

DanubeSediment – an EU Project aiming to the Restoration of the Sediment Balance in the Danube River

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Introduction: In the Danube Basin an increasing discrepancy between surplus and lack of sediment can be observed. This leads to an increase of flood risks and a reduction of navigation possibilities, hydropower production and biodiversity. Thus, sediment transport and sediment management are urgent issues, which can only be treated in a transnational basin wide approach as sediments don't regard administrative or political borders. The lack of sediment management has been recognized by the ICPDR in the Danube River Basin Management Plan in 2009 and 2015. Thus, the main objective of this project is to improve Water and Sediment Management as well as the morphology of the Danube River. To close existing knowledge gaps, sediment data collection will be performed providing information to the sediment data analysis and will lead to a handbook on good practices of sediment monitoring methods. Furthermore, a baseline document on the Danube Sediment Balance will be prepared, which explains the problems which arise with sediment discontinuity negatively influencing flood risk, inland navigation, ecology and hydropower production. Possible answers to these problems will be provided by a catalogue of measures. The main outputs of the project are the first Danube Sediment Management Guidance comprising measures to be implemented and a Sediment Manual for the stakeholders consisting of approaches how to implement the measures, which deliver key contributions to the Danube River Basin Management Plan and the Danube Flood Risk Management Plan. By a better and sustainable sediment management in the Danube Basin, improved navigation conditions, reduced flood risks, enhanced ecological status and durable hydropower production will be obtained. Furthermore, International Stakeholder Workshops, training 100 experts, will be organized to reach the target groups and users of the project results as well as to establish an efficient interaction with them, which deliver key contributions to the Danube River Basin Management Plan and the Danube Flood Risk Management Plan. By a better and sustainable sediment management in the Danube Basin, improved navigation conditions, reduced flood risks, enhanced ecological status and durable hydropower production will be obtained. Furthermore, International Stakeholder Workshops, training 100 experts, will be organized to reach the target groups and users of the project results as well as to establish an efficient interaction with them.

Objectives and Outcomes: The most important outputs of this project, the Danube Sediment Management Guidance

and the Sediment Manual for Stakeholders will be fed into the next Danube River Basin Management Plans and the Danube Flood Risk Management Plans which are the main tools to strengthen transnational water management and flood risk prevention.

There will be three specific objectives of the project. The first one is to improve awareness on sediment quantity related problems in the Danube River Basin". According to the Danube River Basin Management Plans from 2009 and 2015 it is not clear if the sediment management is a significant water management issue or not, since no such management strategy exists. This project will give an answer to this question through the development of sediment management principles for the Danube River. Gaining this knowledge will directly contribute to the improvement of the transboundary sediment management.

The second specific objective is to develop an innovative approach for transnational sediment management. The combination of a multi-sectoral with a multi-stakeholder interrelation and a transnational, cross cutting sediment management at basin, sectoral and local scales forms an innovative approach. This approach combines the data based sediment balance and good practice sediment management measures, aiming to a Sediment Management Guidance for future transnational water management activities.

The third specific objective is to strengthen inter-institutional collaboration in sediment management. A well-established and permanent communication among experts and a participatory and transnational approach, including all relevant stakeholders and policy makers on national and transnational levels are a pre-requisite to reach the overall project objective. The partnership composition and the implementation methodology of the project ensure this interaction between the key players in sediment management of the Danube River.

The lecture will present the results of the ongoing project and give an outlook concerning the implementation of these.