

Adapting to Climate Change: Local and Regional Perspectives



New Partners for Smart Growth Conference

Missy Stults, Climate Adaptation Manager, ICLEI USA

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Session Objective

- Enhance understanding of why planning for climate change is imperative
- Provide examples of successful adaptation planning efforts
- Dialogue with the audience around successes, barriers, and needs

Understanding Climate Mitigation



Climate Mitigation – Any measure or action taken to reduce greenhouse gas emissions.



Understanding Climate Adaptation



Climate Adaptation – Any measure or action that reduces the negative impacts of climate change or increases new opportunities embedded in a changing climate.

Adaptation and Mitigation are not mutually exclusive!



“...adaptation to climate change calls for a new paradigm that takes into account a range of possible future climate conditions and associated changes in human and natural systems, instead of managing our resources based on previous experience and the historical range and variability of climate”

- *National Academy of Sciences, Panel on Adapting to the Impacts of Climate Change, 2010*

Why Plan for Climate Change? The Evidence is Seen Everywhere



Why Plan for Climate Change

- The climate is already changing
- We have already committed ourselves to additional climate changes due to the emissions of past greenhouse gases – even if we cut emissions by 100% we would still feel impacts – meaning that we will see heightened impacts
- Today’s choices will shape tomorrow’s vulnerabilities
- Significant time is required to motivate and develop adaptive capacity, and to implement changes.
- Proactive planning is often more effective and less costly than reactive planning, and can provide immediate benefits.



Examples from on the Ground...

Local Adaptation Planning Efforts

While many adaptation projects are occurring at local levels, these are some local governments that have initiated comprehensive adaptation planning efforts.¹

Homer, AK	Chicago, IL
Phoenix, AZ	Keene, NH
Berkeley, CA	New York, NY
Los Angeles, CA	Salt Lake City, UT
San Francisco, CA	Alexandria, VA
San Rafael, CA	King County/Seattle, WA
Miami-Dade County, FL	Milwaukee, WI

Building Resilience in San Luis Obispo



Adaptation in Keene, NH

Full Planning Process – looking holistically at climate impacts and vulnerabilities – integrated into Comprehensive Plan

Member of ICLEI's CRC Pilot

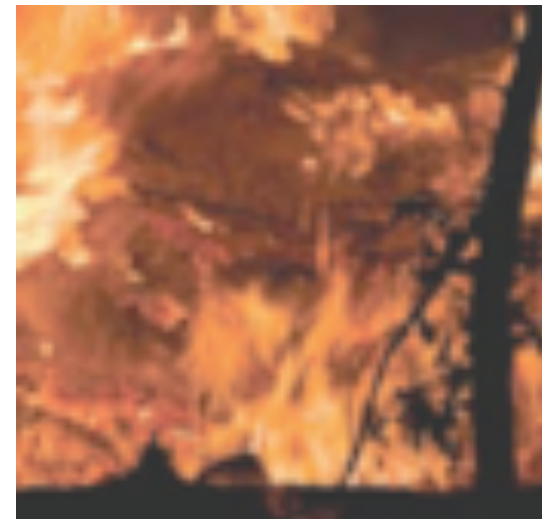
Established Committee of Department Heads to go through process (inc. Mayor, Chief of Police, etc.)

Used a 'climate lens' to evaluate impacts on a department by department basis first – internal operations first



Planning for Water Impacts in Fort Collins

- **Pilot community in CRC program**
- **Effort spearheaded by Fort Collins Utilities**
- **Internal operations focused**
- **Focus on water supply and quality as entry point to adaptation planning**
- **Now revisiting other vulnerabilities**



Adaptation in Miami-Dade County, FL

Adaptation and Mitigation Planning Together

Formed Climate Change Advisory Task Force in 2006 to address both mitigation and adaptation (6 subcommittees):

- Science
- Built Environment
- Greenhouse Gas Mitigation
- Natural Systems
- Economic, Social, and Health
- Intergovernmental Affairs

Working on updated sea-level rise mapping – no full vulnerability assessment yet (SE Florida Climate Compact)

