Woonsocket Wastewater Treatment Facility - CLIMATE VULNERABILITY SUMMARY

The Woonsocket WWTF is located at 11 Cumberland Hill Road in Woonsocket. It treats an average of 9.3 million gallons of wastewater per day, serving approximately 51,400 customers in Woonsocket and North Smithfield, RI and Bellingham and Blackstone, MA. Additional information is on the back of this summary.

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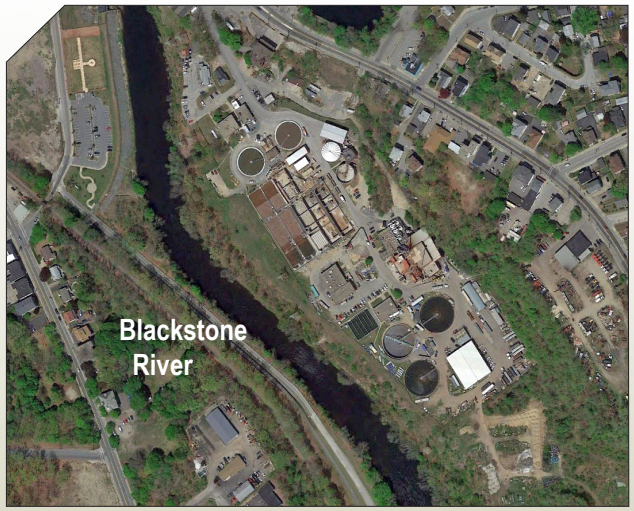


Legend

- Treatment Plant
- Pump Station
- Approx. Parcel Boundary
- 100-Year Flood Level plus 2 ft
- 100-Year Flood Level plus 3 ft

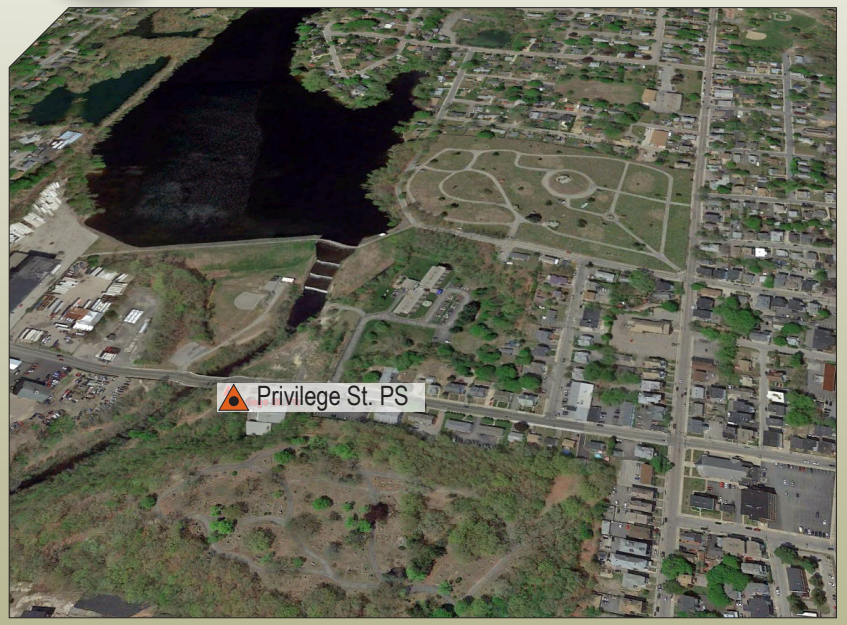
TOP 2 HAZARD MODELING RESULTS

Inland Flood Hazards

Partial inundation of the facility at the 100-year level plus 2 feet. Water depth would be about 10 inches at driveway between secondary clarifiers and effluent filter building.

Inland Flood Hazards

St. Louis pump station possible inundation at the 100-year level plus 3 feet.



COMPLETED CLIMATE CHANGE ADAPTATION MEASURES

Recent and on-going electrical system improvements improve the plant's electrical system resiliency.

WOONSOCKET, RI - CLIMATE VULNERABILITY SUMMARY

FACILITY SUMMARY

Owner	City of Woonsocket
Operator	CH2M Hill
Facility Address	11 Cumberland Hill Road Woonsocket, RI 02895
Contact Name	Jim Lauzon, Superintendent
Phone	401.356.1468
Design Flow Capacity	16.0 MGD
Average Daily Flow	9.3 MGD
Receiving Water	Blackstone River
Extreme Weather Related SSO Events 2010 - 2014	2 of 23 or 9%

The WWTF site is shared with an incinerator system operated by Synagro which uses approximately 3 MGD of recovered wastewater flow for incinerator use.

The facility experiences immediate inflow when a steady rain is present possibly caused by inflow from street flooding and the submergence of manholes and pump station wet wells.

Recent and on-going electrical system improvements include re-wiring with redundant power distribution systems, and replacement of the two existing 500kW generators with a new 2500kW generator installed in a standalone building approximately 4 feet above grade.

ADAPTIVE STRATEGIES (SEE REPORT FOR COMPLETE LIST)

SYSTEM	Hardening	Redundancy	Mitigation Strategy
Aeration Tanks	A		Protect facility entrances with flood barriers
Secondary Clarifiers	A	B	Protect facility entrances with flood barriers. Pumps may be temporarily augmented.
Disinfection System (Chlorine Contact Tanks)	A		Protect facility entrances with flood barriers.
Chemical Feed Building	A		Protect facility entrances with flood barriers.
St. Louis PS	B		Protect facility entrances with flood barriers and relocate building penetrations for louvers. Replace pumps with dry-pit submersibles.

A = < $50,000 B = $50,000 to $250,000 C = $250,000 - $1,000,000 D = > $1,000,000