


COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK




Climate Change Adaptation Act (S.2355)


Final Briefing: Management & Policy Analysis

Leah Stokes Zhishan Harahsheh
Emily Small Emmanuelle Humblet
Dan Teitelbaum Ken Kasman
Marija Filipović Erin McKinnon
Emmanuel Flamand Alejandro Gomez Palma
Grant Goodrich Faculty Advisor: Professor Cohen

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
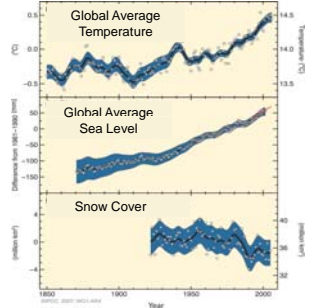
Agenda



- What is climate change and what are the impacts we need to adapt to?
- What is the political context of adaptation policy?
- What does this climate adaptation bill require?
- What are the climate adaptation program's goals, design and timeline?
- How will the program adapt coastal areas to climate change?

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What is the environmental problem of climate change?





What is *climate change* according to the Climate Change Adaptation Act?

“Change in climate over time, whether due to natural variability or human activity.”


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What are the climate impacts we need to adapt to?




Key Climate Change Impacts

- Natural Hazards**
Severe weather events, storm surge, flooding
- Coastal Erosion**
Coastal degradation; loss of ecosystem protection
- Infrastructure Damage**
Sewage, Water resources, Transportation



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How do we define vulnerability and adaptation?



Mitigation

Actions taken to reduce further greenhouse gas emissions, in order to reduce the extent of climactic changes.

Adaptation

Actions taken to reduce vulnerability from the impacts of climate change.

Vulnerability

Human population
Private property
Infrastructure
Environmental Services
Commerce
Strategic assets

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What is the political context of adaptation policy?



Climate change has reached the political agenda and is present in mainstream media

- **International:** Intergovernmental Panel on Climate Change (IPCC) report, Nobel Prize
- **Domestic:** Hurricanes (Katrina, Ike) demonstrate US vulnerability
- **Local:** States and cities are already planning
- **Business:** Insurance, Tourism, Fisheries




HOUSTON CHRONICLE

MAYOR ORDERS PRE-IKE EVACUATION

NY

MAYOR BLOOMBERG LAUNCHES TASK FORCE TO ADAPT TO CLIMATE CHANGE

What does this bill require?

The Secretary of Commerce (through NOAA) must:

- Coordinate and support Regional Assessments → **Regional Vulnerability Assessment**
- Provide Assistance to States & Local Governments → **Regional Coastal & Ocean Adaptation Plans**
- Provide Grants to States → **Regional Coastal & Ocean Adaptation Plans**
- Submit to Congress → **National Coastal & Ocean Adaptation Plan**

Consult with other federal agencies, state governments & key actors, considering previous work and findings.



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What are the program's goals?

Climate Change Adaptation Act Goal

Reduce vulnerability to coastal climate change impacts on human life, ecosystems, infrastructure and the economy.

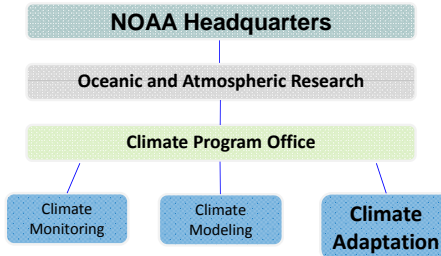
Climate Adaptation Program Regions and Offices



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Program Design

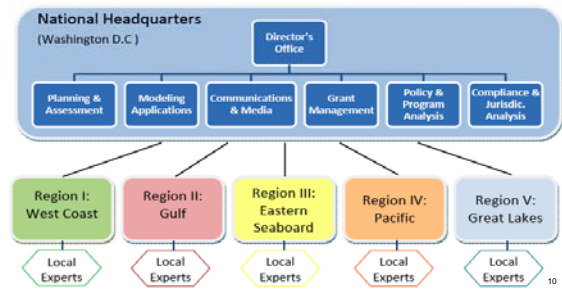
- 1 Build a Climate Adaptation Program within NOAA, establishing adaptation expertise in-house.



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Program Design

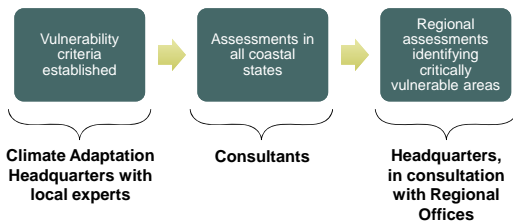
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Program Design

- 2 Conduct regional vulnerability assessments.



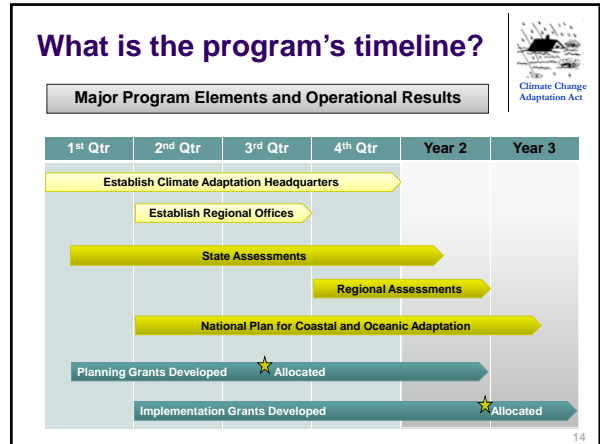
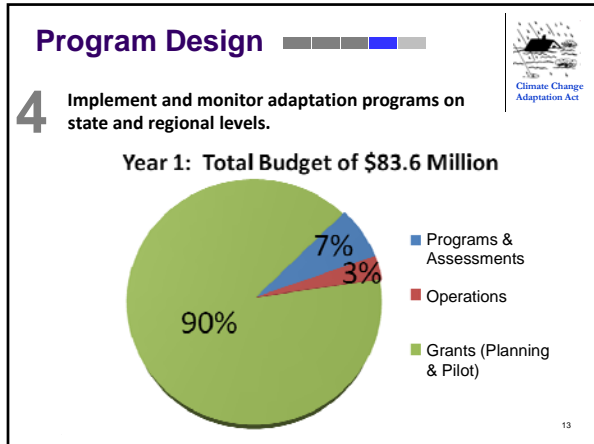
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Program Design

- 3 Develop National Coastal & Ocean Adaptation Plan, comprised of regional plans, outlining strategies for public and private sector adaptation.



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- ## How will success be defined?
- People in coastal regions are safer.
 - Contingency plans in place for emergencies.
 - Monitoring systems developed and implemented.
 - Infrastructure in high risk areas able to withstand new levels for extreme weather events.
 - U.S. coastal ecosystems strengthened or maintained.
-
- Climate Change Adaptation Act
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- ## How will the program adapt coastal areas to climate change?
- 1 Identify vulnerabilities
 - 2 Plan for adaptation programs in coastal regions
 - 3 Implement programs through grants
- Climate Change Adaptation Act
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Questions or Comments?

Climate Change Adaptation Act Team
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Thank you.

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