



22.3.2021

Work Programme 2020-2023

Subgroup on Nature and Water (SNW)

Final 5.6.2020, updated 22.3.2021

1. Introduction

Nature and Water is a subgroup under the Barents Euro-Arctic Council (BEAC) Working Group on Environment (WGE). This Work Programme covers the period of the Finland's Chairmanship of the WGE 2020-2023. It builds on the on-going work of the SNW as well as on the directions from the Declaration of the 14th Meeting of the Barents Environment Ministers in Luleå February 2020.

In the [declaration](#) from the Ministerial meeting in Luleå in February 2020, the Ministers underlined several issues of importance for the Subgroup:

- tackling direct and indirect drivers of the deterioration of nature
- protection and restoration of ecosystems and biodiversity
- implementation of nature-based solutions
- implementation of the Convention on Biological Diversity (CBD) and new strategic plan
- protected areas, ecological connections and green infrastructure, including the Green Belt of Fennoscandia
- protection of the intact forests, pristine mires and wetlands and of restoration degraded ones
- monitoring and prevention of the spread of invasive alien species
- prevention of negative and enhancement of positive effects of nature tourism
- preservation and restoration of water ecosystems and cooperation on transboundary river basins

All Barents Countries are Parties to the UN Convention of Biological Diversity. In 2020-2021 Parties to the CBD will negotiate a new post-2020 global biodiversity framework to safeguard all life on Earth. Recent scientific reports have shown the need for urgent action to address biodiversity loss, climate change and related challenges.

2. Thematic priorities in the SNW under the Finnish Chairmanship 2020-2023

Thematic priorities of the Finland's Chairmanship regarding SNW are

- Greenbelt of Fennoscandia and sustainable nature tourism
- Biodiversity in changing climate, including intact forest, wetlands, invasive species, and migratory fish
- Water management and aquatic ecosystem restoration

Barents cooperation has an important role to strengthen the regional cooperation to protect the nature in the Barents region and to support the global biodiversity commitments, including the post-2020 global biodiversity framework.

To encourage and facilitate the development of new project proposals, especially to address issues that are not covered by existing projects, SNW could consider organizing thematic seminars and/or discussions back-to-back with the meetings of the Subgroup.



3. Meetings and activities of the SNW 2020-2023

Tentative meeting schedule

SNW will have physical meetings back to back with the WGE meetings and, in addition, physical/telephone/video SNW meetings (all together 1-3 meetings/year). Meeting documents should be circulated at least 1 week before the meeting. SNW can prepare and promote activities in-between the meetings by e-mail correspondence. If needed, decisions can be made intersessionally within a minimum of two weeks for approval. In addition, projects and activities have own meetings and communications.

Participation in SNW is open to federal and regional authorities in the Barents Region. Finland, Norway, Russia and Sweden should appoint members to the subgroup. Representatives from indigenous peoples' organizations and other relevant organizations, including NGOs and institutions may participate as observers in SNW.

The meetings of Green Belt of Fennoscandia will be organized as well back-to-back with SNW, when appropriate.

Activities

The SNW will focus on the following issues during the Finnish chairmanship 2020-2023. The projects listed are identified especially relevant to the aspirations of the SNW, and the subgroup will follow their outcomes. Updates about them as well as information about new projects are welcomed in SNW meetings. Details of each project are listed in Annex I.

Green Belt of Fennoscandia and sustainable nature tourism

Activities 2020-2023:

- SNW will follow and promote, when appropriate, the work and outcomes of the GBF Steering Group and Working Group, including the evaluation of the implementation of the strategy of the GBF

Relevant projects:

- Phenomena of Arctic Nature ([PAN](#))
- Green Nature Based Solutions in Tourism to Reduce Negative Impact on the Environment ([NatureBeST](#))

Habitat Contact Forum

Activities 2020-2023:

- Evaluation on the outcomes of the Habitat Contact Forums
- Plan and implement HCF in Norrbotten in 2022
- Discussion on how to develop HCF to better correspond to future needs

Relevant projects:

- Arctic Biodiversity Congress organized by the Arctic Council Working Group Conservation of Arctic Flora and Fauna (CAFF), in Russia in 2022



Biodiversity in changing climate

Activities 2020-2023:

- Focus on following, promoting and learning from the ongoing projects

Relevant projects:

