

Adaptation- Municipal Response



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Agenda

- US EPA State and Local Climate and Energy Program
- Mayors Climate Protection Agreement
- ICLEI
- Local Government Response
- Municipal Engagement
- Things to Watch

Framework

- US EPA State and Local Climate and Energy Program
 - Resource to State and Local Governments on programs related to greenhouse gas, energy, and quality of life
 - Recently sponsored three webinars on adaptation planning and implementation for local governments



Many Opportunities to Adapt Exist (examples)

- Modify long-term planning, engineering standards, and infrastructure design
- Land use planning (e.g., limit development in flood-prone areas!)
- Development of riparian buffer zones
- Shipping: shallower draft ships; dredging ports; length of shipping season; shift to land transport
- Restore and maintain watersheds as an integrated strategy for managing water quality and quantity
- Changes in management and political institutions
- Develop response management plans for invasive species
- Establish heat stress warning systems
- Reduce urban heat island effect
- Enhance water use efficiencies

Difficulty meeting increase in water demand for new development & expected growth			
	21	Require new buildings/developments to plan for gray or recycled water systems	Chula Vista Phoenix
	22	Encourage Water Districts to include the assessment of climate change in their analysis and decision-making process for "Will-Serve" letter issuance for new developments	Sweetwater/Otay Focus 2050 Study
	23	Require large new developments to provide "water offsets" for additional water demand	Cambria

City of Chula Vista –
Draft Adaptation
Options

U.S. Mayors Climate Protection Agreement

- Launched in 2005 by Seattle Mayor Greg Nickels
 - Advance the goals of the Kyoto Protocol
 - Signed by over 1,000 mayors from all 50 states, the District of Columbia and Puerto Rico
- Commitment of three actions:
 - Strive to meet or beat the Kyoto Protocol targets in their own communities – By 2012, reduce greenhouse gases by 7% below 1990 levels
 - Urge their state governments, and the federal government, to enact policies and programs
 - Urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system

ICLEI-Local Governments for Sustainability

- Worldwide organization promoting greenhouse gas reductions and climate change planning for municipalities
- Cities pay minimal annual fee and receive technical and policy support through regional offices
 - Houston, Oakland, Chicago, Boston, Seattle, and Atlanta
- Services include greenhouse gas emission calculator, annual conference, webinars, and new climate adaptation tool

ICLEI U.S. Members

Texas

[Arlington](#)

[Austin](#)

[Bryan](#)

[College Station](#)

[Coppell](#)

[Dallas](#)

[Denton](#)

[Edinburg](#)

[El Paso](#)

[Garland](#)

[Georgetown](#)

[Grapevine](#)

[Houston](#)

[Irving](#)

[Plano](#)

[Richardson](#)

[San Antonio](#)

[South Padre Island](#)

[Texarkana](#)



Over 1000 local
governments in
the U.S. are
members of ICLEI

ICLEI - Adaptation

- Climate Resilient Communities(CRC) is an ICLEI climate adaptation program
- ADAPT - Online tool to assess vulnerabilities and risks, set goals and prioritize actions:
 - Conduct a climate resilient study
 - Set preparedness goals
 - Develop a climate preparedness plan
 - Publish and implement preparedness plan
 - Monitor and reevaluate resiliency

ICLEI Inaugural Adaptation Communities

- Boston, Massachusetts
- Cambridge, Massachusetts
- Flagstaff, Arizona
- Grand Rapids, Michigan
- Lee County, Florida
- Miami-Dade County, Florida
- San Francisco Bay Conservation and Development Commission (BCDC)
- Tucson, Arizona

Local Government & Climate Change Adaptation

- Most municipalities are in the “study” phase on adaptation:
 - Conducting a greenhouse gas(GHG) inventory
 - Conducting vulnerability and risk assessments
 - Developing a climate action plan
 - Developing a sustainability plan
 - Implementing various programs including water and energy conservation programs

