

Department of Legislative Services
Maryland General Assembly
2025 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

Senate Bill 930

(Senator Gile)

Education, Energy, and the Environment

Environment and Transportation

Environment - Managed Aquifer Recharge Pilot Program - Establishment

This bill establishes the Managed Aquifer Recharge (MAR) Pilot Program in the Maryland Department of the Environment (MDE) to authorize, regulate, and evaluate the use of treated reclaimed water as a source for groundwater augmentation through MAR permits. Except as otherwise provided in the bill, a person may not perform groundwater augmentation. MDE must accept applications for MAR permits from January 2, 2026, through January 3, 2028, but may only issue one MAR permit under the pilot program, as specified. A permit is effective for five years, and MDE is authorized to refuse, revoke, or renew a permit, as specified. The bill establishes annual reporting requirements for MDE and a permittee. MDE is authorized to adopt regulations to carry out the pilot program. **The bill terminates September 30, 2036.**

Fiscal Summary

State Effect: MDE can implement the pilot program, review permit applications, and issue one MAR permit using existing budgeted resources, but general fund expenditures may increase minimally as early as FY 2026 to reimburse the Maryland Department of Health's (MDH) Laboratories Administration for costs incurred to conduct water testing under the bill; MDH general fund expenditures and revenues are likewise affected. State revenues are otherwise not materially affected; there is no permit fee.

Local Effect: Although any participation is voluntary, the bill creates a potential novel source of groundwater augmentation for a participating local government. To the extent that a local government participates, local expenditures likely increase.

Small Business Effect: Minimal overall, but potential meaningful effect for certain small businesses, as discussed below.

Analysis

Bill Summary:

Key Definitions

A “demonstration facility” is an advanced water treatment facility approved under an MAR permit to treat reclaimed water for use as a source for testing groundwater augmentation. “Groundwater augmentation” means the injection of reclaimed water into an aquifer for any purpose that is not discharge. A “managed aquifer recharge permit” is a permit issued by MDE for groundwater augmentation.

Authorized Review, Permitting, and Regulation

MDE may review, permit, and regulate groundwater augmentation through an MAR permit if MDE determines that the groundwater augmentation will address a groundwater supply or quality problem that is occurring or reasonably anticipated to occur in the next 25 years and the applicant/proposed facility meets several specified conditions, including, among other things, that (1) the proposed location of the demonstration facility is suitable for long-term implementation of groundwater augmentation; (2) the reclaimed water will be treated at the demonstration facility to meet or surpass specified requirements; (3) the reclaimed water will undergo testing and reporting to verify that applicable requirements are met; (4) the applicant has conducted an analysis to evaluate alternatives to groundwater augmentation; (5) the applicant has in place a detailed testing and monitoring plan, as specified; (6) the applicant has identified all wells that withdraw water from within two years of travel time for the water from the location where groundwater augmentation is proposed and has evaluated the potential impact to those wells; (7) the applicant has identified all industrial users that discharge to the sewerage system from which the reclaimed water is received and the pollutants in each industrial user’s discharge; (8) the applicant has performed a hydrogeological investigation that includes specified descriptions, maps, and a summary of the results from specified groundwater samples; (9) the applicant has submitted a specified mitigation plan to address environmental and safe drinking water risks; (10) the applicant submits a detailed operation and maintenance plan to MDE; and (11) the applicant gives MDE the right of entry on the permit site (at any reasonable time) to inspect or investigate any existing or potential violations of the permit.

Permit Applications

A successful application for an MAR permit must:

- demonstrate to the satisfaction of MDE (1) the ability to comply with the applicable requirements; (2) the applicant’s available funding for the construction and

- operation of the demonstration facility and implementation of any contingency or emergency plan; (3) the technical and administrative capacity to comply with the permit; and (4) that all necessary planning and engineering design is complete; and
- include any additional information requested by MDE.

Permit Issuance and Terms

Title 1, Subtitle 6 of the Environment Article, which governs public participation in the permitting process, governs the issuance of MAR permits. In addition to the notice required under that subtitle, an applicant must send written notice of the application to each owner of a property containing a well that is identified as having withdrawn water within two years of travel time for the water from the location where groundwater augmentation is proposed.

MDE may include in a permit any term, condition, or requirement that MDE considers appropriate to protect public health or the environment. Permit requirements are supplemental to, and do not override, any other law, regulation, permit, order, or decree. The permit must include a requirement to (1) initiate a tracer study within three months of beginning injections in order to verify the reclaimed water's retention time in the aquifer, as specified, and (2) submit the results of the tracer study to MDE as soon as practicable after the completion of the study.

