



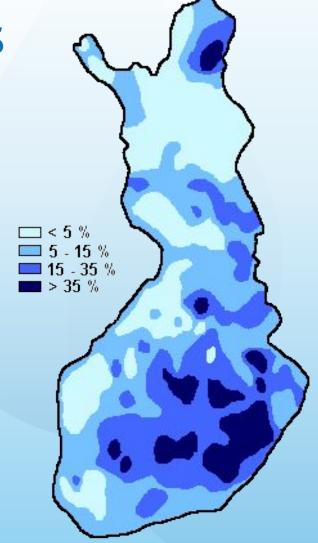
# Effective governance based on long lasting monitoring programmes

Case Lake Vesijärvi
Southern Finland

HEIKKI MÄKINEN, LAKE VESIJÄRVI FOUNDATION

### THE LAND OF WATERS

- 187 888 lakes
  - total area 33 350 km²
- 314 000 km of shoreline
- 178 947 islands
- 22 085 springs
- 647 rivers
- Freshwater reserves:
  - 108 000 Mm3/a
  - 21 000 m3/a capita
  - 57 000 liter/d/person





Proportion of water in the area

### LAKE VESIJÄRVI



- The 44th largest lake in Finland
- Surface area of 109 km2
- Average depth of 6.0 metres
- Maximum depth of 42 metres

- 181 km of shoreline:
  - 45% forestry
  - 33% seasonal dwellings
  - 12.5% other dwellings
  - 9.5% agriculture



# **The Change**

1970`s







2020's







### **EEA: STATE OF WATERS**

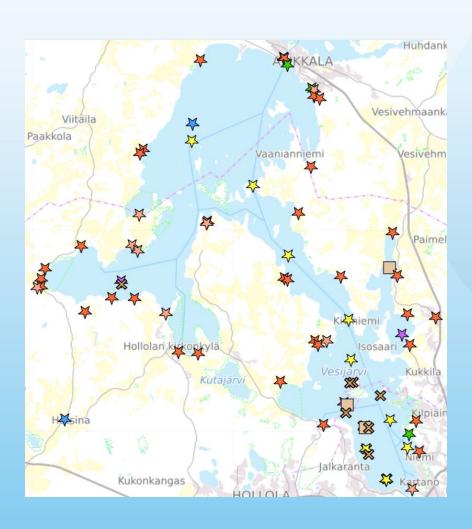
Lake Vesijärvi is a flagship example of successful lake restoration in Europe.

The restoration showcases four key pillars for successful lake restoration:

- 1) a good scientific understanding of the causes of lake deterioration and effectiveness of restoration measures;
- 2) effective policy and governance for lake management,
- 3) public-private finance partnerships to sustain monitoring and management programmes over decades,
- 4) widespread local awareness of the social and economic benefits of restoration.

# I Vesijärvi

# Sampling sites and monitoring stations

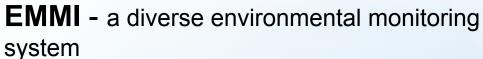


- Over 40 sampling sites
- > 300 samples are taken annually
- Climate change calls for intensive monitoring activities
- Combination of water quality sampling and automatic monitoring stations is needed
- Biology should not be forgotten

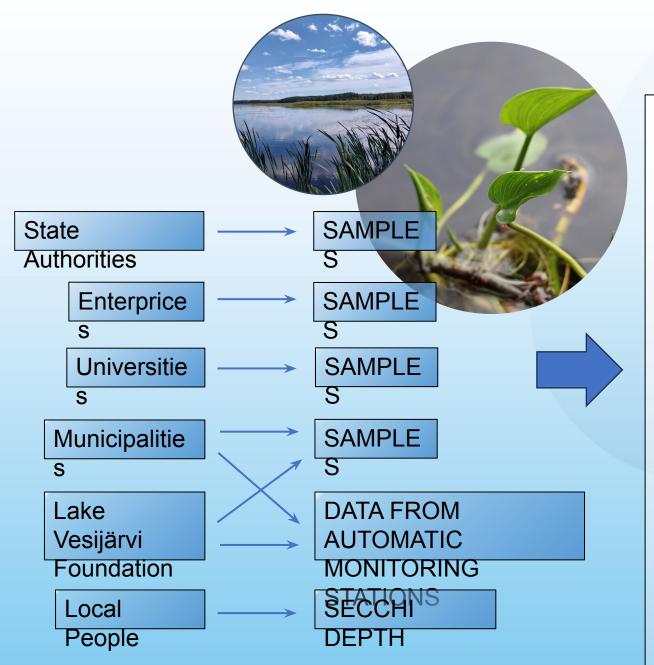
Monitoring and research are a basis for management actions







- Features advanced API interfaces through which sampling results as well as data gathered using a variety of measurement sensors and loggers can be collected into the system automatically
- Provides a platform in which attachment files, photos and metadata can be linked to each observation point
- Displays data directly in the user interface by graphs and diagrams.
- Enables the results to be exported out of the system as basic tables and complete official reports
- Is available free of charge for all interested parties
- The system helps to create a common understanding of the situation







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