



Reality and Perceptions about Climate Change in New Hampshire

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Coastal NH Climate Summit, Greenland NH

#nhcoastalclimate

“Although they produce distinct types of challenges, climate change, energy security, and economic stability are inextricably linked”



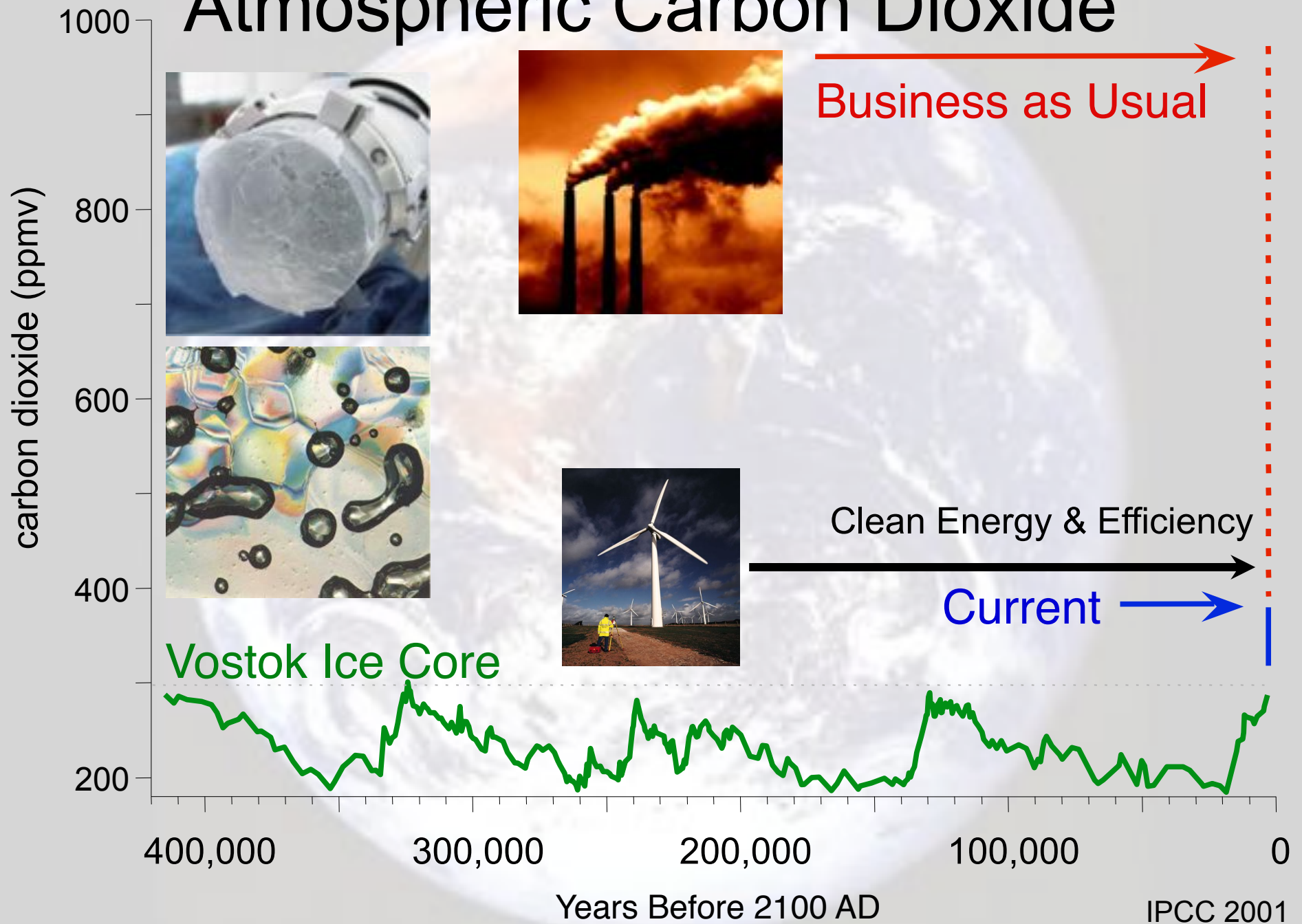
<http://www.defense.gov/qdr/>



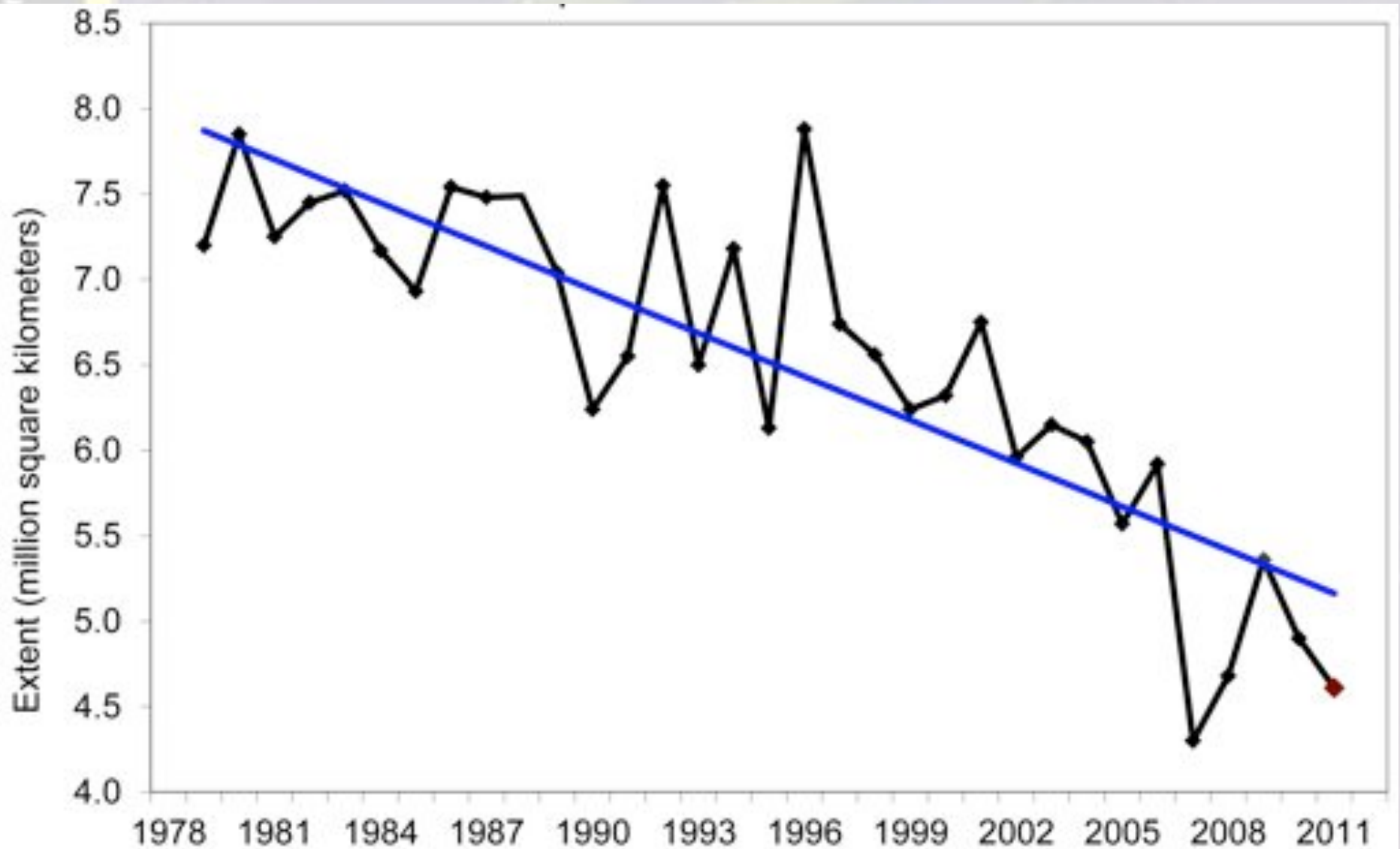
2013 Worldwide Threat Assessment
US Intelligence Community

