



ADAPTATION ACTIONS

FOR A CHANGING ARTIC REPORTS



CONTENTS

- 1 AMAP Overview
- 1 AMAP Project
- 3 AMAP Contact Info.
- (5) Regional Contact Info.
- The Arctic Council
- Quote Sheet
- 7 Photo link

OVERVIEW

Arctic Monitoring and Assessment Programme's three 2017 Adaptation Actions for a Changing Arctic (AACA) reports address opportunities and challenges for how to adapt to Arctic change. Each report carefully documents the Arctic, gathering both climate and social information to understand the interactions between communities and the environment. In all three AACA pilot regions climate is only one of many drivers causing change. These reports provide information for tool kits. Residents and policy makers can use them to form decisions and make policy while considering this change in context of the Arctic and its people.

The Adaptation Actions for a Changing Arctic reports cover most of the inhabited Arctic including the Barents Area (Norway, Sweden, Finland, Russia), Baffin Bay/ Davis Strait Region (Greenland, Canada) and Bering-Chukchi- Beaufort Region (Eastern Russia, Alaska and Canada). The Arctic Council requested the reports in 2011.

What is the Arctic Monitoring and Assessment Programme (AMAP)?

Policy makers and decision makers need solid sciencebased information and advice about the Arctic when making future plans. Since 1991 AMAP has provided long-term support for planning with our assessments and overviews. We monitor and assess the Arctic climate, environment, ecosystems and human populations. Our scientists (AMAP expert groups) document levels of contaminants and time trends, pathways and processes, and these effects on humans and the environment.

We coordinate international activities giving us a complete knowledge of the whole Arctic. All our science is subjected to rigorous peer-review, making use of the most up-to-date results from both monitoring and research.

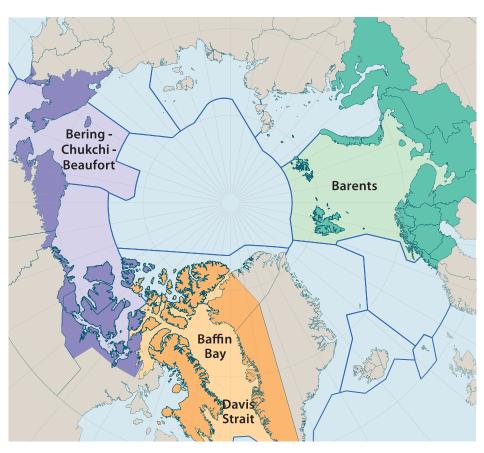
AMAP'S PROJECTS

Snow, Water, Ice and Permafrost in the Arctic (SWIPA)

With SWIPA AMAP experts assess the impacts of climate change on snow, water, ice and permafrost in the Arctic. The first SWIPA report was published in 2011 and AMAP delivers a follow-up study to the Arctic Council Ministerial in May 2017

Adaptation Actions for a Changing Arctic (AACA)

AACA enables more informed, timely and responsive policy and decision making in a rapidly changing Arctic. The project is divided into four components – three regional assessments and one pan-Arctic assessment.



The SAON Process

The decision to establish Sustained Arctic Observing Networks (SAON) was made by the Arctic Council in the Nuuk Declaration (2011). SAON meets the need for a well-coordinated and sustained Arctic Observing Network that meets scientific and societal needs.

Human Health in the Arctic

One of AMAP's main work tasks is to assess human health and food security in the Arctic in relation to environmental contaminants. The 2015 assessment followed three previous assessments and represents the knowledge base after 25 years of focused study.

Chemicals of Emerging Arctic Concern (CEAC)

This report, the fourth in a series of assessments produced by AMAP, addresses the presence in the Arctic of environmental contaminants. The assessment focuses on the occurrence of 17 main groups of chemicals/substances.

Radioactivity

The latest AMAP Assessment on radioactivity in the Arctic was published in May 2016. The report combines new and updated information on radioactivity-related issues in the Arctic. The report identifies the general trends of radioactive contamination in the Arctic environment. The next assessment is planned for 2021.