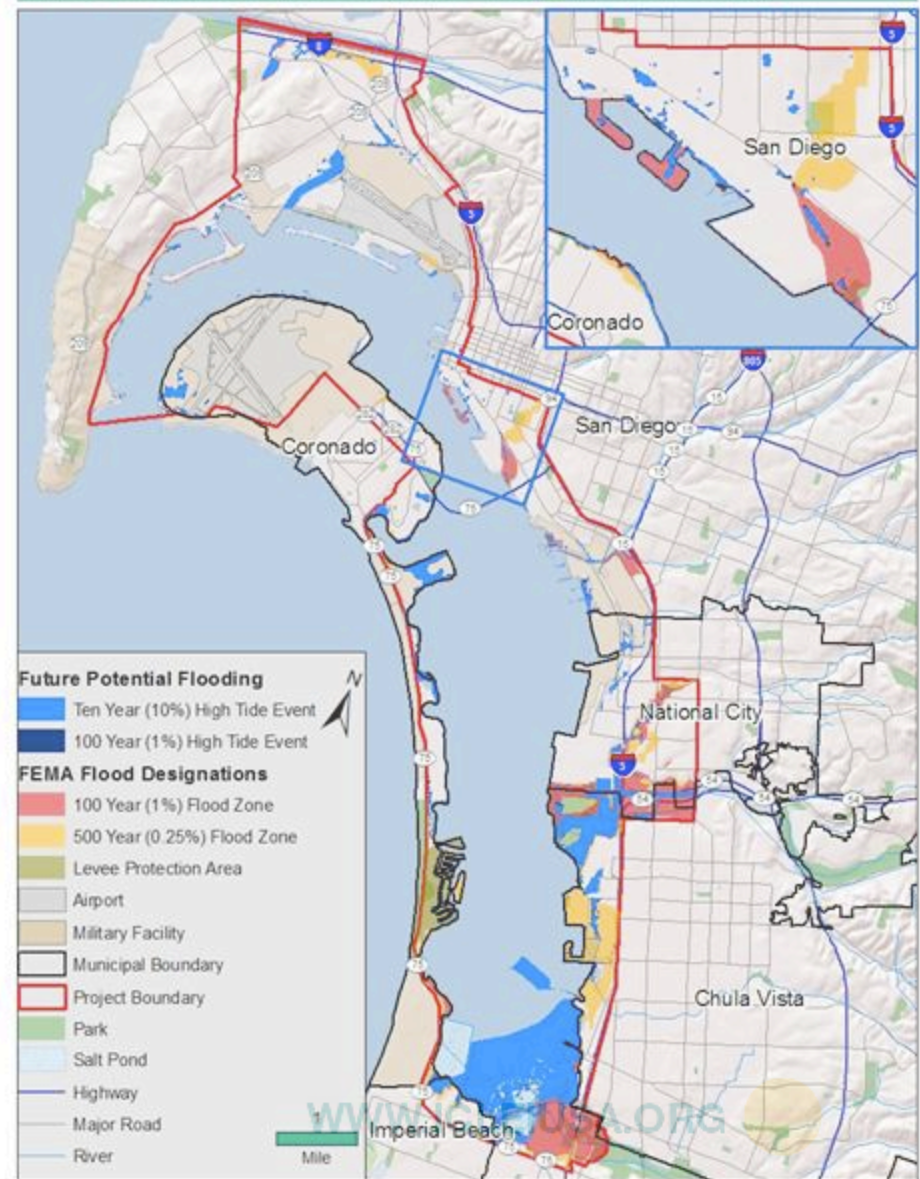
Working with USGS to analyze how SLR will impact drinking water



Preparing Regionally for SLR in San Diego Bay

- Collaboration of 5 municipalities, Port, and Airport
- Focused on preparing for sea level rise
- Integration of individual municipality plans/strategies with regional strategy
- Steering Committee guides process – supported by Stakeholder Committee
- Initiated in Spring 2010 and end products due in September 2011
 - Existing Conditions Report
 - Vulnerability Analysis
 - Final Sea Level Rise Strategy

Figure 3.4 Half Meter of Sea Level Rise - Potential Future Flooding



Adaptation Resources



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Planning and Decision-Making Frameworks: Recent Releases²

