March 11, 2003, Introduced by Senators BIRKHOLZ, TOY, PATTERSON, CASSIS, SIKKEMA, GOSCHKA, VAN WOERKOM, JOHNSON, BARCIA, McMANUS, HAMMERSTROM and ALLEN and referred to the Committee on Natural Resources and Environmental Affairs.

A bill to amend 1994 PA 451, entitled "Natural resources and environmental protection act," (MCL 324.101 to 324.90106) by adding part 328.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- 1 PART 328 CRITICAL AQUIFER PROTECTION
- 2 Sec. 32801. As used in this part:
- 3 (a) "Aquifer" means any water bearing bed or stratum of earth
- 4 or rock capable of yielding groundwater to a water well in
- sufficient quantities that can be withdrawn.
- (b) "Artesian aquifer" means an aquifer overlain by a layer
- 7 of material of less permeability than the aquifer and where the
- 8 aquifer is under sufficient pressure so that when it is
- penetrated by a well, the groundwater will rise naturally above
- 10 the top of the aquifer.

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(c) "Available drawdown" means the difference in depth

- 1 between the static water level and the bottom of the aquifer.
- 2 (d) "Certificate" or "groundwater withdrawal certificate"
- 3 means a groundwater withdrawal certificate issued under this
- 4 part.
- 5 (e) "Class 1 groundwater withdrawal facility" means a
- 6 groundwater withdrawal facility that is located in a critical
- 7 aquifer and in which the department has determined, based upon a
- 8 hydrogeologic study, that the proposed groundwater withdrawal
- 9 will not exceed the sustainable yield.
- 10 (f) "Class 2 groundwater withdrawal facility" means a
- 11 groundwater withdrawal facility that is located in a critical
- 12 aguifer and either of the following conditions exists:
- 13 (i) The department has determined, based upon a hydrogeologic
- 14 study, that the proposed groundwater withdrawal will exceed the
- 15 sustainable yield.
- 16 (ii) The department has reasonable evidence of an existing
- 17 groundwater withdrawal conflict.
- 18 (g) "Consolidated geologic materials" means geologic
- 19 formation materials, such as limestone, dolomite, sandstone,
- 20 shale, basalt, or granite, that are coherent due to the
- 21 interlocking or cementation of their mineral components.
- (h) "Critical aquifer" means an aquifer in which the
- 23 department has determined that there is reasonable evidence of an
- 24 existing or potential groundwater withdrawal conflict.
- 25 (i) "Department" means either of the following:
- 26 (i) The department of agriculture if the responsibility
- 27 assigned to the department under this part involves a groundwater

- 1 withdrawal facility that is used for an agricultural purpose.
- 2 (ii) The department of environmental quality if the
- 3 responsibility assigned to the department under this part
- 4 involves a groundwater withdrawal facility that is used for a
- 5 purpose other than an agricultural purpose.
- 6 (j) "Ecosystem status of the water source" means the
- 7 indicators of the physical, chemical, and biological integrity of
- 8 that water source and the ecosystems that depend on it.
- 9 (k) "Fund" means the aquifer protection fund created in
- 10 section 32808.
- 11 (1) "Groundwater" means water below the land surface in a
- 12 zone of saturation.
- 13 (m) "Groundwater withdrawal conflict" means the failure of an
- 14 existing water well that was constructed in compliance with part
- 15 127 of the public health code, 1978 PA 368, MCL 333.12701 to
- 16 333.12771, to furnish its normal supply of groundwater because of
- 17 a progressive decline of the water level within the aquifer due
- 18 to the withdrawal of groundwater from the aquifer by a
- 19 high-capacity well or sump.
- 20 (n) "Groundwater withdrawal facility" means a water well or
- 21 sump, or a combination of wells and sumps equipped with, or
- 22 intended to be equipped with, a pump or pumps capable of
- 23 extracting groundwater at a rate of more than 70 gallons per
- 24 minute. Two or more groundwater withdrawal facilities on
- 25 contiguous parcels under the same ownership and pumping from the
- 26 same aquifer shall be considered a single groundwater withdrawal
- 27 facility. Groundwater withdrawal facility does not include any

