

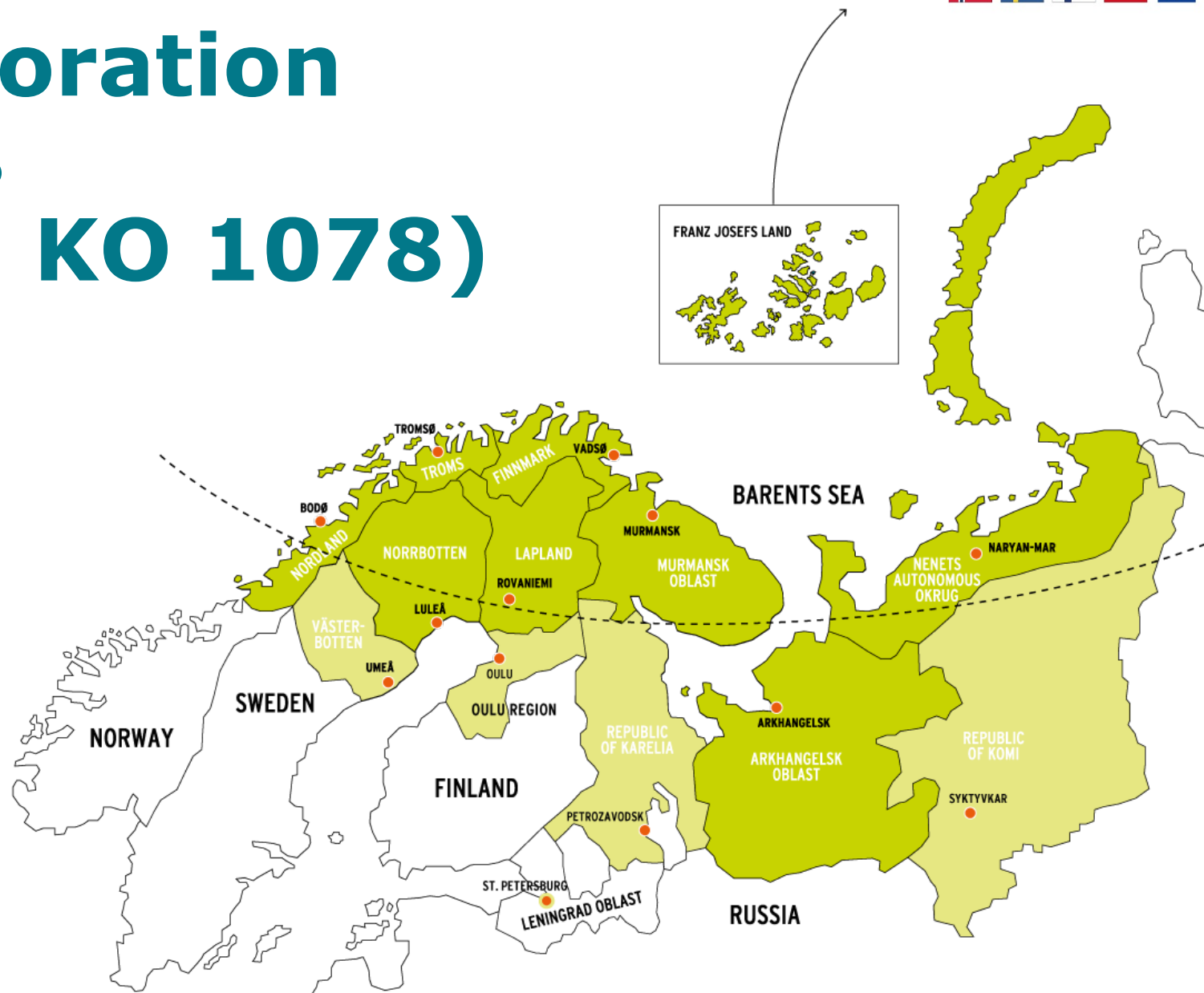
Ecological Restoration of Arctic Rivers (ReArc project, KO 1078)



Kolarctic CBC – Programme 2014-2020

Standard Projects

Get together in Lulea 28-29 November 2019



Project partners

- County Administrative Board of Norrbotten (Sweden, Lead Partner)
- Pechenga Public Organization of Ecological Enlightenment "EcoCenter" (Russia)
- Centre for Economic Development, Transport and Environment of Lapland (Finland)
- Metsähallitus, Parks and Wildlife (Finland)
- Water Resources and Energy Directorate (Norway)



Länstyrelsen
Norrbotten

EcoCentre



Pechenga local public organization



Elinkeino-, liikenne- ja
ympäristökeskus



METSÄHALLITUS



NVE

Norwegian Water Resources
and Energy Directorate



What kind of improvements the project is going to make?

