



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.

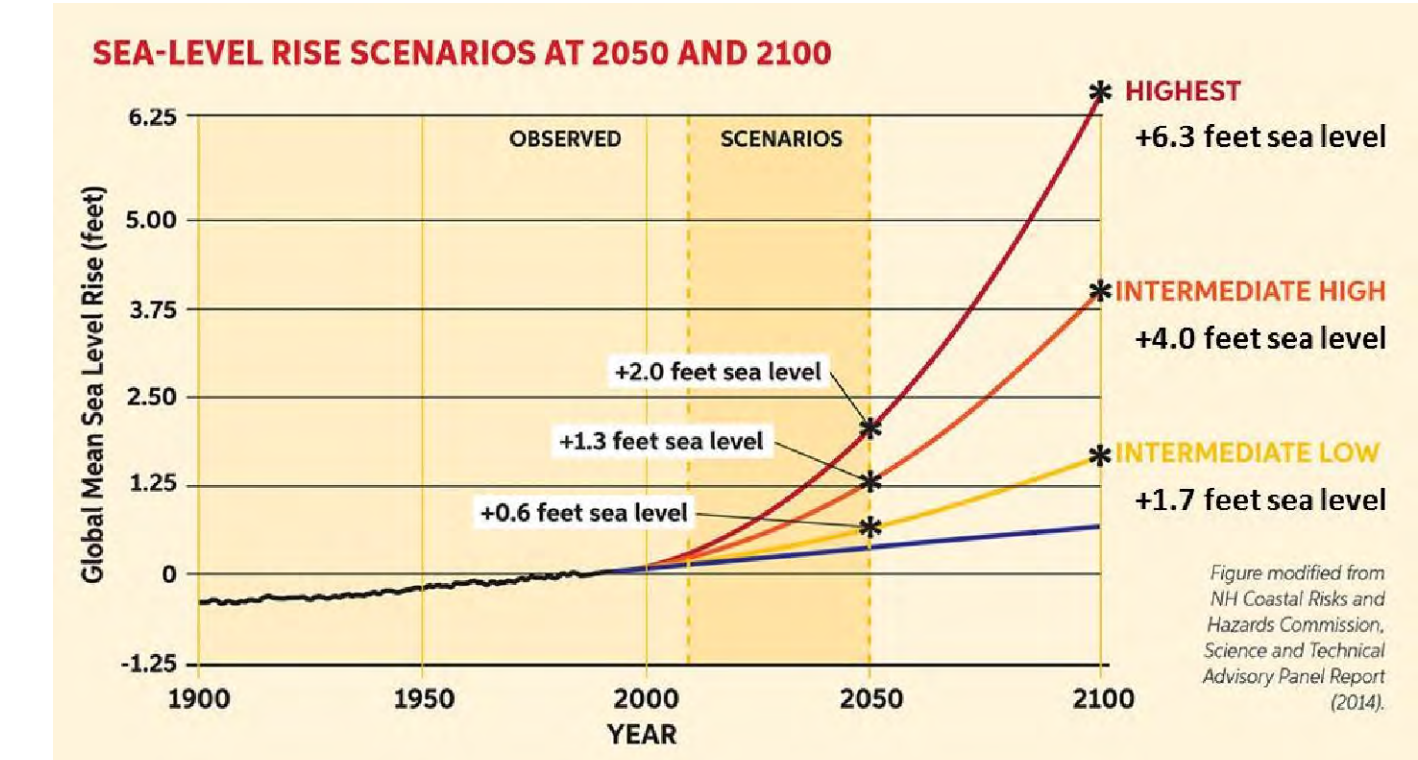
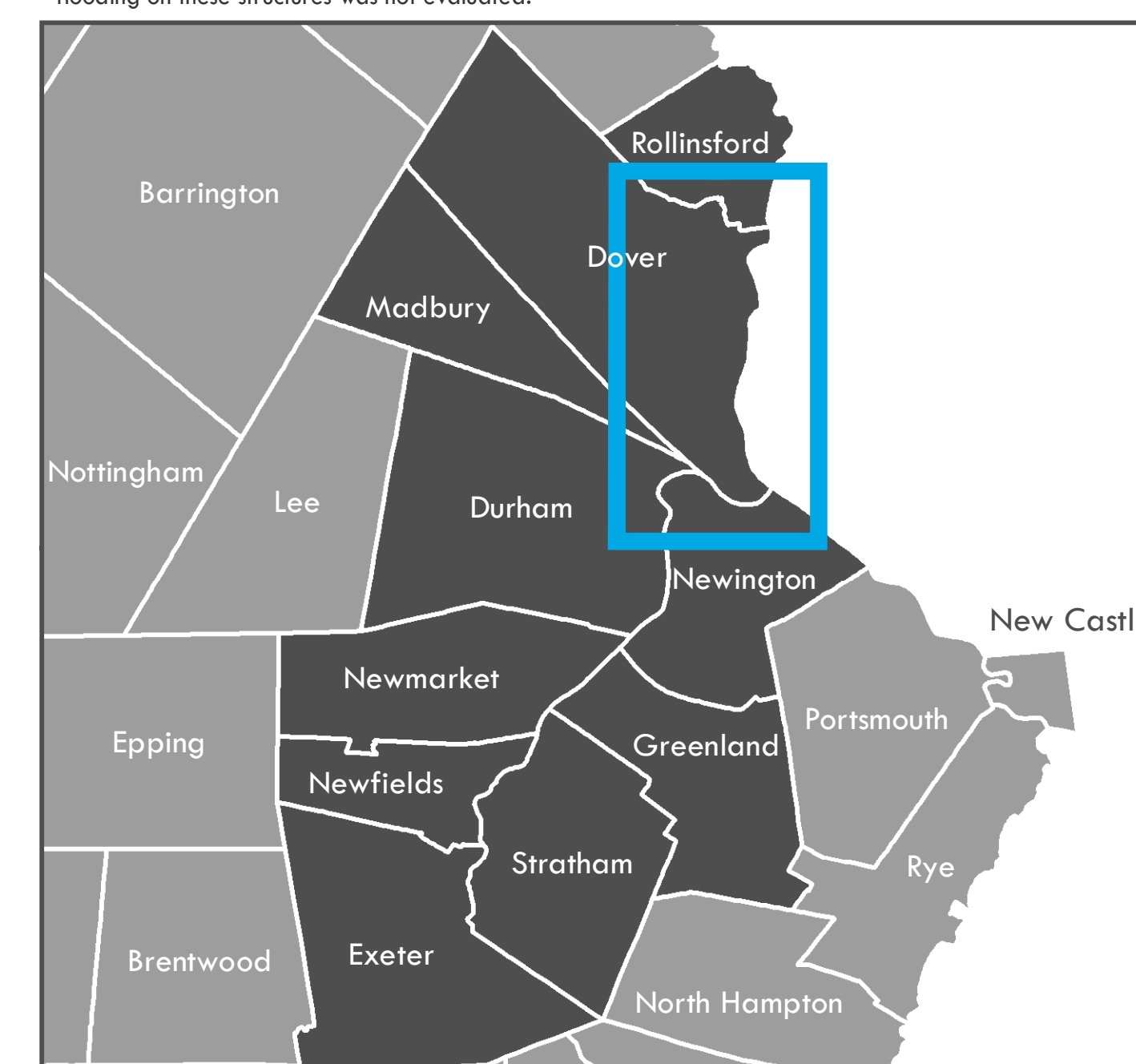
## CITY OF DOVER