Planning Frameworks	Target Audience
Center for Climate Strategies <i>Climate Adaptation Guidebook, est 2011</i>	State and regional governments
ICLEI <i>Adaptation Database and Planning Tool (ADAPT), 2010</i>	Local governments
NOAA Office of Ocean and Coastal Resource Management <i>Adapting to Climate Change: A Planning Guide for State Coastal Managers, 2010</i>	U.S. coastal managers
Drought-Ready Communities <i>A Guide to Community Drought Preparedness, 2010</i>	Local governments; local water resource managers
Decision Making Frameworks	Target Audience
UKCIP <i>Risk, Uncertainty and Decision-Making Framework, 2009</i>	UK country governments and local governments
Georgetown Climate Center <i>Adaptation Tool Kit: Sea Level Rise & Coastal Land Use, est 2011</i>	State and local governments, coastal and land use managers

ICLEI's Climate Resilient Communities™ Program

Is your community preparing for the impacts and costs of climate change?



Start now with ICLEI's Climate Resilient Communities Program for local governments

A changing climate is already affecting communities across America. As these unavoidable impacts intensify in the coming years – heat waves, flooding, water shortages, exacerbated air pollution – your community must begin preparing now to increase its resilience. ICLEI's groundbreaking **Climate Resilient Communities™ (CRC) Program** is the definitive means to do so.

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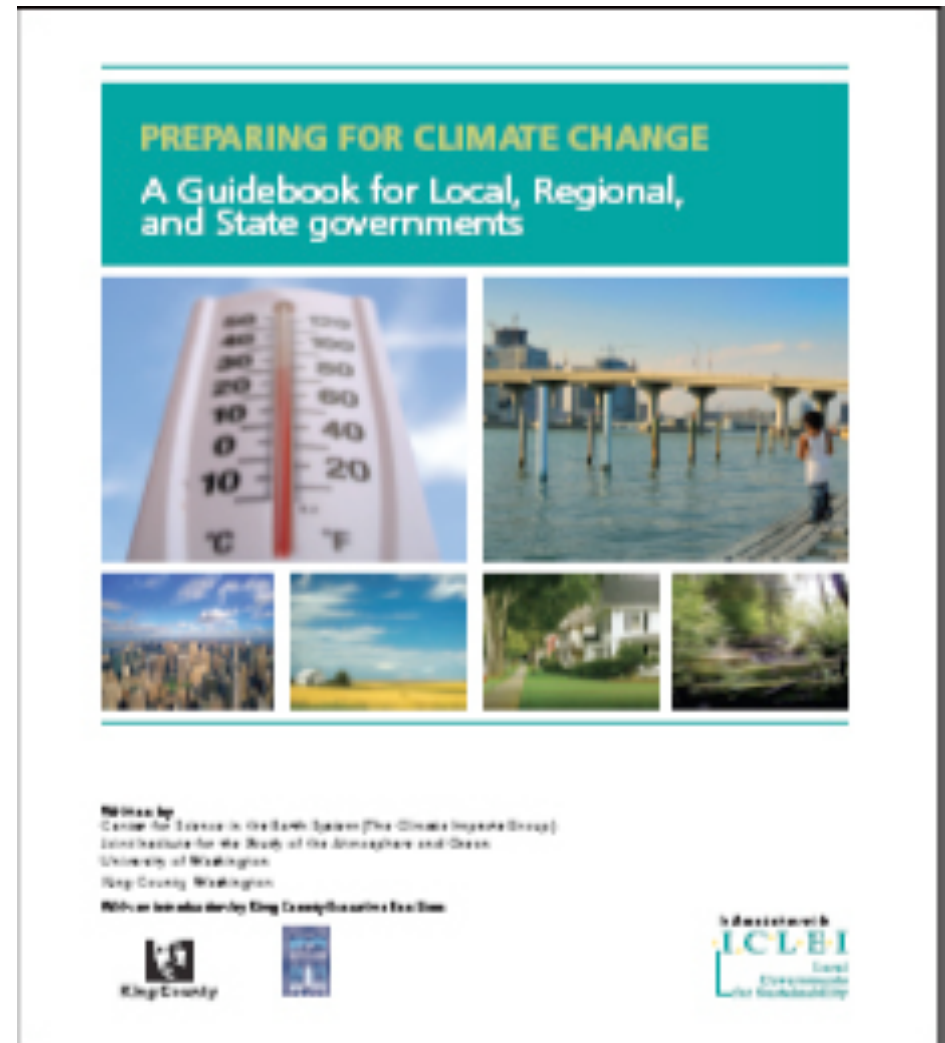
ICLEI USA's Climate Adaptation Guidebook