- Impacts of the climate change on the biodiversity in the Barents Region – from knowledge to mitigation and adaptation ([BARIMS](#))
- Relevant Arctic Council projects and activities
- Drivers and Feedbacks of Changes in Arctic Terrestrial Biodiversity ([CHARTER](#)) (Horizon 2020)
- Cross-border tools for biodiversity hotspots preservation via monitoring and prevention of forest fires along Russian-Finnish border ([BIOKARELIA](#))

Intact forests

Activities 2020-2023:

- Focus on following, promoting and learning from the ongoing projects

Relevant projects:

- [Forest biodiversity protection](#) in the Barents Region in 2020 and beyond: assessing the status and paving the way for mainstreaming biodiversity into forestry

Wetlands

Activities 2020-2023:

- Thematic discussions on wetlands at the meeting in Joensuu
- Supporting the regional implementation of the Ramsar Convention

Relevant projects:

- [Arctic Wetland project \(CAFF\)](#)

Invasive species

Activities 2020-2023:

- Focus on following, promoting and learning from the ongoing projects

Relevant projects:

- Data sources for Species in the Barents region
- Invasive Species in the Barents region
- Collaborative Data and Information Exchange Network for Managing Invasive Alien Species ([DIAS](#))

Migratory fish

Activities 2020-2023:

- Focus on following, promoting and learning from the ongoing projects

Relevant projects:



- Salmonid Fish and Freshwater Pearl Mussel - Ecosystem Services and Biodiversity in the Green Belt of Fennoscandia ([SALMUS](#))
- Conserving our Atlantic salmon as a sustainable resource for people in the North ([CoASal](#))
- Prospering native brown trout and local fishing professions ([PRO TROUT](#))
- [Salmon Peoples of Arctic Rivers](#) (CAFF)

Water management and aquatic ecosystem restoration

Activities 2020-2023:

- Focus on following, promoting and learning from the ongoing projects

Relevant projects:

- Ecological Restoration of Arctic Rivers ([ReArc](#))
- Cross-border dialogue and Multi-Use Planning in the Pasvik and Grense Jakobselv catchments ([MUP](#))
- Environmental planning, Measures and Restoration Actions in regulated water systems ([EMRA](#))
- Sea Co-operation for Management of the Bothnian Bay ([SeaCOMBO](#))
- EXcavator Pro in Ecological ResToration ([EXPERT](#))

Water and waste water services

Activities 2020-2023:

- Focus on following, promoting and learning from the ongoing projects

Relevant projects:

- Clean drinking water and healthy environment for Sortavala ([WESO](#))
- Tana River [II](#)
- Education for Sustainable Water Use ([EDUWATER](#))

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ANNEX I

Project details (as of 06.03.2021)

Green Belt of Fennoscandia, nature tourism

Name **Phenomena of Arctic Nature ([PAN](#))**
Lead(s) Parks & Wildlife Finland, Lapland
Timeline 2019-2022
Financing E.g. Kolarctic CBC, 2 615 785 €
Short description Main objective is to raise awareness of arctic nature and its unique phenomena in the nature tourism sector. New infrastructure, nature exhibitions and a range of different workshops will boost cooperation between tourism entrepreneurs in the Fennoscandian Green Belt in Finnish, Norwegian and Russian Lapland and spread awareness of the phenomena of arctic nature.

Name **Green Nature Based Solutions in Tourism to Reduce Negative Impact on the Environment ([NatureBeST](#))**
Lead(s) Karelian Regional Institute of management, Economics and Law at Petrozavodsk State University (Russia)
Partners North Karelia ELY Centre, Finnish Environment Institute (SYKE), Energy Efficiency Centre, LLC "Velena", Tourist Information Centre of the Republic of Karelia
Timeline 2018-2021
Financing CBC Karelia, 441 620 €
Short description Project aims to enhance awareness on environmental vulnerability and environmental effectiveness of tourist enterprises in the cross-border region through ecological and economically sound solutions.

Biodiversity in changing climate

Name **Impacts of the climate change on the biodiversity in the Barents Region – from knowledge to mitigation and adaptation ([BARIMS](#))**
Lead(s) The Finnish Environment Institute SYKE
Timeline 8/2020-12/2021
Financing Finland, 234 217 €
Short description The project will produce an assessment on how climate change impacts areas that are of importance for biodiversity and human activities in the Barents region. The project will also provide recommendations to protect biodiversity and livelihoods that depend on nature.

