

Gambling with America's Arctic Ocean

In the remote reaches of Alaska lies **one of the world's most extraordinary environments - America's Arctic**. Untamed seas and a spectacular landscape create an irreplaceable natural realm celebrated for its unique wildlife and the culture of the Inupiat people.

Current oil and gas development proposals threaten America's Arctic seas and lands in unprecedented ways. The Minerals Management Service, a branch of the Interior Dept., is rushing into seismic exploration, lease sales and test wells this spring and summer 2007!

What is the Global Importance of America's Arctic Ocean?

The Chukchi and Beaufort Seas make up America's Arctic Ocean, with the Northern Bering Sea inextricably linked - this region is **one of the most abundant marine ecosystems in the world** due to a unique combination of natural elements. Currently, the Chukchi is an unspoiled, intact ecosystem; the vast majority of the Beaufort is also **pristine**. At the same time, these seas are mysterious places where significantly more scientific study is needed. In addition, climate change is having alarming impacts on this region and more research is needed to understand and manage its consequences.



- ⇒ **The Chukchi and Beaufort Seas are distinctly different from lower latitude seas and make direct and important contributions to global ocean and climate systems.**
- ⇒ **The Chukchi Sea is the most productive high latitude ocean system in the Arctic.** Its shallow and highly productive sea floor (benthic system) allows bottom-dwelling prey (crustacea, mollusks, etc) to flourish, creating a buffet for wildlife specialized to feed off the ocean floor, such as walrus, seals, gray whales, and deep-diving sea birds. The **Beaufort Sea is a main artery for bowhead and beluga migrations, and critical for polar bear.** Both seas provide critical habitat for all of the Arctic's wildlife.
- ⇒ **Critical estuaries, bays, inlets and river outlets line the Chukchi and Beaufort Sea coasts** and provide important habitat for millions of birds, including endangered and threatened species as the spectacled and Stellar's eider, as well as candidate species such as the Kittlitz's murrelet. Polar cod, capelin and other fish spawn in these shallow waters and are primary food sources for the Arctic's wildlife.
- ⇒ **The role of ice is a distinctive and critical feature to the Chukchi and Beaufort Seas.** The ice-edge produces a rich profusion of phytoplankton and sea-algae. Icy temperatures inhibit the large fish (such as salmon and pollock) that would eat this prey, allowing it to sink to the seafloor to feed creatures there. The importance and role of ice cannot be underestimated. Much of the Arctic's wildlife and its people are integrally linked to and reliant on the ice-edge.
- ⇒ **National interest areas potentially threatened by offshore development:** Arctic National Wildlife Refuge, Alaska Maritime and Selawik National Wildlife Refuges; Bering Land Bridge National Preserve; Cape Krusenstern National Monument; Ludyard Bay and Teshekpuk Lake.

The Arctic's Notable Wildlife

- **Endangered bowhead** whales migrate throughout both seas, as do **beluga whales**. **Gray whales** feed in the Chukchi, as do increasing numbers of endangered **humpback and fin whales**.
- **Bearded, ribbon, ringed and spotted seals** range throughout both seas; ringed and bearded seals live only in the Arctic and are ice-dependent.
- **Polar bear** is the apex predator of the Arctic and is completely dependant on ice and seals. Polar bear range through both seas. Previously denning mainly on ice, a significant number now den on land; the Arctic Refuge coastal plain is a primary denning site. The **Arctic fox** follows the polar bear and lives much of its life on ice.
- **Walrus** feast on record-level clam beds in the Chukchi Sea and migrate from the northern Bering Sea to Pt. Barrow.
- **Millions of birds** rely on the Chukchi and Beaufort Seas and their critical coastal areas, several are endangered and threatened: spectacled and Stellar's eider, Kittlitz's murrelet is a candidate species.
- In addition to **capelin and polar cod**, there are many endemic and **rare Arctic fishes**.

Arctic Ocean Development Threatens an Ecosystem Already at Risk

Oil and gas development jeopardizes America's Arctic ecosystem and would cause grave environmental impacts, harm globally significant wildlife and impair the Inupiat way of life.

