

## عنوان مقاله:

Assessment of climate change impacts on Agricultural water demands

## محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

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## خلاصه مقاله:

Long-term planning of water resources strongly depends on climate change and its effects on water resources and consumptions. In the past, infrastructures planning and development programs were intended based on historic data of climate. But in recent decades according to the climate change impacts on these planning and programs, moving toward estimation of its effects and finding appropriate strategies to overcome its risks has been interested. One of these effects is impacted on water uses, especially agriculture. In this research the impacts of climate change on water demands of agriculture in the downstream of dam in Zayandehrud river basin for future development of agriculture has been studied. For this purpose we calculate the reference crop evapotranspiration with Penman – Monteith equation and gross water demands of agricultural sectors with AGWAT software. Then the LARS-WG model has been used for down-scaling the parameters of climate change periods. Results show that because of increasing in agriculture water demands, water resources management in the basin will face with big challenges in future. So to reduce this hazard we propose a solution which works with changing in cropping pattern in the basin

## کلمات کلیدی:

Climate change, Agricultural water demands, crop pattern changing, LARS-WG, AGWAT

## لینک ثابت مقاله در پایگاه سیویلیکا:

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