

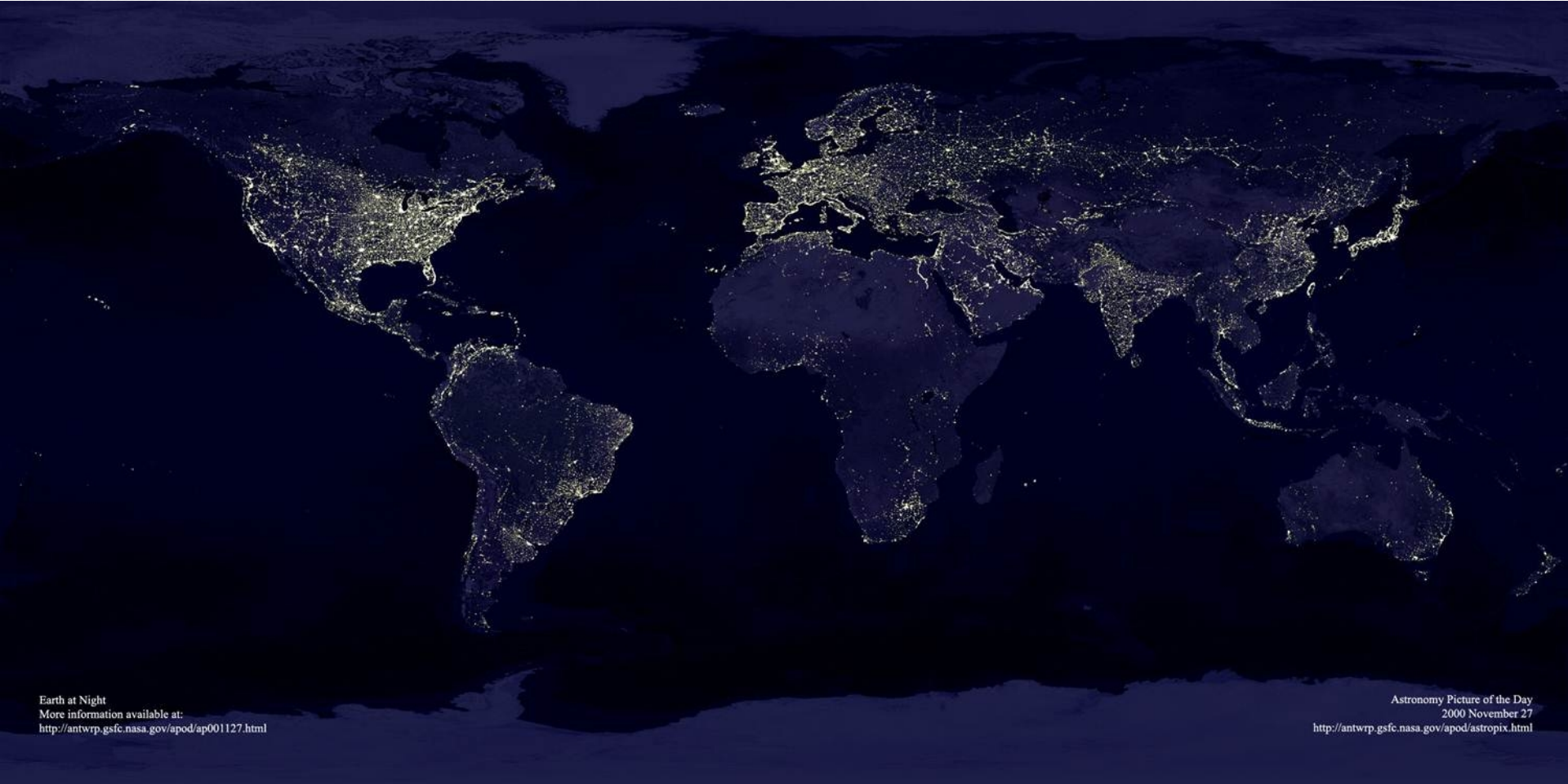
“How Big Should My Water Wings Be?”



