

Department of Legislative Services  
Maryland General Assembly  
2012 Session

**FISCAL AND POLICY NOTE**

Senate Bill 821 (Senator Pipkin, *et al.*)  
Education, Health, and Environmental Affairs

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**Environment - Watershed Implementation Plan - Cap on Costs**

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This bill requires each entity that prepares a State Watershed Implementation Plan (WIP) approved by the U.S. Environmental Protection Agency (EPA) to implement the Total Maximum Daily Load for the Chesapeake Bay (Bay TMDL) to prepare a cost assessment for implementing the WIP through 2017. A cost assessment must be updated by December 1 each year, must include the amount of funds necessary to implement the WIP through 2017, and must specify the amounts of State general funds, local funds, and federal funds that have been expended to date and that are needed to complete implementation of the WIP. The Maryland Department of the Environment (MDE) must report to the Governor and General Assembly on the cost assessments of all WIPs, including an aggregate sum of all cost assessments, by December 31 each year. If the aggregate sum of all cost assessments through 2017 exceeds \$14,748,701,445 in any given fiscal year, an entity may not begin implementation of a WIP or continue implementing a WIP.

The bill takes effect July 1, 2012.

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**Fiscal Summary**

**State Effect:** General fund expenditures increase by more than \$104,100 beginning in FY 2013 for MDE to hire two contractual personnel to undertake the annual cost assessments required by the bill. To the extent that the cost assessment exceeds \$14,748,701,445 in any fiscal year and results in the cessation of WIP implementation by the State, the bill will have significant fiscal and operational ramifications for MDE and the State.

**Local Effect:** Local government workloads and expenditures may increase to coordinate with MDE to produce the cost assessments. To the extent a cost assessment exceeds the specified threshold and results in the cessation of WIP implementation, the bill will have significant fiscal and operational ramifications for local governments.

**Small Business Effect:** Potential meaningful.

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## Analysis

### Current Law/Background:

#### *The Bay TMDL and the WIP Development Process*

In December 2010, EPA established the Bay TMDL, which (1) sets the maximum amount of pollution the bay can receive and still attain water quality standards; and (2) identifies specific pollution reduction requirements. **Exhibit 1** illustrates Maryland's pollution reduction goals in the TMDL. All pollution reduction measures must be in place by 2025, with at least 60% of the actions complete by 2017.

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### Exhibit 1 Maryland's Pollution Reduction Goals in the Bay TMDL (Million Pounds Per Year)

| <u>Pollutant</u> | <u>2010 Loads</u> | <u>Bay TMDL Target Load</u> | <u>Percent Reduction</u> |
|------------------|-------------------|-----------------------------|--------------------------|
| Nitrogen         | 52.76             | 41.17                       | 22.0%                    |
| Phosphorus       | 3.30              | 2.81                        | 14.9%                    |
| Sediment         | 1,376             | 1,350                       | 1.9%                     |

TMDL: Total Maximum Daily Load

Note: Target loads as revised by EPA in August 2011.

Source: Maryland Department of the Environment; U.S. Environmental Protection Agency

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In 2010, each bay jurisdiction submitted a Phase I WIP that details how the jurisdiction will achieve its individual pollution reduction goals under the Bay TMDL. The Phase I WIP focused on the following three approaches for bridging the remaining loading gap: (1) developing new technology and approaches before 2017; (2) increasing the scope of implementation of existing strategies such as upgrading wastewater treatment plants, upgrading septic systems, and increasing the number and efficiency of stormwater runoff controls; and (3) improving regulatory requirements. The Phase I WIP establishes that all nutrient impacts from future growth must be offset if the Bay TMDL is to be met.

On January 26, 2012, Maryland released for public comment a draft of the State's Phase II WIP, which provides implementation strategies for the five major basins in Maryland (the Potomac River basin, Eastern Shore, Western Shore, the Patuxent River basin, and Maryland's portion of the Susquehanna River basin).

*Anticipated Costs and Available Funding*

For contextual purposes, **Exhibit 2** shows that the preliminary estimated cost of implementing the Phase II WIP associated with the Bay TMDL exceeds \$7.5 billion through calendar 2017 and is about \$14.7 billion through calendar 2025. The annual costs to the State, local governments, and other entities are not separately identified in the plan and are not known at this time. However, there are a number of current State programs that provide funding for actions identified in the plan. Existing State funding sources are preliminarily projected by the Department of Legislative Services to provide approximately \$2.8 billion in funding for various Chesapeake Bay restoration programs between fiscal 2010 and 2017.

