

Regional Climate Adaptation Technical Working Group

Progress Update to One Bay Resilient Communities Working Group

Libby Carnahan
Sea Grant Agent

Presentation Overview

- Scientific Foundation
- Regional Coordination
- Framework for Recommendations
- Next Steps
- Questions & Comments

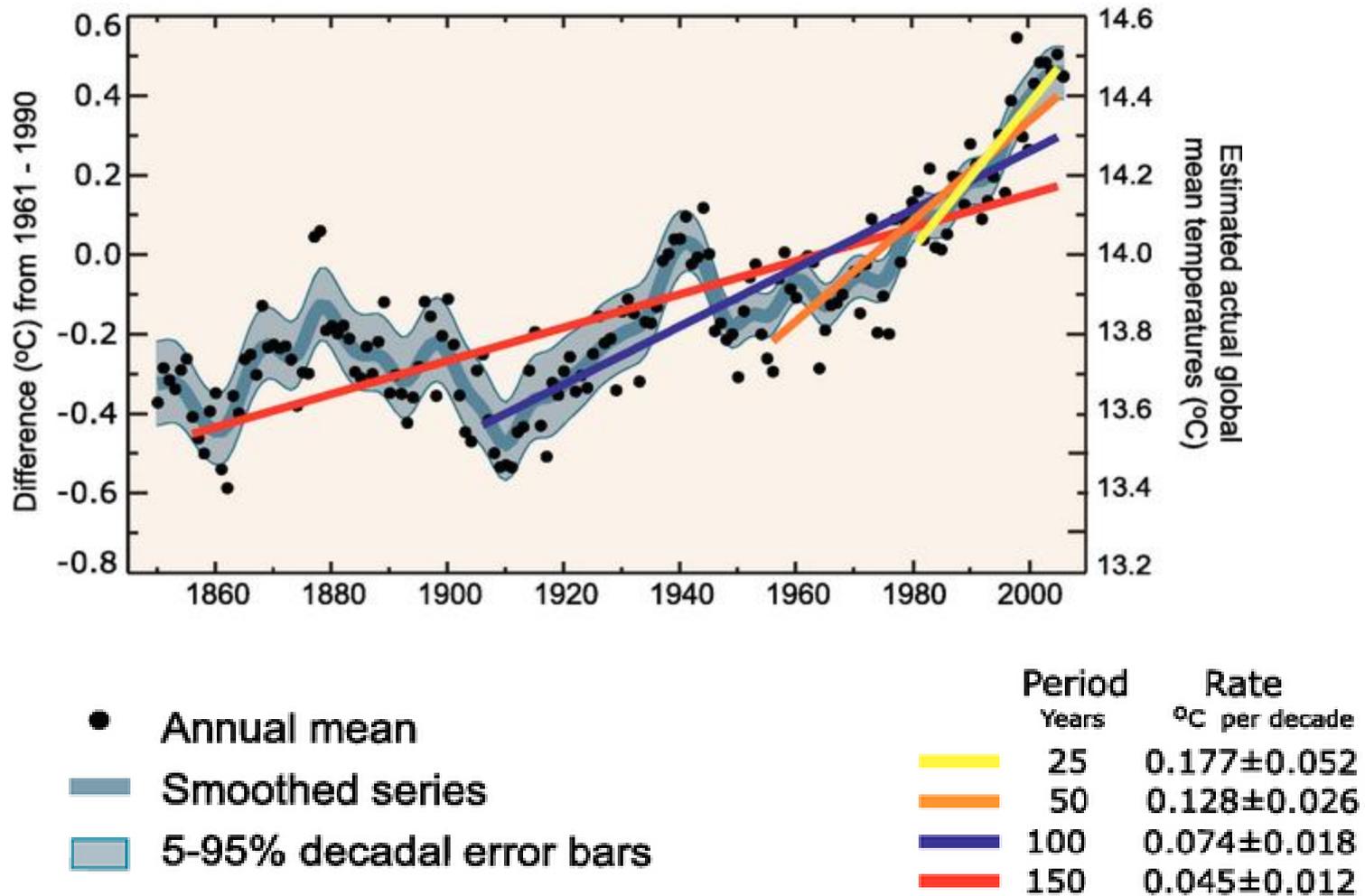
The National Climate Assessment

- Global Change Research Act of 1990
 - Mandates NCA every 4 years
 - Report to President and Congress

- 3rd National Report
 - 3 year effort
 - 300 Expert Authors
 - 60 Member Advisory Committee



