

# Environmental Changes in the Arctic Seen Having Strategic Implications for US and Partner Nations



The crew of the Seawolf-class fast-attack submarine USS Connecticut (SSN 22) enjoys ice liberty after surfacing in the Arctic Circle during Ice Exercise (ICEX) 2020 in this May, 2020, photo. ICEX 2020 is a biennial submarine exercise which promotes interoperability between allies and partners to maintain operational readiness and regional stability, while improving capabilities to operate in the Arctic environment. U.S. Navy / Mass Communication Specialist 1st Class Michael B. Zingaro

A Jan. 6, 2021, report from the Congressional Research Service on changes in the Arctic says the diminishment of Arctic sea ice has led to increased human activities in the region and heightened interest in, and concerns about, the Arctic's future.

Accessibility to the region has increased interest in tourism, mineral extraction, fishing and commerce. An open Arctic means during some times of the year, ships can cut about 40% of the time it takes to pass from Asia to Europe, cutting time and costs to ship goods. The resurgence of Russia's military, which has a significant presence in the Russian Arctic, and especially the growing numbers and quality of Russian submarines, means the region's strategic importance has also increased.

And, of course, the scientific community wants to understand the environmental changes and all of the implications.

"Record low extents of Arctic sea ice over the past decade have focused scientific and policy attention on links to global climate change and projected ice-free seasons in the Arctic within decades," the CRS report says. "These changes have potential consequences for weather in the United States, access to mineral and biological resources in the Arctic, the economies and cultures of peoples in the region, and national security."

Broadly speaking, the report states physical changes in the Arctic include warming ocean, soil, and air temperatures; melting permafrost; shifting vegetation and animal abundances; and altered characteristics of Arctic cyclones. All these changes are expected to affect traditional livelihoods and cultures in the region and survival of polar bear and other animal populations, and raise risks of pollution, food supply, safety, cultural losses, and national security. Moreover, linkages ("teleconnections") between warming Arctic conditions and extreme events in the mid-latitude continents are increasingly evident, identified in such extreme events as the heat waves and fires in Russia in 2010; severe winters in the eastern United States and Europe in 2009/2010 and in Europe in 2011/2012; and Indian summer monsoons and droughts. Hence, changing climate in the Arctic suggests important implications both locally and across the hemisphere.

Due to observed and projected climate change, scientists have concluded the Arctic will have changed from an ice-covered environment to a recurrent ice-free ocean (in summers) as soon as the late 2030s. The character of ice cover is expected to change as well, with the ice being thinner, more fragile, and more regionally variable. The variability in recent years of both ice quantity and location could be expected to continue.

While it will still be a cold and inhospitable place, these changes will appear to be a warm welcome to increased human activity. Concerns about these concerns are shared by America's allies, including NATO.

### **Great power competition**

In testimony before Congress, Chief of Naval Operations Adm. Mike Gilday said the Arctic "has become an emerging area of great power competition," and the sea services are seeking to "better understand the Navy and Marine Corps' role in protecting the Arctic homeland, safeguarding the Arctic region's global commons."

With the return of great power competition, the Department of Defense and the Coast Guard (part of the Department of Homeland Security) are devoting increased attention to the Arctic in their planning and operations, the CRS report noted. "DoD as a whole, as well as the Navy and Marine Corps, the Air Force, and the Coast Guard individually, have issued Arctic strategy documents in recent years, and the Army reportedly is planning to issue one."

The newly released Navy-Marine Corps Arctic Strategy looks at the Arctic as part of the great power competition maneuver space. "Without sustained American naval presence and partnerships in the Arctic region, peace and prosperity will be increasingly challenged by Russia and China, whose interests and values differ dramatically from ours," it says.

Navy Secretary Kenneth Braithwaite said the Navy remains

committed to protecting the Arctic environment and ensuring naval forces do their part to help preserve it. The Navy, he said, will be “operating again in a more permanent manner above the Arctic Circle.”

The CRS report points to remarks made by Secretary of State Michael Pompeo from a May 2019 Arctic Council meeting where he praised international cooperation in the Arctic, but specifically called out Russia and China for their lack of transparency and self-serving activities.

“Just because the Arctic is a place of wilderness does not mean it should become a place of lawlessness,” Pompeo said.

According to the report, some observers believe the U.S.-led international order in general may be eroding or collapsing, and the nature of the international order that could emerge in its wake is uncertain, with significant implications for the Arctic.

China’s growing activities in the Arctic may also reflect a view that as a major world power, China should, like other major world powers, be active in the polar regions for conducting research and other purposes.

Asserting sovereignty in the U.S. Arctic requires presence, and maritime presence requires ships. While The Coast Guard is building new multi-mission, heavy icebreakers called Polar Security Cutters, the Coast Guard currently has few ice-capable vessels, and the Navy has none.