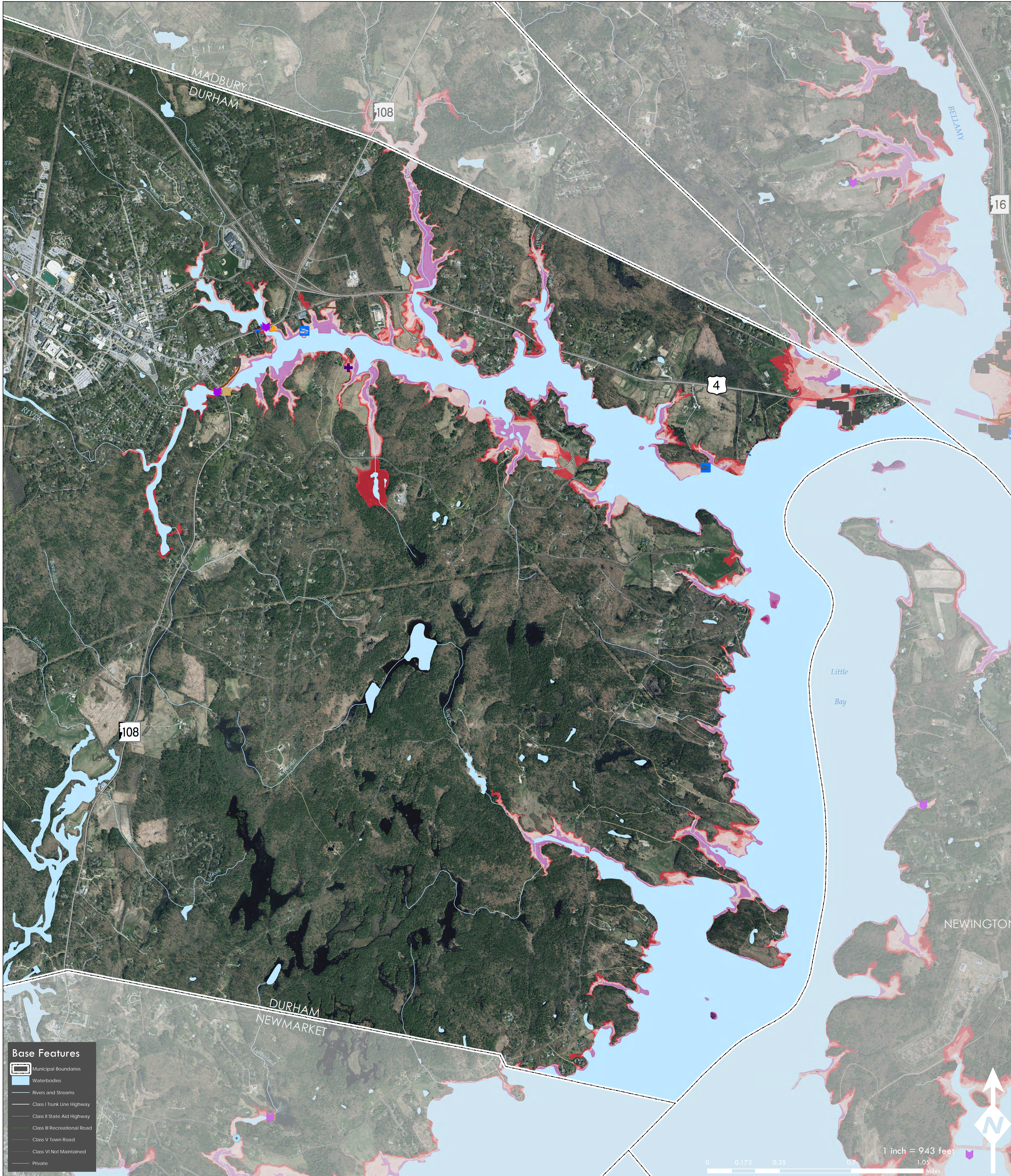




The Climate Risk in the Seacoast: Assessing Vulnerability of Municipal Assets and Resources to Climate Change (C-RiSe) project provides maps and assessments of flood impacts to infrastructure and natural resources in the coastal Great Bay region associated with projected increases in storm surge, sea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

TOWN OF DURHAM

Map 4: Extent of Projected Tidal Flooding Sea-Level Rise 1.7', 4.0', 6.3' + Storm Surge



