

Brazil

Capital city: Brasília
Inhabitants: 209 Million



INSTITUTIONAL SETTING AND PURPOSE

The National Water Agency (ANA) is in charge of Planning, Monitoring and Management Support of Water Resources, providing information on water resources to other governmental water managing bodies and entities at the federal and the federal states level. The Agency is legally responsible for implementing the National Water Resources System (SINGREH), which is a combination of legal and administrative mechanisms established by the Water Law (1997). Its aim is to coordinate integrated water resources management and implement the National Policy of Water Resources. However, the Geological Service of Brazil (CPRM or SGB) is the institution that manages the Integrated Groundwater Monitoring Network (RIMAS), the national groundwater network of Brazil.

CPRM is responsible for planning and implementation of monitoring activities; data collection and maintenance of monitoring wells, as well as for data consistency and data dissemination through the national well database. The States are responsible for licensing groundwater use.

Data are collected with the objective of expanding hydrogeological knowledge, developing specific research and supporting the management of water resources.

CHARACTERISTICS OF THE NETWORK

RIMAS is comprised of approximately 400 monitoring wells located throughout the country. The collection of automatically recorded groundwater levels is done three to four times per year.

Selection of locations and equipment for monitoring wells was made by the CPRM and external consultants from universities, environmental agencies, and other organisations. New wells are constantly added to RIMAS to improve the spatial distribution of monitoring. The process for choosing monitoring locations, is done with the criteria on aquifers prioritization, namely:

1. Sedimentary aquifers;
2. Water of socio-economic importance;
3. Use of water for public supply;
4. Aspects of natural vulnerability and risks;
5. Spatial representativeness of the aquifer; and
6. Existence of monitoring wells.



Figure 1 – Foz do Iguaçu, water falls connected to Paraná river and thereby Guaraní aquifer, by: S. Siepmann

PROCESSING AND DISSEMINATION

Data and reports can be visualized and downloaded from the RIMAS web platform. The CPRM is also responsible for the Groundwater Information System (SIAGAS), a national information system created to support groundwater management in the country. The SIAGAS is composed of a monitoring well data-

base and modules for consultation, information extraction and report generation. The database is constantly updated and can be combined with other systems. At this moment, the SIAGAS has a total of 321,621 registered wells.

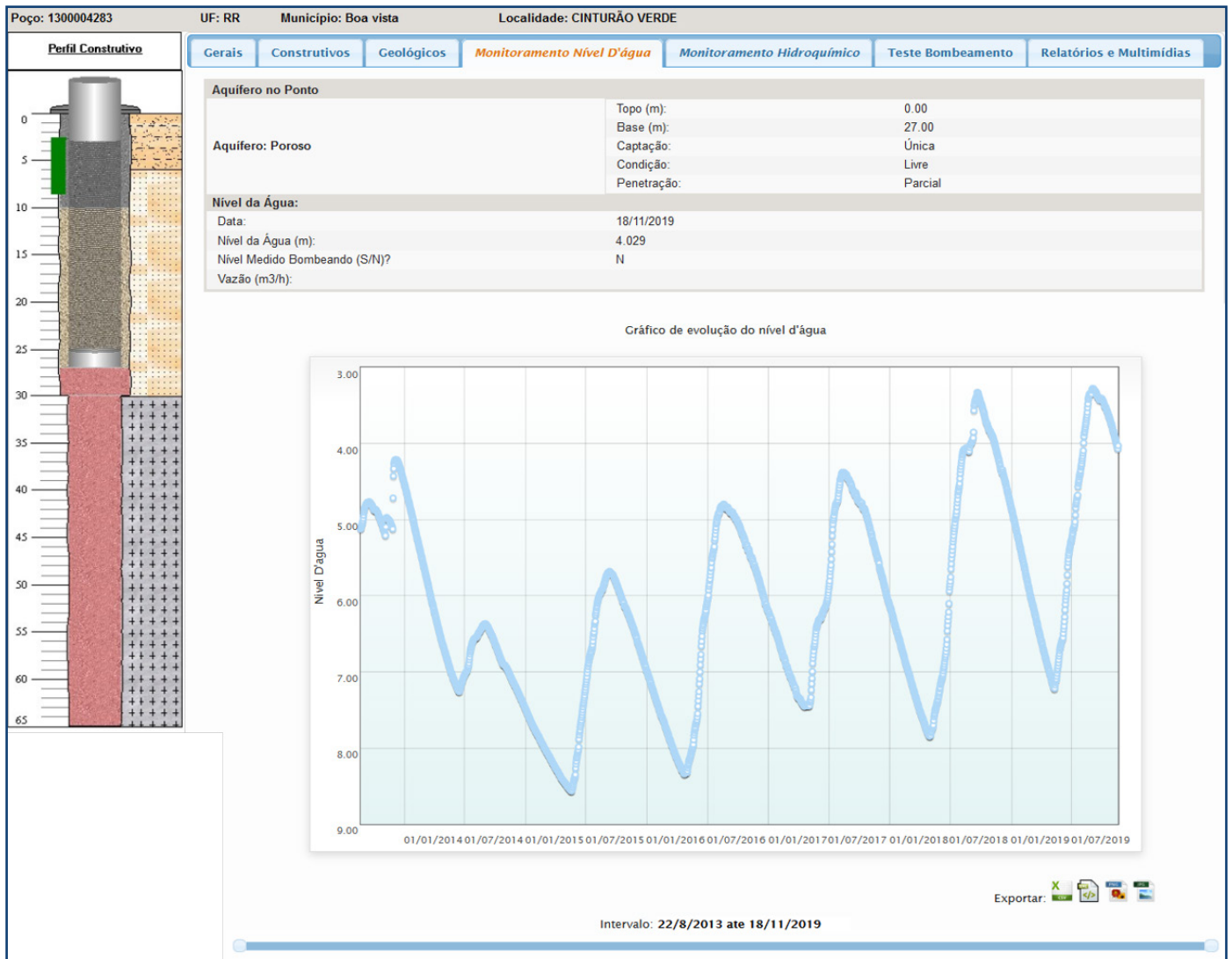


Figure 2 – Integrated Groundwater Monitoring Network

Sources

- **Integrated Groundwater Monitoring Network (RIMAS)** - <http://rimasweb.cprm.gov.br/layout/apresentacao.php>;
- **Groundwater Information System (SIAGAS)** - <http://siagasweb.cprm.gov.br/layout/apresentacao.php>;
- **Agência Nacional De Águas (ANA)** - <https://www.ana.gov.br>; and
- **Feedback from CPRM** - received of 17-03-2020.