

Department of Legislative Services
 Maryland General Assembly
 2023 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 531 (Senator Klausmeier)
 Education, Energy, and the Environment

Public Water Systems - Supplier Requirements (Water Safety and Cybersecurity Act of 2023)

This bill establishes several requirements for water suppliers, with exemptions for specified entities. Among other things, a water supplier must (1) conduct inspections of critical valves and fire hydrants; (2) develop a cybersecurity program by February 1, 2024; (3) develop and submit mitigation plans to the Maryland Department of the Environment (MDE) under certain circumstances; (4) develop and submit an asset management plan to MDE by April 1, 2025, and a related annual report; and (5) submit annual certifications of compliance with specified State and federal laws. MDE must (1) establish an electronic portal for the submission of annual reports and (2) adopt implementing regulations.

Fiscal Summary

State Effect: General fund expenditures increase by \$326,800 in FY 2024; future years reflect annualization and ongoing costs. State revenues are not affected.

(in dollars)	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	326,800	340,000	351,400	363,300	377,900
Net Effect	(\$326,800)	(\$340,000)	(\$351,400)	(\$363,300)	(\$377,900)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease

Local Effect: Local expenditures increase, likely significantly for at least some jurisdictions, beginning in FY 2024 to comply with the bill’s requirements for water suppliers. Local revenues are not directly affected.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary:

Applicability

The bill does not apply to Baltimore City, the Washington Suburban Sanitary Commission, or a water system with fewer than 500 connections to customers.

Inspection of Critical Valves and Hydrants

A water supplier must (1) inspect each critical valve in the public water system that is owned or operated by the supplier, as specified, to determine the accessibility of the valve for operational purposes and the operating condition of the valve; (2) repair or replace any critical valve that is found to be broken or nonoperational; (3) inspect each critical valve at a frequency determined by the supplier and agreed to by MDE; (4) annually inspect the fire hydrants in the public water system to ensure operability unless more frequent inspections are required by local ordinance; (5) formulate and implement a plan for flushing fire hydrants and dead ends, as specified; (6) identify the geographic location of each critical valve and fire hydrant in the public water system, to the extent possible; and (7) record the characteristics and distinguishing identifiers of each hydrant in the public water system in a database available on the supplier's website. The bill establishes procedural requirements that a water supplier must fulfill when conducting the critical valve inspections.

A "critical valve" is a valve within a public water system that a water supplier deems critical, and includes a valve that is (1) 16 inches or more in diameter; (2) located at a hospital, dialysis center, nursing home, water treatment plant, or an emergency interconnection with a water supplier; and (3) a regulator or relief control valve.

Cybersecurity Program

By February 1, 2024, a water supplier must develop a cybersecurity program that (1) defines and implements organization accountabilities and responsibilities for cyber risk management activities and (2) establishes policies, plans, processes, and procedures for identifying and mitigating cyber risks to the public water system. In accordance with the cybersecurity program developed under the bill, a water supplier must (1) conduct risk assessments and implement appropriate controls to mitigate identified risks to the public water system; (2) remain aware of potential cyber threats and vulnerabilities of the public water system; and (3) create and exercise incident response and recovery plans. An affected water supplier must submit a summary report to MDE within 30 days of developing a required cybersecurity program.

Mitigation Plans

If a water supplier receives a specified number of violation notices from MDE within a one-year period, the water supplier must submit to MDE a mitigation plan within 60 days. The mitigation plan must include (1) an explanation of how the notice of violation will be addressed, as specified; (2) an implementation schedule for the mitigation plan; and (3) a report prepared by a licensed engineer that includes a technical analysis of the notices of violation and an explanation of how the mitigation plan will prevent the reoccurrence of the original violation.

Asset Management Plans

By April 1, 2025, a water supplier must develop and submit an asset management plan to MDE. An asset management plan must include (1) a water main renewal program designed to achieve a 150-year replacement cycle or any other appropriate replacement cycle, as determined by a detailed engineering analysis, as specified; (2) a water supply and treatment program designed to inspect, maintain, repair, renew, and upgrade wells, intakes, pumps, and treatment facilities in accordance with all federal and State regulations, standards established by the American Water Works Association, and any mitigation plans submitted pursuant to the bill; (3) capital expenditures required under a mitigation plan; and (4) any other programs, plans, or provisions required by MDE in regulation. The asset management plan must be certified by the water supplier or an engineer.

A water supplier must dedicate funds annually to address the highest priority projects identified in the asset management plan.

By December 31, 2025, and annually thereafter, a water supplier must submit a report to MDE and the Department of Housing and Community Development (DHCD) on the implementation of the supplier's asset management plan. The report must include specified information. MDE, in consultation with DHCD, must establish an electronic portal on MDE's website for the submission of these reports, but a water supplier must submit the required report regardless of whether MDE has established such a portal. MDE must make the reports available for public inspection upon request.

Miscellaneous Certifications and Implementation Requirements

A water supplier must annually certify in writing to MDE that the supplier complies with all federal and State primary drinking water regulations, as specified, and the bill's requirements relating to valve inspection, mitigation plans, and asset management plans. The certification may be included with required consumer confidence reports. Upon request, a water supplier must make the certification available for public inspection. By

December 31 of each year, a water supplier must inform its customers of compliance with this requirement.