Climate change, food insecurity, & drought
fuel tensions and conflicts around world

Atmospheric Carbon Dioxide

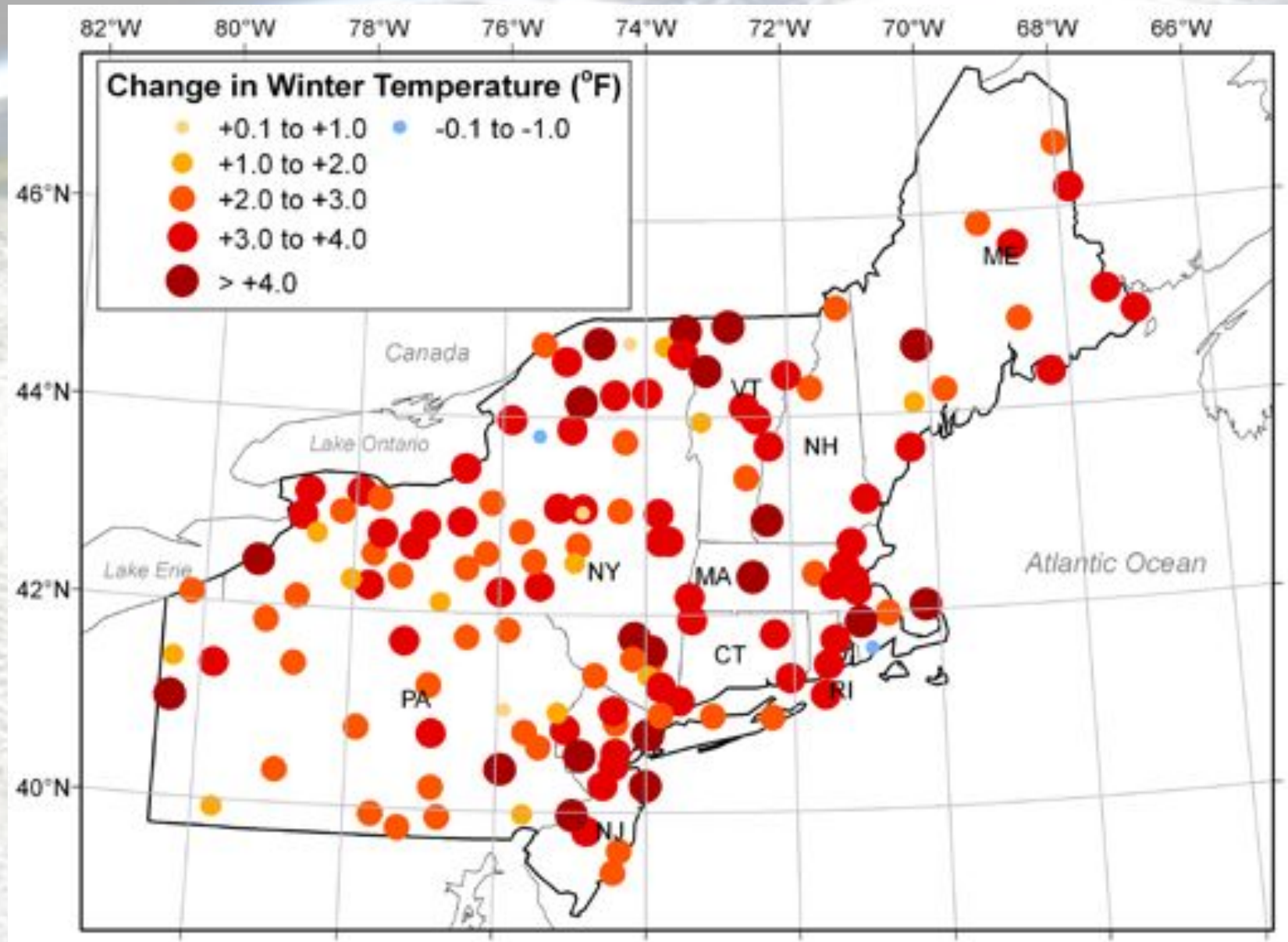


September Arctic Sea Ice Extent 1979 - 2011



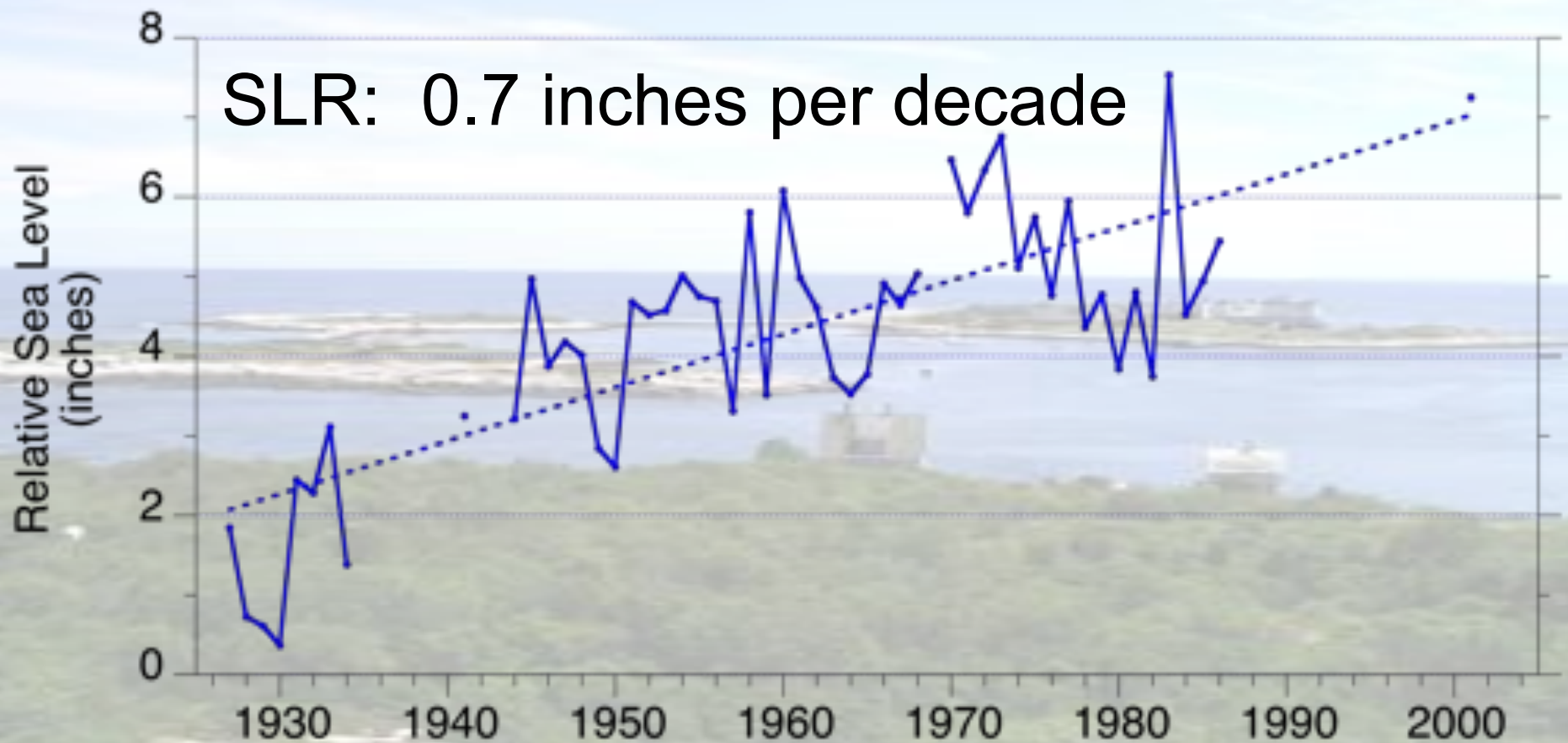
National Snow and Ice Data Center <http://nsidc.org>

