

The Role of CZM Programs in Adaptation to Climate Change

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**10th Annual Caribbean and Southern Regional CZM Meeting
November 8, 2007**



New CSO Structure

- **Old CSO:**
 - **Standing committees (Hazards, Water Quality)**
 - **Exec. Committee – officers, chairs of standing committees**
- **New CSO:**
 - **Work Groups**
 - **Outcome-driven**
 - **Short-term**
 - **Increased participation from agency staff**
 - **Exec. Committee – officers, regional representatives**
 - **2008 – Braxton Davis (South Atlantic), Eddie Fisher (Gulf), and Janice Hodges (Islands)**

Charge of the CC Work Group

- 1) Assess the current activities & needs of coastal states and territories**
 - *Report: “Role of CZM Programs in Adaptation to Climate Change”*
- 2) Track and Respond to Federal Legislation**
 - *Worked w/ CSO staff in reviewing/editing House & Senate bills*
- 3) Develop Draft CSO Policy Statement on CC**
 - *In development for membership consideration at “March” 08 meeting*
 - *Reviewed/submitted comments on US CCSP report on coastal adaptation options*
 - *Participated in several interagency workshops*

1) Assess current activities and needs

- ***“Role of CZM Programs in Adaptation to CC”***
 - Inform CZMA reauthorization
 - Provide for information exchange among states
 - Identify federal research and policy needs
- **Survey distributed to state/territory CZM programs**
 - Parallel efforts underway by NERRS, Sea Grant, others
 - Recent (past 10 yrs) climate change-related activities
 - 18 state responses; additional info from NOAA and RI SG; continuous input from CSO work group

Coastal Zone Management Act

- 302(1): “Because **global warming may result in a substantial sea level rise** with serious adverse effects in the coastal zone, coastal states **must anticipate and plan for such an occurrence.**”
- 303(b): “...the management of coastal development to minimize the loss of life and property...in areas likely to be affected by or vulnerable to **sea level rise, land subsidence, and salt water intrusion**”
- 303(k): “the study and development...of plans for addressing the adverse effects upon the coastal zone of land subsidence and of sea level rise”
- 303(3): “to encourage the preparation of **special area management plans...** including those areas likely to be affected by land subsidence, **sea level rise**”
- 309(a)(2): “Preventing or significantly reducing threats to life and destruction of property by...anticipating and managing the effects of potential **sea level rise and Great Lakes level rise.**”

General Findings

- CZM Program ‘Climate Change’ initiatives
 - All focus on related hazards – erosion, flooding, hurricanes
 - Several involved in Governors’ CC initiatives...
 - Most initially focused on accelerated rate of SLR
- Coastal impacts may also include...
 - Changes in freshwater quality/quantity
 - Changes in lake levels (Great Lakes)
 - Ocean acidification / physical changes (thermal stratification)
 - Invasive species/species migrations/habitat loss

Adaptation Activities

- **State “Sea Level Rise Strategy” reports/workshops** (MD, CA, DE, RI, NC, others...)
- **Sea level rise inundation mapping and vulnerability assessments** (ME, BCDC, NJ, MD, others...)
- **General shoreline mgmt. initiatives** (SC, DE, WA)
- **Extension/Outreach activities** (CA, RI, others...)

Adaptation Policies

Specific sea level rise policies/strategies:

- Public infrastructure siting policies
- Wetland conservation and restoration policies
- Add “freeboard” above BFE
- Address SLR in regional/local plans
- Land acquisition/conservation priorities
- GIS-based decision-support tools

Research Needs

- High resolution topography/bathymetry (LIDAR)
- Guidance/support on inundation and shoreline change modeling and monitoring
- Impacts of accelerated SLR on coastal habitats (especially wetlands)
- Economic studies, potential impacts to infrastructure
- Role of sea level rise in beach nourishment frequency and volumetric requirements
- Policy analyses related to shoreline “retreat” & armoring
- Projections of other climate change impacts
- Information synthesis (regional)

Governance Needs

A clear federal strategy for intergovernmental coordination on coastal adaptation

- Outline roles/activities of federal agencies/programs
- Improve coordination between CZM, FEMA, & ASFPM
 - National Flood Insurance Program
- Coordinate through Regional Partnerships
- Recognize and strengthen the CZMA

Role of CZM in Adaptation to CC

- **Report presentations**
 - Federal Coastal Coordination Committee
 - CEQ's Subcommittee on Integrated Mgmt. of Ocean Resources
 - U.S. Climate Change Science Program
 - CZ07 Special Session
 - Florida Coastal Law School Conference
 - NE and SE Regional Meetings
 - Next week - Senate Commerce, Science and Transportation Committee Hearing

2) Respond to Federal Legislation

- ***House bill – (Rahall, Chair House Nat. Res. - HR 2337)***
 - New section added to CZMA
 - Voluntary grants to CZM programs for state coastal adaptation plans and implementation activities
 - Phased funding
- ***Senate bill (Draft)***
 - Federal interagency adaptation strategy – federal resources and activities
 - NOAA regional vulnerability assessments and recommendations
 - Regional coastal adaptation plans – NOAA partnership with states
 - Ocean adaptation strategy development – NOAA/states
 - Remote sensing / spatial data development activities

Next Steps...

- **Continuation of the work group to address:**
 - Further development of policy statement (February)
 - Ongoing legislative proposals, CZMA development

