IAH network on “Coastal aquifer dynamics and coastal zone management”

QUESTIONNAIRE

IAH national committees, IAH members and non members from all around the world involved in SWI and SGD research and management are kindly asked to fill in the questionnaire in this page with as many details as possible.
A world database will be set up and made available, with basic coastal aquifer main characteristics.
We expect to gather standard and comparable information on the knowledge level and hopefully the state of the art of the research on SWI and SGD, and coastal aquifer management methods adopted around the world

1)	Location of aquifer (country, more specific location):	Tavabe-e Arsanjan,Iran
2)	Reported by:	Mehrdad Bastani, G. Reza Rakhshandehroo and Majid Kholghi
3)	Type of medium (karst, porous, fracture)	Porous
4)	Type of aquifer (phreatic or confined)	Unconfined aquifer
5)	Main lithology - (e.g. gravel, sand and clay)	Rubble stone, gravel, sands with low amount of clay and silt
6)	Hydrochemistry: fresh or saline	Fresh and Saline
7)	Saltwater intrusion: lateral from sea or lakes - upconing	Intrusion from Tashk salt lake
8)	Aquifer geometry: hydraulic characteristics	Thickness of the sediments varies from 30 to 50 m in the northwest, and gradually increases toward the southeast. A maximum thickness of ~400 m can be found near the lake
9)	Aquifer parameters: storage - annual water pumping - (in MCMA - millions cubic meters, annually)	The average annual rainfall is about 333.6 mm
10)	Depth of aquifer (water level and bottom) - water level 5-30 m - aquifer depth - 50-200 m	
11)	Major chemistry (anions - ?; Cations - ?):	Cl^-,Na^+,Mg^{2+} and Ca^{2+}
12)	Major salinity sources:	Results show that saltwater intrusion into the aquifer may occur from two main directions; south and southeast of the region originating from Tashk salt lake, and from the northern adjacent aquifer
13)	Population:	This region is one of the oldest agricultural areas in the world, where farmers extensively use groundwater for irrigation
14)	Aquifer status: special features - e.g. thermal springs, major faults,…	There are not thermal springs
15)	Investigation methods - e.g. water level measurements, EC (electrical conductivity profiles), TDEM (geophysical),	Water level,EC and Hydrochemical measurements
16)	Numerical hydrological modeling, chemical and isotopic methods, age determination, IR survey, seepage meters (for Submarine Groundwater Discharge, SGD)	Piper diagram analysis,pumping test,numerical simulations
17)	Monitoring methods applied and duration - water level measurements, EC (electrical conductivity profiles - seasonal)	Water level was measured during the 13-year period of 1994 to 2007; EC measurements were conducted twice a year on sampling wells in the region in the same years
18)	Management methods:	
19)	Aquifer management actions:	
20)	Identification of existing or potential problems:	Increasing demand for freshwater and overexploitation of the aquifer has caused a drawdown in groundwater levels followed by a seawater intrusion into the coastal aquifer
21)	Annexes:	
22)	Observations:	