Accelerating towards achieving WFD and biodiversity objectives in aquatic ecosystems in Finland

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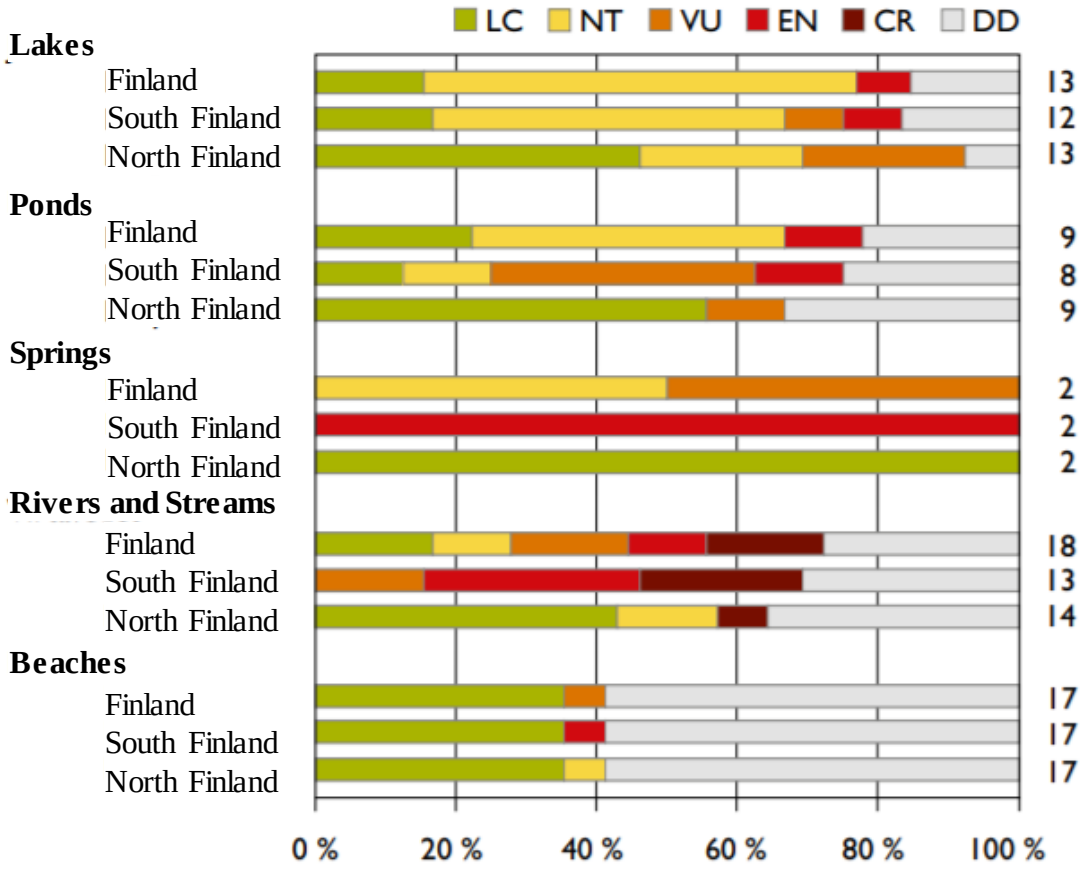
Nasjonalt seminar om restaurering av vassdrag og våtmarker
16th September 2021

