Who We Are?

The Institute of Water Research at Michigan State University is responsible for coordinating research and educational programs on surface water and groundwater quality and quantity. Established in 1961, the Institute addresses multi-disciplinary issues arising from the dynamic interaction of land and water resources, and strengthens MSU's commitment to finding effective solutions to contemporary water resource problems.

OUR GOAL

The Institute's goal is to provide the most accurate and complete information on contemporary land and water issues to citizens, stakeholders, government agencies, and resource managers. To achieve this goal, the Institute consistently collaborates and forges partnerships with other research and resource conservation organizations. The result of these collaborations is the development of science-based information for use by decision-makers faced with complex land and water issues. The increasing use of information technologies and geographical information systems (GIS) for better decision-making is a fundamental part of the Institute's mission in the 21st century.

THE INSTITUTE OF WATER RESEARCH HIGHLIGHTS

Groundwater Mapping Project

On September 26, 2005, DEQ Director Steven E. Chester presented the project team with the DEQ Excellence Award. Michigan Public Act 148 of 2003 required the Department of Environmental Quality (DEQ) to create a "groundwater inventory and map" that includes eight specific map components, a general requirement for a groundwater inventory, and a directive to make the map and inventory available to the public. DEQ created a cooperative research team involving groundwater and mapping experts from the U.S. Geological Survey and the Institute of Water Research and Remote Sensing & Geographic Information Science of Michigan State University.

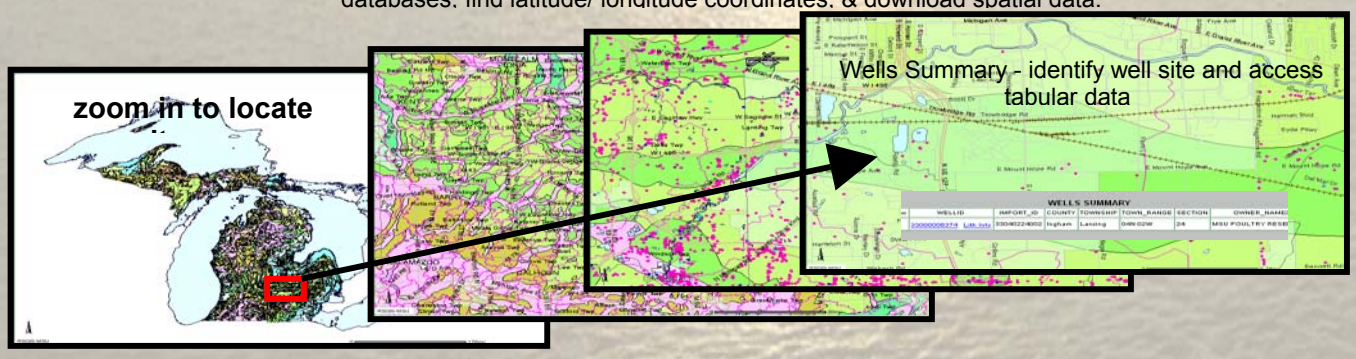
Groundwater inventory and maps available at **http://gwmap.rsgis.msu.edu/**

Maps include:

- Base flow of rivers & streams
- Aquifer recharge rates
- Location and water yielding capabilities of aquifers
- Static water levels of groundwater
- Conflict areas in the state
- Surface waters, including designated trout lakes and streams, and groundwater dependent natural resources identified by natural features inventory
- Location and pumping capacity of specific facilities
- Aggregate agricultural water use & consumptive use, by townships

Several search options are available in the **Groundwater Information Database**. A county summary is available for each county as well as data describing hydrogeological parameters. Publications cited in the summaries can be accessed and downloaded. Publications that contain aquifer data and water quality data can be searched as well. The bibliography contains 464 citations with over 220 digitally scanned documents.

Base map features and image backdrops are included to use with the groundwater maps. With the viewer, users can query well databases, find latitude/ longitude coordinates, & download spatial data.



MICHIGAN STATE UNIVERSITY

Contact Information: Dr. Jon F. Bartholic, Director, Institute of Water Research
1405 S. Harrison Rd., East Lansing, MI 48823
Phone: 517-353-3742, Fax: 517-353-1812, www.iwr.msu.edu

Institute of Water Research