THE NARRAGANSETT BAY COMMISSION

Division of Environmental Science & Compliance

PROJECT HIGHLIGHT

Bucklin Point Wastewater Treatment Facility, East Providence, RI



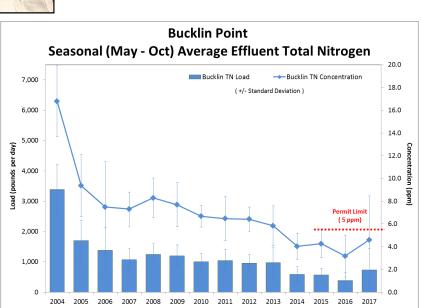


Aerial view of the Bucklin Point WWTF

Wastewater treatment at Bucklin Point includes screening and grit removal, primary settling, biological nutrient removal (BNR), secondary settling, and ultraviolet disinfection. Wet weather flows above the capacity of secondary treatment receive primary treatment and disinfection through chlorination and dechlorination processes. The BNR process at Bucklin Point initially became operational to meet a limit of 8.5 ppm in 2006, and the final system went online in 2014. The current system allows operations to reduce effluent total nitrogen to meet a stringent seasonal (May-October) permit limit of 5 ppm.



Composite sample bottles for automatic hourly sampling at the WWTF



In 1992, the Narragansett Bay Commission (NBC) took ownership of the Bucklin Point Wastewater Treatment Facility (WWTF) in East Providence, Rhode Island. This facility is the second largest WWTF in the state and is designed to provide advanced secondary treatment for up to 46 million gallons of wastewater per day (MGD). Bucklin Point is also designed to provide primary treatment and disinfection for up to an additional 116 MGD of wet weather flows. After treatment and disinfection, final effluent from this plant discharges to the Seekonk River. Bucklin Point is regulated and permitted by the Rhode Island Department of Environmental Management (RIDEM).

Nitrogen in Bucklin Point effluent since 2004

The efficient operation of the Bucklin Point WWTF is of utmost importance to the health of Narragansett Bay and to protect public health. Treatment plant processes are continuously monitored and samples analyzed to allow operators to keep a close eye on plant performance. This diligence has earned the Bucklin Point WWTF numerous awards for its outstanding operation and excellence in achieving high effluent water quality, including recognition from the RIDEM and the National Association of Clean Water Agencies.