Measures to reduce the environmental damage caused by the human impact at river habitats in the Arctic region

- Mapping and restoring of river habitats with human impacts:
 - remove and bypass “man made” migration barriers
 - restoration of spawning areas
- Habitat status and biodiversity mapping in Russia (Pasvik, Vuorjema, Vyala and Indel` rivers), making reports and maps



Where we are now?

Mappings and inventories - FINLAND

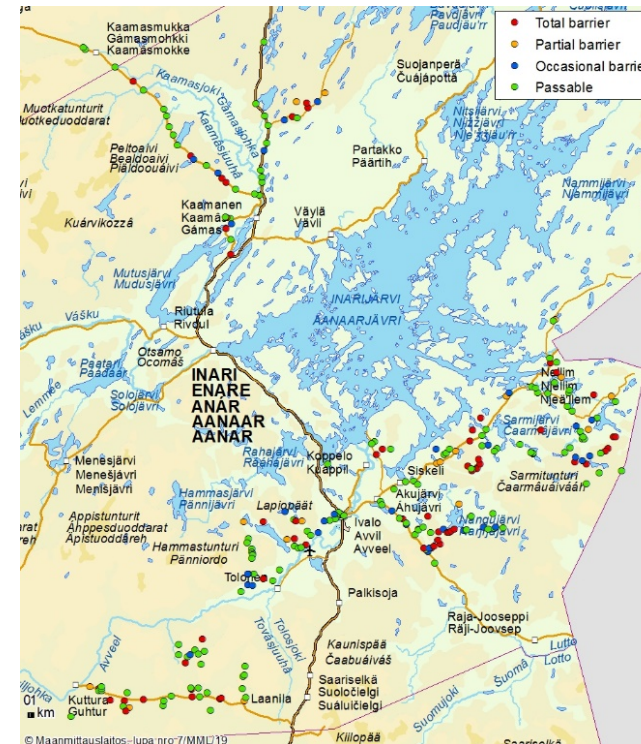
By ELY – centre

Migration Barrier mapping in Lake Inari catchment area 2019 (Lapland, Finland)

- 247 targets,
- Migration barrier in some level 44%
- Total migration barrier 24 %
- >70% of the road culverts are now mapped

River mappings 50 km

- The work has been done in Kirakka, Ivalo, Nangu, Nellimö and Sarmijoki watersystems
- Approx 200 km still to map.



Major part of the project tasks **by Metsähallitus** is accomplished. The River Ivalojoeki area in the Hammastunturi Wilderness Area

Field inventories of the natural habitats: 6 800 ha by three persons in the summer 2019

Inventories of the threatened vascular plants, esp.:

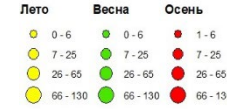
- Primula stricta* (EN), 425 occurrences found,
- Moehringia lateriflora* (NT), 343 occurrences found
- Carex microglochin* (EN), 7 occurrences found

Where we are now?

Mappings and inventories - RUSSIA

Mapping River Status and Biodiversity :

- Pasvik river 206,1 km (along shore), Vuorjema 11 km



Inventory of flora:

- New water vascular plant species for Pasvik river basin – 45 species, algae – 48 species, i.e. rare species
- New check-list has been prepared, ready to publishing

Number of bird indiv., 2019:

- Pasvik river 4843 ind., Vuorjema, river+mouth 1233 ind., marine part – 3113 ind.