Margaret Davidson
Acting Director
NOAA Office of Ocean and Coastal Resource
Management



Coastal Vulnerability Around the World

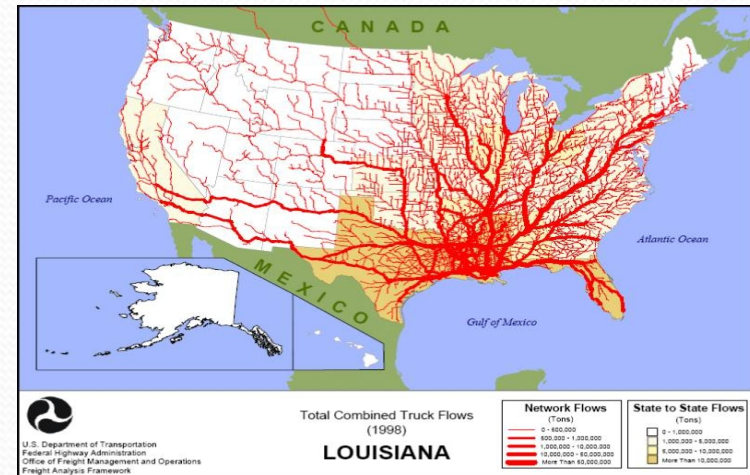


Earth at Night
More information available at:
<http://antwrp.gsfc.nasa.gov/apod/ap001127.html>

Astronomy Picture of the Day
2000 November 27
<http://antwrp.gsfc.nasa.gov/apod/astropix.html>

Coastal Communities: Vital to U.S. and International Economies

- 45 percent of the U.S. national gross domestic product is contributed by coastal communities
 - 51 million jobs
- Coastal habitats help reduce impacts of floods, storms, and climate change on coastal communities by absorbing water, wave energy, and other stressors.

