

MEETING WASTEWATER UPGRADE OBLIGATIONS

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EXECUTIVE SUMMARY

Wastewater treatment facility technology upgrades have helped the Commonwealth reduce pollution to state waters and achieve our Chesapeake Bay Total Maximum Load (TMDL) Phase III Watershed Implementation Plan (Phase III WIP) goals. While nutrient reductions from wastewater treatment plants have been the leading source of reductions towards our Phase III WIP, there are additional upgrades in the queue that require significant financial support as well as additional needs for Combined Sewer Overflow (CSO) systems. For some upgraded facilities, state incentives may help reduce nutrient discharges even further. Virginia must support wastewater treatment facility upgrades to protect water quality and public health.

CHALLENGE

In the last decade and a half, many of Virginia's wastewater treatment plants have upgraded nutrient pollution removal technology to significantly reduce pollution discharged to local rivers and the Bay.¹ Simultaneously, our watersheds have more people, fewer forests, and face routine climate change impacts. Inflation and drawn-out project timelines further threaten our continued progress. Accordingly, Virginia and regional partners will have to enhance efforts to meet the goal of a restored Bay, as called for in the Commonwealth's Phase III WIP.²

We are seeing the fragile, yet remarkable, beginnings of a recovery of our waterways and Chesapeake Bay — increased water clarity and quality, thousands of acres of aquatic grasses, and resurgent oyster populations. These improvements wouldn't be possible without the hard work of wastewater agencies, the localities they serve, or the Commonwealth's commitment to wastewater improvement demonstrated through grants to upgrade pollution reduction capabilities. However, many achievable nutrient reductions for treatment facilities go undone without additional state incentives, stalling further improvement.

Virginia also has three cities with CSOs that, when overloaded by stormwater, send untreated storm and wastewater directly into nearby rivers with concerning

health implications.³ Legislation in 2017 and 2020 put deadlines on Alexandria and Richmond to address untreated overflow events from their CSOs. But the scale of these infrastructure problems requires state help, and increased project costs and shifting timelines further impact these localities' ability to stay on track — particularly in Richmond, where 20.9% of residents are below the poverty line⁴ and already pay some of the highest wastewater rates in Virginia.

SOLUTION

The General Assembly placed Richmond on a timeline to remediate its CSO system by 2035 through legislation (SB1064) passed in 2020. In 2021, the Enhanced Nutrient Removal Certainty Program was established, which will ensure Virginia achieves the wastewater treatment technology upgrades necessary to meet the Phase III WIP.⁵ Still, the funding to implement these projects is critical to accomplishing these goals.

Not only will more complete wastewater treatment revitalize the Bay and its tributaries, but it will ensure that communities across the Commonwealth will more equitably receive the benefits of clean water in their own communities. Rural communities, especially rural communities of color, "have long faced challenges with toxic water due to insufficient water infrastructure," while low-income ratepayers in urban areas struggle to afford wastewater and drinking water improvements.⁶ State investment will help these communities maintain and improve aging infrastructure, prevent local water quality problems like toxic algae, and create good-paying jobs for skilled workers.⁷

Virginia should look to the estimated needs for wastewater and CSO upgrades when forming its next biennial budget. DEQ's latest annual needs assessment for the wastewater sector projects, state funding needs of \$252M in FY25 and \$270M in FY26 to help localities meet their pollution reduction goals through infrastructure upgrades. Additionally, Richmond's most recent report to the General Assembly on its CSO progress identifies projected costs to be over \$1.3 billion to complete remediation work on its combined sewer system.⁸

POLICY RECOMMENDATIONS

Continue supporting the facility upgrade deadlines for the Enhanced Nutrient Removal Certainty Program by fully funding state grants for wastewater treatment upgrades as identified by the Needs Assessment.

Maintain state funding to localities remediating aging CSO systems, once again making local rivers swimmable and fishable.

Incentivize upgraded facilities to further reduce nutrient discharges by optimizing operations.