Arctic communities possess a wealth of knowledge about landscape and ecosystem changes in their regions. This knowledge is an incredible resource that needs to be shared across the circumpolar North and beyond, to non-Arctic research and policy-making centers. The Arctic Adaptation Exchange Portal (AAEP), a project of the Arctic Council’s Sustainable Development Working Group (SDWG) and The University of Alaska is supporting the flow of knowledge between Arctic communities for adaptive and resilient capacity that will enable us to respond to change in a way that is anticipatory rather than reactive. As an open and web-based platform, this information is also available for a range of other users, including researchers and policy-makers. A unique and distinguishing feature of the AAEP is that it is not geared primarily for scientists to use, recognizing the overwhelming number of databases and other technical sites that currently exist. Instead, the AAEP fills a current unmet niche: that of building a knowledge-base at ground level, where day to day adaptation actions are occurring right now, in real life and not theory.

To truly support the knowledge capacity that sustains resilient Arctic communities, the Arctic Adaptation Exchange Portal (AAEP) is expanding its existing platform to allow users to share innovations, problems, and solutions for resilient response to global and environmental change. Currently, the AAEP is a vibrant place to share research of all kinds across a variety of thematic and Arctic regional contexts. But the AAEP has the capacity to support and engage Arctic community members in a more dynamic role: through the Community Observation Network for Adaptation and Security (CONAS) and the joint Scandic-Russian community based observing effort, Snowchange the AAEP team, in partnership with residents, has identified 16 communities around the circumpolar region who are willing to participate in sharing their experiences of and solutions to arctic change. These include communities in the U.S., Russia, Norway, Sweden, and Finland. The AAEP continues to seek community partners across the circumpolar North.

Through an accessible web platform the planned re-design of AAEP serves as both information resource and climate change witness for Arctic communities. This re-design includes adding a user forum for frank discussion, and re-calibrating the AAEP “Explore” map. The map will be re-purposed to directly support community members who want to document their observations of tundra-level changes, and share local solutions to these changes.

With the new AAEP, users from Arctic communities can
- **share** resources and observations on a map. This allows users to document problems at specific locations arising from climate change, and also to share solutions. Shared resources can be in the form of documents, web pages, videos, or photos.
- **explore** problems and solutions of other Arctic communities. The AAEP provides Arctic communities with solution-finding tools to community problems that stem from climate change. These include the Arctic Water Resource Vulnerabilities Index (AWRVI).
- **connect** through an interactive forum for discussion, solution finding, and problem identification. These public forums are moderated and can be used for effective research and policy that is sourced from on-the-ground witnesses.
- **innovate** through discussion, observation, and solution-sharing.

Currently the Arctic Adaptation Exchange Portal unites 50+ Arctic & northern organizations supporting climate change and presents portal users with 900+ resources on Arctic climate change issues and solutions. These resources are submitted by AAEP curators and users, and
are shared through the “Explore” circumpolar map. Included in these resources are Arctic datasets from the US Department of Interior (DoI).

**History**
The Arctic Adaptation Exchange portal is a project of the Arctic Council’s Sustainable Development Working Group. The AAEP began as a collaborative project between the University of Alaska Anchorage and the Government of Canada under the Canadian chairmanship of the Arctic Council. These groups, in partnership with Indigenous communities and government entities, built the AAEP in response to the need expressed by Arctic ministerial members at the 2011 Arctic Council Ministerial in Nuuk for stronger response to arctic-related adaptation. Nuuk delegates recognized a disconnect between the pace of academic research and the speed brought on by necessity for Arctic communities to developing response capacity. The current iteration of the Arctic Adaptation Exchange portal came out of a 2014 meeting with the Alaska EPSCoR AAEP Chair, U.S. and Canadian representatives.

In 2015 with the transfer of the Arctic Council chairmanship from Canada to the US, the University of Alaska took on the mantle of the Arctic Adaptation Exchange. Project co-leads within the Arctic Council’s Sustainable Development Working Group include the Government of Canada (Natural Resources Canada); the Climate Change Secretariat, Department of Environment, Government of Yukon; Aleut International Association; and Gwich’in Council International.

[Image of the Arctic Adaptation Exchange portal]

[Website link: www.arcticadaptationexchange.com]
Arctic Adaptation Exchange video