

Output 5.4

30 experts trained - Floodplain Management Workshop



Work Package (WP)	WP5: Danube Floodplain Guide
Activity	Output 5.4
Output	5.4 - 30 experts trained -Floodplain Management Workshop
Activity-leader	NARW
Output prepared by	NARW
Involved partners	BOKU, CUEI, TUM, NARW

Within the Danube Floodplain project the Experts Training Meeting took place in 21-22 September 2021 and due to the actual pandemic covid-19 event, the meeting was held in an online format.

The meeting was organized by the LP - National Administration Romanian Waters.

The Experts Training meeting on Floodplain Management objective was to explain in detail to the various experts, the floodplain restoration and preservation approaches from the most important outcome of the project, respectively the Manual for floodplain preservation and restoration.

The Manual content covered the following aspects: legal background information & synergies between water, flood and biodiversity EU Directives, the floodplain restoration in the Danube River Basin, the catalogue of “win-win” restoration and preservation measures for reaching flood protection, environmental and biodiversity objectives and the planning and implementing floodplain restoration and conservation projects.

The training was concentrated to main aspects of the floodplain restoration and preservation issues like:

- the importance to have a solid legal knowledge base and synergies between Flood Directive, Water Framework Directive, Habitat and Birds Directive in floodplain restoration and preservation process;
- Danube River Basin District Flood Risk Management and River Basin Management Plans, content and application;
- Drivers and pressures in relation with floodplain disconnection;
- Active and potential floodplains - identification and evaluation, especially Floodplain Evaluation Matrix (FEM), methodology and background, minimum and extended parameters;
- Scenarios for restoration and preservation;
- hydrodynamic modelling of active and potential floodplains;
- restoration scenarios example in pilot areas, in three different scenarios: Current State (CS), Realistic restoration scenario 1 (RS1), Optimistic restoration scenario 2 (RS2);
- Hydrodynamic modelling in pilot areas;
- Ecosystem services. Concept, analysis and mapping;
- Cost Benefit Analyses and ecosystem services approach;
- Extended Cost Benefit Analysis;

- Habitat modeling;
- Tools for assessing restoration projects;
- Catalogue of “win-win” restoration and preservation measures for reaching flood protection, environmental and biodiversity objectives;
- Types of measures;
- Win-win effect;
- Planning and implementing floodplain restoration and conservation projects.



The meeting was attended by 53 experts from 25 institutions (water authorities, NGOs, research field, engineering and education).

Before the presentation of the Manual, the Catholic University Eichstätt-Ingolstadt, the Technical University of Munich and the University of Natural Resources and Life Science from Vienna presented the inputs that served for the

Manual elaboration as following: Report, database and maps of Ecosystem Services analysis of the pilot areas including a list, description, assessment, and ranking concerning the demands and supplies, Method documentation describing the implementation of Ecosystem Services and biodiversity to traditional Cost Benefit Analysis and the General evaluation tool based on table calculation or GIS software for possible later assessment of other restoration projects ensuring a simplified and standardized assessment of such projects.



Ecological situation in the Danube region:

- Significantly reduced floodplain: 68 % of its former extent (Hein et al. 2016)
- 83 barriers
- High flood risk in many towns/settlements
- High nutrient river loads

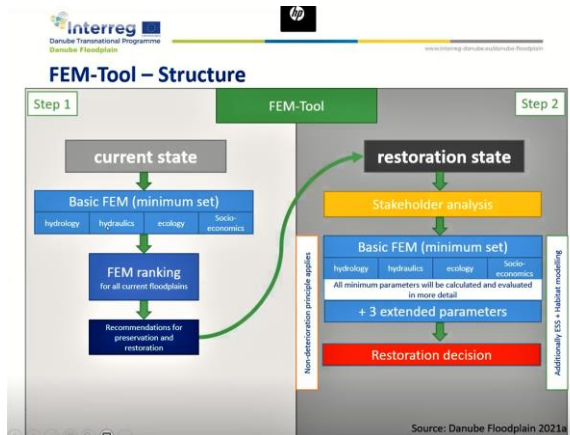


Management of rivers and floodplains:

- Many legal objectives in floodplains, but sectoral approaches
- Slow progress in implementation due to multiple, conflicting human interests in floodplains

During the training meeting some aspects were underlined:

- one of the very important added value of the Danube Floodplain project in the process of planning and implementing floodplain restoration projects is the FEM methodology (floodplain evaluation matrix);



- for the future, new data for the area under study for assessment of ecological services in terms of what's happened with underground water and more input for data species requires also defining of monitoring system of such an area needed. These ecological ecosystem services was done and our approach in the project was to evaluate data in a cognitive way. Step by step collecting the more information in

the area, we shall wait to transform our pulling in potential psychological impact into increasing efficiency in time. For this project, it was really important, the results of stakeholder meetings in order to map all these ecosystem services as it was identifying and classifying provisioning regulatory and control routes. It is a winning process which it was already done;

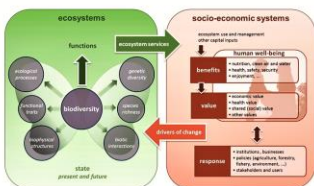
- regarding the part of Tessa toolkit for CBA, it was developed, actually with the goal of being used not at the scientific level, but more at the applied level. Also, for real life projects. There are some examples, not related to floodplain restoration that were also but still only published, in the research papers, with the applicant applied approach. It is manageable to work on the extended cost benefit analysis. The time



requirements are much higher than previously expected;

Ecosystem service concept
The ecosystem service concept describes the **links** between the state of an **ecosystem** and its **benefits for humans**

- The aim is
- to demonstrate the services and value of ecosystems for society and to improve the conditions for sustainable use of nature and ecosystems
 - to mitigate **conflicts** between different parties, e.g. business and nature conservation, and to show **synergies** instead.



MAES 2013 - An analytical framework for ecosystem assessments under action 5 of the EU biodiversity strategy to 2020

- in former projects there are some calculation for ecosystem services for floodplains and the results were used in the planning phase. Maybe in the future, ecosystem services will be more implemented from the incipient phase of the projects;

- the cooperation during the stakeholder involvement is the key aspect in such projects.

We need to have all the models (tools) open to the public;

- the measures have been proposed by technical experts from authorities in general as a result of discussion with local authorities and stakeholders based on their needs. Nevertheless the win-win measures are also based on good practices;

- in order to promote the implementation of our pilot projects, for the next period of time, it is important to start with the examples from other sources story, from other projects already implemented, the online meetings give us various instruments to have a pool and online poll and results immediately would be received.