

D.T3.5.2 - REPORT FROM NATIONAL POLICY DIALOGUE

Country Croatia

Final

Partner Croatian Waters

December 2019





1. General Data

Country:	Croatia
Date & Place:	12.12.2019, Zagreb
Organizers:	Croatian Waters (CW)
Documents Please send together with the report: <ul style="list-style-type: none"> • Scan of list of participants • Agenda • Photos 	

2. Report

<p>Main points of the dialogue / short summary (max 2000 characters) <i>Please prepare short summary of the dialogue with main messages and outcomes so that it can be used as an article or promotion for social media, web page, etc.</i></p> <p>Croatian Waters on Dec 12 organized a stakeholder meeting in its headquarters in Zagreb.</p> <p>The main objectives of the dialogue were to present: the draft Concept Plan including the testing results in the Bednja pilot area; the draft structure of the Guidelines and usability of the FramWat tools (Frogis, static and dynamic tool).</p> <p>Mr Danko Biondić, Head of CW's Development Department, opened the meeting and stressed the importance of the FramWat as a very useful tool to be used in RBM planning.</p> <p>Mr Alan Cibilić, Mr Luka Vukmanić and Ms Renata Sutic presented:</p> <ul style="list-style-type: none"> - The FramWat Project in detail, both in general and per all work packages, as well as its objective, and achieved results till now. - Frogis tool, static and dynamic tools used to analyze the effects of the planned measures. - Concept Plan and planned measures in the pilot catchment area - Draft Guidelines to improve water balance and nutrient mitigation by applying a system of N(S)WRM. <p>In the meeting the multi-criteria tool (AHP method) was presented which method is used to support communication with stakeholders.</p> <p>It was also stressed that climate change will have an important role in the future and N(S)WRM can be used to mitigate the negative trends for quantity and quality of water resources in the pilot area.</p> <p>During the discussion participants expressed their opinions on the Frogis tool, the static and dynamic tools and the Concept Plan and the draft Guidance. The attendees were given an opportunity to ask questions and give their comments and suggestions.</p>
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Participants (max 500 characters)

Shortly describe who were the participants, from which sector, institutions, levels, ...? How many of them, etc.?

Target groups	Number (please attached also list of participants)
Local public authority	
Regional public authority	2
National public authority	18
Sectoral agency	
Interest groups including NGOs	3
Higher education and research	
International organization	1
General public	

**according to the Target groups identified in AF*

Short description (if necessary) of the participants:

The 24 participant stakeholders came from different sectors mostly from water management, international organization responsible for water management and from interest group.



3. Outcomes

Please provide short feedback from your stakeholders on below topic (the ones that you have discussed):

Feedback/comments on the Concept plan / selection of the measures (*max 1000 characters*)

The Concept Plan for the Bednja river catchment was presented to the stakeholders, stressing that it is a combination of measures to mitigate or eliminate the adverse effects of pressures identified in the pilot area for each SPU (mitigation of flood risks, drought impacts, nutrient pollution, etc.).

Among other things, the following was pointed out during the discussion:

- Analyses of cumulative impacts on the catchment level are important for the selected locations in the context of mitigation of floods, droughts and water pollution.
- Testing the proposed measures in the Bednja catchment provides the basis for an additional approach which will when addressing the water management issues use the area's natural characteristics.
- The application of static and dynamic water quality and/or quantity models which give answers after the application of natural water retention measures and their valorisation under conditions of different changes that are about to happen in the catchment over time. These changes cover the climate variation/change scenarios, land use change, the implementation of measures required by the EU Directives (e.g. Nitrate Directive) and the implementation of measures defined by the national plans.
- The application of a multi-criteria analysis of topographical, hydrological and meteorological data and economic indicators is essential, as well as of extreme hydrological events in the analysed basin.
- The impact of climate change will be even bigger in the future and implementing N(S)WRM will be more and more important in the catchments.

Floods are one of the main problem in the pilot catchment so the measures are taken in that respect, to retain water in the catchment.

Considering the character of the Bednja catchment, regarding the flood events in the past it is necessary to have the proper size of retentions and connected measures.

- Torrential flows that form after intensive rainfall on a large number of streams that enter the Bednja River present a big problem. A sudden increase of flows causes the movement and transport of a significant quantity of sediment into the downstream parts of the watercourse. Torrents are frequently accompanied by landslides that put houses and industrial facilities at risk.



It was pointed out that other measures to increase the retention capacity were also possible, but that additional analyses are required in that regard.

It was stated that this project could help with the proposed methodologies and tools. There is still a lot of work to do to implement the N(S)WRM into national RBM Plans taking into account spatial planning and other.

- The Project will contribute to improving integrated water management in the public sector (as an integral part of the water management planning process).

