Abstract

Thesis subject is modelling land use changes impact on the runoff in the Upper Lužnice river basin down to the gauging station Pilař. Rainfall-runoff model HEC-HMS was used for rainfall-runoff modelling. The main goal is an application and testing of chosen hydrological model for four different classification of land use. The first two includes years 1990 and 2000 (analysed on CORINE Land Cover data basis). The other two were hypothetical and in this cases were categories of land use changed. Modelling covered rainfall for period of 10, 20, 50 and 100 years. The SCS CN method was used.

Keywords

Rainfall-runoff modelling, rainfall-runoff model, HEC-HMS, the Upper Lužnice, scenarios modelation, calibration