Mitigation measures for the hydrotechnical works impact on vulnerable ichthyofauna in Răstolița river, Romania

In the context of hydrotechnical works implementation plan on the Răstolița river from the Mureș hydro basin, Romania mitigation measures must be taken in order to ensure Natura 2000 ichthyofauna habitat conservation and restoration. From the six fish species included in the ROSCI0019 Călimani – Gurghiu Standard Data Form (*Hucho hucho*, *Romanogobio uranoscopus*, *Barbus petenyi*, *Sabanejewia balcanica*, *Cottus gobio* and *Eudontomyzon danfordi*), *Hucho hucho* (Danube salmon) stands out due to its *Endangered* IUCN status and to its *Unfavourable – Bad* status for population conservation under Romanian EU Habitats Directive reporting. The measures developed by the experts team from the National Institute for Research and Development in Environmental Protection Bucharest by considering taxonomy principles and the potential climate change impact, provide the means to address the main pressures and threats linked with the implementation, exploitation and maintenance of the planned hydrotechnical works. The major impact is constituted by the hydrodynamic parameters alteration both in the Răstolița dam upstream and downstream river sector that may lead to ichthyofauna habitat loss. The preliminary proposed measures for this issue are represented by keeping the natural conditions and ensuring a minimal water depth for the downstream river section and a minimal discharge echo-hydrograph that take into account the meteorological and climate conditions.