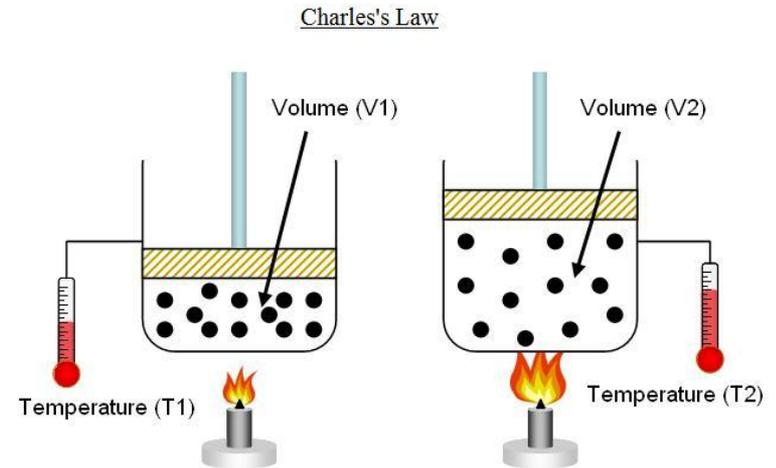
Global Average Temperatures



Source: IPCC

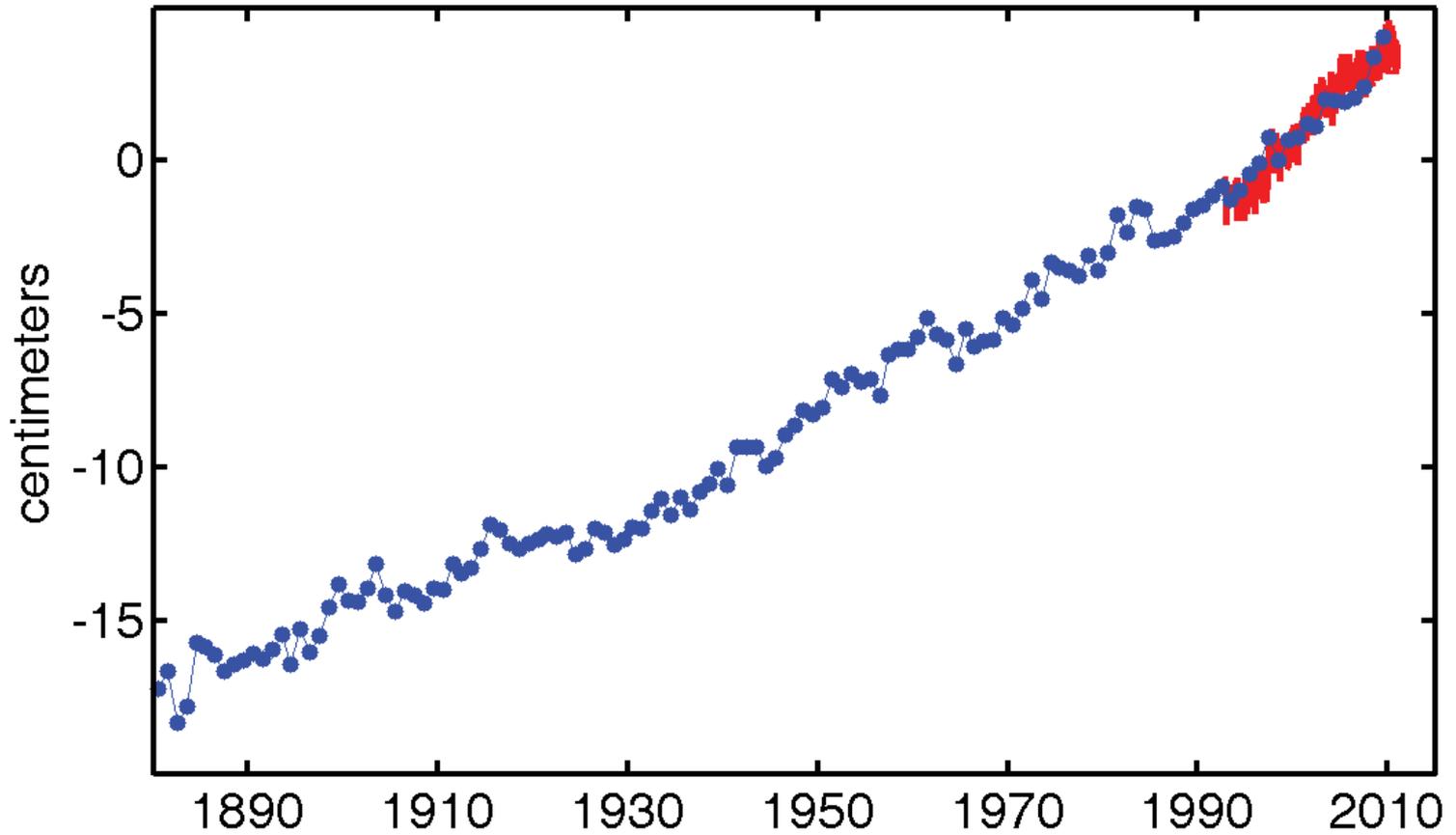
Sea Level Rise

- Oceans are Warming
 - As Water warms, Volume Expands
 - As Volume Expands, Seas Rise
- Melting of Land Ice (Glaciers, Ice Caps, Ice Sheets)



Global Mean Sea Level Rise

Based on Tide Gauges (blue) and satellite altimetry (red)



Source: Mitchum, 2011

National Climate Assessment

- Comprehensive Regional Assessments



► Sectors

- Water
- Energy, Water, and Land
- Energy
- Urban
- Transportation
- Indigenous Peoples
- Agriculture
- Land Use and Land Cover Change
- Forests
- Rural Communities
- Ecosystems
- Biogeochemical Cycles
- Human Health

