

Getting to Action:

Examples of costal resilience actions and the data, tools and techniques that got them there

Silver Jackets Workshop

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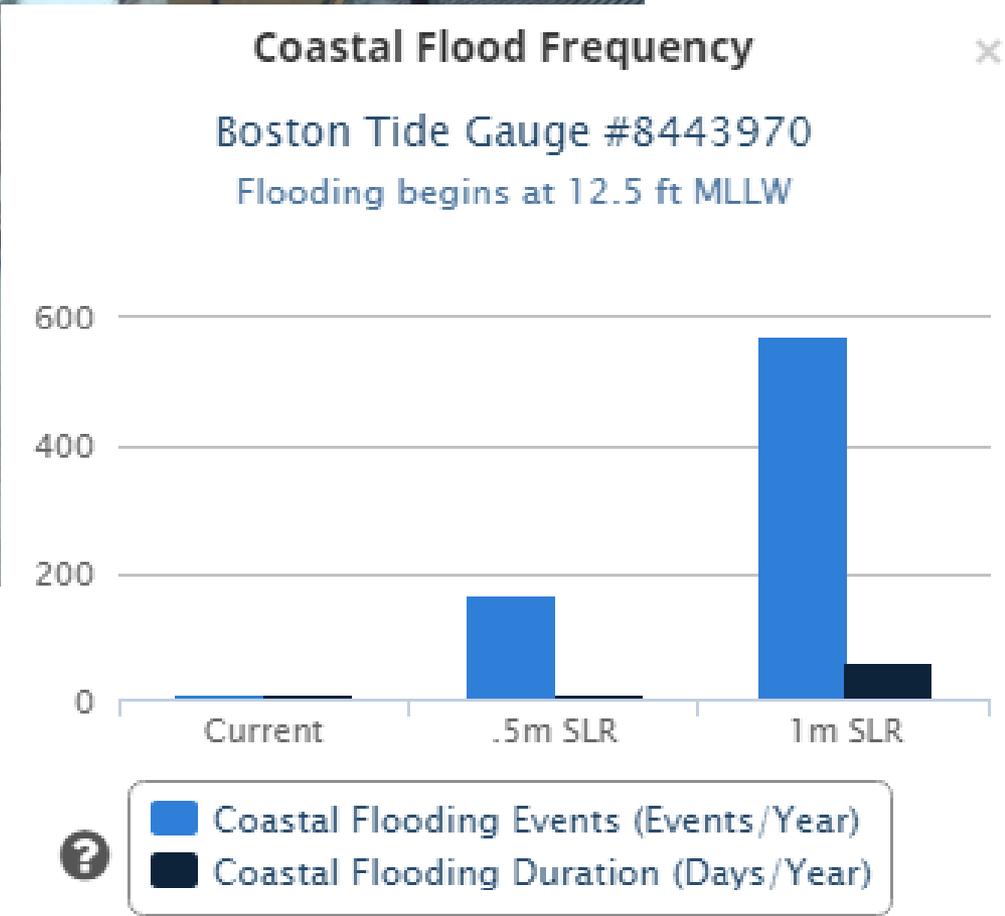
OFFICE FOR COASTAL MANAGEMENT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Objectives

