HB 1268

Department of Legislative Services

Maryland General Assembly
2015 Session

FISCAL AND POLICY NOTE

House Bill 1268 (Delegate Jacobs)
Rules and Executive Nominations

Environment - Implementation of Watershed Implementation Plan - Limitation

This bill prohibits a person from engaging in any activity or strategy to implement 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) until EPA publishes a 2017 Bay TMDL midpoint assessment and the University of Maryland Center for Environmental Science (UMCES) completes a two-year study of the quantity, movement, and effects of sediment and associated nutrients in the lower Susquehanna River and upper Chesapeake Bay.

The bill takes effect June 1, 2015.

Fiscal Summary

State Effect: The bill results in the temporary cessation of Bay TMDL implementation, which is a violation of federal law and likely results in significant fiscal and operational ramifications for the Maryland Department of the Environment and other State agencies that are involved with WIP implementation, hold federal permits, or receive federal funds that may be affected by the bill.

Local Effect: The bill similarly results in significant fiscal and operational ramifications for local jurisdictions that are involved with WIP implementation, hold federal permits, or receive federal funds that may be affected by the bill.

Small Business Effect: Meaningful.

Analysis

Current Law/Background:

UMCES Study of Sediment and Nutrients in the Lower Susquehanna River

UMCES announced the beginning of a study in February 2015 to be conducted by a team of scientists and funded in part through a $3.5 million grant from Exelon Corporation (owner of the Conowingo Dam) to quantify the amount of sediment and associated nutrients present in major entry points to the Lower Susquehanna River Reservoir System and the upper Chesapeake Bay. This study is intended to build upon the *Lower Susquehanna River Watershed Assessment*, which was led by the U.S. Army Corps of Engineers and released in November 2014 and analyzed the movement of sediment and associated nutrient loads through the lower Susquehanna River watershed to the upper Chesapeake Bay. According to UMCES, the study will help policymakers determine the best management options to reduce this effect.

For more information about the Conowingo Dam and the *Lower Susquehanna River Watershed Assessment*, see the **Appendix – Pollutants from the Conowingo Dam and Susquehanna River**.

The Bay TMDL and Consequences of Noncompliance

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. All pollution reduction measures must be in place by 2025, with at least 60% of the actions complete by 2017. Additionally, the Chesapeake Bay Program is expected to be conducting a midpoint assessment of the Bay TMDL implementation by states and federal agencies in 2017, although a final date for the release of the assessment has not been announced and may not be in 2017.

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: The bill effectively delays the implementation of WIP activities until at least calendar 2017 (potentially fiscal 2018). As a result, although the bill delays State and local expenditures for these activities, it also prevents the State and local governments from being able to achieve the reductions called for under the Bay TMDL by the required deadlines and could result in the violation of certain federal permits (such as permits issued to wastewater facilities and local stormwater permits). 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, legal actions, or other sanctions will have significant fiscal and operational impacts on the State and local governments.

Small Business Effect: Small businesses may be significantly affected to the extent the bill delays 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 in the short run. 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 delays spending on those activities. Small businesses across many sectors of the Maryland economy are holders of permits issued by, or under the authority of, EPA. Permit-related costs may increase for many small businesses should the State fail to comply with the Bay TMDL by the required deadlines if EPA exercises its authority to rewrite, withhold, or establish new permits, which are some of the consequences noted by EPA in its accountability framework.

Additional Information

Prior Introductions: None.

Cross File: SB 919 (Senator Hershey) - Education, Health, and Environmental Affairs.

Information Source(s): Maryland Department of the Environment, Department of Natural Resources, University of Maryland Center for Environmental Science, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Department of Legislative Services

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min/lgc

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Appendix – Pollutants from the Conowingo Dam and Susquehanna River

The Conowingo Dam is a large hydroelectric dam in the lower Susquehanna River near the town of Conowingo, Maryland. The dam spans the border between Cecil and Harford counties, sits about 10 miles from the Chesapeake Bay, and is 5 miles south of the Pennsylvania border. It is the largest and southernmost dam among several on the Susquehanna River. The Conowingo Dam's current license to operate was to expire in September 2014, but the dam's owner, Exelon Corporation, received a one-year extension from the Federal Energy Regulatory Commission (FERC).

In recent years, significant attention has been given to the role of the Conowingo Dam as a source of sediment pollution to the Chesapeake Bay. For most of its history, the dam acted as a pollution mitigation instrument by trapping sediments flowing south in the Susquehanna River. However, as the reservoirs behind the Conowingo and other dams on the lower Susquehanna River filled to capacity, the dams' ability to prevent pollution from reaching the bay diminished. In fact, after major storm events, such as Tropical Storm Lee and Hurricane Irene (in 2011), enormous loads of built-up sediment are scoured from behind the dams and deposited in the bay. Thus, several organizations contend that any Chesapeake Bay restoration efforts should focus significantly – perhaps primarily – on reducing this sediment load. And because FERC requires that any potential environmental impacts associated with project relicensing be minimized, the State is considering whether and to what extent Exelon should be required to address this problem as a condition to issuance of the new license.

In November 2014, the U.S. Army Corps of Engineers and the Maryland Department of the Environment (MDE), in cooperation with other State and federal agencies, released its draft *Lower Susquehanna River Watershed Assessment*. After several years of study, the report found that the lower Susquehanna continues to have a significant detrimental impact on the Chesapeake Bay, which is periodically exacerbated by major scouring events. The study found that the Conowingo and other dams in this watershed have essentially reached the capacity to trap sediment, a state known as "dynamic equilibrium." In this state, the dams are neither a source of, nor a trap for, pollutants from the Susquehanna, when measured over the long term. Over shorter periods, however, the dam is part of a cyclical process in which scouring events cause sediment deposition in the bay, followed by a phase in which the newly-created capacity is able to once again trap sediment behind the dam.

The study also reached several other conclusions with important policy considerations. First, the authors found that the impact of sediment deposition on the health of the Chesapeake Bay is relatively minor compared with the adverse impact posed by excess nitrogen and phosphorus nutrients from the entire Susquehanna watershed. The impact of sediment deposition from any given scouring event also depends on timing – most scouring

events tend to occur outside of the annual seasons when submerged aquatic vegetation is most sensitive. Second, the study developed a range of estimated costs of several potential measures that could be taken to address the sediment behind the dam. The estimated sediment management strategy costs range from $5 to $90 per cubic yard of sediment removed, which equates to between $15 million and $270 million annually. The study noted that many of the lower-cost management strategies are already being pursued and that only higher-cost strategies remain.

The authors caution that additional study should be undertaken to evaluate the study's findings regarding the relative impact of sediment versus nutrient pollution on the Chesapeake Bay, as well as on the merits of pursuing additional management strategies to address the volume of accumulated sediment behind the dams' reservoirs. The authors also caution that, although sediment management measures may be costly, states must still act to address the impact that accumulated sediment may have on bay restoration efforts. Thus, shortly after the release of the report, MDE (one of the primary study participants) announced that it intends to deny the issuance of a water quality certification for the dam, which is needed for reissuance of the dam's license pending additional study of potential mitigation measures. In December 2014, Exelon announced that it will withdraw its pending relicensing application and begin work on a new application; the company also announced that it had committed $3.5 million to fund the additional study that the report indicated is needed.