Map 3: Critical Facilities and Infrastructure  
Sea-Level Rise 1.7', 4.0', 6.3'

### SLR Legend Impact Legend

- Extent of Sea-Level Rise 1.7'
- Extent of Sea-Level Rise 4.0'
- Extent of Sea-Level Rise 6.3'
- Approximate Mean High High Water Level
- ▲ Critical Facilities
  - Culverts
  - Dams
  - Graveyard
  - Houses
  - National Register of Historic Places
  - Public Water Access Sites
  - Sewer Pipes
  - Transmission Line
  - 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 <sup>a,b</sup>	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
<b>Total Stillwater Elevation<sup>c,c</sup></b>	<b>12.2</b>	<b>12.9</b>	<b>13.7</b>	<b>17.5</b>

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

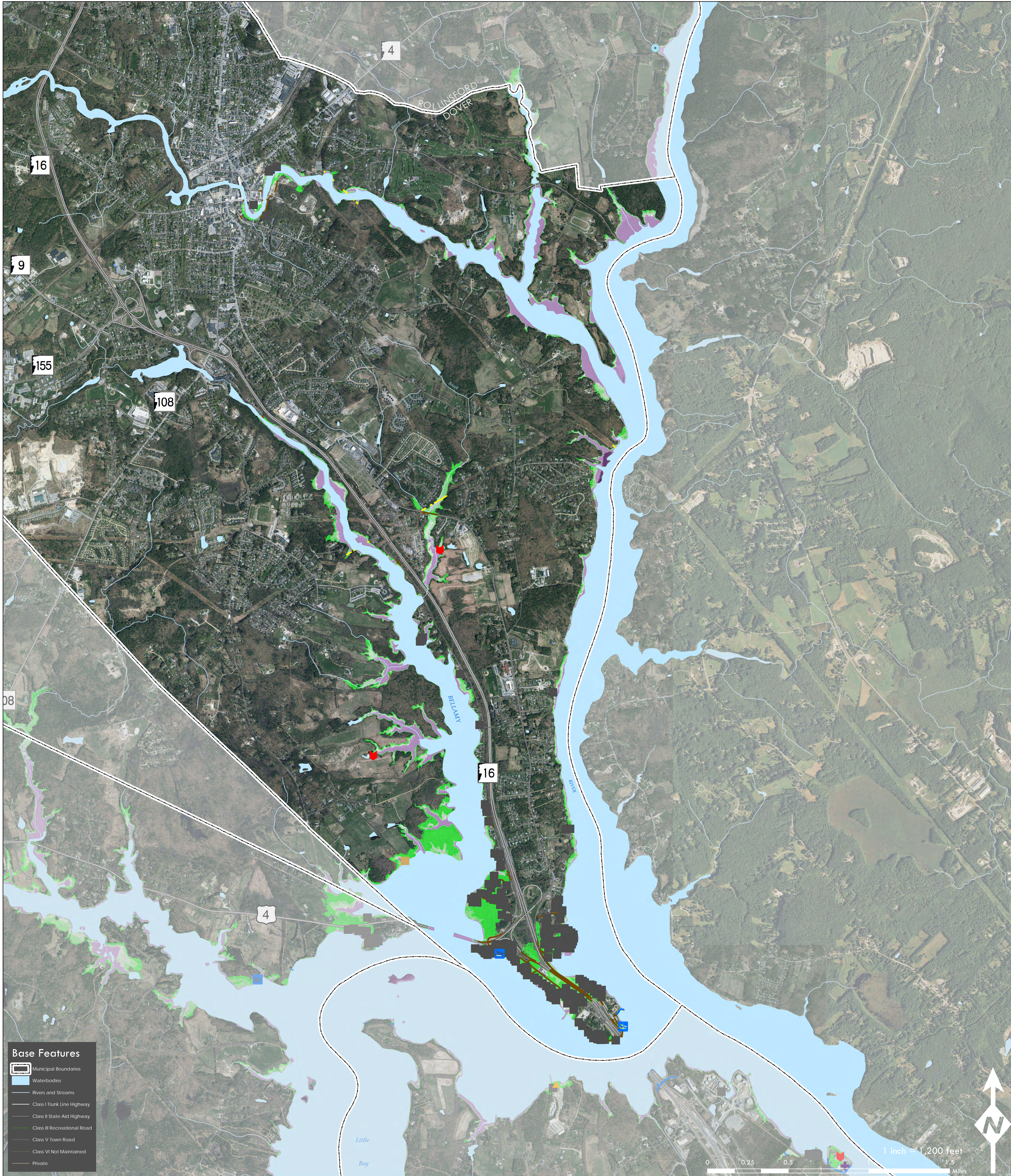
Table 13. Estimator (in feet) of future 100-year flood stillwater elevations at Fort Point under lower and higher emission scenarios (relative to NAVD83) based on the statistical analysis presented in this report.

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Path: M:\Region\Project\_Special\_Merit\Mapping\Final\_Maps\_By\_Community\Dover\Infrastructure\_1\_3.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.

The C-RiSe project is funded by the National Oceanic and Atmospheric Administration under the Coastal Zone Management Act (CZMA) Enhancement Program. Project of Special Merit for FY 2015, authorized under Section 309 of the CZMA (16 U.S.C. § 1456b).



- 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: City of Dover					
Impacted Asset	Metric	Sea Level Scenarios			General Information
		1.7 feet	4.0 feet	6.3 feet	
Sewer Pipes	Miles	0.00	0.28	1.74	Critical Municipal Infrastructure
Water Pipes	Miles	0.00	0.02	0.05	Critical Municipal Infrastructure
Transmission Lines	Miles	0.05	0.10	0.16	Critical Municipal Infrastructure

Other Infrastructure Assets: City of Dover				
Impacted Asset	Metric	Metric Impact	General Location and Name	
Dams	#	1	Tuttle Market Gardens Farm Pond	
Historic Registry Site	#	1	Bay View Road: Back River/Samuel Emerson Farm	
Pump Station(s)	#	4	Eagles Bay Drive; Hilton Park Road; Gerrish Road; and Mill Street	
Residential Structures	#	74	Building data points shown on this map indicate the relative location of existing structures	
Water Access	#	2	Hilton Park: Piscataqua River Bay View Marina: Great Bay	

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