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Senate Bill 289 (as enrolled)

PUBLIC ACT 148 of 2003

Sponsor: Senator Patricia L. Birkholz

Senate Committee: Natural Resources and Environmental Affairs

House Committee: Land Use and Environment

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RATIONALE

Containing one-fifth of the world's fresh water, the Great Lakes are increasingly coveted as the world's human population climbs steadily, pollution increases, and conservation measures do not keep pace with development. One report published by Michigan Citizens for Water Conservation asserts that global demand for water doubles every 20 years. Because water scarcity has not been a problem for Michigan, however, the State does not regulate the quantitative withdrawal of water from either the surface of the lakes or from the underground aquifers that supply between 24% and 32% of the Great Lakes' surface water. (An aquifer is an underground water bed between rocks and soil that is recharged by rain and snow melt).

Absent regulation, Michigan landowners maintain virtually all rights to the water underneath their property. In the past three years, however, a number of water conflicts have arisen. In 2002, the Perrier Group of America, owner of the Ice Mountain brand of bottled water, built a water-bottling plant in Mecosta County and began pumping out groundwater at a rate of 130 gallons per minute. According to an article in the *Detroit Free Press* (5-5-03), the company plans to boost withdrawals to at least 400 gallons per minute. The group Michigan Citizens for Water Conservation has filed a lawsuit against the company, claiming that the withdrawals have harmed, or likely will harm, the environment and members of the citizens group. Further east, southern Saginaw County residents who live near large agricultural irrigators claim that their well levels and water pressure drop significantly during growing season, often leaving them without running water. Also, it is reported

that groundwater supplies in several of Monroe County's townships regularly fail to meet the needs of many local residents. Drought and large groundwater withdrawals, particularly by rock mining operations in the area, have caused significant drops in subsurface water levels there, allowing toxic elements, such as sulfur, to infiltrate private wells. Many Monroe County residents have been forced to import water for drinking and domestic use. According to the Department of Environmental Quality (DEQ), these withdrawals also threaten the water that replenishes the Great Lakes because groundwater supplies 67% of the water in streams that feed the Great Lakes.

Increased Great Lakes protection, including the regulation of water that feeds the Great Lakes, has been in the planning stages for a number of years. In 1985, the Great Lakes governors and Canadian premiers signed the Great Lakes Charter, a voluntary agreement through which the Great Lakes states and provinces cooperatively manage the waters of the Great Lakes. In June 2001, the governors and premiers reaffirmed their commitment to the health of the Great Lakes by signing the Great Lakes Charter Annex 2001 ("Annex 2001"). Annex 2001 focuses specifically on water withdrawals by outlining the basic principles that state and provincial governments should use when evaluating water withdrawal proposals. Annex 2001 also calls for coordinated standards that guide water use decisions toward the common goal of protecting and enhancing the Great Lakes ecosystem. Both the original charter and the Annex are nonbinding, and require statutory authority to be implemented. Also, any water withdrawal legislation must not conflict with

the Commerce Clause of the U.S. Constitution or the provisions of various international trade agreements.

In August 2001, then-Senate Majority Leader Dan DeGrow created the Great Lakes Conservation Task Force, composed of five Republican and three Democratic State Senators. Senator DeGrow charged the Task Force with upholding Article IV, Section 52 of the Michigan Constitution, in which the Legislature is required to: "provide for the protection of the air, water and other natural resources of the state from pollution, impairment and destruction". Specifically, the Task Force was asked to recommend to the Legislature policy changes that would improve the Great Lakes ecosystem. Chaired by Senator Ken Sikkema, the Task Force conducted eight public hearing throughout the State, took considerable oral and written testimony, and issued its report in January 2002. In its report, the Task Force recommended the following two policy changes to address aquifer protection, diversion, and water withdrawals: "1. The Legislature should enact comprehensive water withdrawal laws. This process may require a step-by-step approach, beginning with the enactment of an aquifer protection statute. 2. The Legislature should also promptly enact any implementation laws arising from the consummation of the Annex 2001 process."

As a result of the Task Force report, Annex 2001, and the issues in Mecosta, Saginaw, and Monroe Counties, some people believe the State should take preliminary steps to regulate withdrawals from Michigan aquifers.

