

## Comparison of Salt-Water Intrusion into Eastern and Western Coastal Aquifers of Urmia Lake thru Over-Exploration of Groundwater Resources

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**Abstract :** Urmia Lake's water level has been dropped during the past decade. Although the most common reason in studies was declared climate change, but observation of adjacent lake (like Van in Turkey) is not the same as the common reason. Most of studies were focused on climate and land use change, but groundwater resource as one of the most important element is negligible. Due to population and agriculture activities growth, exploration of groundwater resource has been increased. In as much as continued decline of water levels can lead to saltwater intrusion, reduce stream discharge near outcrop regions and threaten groundwater quality, aquifers of this region were affected by saltwater intrusion of Urmia Lake. In this research comparison of saltwater intrusion into eastern and western coastal aquifer was studied. In conclusion eastern aquifers are in a critical situation; vice versa the western ones are in a better situation. Thus applying management of groundwater operation would be necessary for eastern aquifers.

**Keywords :** coastal aquifer, groundwater over-exploration, saltwater intrusion, Urmia Lake

**Conference Title :** ICEES 2015 : International Conference on Environmental and Earth Sciences

**Conference Location :** Venice, Italy

**Conference Dates :** April 13-14, 2015