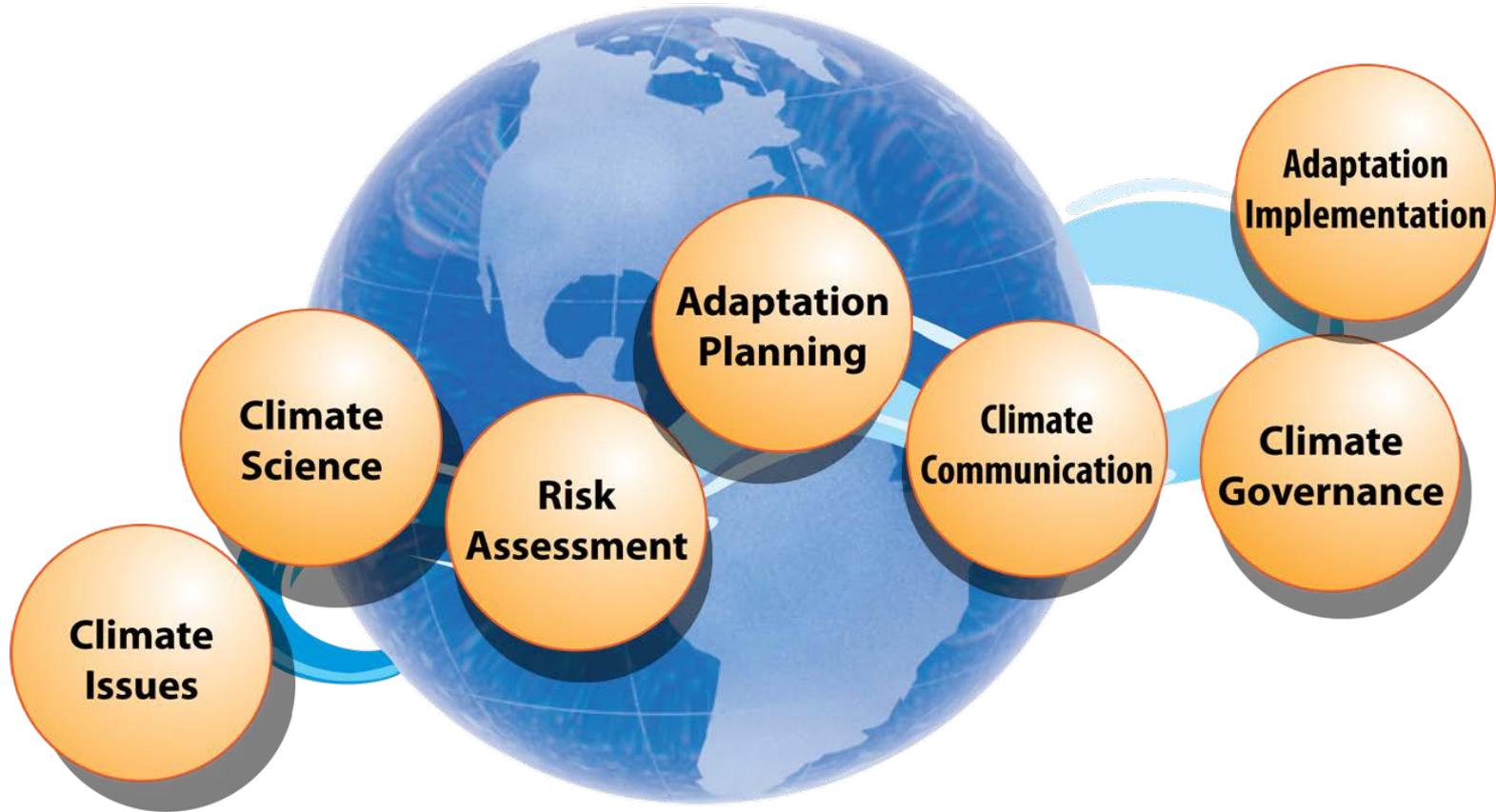
- Overview of coastal flooding issues
- Data, tools and techniques
- Local actions to address coastal flooding
- Resources



Coastal Flooding



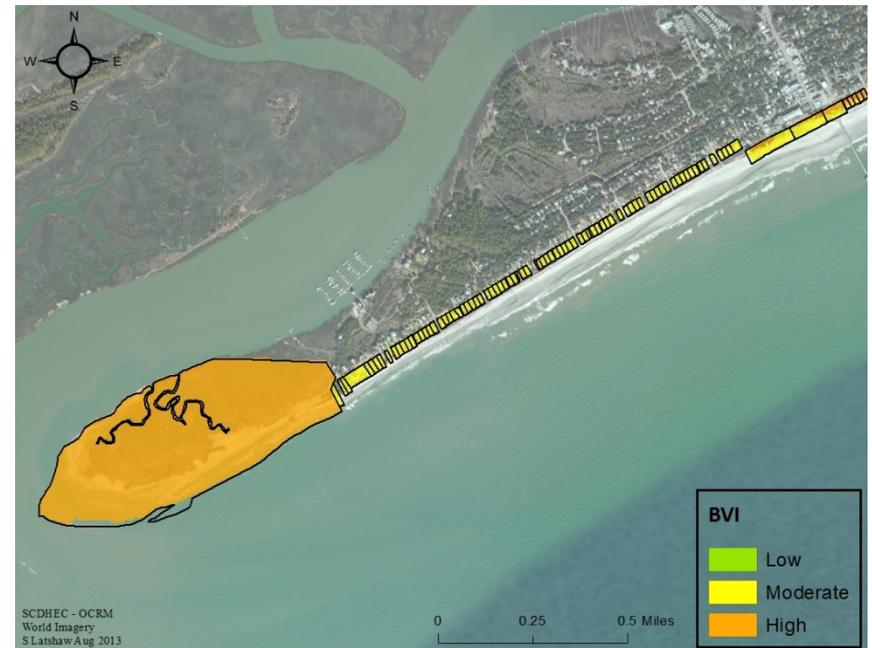
Framework



Coastal Action:

Beachfront Vulnerability Index for South Carolina

- **Issue:** Beachfront development in high risk areas
- **Process:** Beachfront Vulnerability Index (BVI) and overlay tool
- **Impact:** Incorporated into development strategies; state staff use in beach management plan updates



Coastal Action:

Beachfront Vulnerability Index for South Carolina

- **Data, Tools, and Techniques:**
 - Coastal LiDAR, long-term erosion rates, dunes, wave height, tidal range, habitable structure information
 - ArcGIS Weighted Overlay tool
 - Parcel level vulnerability assessments