Wildlife Harm and Disturbance

- Oil spills are a potentially devastating impact to wildlife. Generational and population-level effects are caused by both smaller releases of oil and larger spills. In broken or solid ice, oil would remain in the environment to become a catastrophic event at breakup in the spring when wildlife returns with young.
- **Infrastructure, rigs and on and offshore pipelines** are expected to impair animal migration, feeding, nursing and denning.
- **Huge increases in vessel traffic** will cause wildlife vessel strikes, disturb feeding/resting behaviors and impair migration.
- **Air traffic and industry noise** will displace and scare animals; walrus are sensitive to noise and known to stampede, crushing young walrus and pups; important feeding areas such as Hannah Shoal may be abandoned.
- **Contamination of the sea-floor and water column** could impair the health of all wildlife, from the food base to top predators such as whale, seal, walrus and polar bear and eventually the Inupiat.
- **Seismic testing** is proven to cause direct injury, impair feeding and resting behavior and migration routes.

Threats to Inupiat People's Health, Culture and Community

Tied to the Arctic economically and culturally, the Inupiat rely on the health and abundance of local wildlife, such as seals, walrus, bowhead and beluga whales, fish, birds, caribou, and other land animals. The Inupiat people are inextricably linked to their Arctic way of life and the wildlife that share this extraordinary place with them.

Environmental impact statements clearly state the terrifying reality that **oil development, particularly a large spill, could cause long-lasting and devastating sociocultural impacts** including: contamination of food and water, substantial **impairment to subsistence** due to loss or changes in migration routes and behavior, cultural impacts and community impacts.

An Industry Experiment with Ecosystem-wide Impacts

Oil Spills

In Arctic seas oil spills are perilous. The inability to clean up spills in broken or solid ice or to contain spills and prevent their flowing under solid ice means the oil stays in the environment for generations. Oil presents a direct and immediate threat to all Arctic ocean wildlife and habitats. Even small spills cause contamination that takes generations for recovery. According to the MMS 5-Year Plan EIS, a large spill would cause devastating and long-lasting damages to wildlife, habitats and the Inupiat way of life and culture.

The MMS expects a minimum of 3 large spills during the lease period.

There is no proven technology for cleaning up spilled oil in broken or solid-ice conditions.

Threats to Ice Integrity, Risks from Ice

Ice-breakers, platforms, under-water pipelines all pose unknown hazards in the Arctic's ice-laden and harsh weather conditions. **Development will be experimental**, for the most part; there is little known about oil development in the ice and weather conditions of the Chukchi and Beaufort Seas. **Ice-keels, the deep gouging of the sea-floor by ice, could cause large underwater pipeline spills**, going undetected for months. **The ice-edge could be further disrupted by heavy vessel traffic and ice breakers, compounding climate change effects** already impacting wildlife and Inupiat communities.

Too Much, Too Soon, Too Fast

- ⇒ **Developing oil in our Arctic seas is gambling with an extraordinary place and people's lives. This offshore leasing program offers the American public the trade of an Arctic ecosystem and the Inupiat way of life for more greenhouse gas producing oil.** An honest cost/benefit analysis would show that this proposal will cost more to the American taxpayer than they will gain. We need intelligent energy investments designed with the future in mind.
- ⇒ **These proposals are reckless and too fast paced. Given how little is known about the Arctic ecosystem, its wildlife, and global warming effects, it is morally irresponsible to drill these seas.** Agency scientists overwhelmingly believe that more research is needed for monitoring and mitigating impacts. **The MMS is fast-tracking this development with insufficient science and inadequate data.**
- ⇒ **The arctic is the most difficult, dangerous, and expensive place to drill for oil.** Offshore oil and gas development have a history of spills, contamination of ecosystems, and human and wildlife impacts. The Arctic environment would exaggerate these effects as oil takes much longer to decompose or dilute in cold water.
- ⇒ **Finally, development would compound impacts in an area already under duress from climate change.** A real analysis of the cumulative impacts of oil and gas development on top of the dire changes taking place with global warming has not been done. This proposal exacerbates and intensifies impacts to a region already in trauma.