ABSTRACT

TRENDS IN THE DEVELOPMENT OF RUNOFF AND SURFACE WATER QUALITY IN THE BLŠANKA RIVER BASIN

The aim of this Bachelor's thesis is to analyze trends in the development of runoff and selected features of surface water quality in the drainage basin of the Blšanka river. The thesis consists of a research part and a practical part. The research part examines scholarly literature and describes changes in the runoff and water quality depending on climate change as well as changes in the land use. The practical part processes the data from the Blšanka drainage basin from the end of the 1970s until today. The trends evaluated by the Mann-Kendall's test include the development of the average monthly flow rates, the average monthly temperatures from weather station in Žatec and the monthly amount of precipitation from the four stations situated in or near the area of the drainage basin. The practical part outlines the development of selected indicators of water quality in Trnovany. Next, it also evaluates changes in the land use in a specific part of the Blšanka drainage basin between the years 1995, 2004 and 2013.

Keywords: changes in runoff, climate change, water quality, land cover, Mann-Kendall, Blšanka