Within three years of acquiring a new public water system, a water supplier must comply with the bill's requirements.

A water supplier may not receive any public funding unless the supplier can demonstrate that the supplier has developed, or is in the process of developing, an asset management plan and a cybersecurity program in accordance with the bill.

Current Law: MDE is responsible for the primary enforcement (primacy) of the federal Safe Drinking Water Act (SDWA) in Maryland. This means MDE is charged with ensuring that the water quality and quantity at all public water systems meet the needs of the public and are in compliance with federal and State regulations. According to MDE's [Safe Drinking Water Act Annual Compliance Report for Calendar Year 2021](#) to the U.S. Environmental Protection Agency (EPA), routine compliance activities include regular on-site inspections of water systems to identify any sanitary defects in the systems, technical assistance, and a permitting process that helps ensure that systems obtain the best possible source of water.

Any facility that regularly serves water to 25 or more people a day for more than 60 days per year or has at least 15 service connections is a public water system. Maryland regulates 3,253 public water systems (461 community water systems, 550 non-transient noncommunity water systems, and 2,242 transient noncommunity water systems).

Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. In 2018, SDWA was amended by the America's Water Infrastructure Act of 2018 (AWIA). AWIA § 2013 requires community (drinking) water systems serving more than 3,300 people to develop or update risk assessments and emergency response plans (ERPs). The law specifies the components of the risk assessments and ERPs, including the physical and cybersecurity of the systems, and establishes deadlines by which water systems must certify to EPA completion of the risk assessment and ERP.

State Fiscal Effect:

Maryland Department of the Environment

General fund expenditures for MDE increase by \$326,827 in fiscal 2024, which accounts for the bill's October 1, 2023 effective date. This estimate reflects the cost of hiring two full-time regulatory and compliance engineers and one part-time (25%) regulatory and compliance supervisor to (1) assist with the development of a database, procedures, and

tracking elements; (2) conduct statewide outreach to affected water suppliers; (3) establish policies and procedures to identify and mitigate cyber risks; (4) develop regulations; and (5) track, collect, and process the various plans, reports, and certifications submitted under the bill. It includes salaries, fringe benefits, one-time start-up costs (including initial contractual costs to establish a database and the electronic portal), and ongoing operating expenses. The information and assumptions used in calculating the estimate are stated below:

- there are approximately 100 water suppliers affected by the bill, and MDE must conduct significant outreach and training to assist affected suppliers;
- MDE does not have the technical expertise to implement the bill, particularly with regard to the cybersecurity provisions;
- the scope of the plans, reports, and certifications submitted under the bill and the number of affected entities necessitates the development of a tracking database as well as the required electronic portal; and
- the bill increases the scope of MDE’s oversight requirements for public water systems such that current staff cannot implement the bill.

Positions	2.25
Salaries and Fringe Benefits	\$175,760
Database and Electronic Portal Costs	75,000
Purchase of Vehicles	49,186
Other Operating Expenses	<u>26,881</u>
Total FY 2024 State Expenditures	\$326,827

Future year expenditures reflect full salaries with annual increases and employee turnover and ongoing operating expenses, including contractual costs to maintain the database and the electronic portal.

DHCD can consult with MDE as necessary using existing budgeted resources.

State Effect as Owners/Operators of Public Water Systems

Based on currently available information from MDE, the bill is not believed to affect State-owned public water systems. Thus, this estimate does not reflect any costs for State agencies to comply with the bill’s requirements for water suppliers.

Local/Small Business Effect as Owners and Operators of Public Water Systems: In order to comply with the bill’s requirements for water suppliers, the bill results in an increase in expenditures for some local governments, and potentially small businesses, that own and/or operate affected public water systems. The increase in expenditures is likely

significant for some of the affected entities. Based on currently available information from MDE, affected public water supply systems are primarily owned by local governments, but some are also owned by the federal government and private entities. The Department of Legislative Services (DLS) does not have information about whether these private entities are small businesses. For these larger water systems (which are the systems affected by the bill), MDE estimates that costs increase by \$200,000 to \$250,000 annually to meet the bill's requirements. These costs are likely passed on to customers.

The Maryland Association of Counties and the Maryland Municipal League both advise that affected counties and municipalities incur significant capital and operating costs to comply with the bill's requirements. For example, Charles County estimates that costs increase by approximately \$268,000 in fiscal 2024 and by approximately \$160,000 annually thereafter to conduct annual inspections of fire hydrants and water main lines and comply with the bill's plan development and reporting requirements.

Additional Comments: DLS notes that the bill specifies that a water supplier may not receive public funding from any source unless the supplier can demonstrate that the supplier has developed, or is in the process of developing, an asset management plan and a cybersecurity program in accordance with the bill. This analysis does not reflect any potential effects resulting from this provision; it is assumed that water suppliers comply with the bill's provisions.

Additional Information

Prior Introductions: Similar legislation has been introduced within the last three years. See SB 820 and HB 1416 of 2020.

Designated Cross File: None.

Information Source(s): Maryland Environmental Service; Baltimore, Charles, and Howard counties; Maryland Association of Counties; City of Laurel; Maryland Municipal League; Maryland Department of the Environment; Maryland Department of Health; Department of Legislative Services

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km/lgc

Analysis by: Kathleen P. Kennedy

Direct Inquiries to:
(410) 946-5510
(301) 970-5510