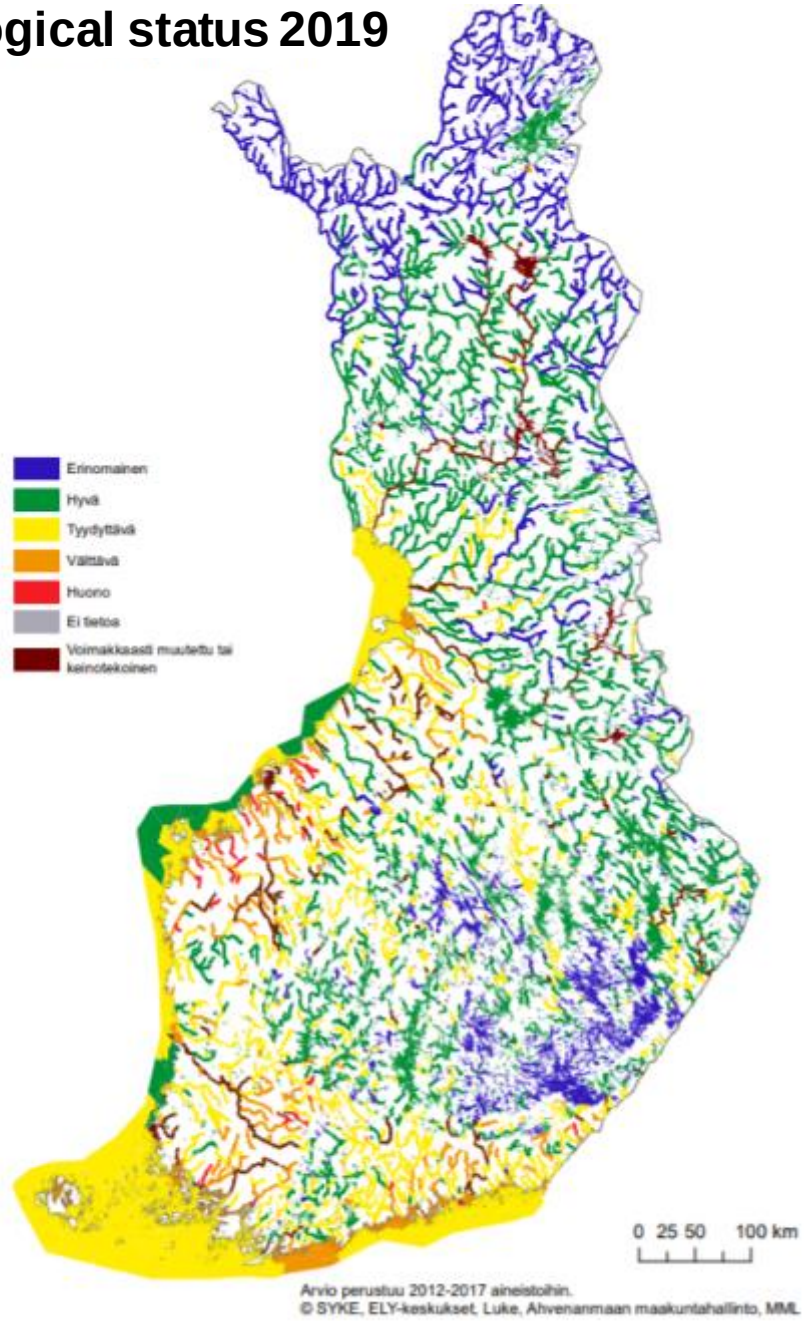
Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

Status of the aquatic ecosystems in Finland

Threatened habitat types in Finland 2018



Ecological status 2019



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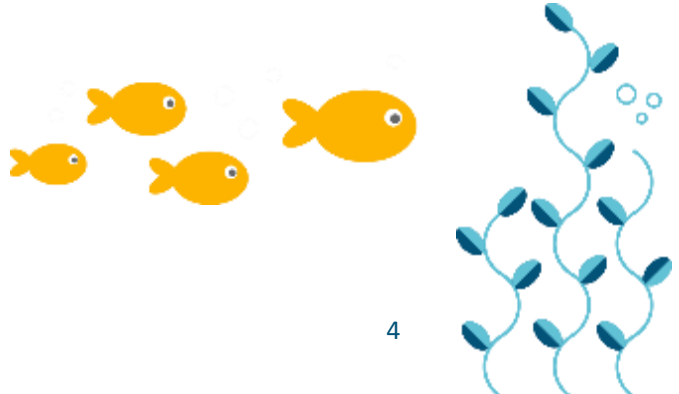
Governmental programs for accelerating the achievement of the objectives