Northeast Winter Temperature Trends 1965-2008

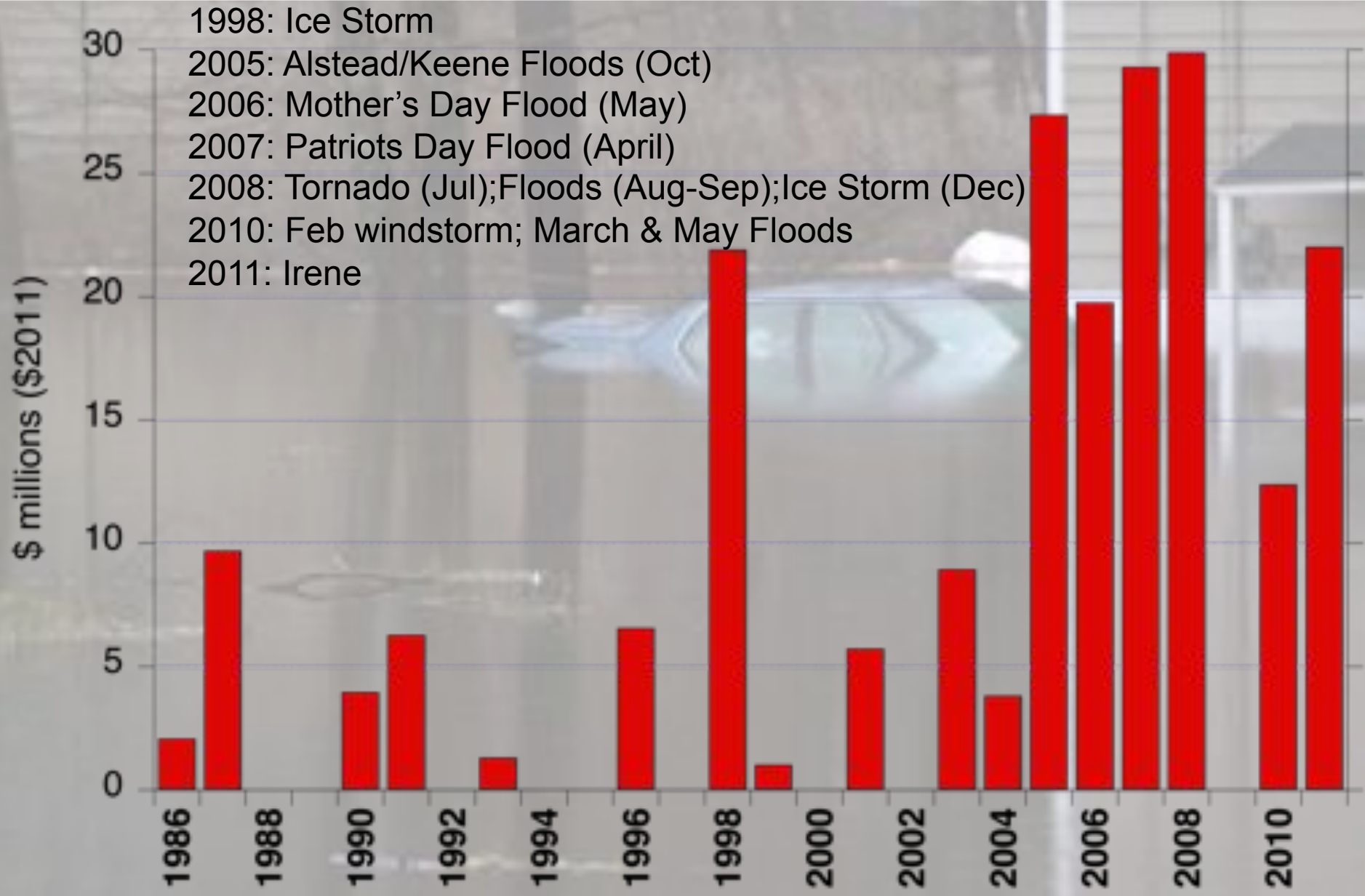


Burakowski et al., 2008, JGR

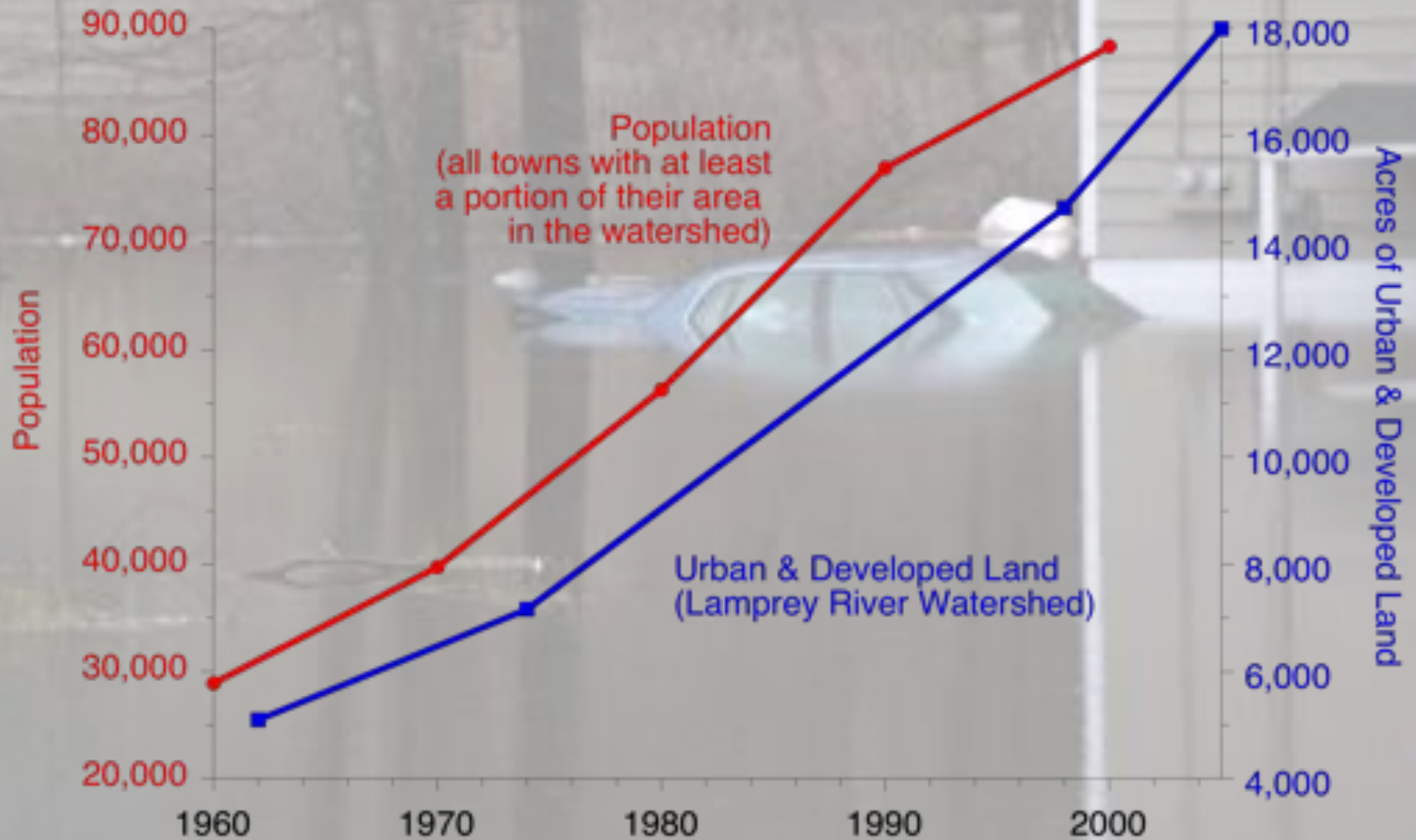
Sea Level Rise at Portsmouth Harbor 1927 - 2001



Costs from Presidentially Declared Disasters And Emergency Declarations in NH



5 Decades of Population Growth and Development



Assessing Flood Risk in the Lamprey River Watershed, NH

<http://100yearfloods.org>

100-Year Floodplains in the Lamprey River Watershed: Flood Insurance Rate Maps (FIRMs), Updated (2005) Conditions, and 2100 Conventional Buildout Durham Panel