Feedback/comments on the draft structure of the Guidelines (Steps) *(max 1000 characters)*

The steps were introduced as follows.

Step 0: Decision Support System (DSS) and users; Step 1: Vision, setting the problem (current gaps and challenges); Step 2: Input data, FroGIS; Step 3: Identification process using the most suitable tool; Step 4: Building scenarios; selection of areas and measures with static and dynamic tools + Valorisation (prioritization of the area for NSWRM) Mid-Result: Concept Plan + Tuning (multi-criteria analysis); Step 5: Legislation (review); Step 6: Cost analysis and financial plan; Step: Towards Action Plan.

The structure of the Guidelines was clear and acceptable for the audience. There were no other suggestions or proposal for improvement.

What are future steps/plans in terms of preparation of the Action Plan? *(max 1000 characters)*

It was presented to the stakeholders that the Action plan is an implementation document and it describes clear steps, timeline, financial resources and responsible actors for integrating N(S)WRMs into RBMPs.

The structure of the Action Plan has for every pilot river basin its own specific, but in general it has to have these parts:

- introduction, challenges, problems; selection of the measure; legislation/policy; clear steps of the activities/implementation of measures; timeline; financial resources; responsible actors; and monitoring.

Feedback on usability of the tools and how they can be used after the project ends *(max 1000 characters)*

It was stated that after the project the tools can also be used for other catchments in Croatia.

Feedbacks/proposals for follow-up/future activities



It was also pointed out that climate change will have an important role in the future and N(S)WRM can be used to mitigate the negative trends for quantity and quality of water resources in the pilot area.

Please add input/comments from stakeholders also on other FramWat outputs if you include them in the discussions:

Cost analysis (act. 3.3)

The objectives for cost analyses were presented to the stakeholders.

Development of a uniform methodology on how to calculate and analyse N(S)WRM costs on river basin scale; Establishment of the tool for assessment of the cost analysis (not CBA) - scenario optimization; Provides an important basis for decisions on N(S)WRM investments.

The objective is to develop the uniform methodology for cost assessment on a river basin scale. The methodology has to be uniform in terms of transferability, applicability and for all measures that are in our NWRM catalogue. Uniform methodology for all countries in Central Europe.

Cost analysis will be included in the Concept Plan and the Action Plan, because costs are a very important aspect in the process of decision-making.

The stakeholders stated that it is important to establish a simplified approach for the whole river basin.

Multi-criteria Analysis

The stakeholders were instructed step by step to try to approach this tool with their own mobile phones. They entered: <http://ahp.framwat.apps.vokas.si/> and then tried this multi-criteria tool in practice.

It was presented at the workshop how to use the AHP method (Analytic Hierarchy Process) which was implemented into the DSS tool (DSS stands for Decision Support System) as an optional supporting tool for NSWRM selection. Both tools were created under the Interreg Central Europe - FramWat Project.

It is designed as an interactive web application freely available for all interested parties, accessible both from DSS tool or directly through a web address.

The feedback from stakeholders was positive and it was stressed that this tool could be useful for decision makers in the future.

Effectiveness of NSWRMs (O.T2.1)



By comparing the results, it is clear that the effect of reducing floodplains is the largest in the area along the Bednja in the downstream part of the basin, whereas the effects of retention basins in the upland part of the basin are present only locally, through the reduction of individual flooding depths caused by the retention of water volumes in the retention basins.

Decision support system (Act. 3.4.)

The Decision Support System (DSS) which is still in its working version was presented. The stakeholders were told that the final DSS tool would be available online and that it would have an open source (to be further developed by potential users, to test their own indicator values, to test their own weights and indicator indices).

The following will be available to the stakeholders and users included in the planning of water retention measures:

- Education (information on water retention needs, planning process, investment process, tools, dictionary, link to the manual);
- Catalogue of Measures (description, picture examples for app. 50 N(S)WRMs and a system of queries to select right measures);
- Links to the developed tools such as the valorisation method, statistical method to assess the effectiveness of measures, dynamic method to assess the effectiveness of measures.

FroGIS (O.T1.1.)

The application of the online FroGIS tool in the Bednja pilot catchment was presented to the stakeholders through the FroGIS web application (open source), explaining some of the possibilities such as: e-learning, methodology, manuals, example data, valorisation results in a map or an Excel table format.

1. Methodology 2. FroGIS web application (open source) 3. Testing the method in the pilot areas

Evaluation of needs and possibilities to design/implement N(S)WRMs in a certain landscape (SPUs).

Methodology workflow when using the FroGIS tool was presented: 1. Input SPUs; 2. Choose goal (group of indicators); 3. Choose indicators relevant for particular goals - indicators can act as stimulant/destimulant; 4. Insert input data; 5. Calculate correlation matrix; 6. Classification and aggregation; 7. Valorisation of goal

Other comments

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