

Sea Level Scenarios **General Information** Impacted Asset 1.7 feet | 4.0 feet | 6.3 feet 1.38 0.23 0.68 Critical Municipal Infrastructure Sewer Pipes Miles 0.05 0.33 0.93 Water Pipes Miles Critical Municipal Infrastructure 0.04 0.04 Transmission Lines Miles 0.04 Critical Municipal Infrastructure

Other Infrastructure Assets: Town of Exeter							
Impacted Asset	Metric	Metric Impact	General Location and Name				
School	#	0	N/A				
Water Treatment Plan	#	1	Portsmouth Ave				
Elderly Housing	#	1	Squamscott View				
Daycare Facility	#	1	PEA Daycare				
Sewer Pump Station(s)	#	2	Webster; Main Street				
Residential Structures	#	16	Building data points shown on this map indicate the relative location existing structures				
Dam	#	1	Exeter Sewage Holding Pond				
Historic Registry Site(s)	#	2	Exeter Waterfront Commercial Historic District; Front Street Historic District				
Water Access	#	1	Exeter Boat Launch: Squamscott River				



The Climate Risk in the Seacoast: Assessing Vulnerability of Municipal Assets and Resources to Climate Change (C-RiSe) project provides maps and assessments of flood impacts to infrastructure and natural resources in the coastal Great Bay region associated with projected increases in storm surge, sea level, and precipitation.

TOWN OF EXETER

Extent of Projected Tidal Flooding Sea-Level Rise 1.7', 4.0', 6.3'

SLR Legend

Impact Legend

Community Anchor Institutions



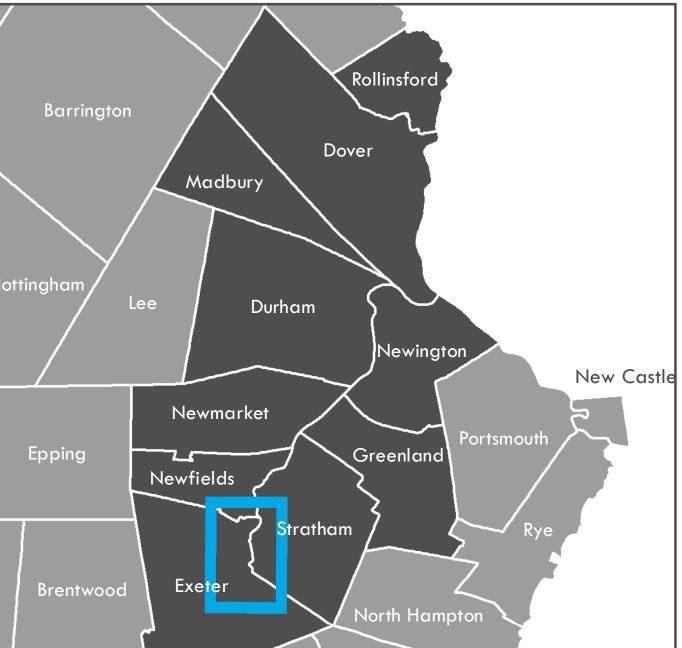
Approximate Mean High High Water Level

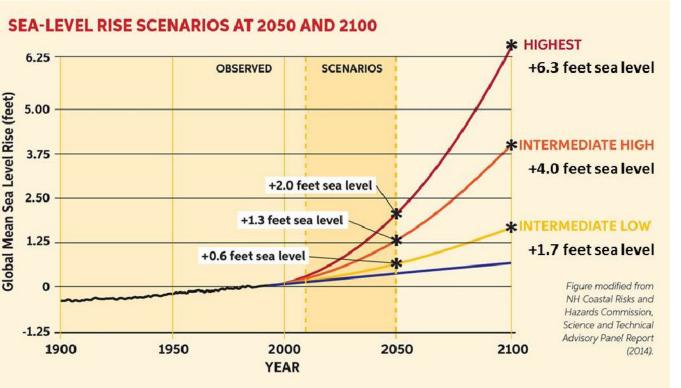
Critical Facilities Energy Facilities Graveyard National Register of Historic Places Public Water Supply

Transmission Substation Wastewater Treatment Facilities Public Water Access Sites Sewer Pipes

Transmission Line Water Pipes

The building data points shown on this map indicate the relative location of existing structures to the flood scenarios displayed. For the purpose of the C-RiSe assessment, the severity, type, or impact of flooding on these structures was not evaluated.





Sea-Level Rise Scenarios

Please note that the sea-level rise scenarios used in this assessment were derived from the Wake, 2011 report (refer to table of values below from this report). These scenarios were selected prior to the release of the Science and Technical Advisory Panel Report to the N.H. Coastal Risks & Hazards Commission, in August, 2014 [1]. While slightly different than the scenarios cited in that report, they yield coverage estimates that are within the mapping margin of error.

[1] Wake CP, Kirshen P, Huber M, Knuuti K, and Stampone M (2014) Sea-level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends, prepared by the Science and Technical Advisory Panel (STAP) for the New Hampshire Coastal Risks and Hazards Commission.

	2050		2100	
	Lower	Higher	Lower	Higher
Current Elevation of MHHW a,b	4.4	4.4	4.4	4.4
100-Year Flood Height	6.8	6.8	6.8	6.8
Subsidence	0.0	0.0	0.0	0.0
Eustatic SLR	1.0	1.7	2.5	6.3
Total Stillwater Elevation a.c	12.2	12.9	13.7	17.5

c - Total Stillwater Elevation may not equal total of components due to rounding

Table 13. Estimates (in feet) of future 100-year flood Stillwater elevations at Fort Point under lower and higher emission scenarios (relative to NAVD88) based on the statistical analysis presented in this report. Wake CP, E Burakowski, E Kelsey, K Hayhoe, A Stoner, C Watson, E Douglas (2011) Climate Change in the Piscataqua/Great Bay Region: Past, Present, and Future. Carbon Solutions New England Report for the Great Bay (New Hampshire) Stewards."

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Data sets were retrieved from the NH GRANIT database, December, 2015. Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Earth Systems Research Center (ESRC), under contract to the Office of Energy & Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. Neither OEP nor ERSC make any claim as to the validity or reliability or to any implied uses of these data.

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