

## Minimizing CROSSborder water contamination of microPLASTICS - MICROPLASTICS

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**Introduction:** The Interreg IPA HUSRB/23R/12/089 project MICROPLASTICS has been approved within the Interreg VI-A IPA Hungary-Serbia Programme for the 2021-2027 EU financial framework, effective from 01.07.2024 to 30.06.2026. There are four project team members: IZJZV as the Lead Partner, ZZJZ SO (PP1), LUPS (PP2) and FEAD APV (PP3). The project's overall objective is to enhance environmental protection and reduce pollution by identifying sources and reducing microplastic pollution in the water ecosystem within the cross-border area of Bačka/Bács-Kiskun.

**Method:** The activities are achieved through sampling by Manta travel net and special designed pump, identification of pollutants by FTIR-microscopy, modelling and developing measures and tools to reduce microplastic pollution in the water ecosystem and increasing public awareness on the problem and solutions developed.

**Results:** The realized activities included opening a conference, producing ecological promotion material, creating bilingual roll-ups, increasing visibility through social media, conducting three educational sessions for Serbian public health experts, and providing education for elementary and high school children in Hungary. The sampling of open surface water, wastewater, and sediments is ongoing in Hungary and Serbia. The samples are being prepared for analysis of microplastics. A filter solution for eliminating microplastics from wastewater is being planned for two wastewater treatment plants and is currently in progress. Future activities, in addition to ongoing sampling and analyses, will focus on validating the methods and laboratory techniques, developing a protocol, implementing the ICT solution for sharing project information, and enhancing the capacity to reduce microplastics within local government.

**Conclusion:** The Interreg IPA project MICROPLASTICS enabled cross-border cooperation, built the technical and quality capacities within the team member organizations, and raised awareness of reducing microplastic pollution in the water ecosystem among children, students, decision-makers, and the global population.

**Key words:** microplastics, public health, water pollutants

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