1. Water protection programme 2019-2023
2. Archipelago sea programme 2021-2027
3. Nutrient recycling programme RAKI 2012 →
4. Migratory fish programme NOUSU 2020-2023
5. Helmi habitats programme 2021-2030

1. Water protection programme 2019-2023

- Record high investment, **EUR 69** million, in 2019-2023 in total
- Allocating funds to the most effective measures to improve the quality of waters
- Strengthening cooperation between stakeholders
- Introducing new water protection practices and methods



VAIKUTA VESIIN

Action

Watercourse restoration projects

Capacity building of expert networks

Water management projects

Research

Gypsum, structure lime and fibre sludge

Catchment specific cooperation model for water protection

Improving knowledge base for sustainable water management

Development

Restoration of the high risk shipwrecks

Urban water management and harmful substances

Studying the state of the Baltic Sea and inland waters

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Agriculture

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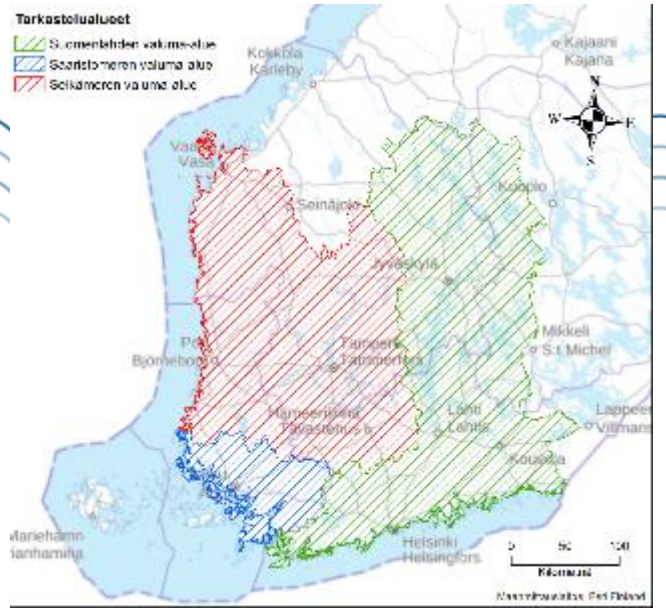
- Reducing nutrient load by **spreading gypsum** on a large scale on arable lands in the catchment area of the Archipelago Sea
- Objective of spreading 50 000 ha
  - 2020-2021: ~20 000 ha achieved
  - Application will continue in 2022–2023
- The EU Resilience and recovery funds to be used for extending gypsum amendment to other coastal areas
- Investigating the use of **structure lime** and **fibre sludge** as means of water protection, and provision of guidance on their use



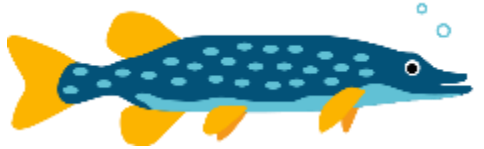
Water management in agriculture and forestry

- In the theme a particular focus is on ***nature based solutions*** that will
  - enhance water protection
  - contribute to climate change adaptation
  - promote the preservation of biodiversity
  - improve soil structure and productivity,

- Knowledge base improved in an R&D project to develop two-stage drainage channels and other methods
- Regional pilot projects supported in cooperation with the Ministry of Agriculture and Forestry
  - 19 projects funded in 2021, ~3 M€

Watercourse restoration and capacity building of expert networks

- Improving the quality of waters and aquatic environments
- Enhancing biodiversity
- Strengthening cooperation between operators in the sector and involvement of new operators by funding regional expert networks
- Developing the watercourse restoration sector by:
  - sharing up-to-date information on restoration methods
  - creating opportunities to experiment with new methods
- > 300 projects funded in 2019-2021
  - ~ 8M€, governmental funding 20-75% /project