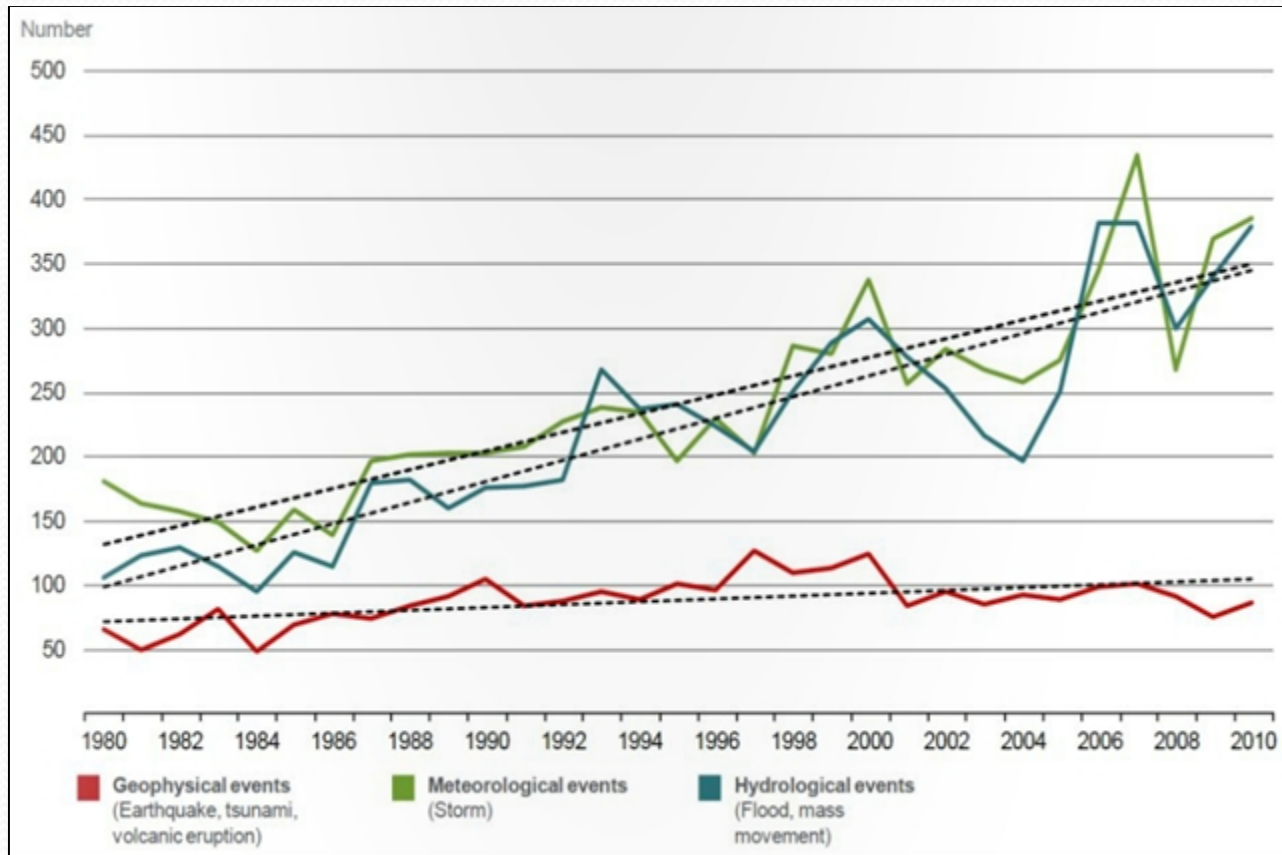


Billion Dollar Disasters: Fact of Life

A Record 14 Disasters in the U.S. in 2011
Three more approaching \$1B