Flood Studies	100-yr Packers Falls Discharge	100-yr Packers Falls Water Surface Elevation	100-yr Floodplain Area
FIS to 2005	56%	2.7 ft	20%
2005 to 2100	66%	4.4 ft	14%

Vermont Law School - Questions of
Legal Authority, Measures and Consequences

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Climate Change in the Piscataqua/Great Bay Region: Past, Present, and Future



 UNIVERSITY
of NEW HAMPSHIRE

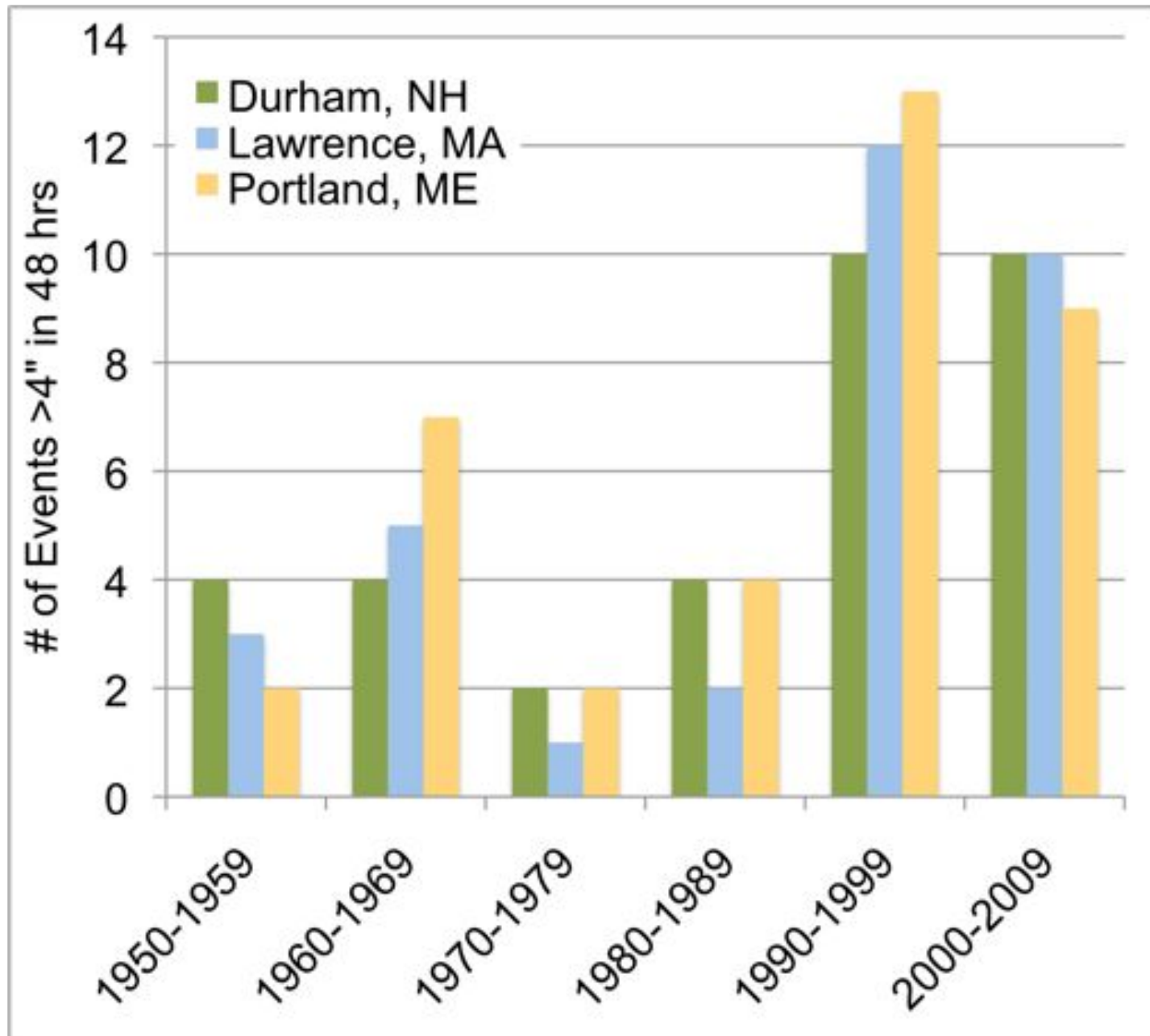
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Elizabeth Burakowski
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Katharine Hayhoe & Anne Stoner
Texas Tech University