CONTENT

The bill amended Part 327 (Great Lakes Preservation) of the Natural Resources and Environmental Protection Act, and added Part 328 (Aquifer Protection), to do the following:

- Require the Department of Environmental Quality to prepare a Statewide groundwater inventory and map within two years after the bill's effective date.**
- Increase water use reporting fees for industrial, processing, and irrigation facilities with a capacity to pump over 100,000 gallons per day from \$50 to**

\$100.

- Require farms with a capacity to pump over 100,000 gallons a day, beginning one year after the bill's effective date, either to register with the DEQ and pay the water use reporting fee, or to register with the Michigan Department of Agriculture (MDA) by submitting a water use conservation plan.**
- Allow money in the Water Use Protection Fund to be used for the groundwater inventory and map, and for the implementation of Part 317 (Groundwater Dispute Resolution) (proposed by House Bill 4087).**
- Require the MDA to use the information in the conservation plan to determine an estimate of water use and consumptive use data for each township in the State, and then forward the data to the DEQ for inclusion in the groundwater inventory and map.**
- Require the DEQ, the MDA, and Michigan State University to validate and use a formula or model to estimate the consumptive use of withdrawals made for agricultural purposes.**
- Create the Groundwater Advisory Council within the DEQ to study the sustainability of the State's groundwater use, monitor implementation the Great Lakes Charter Annex 2001, and make recommendations on statutory conformance with Annex 2001.**

100,000-Gallon Facilities

Registration. Part 327 requires that owners of industrial or processing facilities or irrigation facilities register with the DEQ if the facilities have the capacity to withdraw over 100,000 gallons of water per day from the waters of the Great Lakes basin in any consecutive 30-day period. The bill also requires the owner of a farm with the capacity to withdraw over 100,000 gallons of water per day from the Great Lakes basin in any consecutive 30-day period to register, beginning one year after the bill's effective date. (Alternatively, owners of farms with the capacity to withdraw over 100,000 gallons per day may register by submitting a water use conservation plan, as described below.)

Report. Under Part 327, 100,000-gallon facilities that register with the DEQ also must submit to the Department an annual report stating the rate of water withdrawn on an annual and monthly basis, the source of the water supply, the use of the water, and the amount of consumptive water use. The bill requires that this report also contain the amount (as well as the rate) of water withdrawn on an annual and monthly basis. In addition, if the source of the water is groundwater, the report must contain the static water level of the aquifer or aquifers, and the location of the well or wells from which the water is withdrawn in latitude and longitude, with the accuracy of the reported location data to within 15 feet.

Fee. Part 327 requires that owners of facilities who file the required annual report remit a water use reporting fee to the DEQ. The bill increases the fee from \$50 to \$100, and requires that the fee be remitted annually. Under the Act, money collected from the fee must be credited to the Water Use Protection Fund, and the DEQ may use money in the Fund for the implementation and administration of Part 327. Under the bill, money in the Fund also may be used for the preparation of the Statewide groundwater inventory and map required under the bill, and for the implementation and administration of Part 317 (Aquifer Protection and Dispute Resolution) (proposed by House Bill 4087).

Farms

Conservation Plan. Under Part 327, the term "irrigation facility" excluded irrigation for an agricultural purpose (which meant that the registration, reporting, and fee requirements described above did not apply to agricultural irrigation facilities). The bill, instead, states that irrigation facility does not include a farm (as defined in the Michigan Right to Farm Act).

Under the bill, the owner of a farm with the capacity to withdraw over 100,000 gallons of water per day average in any consecutive 30-day period from the Great Lakes basin must register and report beginning one year after the bill's effective date. The registration, reporting, and fee requirements do not apply, however, if a farm owner who makes a withdrawal for an agricultural purpose, including irrigation, registers the farm address and reports water use by annually submitting

a water use conservation plan to the MDA, beginning one year after the bill's effective date. The conservation plan must include, but need not be limited to, all of the following information:

- The amount and rate of water withdrawn on an annual and monthly basis in either gallons or acre inches.
- The type of crop irrigated, if applicable.
- The acreage of each irrigated crop, if applicable.
- The source or sources of the water supply.
- The use or uses of the water withdrawn, if it is not used entirely for irrigation.
- The static water level of the aquifer or aquifers, if the source of water withdrawn is groundwater.
- Applicable water conservation practices and an implementation plan for those practices.

