

Strategic Energy Resources: ANWR, Alaska

In a refuge the size of South Carolina, on a coastal plain the size of Massachusetts, a development footprint the size of a large airport



The ANWR Coastal Plain in Spring (Photo Courtesy of Arctic Power)

Oil reserves under the Arctic National Wildlife Refuge comprise a vital national energy resource:

- USGS estimates between 5.7 and 16.0 billion barrels of oil are “technically recoverable”
- This represents more than twice the proven oil reserves in Texas and almost half the total of U.S. proven oil reserves
- Production could equal as much as 1 million barrels per day for as much as 30 years, an amount equal to the daily U.S. production in the Gulf of Mexico lost in 2005 due to hurricanes and equivalent to current daily imports from Saudi Arabia

Under current federal legislation, only a small portion of the Arctic National Wildlife Refuge would be affected by exploration and production of oil and gas

- Total ANWR area:
 - 19.6 million acres
- Designated as wilderness:
 - 8 million acres
- ANWR coastal plain study area:
 - 1.5 million acres
- Federal legislative limit to oil and gas activities at ANWR:
 - 2000 acres

Advanced technology has greatly reduced the footprint of Arctic oil development as production pads have been getting progressively smaller

- Prudhoe Bay well pads, constructed in the 1970's, comprise 44 acres, while today's modern, smaller well pads comprise as little as 5 to 7 acres
- These new technologies allow 64 square miles to be drained from wells

on one pad, roughly the size of Washington, D.C.

Congress has set stringent environmental requirements for oil and gas leases in ANWR

- Use of best commercially available technology for exploration and development
- Limiting exploration activities to the winter period between November and May
- Imposing seasonal limits to protect breeding, spawning, and wildlife migration patterns
- Using ice roads, ice airstrips, and other low-impact transportation methods while limiting air traffic to reduce disturbance to fish and wildlife
- Requiring pipelines and roads to be designed to minimize adverse effects on migratory caribou, other wildlife, and surface water flow
- Protecting springs, streams, rivers, wetlands, and other environmentally sensitive habitats from the effects of water used in drilling
- Proper treatment and disposal of all waste products and an annual report on waste management
- All crew members educated on environmental protection methods
- Compliance with all applicable air and water quality standards

Comparison of ANWR to Continental U.S.