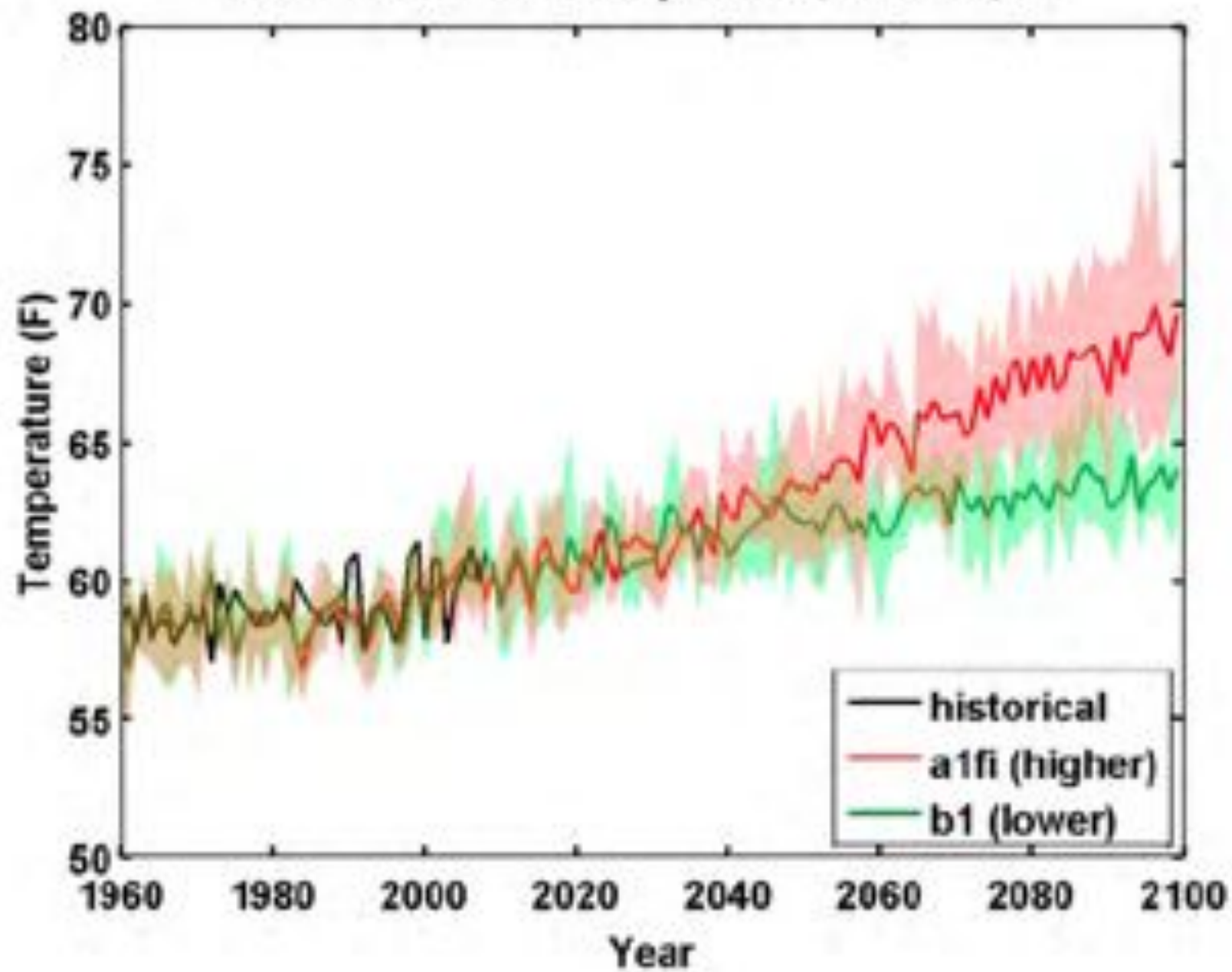
Chris Watson & Ellen Douglas
UMass Boston

<http://CarbonSolutionsNE.org>

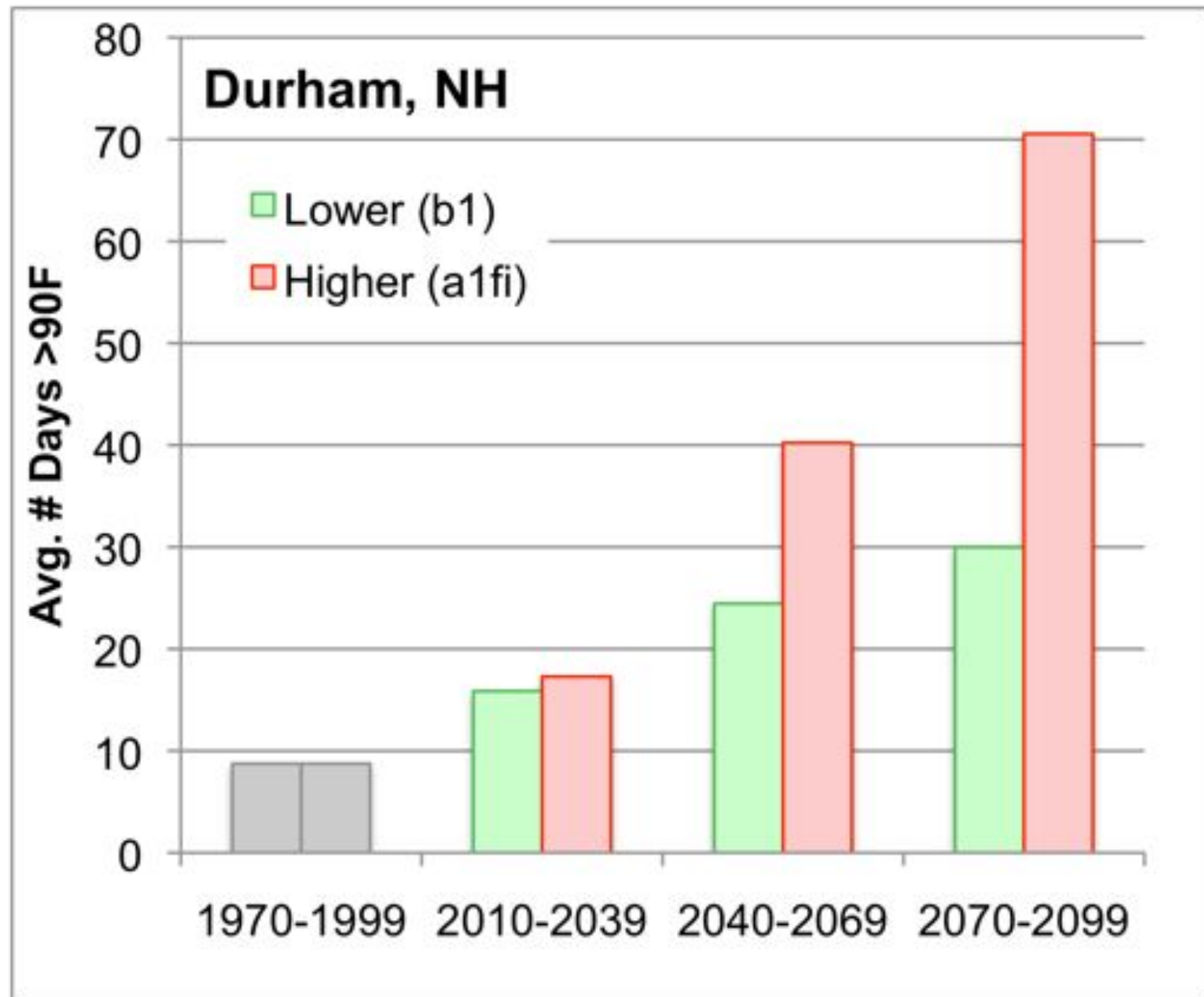
Extreme Precipitation Events (>4") 1950-2009