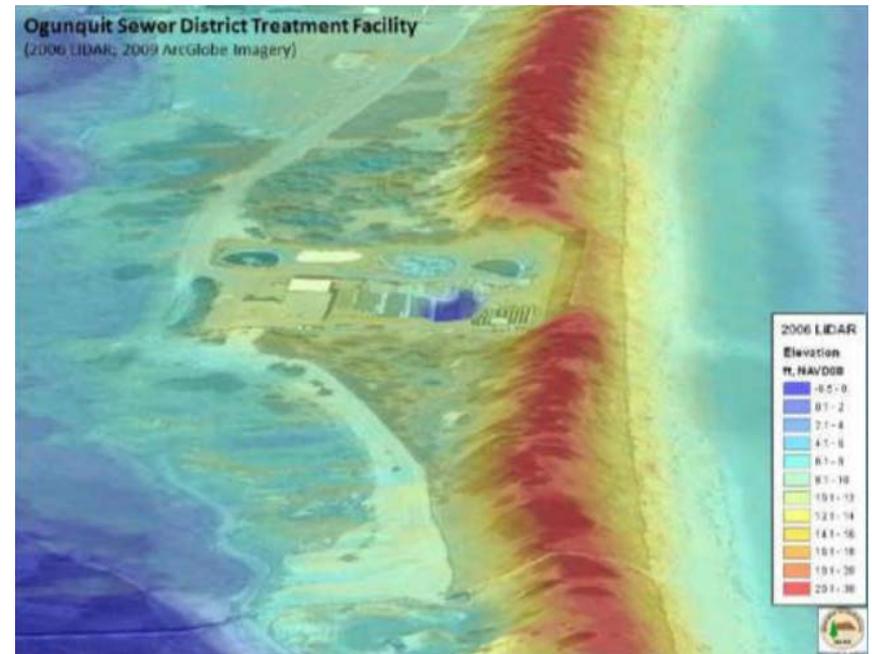
Coastal Action: Adapting WWTP in Ogunquit, ME

- **Issue:** Potential failure of Wastewater Treatment Plant
- **Process:** Vulnerability assessment, planning, implementation
- **Impact:** Report and Sea level rise project, Mitigation plan with construction timeline, Rate adjustments and outreach efforts



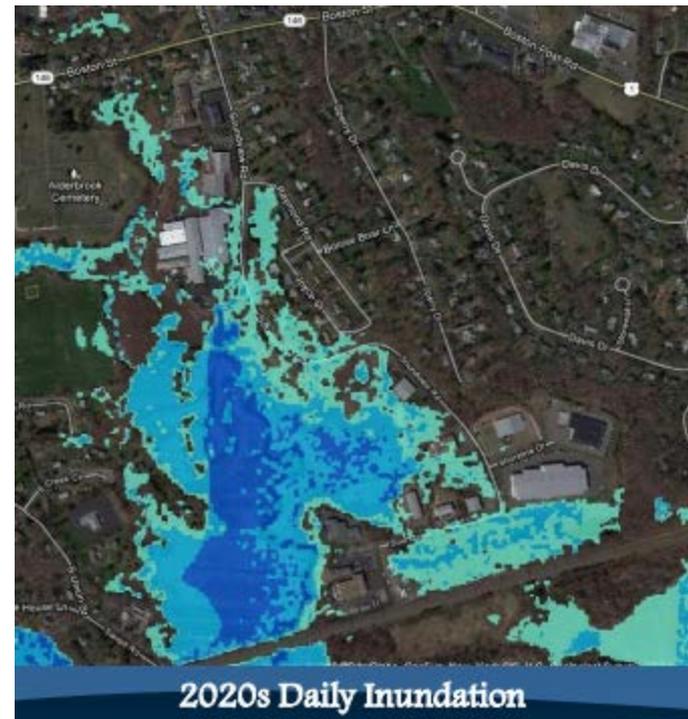
Coastal Action: Adapting WWTP in Ogunquit, ME

- **Data, tools and techniques:**
 - LiDAR, DEMs, water levels
 - Inundation model
 - Site mitigation and adaptation through 2055; relocation by 2100



Coastal Action: Options for Resilience in Guilford, CT

- **Issue:** Tax base at risk from sea level rise and storm surge
- **Process:** Vulnerability assessment, public engagement
- **Impact:** Developed and adopted Coastal Resilience Plan, preparing for FEMA's CRS



Coastal Action: Options for Resilience in Guilford, CT

- Data, tools, and techniques
 - Coastal LiDAR, DEMs, parcel tax data,
 - The Nature Conservancy Coastal Resilience Tool, inundation modeling
 - Daily inundation scenarios



Resources

- NOAA's Digital Coast (coast.noaa.gov/digitalcoast)
 - Data: Coastal LiDAR and Digital Elevation
 - Tools: Coastal Inundation Mapping (tools and training)
 - Techniques: Climate Adaptation for Coastal Communities Training
- Northeast Regional Ocean Council - Municipal Coastal Resilience Grants (necca.stormsmart.org)



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