



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES

2024 303(d) List Response to Public Comments

June 26, 2024

Public Notice of the draft 2024 303(d) List of Impaired Waters was issued by press release May 13, 2024. A virtual public workshop on the findings of the full statewide assessment of water quality conditions including the 303(d) list was held at 3:30 PM on May 22, 2024. The public comment period during which the Department of Environmental Management (DEM) would accept comments pertaining to the draft Impaired Waters List ended at 4:00PM on June 10, 2024.

DEM received two written comments. The comment submissions are summarized and presented below, followed by DEM's response. Copies of all comments are on file and available for public review at the RI Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, RI 02908.

Commenter #1 Michael Jarbeau, representing Save The Bay

COMMENT 1: Save The Bay commented on the number of unevaluated waterbodies statewide. The comment urges DEM to seek additional staff and resources for both monitoring additional unassessed waterbodies statewide.

DEM RESPONSE: DEM acknowledges Save The Bay's (STB) comment and appreciates their continued support and partnership in addressing water quality issues in Narragansett Bay. RIDEM continues its goal of assessing all waters statewide. As noted in the 2019 RIDEM Water Monitoring Strategy (<https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/benviron/water/quality/surfwq/pdfs/ri-water-monitoring-strategy-19.pdf>), several important monitoring programs (Narragansett Bay fixed network, mercury in fish tissue data, and reinstatement of regular water quality monitoring of RI's largest rivers via a Joint funding agreement with the United States Geological Survey) were expanded despite on-going RIDEM staffing limitations, as acknowledged by STB. RIDEM strives to continue to access new sources of data, staffing, funding, and partnerships to continue to acquire data on Category 3 (unassessed/insufficient data) waters and maintain current data on previously assessed waters.

COMMENT 2: Save the Bay raised concern on the adjustment of scheduled TMDL studies further into the future for particular impaired waters in the Upper Bay, Providence River, Seekonk River, and Greenwich Bay and to limit further extension of TMDL schedules to avoid prolonging water quality outcomes.

DEM RESPONSE: RIDEM has and will continue to utilize the most effective approach, TMDL or non-TMDL, to advance water quality improvements and ultimately achieve water quality standards. RIDEM applies an adaptive management approach in the scheduling of TMDLs for impairments where studies and/or models have documented specific source(s) are the predominate cause of the impairment and/or pollution control requirements in place or coming online are reasonably expected to result in attainment of water quality standards. Low priority for TMDL development scheduling is assigned to these impairments as compliance with the required actions are expected to result in water quality improvements and possibly negate the need for a TMDL.

For the estuarine waters noted by STB, significant progress has been made in abating pollution sources on upstream waters through permitting, particularly nutrient inputs from wastewater treatment facilities (WWTF) discharging to major rivers flowing into the estuarine waters. Studies determined that WWTF discharges on the major rivers were a majority of the nutrient load to Upper Narragansett Bay and its waters. Permitted facilities have gone through several rounds of permitting updates and facility upgrades to achieve the mandated goal of a summer nitrogen reduction of 50%. The targeted Rhode Island WWTFs first achieved

the 50% summer reduction goal during the 2012 summer season, and the most recent analysis found reductions at the WWTFs greater than 70% when compared to pre-nitrogen reduction era (early 2000s).

Given the high degree of interannual variability and significant reduction in nitrogen inputs, RIDEM and partners have been focused on monitoring the improvement in water quality. A reduction in frequency and duration of hypoxic events has occurred, but additional data and analysis is needed to ascertain significance in the trend. RIDEM acknowledges that the identified waters have not met water quality standards as of the 2024 cycle, and therefore, have not delisted the estuarine waters. However, the Blackstone and Pawtuxet Rivers have been delisted from nutrient impairments in previous assessment cycles.

Another factor in pursuing pollution reduction strategies prior to TMDL development is the lack of a robust, accepted model for Narragansett Bay and embayments suitable for TMDL development. Particularly, for the Providence and Seekonk Rivers, the mass transport component of one model system could not be successfully calibrated and validated due to the interaction of the deep channel and shallow flanks of these waterbodies. The greater Upper Narragansett Bay extensive modeling work and collaboration continues to evolve with further developments needed for mechanisms governing phytoplankton and dissolved oxygen over short time periods (Knightes 2023)¹. DEM continues to engage with ongoing modeling work on the Bay by researchers. Development of a robust, accepted model for Narragansett Bay and embayments would be a critical first step in TMDL development.

While some estuarine TMDL schedules have been delayed, RIDEM continues to foster initiatives with a proven track record of improving water quality within the Bay. These initiatives include both wastewater and stormwater mitigation strategies, such as projects supported via Rhode Island Clean Water State Revolving Fund and other sources. Projects include rehabilitating and replacement of sewer lines and pump stations to reduce sewer system overflows and continuing CSO abatement along with other wastewater projects, as well as upgrades to stormwater infrastructure with an emphasis on nature-based solutions.

Commenter #2 Steve Winnett, representing U.S. Environmental Protection Agency

COMMENT 1: USEPA requested clarification on the scheduling of TMDLs for the Newport Water Supply Tributaries and Melville Ponds and tributaries in 2024.

DEM RESPONSE: RIDEM continues progress on data analysis and documentation of the Newport Water Supply Tributaries and Melville Ponds and tributaries TMDL projects, but acknowledges that one or both of these projects may be finalized in 2025. Therefore, the waterbodies and causes in current TMDL development will be moved from 2024 completion to 2025 to accurately reflect TMDL priority in the next two years.

¹ Knightes, C.D. 2023. Simulating hypoxia in a New England estuary: WASP8 advanced eutrophication module (Narragansett Bay, RI, USA). *Water*. 15:1204.