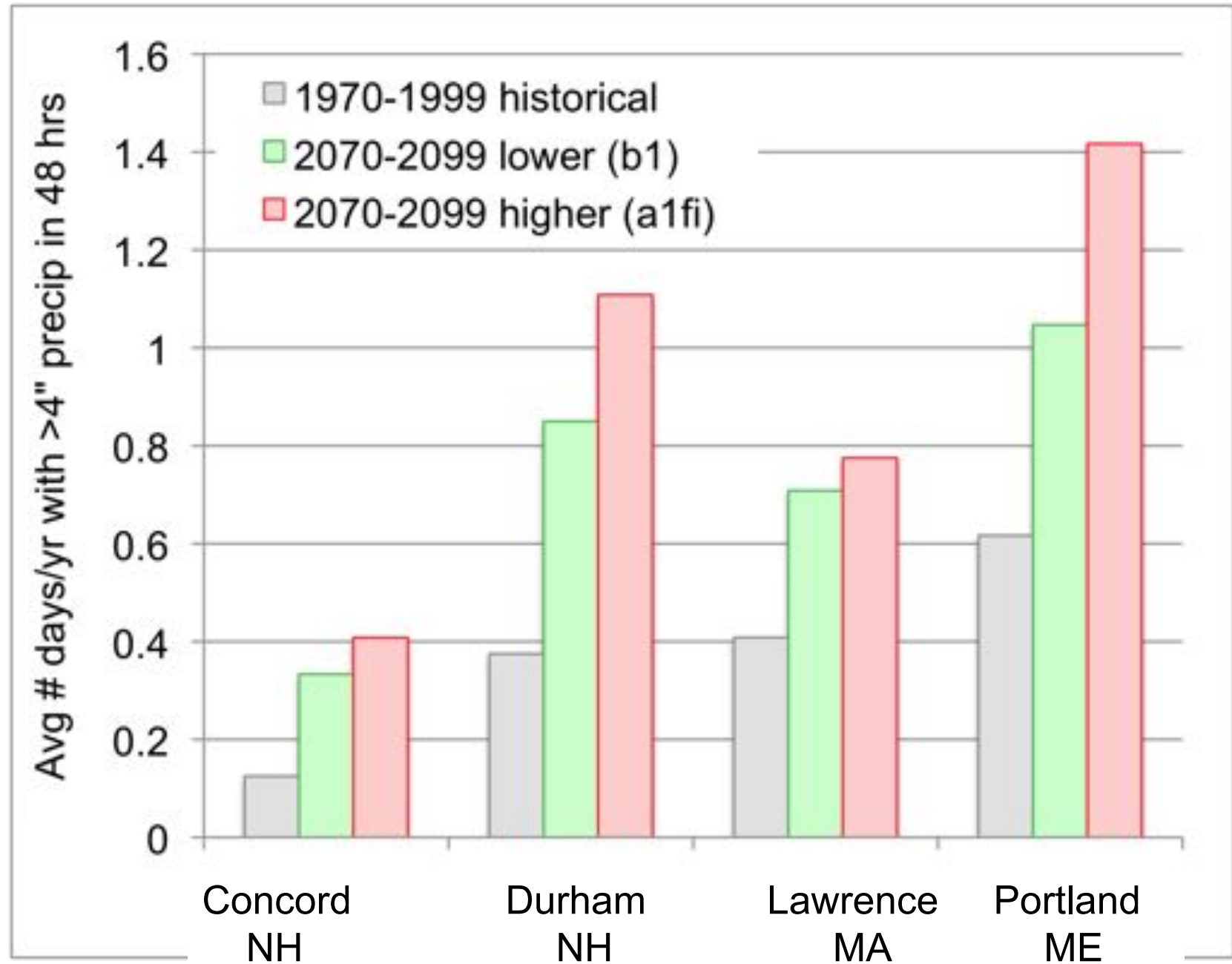
Annual Maximum Temperature, Durham, NH



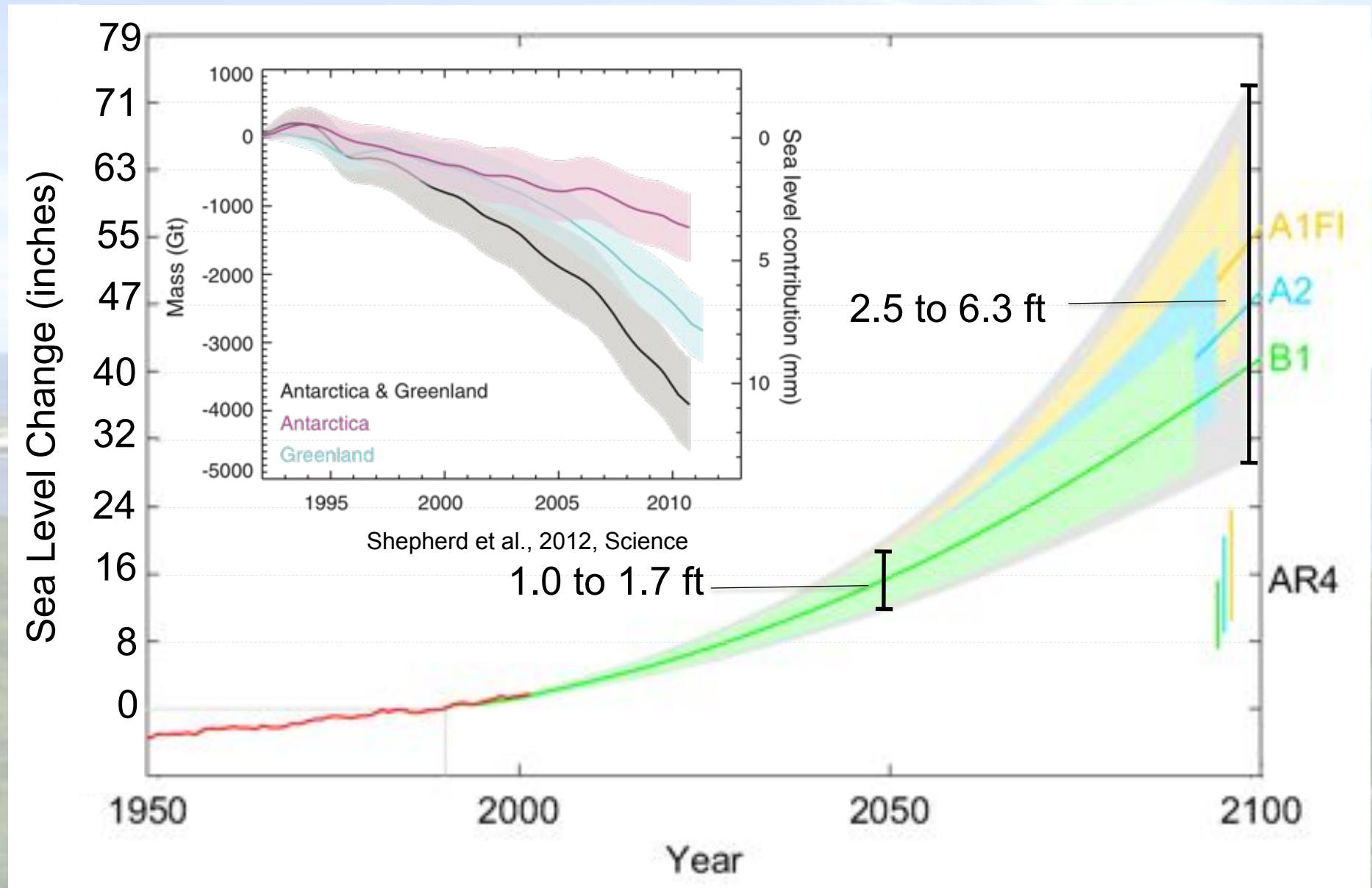
How Hot Will Summer be in Durham, NH??