Number of bird species:

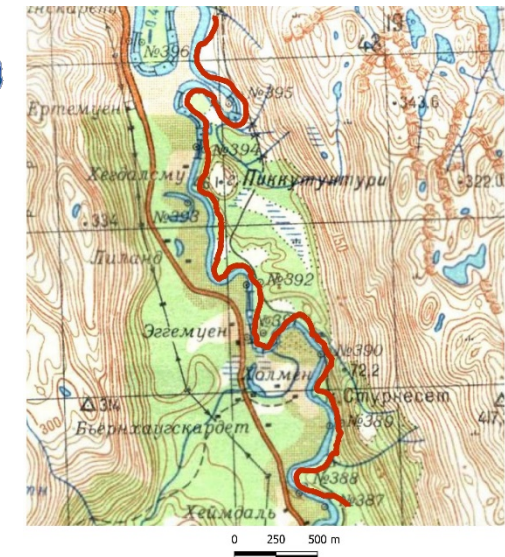
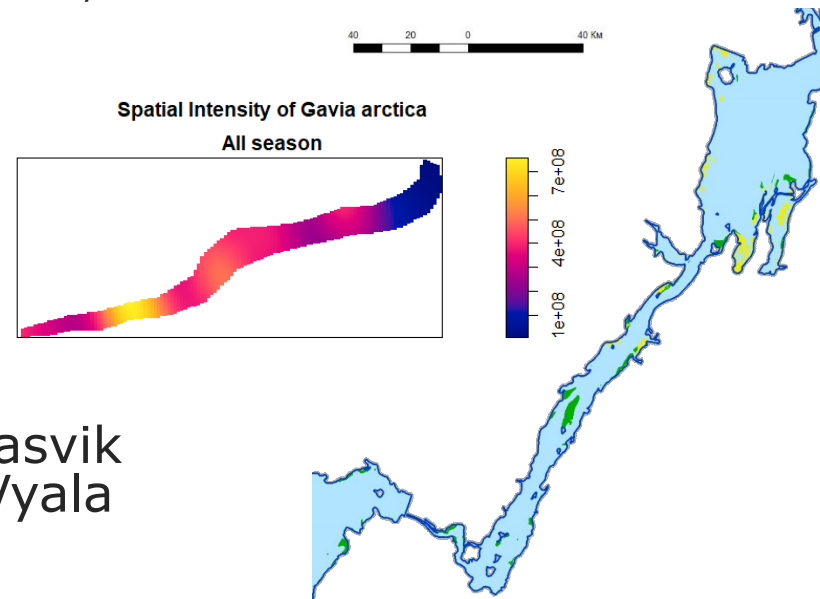
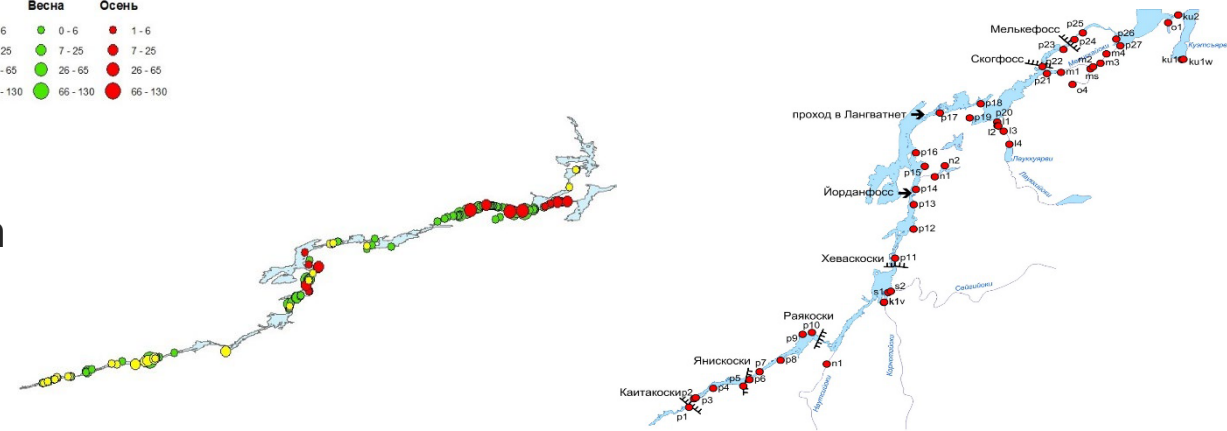
- Pasvik 42 species, Vuorjema 28 species.

Rare bird species:

- Pasvik 110 locations, Vuorjema - 8 locations.