Urban water management and harmful substances

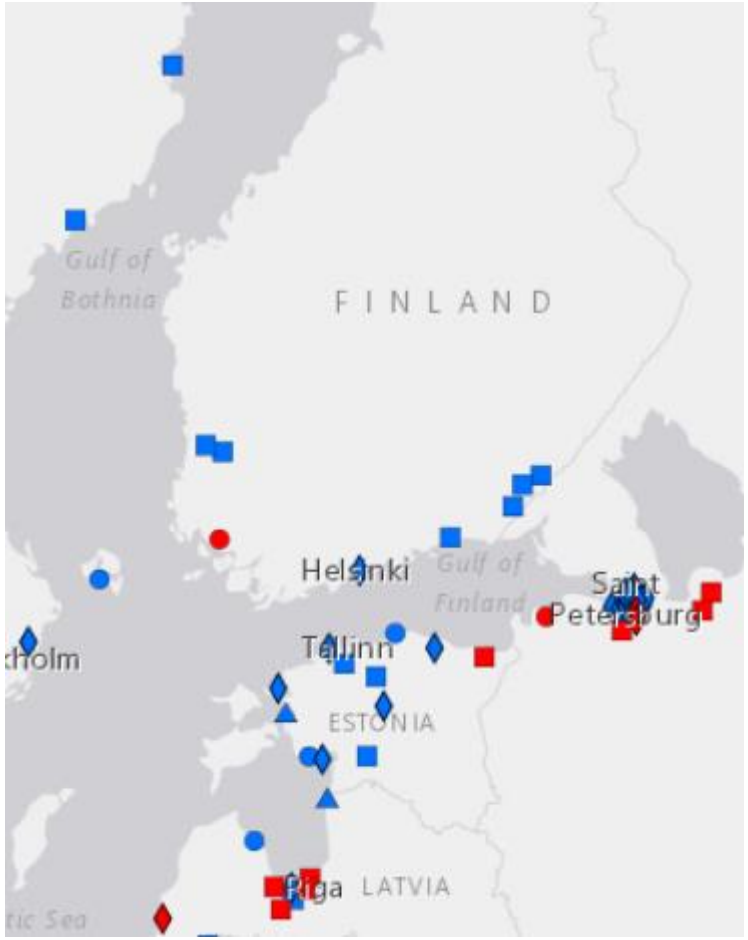
- Reducing discharges of harmful substances into surface waters and groundwater
- Providing more information on the presence and effects of harmful substances in aquatic environments
- Reducing the amount of plastic entering water

- 17 projects funded in 2020-2021; 2,6 M€
  - In 2020 funding for 6 projects to improve the treatment of municipal wastewater passing through the sewage system
  - In 2021 funding for 11 projects to reduce the levels of harmful substances in urban storm waters
- 3 high risk shipwrecks cleaned in the coastal waters

2. Arcipelago sea programme 2021-2027

- **The objective** of the programme is to remove Archipelago sea catchment from the HELCOM Hot Spot list
- By **reducing diffuse loading** from agriculture

- The programme will develop a road map for achieving the objective, including implementation of measures identified in
  - Programme of measures under the WFD
  - CAP strategic plan
  - Etc.



HELCOM Hot Spots

3. Nutrient recycling programme RAKI 2012→

- The programme has been funding ~100 R&D projects since 2012 to improve and develop the nutrient recycling with more than 20 M€
- Nutrient recycling action plan 2019-2030
- In 2021 31 new projects started, 13 M€
  - Focus in energy efficiency of waste water treament, nutrient recovery and related industrial symbioses
- EU RFF will provide additional 5 M€ in 2021-2023 for development of nutrient recyling and safe use of recyled nutrients

