



CoastalPlain_EIS, BLM_AK <blm_ak_coastalplain_eis@blm.gov>

[EXTERNAL] Arctic Drilling

1 message

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To: mnhayes@blm.gov, blm_ak_coastalplain_EIS@blm.gov

Dear Ms Hayes,

As U.S. citizens deeply concerned for our environment and diminishing wildlife populations, I am writing to highlight for you the fundamental importance of fully protecting its 1.5-million acre coastal plain. Like the majority of Americans, I completely oppose oil exploration, development and production in the Arctic Refuge. Such activity would be incompatible with the purposes for which the refuge was established, including "to conserve fish and wildlife populations and habitats in their natural diversity."

When the original Arctic National Wildlife Range was established in 1960 by the Eisenhower Administration, it was done with the foresight and wisdom to protect an entire ecosystem, both south and north of the Brooks Range, including the rich coastal plain.

Decades of biological study and scientific research within the Arctic Refuge have confirmed that the coastal plain specifically is vital to the biological diversity of the entire refuge. Within the narrow (15-40 miles) coastal plain, there is a unique compression of habitats which concentrates a wide array of wildlife native to the Arctic, including polar bears, grizzly bears, wolves, wolverines, caribou, muskoxen, Dolly Varden, Arctic grayling, and over 200 species of migratory birds. Area 1002, a delicate ecosystem, is the biological heart of the refuge. Deemed "the sacred place where life begins" by Alaska's native Gwich'in people, the Arctic National Wildlife Refuge (ANWR) possesses massive environmental and cultural importance. The Arctic Refuge coastal plain contains the "greatest wildlife diversity of any protected area above the Arctic Circle" (USFWS).

In 2003, the National Research Council (NRC) published a report on the "Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope." This report was prepared by a panel of prominent scientists following an extensive review of the literature and consultations with experts. It remains the best, most comprehensive synthesis of the effects of oil development on wildlife and the landscape of Arctic Alaska (1).

Although oilfield technologies continue to improve, the NRC's findings are still of concern today. Even proposals which would "limit the footprint" of oil development to 2,000 acres on the coastal plain within the Arctic Refuge would have extensive impact, as those acres may be spread over much of the coastal plain. This would be especially true if oil reserves are scattered in multiple pockets across the refuge, as is suggested by the U.S. Geological Survey (2). Since the effects of industrial activities, starting with seismic surveys, are not limited to the footprint of a structure, or to its immediate vicinity, it is inevitable that such activities would adversely affect a wide variety of wildlife in the refuge's narrow coastal plain. Furthermore, development of yet another oilfield would further set back efforts to limit the carbon emissions that are fueling the dramatic changes in climate now affecting Alaska.

Experts say an oil spill would be inevitable. Offshore drilling threatens our oceans, marine wildlife, and terrestrial wildlife with the risk of catastrophic oil spills. **The Interior Department estimates a 75% chance of a major oil spill in the Arctic's Chukchi Sea from just a single lease sale.** Oil spills can also take numerous years to clean up. Nearly 20 years after the Exxon Valdez spill, more than 26,000 gallons of oil still remain in shoreline soils. Sadly, oil spills take place on a relatively consistent basis. Each year, about 880,000 gallons of oil are sent to the ocean from U.S. drilling operations.

The challenges for cleaning up an oil spill in the Arctic are numerous. There are no viable methods of cleaning up oil from ice, and, in addition to adverse weather conditions, much of the area where drilling would take place is remote. Responding to an oil spill is extremely challenging in any marine environment, much more so in the Arctic. The period when it would be possible to clean up an oil spill is restricted to four to five months by darkness, heavy ice, and extreme cold. These severe conditions would make it impossible to attempt an oil spill cleanup for half the time during the operating season, and 100 percent of the time during the winter.

There will also be difficulties with an under-ice oil spill. If crude oil is spilled in the ocean, it normally floats. But if the oil is released or spilled under a lid of sea ice, it will be trapped under the ice.

In order to evaluate the environmental consequences of an under-ice oil spill, you need to know when and if the oil will come to the surface, how far the ice will drift before the oil surfaces, and how much of the oil will be trapped in the ice when the ice finally melts.

Sea ice is more like a sponge than a solid substance. The channels and pores in the sea ice are different depending upon where they are located in the ice. At its surface, where ice is in contact with cold air temperatures, sea ice has smaller and less connected pores. Oil will normally only enter larger pores and also needs to push the seawater out of the pores. During wintertime, the ice is often too cold at the surface to allow for this, and the oil will be trapped. But during spring, or when the ice warms in warm weather, oil may migrate to the surface. Once the oil surfaces, time is of the essence. The only realistic approach to remove this oil from the surface of a closed ice cover is to burn it. **However, most of the oil can only be burned during a window of opportunity of typically one week.** After a week, the oil is said to be weathered, i.e., it has lost certain components and mixed with water and can no longer be removed by burning it. This oil then threatens the arctic ecosystem (3).

Despite monitoring systems in place to prevent spills, a leak occurred in a pipe leading to the Trans-Alaska Pipeline System (TAPS) that went undetected for several days, spilling 267,000 gallons of crude oil (4). Other spills directly related to land transportation of Alaskan oil include 700,000 gallons spilled when vandals destroyed a section of TAPS in 1978, and 285,000 gallons when a hunter shot the pipeline in 2001. Just as environmental assessments of TAPS have recognized and anticipated that oil spills happen and have consequences for environmental quality (5), the same consideration is necessary when evaluating the environmental impacts of drilling in ANWR.

Even without an oil spill, the process of drilling, and the release of thousands of gallons of polluted water ("drilling muds") would damage this delicate ecosystem. These muds contain toxins like benzene, zinc, arsenic, radioactive materials, and other contaminants used to lubricate drill bits and maintain pressure. Unfortunately, discharges are unregulated. High concentrations of metals were found around drilling platforms in the Gulf of Mexico. A single oil well discharges around 1,500 – 2,000 tons of waste material (6). Contaminants from oil drilling accumulate on the sea floor; smother organisms and cause malformations, genetic damage, and mortality in fish embryos.

The Arctic is one of our last and greatest unspoiled wild places. No oil company has ever successfully drilled for oil in the pristine, wildlife-filled public waters of the Arctic Ocean despite an expensive and near catastrophic attempt by Shell Oil to explore for oil there in 2012, when a Shell drilling rig ran aground in a storm. Drilling here would threaten one of our planet's most fragile, and remote ecosystems.

"If future generations are to remember us with gratitude rather than contempt, we must leave them something more than the miracles of technology. We must leave them a glimpse of the world as it was in the beginning, not just after we got through with it.

"Once our natural splendor is destroyed, it can never be recaptured. And once man can no longer walk with beauty or wonder at nature, his spirit will wither and his sustenance be wasted."

— Lyndon B. Johnson

Thank you for your time and consideration of this extremely important matter,

Joan Milford
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