

Interagency Arctic Research Policy Committee

Arctic Research Plan Accomplishments, 2022-2024



Building connections and facilitating research for a thriving Arctic and Earth.

The Interagency Arctic Research Policy Committee (IARPC) brings together leaders from 18 U.S. federal agencies, departments, and offices to enhance research in the Arctic.

Together, IARPC agencies developed and are implementing the U.S. Arctic Research Plan 2022-2026. The Arctic Research Plan also outlines a vision to address emerging questions about this vital region that are important to Arctic communities. It also provides pathways to strengthen relationships among those involved in Arctic research. Its associated implementation plan provides specific federal actions to promote research aimed at improving community resilience and well-being, advancing scientific understanding of ongoing changes in the Arctic system, creating more sustainable economies and livelihoods, and improving risk management and hazard mitigation. See the graphic at right for more on the structure of the Arctic Research Plan.

Additionally, IARPC coordinates IARPC Collaborations, a unique and innovative



platform that connects federal and state agencies, Arctic researchers and community members, Indigenous Knowledge holders, and more. IARPC Collaborations serves as a hub for these partners and facilitates the implementation of the Arctic Research Plan. Groups across IARPC Collaborations come together to share information, work toward shared goals, and track progress. Those interested can join at: iarpccollaborations.org.

This document highlights accomplishments from 2022 to 2024 under the Arctic Research Plan. The IARPC Collaborations community advanced 91 deliverables and held over 200 webinars and meetings to share information.

What have IARPC and the Arctic research community achieved?

SUPPORTING HUMAN HEALTH IN URBAN AND RURAL ALASKA COMMUNITIES.

IARPC federal agencies and Arctic researchers have contributed to safer drinking water in Arctic communities. IARPC members have developed and evaluated remediation and treatment strategies for perfluoroalkyl and polyfluoroalkyl substances (PFAS) in urban and remote areas. IARPC Collaborations has connected local and Indigenous community members with federal agencies and researchers to improve food security and address climate impacts on food storage. And IARPC members have connected people in remote communities to testing and treatment for diseases such as Hepatitis C.



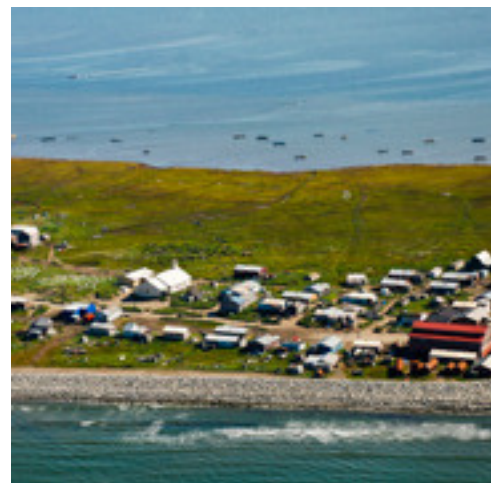
INVESTIGATING IMPACTS OF CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION ON THE ARCTIC.

The IARPC Collaborations community has come together to measure key marine processes contributing to Arctic change, assess the impacts of permafrost thaw, and to evaluate the role of the Arctic in the global system. Federal agencies have also provided funding and advanced programs to understand harmful algal blooms and other risks to food security and ecosystems. Groups across IARPC have held collaborative workshops and webinars to advance understanding of Arctic amplification, the phenomenon of the Arctic region warming significantly faster than the global average.



FOSTERING COMMUNITY RESILIENCE IN THE FACE OF CLIMATE CHANGE.

IARPC Collaborations has supported decision-making and planning around risks and hazards by connecting communities with federal and non-federal organizations that are developing tools and collecting critical data. IARPC members worked to identify what researchers and communities need to address hazards like erosion and flooding. In particular, IARPC members are also developing an asset map of existing Arctic infrastructure to identify trends and improve information for community resilience. Researchers and federal agencies are also collaborating with Alaska communities to develop a coastal flood hazard assessment tool.



Photos, from top: Keith Ramos/USFWS; Brandt Meixell/USGS; NPS



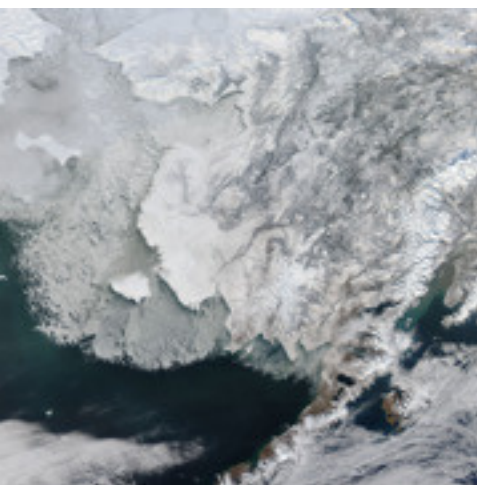
04 WORKING TO ENSURE ARCTIC COMMUNITIES KNOW WHAT RESEARCH IS HAPPENING NEARBY.

Federal agencies and partners have collaborated to compile and share information on the plans and movements of Arctic research vessels and the location of research moorings. This information supports greater coordination among researchers, enables coastal Arctic communities to understand what work is being done in their waters, and reduces conflict between subsistence and scientific activities. IARPC communities have also held trainings for researchers on how to better engage with and include Alaska communities in their work.