Timeline of Regional Efforts

When	Action Item
January 2014	Sea Level Rise Project Inventory Workshop & Electronic Survey
January 2014	Presentation to Pinellas BoCC <i>Extreme Weather & Sea-Level Rise</i>
March 2014	Invited members to serve on Scientific Advisory Group
April-Sept 2014	Monthly Meetings of Regional Climate Adaptation Technical Working Group
August 2014	Presentation to Hillsborough BoCC <i>Changing Climate</i>

Needs Identified

Leadership
Framework

Central Web
Depository

Regional Models

Regional Climate Adaptation Technical Working Group- Overarching Goal

Collaborate to support local governments in their efforts to plan for a changing climate.

Objectives

- 1. **Convene inter-agency partners** working both within their own agency and in cooperation with other agencies on research and/or community adaptation projects related to a changing climate.
- 2. **Inventory existing projects** including project objectives, partners, time scales, and needs.
- 3. Identify existing **reports and data sets** that can be utilized by local governments in their comprehensive planning efforts for a changing climate.

Scientific Membership

Convener- UF/IFAS Extension, Florida Sea Grant

Agency Members

Tampa Bay Regional Planning Council (regional)

Tampa Bay Estuary Program (regional)

Tampa Bay Water (regional)

Southwest Florida Water Management District (regional)

Florida Climate Institute (state)

Florida Sea Grant (state)

National Weather Service, Tampa Bay (regional, national)

NOAA Fisheries Service, SWRegional Office (multi-state)

US Army Corps of Engineers (national)

US Geological Survey (national)

Scientific Membership

Academic Members

University of South Florida, School of Public Affairs

University of South Florida, College of Marine Science

Government Members

Natural Resources, Pinellas County

Environmental Protection Commission of
Hillsborough County

Environmental Protection Division, Manatee County

Environmental Lands, Pasco County

Working Objective #1

Formulate a recommendation for the methodology to utilize for a unified SLR projection for the Tampa Bay region

“Scenarios do not predict future changes, but describe future potential conditions in a manner that supports decision-making under conditions of uncertainty. Scenarios are used to develop and test decisions under a variety of plausible futures.” (NOAA)

Process

Facilitated
Discussion



Literature
Review



Context
Speakers

Context Speakers

TBRPC

- GIS Tools used in Evacuation Planning and Climate Change Modeling

USACE

- Sea Level Rise and Climate Change Risk Management for Florida

DEO

- Sea Level Rise Projection, Needs, Capacities, and Alternatives for Florida

Sea Level Rise Projection: Needs, Capacities & Alternative Approaches

A Policy Briefing for the Florida Department of
Economic Opportunity, September 2013

Prepared by Florida Planning and Development
Lab, Department of Urban and Regional
Planning, The Florida State University



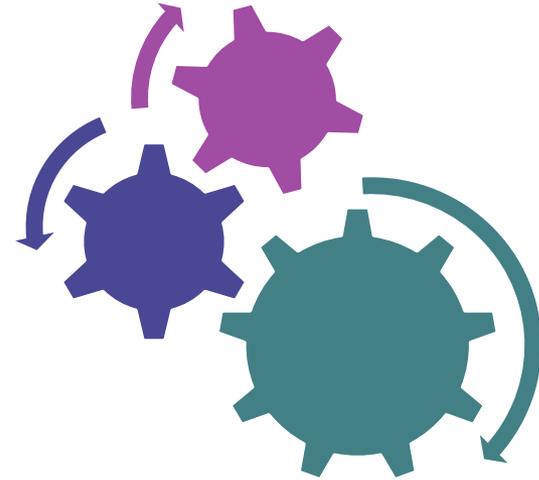
SLR Projection Study Recommendations

1. Decision context should guide choice of scale, resolution, and accuracy; tidal datum; and time horizon.
2. Use relative sea level rise projections from the closest tide station.
3. Projection method should be based on the most up-to-date science available.
4. Projection estimate choice should reflect planning constituency risk posture.

SLR Projection Study Recommendations

5. State inter-agency consistency for projection method and estimate is desirable to minimize confusion at regional and local levels.
6. *Develop a single sea level rise projection tool that can meet most coastal adaptation planning needs.*
7. Continue to rely on SLAMM for coastal wetland adaptation planning.
8. Develop guidance and training for using these tools.

Next Steps



- Next Meeting– October 21
 - Draft Recommendation
- One Bay Resilient Communities- December 5
 - Distribute Draft Recommendations
 - Discuss Methodologies

Questions?

A scenic view of a waterfront promenade. In the foreground, a concrete walkway runs along the water's edge. To the right, a row of tall palm trees stands in the water, their reflections visible on the surface. A wooden pier with a railing extends into the water in the middle ground. The background shows a calm body of water and a distant shoreline with trees and buildings under a bright, overcast sky.

Libby Carnahan
lcarnahan@ufl.edu
727-453-6522