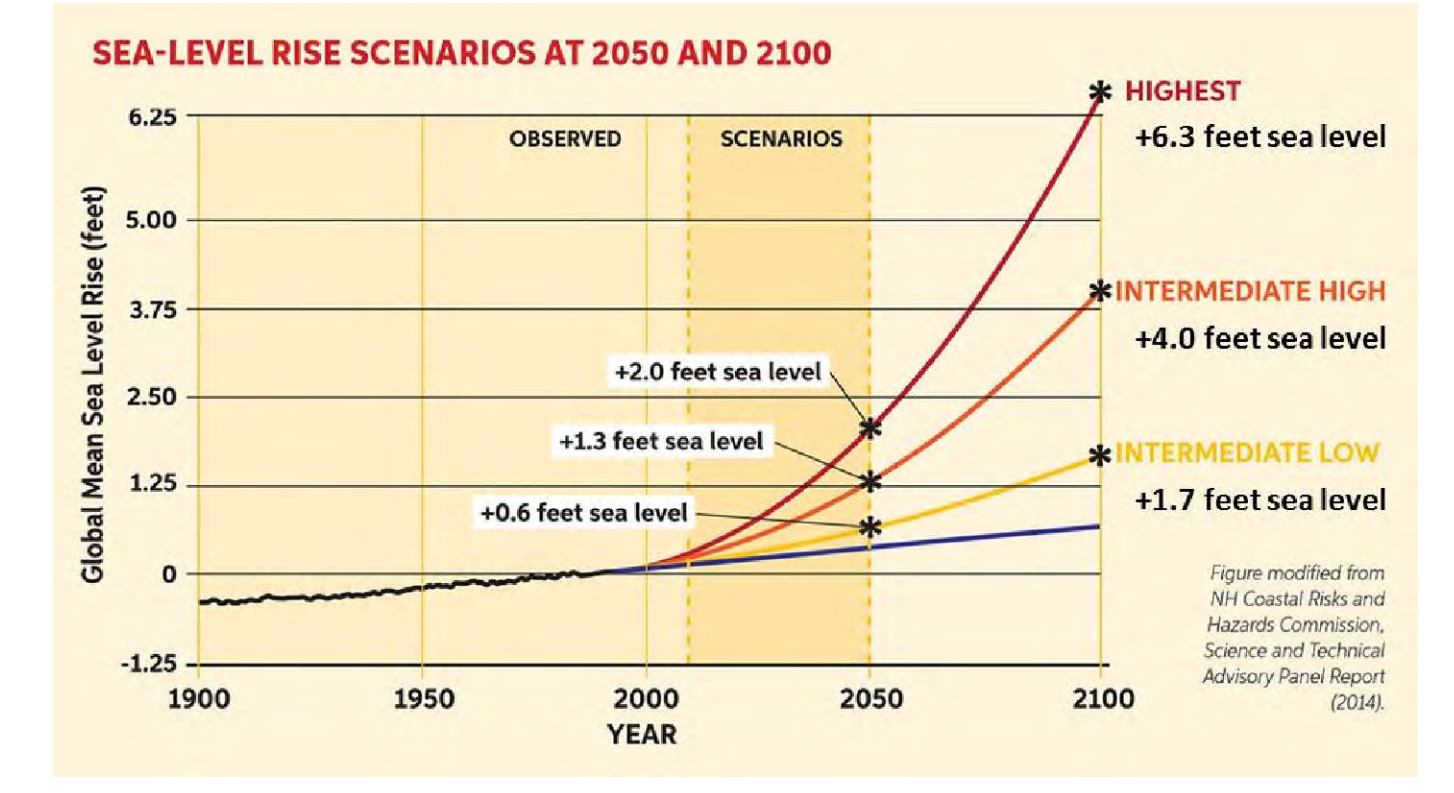
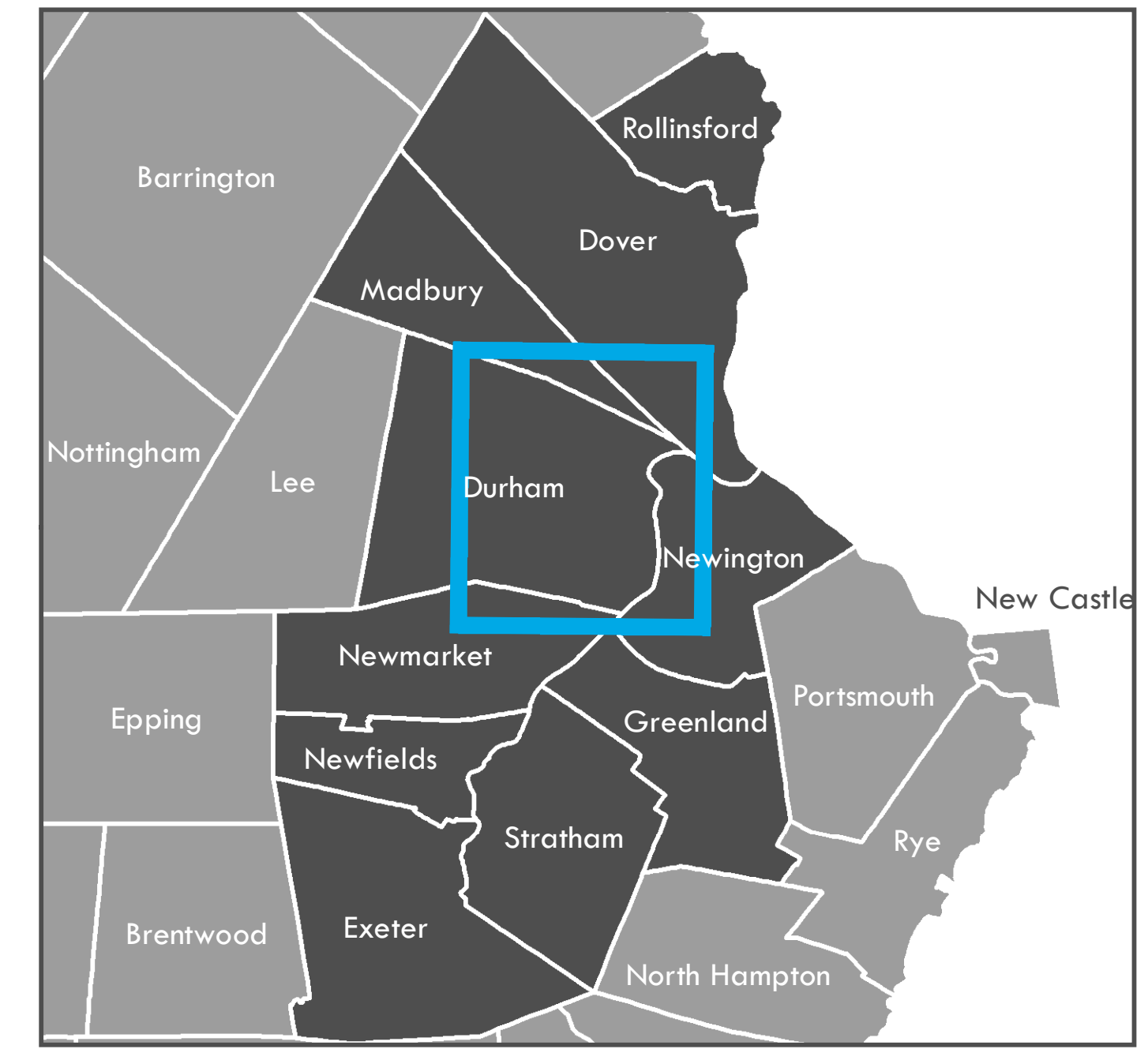
SLR Legend

