

Abstract

This thesis deals with options of integration of drainage measures in stream restoration projects in rural landscape. The main aims are creation of research on the topic and creation of database of drainage systems in the area of interest, upper course of the Klíšský Brook. Partial aim is physical-geographical characteristics of the area of interest. The positive and negative effects of drainage are presented and discussed, and then adaptation measures to mitigate the harmful effects are described. The overview of drainage in the catchment is a synthesis of map data from the Register of Soil Blocks, data provided by the Ohře River Basin, drainage found in aerial photographs and field research. There are both main drainage facilities and drainage pipes in the area of interest. 10 surface canals and 7 drainages flow into the revitalized part of the Klíšský Brook. While the canals are still functional, the drainage is clogged with sediment, overgrown with vegetation and causes wetting. The results serve as a basis for the design of adaptation measures in the restoration of the Klíšský Brook.

Key words: hydromelioration, drainage, rural landscape, adaptation measures, restoration, water retention