

New Shoreham Wastewater Treatment Facility - CLIMATE VULNERABILITY SUMMARY

New Shoreham WWTF is located at 252 Spring Street in New Shoreham (Block Island). It serves approximately 300-700 customers during the winter and approximately 4,000 customers during the summer. Additional information is on the back of this summary.



Legend

- Treatment Plant
- Pump Station
- Approx. Parcel Boundary
- 100-Year Flood Level
- 100-Year Flood Level Plus 1' SLR
- 100-Year Flood Level Plus 2' SLR
- 100-Year Flood Level Plus 3' SLR
- 100-Year Flood Level Plus 5' SLR



TOP 2 HAZARD MODELING RESULTS

Ocean Ave. PS #1, Ocean Ave. PS #2, are inundated at the 100-year flood event.



Old Harbor (Main) PS is inundated at the 100-year flood event with 1 foot of SLR.



NEW SHOREHAM, RI - CLIMATE VULNERABILITY SUMMARY

FACILITY SUMMARY	
Owner	Town of New Shoreham
Operator	Town of New Shoreham
Facility Address	252 Spring Street New Shoreham, RI 02807
Contact Name	Chris Blane, Superintendent
Phone	401.466.3231
Design Flow Capacity	0.3 MGD
Average Daily Flow	0.2 MGD Summer / 0.05 MGD Winter
Receiving Water	Rhode Island Sound
Extreme Weather Related SSO Events 2010 - 2014	None reported

Transportation vessels supplying the island terminate operation approximately 72 hours prior to major storm events, isolating the island so the facility stores chlorinating/dechlorinating chemicals and sodium hydroxide for alkalinity adjustment on-site, and maintains a stock of lime for back-up alkalinity adjustment.

The facility has two old rectangular clarifiers used to hold press filtrate; in the winter time these tanks can hold up to 2 days' worth of influent flow in case of system failure.

The treatment facility isolates itself from the power grid under winds exceeding 45 mph; power is cut off at the grid at 75 mph.

ADAPTIVE STRATEGIES (SEE REPORT FOR COMPLETE LIST)				
SYSTEM	Hardening	Readily Repairable/ Replaceable	Bypass	Mitigation Strategy
Preliminary Treatment (Screening / Grit Removal)				Unnecessary or low priority
Aeration Tanks				Unnecessary or low priority
Secondary Clarifiers		A		Store replacement drive components on site.
Old Harbor (Main) PS	B		A	Modify structure to withstand wave impact and elevate building penetrations. Establish station shutdown plan for implementation during conditions of seawater inundation.
Ocean Avenue #1 PS	A			Elevate control panels above grade.
Ocean Avenue #2 PS	A			Elevate control panels above grade.

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