Name **Drivers and Feedbacks of Changes in Arctic Terrestrial Biodiversity ([CHARTER](#))**
Lead(s) Arctic Center, University of Lapland
Timeline 2020-2024
Financing 5 900 000 €, EU HORIZON 2020
Short description The project will integrate natural and social sciences and humanities with views from local Arctic and indigenous professionals and experts, to advance adaptive capacity of Arctic communities to climatic and biodiversity changes, to provide policy-relevant, testable and locally applicable results for the next



generation, and to enhance the engagement of, and interaction with, local communities and indigenous societies.

Name	Circumpolar Biodiversity Monitoring Programme (CBMP)
Lead(s)	Conservation of Arctic Flora and Fauna (CAFF)
Timeline	ongoing
Financing	
Short description	The Circumpolar Biodiversity Monitoring Program (CBMP) is an international network of scientists, governments, Indigenous organizations and conservation groups working to harmonize and integrate efforts to monitor the Arctic's living resources. The CBMP organizes its efforts around the major ecosystems of the Arctic: marine, freshwater, terrestrial and coastal. State of the Arctic Marine Biodiversity Report was published in 2017 and State of the Arctic Freshwater Biodiversity in 2019. State of the Arctic Terrestrial Biodiversity Report will be published in 2021.
Name	Cross-border tools for biodiversity hotspots preservation via monitoring and prevention of forest fires along Russian-Finnish border (BIOKARELIA)
Lead(s)	Natural Resources Institute Finland (Luke)
Partners	North Karelia ELY Centre, Arbonaout oy, Forest Research Institute of Karelian Research Centre of the Russian Academy of Sciences, Buro Partner Ltd, Directorate for regional protected territories for the Republic of Karelia, Kostamuksha Strict Nature Reserve and Kalevala National Park
Timeline	2019-2022
Financing	CBC Karelia, 585 000 €
Short description	The project develops practical tools for biodiversity hotspots preservation via mapping biodiversity values, monitoring and forecasting occurrence of forest fires and wood harvesting along the Russian-Finnish border.

Intact forests

Name	<u>Forest biodiversity protection</u> in the Barents Region in 2020 and beyond: assessing the status and paving the way for mainstreaming biodiversity into forestry
Lead(s)	Finnish Environment Institute (SYKE)
Partners	North Karelia ELY Centre, Karelian Research Center of Russian Academy of Sciences, Swedish Environmental Protection Agency SEPA, Norrbotten County Administrative Board, Västerbotten County Administrative Board, County Governor of Troms and Finnmark
Timeline	2021
Financing	Nordic Council of Ministers, 500 000 DKK (about 67 000 €)
Short description	Boreal forests of the Barents Region stretch through Norway, Sweden, Finland and Russia, who are all Parties to the UN Convention on Biological Diversity. Under the CBD, Aichi Biodiversity Targets are expiring in 2020. The project takes stock of the progress made to achieve Aichi Target 11 (17% of the terrestrial and inland water areas conserved by 2020) in the boreal forest zone of the Barents Region. As the biodiversity needs to be protected also outside protected areas, the project launches a dialogue with the forestry sector in the Barents Region and seeks to establish common ground to mainstream biodiversity in the forestry sector.