An MAR permit issued by MDE is effective for five years. Before a permit expires, MDE may renew a permit for an additional period of five years after administrative review by MDE and in accordance with Title 1, Subtitle 6 of the Environment Article.

MDE may refuse to issue an MAR permit under specified conditions. Among other things, MDE may refuse to issue a permit if the applicant fails to provide any requested information or fails to demonstrate compliance with the bill's requirements to MDE's satisfaction.

MDE may revoke a permit under specified conditions. Among other things, MDE may revoke a permit if it finds that the application included false or inaccurate information, the conditions or requirements of the permit have been or are about to be violated, or the treated reclaimed water may threaten public health, safety, comfort, or the environment.

Reporting Requirements

By September 1 each year, a permit holder must report to MDE on (1) the applied scientific results of any demonstration facility or groundwater augmentation activities conducted under the pilot program and (2) any recommendations for the pilot program based on the permit holder's experience.

By December 31, 2028, and each December 31 thereafter, MDE must report to the Governor and the General Assembly on (1) the status of the pilot program; (2) any scientific results and recommendations reported by a permit holder; (3) whether the pilot program should be modified, extended, or made permanent; and (4) any statutory or regulatory changes that MDE recommends to permanently authorize the regulated use of treated reclaimed water as a source for groundwater augmentation, if appropriate.

Current Law:

Groundwater Discharges and Maryland Water Supply Program

Federal and State laws and regulations govern the activities of MDE's Water Supply Program, water utilities, and water users. The Safe Drinking Water Act (SDWA), originally passed in 1974 (40 Code of Federal Regulations §§ 141 and 143), is the main federal law that ensures the quality of drinking water in the United States. Under SDWA, the U.S. Environmental Protection Agency (EPA) sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. SDWA was amended in 1986 and 1996 and requires several actions to protect drinking water and its sources (rivers, lakes, reservoirs, springs, and ground water wells). These standards generally do not apply to private drinking water wells. Rather, private well owners are responsible for the safety of their own wells after initial construction and certification is completed. MDE is responsible for primary enforcement of SDWA in the State.

COMAR 26.08.04, 26.08.02.09, and 26.08.07 establish specific requirements for the discharge or disposal of water or wastewater into the underground waters of the State and for underground injection control (UIC). MDE notes that it currently regulates MAR through existing UIC permits, called Class V wells governed under these COMAR provisions.

Federal Clean Water Act and the National Pollutant Discharge Elimination System

The federal Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States. The National Pollutant Discharge Elimination System (NPDES), a component of CWA, is a permit program that addresses water pollution by regulating point sources that discharge pollutants to U.S. waters. In Maryland, EPA delegates authority to issue NPDES permits to MDE. MDE issues discharge permits to protect Maryland's water resources by controlling industrial and municipal wastewater discharges. Surface water discharges are regulated through combined State and federal permits under NPDES. Groundwater discharges are regulated through State-issued groundwater discharge permits.

Reclaimed Water

It is the policy of the State to promote and encourage the use of “reclaimed water” in order to conserve water supplies and to meet other stated goals. MDE is statutorily required to encourage the use of reclaimed water for irrigation. “Reclaimed water” is defined as sewage that has been treated to a high quality suitable for various reuses and meets water quality standards for certain contaminants. Reclaimed water is authorized for irrigation of farmland, golf courses, athletic fields, turf, landscaping, and any other use that MDE considers appropriate.

Indirect Potable Reuse Pilot Program

The Indirect Potable Pilot Program was established pursuant to Chapters 122 and 123 of 2023 to authorize the regulated use of reclaimed water as a source for drinking water treatment facilities. Under the program, MDE may review, permit, and regulate a process to use reclaimed water as a source for a drinking water treatment facility through a potable reuse permit under certain circumstances. Permittees must also authorize MDE to inspect or investigate the site to check for existing or potential violations of the potable refuse permit.

MDE was required to accept applications for potable reuse permits between July 1, 2023, and June 30, 2024. A potable refuse permit is effective for five years. Before a permit expires, MDE may renew a permit after administrative review in accordance with regulations that MDE adopts and in accordance with Title 1 Subtitle 6 of the Environment Article.

Public Notice for Certain Permit Applications

Title 1, Subtitle 6 of the Environment Article establishes the general public participation requirements for a number of permits issued by MDE, including permits to discharge pollutants into waters of the State and potable reuse permits.

