West Warwick Wastewater Treatment Facility - CLIMATE VULNERABILITY SUMMARY

West Warwick WWTF is located at 1 Pontiac Avenue in West Warwick. It treats an average of 5.2 million gallons of wastewater per day, serving approximately 31,600 customers in Coventry, Cranston, East Greenwich, Warwick, and West Greenwich. Additional information is on the back of this summary.







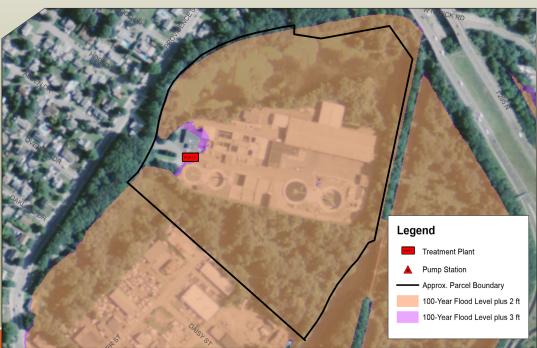


TOP 3 HAZARD MODELING RESULTS

Inundation of almost the entire WWTF site at the 100-year plus 2' event with a water depth of 4-5 feet near the solids processing building.

Inundation of Clyde PS at the 100-year flood level plus 2' event.

Inundation of Maisie Quinn PS at the 100-year plus 3' event.







WEST WARWICK, RI - CLIMATE VULNERABILITY SUMMARY

FACILITY SUMMARY				
Owner	Town of West Warwick			
Operator	Town of West Warwick			
Facility Address	140 Pettaconsett Avenue Cranston, RI 02920			
Contact Name	Bernard Bishop, Interim Superintendent			
Phone	401.822.9228			
Design Flow Capacity	11 MGD			
Average Daily Flow	5.2 MGD			
Receiving Water	Pawtuxet River			
Extreme Weather Related SSO Events 2010 - 2014	2 out of 6 events or 33%			

Numerous process components throughout the facility were replaced following the storm events of March 2010, however very few incorporated flood mitigation efforts to protect new equipment because of code restrictions.

According to the U.S. Fish & Wildlife Service National Wetlands Inventory, approximately two-thirds of the perimeter of the WWTF abut wetlands of various classifications.

Atypical chemicals stored on the WWTF site would be subject to flotation or inaccessibility during a flood event.

Clyde PS is adjacent to the Pawtuxet River with the generator louver close to grade. Flood waters were observed flowing into Clyde PS through the generator louver during previous flood events, but the station maintained functionality.

ADAPTIVE STRATEGIES (SEE REPORT FOR COMPLETE LIST)						
SYSTEM	Hardening	Relocating	Readily Repairable/ Replaceable	Redundancy	Mitigation Strategy	
Primary Clarifiers	В	D	В	В	Protect facility entrances with flood barriers. Extend tank perimeter wall upward. Pump influent to Cranston WWTF.¹ Store replacement drive components on site. Pumps may be temporarily augmented. Replace sludge pumps with submersibles.	
Disinfection System (UV)	А	D			Protect facility entrances with flood barriers. Pump influent to Cranston WWTF. ¹	
Effluent Pump Station	А	D			Protect facility entrances with flood barriers. Pump influent to Cranston WWTF.1	
Generator	А	D			Protect facility entrances with flood barriers. Pump influent to Cranston WWTF.1	
Operations Building	А	D			Protect facility entrances with flood barriers. Pump influent to Cranston WWTF.1	

Redirecting influent flow to the Cranston WWTF would address multiple systems under one project. This long term plan should be considered in conjunction with Warwick A = < \$50,000 B = \$50,000 to \$250,000 C = \$250,000 - \$1,000,000 D = > \$1,000,000