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**Exhibit 2**  
**Estimated Phase II WIP Costs for Interim and Final Targets Under the Bay TMDL**  
**(\$ in Millions)**

| <u>Source Sector</u>                         | <u>Cost of 2017<br/>Strategy<br/>2010-2017</u> | <u>Cost of 2025<br/>Strategy<br/>2010-2025</u> |
|--|--|--|
| <b>Agriculture</b>                           | <b>\$498</b>                                   | <b>\$928</b>                                   |
| <b>Municipal Wastewater</b>                  | <b>2,384</b>                                   | <b>2,384</b>                                   |
| Major Municipal Plants                       | 2,322  | 2,322  |
| Minor Municipal Plants                       | 62   | 62   |
| <b>Stormwater</b>                            | <b>3,826</b>                                   | <b>7,607</b>                                   |
| Maryland Department of Transportation (MDOT) | 467  | 1,500  |
| Local Government                             | 3,359  | 6,107  |
| <b>Septic Systems</b>                        | <b>799</b>                                     | <b>3,746</b>                                   |
| Septic System Upgrades                       | 336  | 2,533  |
| Septic System Connections                    | 439  | 1,125  |
| Septic System Pumping                        | 24   | 88   |
| <b>Total</b>                                 | <b>\$7,507</b>                                 | <b>\$14,665</b>                                |

Note: Exhibit does not reflect costs associated with controlling combined sewer and sanitary overflows or the implementation of the Healthy Air Act.

Source: *Phase II Watershed Implementation Plan*; Maryland Department of the Environment

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## *Funding Shared Across All Levels of Government and the Private Sector*

While the State provides funding for some of the strategies in the WIP, the cost of others is anticipated to be borne by the private sector, local governments, and the federal government. With respect to federal funding for example, about \$78.7 million in federal funds were appropriated in the fiscal 2012 State budget for purposes associated with restoring the Chesapeake Bay, although not necessarily for the specific purpose of implementing the Bay TMDL.

The State's share of the costs to implement the Phase II WIP has not yet been determined as noted above. The Governor's proposed fiscal 2013 budget includes a total of \$743.2 million in funding (\$354.8 million in special funds, \$137.5 million in Maryland Department of Transportation funds, \$114.8 million in general obligation bonds, \$62.6 million in federal funds, \$35.5 million in general funds, and \$38.1 million in other funds) for bay restoration activities, although not necessarily for the specific purpose of implementing the Bay TMDL.

With respect to identifying future funding sources for WIP activities, the Task Force on Sustainable Growth and Wastewater Disposal, which was established by Governor O'Malley under Executive Order 01.01.2011.05, addressed these concerns, among others. The task force met throughout the 2011 interim and reviewed and studied issues such as increasing the bay restoration fee in order to cover the existing shortfall in the Bay Restoration Fund (BRF) and close the funding gap for implementing other WIP requirements associated with developed land best management practices (BMPs), including strategies to address septic systems, stormwater management, and the upgrade of "major minor" wastewater treatment plants (WWTPs). Under one recommendation, the task force envisioned:

- a 50% State share of costs for the upgrade of major minor WWTPs with biological nutrient reduction technology;
- a 50% State share of costs for stormwater retrofits;
- the transfer to local governments of 15% of the gross BRF revenue generated within each jurisdiction for implementation of approved stormwater BMPs, increasing to 25% in fiscal 2018, if recommended by the Bay Restoration Fund Advisory Committee; and
- using competitive awards for local governments to maximize cost effectiveness of the distribution of funds statewide, including competitive grants for upgrading 10 of the largest minor WWTPs upgrades to enhanced nutrient removal technology.

The Department of Legislative Services advises that the legislation that has been introduced by the Administration to increase the bay restoration fee (SB 240/HB 446) would not result in an increase in revenue sufficient to support the allocations proposed

by the task force, nor would it expand the authorized uses of the BRF to support activities not currently authorized, such as stormwater retrofits.

