Newport Wastewater Treatment Facility - CLIMATE VULNERABILITY SUMMARY

Newport WWTF is located at 250 J.T. Connell Highway in Newport, approximately 1,000 feet inland from Coasters Harbor. It treats an average of 8.4 million gallons of wastewater per day in dry weather, serving approximately 41,600 customers in Newport, Middletown, U.S. Naval Station Newport, and a portion of Portsmouth. Newport is a combined system that treats stormwater flows during rain events with capacity up to 19.7 million gallons per day. Additional information is on the back of this summary.









TOP 3 HAZARD MODELING RESULTS

Partial inundation of the WWTF during a 100-year storm.

Main power disconnect inundated during 100-year storm event with 2-3 feet of SLR.

Dyre Street, Goat Island, Long Wharf, and Wellington pump stations and Washington CSO facility inundated during a 100-year storm.









NEWPORT, RI - CLIMATE VULNERABILITY SUMMARY

FACILITY SUMMARY			
Owner	Town of Newport		
Operator	Suez		
Facility Address	250 J.T. Connell Highway Newport, RI 02840		
Contact Name	Thomas Ciolfi, Superintendent		
Phone	401.845.2000		
Design Flow Capacity	10.7 MGD		
Average Daily Flow	8.4 MGD		
Receiving Water	Narragansett Bay East Passage		
Extreme Weather Related SSO Events 2010 - 2014	21 out of 85 events or 25%		

The WWTF has an effluent pumping system used during high surface water conditions at the outfall. Operators estimate the effluent pumping frequency averages one event per month.

Newport operates two CSO facilities.

Facility upgrades are underway to increase treatment capacity and eliminate CSOs. The upgrades will impact preliminary, primary and secondary treatment as well as solids handling and will raise the maximum daily flow capacity from 19.7 MGD to 30 MGD.

Efforts are on-going to separate catch basins from the sanitary system.

ADAPTIVE STRATEGIES (SEE REPORT FOR COMPLETE LIST)					
SYSTEM	Hardening	Readily Repairable/ Replaceable	Redundancy	Mitigation Strategy	
Primary Clarifiers	В	В	В	Protect facility penetrations (and electrical equipment) with flood barriers. Store replacement drive components on site. Replace sludge pumps with submersibles. Pumps may be temporarily augmented.	
Disinfection System (Chlorine Contact Tanks)	А			Protect facility entrances with flood barriers.	
Effluent Pump Station (Screw Pumps)	А			Protect facility entrances with flood barriers.	
Long Wharf PS	А			Protect facility entrances with flood barriers and relocate building penetrations for louvers.	
Wellington Avenue PS/CSO	А			Protect facility entrances with flood barriers.	