

The monitoring of eco-hydrological parameters within the LIFE Ljubljanica Connects project

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The main objectives of the Ljubljanica Connects project arising from the need to improve the living conditions in the Ljubljanica River for endangered fish species. The history of improving the conditions dates back more than 100 years ago with the construction of fish passages at the obstacles on the Ljubljanica River. As part of the project the fish passages were reconstructed and upgraded to improve river connectivity. But for the survival of fish and other aquatic organisms in the river also adequate living conditions are necessary which can be determined by measurements of individual parameters of water quality.

Within the LIFE Ljubljanica Connects project we have established continuous eco-hydrological monitoring of water level and temperature at 17 measuring sites and concentration of dissolved oxygen at 3 measuring sites along the Ljubljanica River and its tributaries. Water level data are input data for the hydrological model of Ljubljanica River, while water temperature and concentration of dissolved oxygen are the basic indicators of the quality of the water.

The purpose of this paper is to present the measuring equipment of eco-hydrological monitoring, the first feedback on the results of measured water temperature and the concentration of dissolved oxygen in the Ljubljanica River, and the advantages and importance of such monitoring.