Relevant Enforcement Provisions

The provisions of §§ 9-334 through 9-341 of the Environment Article, which are established under provisions relating to Title 9, Subtitle 3 of the Environment Article (Water Pollution Control), establish enforcement procedures that govern (1) the ability of MDE to issue complaints, conduct hearings, issue corrective orders, and obtain injunctive relief and (2) judicial review of final decisions. (Because the bill’s provisions are codified under Subtitle 3 of Title 9 of the Environment Article, these enforcement provisions are applicable.)

Under § 9-343 of the Environment Article, a person who violates any provision of or fails to perform any duty imposed by Title 9, Subtitle 3 of the Environment Article, or who violates any provision or fails to perform any duty imposed by a rule, regulation, order, or permit adopted or issued under that subtitle, is guilty of a misdemeanor and on conviction is subject to a maximum fine of \$25,000 and/or imprisonment for up to one year for a first offense and a maximum fine of \$50,000 and/or imprisonment for up to two years for a subsequent offense. The person may also be enjoined from continuing the violation. Each day on which a violation occurs is a separate violation.

In addition, a person is guilty of misdemeanor and on conviction is subject to a maximum fine of \$50,000 and/or imprisonment for up to two years if the person (1) knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the subtitle or (2) falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the subtitle or any rule, regulation, order, or permit adopted or issued under the subtitle.

Pursuant to § 9-344 of the Environment Article, the Attorney General is in charge of prosecuting and defending cases that arise on behalf of the State.

State Fiscal Effect:

Maryland Department of the Environment

MDE anticipates that it can develop the MAR Pilot Program, review permit applications, and issue one MAR permit within existing resources. However, MDE may incur costs to reimburse MDH for testing water samples (discussed below).

The bill does not establish a permit application fee, so no additional revenues are anticipated from any permit applications submitted under the bill. Although the permitted facility may be required to obtain other MDE-issued permits (required under current law) in order to operate, because there will only be one permittee, the bill is not expected to materially affect MDE's fee revenues.

Maryland Department of Health

MDH's Laboratories Administration provides analytical support services for State agencies and program offices throughout the State and is the primary laboratory in the State that conducts water testing for MDE and local health departments. The Laboratories Administration has a memorandum of understanding (MOU) in place with MDE to recoup related water testing costs. The Laboratories Administration anticipates that it is likely responsible for any increased water testing under the bill.

Thus, general fund expenditures and revenues (from reimbursement under the MOU) for the Laboratories Administration may increase beginning as early as fiscal 2026 from any additional water testing resulting from the bill. The Laboratories Administration anticipates that testing costs and related revenues associated with one permitted facility are roughly \$17,000 annually. Actual impacts on MDH finances depend on the water testing requirements established under MDE's implementing regulations.

Penalty Provisions

The application of existing penalty provisions to violations of the bill is not anticipated to materially affect State finances.

Local Fiscal Effect: Although any participation in the pilot program is voluntary, a participating local government may benefit from the flexibility to use reclaimed water as a potential source for groundwater augmentation. However, to the extent that a local government applies for and receives an MAR permit, local expenditures likely increase, potentially significantly, to construct a demonstration facility, adequately treat reclaimed water, and comply with other permit requirements. The Department of Legislative Services (DLS) notes that because MDE may issue only one MAR permit under the pilot program, the local government impact is limited.

The application of existing penalty provisions to violations of the bill is not anticipated to materially affect local incarceration costs.

Small Business Effect: The bill may provide new business and employment opportunities for small businesses involved in the treatment and use of reclaimed water as a source for groundwater augmentation. There could be opportunities for small businesses that create plans for using reclaimed water, that sell parts or equipment, and potentially, for those that provide installation or maintenance services.

Additional Comments: DLS notes that the bill requires MDE to accept applications for MAR permits from January 2, 2026, through January 3, 2028. However, the bill also prohibits MDE from issuing more than one MAR permit under the pilot program. This analysis assumes that MDE may issue an MAR permit to a qualified applicant *during* the application period, in part because:

- the bill specifies that the permit is valid for five years and may be renewed for five additional years; and
- the bill terminates September 30, 2036.

To the extent MDE is prohibited from issuing an MAR permit until the application period has closed, the fiscal effects discussed above are delayed until fiscal 2028.

Additional Information

Recent Prior Introductions: Similar legislation has been introduced within the last three years. See SB 942 and HB 1131 of 2024.

Designated Cross File: HB 1296 (Delegates Pruski and Lehman) - Environment and Transportation.

Information Source(s): Maryland Association of County Health Officers; Maryland Environmental Service; Anne Arundel, Baltimore, Charles, Dorchester, and Garrett counties; Maryland Association of Counties; Maryland Municipal League; Maryland Department of the Environment; Maryland Department of Health; U.S. Environmental Protection Agency; Department of Legislative Services

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