Ichthyologic studies – Pasvik river, 50 km

Mapping of transformation ecosystems of Pasvik river (plants, birds), ecosystems status of Vyala and Indel` rivers etc.



Where we are now?

Restoration of the rivers - NORWAY

Restoration of the first river section began in the fall of 2019, in Julelva (Tana municipality, Finnmark County, Norway). The goal is - to restore the channeled parts of the rivers and facilitate better spawning and growing areas.

Restoration by moving flood embankment from the 1950s/60s backwards to the old riverside – gives the river more space and lower water velocity. Gives better conditions for anadromous brown trout and all other aquatic species in the river.



Where we are now?

Exchange of experience - SWEDEN

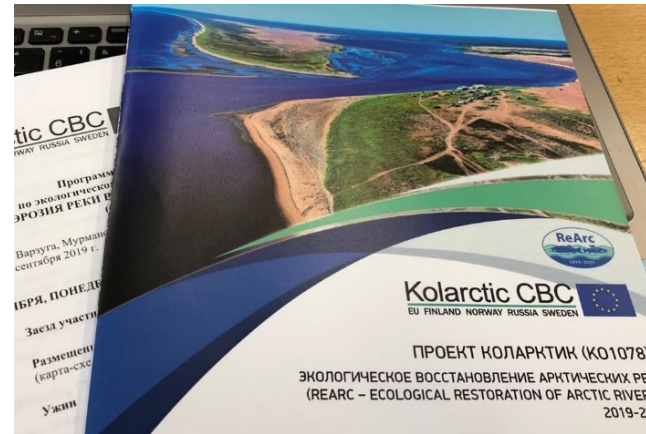
- **Arranged the kick-off meeting**
- **Field river mapping workshop** in Finland, Inari, Menesjarvi, June 2019 and in October in Kiruna, Sweden for mapping of the rivers, teaching our inventory method and technical equipment - harmonization the methods.
- **Seminar «Varzuga river erosion – problems and solutions»**, in Russia, Varzuga, September 2019, for exchange of experiences of rivers ecological restoration, monitoring approaches and making proposals for restoration the shores.
- **Applying for permits:** Preparing for the environmental court with consultation of all stakeholders before handing in the application.



Where we are now?

Joint communication

- **Preforming our communication strategy by:** Communication and Dissemination Plan
- **The activities in the project are disseminated trough Social media:** Our Facebook page are used to get out information and pictures, movies and other news from each country.
- **Getting publicity trough:** Newspapers, Radio and Television.
- **Made a project leaflet:** with basic information about the project and its goals.



What will be the results of our activities?

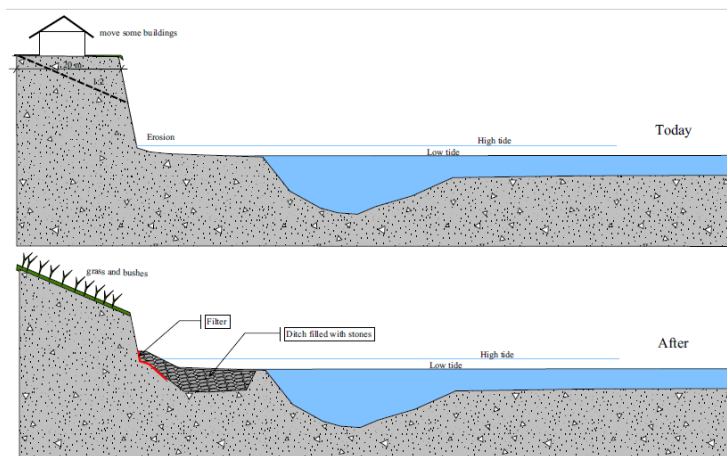
Increased knowledge in all countries about how to restore river habitats.

- Habitat restoration of rivers approximately 200 km.
- More than 500 km of new free migration routes for the aquatic species in the region.
- 9 km erosion protection and 3 km flooding protection will be removed or moved.
- 200 km of riverine habitats mapped.

➔ The aquatic species and its habitats in the region will be better able to cope with the effects of climate change due to our restorations.



Photo: Laura Vuoksenmaa



Our contacts

We are on Facebook:

https://www.facebook.com/ReArc.project/?modal=admin_todo_tour

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