Preparing for Climate Change: A Guidebook for Local, Regional and State Governments

Created in partnership with The Climate Impacts Group and King County, WA

Launched in 2008

Provides detailed guidance on how to plan for climate change adaptation



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Getting Started

[Overview](#)

[1. A First Look at Climate Impacts](#)

[2. Survey Stakeholders](#)

[3. Opening Statements](#)

[4. Spreading Preparedness Message](#)

[5. Sample Resolution](#)

[6. Building Preparedness Team and Charter](#)

[7. Selecting Team Chair and 1st Meeting](#)

Resiliency Study

[Overview](#)

[1. Research Climate Change Projections](#)

[2. Identify Impacts](#)

[3. Vulnerability Assessment](#)

[4. Identify Key Vulnerabilities](#)

Appendix

[Glossary](#)

Getting Started - Overview

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This worksheet is intended to introduce users to the first module of ADAPT and help track progress through the various steps included within this resource.

Worksheet	Description	Status	Notes
Step 1. - A First Look At Climate Impacts	Step 1 will help with tracking projected and existing climate change impacts in your region; information which will be used to build your preliminary adaptation messages.	Not Started ▾	
Step 2. - Survey Staff	Step 2 provides questions to use as a survey for government staff regarding their perception of current climate impacts and a table for recording responses.	Not Started ▾	
Step 3. - Opening Statements	Step 3 is designed to help users draft preliminary statements about why your local government should engage in adaptation planning and what you hope to achieve by doing so.	Not Started ▾	
Step 4. - Spreading the Preparedness Message	Step 4 is intended to help determine the appropriate climate preparedness message, messenger, and medium for various audiences within your community.	Not Started ▾	
Step 5. - Creating A Climate Resilient Communities Resolution	Step 5 provides a sample resolution/ordinance that can be used to formalize your community's commitment to climate preparedness.	Not Started ▾	
Step 6. - Building A Climate Preparedness Team and Developing Your Team Charter	Step 6 provides guidance on building an interdepartmental climate change preparedness team representing the disciplines and departments appropriate for the climate change impacts preliminarily identified for your region.	Not Started ▾	
Step 7. - Selecting A Preparedness Team Chair and Holding First Preparedness Team Meeting	Step 7 provides guidance on selecting a strong preparedness team chair and holding the first preparedness team meeting.	Not Started ▾	

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Case Studies on Local Adaptation Efforts



Keene, NH:

- Full adaptation planning process
- Established committee of all department heads
- Included adaptation and mitigation in community visioning and comprehensive plan



Miami Dade County, FL:

- Adaptation and mitigation planning together
- Created a climate change advisory task force → 34 different recommendations
- Working on regional preparedness through Southeast Florida Climate Change Compact



Homer, AK:

- Adaptation and mitigation planning together
- Strong science
- Effective adaptation strategy of making sure changes being made today consider long term climate change



Other Adaptation Resources

Fact Sheets

Mitigation-Adaptation Connection: Milestones, Synergies and Contradictions

Financing Climate Change Adaptation

Preserving Assets in At-Risk Municipalities: Financial Strategies for Climate Change Adaptation

Other Resources

Adaptation email newsletter

Adaptation blog posts

Public health webinars

Webinar series on adaptation

Adaptation talking points

Link to climate adaptation resources from around the nation



New Tool: Adaptation Resource Toolbox (ART)

“Streamlining Access to Climate Adaptation Information”

Objective:

A central repository for tools, resources, information, organizations, and funding available from federal, state, and non-profits

Focus:

Local governments in Connecticut, with potential to expand regionally or nationally

