

December 1, 2010

The Honorable Barack H. Obama
President of the United States
The White House
Washington, DC 20500

Dear Mr. President:

As scientists and natural resource managers from the United States and Canada with many years of experience in ecology, wildlife and conservation biology, resource management, and cultural anthropology, we encourage your administration to permanently secure the ecological integrity of the coastal plain of the Arctic National Wildlife Refuge.

The wildlands of the Arctic Refuge include the barrier islands and estuaries of the Beaufort Sea, the Arctic coastal plain, the Brooks Range, and the boreal forest within the upper Yukon River watershed. First set aside by President Dwight D. Eisenhower as the Arctic National Wildlife Range in 1960, this is the only conservation unit in the United States that encompasses an intact Arctic ecosystem. Combined with the adjacent Ivavik and Vuntut national parks in Canada, the Arctic Refuge represents one of the largest protected landscapes in the world. Moreover, the Arctic Refuge's coastal plain is a rare example of an ecosystem where ecological and cultural processes continue to interact much as they have for thousands of years. Unlike the adjoining refuge lands that are designated Wilderness, the coastal plain is not permanently protected from development.

When President Eisenhower established the Arctic National Wildlife Range, he had the foresight and wisdom to include the entire ecosystem both south and north of the Brooks Range, encompassing the biologically rich coastal plain considered essential to the integrity of this ecosystem. In 1980, Congress enlarged the range to encompass additional wildlife habitat and designated this unique area the Arctic National Wildlife Refuge. The refuge mission was broadened to include international research and management, as well as support for subsistence uses that form the basis of Native cultural values. Most of the original wildlife range was designated as Wilderness. Only the 1.5-million-acre coastal plain was omitted. And today, this oversight remains a significant conservation concern.

Olaus Murie, who initiated the first biological studies of Alaska's caribou herds and was instrumental in the establishment of the Refuge, stressed the value of the area for long-term study and research of Arctic ecosystems. Six decades of biological study and scientific research have confirmed that the coastal plain of the Arctic National Wildlife Refuge forms a vital component of the biological diversity of the refuge and merits the same kind of permanent safeguards and precautionary management as the rest of this original conservation unit. In contrast to the broad (greater than 150 mi.) coastal plain to the west of the Arctic Refuge, the coastal plain within the refuge is much narrower (15–40 mi.). This unique compression of habitats concentrates the occurrence of a wide variety of species, including polar bears, grizzly bears, wolves, wolverines,

caribou, muskoxen, Dolly Varden, Arctic Grayling, snow geese, and more than 130 species of migratory birds. In fact, according to the U.S. Fish & Wildlife Service, the Arctic Refuge coastal plain contains the greatest wildlife diversity of any protected area above the Arctic Circle.

The coastal plain provides essential calving and post-calving habitat for the Porcupine Caribou Herd, the largest (at about 100,000 animals) international migratory caribou herd in the world. The United States and Canada share the immense responsibility of managing this herd and protecting the key habitats on which the herd depends. In 1987, the two nations signed an international agreement to protect the Porcupine Caribou Herd. Since then, the calving grounds on the Canadian side of the border have received full protection, while the United States has not yet taken similar steps to adequately protect this important habitat within the coastal plain of the Arctic Refuge—the historic and traditional calving grounds of the Porcupine Caribou Herd. The Gwich'in Nation of Alaska and Canada depends upon the sustained productivity of the Porcupine Caribou Herd and are justifiably concerned about its security. Extensive state and university research on the Central Arctic Caribou Herd at Prudhoe Bay indicates appreciable losses of preferred calving habitats in response to petroleum development and associated decline in reproductive success for those animals displaced by development. These findings were supported by the National Research Council's 2003 report *Cumulative Environmental Effects of North Slope Oil and Gas Activities on Alaska's North Slope*.