Leading cities/regions according to EPA

- City of Boston
- City of New York
- City of Charleston
- North Carolina

City of New York

The City of New York is conducting a citywide strategic planning process for climate change adaptation including:

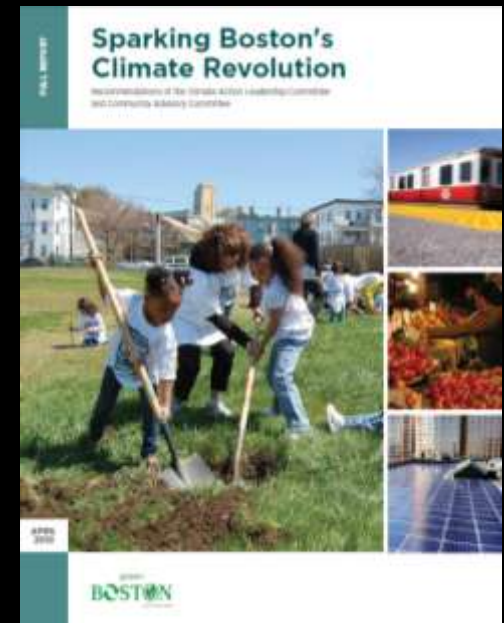
- Develop a comprehensive climate change adaptation policy
- Create a strategic planning process to adapt to climate change impacts
- Ensure that New York's 100-year floodplain maps are updated
- Document the City's floodplain management strategies to secure discounted flood insurance for New Yorkers
- Amend the building code to address the impacts of climate change



City of Boston

The Climate Action Leadership Committee and Community Advisory Committee recommendations incorporating climate change into all planning and operations for infrastructure, land use, emergency preparedness, and economic development, public health , and other civic functions

- Recommended Actions and Path Forward
 - Develop an adaptation plan focusing on sea-level rise, heat waves and extreme storms
 - Conduct a vulnerability assessment, start considering potentially catastrophic long-term impacts
 - Collect and analyze new data, establish an advisory group
 - Include climate change in all formal development review and capital planning
 - Require every municipal department and agency to undertake a formal review of consequences of climate change



City of Chula Vista

Certain species in riparian ecosystems threatened as water conditions and sediment conditions are altered		
	12 Ensure monitoring and restoration programs include riparian ecosystems as well as terrestrial habitats	California
	13 Create a regional sediment management plan for local watersheds, in partnership, where possible, with the Wildlife Agencies and/or adjacent public land managers	New York-New Jersey Harbor Estuary Program, San Francisco Bay