- 1 of the following:
- 2 (i) A water well used solely for fire protection.
- (ii) A dewatering well, regulated under part 127 of the
- 4 public health code, 1978 PA 368, MCL 333.12701 to 333.12771, if
- 5 the provisions of R 325.1755 of the Michigan administrative code
- 6 have been met.
- 7 (iii) Groundwater contamination remediation wells installed
- 8 under this act.
- 9 (o) "Hydrogeologic study" means a hydrogeologic study
- 10 described in section 32804.
- 11 (p) "Potentially impacted well" means a water well that may
- 12 be subject to a groundwater withdrawal conflict.
- 13 (q) "Return flow" means the return of water to the waters of
- 14 the Great Lakes basin.
- 15 (r) "Static water level" means the distance between the
- 16 ground surface and the water level within a well that is not
- 17 being pumped or is not under the influence of a well that is
- 18 being pumped.
- 19 (s) "Sump" means an excavation, pit, infiltration gallery, or
- 20 other structure that is installed for the purpose of lowering the
- 21 groundwater level at a groundwater withdrawal facility.
- 22 (t) "Sustainable yield" means the amount of groundwater,
- 23 giving due consideration to existing groundwater withdrawals,
- 24 that can be withdrawn from an aquifer based on 100 days of
- 25 continual pumping at the rated pump capacity without recharge and
- 26 without causing any of the following conditions:
- 27 (i) A progressive decline of the water level of at least 5

- 1 feet below the static water level within a potentially impacted
- 2 well that is completed in unconsolidated geologic materials, or
- 3 at least 25 feet below the static water level within an existing
- 4 water well that is completed in consolidated geologic materials.
- 5 (ii) A progressive decline of water level that reduces the
- 6 available drawdown of the aquifer on the property of adjacent
- 7 groundwater users by at least 25%.
- 8 (u) "Unconsolidated geologic materials" means geologic
- 9 formation materials that are loose and noncemented, such as sand
- 10 or gravel.
- 11 (v) "Water table aquifer" means an aquifer where groundwater
- 12 is under atmospheric pressure.
- 13 (w) "Water well" means an opening in the surface of the earth
- 14 that is intended for the removal of groundwater for any purpose.
- 15 A water well includes, but is not limited to, a vertical
- 16 borehole.
- 17 (x) "Water-dependent natural resources" means those systems
- 18 of plants, animals, and microorganisms, together with the
- 19 nonliving component of their environment, and related ecological
- 20 processes that are dependent on water for their survival and
- 21 well-being.
- 22 (y) "Waters of the Great Lakes basin" means the surface
- 23 waters and groundwaters within or under the Great Lakes surface
- 24 watershed and the groundwater outside the Great Lakes surface
- 25 watershed determined to contribute to those waters of the Great
- 26 Lakes surface watershed. Waters of the Great Lakes basin include
- 27 all groundwater in the state.

- 1 (z) "Withdrawal" or "withdraw" means the taking of
- 2 groundwater from where it naturally occurs.
- 3 Sec. 32802. (1) Subject to subsection (2), beginning 2
- 4 years after the effective date of the amendatory act that added
- 5 this section, a groundwater withdrawal facility within a critical
- 6 aquifer as identified on the map of critical aquifers prepared
- 7 under section 32809 shall not extract groundwater at a rate of
- 8 more than 70 gallons per minute unless a groundwater withdrawal
- 9 certificate has been obtained from the department.
- 10 (2) Until 10 years after the effective date of the amendatory
- 11 act that added this section, a facility withdrawing groundwater
- 12 on the effective date of the amendatory act that added this
- 13 section is not required to obtain a groundwater withdrawal
- 14 certificate unless additional water wells are proposed to be
- 15 added or the pumping capacity is proposed to be increased and the
- 16 total groundwater withdrawal would be increased by at least 70
- 17 gallons per minute. Beginning 10 years after the effective date
- 18 of the amendatory act that added this section, all groundwater
- 19 withdrawal facilities meeting the requirements of subsection (1)
- 20 shall obtain a groundwater withdrawal certificate.
- 21 Sec. 32803. (1) The owner of a groundwater withdrawal
- 22 facility or a proposed groundwater withdrawal facility or the
- 23 owner's authorized representative may apply for a groundwater
- 24 withdrawal certificate by submitting an application to the
- 25 department on a form provided by the department. The applicant
- 26 shall provide the department with all of the following
- 27 information:

- 1 (a) The purpose of and need for the withdrawal, including
- 2 measures investigated to reduce or eliminate the amount of the
- 3 withdrawal needed.
- 4 (b) The location of the proposed groundwater withdrawal
- 5 facility and the course of the proposed withdrawal and the
- 6 ownership of all lands upon and through which the proposed
- 7 withdrawal will occur, and documentation of any pertinent
- 8 agreements, easements, and rights-of-way obtained from landowners
- 9 regarding the withdrawal.
- 10 (c) The proposed well or sump locations at the groundwater
- 11 withdrawal facility, including the township name, township
- 12 number, range number, section number, and fractional description
- 13 of the location within the section, and the county.
- 14 (d) Proof of ownership of the property from which the
- 15 groundwater withdrawal will occur.
- 16 (e) The rated pumping capacity of pumping equipment to be
- 17 installed in the water wells or sumps.
- 18 (f) The infrastructure through which the water is to be
- 19 withdrawn.
- 20 (g) The frequency, duration, and amount of water to be
- 21 withdrawn per day, month, and year.
- 22 (h) A hydrogeologic study.
- 23 (2) An applicant for a groundwater withdrawal certificate
- 24 shall submit a fee in an amount established by the department.
- 25 The department shall establish this fee based upon the
- 26 administrative costs of the department in reviewing certificate
- 27 applications under this part. The department shall forward fees

- 1 collected under this subsection to the state treasurer for
- 2 deposit into the fund.
- 3 (3) An incomplete application or an application submitted to
- 4 the department without payment of the fee under subsection (2)
- 5 shall not be processed.
- 6 Sec. 32804. A hydrogeologic study submitted under this part
- 7 shall include at least the following information as required by
- 8 the department based upon gaps in the department's hydrogeologic
- 9 data related to the proposed groundwater withdrawal facility:
- 10 (a) The location of the wells or sumps at the groundwater
- 11 withdrawal facility, and the latitude and longitude of the wells
- 12 or sumps using a global positioning system.
- 13 (b) A summary of regional and local hydrogeology, including
- 14 an estimate of the areal and vertical extent of the aguifer,
- 15 whether the aquifer is a water table aquifer or an artesian
- 16 aquifer, flow direction of the aquifer, and whether the aquifer
- 17 consists of consolidated or unconsolidated geologic materials.
- (c) An estimate of hydraulic characteristics including
- 19 aquifer storage coefficient and transmissivity based on an
- 20 aguifer test of sufficient design and duration.
- 21 (d) The proposed rate of groundwater withdrawal.
- (e) The location of potentially impacted wells within a
- 23 radius of 1 mile of the groundwater withdrawal facility. If no
- 24 potentially impacted wells exist within a 1-mile radius of the
- 25 groundwater withdrawal facility, the nearest 4 potentially
- 26 impacted wells surrounding the groundwater withdrawal facility
- 27 shall be identified.

- 1 (f) A current record of static water levels from wells in the
- 2 vicinity as follows:
- 3 (i) If there are wells located within 1 mile of the
- 4 groundwater withdrawal facility, the static water levels shall be
- 5 obtained in accordance with all of the following:
- 6 (A) At a minimum, from wells located north, south, east, and
- 7 west of the groundwater withdrawal facility.
- 8 (B) Collected from the well or wells at the groundwater
- 9 withdrawal facility.
- 10 (C) Collected from 10% or not less than 4 of the potentially
- 11 impacted wells identified under subdivision (e), whichever is
- 12 greater.
- 13 (ii) If no wells are located within 1 mile of the groundwater
- 14 withdrawal facility, static water levels shall be collected from
- 15 not less than the nearest 4 potentially impacted wells or from
- 16 not less than 4 wells installed by the applicant, which are
- 17 completed in the same aquifer as the well or wells serving the
- 18 groundwater withdrawal facility and which are located in
- 19 accordance with subparagraph (i)(A).
- 20 (g) Projections of drawdown within the aquifer as a function
- 21 of distance from the groundwater withdrawal facility, including a
- 22 determination of the sustainable yield.
- 23 (h) Identification of potentially impacted wells identified
- 24 under subdivision (e), which withdraw more than 70 gallons per
- 25 minute.
- 26 Sec. 32805. (1) The department shall process all
- 27 administratively complete groundwater withdrawal certificate

- 1 applications in the order in which they are received.
- 2 (2) Within 45 days of receipt of an administratively complete
- 3 groundwater withdrawal certificate application under section
- 4 32803, the department shall evaluate the application and shall
- 5 determine whether the application is for a class 1 groundwater
- 6 withdrawal facility or a class 2 groundwater withdrawal
- 7 facility.
- 8 (3) If an aggrieved person requests the department to
- 9 schedule a public hearing on a groundwater withdrawal certificate
- 10 application, the request shall be made in writing and any hearing
- 11 shall be conducted pursuant to R 325.10201 and R 325.10202 of the
- 12 Michigan administrative code. A public hearing under this
- 13 subsection shall be held within 45 days of the department's
- 14 receipt of an administratively complete application.
- 15 Sec. 32806. (1) If the department has determined under
- 16 section 32805 that the application is for a class 1 groundwater
- 17 withdrawal facility, the department shall issue to the applicant
- 18 a groundwater withdrawal certificate.
- 19 (2) If the department determines that the application is for
- 20 a class 2 groundwater withdrawal facility, the department shall
- 21 do all of the following:
- (a) Require the applicant to submit an additional fee in an
- 23 amount established by the department. The department shall
- 24 establish this additional fee based upon the additional
- 25 administrative costs of the department in reviewing applications
- 26 for class 2 groundwater withdrawal facilities. The department
- 27 shall forward this fee to the state treasurer for deposit into

