



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2003MI25B

Title: Evaluation and Decision Support System for the Regulation of High Capacity Groundwater Withdrawal in Michigan's Lower Peninsula

Project Type: Research

Focus Categories: Groundwater, Non Point Pollution

Keywords: Groundwater, groundwater regulation, Great Lakes diversion, nonpoint source pollution

Start Date: 03/01/2003

End Date: 02/28/2004

Federal Funds Requested: \$15000.00

Matching Funds: \$30794.00

Congressional District: Eighth

Principal Investigators: Beckwith, Jo Ann

Abstract: Groundwater is an important resource in Michigan. Approximately 858 million gallons of groundwater are used daily for public water supply, domestic uses, industry and agriculture (Solley and other 1998). Increasing demand for freshwater not only in Michigan but nationally has led to an increased number of conflicts for the available water supply. Michigan legislators introduced several Bills into both the State House and Senate to regulate high capacity groundwater withdrawal. While these Bills are apparently designed to address specific use, the laws if enacted would affect a wide variety of other users. The regulation of high capacity wells raises a number of complex issues based on the proposed use of the water. Some of the proposed uses involve shipping the water nationally and involve questions of diversion of Great Lakes water. Other uses, while keeping the water in the Great Lakes Basin create environmental concerns related to the quality of the return flow. All high capacity withdrawals raise questions about a decreased water supply to recharge surface streams and wetlands and the potential for conflict with other water users in the area. The proposed research will evaluate the proposed legislation in terms of the available hydrologic data describing the principal aquifers in Michigan's Lower Peninsula. Based on the evaluation a decision support system will be developed to aid in the incorporation of sound hydrologic science into the legislative process. The system will also permit

applicants and regulators in evaluating specific sites for the placement of high capacity groundwater wells.

[U.S. Department of the Interior, U.S. Geological Survey](#)

Maintain: Schefter@usgs.gov

Last Modified: Wed May 28, 2003 4:26 PM

[Privacy Statement](#) // [Disclaimer](#) // [Accessibility](#)