# Regional Climate Adaptation Technical Working Group

Libby Carnahan Sea Grant Agent



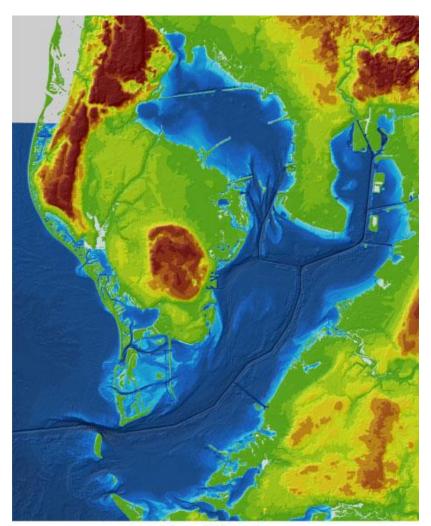


# **Presentation Overview**

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

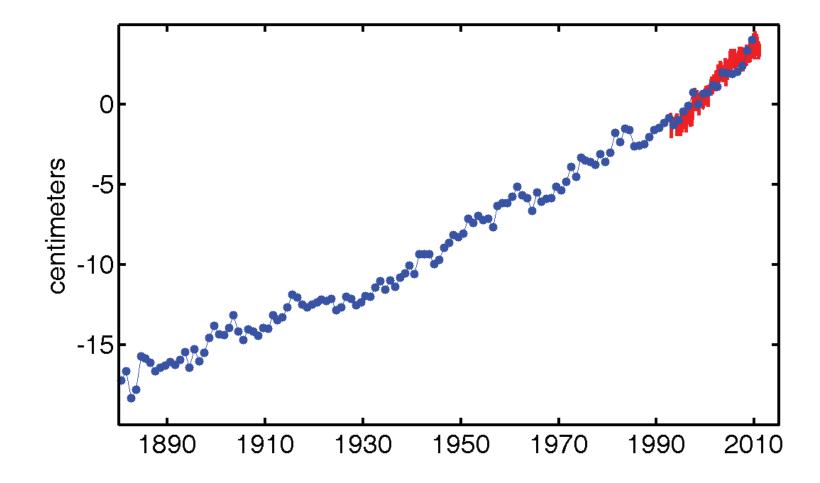
# Tampa Bay

- Low-lying
- Densely-populated
- Diverse Natural Resources



### Global Mean Sea Level Rise

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



Source: Mitchum, 2011

# Situation

- Climate change issues more commonplace
- Mass information is generally global in scale, long time frames
- Decision makers, government employees, and residents need information to address the challenges they are facing at **local level**

# Timeline of Regional Efforts

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

### January 2014 Sea Level Rise Project Inventory Workshop



### 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**

# TBRPC

• GIS Tools used in Evacuation Planning and Climate Change Modeling

# USACE

• Sea Level Rise and Climate Change Risk Management for Florida

### DEO

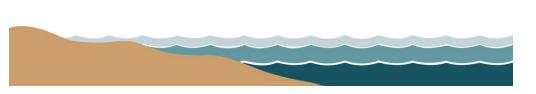
• Sea Level Rise Projection, Needs, Capacities, and Alternatives for Florida

### 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

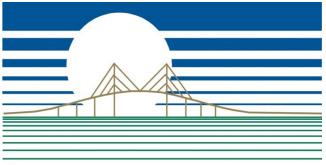
- 1. Decision context should guide choice of scale, resolution, and accuracy; tidal datum; and time horizon.
- 2. Use relative sea level rise projections from the closest tide station.
- 3. Projection method should be based on the most upto-date science available.
- 4. Projection estimate choice should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



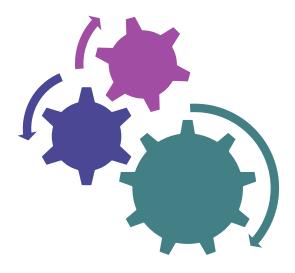
# RESILIENT



Tampa Bay Regional Planning Council



# Next Steps



- Next Meeting– December 16
  - Draft Recommendation
- One Bay Resilient Communities
  - December- Discuss Methodologies
  - February- Distribute Draft Recommendations

# Questions?

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