4. Migratory fish program NOUSU

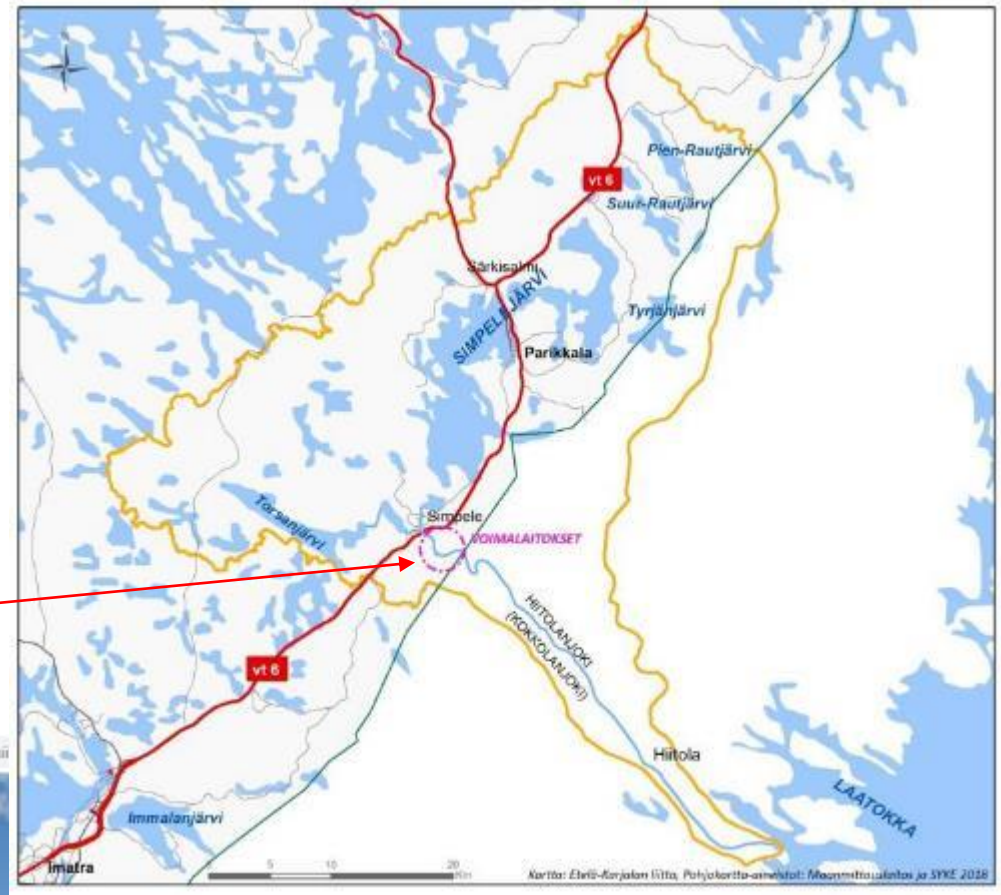
- National fish passage strategy 2012
- National salmon and sea trout strategy 2014
- Revision of Fishing Act 2015

