1 Introduction

For all river basins in the EU, Member States water management must be in terms of implementing the EU Water Framework Directive (WFD). While Slovenia and Croatia, being the new EU Member States, are now faced with the great challenge to achieve not only the good-ecological and chemical status of the Soča River and the Sutla River (as defined by WFD), but also to achieve good or excellent quality for bathing and recreation from adverse effects of human activities [1,2]. The implementation of the WFD is the starting point for the integrated water management. Small local river basins, together with the lack of calculation in agroindustry of less than 2000 HE and agricultural activities, present a challenge to water quality management for the basin administrators. Many authors highlight the importance of predicting and protecting environmental and environmental objectives for the river basin. In case of transboundary basins with high water quality and narrow width, methods used in the past and presented in SWAT model is to potentially necessary to apply an innovative approach to river water management. Successful management of real river basins includes integrated measures, from very expensive to easiest measures to protect water bodies. Using appropriate models helps in the assessment of environmental impact and implementation of adaptation measures. Through a probabilistic selection of appropriate models for real river basins, the mathematical model SWAT (Sediment and Water Assessment Tool) is to be supported in the framework of the implementation of the WFD. The model has built-in options for the use of economic analyses and integrated services and human well-being [3].

Keywords: integrated water management, EU water policy, DPSIR, adaptation, SWAT, good-ecological water status, measures.