Use of GIS hydrology tools in water management

Abstract

This thesis deals with the use of GIS hydrology tools in water management. It is solved on example of Dobříš region. It deals with delineating water protection zones based on digital elevation model. The digital elevation model was derivated from elevation data from the ZABAGED database and then modified by the river network data from the DIBAVOD database. The paper also discusses the use of hydrological functions in the search for potential water sources. During the work was developed a geodatabase containing the data usable in water management.

Keywords

GIS, water management, hydrologic modelling, protection zones, water resources