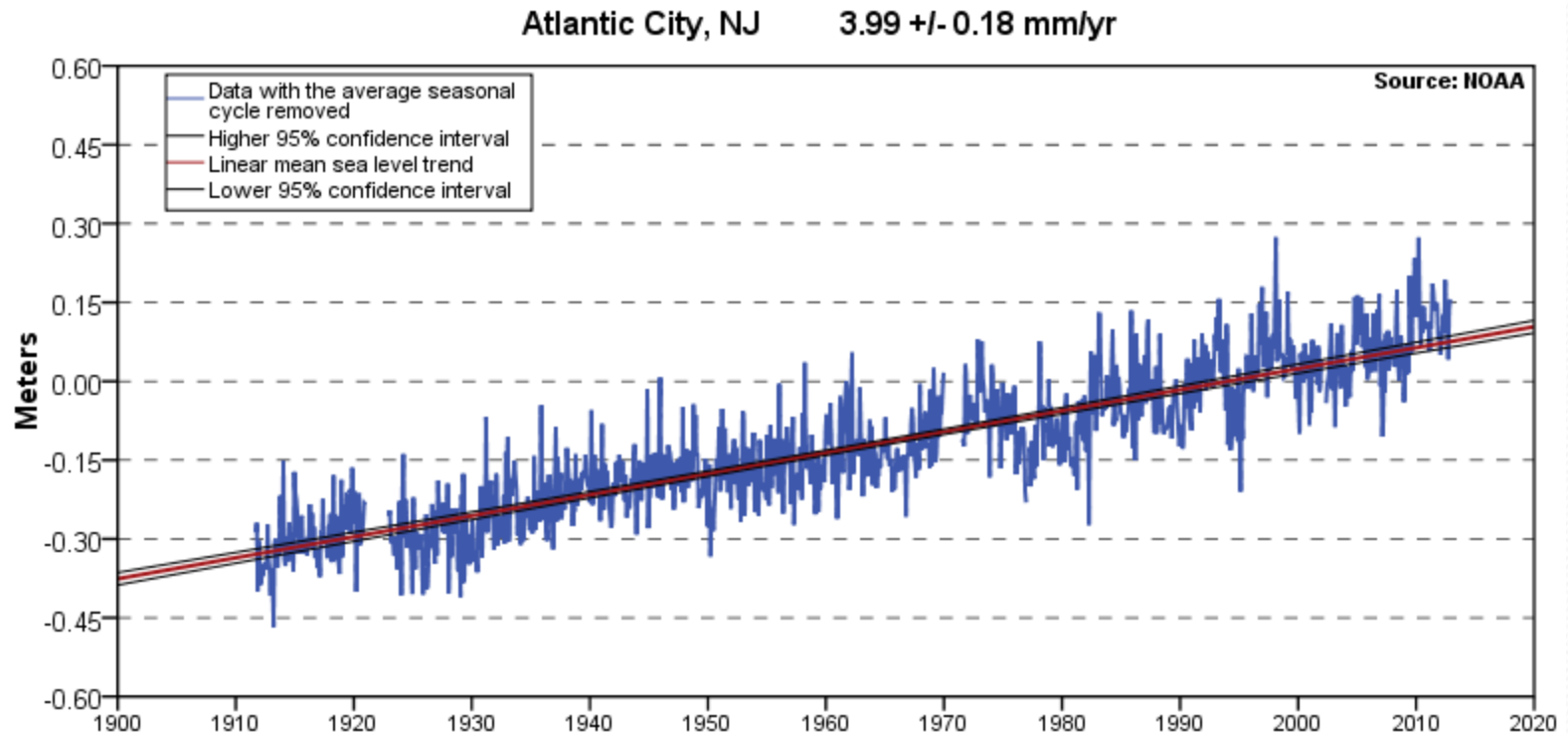


Weather-related versus Geophysical Events



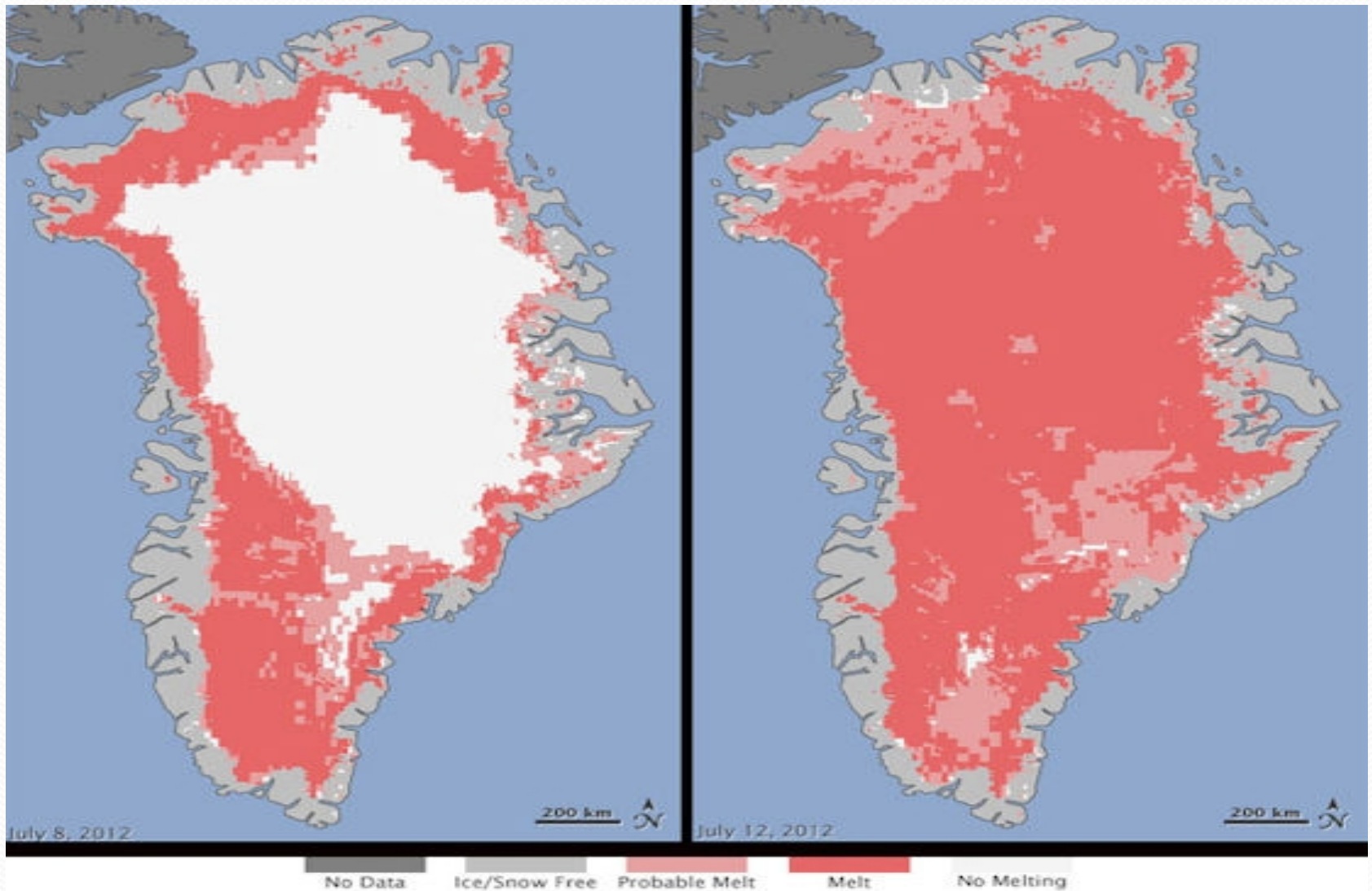
Source: Munich RE

Sea Level Trend: Atlantic City, NJ



