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):	CAMPOS (MALLORCA, SPAIN)
2)	Reported by:	N. VAN MEIR,D. JAEGGI,M. HERFORT,S. LOEW,PH. PEZARD,PH. GOUZE and G. LODS
3)	Type of medium (karst, porous, fracture)	Karst and Porous
4)	Type of aquifer (phreatic or confined)	Phreatic
5)	Main lithology - (e.g. gravel, sand and clay)	Sedimentary karstified limestone aquifer: an alternating succession of grainstones to packstones,with marly packstones to wackestones and layers of sandy clays
6)	Hydrochemistry: fresh or saline	Fresh and saline
7)	Saltwater intrusion: lateral from sea or lakes - upconing	Saltwater intrusion has already affected the aquifer at six kilometres distance inland from the sea
8)	Aquifer geometry: hydraulic characteristics	Transmissivity around 120 m2/s
9)	Aquifer parameters: storage - annual water pumping - (in MCMA - millions cubic meters, annually)	Annual water pumping: about 50 MCMA Annual precipitation is about 190 Mm3/yr
10)	Depth of aquifer (water level and bottom) - water level 5-30 m - aquifer depth - 50-200 m	The water table is about 40 m below ground surface, and only just above the mean sea level(1,5m)
11)	Major chemistry (anions - ?; Cations - ?):	
12)	Major salinity sources:	Sea water
13)	Population:	Campos is a municipality on the island of Majorca and the economy of this municipality has been linked to agriculture since its foundation: Its lands are fertile and it uses irrigation cultivation
14)	Aquifer status: special features - e.g. thermal springs, major faults,…	
15)	Investigation methods - e.g. water level measurements, EC (electrical conductivity profiles), TDEM (geophysical),	Exploratory geophysics consisted of optical borehole televiewer, acoustic televiewer,natural gamma, long and short normal resistivity measurements, temperature-conductivity logging and pH-oxygen logging and water level measurements
16)	Numerical hydrological modeling, chemical and isotopic methods, age determination, IR survey, seepage meters (for Submarine Groundwater Discharge, SGD)	Larger scale pumping test,packer testing 3D-porosity-model,Flow model
17)	Monitoring methods applied and duration - water level measurements, EC (electrical conductivity profiles - seasonal)	The first field campaign in February 2002 consisted mainly of logging existing wells for electrical conductivity and temperature. A total of 22 holes were logged in both the Campos
18)	Management methods:	EU-funded project ALIANCE: The main objective of this project is to develop a strategy for the quantative description of fluid flow and storage in a shallow aquifer contaminated with saltwater
19)	Aquifer management actions:	Several cored drilling were made and in the near future, a rigorous analysis of the water level measurements(one and a half years of data)
20)	Identification of existing or potential problems:	Saline pollution of coastal aquifers becomes a problem because population growth pressures the mostly scarce freshwater reserves
21)	Annexes:	
22)	Observations:	