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HAPPY FISH and WATER WELLS
Michigan's Water Withdrawal Legislation

BACKGROUND

Beginning in 2001, activist-funded lawsuits against water resources developments produced a call for legislative action. In 2003, legislation (2003 P.A. 148) was passed that created the Groundwater Conservation Advisory Council. The legislation required the inventory of state-wide groundwater resources and enacted a Groundwater Conflict Resolution process.

For several years, Great Lakes States and interest groups encouraged Michigan to ratify the Great Lake Basin Compact (or Annex). The Annex requires states to pass groundwater withdrawal screening (permitting) legislation within five years of ratification. The Michigan legislature decided to both ratify the Annex and create water withdrawal permitting to avoid the problems associated with separate legislation.

Effective February 2006, Public Act 34 of 2006 prohibited "Adverse Resource Impacts" by "Large Quantity Withdrawals." A large quantity withdrawal was defined as a groundwater withdrawal of one or more cumulative extractions (water wells) of 100,000 gallons per day or more average in any 30-day period. A well with capacity of 70 gallons per minute (gpm) would qualify as a large quantity withdrawal. A well's capacity is based on the rated pump capacity and the manufacturer's pump curve.

Adverse resource impact was defined as decreasing the flow of trout stream or level in surface water such that a stream's or lake's ability to support it's characteristic fish populations is functionally impaired. This emphasis on fish populations as a benchmark for permitting water use led to the water resource industry's expression, "The Happy Fish Bill."

WATER WITHDRAWAL ASSESSMENT

The Happy Fish Bill was expanded in 2008 with the signing of the Great Lakes Compact by extending the adverse resource impact definition to include all lakes and streams; and including an internet-based assessment tool as part the new or increased large quantity withdrawal permit process.

Large quantity withdrawals for farm use fall under a separate permitting process administered by the Michigan Department of Agriculture (MDA) as opposed to the Michigan Department of Environmental Quality (MDEQ).

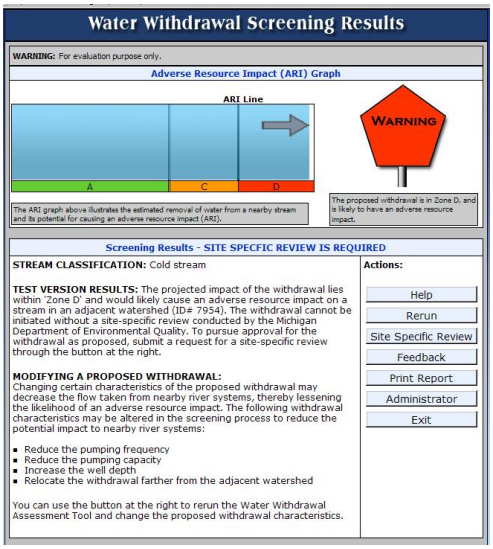
The Water Withdrawal Assessment Tool (WWAT) was developed by the MDEQ, Michigan Department of Natural Resources and the U.S. Geological Survey to assess the likelihood of an adverse resource impact by a proposed large quantity withdrawal. The WWAT is located on the MDEQ website:

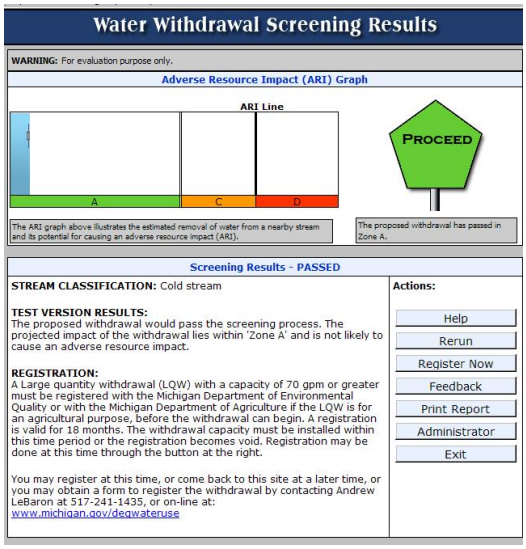
http://www.miwwat.org/

The tool is currently under testing and the online "beta" version is available for public use and comment.

The WWAT requires only the proposed location and depth (well screen interval) of the withdrawal, pumping capacity and frequency of withdrawal. Input of these parameters and running model is easy. Results of the screening may range from "Zone A: Proceed with permitting with no further screening" through "Zone D: Warning, proposed withdrawal is likely to cause an adverse resource impact."

Zone D warnings prevent permitting without a "Site Specific Review" performed by the regulating department. According to MDEQ Water Bureau officials, substantial site-specific evidence must be available to the department to overrule a WWAT result.





WWAT Model Screening Results pages

LIMITATIONS OF THE WWAT

When considering results of the WWAT, it is important to remember that although the MDEQ will hesitate to overrule the WWAT result, the computer models producing the results are based on some significant assumptions.

The WWAT is based on the application of three models that predict:

- groundwater drawdown
- stream or surface water depletion by groundwater drawdown
- fish impact from stream depletion components.

Each of these three model components rely on their own set of assumptions with built-in safety factors. For example, the groundwater withdrawal component does not consider that a withdrawal from a confined aquifer, which is not connected to surface water, would not affect a stream or the fishery that the tool is tasked with protecting.

Therefore, WWAT results should be considered as initial screenings, not definitive permit conditions. The WWAT results should always be evaluated. Withdrawal may not cause an adverse resource impact even if the WWAT has raised cautionary flags.

For more information refer to:

http://www.michigan.gov/deq/0,1607,7-135-3313_3684_45331---,00.html

IMPORTANT EXEMPTIONS

Groundwater withdrawal for cleanups regulated by Parts 201, 213, 111, and/or 115 are exempt from permitting and reporting.

FEES AND REPORTING MANDATES

The large quantity withdrawal application fee is $2,000. Annual reporting fees for existing permits are $200 and reporting forms are due April 1st each year.

Reminder:

Use of the Water Withdrawal Assessment Tool becomes mandatory for Large Quantity Withdrawals on July 9, 2009.

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