

El Salvador

Capital city: San Salvador

Inhabitants: 6 Million



INSTITUTIONAL SETTING AND PURPOSE

The Ministry of Environment and Natural Resources (MARN) has constitutional power of protection, conservation and recovery of the environment with a specific mandate for the protection of water resources.

In 2007, MARN, through the former National Service of Territorial Studies, SNET (currently the General Directorate of the Observatory of Threats and Natural Resources, DOA) and the

European Union, with the project Strengthening Environmental Management of El Salvador (FORGAES), launched the first network of groundwater monitoring wells in the metropolitan area of San Salvador and the Zapotitán Valley, which has been improved through several initiatives promoted by the Hydrology Management Office of MARN. The objective of the network is to provide data on the long-term status and trends of the national groundwater resource.

CHARACTERISTICS OF THE NETWORK

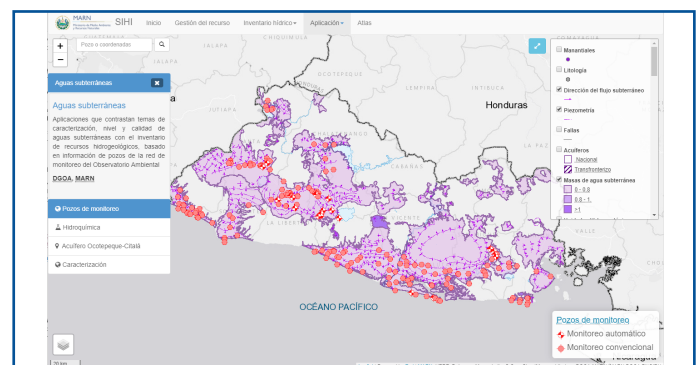
The network currently has 32 monitoring wells that register groundwater levels automatically using data loggers every 8 hours. On average, there are 8 years of records of groundwater levels in 17 of these wells. In 2018 and 2019, 15 new monitoring wells were drilled, which were provided with the equipment to perform automatic measurement of piezometric level and temperature.

Additionally, there is a monitoring network of around 100 hand dug wells where groundwater levels are measured manually. Water sampling for physical-chemical characterization is carried out twice a year (once during dry season and once during wet season). For these wells a record of 7 years of measurement is present.

PROCESSING AND DISSEMINATION

The data are processed by implementing time series analysis. The information on groundwater levels and physical-chemical parameters is published on-line via the Water Information System (SIHI), Figure 1. SIHI was designed and developed by the MARN in collaboration with the Spanish Agency for International Cooperation for Development (AECID) through the Cooperation Fund for Water and Sanitation (FCAS).

Figure 1 – Web platform of SIHI



Sources

- **Feedback from MARN** - received on 29-01-2020;
- **Feedback from MARN (answer to form)** - coordinated by CeReGAS and received in 2019;
- **Ministry of the Environment and Natural Resources (MARN)** - <http://www.snet.gob.sv/ver/comunicacion+social/noticias+y+temas+de+interes/noticias/ano+2007/inauguracion+de+la+red+de+monitoreo+de+aguas+subterraneas;>
- **MARN, 13-09-2019. Rocks and Ashes Unveil Eruptive History of the San Salvador Volcano** - [https://www.marn.gob.sv/rocas-y-cenizas-desvelan-historia-eruptiva-del-volcan-de-san-salvador/;](https://www.marn.gob.sv/rocas-y-cenizas-desvelan-historia-eruptiva-del-volcan-de-san-salvador/)
- **MARN Transparency Portal, Groundwater Monitoring Network** <http://www.marn.gob.sv/red-de-monitoreo-de-aguas-subterraneas;>
- **MARN Transparency Portal, Groundwater** - <http://www.marn.gob.sv/agua-subterranea;> and
- **MARN Water Information System (SIHI)** - <http://srt.snet.gob.sv/sihi/public/app/1/pozosmonitoreo>.