Biologists have also identified conservation concerns with other wildlife populations in the Arctic Refuge, including threatened polar bears, muskoxen, and snow geese. Although many polar bears den on the pack ice, bears are increasingly denning on shore and the refuge's coastal plain is the most important land denning area for Beaufort Sea bears in Alaska. Muskoxen are year-round residents of the coastal plain, and disturbance from industrial development, particularly in winter, holds the potential to increase energetic costs and result in decreased calf production. Also, snow geese might be displaced from important feeding and staging habitats prior to autumn migration, increasing energy expenditure and reducing their ability to accumulate the fat needed for migration. The coastal plain serves many biological functions, including nesting habitat for shorebirds, waterfowl, songbirds, raptors, and other migratory birds.

The Interior Department predicts that oil and gas exploration and development would have a major effect on water resources. Fresh water already is limited on the refuge's coastal plain, and direct damage to wetlands will adversely affect fish, waterfowl, and other migratory birds. These potentially disruptive effects to fish and wildlife should not be viewed in isolation, however. Arctic ecosystems are characterized by many complex interactions, and changes to one component may have secondary but significant effects on other ecosystem components. Oil exploration and development have substantially changed environments where they have occurred in Alaska's central Arctic. Since the discovery of oil at Prudhoe Bay in 1968, The National Research Council estimated in 2003 that development affects a land area of about 1,000 square miles of Arctic habitats, which represented one of the world's largest industrial complexes. Oil spills, contaminated waste, and other sources of pollution have had measurable impacts on this environment. Roads, pipelines, well pads, processing facilities, and other support infrastructure have incrementally altered the character of this ecosystem.

Pronounced ecological changes in the flora and fauna at the landscape level have been observed in the Alaskan Arctic in recent decades as a consequence of climate change. The Arctic Refuge, with no direct ecosystem effects as yet from development, is serving an essential role in the joint efforts by state, federal, and regional natural resource agencies, academia, and environmental NGOs that are monitoring ecological changes in the Alaskan Arctic. This investigative work must continue to provide the baseline information necessary to guide future oil, gas, and other resource exploration and development activities in the Alaskan Arctic. In addition, should habitat distribution shift as a result of climate change, wildlife will have a better opportunity to adapt in an unfragmented ecosystem. The refuge and adjacent areas in Canada are especially important given that many other areas of the Beaufort Sea Coastal Plain are already impacted by resource development—or will be under future development. Based on our current collective experience and understanding of the cumulative effects of oil and gas exploration and development on Alaska's North Slope, we do not believe the impacts from development activities, as well as those effects resulting from the changing climate, have been adequately considered for the Arctic Refuge. Mitigation efforts associated with oil and gas development without adequate data on this complex ecosystem and changing climate are unlikely to prove successful.

Please understand that we are not philosophically opposed to oil and gas development in Alaska. Indeed, we all clearly recognize the need for balanced resource management. But we also recognize the importance of maintaining the biological diversity and ecosystem integrity of our nation's Arctic. Nearly the entire Arctic Coast of Alaska north of the Brooks Range is available for oil and gas exploration or development. The 110-mile-long coastal plain of the Arctic National Wildlife Refuge encompasses 1.5 million acres of key wildlife habitat vital to the integrity of the Arctic National Wildlife Refuge.

As we celebrate the 50th anniversary of the Arctic National Wildlife Refuge, we encourage you to take this historic opportunity to safeguard the extraordinary natural values of the coastal plain. We are concerned that persistent efforts to mandate oil development will be successful unless administrative or legislative action provides permanent protection for this national conservation unit. Your administration has the opportunity to help safeguard the ecological integrity of this important national conservation system unit for future generations of Americans.

We urge you, Mr. President, to implement administrative actions and support legislation, as appropriate, that may be needed to permanently protect, for future generations, the biological diversity and wilderness character of the coastal plain of the Arctic National Wildlife Refuge.

Thank you for considering our concerns and recommendations.

Sincerely,

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