Mean Sea Level
Trend

Greenland Ice Melt



Determining Risk

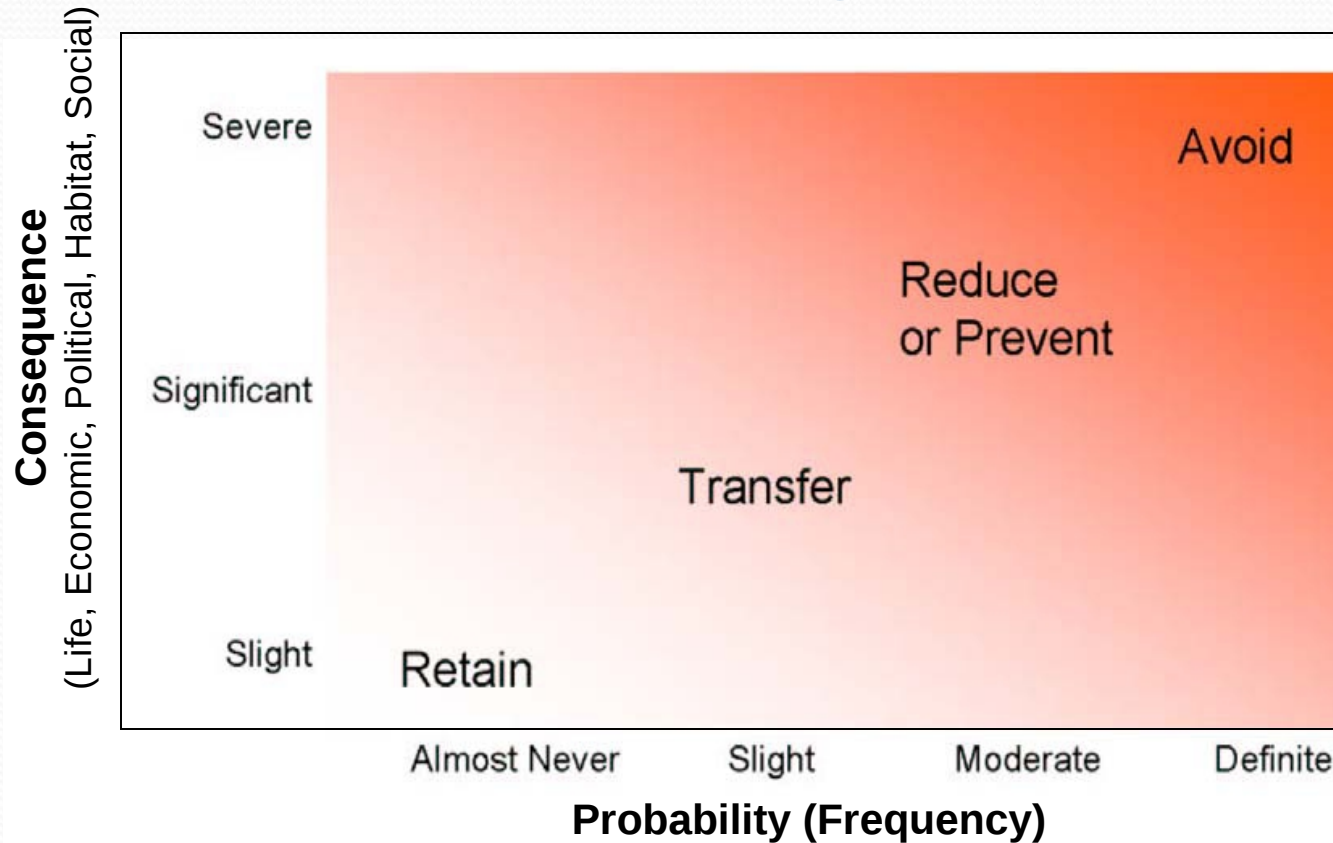


Chart courtesy of Western Kentucky University

Sandy: A Turning Point?