Migratory Fish

Priority projects/activities followed by the SNW

Name	Salmonid Fish and Freshwater Pearl Mussel - Ecosystem Services and Biodiversity in the Green Belt of Fennoscandia (SALMUS)
Partners	Natural Resources Institute Finland (Luke), Finnish Forest Administration, University of Jyväskylä, Länsstyrelsen Norrbotten, NIBIO Norwegian institute of Bioeconomy Research, Alleco Oy, Institute of the Industrial Ecology Problem of the North, Kostomuksha Nature Reserve
Timeline	01.01.2019 – 31.12.2021
Financing	Kolarctic CBC, 2 100 000 €
Short description	The overall objective of the project is to enhance cooperation and to streamline common practices for assessing the status of streams and rivers, and especially of freshwater pearl mussel and salmonid fish as indicators of ecosystem function and health.
Name	Conserving our Atlantic salmon as a sustainable resource for people in the North (CoASal)
Lead(s)	Office of the Troms and Finnmark County Governor, Norway
Partners	Polar Branch of VNIRO (former PINRO Murmansk) Russia, University of Turku – Kevo, Finland, Swedish University of Agricultural Science dept. Aquatic Recourses, Sweden and Institute of Marine Research, Norway
Timeline	2020-2021
Financing	Kolarctic ENI CBC and national funding, 1 146 619€
Short description	The CoASal project will document and examine the effects of the new sea salmon fishery regulations, study the growing threats Atlantic salmon populations face today with climate change, growing cage culture industry and emerging diseases. The project raises awareness and knowledge on the unique and joint Atlantic salmon resource in the Barents region, enhances cooperation at all levels.
Name	Prospering native brown trout and local fishing professions (PRO TROUT)
Lead(s)	Metsähallitus Wildlife Service Finland
Timeline	01.03.2020 – 31.12.2022
Financing	Karelia CBC (EU, Russian Federation, Finland), 628 772 €
Short description	The objective of the project is that fisheries of Lake Pyaozero in Russian Karelia become used, controlled and managed in a way that stops the ongoing erosion of native fish biodiversity and allows for local people to operate fishery-based businesses sustainably.
Name	Salmon Peoples of Arctic Rivers
Partners	Arctic Council working group Conservation of Arctic Flora and Fauna (CAFF)
Timeline	2015-2022
Short description	The project will design an assessment of freshwater river systems based on traditional knowledge (TK). The design of this holistic assessment will focus on “Salmon peoples” as a measure of ecosystem health, and also outline future data needs that could contribute to the resilience and adaptation of these peoples and the salmon populations upon which they depend.



Invasive species

Name **Data sources for Species in the Barents region**
Lead(s) Swedish University of Agricultural Sciences, Swedish Environmental Protection Agency
Timeline 2019-2020
Financing Swedish Environmental Protection Agency
Short description Presently there are numerous data sources to be found on threatened species, invasive species and species in general, but a substantial part of is on native languages, in online databases and on webpages from government authorities in the Barents countries and the EU. In this project, the most important sources will be listed and its content and focus will be described.

Name **Invasive Species in the Barents region**
Lead(s) Swedish University of Agricultural Sciences, Swedish Environmental Protection Agency
Timeline 2020
Financing Swedish Environmental Protection Agency
Short description Project aims to synthesize the collected knowledge on IAS in the Barents countries and in EU. What species are presently problematic and what species are projected to be invasive in a warmer climate. With this information the likelihood that newly arriving species in the Barents region can be detected and eradicated will increase to a great extent. It will also be helpful in planning of control of existing species.

Name **Collaborative Data and Information Exchange Network for Managing Invasive Alien Species ([DIAS](#))**
Lead(s) Finnish Environment Institute
Timeline 01.11.2018 – 30.04.2021
Financing Karelia CBC, 646 535 € (total budget, programme 581 881 €)
Short description The project targets creating a sustainable, interoperable and open data and knowledge exchange network between Finnish and Karelian government officials, researchers and citizen (NGOs), to tackle threats posed by invasive alien species.

Water management and aquatic ecosystem restoration

Priority projects/activities followed by the SNW

Name **Ecological Restoration of Arctic Rivers ([ReArc](#))**
Lead(s) County Administrative Board of Norrbotten
Timeline 1.1.2019 - 31.12.2021
Financing Kolarctic CBC, 3 030 936 €
Short description The aim of the project ReArc is to restore previously modified arctic river systems to increase the fulfillment of the environmental objectives of the EU Water Framework Directive and the main goals of the Russian Water Codex and Federal Program. In a broader perspective, this will result in a greater potential for river ecosystems to adapt to climate change and contribute to the viability of arctic nature, environment and economy.



Name	Cross-border dialogue and Multi-Use Planning in the Pasvik and Grense Jakobselv catchments (MUP)
Partners	County Governor of Troms and Finnmark, Lapland ELY center and Pasvik State Nature Reserve
Timeline	1.12.2018 - 30.11.2020
Financing	Kolarctic CBC, total budget 404 148 € (total grant – CBC 363 733 €)
Short description	Sustain and improve the state of the environment within the catchment areas of Pasvik and Grense Jakobselv rivers for the benefit of the local population and for a viable economy in the Russian, Norwegian and Finnish border area. To develop a new Pasvik and Grense Jakobselv multi-use plan as a tool for future transboundary environmental management.

