

TEMPLATE

Output factsheet: TOOLS

Version 2

Project index number and acronym	CE983 FramWat
Lead partner	WULS
Output number and title	O.T1.1 - TOOL: Landscape Valorisation Method (VM) and GIS Tool for identifying locations where N(S)WRM are needed
Responsible partner (PP name and number)	<ol style="list-style-type: none"> 1. WULS 2. GWP CEE 3. SWME 4. REC 5. MTDWD 6. Limnos 7. HV 8. UL 9. WCL
Project website	https://www.interreg-central.eu/Content.Node/FramWat.html
Delivery date	06.2018

Summary description of the key features of the tool (developed and/or implemented)

Finally, we developed a tool for planning purposes that meet the assumed objective ie. identification of potential locations of the NSWRM at the initial stage of analysis, using government and EU datasets. Its features are universal (can be used in various locations), ease and intuitive operation without installation process and a possibility of development by publishing it like open source software. WULS was the leader and main contractor of the WP and was responsible for all activities related to the development of the VM and GIS Tool (FroGIS) prototype, training and updates of VM and FroGIS.

Partners along with stakeholders helped in the development of the valorisation method by: (1) reviewing literature in English and in their native languages, (2) developing a list of publicly available datasets and datasets available on request for their country area, (3) analysing global datasets to determine the extent (statistics) of the spatial variability of climatic and physico-geographical indicators for a given country, (4) obtaining detailed data for the pilot catchment or larger region in order to prepare an analysis, (5) selection of objectives for mapping and indicators relevant at the national level and depending on global and regional variations, (6) recommending changes to the proposed valorisation method. In terms of the FroGIS app development partners and stakeholders helped with: (1) testing the app in their pilot catchments, (2) consulting testing results with stakeholders, (3) reporting bugs and ideas, (4) submitting proposals for new indicators and helping to develop them in the R language.

NUTS region(s) where the tool has been developed and/or implemented (relevant NUTS level)

The tool is available free for all at <http://WaterRetention.sggw.pl> . It was developed in 2018 in Warsaw (PL911). In 2018 was implemented by project partners in six pilot catchments: Kamienna (PL721), Asist (AT313), Bednja (HR044), Nagykunsági (HU322), Slaná (SK032, SK042), Kamniska Bistrica (SI041). The total implementation area was 7610 km².

Expected impact and benefits of the tool for the concerned territories and target groups

The FroGIS tool is a widely available, intuitive application that can be used in the first stage of action planning. It is planned that in the future it is going to become a part of a larger decision support system enabling communication between stakeholders (local authorities) and catchment management authorities. In addition, it has a universal character, which allows for using it in Central Europe to solve pressing issues such as: flood protection, drought prevention, sediment and water quality improvement. The valorisation method enables taking into account environmental conditions already at the initial stage of planning activities. It can be especially used in the process of developing the Flood and Drought Management Plan. The tool user can be anybody dealing with water management and knowing the basics of GIS.

Sustainability of the tool and its transferability to other territories and stakeholders

The tool has the ability to analyze data prepared by the user so it can be used for any area and on any scale. Availability of the tool is guaranteed until 1.05.2025 by being installed on FramWat project DEMO Server (<http://WaterRetention.sggw.pl>). In addition, this application was written in the open source portal <https://gitlab.com/FramWat> which will enable to use it on any computer and allow for its further development. Using the application is very simple and does not require installation because everything is done through a web browser.

Lessons learned from the development/implementation process of the tool and added value of transnational cooperation

Experience gained during the creation of methodologies and FroGIS tool allowed us to conclude that:

- the tool is universal and can be used in various locations, but requires individual selection of indicators and valorization scales,
- its development was time-consuming and required the cooperation of a number of experts and stakeholders from different countries due to its unique character,
- **the testing process has resulted in increasing the knowledge of all partners and stakeholders about spatial analysis and indicators calculation,**
- the methodology is developed to be used for planning purposes not for developing a project, therefore, when designing specific activities or objects, the needs of water users and environmental protection requirements, including environmental flows, should be taken into account,
- the quality of valorisation results depends on the quality and scale of the data used, and the knowledge of the expert developing the valorisation.**

References to relevant deliverables and web-links

If applicable, pictures or images to be provided as annex

<http://WaterRetention.sggw.pl>

<http://RetencjaWod.sggw.pl>

<https://gitlab.com/FramWat>

<http://levis-framwat.sggw.pl>