*Consequences of Not Meeting the Bay TMDL Target Reductions*

Early in the Bay TMDL development process, EPA notified states of the accountability framework in place to ensure that the watershed states initiate the WIP development process and ultimately achieve the required nutrient and sediment reductions. The accountability framework includes a number of backstop measures that EPA may take to ensure that the required reductions are achieved in the absence of effective state WIPs. These backstop measures include expanding water permit coverage to currently unregulated sources, objecting to inadequate permits, requiring net improvement offsets for new or increased point source discharges, establishing finer scale allocations in the Bay TMDL, requiring additional load reductions from point sources, increasing and targeting federal enforcement efforts, conditioning and redirecting federal grant funds, and initiating the development of local nutrient water quality standards.

**State/Local Fiscal Effect:**

*MDE Expenditures for the Cost Assessment*

General fund expenditures increase by \$104,121 in fiscal 2013 for MDE to undertake the State cost assessment required by the bill. This estimate reflects the cost of hiring one contractual natural resources planner to lead the comprehensive resource planning necessary to develop the cost assessment and one contractual accountant to track, record, and analyze all funds expended. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses.

|                                       |                  |
|---------------------------------------|------------------|
| Contractual Positions                 | 2                |
| Salaries and Fringe Benefits          | \$94,051         |
| Start-up costs                        | 8,970            |
| Operating Expenses                    | 1,100            |
| <b>Total FY 2013 MDE Expenditures</b> | <b>\$104,121</b> |

Future year expenditures reflect salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses. It is assumed that the contractual positions will be eliminated during fiscal 2018 once the final cost assessment and report is completed, as the bill only requires an assessment of costs through 2017.

### *State/Local Implications if the Threshold Is Exceeded*

The bill specifies that, if the aggregate sum of all cost assessments through 2017 exceeds \$14,748,701,445 in any given fiscal year, an entity may not begin implementation of a WIP or continue implementing a WIP. If any aggregate cost assessment exceeds this threshold and the State and local governments were prohibited from implementing the WIP, although the State and local governments would spend less activities related directly to the WIP, they would not be able to achieve the reductions called for under the Bay TMDL and could be in violation of certain federal permits (such as permits issued to local wastewater facilities). This could elicit any number of responses by EPA, as described above. Any decrease in federal funding, withholding of permits, establishment of new permits, reallocation of load reductions, loss of existing State permitting authority, or other sanctions will have significant, but indeterminate, fiscal and operational impacts on the State and local governments.

The likelihood that an aggregate cost assessment will exceed \$14,748,701,445 in any given year is unclear. While the cost to implement the WIP through 2017 reflected in Exhibit 2 is nearly half the threshold amount specified in the bill, as noted, this estimate does not account for costs associated with controlling combined sewer and sanitary overflows or the implementation of the Healthy Air Act, both of which are ongoing activities required by other laws. Further, this cost estimate is preliminary and, presumably, would not be sufficient to constitute a cost assessment required by the bill. MDE advises that developing the cost assessment will require numerous tasks and pose a substantial challenge, which is made more difficult by the need to determine the source and purpose of previous and future expenditures, many of which are only partially associated with implementing the WIP.

**Small Business Effect:** Small businesses may be significantly affected to the extent the bill results in the cessation of WIP implementation. Many small businesses that are engaged in operations associated with planned or existing Chesapeake Bay restoration efforts may experience a reduction in the demand for their services. On the other hand, small businesses that are required to reduce nutrient and sediment loading pursuant to the WIP could benefit to the extent the bill reduces spending on those activities. Small businesses across many sectors of the Maryland economy are holders of permits issued by EPA. Permit-related costs may increase for many small businesses should the State fail to comply with the Bay TMDL to the extent that EPA exercises its authority to rewrite, withhold, or establish new permits, which are some of the consequences noted by EPA in its accountability framework.

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### **Additional Information**

**Prior Introductions:** SB 11 of the 2011 special session, a similar bill, was referred to the Senate Rules Committee, but no further action was taken.

**Cross File:** None.

**Information Source(s):** Maryland Association of Counties; Kent, Montgomery, Washington, and Worcester counties; Maryland Department of the Environment; Task Force on Sustainable Growth and Wastewater Disposal; U.S. Environmental Protection Agency; Department of Legislative Services

**Fiscal Note History:** First Reader - March 2, 2012  
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