

are non-wasteful. From 1980 through 2002, the total annual harvest in Alaska averaged 107 bears. The majority of this harvest (69 percent) occurred in the Chukchi and Bering Seas area.

Polar bears in the near-shore Alaskan Beaufort Sea are widely distributed in low numbers, with an average density of about one bear per 30 to 50 square miles. Polar bears congregate on barrier islands in the fall and winter because of available food and favorable environmental conditions. Polar bears will occasionally feed on bowhead whale carcasses on barrier islands. In November 1996, biologists from the U.S. Geological Survey observed 28 polar bears near a bowhead whale carcass on Cross Island, and approximately 11 polar bears within a 2-mile radius of another bowhead whale carcass near the village of Kaktovik on Barter Island. From 2000 to 2003, biologists from the USFWS conducted systematic coastal aerial surveys for polar bears from Cape Halkett to Barter Island. During these surveys they observed as many as 5 polar bears at Cross Island and 51 polar bears on Barter Island within a 2-mile radius of bowhead whale carcasses. In a survey during October 2002, we observed 109 polar bears on barrier islands and the coastal mainland from Cape Halkett to Barter Island, a distance of approximately 350 kilometers.

Effects of Oil and Gas Industry Activities on Subsistence Uses of Marine Mammals

The subsistence harvest provides Native Alaskans with food, clothing, and materials that are used to produce arts and crafts. Walrus meat is often consumed, and the ivory is used to manufacture traditional arts and crafts. Polar bears are primarily hunted for their fur, which is used to manufacture cold weather gear; however, their meat is also consumed. Although walrus and polar bears are a part of the annual subsistence harvest of most rural communities on the North Slope of Alaska, these species are not as significant of a food resource as bowhead whales, seals, caribou, and fish.

Pacific Walrus

The Pacific walrus has cultural and subsistence significance to native Alaskans. Although it is not considered a primary food source for residents of the North Slope, walrus are still taken by a few Alaskan communities located in the southern Beaufort Sea along the northern coast of Alaska, including Barrow, Nuiqsut, and Kaktovik.

The primary range of Pacific walrus is west and south of the Beaufort Sea.

Accordingly, few walrus inhabit, or are harvested in, the Beaufort Sea along the northern coast of Alaska. Therefore, the effect to Pacific walrus of Industry activities described in this rule making would most likely be minimal, as they would affect only those individuals inhabiting the Beaufort Sea. Walrus constitute only a small portion of the total marine mammal harvest for the village of Barrow. From 1994 to 2002, 182 walrus were reported taken by Barrow hunters through the Service Marking, Tagging, and Reporting Program. Reports indicate that only up to 4 of the 182 animals were taken east of Point Barrow, within the geographic area of these proposed incidental take regulations. Furthermore, hunters from Nuiqsut and Kaktovik do not normally hunt walrus east of Point Barrow and have taken only one walrus in that area in the last 13 years.

Polar Bear

Within the area covered by the proposed regulations, polar bears are taken for subsistence use in Barrow, Nuiqsut, and Kaktovik where Alaska Natives utilize parts of the bears to make traditional handicrafts and clothing. Data from our Marine Mammal Management Office indicate that, from July 1, 1993, to June 30, 2002, a total of 194 polar bears was reported harvested by residents of Barrow; 26 by residents of the village of Nuiqsut; and 26 by residents of the village of Kaktovik. Hunting success varies considerably from year to year because of variable ice and weather conditions.

Native subsistence polar bear hunting could be affected by oil and gas activities in various ways. Hunting areas where polar bears are historically taken may be viewed as tainted if an oil spill were to occur at these sites. In general, though, traditional hunting areas are not located near current or planned Industry activities. Other potential disturbances, such as noise and vehicular traffic, could have limited effects on subsistence activities if these disturbances were to occur near traditional hunting areas and lead to the displacement of polar bears.

Plan of Cooperation

Polar bear and Pacific walrus inhabiting the Beaufort Sea represent a small portion, in terms of the number of animals, of the total subsistence harvest for the villages of Barrow, Nuiqsut, and Kaktovik. Despite this fact, the harvest of these species is important to Alaska Natives. An important aspect of the LOA process therefore, is that prior to receipt of an LOA, Industry must provide evidence to us that an adequate

Plan of Cooperation has been presented to the subsistence communities, the Eskimo Walrus Commission, the Alaska Nanuq Commission, and the North Slope Borough. The plan will ensure that oil and gas activities will continue not to have an unmitigable adverse impact on the availability of the species or stock for subsistence uses. This Plan of Cooperation must provide the procedures on how Industry will work with the affected Native communities and what actions will be taken to avoid interfering with subsistence hunting of polar bear and walrus.

Effects of Oil and Gas Industry Activities on Marine Mammals

Pacific Walrus

Walrus are not present in the region of activity during the ice-covered season and occur only in small numbers in the defined area during the open-water season. From 1994 to 2000, three Pacific walrus were sighted during the open-water season. In June 1996, one walrus was observed from a seismic vessel near Point Barrow. In October 1996, one walrus was sighted approximately 5 miles northwest of Howe Island. In September 1997, one walrus was sighted approximately 20 miles north of Pingok Island.

Certain activities associated with oil and gas exploration and production during the open-water season have the potential to disturb walrus. Activities that may affect walrus include disturbance by: (1) Noise, including stationary and mobile sources, and vessel and aircraft traffic; (2) physical obstructions; and (3) contact with releases of oil or waste products. Despite the potential for disturbance, no walrus has been injured during an encounter by industry activities on the North Slope, and there have been no lethal takes to date.

1. Noise Disturbance

Reactions of marine mammals to noise sources, particularly mobile sources, such as marine vessels, vary. Reactions depend on the individual's prior exposure to the disturbance source and their need or desire to be in the particular habitat or area where they are exposed to the noise and visual presence of the disturbance sources. Walrus are typically more sensitive to disturbance when hauled out on land or ice than when they are in the water. In addition, females and young are generally more sensitive to disturbance than adult males.

Noise generated by Industry activities, whether stationary or mobile, has the potential to disturb small numbers of