- Extent of Sea-Level Rise of 1.7' with Storm Surge
- Extent of Sea-Level Rise of 4.0' with Storm Surge
- Extent of Sea-Level Rise of 6.3' with Storm Surge
- Approximate Mean High High Water Level

Impact Legend

- Critical Facilities
- Culverts
- Dams
- Graveyard
- Houses
- National Register of Historic Places
- Public Water Access Sites
- Sewer Pipes
- Water Pipes

Disclaimer:
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, Kintner P, Huber M, Knott K, and Stomporo 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
Elastic SLR	1.0	1.7	2.5	6.3
Total Stillwater Elevation^{c,c}	12.2	12.9	13.7	17.5

a - NAVD: North American Vertical Datum of 1988
b - MHHW: Mean Higher High Water at Fort Point, NH
c - Total Stillwater Elevation may not equal total of components due to rounding

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Date: 12/9/2016 Author: MS/RR/JL/KP
Path: M:\Region\Project_Special_Merit\Mapping\Final_Maps_By_Community\Durham\Durham_Infrastructure_4_6.mxd

Data Sources:
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 ESRC make any claim as to the validity or reliability or to any implied uses of these data.

Base Features

- Municipal Boundaries
- Waterbodies
- Rivers and Streams
- Class I Trunk Line Highway
- Class II State Aid Highway
- Class III Recreational Road
- Class V Town Road
- Class VI Not Maintained
- Private

Infrastructure Asset Impacts: Town of Durham

Impacted Asset	Metric	Sea Level Scenarios			General Information
		1.7 feet	4.0 feet	6.3 feet	
Sewer Pipes	Miles	0.13	0.19	0.26	Critical Municipal Infrastructure
Water Pipes	Miles	0.01	0.01	0.11	Critical Municipal Infrastructure
Transmission Lines	Miles	0.00	0.00	0.00	Critical Municipal Infrastructure

Other Infrastructure Assets: Town of Durham

Impacted Asset	Metric	Metric Impact	General Location and Name
Primary Sewer Lift Station	#	1	Near Beards Creek Dam
Dams	#	1	Beards Creek Dam
Graveyards	#	1	Mill Pond Dam
Durham Historic District	#	1	Durham Point Road
Residential Structures	#	14	Main Street/Newmarket Road
Water Access	#	1	Jackson's Landing
		1	Wagon Hill

Note: Total number of impacted assets were calculated using the greatest sea-level scenario (6.3')

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