



Policy Innovations: Effective Strategies for Adoption and Implementation

Climate Change: An Alternative View of Risk Assessment

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Climate Change: An Alternative View of Risk Assessment

**The risk of Climate Change upon your community
will be assessed by someone:**

Either proactively by your community or region

And/or by others with a vested interest

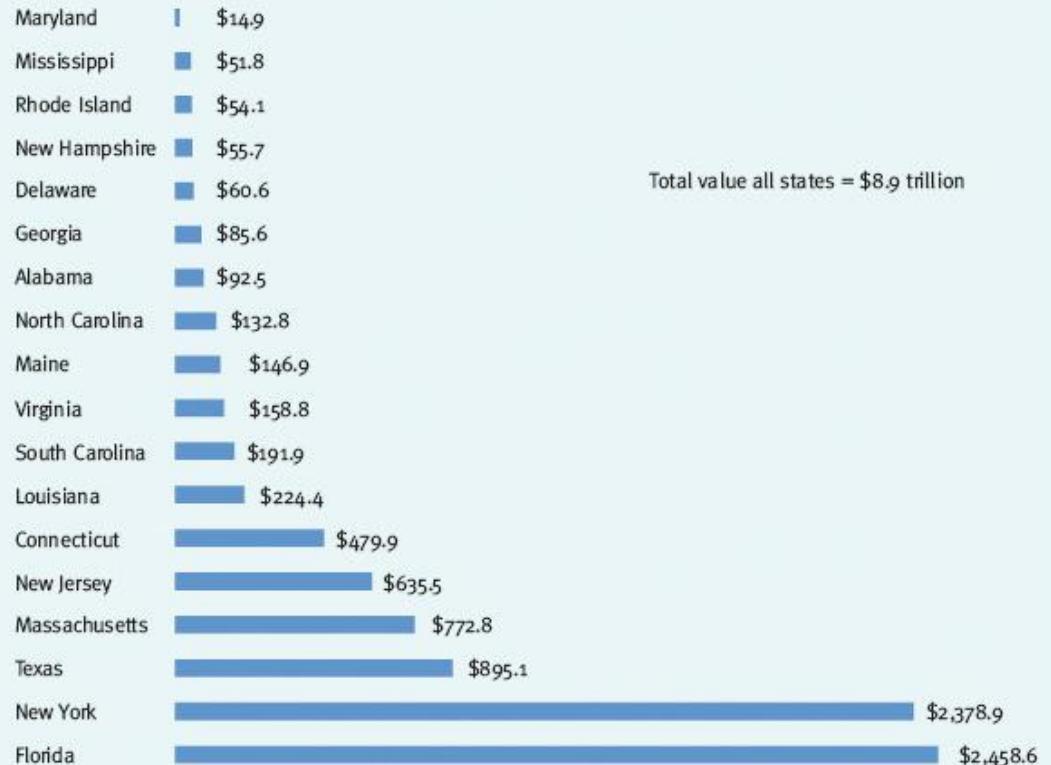
They're called Insurance Companies

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Cost to Replace Coastal
Properties...
2007 estimate
Maine \$146.9 Billion

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.

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**The state of Florida learned
there are different ways to
measure the cost of storms of
increasing intensity from
warmer waters**

**They include insured losses
and uninsured losses...
all staggering**

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**Florida's 10 Costliest Storms
Hurricane (Year) Total Insured Losses
(2009 dollars)**

Andrew (1992)*	\$23 billion
Wilma (2005)*	\$9.2 billion
Charley (2004)*	\$8.5 billion
Ivan (2004)*	\$4.9 billion
Frances (2004)*	\$4.9 billion
Jeanne (2004)*	\$3.4 billion
Opal (1995)	\$2.0 billion
Dennis (2005)	\$939.3 million
Katrina (2005)*	\$596.5 million
Erin (1995)	\$492.7 million

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**The role of property insurance in addressing
Climate Change issues has been significant....**

**“The total value of insured coastal property in
Florida was \$2.5 trillion in 2007, up nearly 27
percent since 2004.**

**Coastal exposure represents 79 percent of all
property exposure in the state.”**



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State Farm Florida Leads Climate Change Discussion by Example... with it's Exit Strategy!

Sept. 30, 2007 State Farm begins non-renewal of 1.2 million Florida residential and commercial policyholders

“During the period 1985-2010, Florida insurers, on average, experienced the worst loss ratio of comparable coastal states at 97.3%, meaning they needed 97.31% of the premiums earned simply to pay losses and loss adjustment expenses.”

