



# Climate Change Adaptation Act (S.2355)

**Program Design:**

## Key Considerations and Planning Parameters

*Emmanuel Flammand, Marija Filipovic-Posso, Zhishan Harahsheh,  
Alejandro Gomez Palma, Grant Goodrich, Emmanuelle Humblet,  
Kenneth Kasman, Erin McKinnon, Emily Small,  
Leah Stokes & Daniel Teitelbaum*

Midterm Briefing – Fall Term  
8 October 2008

# Agenda



Climate Change  
Adaptation Act

- ❑ What is the political context of the bill?
- ❑ What does the bill tell us?
- ❑ How do we define *vulnerability* and *adaptation*?
- ❑ Program Design
- ❑ What are our next steps?

# What is the political context of the bill?



Climate Change  
Adaptation Act

- Recent and current disasters have demonstrated vulnerability to hazards
- Business interests are worried – and getting more so
- States and cities are already planning and implementing adaptation measures
- Climate change is a “hot” topic – adaptation, *not so much*
- Few supporters on record in Congress

# What does the bill tell us?



Climate Change  
Adaptation Act

## ❑ **The President must:**

- ✓ Present to congress a five-year National Strategic Plan for Climate Change Adaptation, within 2 years.

## ❑ **The Secretary of Commerce (through NOAA) must:**

- ✓ Coordinate and support regional assessments;
- ✓ Develop and present a National Coastal and Ocean Adaptation Plan
- ✓ Provide technical planning assistance and products;
- ✓ Provide grants to coastal states;
- ✓ Consult with other federal agencies, state governments and key actors.
- ✓ Integrate the findings from the U.S. Global Change Research Program

## ❑ **\$ 250 million USD are authorized per fiscal year**

# ... What does it not tell us?



Climate Change  
Adaptation Act

- ❑ How NOAA will *coordinate, support and assist*
- ❑ What the institutional design should look like within NOAA to accomplish all of its tasks
- ❑ What regional strategy should determine coordination between states and territories
- ❑ How to define “**Vulnerability**”
- ❑ What “**Adaptation**” is at the regional, state and local levels

# How do we define *vulnerability*?



Climate Change  
Adaptation Act

- 1. Take highest potential climate change scenario for 2100 (IPCC, 2007)**
  - *Temperature*
  - *Sea level rise*
  - *Extreme weather events*
- 2. Identify and map “high risk” areas**
- 3. Consider six key variables in state and local assessments:**
  - **Human population** living in high-risk areas
  - **Private property** (*market value*)
  - **Infrastructure** (*current cost of replacement*)
  - **Environmental services** (*approximate value*) provided by ecosystems
  - **Economic activity and Commerce** (*annual adjusted estimates*)
  - **Strategic assets** (*location specific and in consultation with DOE, DOD, etc.*)

# How do we define *adaptation*?



Climate Change  
Adaptation Act

Actions taken to ensure that high-risk areas under maximum climate change scenarios are “as safe” as they would be without factoring in climate change

- ❑ **Comparative scale based on initial degree of vulnerability.**
- ❑ **Multi-year process.**
- ❑ **Ongoing calibration process as findings from research and implementation become available.**

# Program Design



Climate Change  
Adaptation Act

## The U.S. Coastal Adaptation Program

### Purpose:

**Reduced vulnerability to climate change impacts in the U.S. on human life, ecosystems, infrastructure, and the economy.**

### Strategic Outcome:

**Effective climate change adaptation programs designed and implemented in 30 U.S. states and 5 territories.**

# Program Design



Climate Change  
Adaptation Act

## Expected Result:

- 1 **State of the art procedures established for periodically assessing risks to human life, private property, infrastructure, ecosystems, economic growth and commerce, at the regional, state and local levels.**

## Key Activities:

- 1.1 Within **NOAA**, the **National Climate Service (NCS)** will coordinate.
- 1.2 The **NCS** will set up **risk assessment guidelines**.
- 1.3 The **Adapting to Climate Change Taskforce (ACCT)**, based in NCS HQ.
- 1.4 **Regional Taskforces (ReACCTs)** will be established in regional NCS offices.
- 1.5 Cooperation agreement with the **U.S. Global Change Research Program**.

# Program Design



Climate Change  
Adaptation Act

## Expected Result:

**2** Climate change adaptation incorporated into the planning, management and organizational culture of the public and private sectors in vulnerable regions.

## Key Activities:

- 2.1 **Best practices** in adaptation planning, design and implementation **identified**, in consultation with NASA, FEMA, states, cities and universities.
- 2.2 **Executive training seminar** designed and conducted: “**Adapting to Climate Change in the Public and Private Sector: *What should decision-makers and managers know about adaptation?***”

# Program Design



Climate Change  
Adaptation Act

## Expected Result:

- 3** State of the art expertise established in-house at the NCS/NOAA and sufficient local capacity exists, regarding adaptation planning, design, implementation, monitoring and evaluation.

## Key Activities:

- 3.1 **Needs Assessment** conducted to identify key gaps of information, knowledge, skills and management tools.
- 3.2 **Educational, training and capacity-building services** to ACCT and ReACCT personnel from outside contractors.
- 3.3 **Regional Capacity-Building Programs designed** for state, city and local actors, to be given by ACCT and ReACCT personnel.

# Program Design



Climate Change  
Adaptation Act

## Expected Result:

**4** The states and five territories of the U.S. most vulnerable to climate change, design, plan, implement and monitor adaptation programs.

## Key Activities:

- 4.1 **Guidelines and Procedures** for **Coastal and Ocean Adaptation Grants**, in coordination with **FEMA** and state authorities.
- 4.2 **Interim Grant Guidelines** established by NCS during first year to support states' efforts in assessments and capacity-building.
- 4.3 **Risk Preparedness Scorecard** for each **participating state** will be publicly presented: “**A**” for states in the process of implementing approved plans, “**C**” for states that get on board and begin the process” and “**F**” for states that refuse to participate.

# What are our next steps?

- ❑ Defining the Organization, Contracting and Staffing Plan
- ❑ Defining Budget and Revenue
- ❑ Designing the Performance Management Process
- ❑ Master Calendar
- ❑ Final Program Briefing



Climate Change  
Adaptation Act

Climate  
Change  
Adaptation  
Act  
Team

CCAAT

*Thank you.*

*Questions?*