



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 NEWMARKET

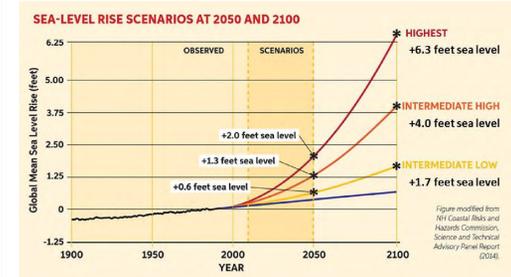
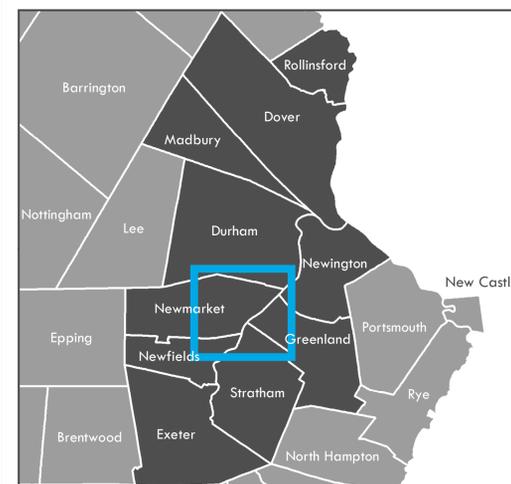
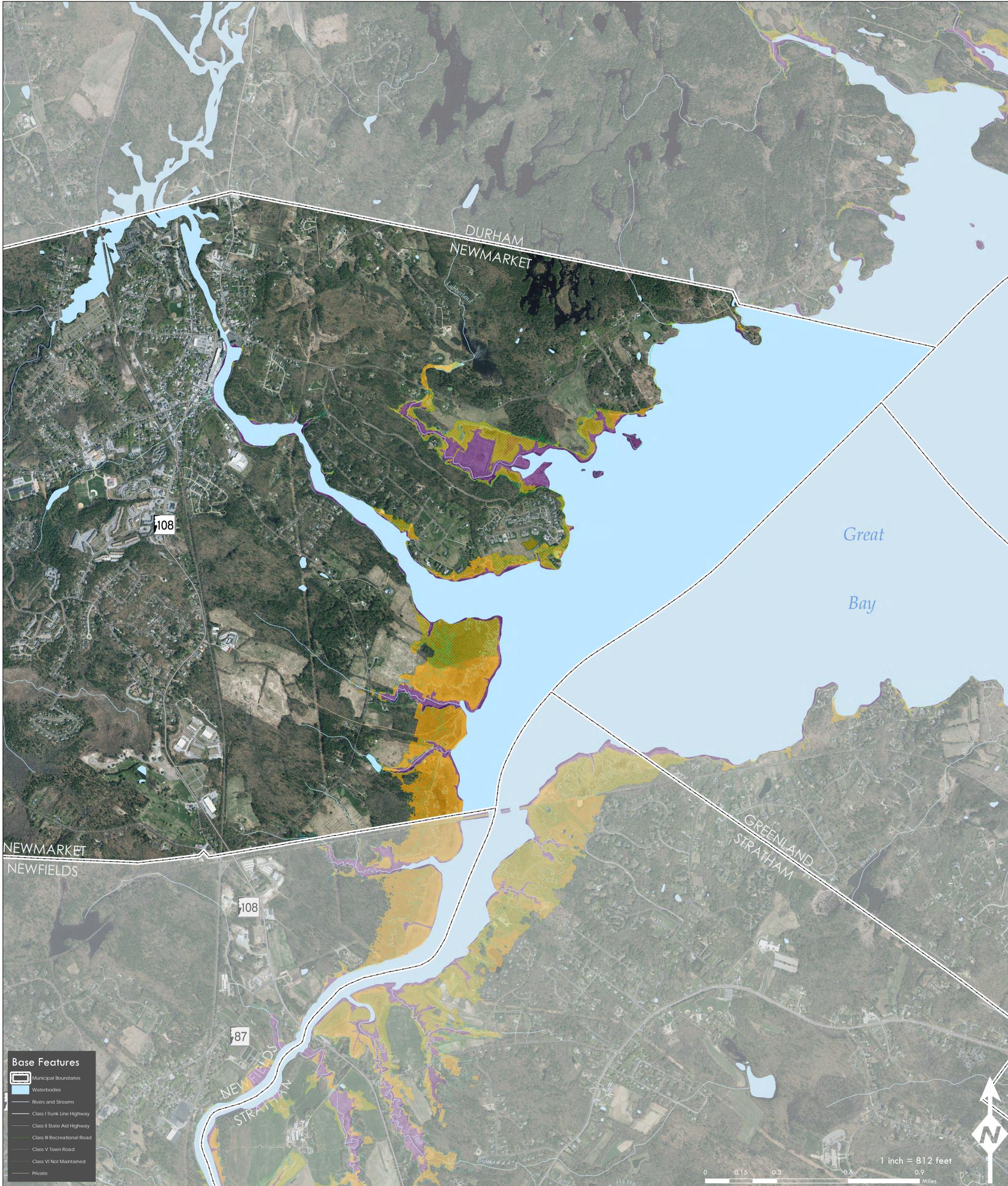
Map 7: Land Resources  
Sea-Level Rise 1.7', 4.0', 6.3'

### SLR 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

### Impact Legend

- Conservation Lands (2015)
- Wildlife Action Plan Tiers 1,2,3 (2015)



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>

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

Table 43. Estimate (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.  
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.

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Path: M:\Region\Project\_Special\_Merit\Mapping\Final\_Maps\_By\_Community\Newmarket\Newmarket\_LandRes\_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.

#### 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

Land Resource Impacts: Town of Newmarket (acres)									
Resource Type	Name	Sea Level Scenarios			Resource Type	Name	Sea Level Scenarios		
		1.7 feet	4.0 feet	6.3 feet			1.7 feet	4.0 feet	6.3 feet
Conservation Lands	Billetter	1.36	1.57	1.80	Conservation Lands	Pitman	0.01	0.14	0.44
	Common Open Space	0.00	0.00	0.27		Popov Waterfront	0.03	0.15	0.41
	Continental Advisors	0.00	0.01	0.07		Sandy Point	0.00	0.00	0.06
	Crommet & Lubberland Creek	12.99	17.23	21.30		TNC/Atherton	0.00	0.01	0.03
	Heron Point Open Space	0.04	0.16	0.40	Wildlife Action Plan	Tier 1	77.77	139.20	190.25
	Lemprey River Shorebank Access	0.00	0.02	0.07		Tier 2	0.38	2.19	7.45
	Levy Easement/Fee	4.27	26.71	34.61		Tier 3	0.40	1.38	5.70
	Moody Point Open Space	11.88	17.56	25.64					
	Palmisciano-Ahlgren	0.11	0.71	1.81					
Pearson Easement	4.48	6.15	7.76						

Land Resource Totals (acres)			
Resource Type	Sea Level Scenarios		
	1.7 feet	4.0 feet	6.3 feet
Conservation Lands	35.17	70.42	94.67
Wildlife Action Plan	78.55	142.77	203.40
<b>Total(s) Combined</b>	<b>113.72</b>	<b>213.19</b>	<b>298.07</b>

1 inch = 812 feet