Projected Changes in Extreme Precipitation



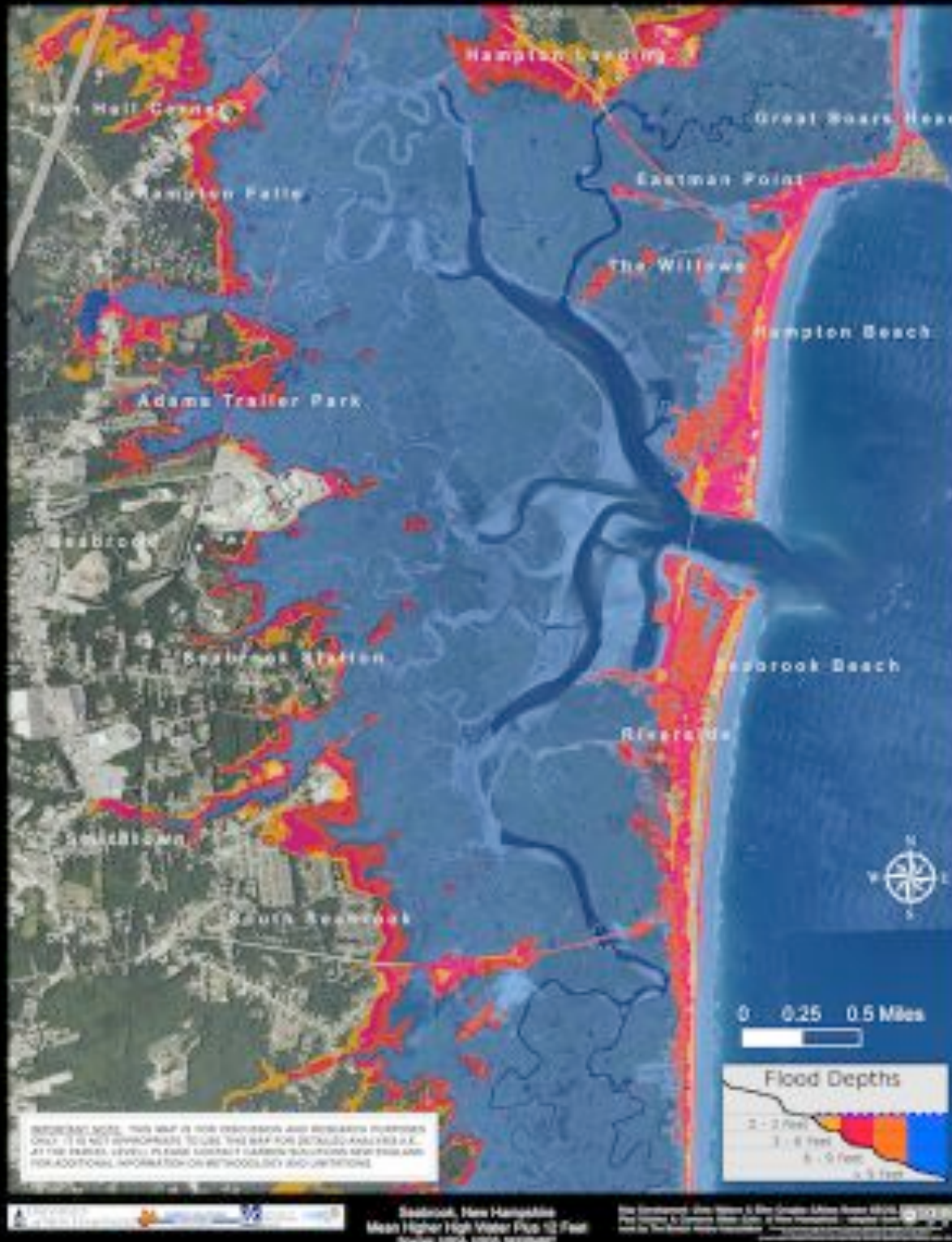
Projection of Sea Level Rise from 1990 to 2100



