

DEFINING POTENTIAL CRITICAL SOURCE AREAS for PROVIDING SUSTAINABLE WATER MANAGMENT IN DRINKING WATER BASIN: NAMAZGAH DAM CASE STUDY, TURKEY

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Increasing of population, agricultural and industrial activities on drinking water basins have been degraded water quality and quantity day by day. To protect water quality and quantity in drinking water basins, defining protection zones and management principles are very important. Understanding temporal and spatial distribution of water and pollution loads on basins, becomes mandatory to develop proper management plan for valuable water resources. Thus, to use mathematical simulation models may play a major role in preparing for a successful management plan. In this study Soil Water Assessment Tool (SWAT)" model was used to delineate the potential critical source areas for non-point pollution sources for Namazgah Dam basin. At the end of application of the model, the map which represents sensitive areas for nonpoint pollutions was obtained. Thus, achieving the objectives will help to generate protection zones and policies for basins which are considered for drinking water.