(Florida Catastrophic Risk Management Center, 2011)

Florida's Citizen Property Insurance Corporation: a not-for-profit, tax-exempt government corporation

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**What's the relevance for Florida's dramatic storm
events and insurance woes for our communities...
1,500 miles away?**



Tuckerton, N.J., Oct. 30, 2012, Day One post Sandy,
(US Coast Guard via AFP/Getty Images)

Flooding from Hurricane Sandy in NJ

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Tuckerton, N.J., Oct. 20, 2012, Day One post Sandy,
(US Coast Guard via AFP/Getty Images)

Plenty...think Hurricane Sandy

Storm surge from Hurricane Sandy in Maine



Hurricane Sandy, Kennebunk, Maine (AP
Photo/Robert F. Bukaty)

**One storm centered over NY &
NJ, 300 miles away...**

Being north is not being immune

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**Though the scale is different, Maine
has 5,412 miles of shoreline including
estuaries and islands**

Maine Department of Conservation



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From the insurance perspective it's about *reducing the physical risks of climate change to buildings* and infrastructure so that the built environment will be more resilient to anticipated impacts.

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**As Florida looks for solutions to issues
related to Climate Change....
counties lobby individually in DC for
Federal Funds
....which leads to an epiphany!**

**The value of collaboration increases
as the stakes increase...
Florida's solution?**

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The Southeast Florida Regional Climate Change Compact represents a joint commitment of Broward, Miami-Dade, Monroe and Palm Beach Counties to partner in mitigating the causes and adapting to the consequences of climate change.

Photo/text <http://southeastfloridaclimatecompact.org/>

The Southeast Florida Regional Climate Change Compact

- The Compact is a new form of regional climate governance
- Designed to allow local governments to set the agenda for adaptation
- Providing an efficient means for state and federal agencies to engage with technical assistance and support

~ Southeast Florida Climate Compact



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It started with:

- **The need to develop unified methodologies and criteria for creating sea level inundation maps for the SE FL region**
- **Four counties, municipalities & partners form SE FL Regional Climate Change Compact including a 200 mile region & 5.6 million people**
- **October 23, 2009 Southeast Florida (SE FL) Regional Climate Leadership Summit**
- **A Compact and the Southeast Florida Regional Action Plan**

Compact Counties Work Products:

Regional greenhouse gas emissions inventory

A preliminary assessment of areas at risk to increased flooding

Concurrent efforts include development of regional climate mitigation and adaptation measures in the areas of:

Land use

Regional transportation

Built environment



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Identifying the barriers to progress:

Local diversity in sea level rise (SLR) projections to achieving regionally consistent adaptation policies and demonstrating a coordinated local effort to higher political levels.

Lessons Learned

- **Local/regional work without additional external funding or staffing**
- **Produced during the most difficult economy since the Great Depression**
- **Unprecedented intergovernmental cooperation**
- **Competitors became collaborators/Challenges became successes**



Hurricane Sandy, Kennebunk, Maine (AP
Photo/Robert F. Bukaty)

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Transferability

- **Forming a Regional Compact**
- **Range of organizations involved in mapping vulnerability could be similar in Maine**
- **Working to achieve regionally consistent SLR projections and adaptation policies; demonstrating that coordinated local effort to higher political levels**
- **Seek out insurers for perspective on risk assessment!**

Assessing Climate Change from the Perspective of Southeast Florida Residents

Achievements

Work on Climate Change issues are being implemented

The 4 counties were awarded by National Association of Counties (NACo) as co-recipients of the 2011 annual achievement award for shared efforts in implementing the Southeast Florida Regional Climate Change Compact (SFRCCC)

Assessing Climate Change from the Perspective of Southeast Florida Residents

Questions?

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Resources

<http://southeastfloridaclimatecompact.org/>

- Southeast Florida Regional Climate Action Plan, October 2012
- The State of Florida's Property Insurance Market 2011, Prepared for the Florida Legislature...
- Florida Counties Band Together to Ready for Warming's Effects, Michael D. Lemonick
- Climate-change plans now up to towns, K. McCormick, Maine Center for Public Interest Reporting, Nov. 14, 2012
- Maine's Climate Future, Climate Change Institute of the University of Maine, 2009
- COAST Report, *Environmental Finance Center, USM*, S. Merrill et al, 2012
- Climate Change in the Casco Bay Watershed,
http://www.cascobay.usm.maine.edu/pdfs/Climate_Change_in_Casco_Bay.pdf
- Maine Coastal Program, http://seagrant.gso.uri.edu/z_downloads/coast_haz_slr.pdf
- Saco Bay Communities Working Together: *Adapting to Sea Level Rise*
P. Slovinsky, J. T. Lockman
- Adaptation Costs of Climate Change Risks, A. LaBlanc, Urbanland, April 1, 2010
- 2009 – 2012 Strategic Plan, Insuring Florida's Future, Citizens Property Insurance Corporation
- Withdrawal Plan for State Farm Florida Insurance Company
- Overview of Florida Insurance Market
- The State of Florida's Property Insurance Market, 2011.