

عنوان مقاله:

Salinity Variation in Kashan Plain Groundwater Resources

محل انتشار:

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خلاصه مقاله:

Aims: The trend of withdrawal from groundwater resources in Kashan plain has been increased during the recent 40 years. For example, the number of deep wells has been increased from 67 in 1965 to 927 in 2003. As a result, the well discharges and water quality have been diminishing. Hence, this research was aimed to study the salinity variation modeling in Kashan plain groundwater resource. **Materials and Methods:** This descriptive research was done based on recorded data for some wells in Kashan plain. First, the data from 112 wells were considered then, 16 wells with more complete data were selected for analysis. Total dissolved solids (TDSs) were considered as the salinity index. **Results:** The results showed that, in Kashan plain, the mean of salinity has been increased from 1190 mg/L to more than 1400 mg/L during 7 years. Although the salinity has been somewhat less after each annual precipitation, the trend is upward. Minimum and maximum of TDS were identified taken samples from wells number 27 and 47, respectively. Maximum rate of salinity was found in wells number 53 and 55, while the minimum was related to well number 54. **Conclusions:** The groundwater salinity in Kashan plain has an upward trend. The groundwater salinity can be related to some major factors such as distance from Salt Lake, less annual precipitation, and more withdrawal from the aquifer in the recent decades. Since the later can be managed withdrawal, especially for agricultural activities .have to be minimized as the most effective way for prevention of the groundwater quality degradation

کلمات کلیدی:

Groundwater, Kashan, salinity, total dissolved solids

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