Vermeer and Rahmstorf 2009 PNAS

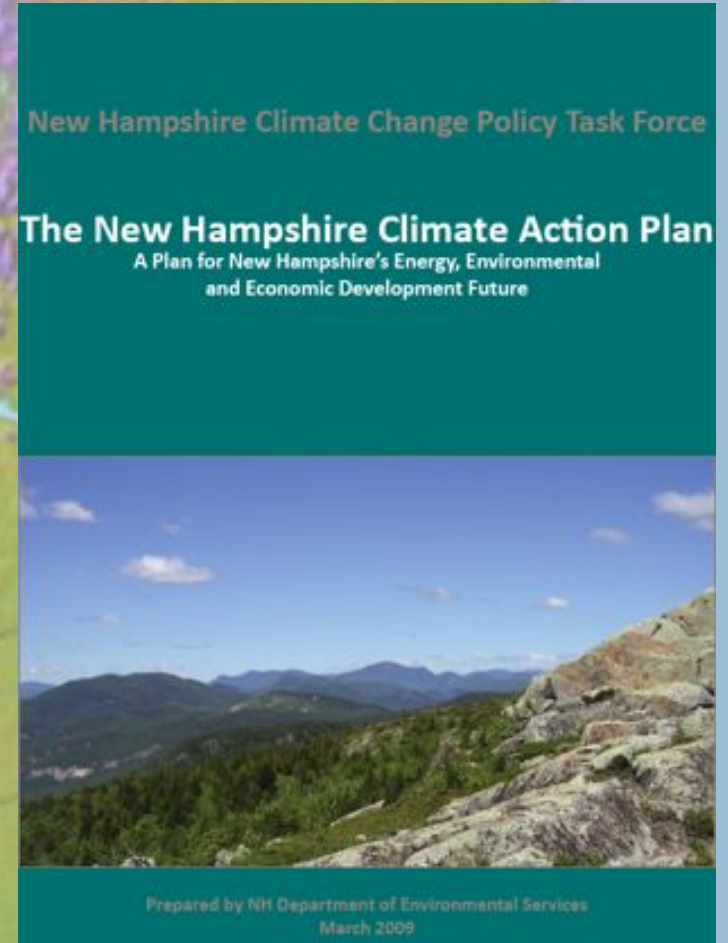
High Tide + 12 feet Hampton & Seabrook, NH

NHPR Story
9 April 2013 Rising
Tides in Seabrook, NH
[#nhcoastalclimate](#)



NH Climate Action Plan

- One of the largest, most diverse collections of leading NH citizens
- Promotes growth of new jobs and renewable energy development
- Reduces energy costs
- Identifies 67 recommended actions
 - buildings
 - electricity generation,
 - transportation & land use
 - natural resources
 - government action
 - adaptation**
- Reduce greenhouse gas emissions
 - 44% below 2005 levels by 2025
 - 86% below 2005 levels by 2050

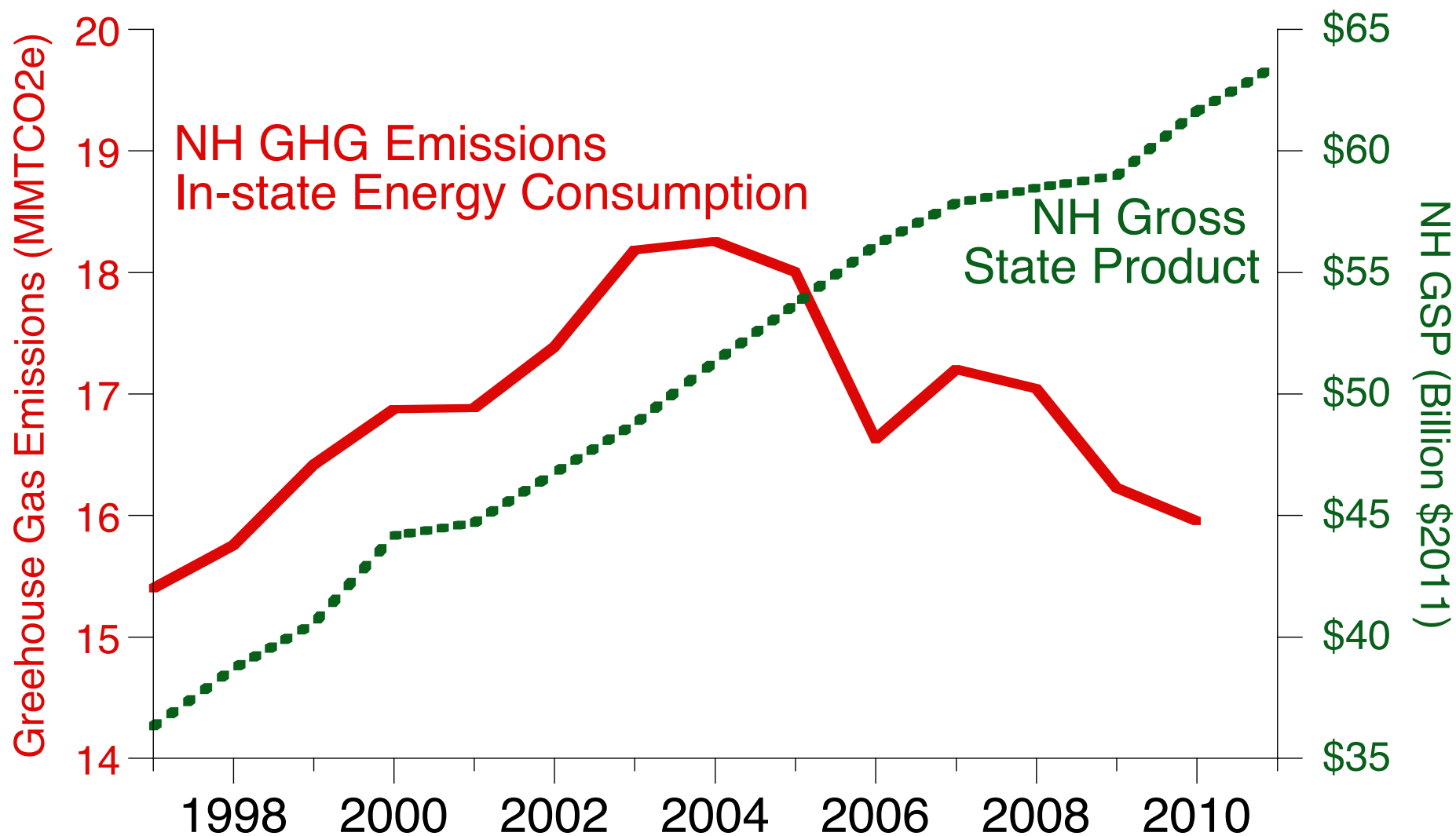


More info at:
<http://CarbonSolutionsNE.org>

New Hampshire's Energy, Environmental, and Economic Development Benchmark Report



Gross State Product & Greenhouse Gas Emissions



What path will we take to the future?



Two roads diverged in a wood, and I -
I took the one less traveled by,
And that has made all the difference.

Robert Frost