Groundwater and Well Maintenance

What you need to know!

Groundwater fills the spaces between soil particles and fractured rock beneath the earth's surface

Groundwater is formed by rain and snow seeping into the ground

Nearly ½ of Ohio citizens, businesses, and industries use groundwater as their main source of drinking water

An aquifer is a body of rock and/or sediment that holds groundwater

Groundwater moves slowly: A flow rate of 1 foot per day is considered fast

98% of Ceauga residents rely on groundwater as their source for drinking water

Groundwater makes up about 30% of the world's fresh water supply

Main sources of groundwater pollution in rural areas are agricultural activities and septic systems

What is poured on the ground today can end up in our drinking water many years later

Only about 25% of all rainfall in the U.S. becomes groundwater





Geauga SWCD Mission: "To conserve, protect, and enhance the resources of Geauga County by providing leadership, education, and assistance to all."

Industrial/ Manufacturing 33% Do

Agriculture

5%

Domestic 61%

Groundwater uses in Chio

A Well Owner's Do's...

- Well owners should test water annually or when there's a change in appearance, taste, or smell
 - Test for total coliform bacteria, E. Coli, nitrates, and arsenic annually
 - Test for contaminants of local concern
 - Keep records of tests to track onset of problems or to prove if nearby land use activity affected the quality
- It is recommended to pump septic tanks every 2-3 years, depending on usage, by a registered sewage pumper
- Limit use of and keep hazardous chemicals, such as paint, fertilizer, pesticides, and motor oil, away from your well and properly dispose of them
- Periodically check well cover or cap to ensure it is in good condition
- When landscaping, top of well should be at least 1 foot above the ground and slope ground away from well
- Maintain proper separation between your well and buildings, waste systems, or chemical storage facilities

Local Resources:

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- Geauga Soil and Water Conservation District geaugaswcd.com/landowner-resources
- Geauga County Groundwater Resources
 <u>co.geauga.oh.us/departments/planningcommission/water-links</u>
- Geauga Public Health
 gphohio.org/environmental-health/private-water-wells
- USGS Geauga County Groundwater Publications usgs.gov/search?keywords=Geauga%20County

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Other Resources:

- The National Groundwater Association
 <u>ngwa.org/connect-with-your-state/state-resources/Ohio</u>
- U.S. Environmental Protection Agency
 <u>epa.gov/ground-water-and-drinking-water</u> and <u>epa.gov/privatewells</u>
- The Private Well Class: Trainings and Resources privatewellclass.org
- Centers for Disease Control and Prevention <u>cdc.gov/healthywater/drinking/index.html</u>
- USGS Groundwater Levels in Ohio, Kentucky, and Indiana <u>https://apps.usgs.gov/oki/gww/index.html</u>
- Wellowner.org: Your One-Stop Private Water Well Resource wellowner.org
- The Great Lakes Rural Community Assistance Program, Private Well Assessments glcap.org/programs/home-rehabilitation-needs/private-well-assistance
- Ohio Department of Health
 <u>odh.ohio.gov/wps/portal/gov/odh/know-our-programs/private-water-systems-program/info-for-homeowners</u>
- Ohio Environmental Protection Agency
 <u>epa.ohio.gov/monitor-pollution/maps-and-advisories/ambient- ground-water-monitoring</u>
- Ohio Department of Natural Resources, Division of Geological Survey, Groundwater Resources
 <u>ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-odnr/geologic-survey/groundwater-resources</u>



...and Dou'ts

- **Don't** ignore changes in appearance, odor, or taste of your water
- Don't dispose of chemicals or prescription drugs down the drain or in the toilet
- Don't pile snow, leaves, or other materials around well
- Don't overapply pesticides, herbicides, and fertilizers near well

Well Water Test Interpretation Tools:

- Ohio State University Extension
 <u>ohiowatersheds.osu.edu/know-your-well-water</u>
- NH Dept of Environmental Services-Be Well Informed Guide www4.des.state.nh.us/dwitool/welcome.aspx
- Be Well Informed
 bewellinformed.info/workbench

Testing Labs:

- Geauga County Water Resources Lab (440) 279-1970, gcdwr.org
- Biosolutions
 (440) 708-2999, biosolutionslab.com