Potential Local Government Response Affecting Ports

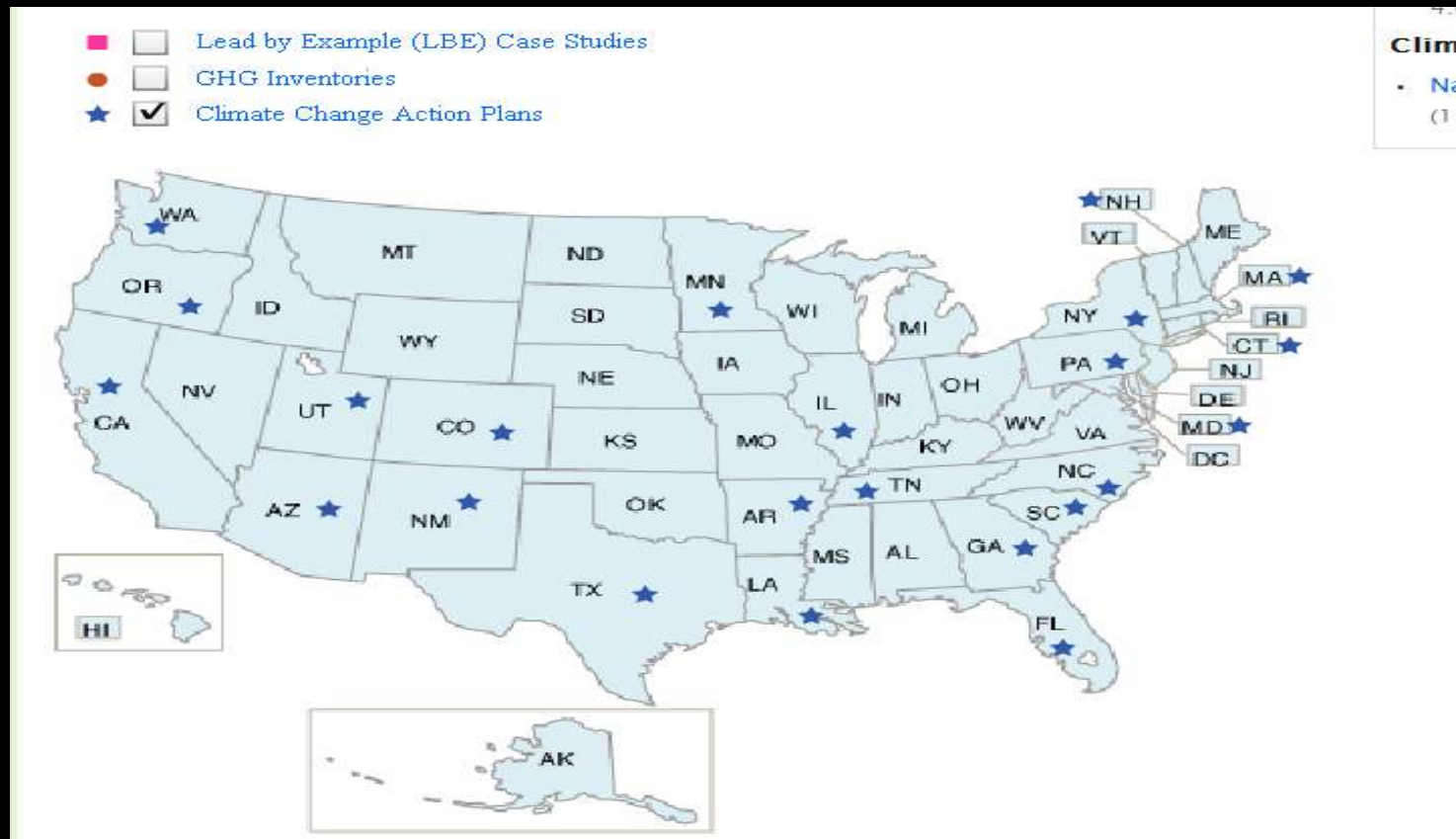
- Stakeholder involvement process
- Development of vulnerability assessments/plans
- Building codes/ordinances
 - Land development
 - Green building
 - Water
- TMDL process
- Ozone non-attainment considerations
- Combined sewer overflow programs
- Emergency response planning

Municipal Engagement

- Research local government/region
 - Are they a member of ICLEI?
 - Closest regional office
 - Contact municipal sustainability or environmental staff
 - Online research
 - Municipal Sustainability Plan (Internal and External)
 - Municipal Climate Action Plan
 - Mitigation/Adaptation activities
- Stay abreast of EPA guidance through State and Local Climate and Energy Programs and/or Climate Ready Estuaries
- Get involved
 - Participate in local discussions on adaptation and planning process

....Each Community is Unique

State and Local Climate and Energy Program



Things to Watch

- Evolution of ICLEI and use of ADAPT tool
- Federal grants
 - Energy Efficiency Community Block Grant (EECBG)
 - HUD/DOT/EPA Sustainability Communities Partnership and Grants
 - Regional Plans for Sustainable Development
- EPA Programs and Guidance

Websites

- EPA State and Local Climate and Energy Program
 - <http://www.epa.gov/statelocalclimate/>
- Climate Ready Estuaries
 - <http://www.epa.gov/climateredyestuaries/>
- ICLEI
 - www.icleiusa.org
- City of Chula Vista
 - <http://www.chulavistaca.gov/clean/conservation/Climate/ccwg1.asp>