Tools

Sea Level Rise and Coastal Flooding Impacts Viewer

[NOAA Coastal Services Center](#)

Inundation with
1 foot of sea level rise



Inundation with
6 feet of sea level rise



Shrewsbury River,
NJ

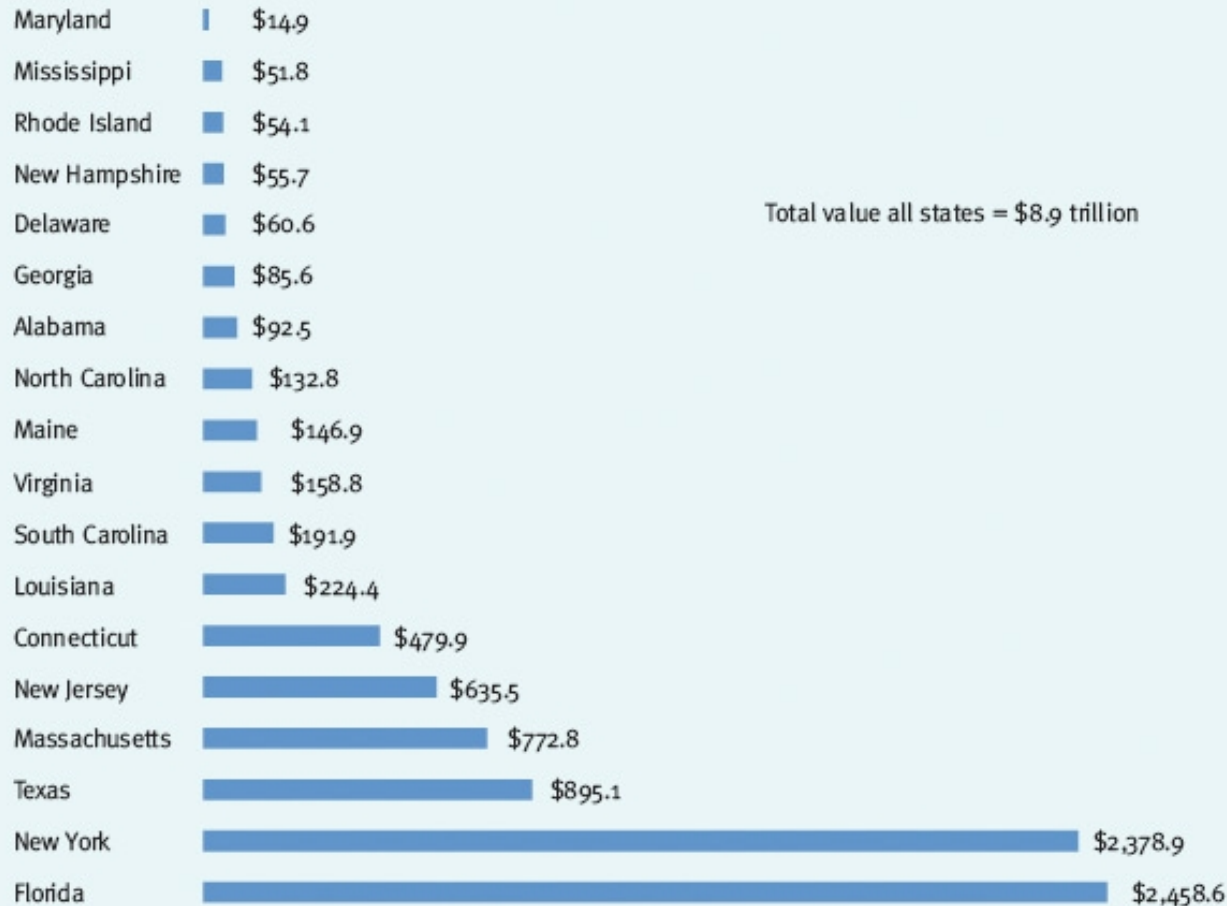
Shared Flood Risk Management: Buying Down Risk



Adaptation Costs of Climate Change Risks

INSURED VALUE OF COASTAL PROPERTIES BY STATE, 2007

(Billions of Dollars)



Source: AIR Worldwide.

Note: Figures are the estimated cost to replace insured and insurable residential and commercial structures, including their contents and business interruption coverage, in coastal counties along the U.S. East and Gulf coasts.

Multiple Lines of Defense



Green/Gray Infrastructure





Change is Here: Time to Act is Now