05 MAKING CONNECTIONS TO SUPPORT BETTER SCIENCE AND BUILD FUTURE EXPERTISE.

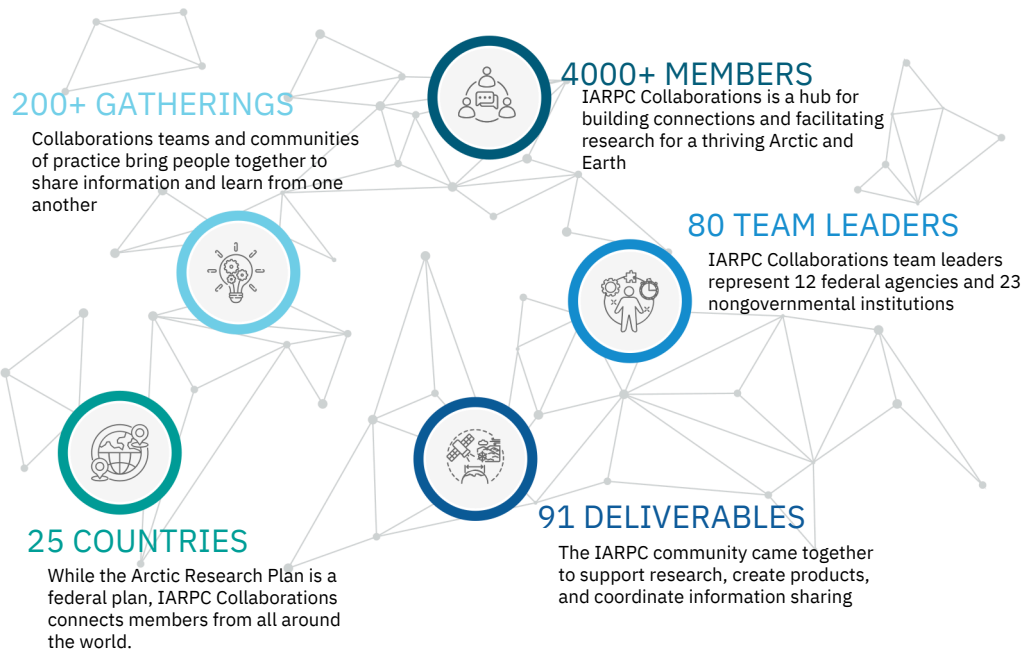
IARPC is evaluating the **S**ustain and build relationships, **H**umble accountability, **A**dvance responsible environmental stewardship, **R**espect Indigenous Knowledges, and **E**ffective communication (SHARE) Principles for Conducting Research in the Arctic to better promote mutual respect and equitable communication between Arctic residents and researchers. Additionally, IARPC launched the OneSTEM hub as a central nexus of available science, technology, engineering, and math training programs in the Arctic. With the hub, students and community members can find programs to support their academic interests.



06 SUPPORTING BETTER DATA AND MORE EFFECTIVE PREDICTIONS.

The U.S. Arctic Observing Network developed a tool for scientists and communities to assess connections and gaps in Arctic observing data that are critical for identifying and predicting hazards. This tool supports strategic investment and decision-making to address those gaps. IARPC has led efforts to integrate the **F**indable, **A**ccessible, **I**nteroperable, and **R**eusable (FAIR) and **C**ollective benefit, **A**uthority to control, **R**esponsibility, and **E**thics (CARE) data management principles into Arctic research. IARPC has also brought researchers together to share approaches for more accurate and robust Earth System models.

Photos, from top: Charley Hengen/USCG; USFWS; Jeff Schmaltz/NASA



IARPC Member Agencies:

Denali Commission
 Department of Agriculture (USDA)
 Department of Commerce (DOC)
 Department of Defense (DOD)
 Department of Energy (DOE)
 Department of Health & Human Services (HHS)
 Department of Homeland Security (DHS)
 Department of Housing & Urban Development (HUD)
 Department of the Interior (DOI)
 Department of State (DOS)
 Department of Transportation (DOT)
 Environmental Protection Agency (EPA)
 Marine Mammal Commission (MMC)
 National Aeronautics & Space Administration (NASA)
 National Science Foundation (NSF)
 Executive Office of the President (EOP)
 Office of Management & Budget (OMB)
 Office of Science & Technology Policy (OSTP)
 Smithsonian Institution

Priority Area Collaboration Teams

Arctic Systems Interactions
 Community Resilience & Health
 Risk Management & Hazard Mitigation
 Sustainable Economies & Livelihoods

Foundational Activity Collab. Teams

Data Management
 Education and Training
 Monitoring, Observing, Modeling, & Prediction
 Participatory Research & Indigenous Leadership in Research
 Technology Innovation & Application

IARPC Communities of Practice

Atmosphere
 Coastal Resilience
 Cold/High Anaerobic Digestion
 Early Career
 Field Operations
 Glaciers & Sea Level
 Marine Ecosystems
 Modelers
 Observations
 Permafrost
 Physical Oceanography
 Sea Ice
 Terrestrial Ecosystems



Scan code to see all progress on the Arctic Research Plan

Learn more at
iarppcollaborations.org



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