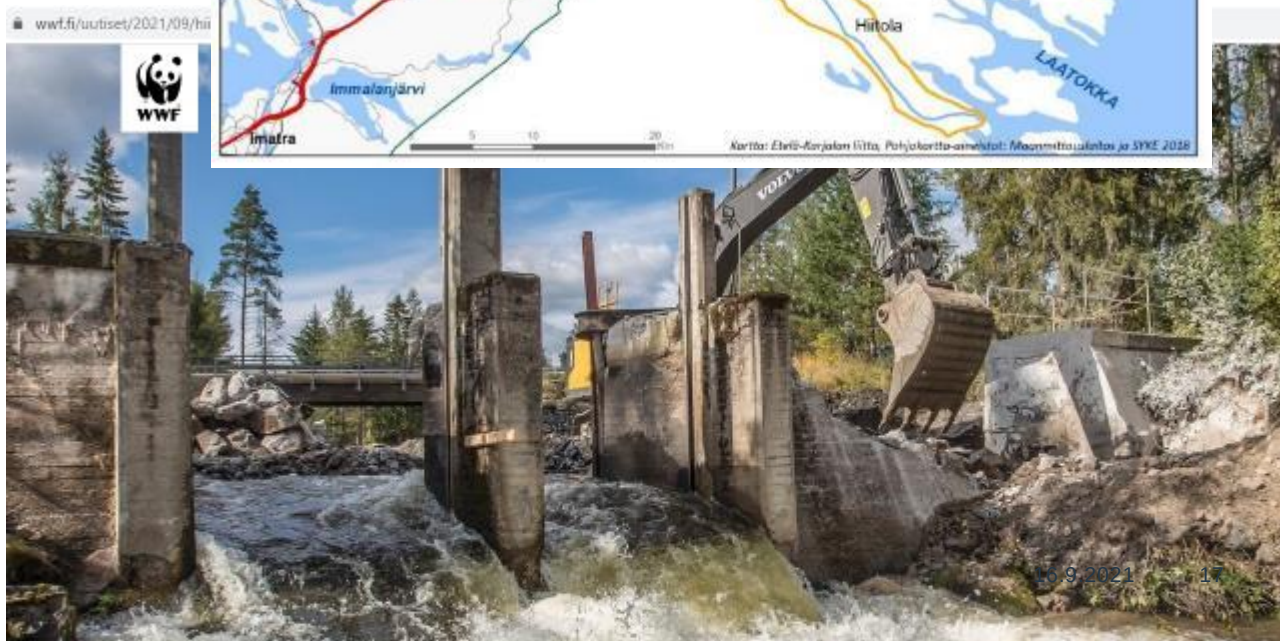
Shift in fisheries management towards natural life cycle of fish stocks

- Migratory fish program NOUSU, 2020 →
  - Objectives
    - Support the implementation of fish passage stregy (fish passages and downstrem migration structures)
    - Removal of barriers
    - Habitat restoration
  - Funding 12 M€ for 2020-2023, ~50% is allocated (4/2021)
    - 4 projects on fish passages, 3 on removal of barriers and 8 R&D projects
    - Several projects under preparation
    - Funding from NOUSU program 20-50 % of total costs per project

Case example: River Hiitolanjoki

- Transboundary river between Finland and Russia
- Spawning area of endangered landlocked salmon (*Salmo salar m. sebago Girard)* and brown trout (*Salmo trutta*) in Lake Ladoga
- No barriers in Russian side, three hydropower plants in Finnish side
- Fishway oblication for hydropower companies in 2019
- Removal of barriers in 2021-2023
- Cooperation of private actors and funding with public bodies and foundations





Removal of Kangaskoski dam in 8/2021

Helmi habitats programme 2021-2030

The Helmi programme is a key tool for halting biodiversity loss in Finland. The programme's actions will provide help to hundreds of endangered species and most of the endangered habitats in our country. The Helmi programme is based on voluntary action by landowners.