The MDA must use this information to determine an estimate of water use and consumptive use data for each township in the State. The MDA then must forward the township water use and consumptive use data to the DEQ for inclusion in the Statewide groundwater inventory and map.

Definition. Part 327 defined "agricultural purpose" as the agricultural production of forestry, livestock, food, feed, or fiber. The bill defines it as the agricultural production of those plants and animals useful to human beings produced by agriculture, including forages and sod crops, grains and feed crops, field crops, dairy and dairy products, poultry and poultry products, cervidae, livestock, including breeding and grazing, equine, fish and other aquacultural products, bees and bee products, berries, herbs, fruits, vegetables, flowers, seeds, grasses, nursery stock, trees and tree products, mushrooms, and other similar products, or any other product, as determined by the Michigan Commission of Agriculture, that incorporates the use of food, feed, fiber, or fur.

Groundwater Inventory & Map

Under Part 328, added by the bill, the DEQ must collect and compile groundwater data into a statewide groundwater inventory and map, within two years after the bill's effective date. The DEQ must use existing sources of groundwater data, where available, include the information reported under Part 327,

information reported under the Safe Drinking Water Act, and information collected under the groundwater dispute resolution program that would be established in proposed Part 317. The DEQ may supplement the data through additional studies if the data are incomplete. Following completion of the initial statewide groundwater inventory and map, the DEQ must update the inventory and map as new information becomes available.

The Department must include in the inventory and map data on all of the following:

- Location and water yielding capabilities of aquifers in the State.
- Aquifer recharge rates in the State, if available to the DEQ.
- Static water levels of groundwater in the State.
- Base flow of rivers and streams in the State.
- Conflict areas in the State.
- Surface waters, including designated trout lakes and streams, and groundwater-dependent natural resources, that are identified on the natural features inventory (maintained by the Department of Natural Resources (DNR)).
- The location and pumping capacity of industrial, processing, or irrigation facilities registered under Part 327 that withdraw water.
- The location and pumping capacity of public water supply systems having the capacity to withdraw over 100,000 gallons of groundwater per day average in any consecutive 30-day period.
- Aggregate agricultural water use and consumptive use, by township.

The DEQ must make the map and inventory available to the general public.

(Part 328 defines "groundwater" as water below the land surface in a zone of saturation. "Aquifer" means any water bearing bed or stratum of earth or rock capable of yielding groundwater to water well in sufficient quantities that can be withdrawn. "Base flow" means groundwater discharge to rivers and streams. "Conflict areas" means an aquifer or a portion of an aquifer in which the DEQ has determined that there is reasonable, scientifically based evidence of a pattern of groundwater withdrawal conflicts, or a single extended groundwater withdrawal conflict.

"Groundwater withdrawal conflict" means the failure of an existing water well that was constructed in compliance with Part 127 (Water Supply and Sewer Systems) of the Public Health Code to furnish its normal supply of groundwater because of a progressive decline of the static water level within the aquifer due to the withdrawal of groundwater from the aquifer by a high-capacity well or sump, as determined based on reasonable, scientifically based evidence. "Static water level" means the distance between the ground surface and the water level within a well that is not being pumped.)

Advisory Council

Under Part 328, the Groundwater Conservation Advisory Council is created within the DEQ. The Council must consist of all of the following members:

- Three individuals appointed by the Senate Majority Leader representing business and manufacturing interests, utilities, and conservation organizations.
- Three individuals appointed by the Speaker of the House of Representatives representing well drilling contractors, local units of government, and agricultural interests.
- Three individuals representing the DEQ, the MDA, and the DNR, as nonvoting members serving as information resources to the Council.
- Four individuals appointed by the DEQ Director representing nonagricultural irrigators, the aggregate industry, environmental organizations, and the general public.

