

Developing mobile services for in-situ monitoring, data storing and sharing (HALI)

Planning of a water quality measurement device package for volunteers as part of the National environment monitoring strategy and development program MONITOR2020

Introduction

The HALI project is coordinated by the Finnish Environmental Institute with its intention to create possibilities for digitalization of field observations and measurements, and the implementation of new procedures and technologies as well as increasing the participation of volunteer citizens in water monitoring.

The main aim of this project was to develop a practical and functional water quality measurement device package for volunteers willing to participate in the monitoring of aquatic environments like lakes and rivers.



Figure 1. Devices were tested both in the laboratory and field with volunteers. Very reliable and usable were the Secchi disk and a thermometer. Photo: Jari Silander.

Methods

The project started by making a survey, which would help to determine people's interest in water monitoring as well as the measurements and parameters that they find most important.

After this, different measuring devices were ordered and tested in the laboratory for reliability and suitability for Finnish natural waters.

Finally, the information obtained from the survey and the tests were used for creating the water quality measurement device package for volunteers.

Results

The outcomes of this project were survey results, a laboratory analysis of the water quality and finally, instead of only one package, three water quality measurement device packages for volunteers were selected.

The packages were selected based on usability, reliability and price. The target groups for each package were school children, volunteers with basic skills and volunteers with advanced skills.

Further information:
www.syke.fi/hankkeet/hali