

Danube Water Balance

International workshop in Szolnok within the framework of the Danube Water Balance project

On June 17, 2026, the headquarters of the Middle Tisza District Water Directorate (KÖTIVIZIG) in Szolnok hosted the professional workshop related to the Tisza watershed of the international project Danube Water Balance (DWB). The event was attended by more than forty Hungarian, Romanian, Serbian, Slovakian and Ukrainian experts, who discussed the latest results on the water management of the Tisza watershed and future water resource management challenges.

One of the most important results of the project is the creation of a joint water balance calculation methodology and an open source modelling system, which will be tested in several transboundary sub-basins, including the Tisza basin, under different climate scenarios.

The meeting in Szolnok is a milestone of the project, where the project experts shared the results of the modelling of the Tisza water management under different climate scenarios with those involved in water management.

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The professional background and objectives of the project were presented by Ágnes Tahy, expert from the OVF, who said that the frequency of water shortage periods, decreasing water flows and increasing evapora-



tion are becoming more frequent due to climate change. A more precise understanding and modeling of changes in the water cycle is essential for sustainable water resource management. In her presentation, she pointed out that the Tisza river basin is one of the five sample areas of the Danube Water Balance project, where almost all significant water management challenges appear – from floods and droughts to water quality issues. The expert highlighted that the countries of the Danube basin want to jointly respond to the increasingly serious problem of water shortage and drought by developing a unified water balance system.



In his opening speech, Attila Lovas, Director of KÖTIVIZIG, drew attention to the importance of the project and sustainable water management, which today, in light of climate change, poses a serious challenge to all actors in water management. In his welcoming speech, Norbert Csáthi, Project Manager (OVF), pointed out that the Danube Water Balance project seeks answers to one of the most important water management challenges of our time. He emphasized the importance of making the project's results known so far and the importance of international cooperation in developing common responses to the effects of climate change.

In their opening remarks, they emphasized that the increasingly frequent periods of water scarcity, decreasing water flows, and increasing evaporation due to climate change pose new challenges to water management stakeholders. A





During the program, Zsolt Kozma, researcher at the Budapest University of Technology and Economics, presented the CWatM (Community Water Model)-based modeling system and its application to the Tisza river basin, as well as the results of simulations based on different climate scenarios.



The participants were introduced to the central data storage system of the DWB project in the presentation of Máté Chappon, expert from the General Directorate of Water Management. In his presentation, he emphasized the importance of joint data management, which is a fundamental condition for uniform water balance calculations between the countries of the Danube Basin and well-founded water management decisions.

Nikola Santrač, researcher at the Faculty of Agriculture of the University of Novi Sad, presented the Web-GIS platform developed within the framework of the project. In his presentation, he presented the GIS tools and visualization options that make the project results, modeling data and water balance calculations easily accessible and analyzable for professionals.

In the second half of the workshop, KÖTIVIZIG experts presented their ongoing, related initiatives and activities. Gábor Harsányi, Deputy Technical Director (KÖTIVIZIG), presented the LAREDAR – Lakes and Reservoirs in the Danube River Basin – an international project supported by the Interreg Danube Region Programme, which develops a concept for the coordinated operation of lakes and reservoirs to support the management of flood and low-water periods. The project, which started in the spring of 2025, will be implemented under the leadership of KÖTIVIZIG and in cooperation with 11 partners.



In his presentation, Dávid Béla Vizi, Technical Secretary of KÖTIVIZIG, presented the operation of the Tisza–Körösvölgyi Cooperative Water Management System (TIKEVIR) water resource sharing system and the experiences gained from the severe water shortages of recent years.

The professional presentations highlighted that the efficient and coordinated management of water resources is important in increasing the adaptability of the region.

At the end of the event, the participants discussed the possibilities of practical application of the modeling results and the directions for further development of cross-border cooperation in a workshop. One of the key goals of the Danube Water Balance project is to prepare the countries of the Danube Basin together, based on a coordinated methodology, to address the water management challenges caused by climate change.



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