AMAP: Monitoring and assessments: Contaminants, climate change and impacts

AMAP has a mandate to <u>monitor</u> and <u>assess</u> the status of the Arctic region with respect to <u>pollution</u> (...) and <u>climate change</u> issues by documenting <u>levels</u> and <u>trends</u>, <u>pathways</u> and <u>processes</u>, and <u>effects</u> on <u>ecosystems</u> and <u>humans</u>, and by proposing actions to reduce associated threats for consideration by governments

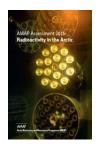
AMAP's Arctic regional monitoring is based on national monitoring and research activities and provides a regional contribution to the global monitoring programmes

















AMAP monitoring

- Arctic pollution and its effects
 - Mercury
 - Persistent Organic Pollutants (POPs)
 - Human health
 - Litter and microplastics
 - Radioactivity
- Climate change and its effects
 - Climate and climate change (Snow, Water, Ice, and Permafrost in the Arctic – SWIPA)
 - Climate change ecosystem impacts (with CBMP)
 - Short-lived Climate Forcers (methane, black carbon, ozone ...)
 - Ocean acidification



AMAP Trends and Effects Monitoring Programme Monitoring guidelines Background

- The structure for the monitoring guidelines is derived from the DPSIR framework. The framework describes the interactions between society and the environment: Driving forces, Pressures, States, Impacts, and Responses.
- The monitoring guidelines addresses (some of the) data/information needs associated with the *States* and *Impacts* DPSIR components
- The basis is the Essential Climate Variables
 (ECV) by the Global Climate Observing
 System (GCOS)¹



¹ https://public.wmo.int/en/programmes/global-climate-observing-system/essential-climate-variables

AMAP Trends and Effects Monitoring Programme Monitoring guidelines Structure

Chapter 1: Introduction

Chapter 2: State parameters

Chapter 3: Impacts/Effects of State parameters

Chapter 4: Ecology

Chapter 5: Feedbacks



AMAP Trends and Effects Monitoring Programme Monitoring guidelines Structure

For each parameter, address these questions:

- Coordination activities
 [Are these parameters monitored by other organizations/initiatives? Should these be considered the 'home' for these parameters?]
- Quality Assurance/Quality Control
 What QA/QC programs exist or should be
 developed in support of these parameters?]
- Data reporting
 [Are international, recognized data centres for these variables existing?]

