

## Feds eye new fishing rules for a warming Arctic Ocean

**T**he potential for offshore commercial fishing in a warming and less icy Arctic Ocean is beginning to draw serious attention from federal officials.

The most significant evidence: The National Marine Fisheries Service (NMFS) is drawing up budget requests for trawl surveys in the two regional Arctic seas touching Alaska — the Chukchi Sea north of the Bering Strait and the Beaufort Sea to the east.

Little is known about the size and makeup of fish and shellfish populations in the Arctic waters. But with the polar climate warming and with ice cover shrinking, regulators and researchers say they want to be ready should commercial fishing vessels venture into the frontier.

Currently, there are no managed fisheries in the U.S. Exclusive Economic Zone (EEZ) of the Arctic Ocean offshore Alaska.

“The idea is to establish baselines to see what’s going on now and periodically check back to see what’s happened,” said Mike Sigler, a NMFS marine biologist in Juneau who’s writing budget requests for the Arctic stock surveys.

NMFS wants to conduct the trawl surveys in the Chukchi and Beaufort seas around August 2008, Sigler said. The federal Minerals Management Service, which is the agency that regulates offshore oil and gas drilling, would foot the estimated \$2.1 million cost of the two surveys.

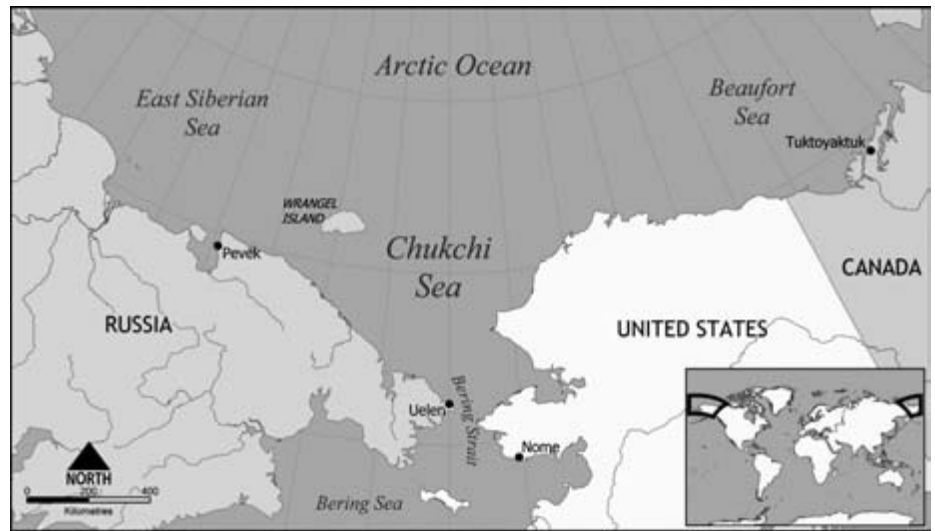
The goal is to assess the abundance of groundfish, snow crab, and even salmon in select zones of the vast Chukchi and Beaufort seas, Sigler said. NMFS will use its research ship, the *Miller Freeman*, if available, or it will charter a commercial fishing vessel, he said.

But the funding request must gain a number of approvals before it can move ahead. According to Sigler, the Arctic survey work will need approvals from top Commerce Department officials, and it must also win inclusion in the president’s budget. So far, it ranks high with the Commerce brass, he said.

“People recognize that it’s important to be done,” Sigler said.

In other developments:

- The North Pacific Fishery Manage-



ment Council, which normally focuses on the rich harvests of the Bering Sea and Gulf of Alaska, in October began looking at options for managing Arctic Ocean fisheries, should they develop. Council staffer Bill Wilson wrote a 14-page paper noting, among other things, that species such as Arctic cod and yellowfin sole are present in the polar ocean, and that Arctic cod have been harvested commercially off Russia and some northern European countries. Arctic cod are small, usually less than 15 inches long, and thrive along the edge of the pack ice.

If fisheries expand north with climate change, the council will need a fishery management plan for the Arctic, said council chair Stephanie Madsen.

- The Anchorage-based North Pacific Research Board, with millions of dollars to spend, recently solicited research proposals to “design a comprehensive inventory of marine species” in the Bering Strait and Chukchi Sea region.

The board’s executive director, Clarence Pautzke, said the design would serve as a blueprint for periodic Arctic Ocean surveys in coming years. If commercially important fish such as Bering Sea pollock push north, toward Russia, that could create some “interesting geopolitics” but also new importance for Arctic waters, Pautzke said.

Wilson’s paper notes that ice typically has covered the Chukchi and Beaufort seas for up to nine months a year. That

makes Arctic Ocean productivity relatively low due to long winters of low light and low plankton production.

Surveys such as those proposed by NMFS have been few and far between in the Arctic Ocean. In summer 2004, Russian and American scientists teamed up for an historic research cruise through the Bering Strait into the Chukchi Sea, where they used an otter trawl to catch at least 24 species. While fish abundance and diversity seemed lower than in the Bering Sea, the scientists also reported bagging pollock and other species beyond the previously known northern range for the fish.

Some commercial fishing does occur above the Bering Strait, but only in the state-managed inshore waters. It includes chum salmon and sheefish harvests on the edge of the Chukchi Sea at Kotzebue, and a small cisco fishery in the Colville River delta, which opens into the Beaufort Sea.

Offshore fisheries conceivably could blossom if sea ice continues to shrink. In November, the U.S. National Ice Center in Maryland said a new, comprehensive analysis of satellite data showed that the extent of Arctic sea ice has steadily declined over a 33-year period, with summer ice cover shrinking by more than 8 percent per decade.

What does it all mean? “This next 25 years could just be dazzling,” Pautzke said. ■