Arctic Ocean Acidification

In 2013 AMAP presented the first assessment of

Arctic Ocean Acidification (AOA), including a <u>Summary</u> <u>for Policy-makers</u>.

The AMAP follow-up study of AOA is underway and the ssessment work is organized as five case studies:

- 1. Socioeconomic impacts of ocean acidification and temperature
- 2. A Bio economic Model of Ocean Acidification Challenges in the Baffin Bay/Davis Strait Shrimp and Fishery
- 3. Ocean Services of the Barents Sea
- 4. Adaptation Framework: Ocean acidification adaptation in the Arctic
- 5. Impacts of Arctic ocean acidification and other climate change impacts on subsistence fisheries in the Beaufort Sea and Canadian Arctic Archipelago



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BERING-CHUKCHI - BEAUFORT

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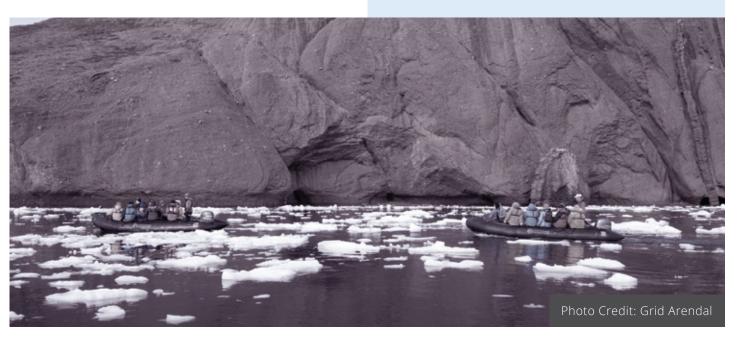
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THE ARCTIC COUNCIL

<u>The Arctic Council</u> leads intergovernmental relations in the Arctic. They promote cooperation, coordination and interaction among the Arctic States, Arctic indigenous communities and other Arctic inhabitants on common Arctic issues. In particular they address issues of sustainable development and environmental protection in the Arctic. <u>Six working groups</u> cooperate to cover a broad range of subjects from climate change to emergency response.



Arctic Contaminants Action Programme (ACAP)



Arctic Monitoring and Assessment
Programme (AMAP)



Conservation of Arctic Flora and Fauna (CAFF)



Emergency Prevention, Preparedness and Response (EPPR)



Protection of the Arctic Marine Environment (PAME)



Sustainable Development Working Group (SDWG)

PARTICIPANTS IN THE ARCTIC COUNCIL

<u>Permanent Indigenous Participants</u> and <u>eight member states</u> form the Arctic Council. They have full consultation rights in connection with the Council's negotiations and decisions. Member states include: <u>Canada</u>, the <u>Kingdom of Denmark</u>, <u>Finland</u>, <u>Iceland</u>, <u>Norway</u>, the <u>Russian Federation</u>, <u>Sweden</u> and the <u>United States</u>. <u>Observer countries and organizations</u> contribute at the Working Group level.

QUOTE SHEET

"The linkage between environmental health and my cultural identity is inseparable. I can see the value of safeguarding the environment, and how conservation efforts can provide for the perseverance of my values. At the same time, I don't see people as separate from the environment; in the Arctic people are a central part of the land and seascape. This is why conservation efforts need to account for and directly link with values important to people." Raychelle Daniel, Yup'ik, Alaska

"The perception of climate change across my relatively short professional life span working in the natural resource field has gone from a prodigious threat looming in the distant future to an inescapable reality that we have to be prepared for and need to "adapt" to before it's too late." Raychelle Daniel, Yup'ik, Kuskokwim River, Alaska

