



## INSTITUTIONAL SETTING AND PURPOSE

The State Water Holding Polish Waters is a central administrative body responsible for water conservation, management and use. The main tasks of the Holding include development of the national water and environmental programme, keeping the water inventory country-wide, supervising the performance of the National and Regional Water Management Boards; and hydrological, meteorological and hydrogeological services.

In Poland, groundwater monitoring is carried out through national, regional and local networks. The institution responsible for the organization and coordination of monitoring studies is Chief Inspectorate for Environmental Protection.

## CHARACTERISTICS OF THE NETWORK

The national network consists of selected, representative observation points.

First groundwater level monitoring in Poland began in the 1970s and quality monitoring in 1991. The network was formed to reflect specific features resulting from the unique geological structure and hydrogeological conditions in Poland. Particular attention is paid to the development of observation networks in recharge and discharge zones, as well as areas endangered by drought, flooding and degradation of groundwater quality. Since Poland joined the European Union, the organisation and scope of groundwater monitoring was adapted to comply with European Community directives and for that reason it relates to monitoring of groundwater bodies. For the current planning cycle there are 172 groundwater bodies in consideration, and there will be 174 for the cycle 2022-2027.

The depth of the water table is measured daily at so-called first order hydrogeological stations, and every Monday at the second order hydrogeological stations. The monitoring network currently comprises of ca. 1250 points (as of September 2020). In addition, 366 observation wells are equipped with automatic devices in which water level monitoring is measured every hour.

Monitoring of groundwater quality is performed within the surveillance and operational networks comprising of selected hydrogeological station of the first and second orders as well

as public water supply and private wells. For the planning cycle 2016-2021 the surveillance monitoring was undertaken within ca. 1300 points and the operational in ca. 400.

Poland has also seven transboundary groundwater monitoring networks with seven neighbouring countries, with over 300 observation wells.

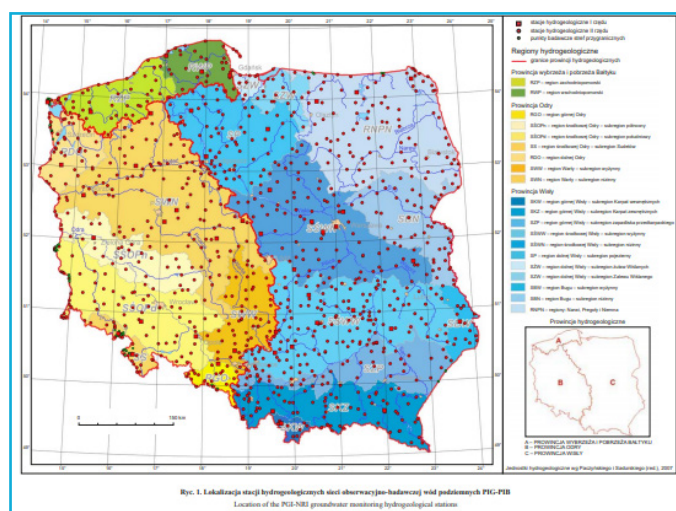


Figure 1 - Groundwater monitoring Network in Poland. Source: Polish Geological Institute – National Research Institute (PIG-PIB)

## PROCESSING AND DISSEMINATION

Groundwater Monitoring database (MWP database) includes:

- Information on monitoring points;
- Groundwater level and spring discharge measurements (since 1974); and
- Groundwater chemical composition analysis (since 1991).

The monitoring data and the outcomes of analysis are published on-line in Quarterly Groundwater Information Bulletin and Hydrogeological Yearbook.

