

INFLUENCE OF THE DISCHARGE ON THE DRIETOMICA RIVER HABITAT

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Abstract: During the years 1995-2005, the research on the impact of river regulation on the aquatic zone of the Drietomica rivulet was implemented. In this article the results of modeling of the microhabitat by means of the IFIM methodology are presented. For the 1-dimensional modeling, the RHABSIM (River Habitat Simulation System) and for the 2-dimensional modeling, River2D software, which are both intended for analysis of the interaction between the water flow, morphology of the riverbed and the biological components of the environment, were used. After the hydraulic calibration, the available fish habitat in the shape of a weighed usable area was simulated using both models.

The current stage of the research represents testing the differences between the various types of models and a comparison of the impact of the non-biotic parameters on the development of criteria curves, which define fish hiding-places as a microhabitat of the stream.

Keywords: IFIM, habitat, abundance, ichthyomass, weighed usable area