Service does not propose to authorize taking by Level A harassment because it does not anticipate that serious injury or death of a marine mammal

would result from the proposed activities. The Service preliminarily has determined that the expected taking would have a negligible impact on the affected species and stocks based on the proposed mitigation and monitoring measures. These measures include—

- locating bear dens within and near areas of proposed operations using forward-looking infrared imagery and/or polar bear scent-trained dogs from November to April;
- establishing a one-mile exclusion zone around known dens and ceasing activities pending guidance from the Service if a previously unknown den is discovered within one mile of the proposed activities;
- mapping den habitat;
- timing activities to limit disturbance around dens;
- using dedicated marine mammal observers on board operational and support vessels to alert the crew of the presence of polar bears and walruses;
- requiring operational or support vessels to remain at least 805 m from polar bears or walruses observed in the water, on land, or on ice;
- restricting the transit of operational and support vessels through specified areas prior to 1 July to allow walruses to disperse;
- avoiding areas used or expected to be used for subsistence hunting;
- restricting aerial overflights to altitudes greater than 305 m and distances farther than 805 m from observed polar bears and walruses;
- establishing, verifying, and monitoring in-water exclusion zones (190 and 180 dB re 1  $\mu$ Pa (rms) for polar bears and walruses, respectively) and disturbance zones (160 dB re 1  $\mu$ Pa (rms));
- using ramp-up, power-down, and shutdown procedures;
- monitoring exclusion zones and surrounding waters 30 minutes prior to and during ramp-up procedures;
- powering or shutting down airguns if an aggregation of 12 or more walruses is detected within the 160-dB re 1  $\mu$ Pa isopleth;
- shutting down all airgun activities if an animal is injured, in distress, or dying, pending review by the Service and approval to reinitiate activities;
- using trained, Service-approved marine mammal observers to conduct site-specific monitoring programs and implement adaptive mitigation responses;
- requiring marine mammal/human interaction planning and training; and
- developing and implementing a Service-approved plan of cooperation with communities engaged in subsistence hunting.

Based on aerial surveys, direct observations, community consultations, and personal communication with hunters, opportunities for subsistence hunting of polar bears and walruses have not been adversely affected by previous oil and gas operations in this area. The Service does not anticipate any new impacts from the proposed activities. Therefore, the Service preliminarily has

determined that the expected taking would not have an unmitigable adverse impact on the availability of polar bears or walrus for taking for subsistence use by Alaska Natives.

The Service would require separate letters of authorization for each action proponent's proposed activities that would occur under the final rule. The Service would require each letter of authorization to include specific mitigation and monitoring measures and other conditions, depending on the activity and location. Applicants also would include a plan of cooperation describing how they would avoid adverse effects on the availability of polar bears and walrus for subsistence use by Alaska Native communities and how these species would be affected by the proposed activity.

### **Walrus**

The Fish and Wildlife Service has determined that the Pacific walrus warrants protection under the Endangered Species Act, but the need to address other higher priority species precluded action on a proposed listing rule (76 Fed. Reg. 7634). Consequently, the walrus has been added to the Service's list of candidate species and its status will be reviewed annually. Because the walrus is only a candidate species, formal consultation under section 7 of the Endangered Species Act is not required. However, a conference in accordance with 50 C.F.R. § 402.10 might prove useful. Such a conference can be conducted in accordance with procedures for a formal consultation (§ 402.14), and any resulting opinion can be adopted as the biological opinion under section 7 if and when the species is listed or critical habitat is designated. The Service has initiated section 7 consultations for the polar bear. Thus, it would be prudent to initiate a conference for the walrus as well. The Marine Mammal Commission recommends that the Fish and Wildlife Service advise the applicant of the desirability of initiating a conference for the walrus to help fulfill the applicant's obligations under the Endangered Species Act for the five-year period of the final rule.

The Commission also notes that one of the mitigation measures requires powering or shutting down airguns if an aggregation of 12 or more walrus is detected within the 160-dB re 1  $\mu$ Pa isopleth. At the same time, the Service only proposes to authorize the taking of 10 walrus by Level B harassment. These numbers are inconsistent and could result in the taking of a larger number of walrus than authorized without the implementation of mitigation effects. The Commission therefore suggests that the Service correct this inconsistency.

### **Oil Spill Risk Analysis**

The Service has determined that the probability of an oil spill having a significant impact on polar bears and walrus is extremely low. The probability of a spill affecting walrus in the Beaufort Sea is very low because walrus do not regularly occur in that area. However, polar bears regularly occur in the Beaufort Sea and, for that reason, the Service quantitatively assessed the risk of an oil spill to polar bears. The assessment was based on oil spill probability estimates, oil spill trajectory models, and a polar bear distribution model. In the 2006 proposed rule, the Service included an oil spill risk assessment for polar bears at the Northstar and Liberty sites. In the current

Mr. Craig Perham  
11 April 2011  
Page 4

proposed rule, the Service included updated information to analyze spill trajectories of potential spills at Oooguruk, Nikaitchuq, Northstar, and Endicott/Liberty offshore projects. However, the Service did not incorporate the updated information into the oil spill risk assessment. To ensure that the Service has the benefit of the best available risk information, the Marine Mammal Commission recommends that, prior to issuing the final rule, the Fish and Wildlife Service describe all updated information for the four sites in question and reassess the risk of oil spills to polar bears for the Northstar and Liberty sites, where updated information is available.

Although the risk assessment from 2006 did not specifically model spills from the Oooguruk or Nikaitchuq sites, the Service believes “it was reasonable to assume that the analysis for Liberty, and indirectly Northstar, adequately reflected the potential impacts likely to occur from an oil spill at either of these additional locations due to the similarity in the nearshore location.” However, weather conditions, currents, tides, geographic locations, and distances to shore differ between both the Oooguruk and Nikaitchuq sites and the Liberty site. Thus, it is unclear whether the environmental conditions at these nearshore sites are sufficiently similar to apply the modeled results from Liberty to the other two sites. The Service also has not provided an adequate explanation to support its assertion that the oil spill risk at Liberty would be representative of an oil spill at either Oooguruk or Nikaitchuq. Therefore, the Marine Mammal Commission recommends that, prior to issuing the final rule, the Fish and Wildlife Service assess the risk of an oil spill to polar bears at Oooguruk and Nikaitchuq. Further, the Service notes that the Bureau of Ocean Energy Management, Regulation, and Enforcement is developing a new large spill projection for the Arctic’s outer continental shelf based on information gleaned from the Deepwater Horizon event. To take advantage of this new information, the Marine Mammal Commission recommends that the Fish and Wildlife Service require applicants for letters of authorization under the final rule to incorporate those updated oil spill projections in their applications, when available.

The Commission hopes you find these recommendations and comments helpful. Please contact me if you have questions concerning them.

Sincerely,



Timothy J. Ragen, Ph.D.  
Executive Director