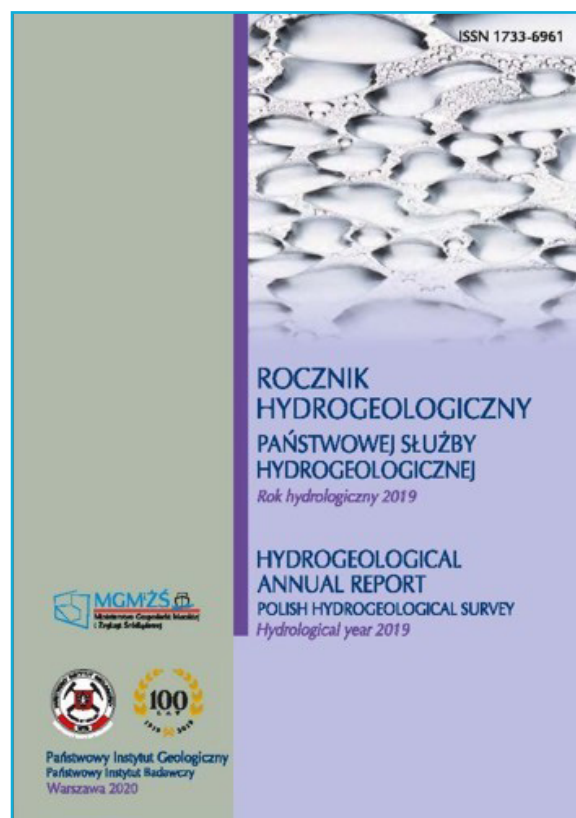
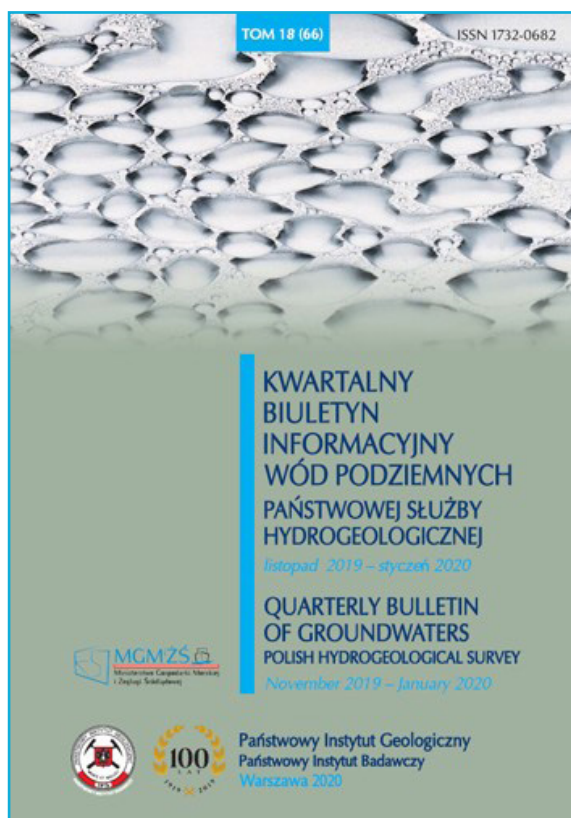


Figure 2 - Quarterly Bulletin of groundwaters and Hydrogeological Annual

## Sources

- **Feedback from the Polish Geological Institute - National Research Institute (PIG-PIB)** - received on 05-10-2020;
- **National Water Management of Poland** - <https://www.kzgw.gov.pl/index.php/en/about-kzgw/president-s-duties>;
- **Polish Geological Institute – National Research Institute, Groundwater Monitoring (1)** - <https://www.pgi.gov.pl/en/phs/tasks/9031-groundwater-monitoring1.html>;
- **Polish Geological Institute – National Research Institute, Groundwater Monitoring (2)** - <https://www.pgi.gov.pl/gdansk/wody-podziemne-pomorza/monitoring-wod-podziemnych/6389-monitoring-wod-podziemnych.html>; and
- **Polish Geological Institute – National Research Institute, Groundwater Monitoring and research network. Transboundary monitoring networks in 2012** - <https://www.pgi.gov.pl/en/phs/tasks/9006-groundwater-monitoring-and-research-network.html>.