



The U.S. Geological Survey (USGS) is the science agency of the Department of the Interior and is primarily involved in the disciplines of hydrology, geology, geography, and biology. For more than 125 years, the USGS has served the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life. The diversity of USGS scientific expertise enables it to carry out large- and small-scale studies and single-discipline or multidisciplinary investigations. The USGS is unique among government organizations because it has neither regulatory nor developmental authority—its sole product is impartial, credible, relevant, and timely information, equally accessible and available to all interested parties.

## Water-Resources Activities in Ohio

The principal location of USGS water-resources activities in Ohio is the USGS Ohio Water Science Center (WSC); the main office is in Columbus, and a field office is in New Philadelphia. The approximately 60 people who

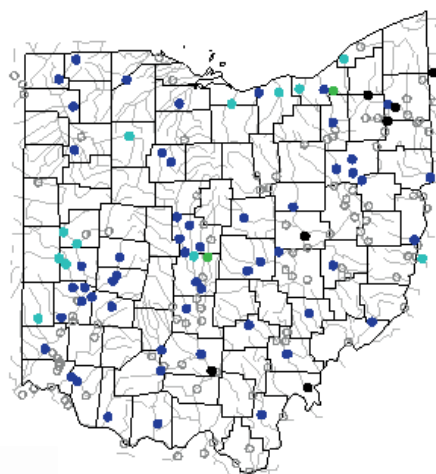
work in the USGS offices in Ohio have scientific expertise in hydrology, engineering, geology, biology, microbiology, chemistry, and geography. The Ohio WSC works cooperatively on studies with local, state, and other Federal agencies, as well as with universities, to furnish decisionmakers, policymakers, and the general public with data and tools to assist them in management and stewardship of Ohio's resources. (See sidebar to the right.)

## Water Information

### Data

In November 1898, the USGS established five streamgages in Ohio. From that small beginning, the hydrologic data-collection network operated by the USGS and cooperating agencies has grown to about 160 streamgages and more than 100 wells.

Hydrologic conditions at many of these locations can be viewed in real-time through NWISWeb (National Water Information System, Web interface) at <http://waterdata.usgs.gov/oh/nwis/>. Real-time streamflow and stage-only gages are shown on the Ohio map below. Real-time water-quality data (temperature, pH, dissolved oxygen, and specific conductance) are available for some of these gages. Real-time ground-water levels are available for selected wells in 11 Ohio counties.



### WHAT KIND OF WORK DOES THE USGS DO, AND HOW IS THE WORK FUNDED?

Water-resources studies undertaken by the USGS must meet mission goals that include advancing knowledge of the regional hydrologic system; advancing field or analytical methodology; advancing understanding of hydrologic processes; providing data or results useful to multiple parties in potentially contentious interjurisdictional conflicts over water resources; furnishing hydrologic data or information that contribute to protection of life and property; and providing standardized, quality-assured data to national data bases available to the public that will be used to advance the understanding of regional and temporal variations in hydrologic conditions.

Some USGS projects are funded directly by the USGS or by other Federal agencies that provide resources for USGS technical assistance. The USGS also works cooperatively with non-Federal agencies—primarily state, county, and municipal agencies with water-resources responsibilities—to jointly plan and fund water-resources projects. Nationwide and in Ohio, non-Federal cooperators contribute about two-thirds of the total cost of these partnership efforts, with the USGS contributing the balance.

The USGS is valued for its technical expertise, quality assurance, and objectivity and impartiality—a result of its scientific, nonregulatory mission. Investigations are done by highly skilled USGS employees using nationally consistent procedures and quality-assurance protocols so that data are directly comparable from one region to another and are available to citizens nationwide.

## HYDROLOGIC SUPPORT TO OTHER FEDERAL AGENCIES

Part of the USGS mission is scientific support to other Federal agencies. In Ohio, the USGS has provided technical expertise to the USEPA, the U.S. Air Force, and the National Park Service for their environmental programs, usually by way of studies to aid in understanding the regional hydrogeologic system. This support includes reviewing reports, attending meetings, and addressing problematic hydrologic issues. The USGS also evaluates the appropriateness of remedial measures for ground-water contamination near Federal facilities, including long-term monitoring and/or engineering measures. In situations where another Federal agency has been faced with conflicting information about a site, the USGS has been involved as an impartial reviewer of hydrologic data.

Historical daily streamflow data (about 420 sites), ground-water levels (about 4,500 sites), and water-quality data (about 4,200 samples) also are available through NWISWeb. These data have been collected as part of the Ohio WSC's long-term hydrologic surveillance program as well as during short-term, local or regional studies. Historical sediment data and water-use data for Ohio can be found by way of the Ohio WSC Web site (<http://oh.water.usgs.gov/data.htm>).

## Publications

The USGS maintains a publication warehouse that contains citations for more than 70,000 publications, with the oldest published in 1882, at <http://pubs.usgs.gov/>. All recent and many historical Ohio WSC publications are available from this source. Citations can be keyword searched by author, title, year, or product type. Full product and thematic map content is viewable online or downloadable for more than 40,000 publications. Information about document availability, price, and purchase options for

hard copies are also can be found through the Publication Warehouse.

## Paper and Digital USGS Maps, Aerial Photographs, and Satellite Imagery

The best known USGS maps are the 7.5-minute topographic maps (1:24,000-scale), which use brown contour lines to show the shape and elevation of the terrain. The USGS distributes and sells paper and digital maps online and through business partners (listed at <http://topomaps.usgs.gov>). The Ohio Department of Natural Resources (ODNR), Division of Geological Survey, also sells USGS topographic maps online, by mail, and over the counter at its office in Columbus (<http://www.dnr.state.oh.us/geosurvey/pub/usgstopo.htm>).

Digital USGS maps and aerial photo images can be viewed online (often at no charge) through seven business partners, which are described at <http://nationalmap.gov/gio/viewonline.html>.

Information about USGS Landsat and satellite imagery can be found at <http://www.usgs.gov/pubprod/satellitedata.html>.

## Employment Opportunities

Information about employment with the USGS can be found at <http://www.usgs.gov/ohr/>.



## Ohio State Facts



Locations on image are approximate

**Capital:** Columbus (★)

**Land Area:** 40,948 sq. miles  
(source: 2003 Census)

**Population:** 11,435,798  
(source: 2003 Census estimate)

**Counties:** 88  
(source: National Association of Counties)

**Highest Point:**  
Campbell Hill at 1,550 feet, located in the county/subdivision of Logan  
(source: U.S. Geological Survey)

**Lowest Point:**  
Ohio River at 455 feet, located in the county/subdivision of Hamilton  
(source: U.S. Geological Survey)

**Geographic Center:**  
Located in Delaware County approx. 25 miles north-northeast of Columbus  
(source: U.S. Geological Survey)

## Additional Information

To learn more about USGS projects in Ohio or USGS information products, please contact

James R. Morris, Director  
USGS Ohio Water Science Center  
6480 Doubletree Avenue  
Columbus, Ohio 43229-1111  
<http://oh.water.usgs.gov/>  
Office: 614-430-7700  
FAX: 614-430-7777  
Email: [dc\\_oh@usgs.gov](mailto:dc_oh@usgs.gov)

Also visit these Web pages:

Water Resources

<http://water.usgs.gov/>

Geology

<http://geology.usgs.gov/>

Geography

<http://geography.usgs.gov/>

Biology

<http://biology.usgs.gov/>