



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Eddie Bernice Johnson (D-TX)

Full Committee Hearing

Amplifying the Arctic: Strengthening Science to Respond to a Rapidly Changing Arctic

September 20, 2022

Good morning and welcome to our witnesses.

The Arctic, sometimes referred to as the Land of the Midnight Sun or the Top of the World, evokes images of the northern lights, the running of the iconic Iditarod dog sled race, and of course, polar bears. We don't imagine the increasing toxic algal blooms on Alaska's sea floor or increasing burn areas of boreal forest fires. Nor do we picture the sinking homes and impassable roads caused by thawing of the once frozen ground they are built upon. But these are the realities faced by the 4 million people living in the Arctic. These realities became even more dire over the weekend as western Alaska faced the strongest September storm seen in 70 years. The storm caused record storm surge of nearly 9 feet in some areas, flooding, and buildings to be swept off their foundations. Environmental changes have many social, cultural, and economic impacts, including on the food security of many local communities.

The Arctic is warming faster than any other part of the globe. Some changes are seen in a matter of years, not decades. Now, more than ever it is becoming clearer that what happens in the Arctic has both local and global impacts. People in my home state of Texas experienced a historic winter storm in February of 2021 that left many without running water, power, or heat for days. Researchers have linked this storm, western wildfires, and other extreme weather events in the lower 48 states to warming in the Arctic.

Support of robust, coordinated Arctic research and science is critical. I applaud the interagency effort and work of experts to develop the 2022-2026 Arctic research plan. I look forward to hearing how the plan will lay the foundation for our priorities for the next five years. The changes in the Arctic are happening today and we must be agile and strategic in our response. This starts with working meaningfully with local and Indigenous communities of Alaska and the Arctic who know their needs the most.

Efforts have been made to bridge Indigenous knowledge and western science, but more needs to be done to elevate co-production of knowledge in the research enterprise. Research opportunities such as field research and expeditions are a highlight for many scientists who study the Arctic. Unfortunately, the feeling is not always mutual amongst local communities. We must find ways to build better relationships if the research is to be as productive as possible.

In addition to expanding participation in Arctic research, we must also strengthen and increase our Arctic science capabilities, including research vessels, infrastructure, and facilities, which are constrained. If we are to continue our leadership in Arctic science, what additional capabilities are necessary? Likewise, what are our plans to support more robust monitoring, observing, modeling, and prediction that will help us better understand changes in the Arctic?

Well, we have a lot to address at this morning's hearing, and I again want to thank our witnesses for their testimony.