

Water-related Research and Outcomes

Wisconsin Geological and Natural History Survey

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WGNHS Mission

The Wisconsin Geological and Natural History Survey (WGNHS) conducts earth-science surveys, field studies, and research.

- We provide objective scientific information about the geology, water resources, and mineral resources of Wisconsin.
- We collect, interpret, disseminate, and archive natural resource information.
- We communicate the results of our activities through publications, technical talks, our website, social media, and responses to inquiries from the public.

These activities support informed decision making by government, industry, business, and individual residents of Wisconsin.

Baseline information on Wisconsin's aquifers

The WGNHS is the primary source for information on Wisconsin's aquifers. We collect, describe, and archive geological materials and assemble, manage, and analyze groundwater data.

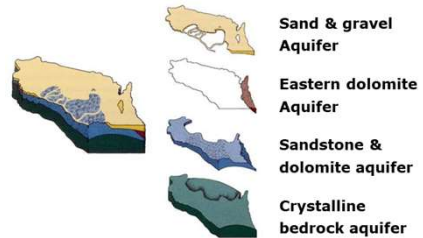
Archival materials



Mt. Horeb Research and Education Center



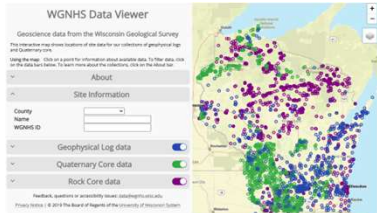
Photo credit: Shazwan Abdul Hamid



Source: Wisconsin Natural Resources Magazine

Databases

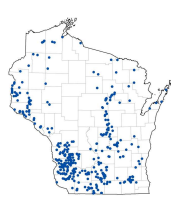
Geophysical logs and geological core data



Groundwater Monitoring Network (with USGS, WDNR)



Springs (with WDNR)



Well Construction Reports (with WDNR)

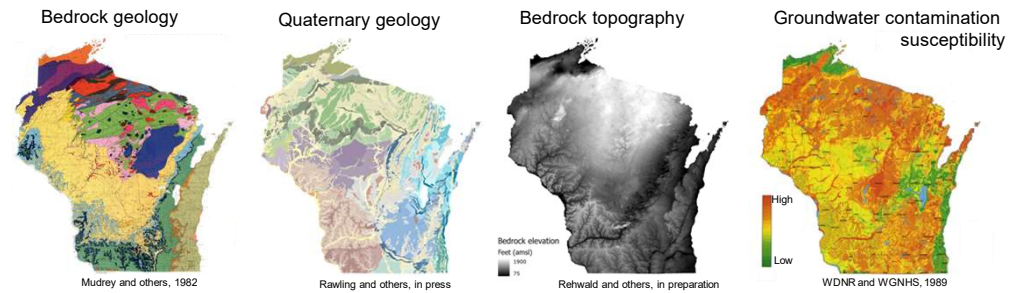


Contact us with your questions! WGNHS maps, data, and publications available on our website.

Statewide and regional studies

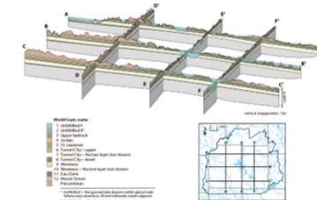
Statewide geological information informs regional groundwater studies and helps answer questions like, What direction is groundwater moving? How much water enters aquifers in a year? Where is groundwater most vulnerable to contamination?

Statewide mapping



Regional groundwater studies

Modeling studies: Evaluating impacts of high-capacity wells, developing wellhead protection plans, evaluating effects of land use and climate on groundwater, and quantifying the relationships between groundwater and surface water.



Parsen and others, 2016

Water quality studies: Central Sands Nitrate and Neonicotinoids Database



Hydrogeologic studies: Assessing private well contamination in Grant, Iowa, and Lafayette counties: The southwest Wisconsin groundwater and geology study (SWIGG)



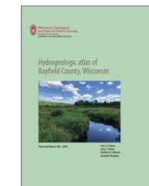
Photo credit: Maureen Muldoon

County and local studies

County and local studies reflect the needs of our statewide partners. We work closely with them to develop resources and tools to assist with groundwater management and local decision making.



Cold-water trout habitat: Evaluation of how climatic changes are likely to affect groundwater discharge and stream temperatures in the Marengo River headwaters, CNNF



County groundwater initiatives at the Wisconsin Geological and Natural History Survey