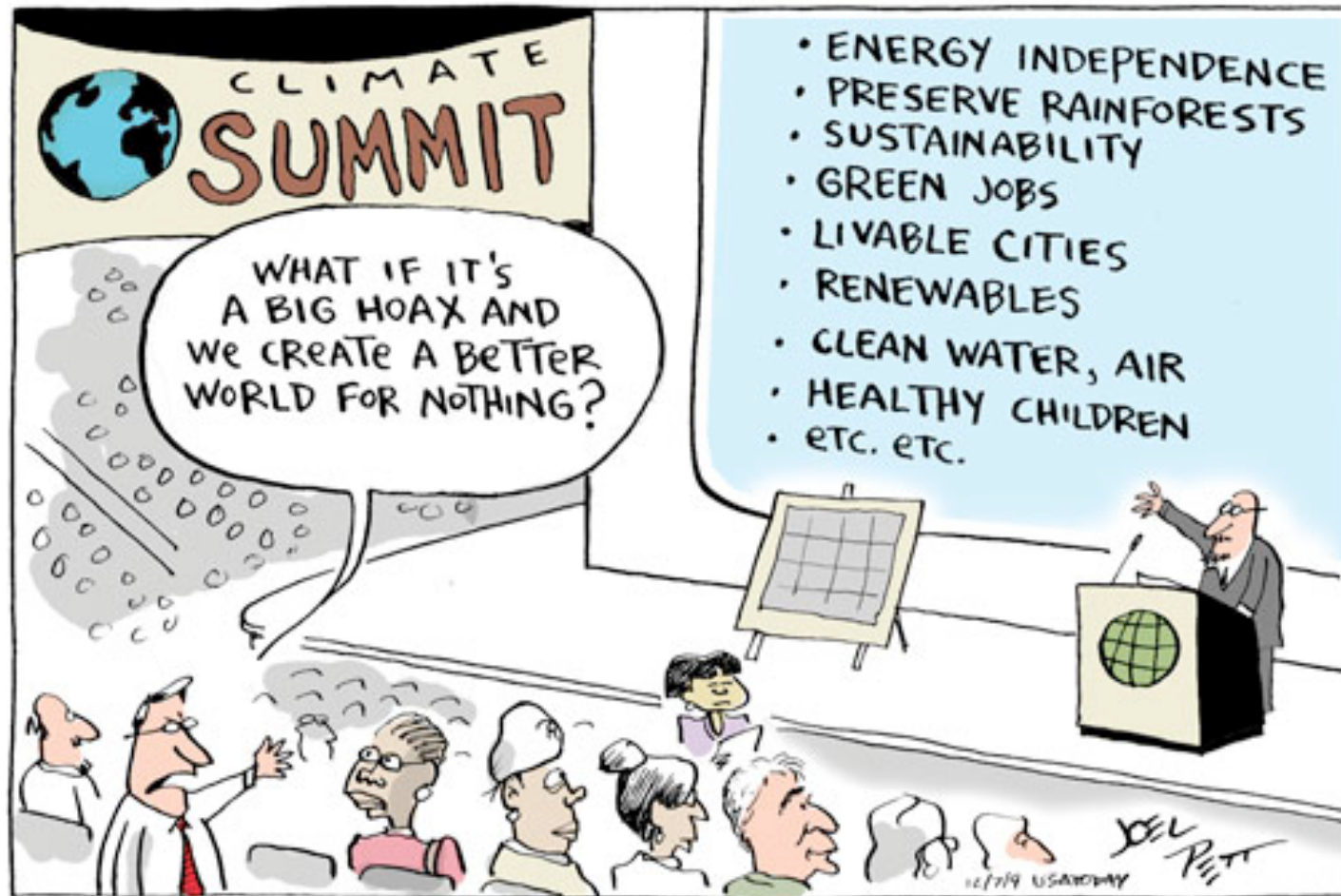


What's Next?

- Continue to develop tools and resources that are responsive to local needs
 - Communicating climate change
 - Integrating climate into existing planning processes
 - Indicators of success
- Your ideas?



Questions?



Missy Stults
Adaptation Manager – ICLEI USA

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