

## عنوان مقاله:

Assessing the impact of future climate change on fresh water resources

## محل انتشار:

اولین کنفرانس کاربرد ابزار مدیریت آب و خاک (SWAT) در مدیریت منابع آب کشور (سال: 1397)

تعداد صفحات اصل مقاله: 13

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## خلاصه مقاله:

Understanding the influence of climate change on water resources is of significance to solve the management problems of watersheds. In this study, we calibrated and validated the Soil and Water Assessment Tool (SWAT) using monthly observed discharge from 2001 to 2015 to quantify the impact of climate change on spatial distribution of blue and green water in a small river catchment in Northern Iran. The downscaled daily precipitation and temperature using the ECHAM5 projection data from CMIP3 under three SRES emission scenarios were used to construct future climate scenarios for periods of 2011-2032 and 2046-2065. According to the climate scenarios, the study catchment will experience an increase in precipitation, blue water and green water flow in future. The results of green water resource projections are different from subbasin to subbasin and among different scenarios. These results imply the large impact of climate change on water of the region and reveal the importance of further climate change analysis.

## کلمات کلیدی:

SWAT, Lars-WG, ECHAM5, Hydrological modeling, Emission scenario

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/820036>

