

## **Abstract**

The subject of bachelor thesis was to evaluate the diversity of physical habitat, using three methods of hydromorphological survey. Methodologies with different approaches of evaluation have been applied to model basin Sviňovický stream. Detailed assessment describes the downstream changes in individual characteristics. River basin represents a contrast between the upper stream, which is completely anthropogenically influenced and lower stream which is after restoration. The thesis presents the result of a field survey of different methodologies and evaluates the diversity of habitat in different flow conditions. The results of all three approaches are confirmation of positive impact of restoration to the habitat quality and especially the requirement to modify each methodology to local conditions. Longitudinal development of selected hydromorphological parameters have been observed.