Pikkuapollo

Active deeds

1

Protecting mires

2

Restoring mires

3

Restoring aquatic bird habitats and wetlands

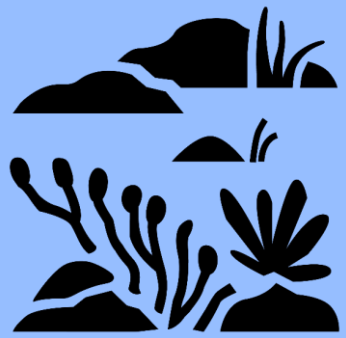
4

Managing semi-natural grasshabitats

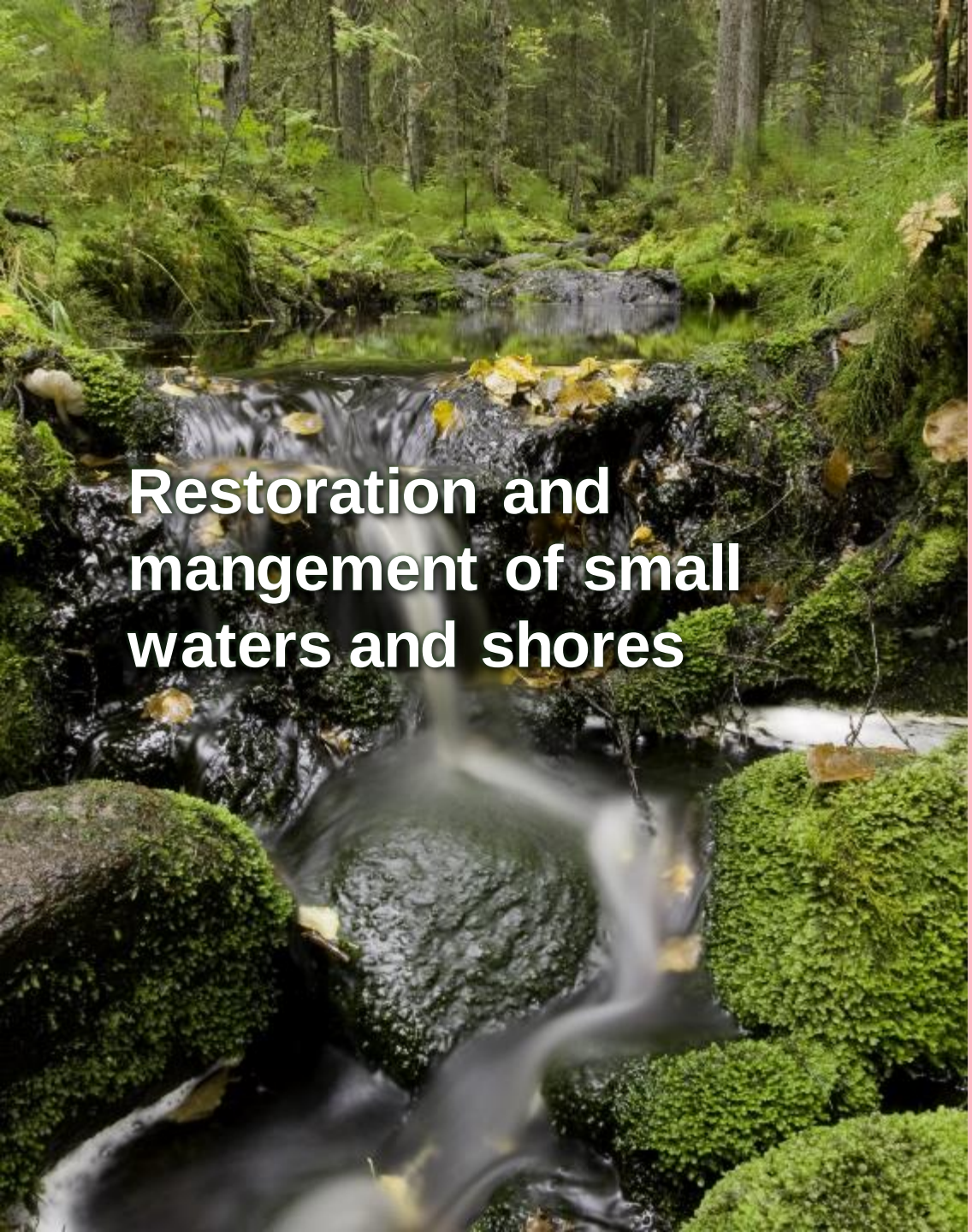
5

Management of woodland habitats

6



Restoring aquatic and shore habitats



Objectives for 2021-2030

- Restoration of small waters in protected areas

  350 springs

  200 km streams

  40 flads & gloe lakes

- Restoration of small waters outside protected areas

  700 springs

  400 km streams

  40 flads & gloe lakes

- Restoring river continuum in small waters

  Restoration of river continuum in 700 streams

  Removal of 970 migration barriers in state owned forests

- Restoration of shore habitats in and outside protected areas

  200 sites

Thank you!

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