

## Oil drilling banned in Arctic area that attracts walrus

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This July 17, 2012 photo released by the U.S. Geological Survey shows adult female walruses on an ice flow with young walruses in the Eastern Chukchi Sea, Alaska. A remote plateau on the Arctic Ocean floor, where thousands of Pacific walrus gather to feed and raise pups, has received new protections from the Obama administration that recognize it as a biological hot spot and mark it off-limits to future oil drilling. (AP Photo/U.S. Geological Survey, S.A. Sonsthagen)

A plateau on the Arctic Ocean floor, where thousands of Pacific walrus gather to feed and raise pups, has received new protections from the



Obama administration that recognize it as a biological hot spot and mark it off-limits to future oil drilling.

But the announcement from Interior Secretary Sally Jewell triggered an uproar from Alaska leaders, angry that the federal government was making a decision that they said would harm the state's economy.

"This administration has effectively declared war on Alaska," U.S. Sen. Lisa Murkowski said.

Hanna Shoal rises from the shallow Chukchi Sea and teems with plankton, clams and marine worms that attract walrus and bearded seals. The remote area lies 80 miles off the state's northwest coast, beyond even sparsely populated subsistence whale hunting towns such as Barrow, the northernmost community in the U.S.

Federal estimates, however, show that the Chukchi and Beaufort seas could hold 26 billion barrels of recoverable oil, and many Alaska leaders are eager to begin drilling in the area to create jobs and fund state government projects and services.

About 90 percent of Alaska state revenue comes from oil taxes or fees, and with the price drop of nearly \$60 per barrel since April, the state faces a \$3.5 billion budget deficit next year. Leaders in Alaska want to find new drilling opportunities as a way to offset those losses.

Jewell's move late last month, adding Hanna Shoal to four other Arctic Ocean areas that won't be offered for future oil lease sales, came just two days after President Barack Obama declared he would seek wilderness protection for the Arctic National Wildlife Refuge, including its coastal plain, which holds an estimated 10 billion barrels of oil.

The back-to-back announcements hit a familiar nerve for Murkowski



and others, who say the federal government frequently makes decisions that are bad for state's economy. The Obama administration wants to preserve Alaska like a "nice little snow globe," Murkowski said.

The announcements change very little for current oil exploration. The newly removed section covers about 2,500 square miles. Meanwhile, more than 184,000 square miles of Arctic Ocean territory remain available for future oil leases and exploration.

Also, Alaska officials have failed to get drill rigs onto the ANWR coastal plain for three decades, under presidents from both parties. The president cannot designate wilderness areas in the refuge, and cannot open it to drilling; only Congress has that authority.

Environmental groups bitterly oppose Arctic Ocean drilling and contend oil companies cannot clean potential spills. They applauded the removal from future sales of Hanna Shoal, where the Bureau of Ocean Energy Management has spent about \$10 million on studies in the last three years.

Researchers say the shoal, a 30- by 100-mile area, rises from the shallow continental shelf like the top half of a football. Its physical properties interrupt ocean currents to creating eddies where plankton, algae and other organic materials swirl and fall, nourishing bottom feeders that are in turn eaten by walrus and seals.

"The physics are driving the biology," said Dr. Ken Dunton, chief scientist for the Hanna Shoal Ecosystem Study.

The shoal rises about halfway up the water column, said Thomas Weingartner, professor of physical oceanography at the University of Alaska Fairbanks, and seawater freezes over the plateau each winter, expelling salt. The salt sinks and mixes with water lower in the column,



creating very cold, dense, salty water. Scientists call it "winter water."

In summer, warmer water flowing north through the Bering Strait hits the dense winter water and swirls around it. The cold, dense, salty water not only creates giant eddies to trap plankton, it can retain ice floes longer than other parts of the Chukchi, giving walrus a platform from which to dive and raise young.

"The winter water stays in that area for a good deal of the year, if not the entire year," Weingartner said. "It's only slowly replaced."

Walrus are drawn to the shoal even when ice melts above it, researcher Chad Jay of the U.S. Geological Survey said. Some make a 300-mile round trip to feed in the area. "They felt that area was important enough to make that trip," Jay said.

The shoal is incredibly rich biologically and important habitat, Jewell said. "Like Bristol Bay," she said, "there are some places too special to drill."

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