- 1 the fund.
- 2 (b) Require the applicant to submit to the department all of
- 3 the following additional information:
- 4 (i) The estimated condition, amount of water, times of the
- 5 year, and places that withdrawn water will be returned to the
- 6 local ecosystem as return flow.
- 7 (ii) The requirements imposed on the proposed water
- 8 withdrawals by other statutes, including, but not limited to, the
- 9 federal water pollution control act, chapter 758, 86 Stat. 816,
- 10 33 U.S.C. 1251 to 1252, 1253 to 1254, 1255 to 1257, 1258 to 1263,
- 11 1265 to 1270, 1273 to 1274, 1281, 1282, to 1293, 1294 to 1301,
- 12 1311 to 1313, 1314 to 1330, 1341 to 1346, 1361 to 1375, 1376 to
- 13 1377, and 1381 to 1387.
- 14 (iii) The means for monitoring and documenting return flow.
- 15 (iv) Measures that will be taken by the applicant to do both
- 16 of the following:
- 17 (A) Implement environmentally sound and economically feasible
- 18 water conservation measures.
- 19 (B) Improve the waters of the Great Lakes basin and the
- 20 water-dependent natural resources of the Great Lakes basin.
- 21 (v) Other information required by the department.
- (c) Provide the applicant all of the following information:
- 23 (i) The current ecosystem status of the water source that
- 24 will be affected by the withdrawal.
- 25 (ii) The ecosystem status of the waters that will receive the
- 26 return flow, and the expected impact of return flow on that
- 27 status.

- 1 (iii) The expected recharge rate and estimated area and depth
- 2 of the cone of depression of any affected aquifer, in cases where
- 3 necessary to avoid impacts to other aquifer users.
- 4 (3) The department shall not issue a groundwater withdrawal
- 5 certificate for a class 2 groundwater withdrawal facility unless
- 6 the applicant can demonstrate that the withdrawal will meet all
- 7 of the following standards and the department makes these
- 8 standards a condition of the certificate:
- 9 (a) There is a demonstrated need for the proposed
- 10 withdrawal.
- 11 (b) The withdrawal and its associated use or transport of
- 12 water will prevent or minimize water loss from the watershed
- 13 through return flow and implementation of environmentally sound
- 14 and economically feasible water conservation measures.
- 15 (c) The withdrawal will result in no significant adverse
- 16 individual or cumulative impacts to the quantity and quality of
- 17 the waters of the Great Lakes basin and water-dependent natural
- 18 resources of the Great Lakes basin.
- 19 (d) Subject to subdivision (g), the withdrawal will not
- 20 adversely affect other users of the same aguifer.
- 21 (e) The withdrawal is consistent with the future water use
- 22 needs identified in any master land use or zoning plan adopted by
- 23 the local unit of government in which the withdrawal is
- 24 proposed.
- 25 (f) The applicant will improve the waters of the Great Lakes
- 26 basin and the water-dependent natural resources of the Great
- 27 Lakes basin. When assessing whether a proposed improvement is

- 1 sufficient to meet this condition, the department shall place a
- 2 higher priority on proposals that improve the affected waters or
- 3 water-dependent natural resources.
- 4 (g) The applicant has submitted 1 or more of the following:
- 5 (i) Signed affidavits from all potentially impacted well
- 6 owners acknowledging and accepting the potential impact.
- 7 (ii) A legally binding agreement between the applicant and
- 8 the owners of potentially impacted wells that provides for well
- 9 alteration, well replacement, provisions for an alternate water
- 10 supply, financial compensation, or other remedies as agreed upon
- 11 between the parties.
- 12 (iii) A proposal to limit the groundwater withdrawal to the
- 13 sustainable yield of the aquifer.
- 14 (4) If the department denies an application for a groundwater
- 15 withdrawal certificate, the department shall provide notice of
- 16 the denial to the applicant and the reason or reasons for the
- 17 denial. An applicant who is denied a groundwater withdrawal
- 18 certificate may demand a contested case hearing on the denial
- 19 pursuant to the administrative procedures act of 1969, 1969 PA
- 20 306, MCL 24.201 to 24.328.
- 21 Sec. 32807. A groundwater withdrawal certificate issued
- 22 under this part is valid for a 5-year period at the pumping rate
- 23 as specified in the certificate. Upon expiration of a
- 24 certificate, the certificate may be renewed. The owner of a
- 25 groundwater withdrawal facility or his or her authorized
- 26 representative who wishes to renew a certificate shall submit an
- 27 application for a certificate renewal and a certificate renewal