Other projects/activities followed by the SNW

Name	Environmental planning, Measures and Restoration Actions in regulated water systems (EMRA)
Partners	County Administrative Board of Norrbotten, Centre for Economic Development, Transport and the Environment for Lapland, Natural Resources Institute Finland (Luke), Finnish Forest Administration, Kemijoki Oy, Vattenfall Ab
Timeline	01.08.2019 – 31.07.2022
Financing	Interreg Nord, Luke self-funding, Regional Council of Lapland, 3 154 000 €
Short description	The aim is to strengthen the natural environment and restore the living environment of aquatic life in streams in the waters of the Kemi and Luleå rivers, as well as to increase biodiversity and improve recreational and fishing tourism. As a result, authorities and stakeholders in Finland and Sweden are deepening their expertise by implementing measures in the water bodies affected by large-scale hydroelectricity and rafting.

Name	EXcavator Pro in Ecological ResToration (EXPERT)
Partners	County Administrative Board of Norrbotten, Centre for Economic Development, Transport and the Environment for Lapland, Pechenga local public organization on ecological enlightenment “EcoCentre” (Russia) and Norwegian Water Resources and Energy Directorate
Timeline	01.12.2021 to 30.11.2022
Financing	Kolarctic CBC, Micro Project, total budget 66 300 € (total grant – CBC 33 150 €, 50% of total financing)
Short description	The project will develop an education package for excavator operators that are working with river restoration, wetland restoration and removal of migratory barriers. It will result in a complete educational material with compendium, movies and power point presentations in Norwegian, Swedish, Finnish and Russian as well as a programme for the course. The educational material will contribute to an increased ecological enlightenment and knowledge of ecological restoration.

Name	Sea Co-operation for Management of the Bothnian Bay (SeaCOMBO)
Lead(s)	County Administrative Board of Norrbotten
Timeline	01.05.2020-31.12.2021
Financing	Interreg Nord, Regional Council of Lapland, 388 525 €
Short description	The main goal of the project is to develop co-operation network of Swedish and Finnish marine authorities and experts and to exchange best practices and experience concerning Northern marine environment protection ja



management. Project will examine possibilities to establish a cross-border marine protection area (MPA). Project produces also a report of methods and possibilities for restoring damaged marine habitats.

Water and wastewater services

Name	Clean drinking water and healthy environment for Sortavala (WESO)
Partners	Centre for Economic Development, Transport and the Environment of Lapland Karelvodokanal Ltd, Centre for Economic Development, Transport and the Environment for North Karelia
Timeline	01.08.2019 – 31.07.2022
Financing	Karelia CBC, total budget 209 240 € (total grant – CBC 188 316 €)
Short description	A new environmentally advanced pipe-laying technology will be introduced in Russia. Finnish economical technology allows to save resources, but also to minimize the damage to the water bodies. Main output of the Project is Design and Estimate Documentation for water pipe laying across bottom of Lake Karmalanjarvi for Drinking water supply system in the area of Zaozerny of Sortavala district. The pilot site is located in the cross-border catchment basin of Lake Ladoga. Broader implementation of the Finnish technology implies transfer of the experience from the pilot project to other organizations in the Republic of Karelia responsible for design and construction of water supply systems.
Name	Tana River II
Partners	Inari Lapin Vesi Oy (business), Utsjoki, Karasjok and Tana municipalities
Timeline	2019-2022
Financing	E.g. Interreg Nord, 868 877 EUR
Short description	To produce a general plan for the coordination of water and sewage services between the municipalities of Utsjoki, Karasjok and Tana. Investigation on property-specific wastewater management systems in the area of Tana River, and on the decontamination needs of these systems.
Name	Education for Sustainable Water Use (EDUWATER)
Partners	Swedish Karelian Business and Information Centre (SKBIC), Russia Education Development Center, Petrozavodsk Russia JSC "Petrozavodsk Communal Systems - Water Channel" Finnish Environment Institute (SYKE) Information centre of Water supply company "Vodokanal" of St. Petersburg
Timeline	2018-2020
Financing	Karelia CBC, total budget 459 568 €, (total grant – CBC 403 000 €)
Short description	The objective of the project is to launch a system of efficient water use education in Petrozavodsk, Joensuu and Kitee. The project activities will provide basis for continuous education on water issues from earliest ages. A system of methodic work on promoting water lessons in schools and kindergartens will be launched during the project. Establishing of a Water Center in Petrozavodsk will create an important link between the operator of the water/sewage facilities and the low-end users. The project builds networks, uniting teachers, specialists of water supply and treatment companies, local experts in water issues training and research.