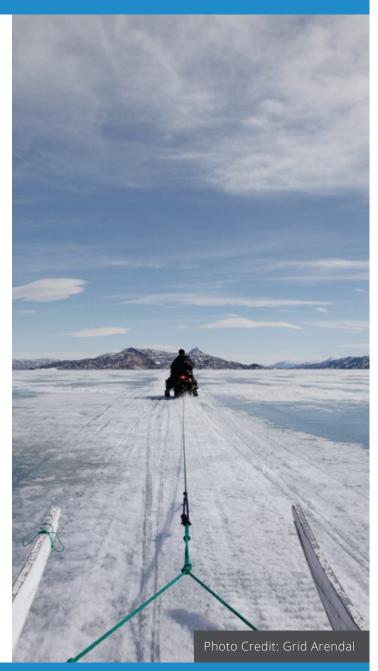
"Our supply of protein and fat during the long polar winter depends on the success of the autumn walrus hunt ... As a result, almost every man is able to provide his family with food, guaranteeing anough to eat for a long period ... This means that the coastal inhabitants of Chukotka are highly vulnerable to any temporal or special changes in the migration of marine mammals." - Eduard Zdor, Executive Secretary of the

Chukotka Association of Traditional Marine Mammal Hunters, Chukotka, Russia

"Reindeer are the foundation of our life in the tundra. Thanks to our traditional knowledge accumulated over centuries while living in harmony with animals, the land and the climate, we Nenets have kept our traditional lifestyle of herding and thriving in the harsh climate conditions of the Arctic, all the while our region is undergoing dramatic and in some cases, irreversible change."

Igor Slepushkin, A Nenets reindeer herder from Yar-Sale, Yamal Nenets AO.

"Of course, I understand that it's the 21 century, computers, big cities, mobilization and so on. In this case, those who want to become a reindeer herder and live in the forest would be very few. But why does everyone think in clichés? We can perfectly combine our traditions and new traditions and new technologies, and not only combine, but also extract the maximum benefit from it." EALLIN workshop participant, quotes in EALLIN 2015



FREE PRESS PHOTOS

Tourism: Cruise, Magdalenefjord, Spitzbergen, Svalbard http://www.grida.no/resources/2265

Tourists and high Arctic scenery, Liefdefjorden, Svalbard http://www.grida.no/resources/2202

<u>Arctic scenery, Woodfjord, Svalbard</u> <u>http://www.grida.no/resources/2168</u>

Cleaning the shores on Amsterdamøya, Svalbard http://www.grida.no/resources/2055

Alaska Inside the Mendenhall Glacier Ice Cave Nome - Muskox https://www.flickr.com/photos/arctic_council/ 33450260826/

<u>Canada Fireweed, Yukon http://www.grida.no/resources/2242</u>

West coast of Baffin Island, Nunavut http://www.grida.no/resources/4430

<u>Inuit children, Pond Inlet</u> <u>http://www.grida.no/resources/4457</u>

Marshes, Hudson Bay http://www.grida.no/resources/4436

Franz Josef Land, Russian Arctic National Park Hooker Island http://www.grida.no/resources/2078

<u>Champ Island</u> <u>http://www.grida.no/resources/2117</u>

Bowhead Whale http://www.grida.no/resources/2102

Greenland Traditional dog sled http://www.grida.no/resources/1093

Snow mobile travel over sea ice in Uummannaq http://www.grida.no/resources/1151 Tourists studying permian red sediments in Røde Fjord, Northeast Greenland National Park http://www.grida.no/resources/3987

Fishing boat in between icebergs, Disco Bay http://www.grida.no/resources/4162

<u>Polar bear</u> <u>On pack ice North of Svalbard</u> <u>http://www.grida.no/resources/2019</u>

Siblings on pack ice North of Svalbard http://www.grida.no/resources/2241

Polar Bear (Ursus Maritimus), Svalbard http://www.grida.no/resources/2217

Shismaref community, Alaska, erosion Climate change and Shishmaref http://www.grida.no/resources/1141

Sinking stones of the protective seawall http://www.grida.no/resources/1136

Houses collapsing due to coastal erosion http://www.grida.no/resources/1139