- 1 application fee to the department. The application shall contain
- 2 the information required by the department. The department shall
- 3 renew the certificate unless there has been a significant and
- 4 substantial change in conditions affecting the aquifer. If the
- 5 department determines that there has been a significant and
- 6 substantial change in conditions affecting the aquifer, the
- 7 department shall evaluate the renewal application based upon the
- 8 standards provided in this section. The department shall
- 9 establish a fee for certificate renewals based on the
- 10 administrative costs of the department in reviewing certificate
- 11 renewal applications. The department shall forward fees
- 12 collected under this section to the state treasurer for deposit
- 13 into the fund.
- 14 Sec. 32808. (1) The aquifer protection fund is created
- 15 within the state treasury.
- 16 (2) The state treasurer may receive money or other assets
- 17 from any source for deposit into the fund. The state treasurer
- 18 shall direct the investment of the fund and shall credit to the
- 19 fund interest and earnings from fund investments.
- 20 (3) Money in the fund at the close of the fiscal year shall
- 21 remain in the fund and shall not lapse into the general fund.
- 22 (4) The department of environmental quality and the
- 23 department of agriculture may expend money from the fund, upon
- 24 appropriation, only for the implementation and administration of
- 25 this part.
- 26 (5) Beginning 4 years after the effective date of the
- 27 amendatory act that added this section and at least every 4 years

- 1 thereafter, the department and the department of agriculture
- 2 shall jointly prepare and submit to the legislature a report that
- 3 evaluates the adequacy of the fees established under this part in
- 4 providing the resources necessary to implement this part.
- 5 Sec. 32809. (1) Not later than 2 years after the effective
- 6 date of the amendatory act that added this section, the
- 7 department shall collect and compile groundwater data into a
- 8 statewide groundwater inventory. The department shall use
- 9 existing sources of groundwater data where that data is
- 10 available, but may supplement that data through additional
- 11 studies if that data is incomplete. From the information in the
- 12 statewide groundwater inventory, the department shall identify
- 13 critical aquifers. The department shall prepare a map that
- 14 delineates critical aquifers in the state.
- 15 (2) The department shall make the statewide groundwater
- 16 inventory and the map of critical aquifers prepared under
- 17 subsection (1) available to the general public.
- 18 Sec. 32810. The director of the department may issue a
- 19 cease and desist order to a person who is in violation of this
- 20 part.
- 21 Sec. 32811. (1) An owner of a groundwater withdrawal
- 22 facility who fails to obtain a groundwater withdrawal certificate
- 23 as required by this part, or who violates the conditions of the
- 24 certificate and causes environmental harm or impairs the rights
- 25 of other property owners to withdraw groundwater for their
- 26 reasonable and beneficial use, is guilty of a misdemeanor
- 27 punishable by a fine of not more than \$5,000.00 for each day of

- 1 violation or by imprisonment for not more than 1 year, or both.
- 2 (2) At the request of the department, the attorney general
- 3 may bring a civil action to enforce a cease and desist order
- 4 under section 32810 or for injunctive or other appropriate relief
- 5 to enforce this part.
- 6 Sec. 32812. If a small quantity well fails to furnish the
- 7 well's normal supply of water or fails to furnish potable water,
- 8 and the owner of the small quantity well has credible evidence to
- 9 believe the well's problems are being caused by a high capacity
- 10 well, the owner of the small quantity well may pursue a remedy
- 11 under part 317.
- 12 Sec. 32813. In addition to a groundwater withdrawal
- 13 facility certificate required by this part, the owner of a
- 14 groundwater withdrawal facility or his or her authorized
- 15 representative shall obtain any well construction permits as
- 16 otherwise required by state law or local ordinances.
- 17 Sec. 32814. Before a person who is registered as a water
- 18 well drilling contractor or pump installation contractor under
- 19 part 127 of the public health code, 1978 PA 368, MCL 333.12701 to
- 20 333.12771, constructs and equips a well serving a groundwater
- 21 withdrawal facility that is located within a critical aquifer as
- 22 identified on the map of critical aquifers prepared under section
- 23 32809, the contractor shall notify the owner or operator of the
- 24 groundwater withdrawal facility of the provisions of this part.

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