The Council must do all of the following: 1) study the sustainability of Michigan's groundwater use and whether the State should provide additional oversight of groundwater withdrawals, 2) monitor Annex 2001 implementation efforts and make recommendations on Michigan's statutory conformance with Annex 2001, including whether groundwater withdrawals should be subject to best management practices or certification requirements and whether groundwater withdrawals have an impact on water-dependent natural features, and 3) study the implementation of and the results from the groundwater dispute resolution program created in proposed Part 317.

Within two and a half years after the bill's effective date, the Council must submit a report, approved by a majority of the voting members of the Council, on its findings and recommendations to the Senate Majority Leader, the Speaker of the House, and the standing committees of the Legislature with jurisdiction primarily related to natural resources and the environment. The Council is to disband six months after submitting its findings and recommendations.

MCL 324.32701 et al.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

According to the report of the Great Lakes Conservation Task Force, "There is an immediate need for an aquifer protection statute to protect the public and the environment from both present and future problems caused by water withdrawals." The bill takes an important and manageable first step toward aquifer protection by building on the water use reporting procedure already in place. The creation of a Statewide groundwater inventory and map will provide, for the first time, a complete picture of Michigan's complex hydrology. The requirement that farms pumping over 100,000 gallons a day report their water use, just as other industrial, processing, or irrigation facilities must, will enable officials to compile comprehensive data for the inventory and map. With this information, State policy-makers will be able to determine the scope of groundwater withdrawal issues and then create appropriate regulations.

Focusing on the creation of the map, inventory, and Advisory Council will lay the foundation for future water protection statutes.

Response: The bill does not go far enough to protect aquifers or Michigan citizens from high capacity wells that harm fragile ecosystems. While a groundwater map and inventory may be administratively useful, they fall short of regulation. Meanwhile, the Perrier (Ice Mountain) bottling plant plans to more than double the rate at which it extracts water from the ground near the headwaters of the Little Muskegon River, which flows into the Big

Muskegon River, which in turn flows into Lake Michigan. Most Michigan residents believe these waters are the heritage of citizens and the flora and fauna that grace the area. The water should be enjoyed and shared by all, not privatized and sold by a corporation.

Opposing Argument

Expanding the water use reporting requirement will be ineffective because the system is faulty. According to the Michigan Groundwater Association, a professional association for well drillers, a relatively low percentage, between 10% and 25%, of the owners of 100,000-gallon facilities actually submit their water use report as required. The Association believes the low reporting rates are due to lack of awareness of the requirement; an incorrect assumption by facility owners that if they have secured the appropriate local permits, their obligations have been met; and a lack of readily available reporting forms.

Opposing Argument

The new reporting requirements for farms do not provide for uniform data collection. The bill requires a farm to submit, in its conservation report, the farm's address but not the precise location of its wells. A farm's address could comprise an area as large as 36 square miles. Agricultural facilities should have to report the same information in the same manner as industrial, processing, and irrigation facilities must report, in order to lessen the burden on the DEQ and to provide for a more accurate map.

Legislative Analyst: Claire Layman

FISCAL IMPACT

The bill doubles the current water use reporting fee from \$50 to \$100 annually. Revenue from the fee will double from \$46,805 in FY 2001-02 to \$93,610. According to data provided by the DEQ, the program requires approximately \$150,000 to operate. The costs not covered by fee revenue are supported by the General Fund.

The bill requires the development of a Statewide groundwater inventory within two years of the bill's effective date. While maintenance of the database is considered part of the overall program, and revenue from the water use reporting fee may be used for preparation of the Statewide groundwater inventory, implementation costs might require

additional appropriations. The enacted FY 2003-2004 appropriations bill for the DEQ (Public Act 171 of 2003) includes \$1 million from the Clean Michigan Initiative– Clean Water Fund to support the implementation of the Statewide groundwater inventory and map. Further, language contained in the enrolled supplemental appropriations bill, Senate Bill 540, specifies that \$64,100 of the water use reporting fee is for the preparation of the groundwater inventory. This amount is the increased appropriation in the fees as a result of Senate Bill 289.

Agricultural irrigation facilities have been exempt from paying water use reporting fees, and farms will retain that exemption if their owners register with the Department of Agriculture.

Fiscal Analyst: Jessica Runnels

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.