

Resiliency in Broward County and the SE Florida Regional Climate Compact

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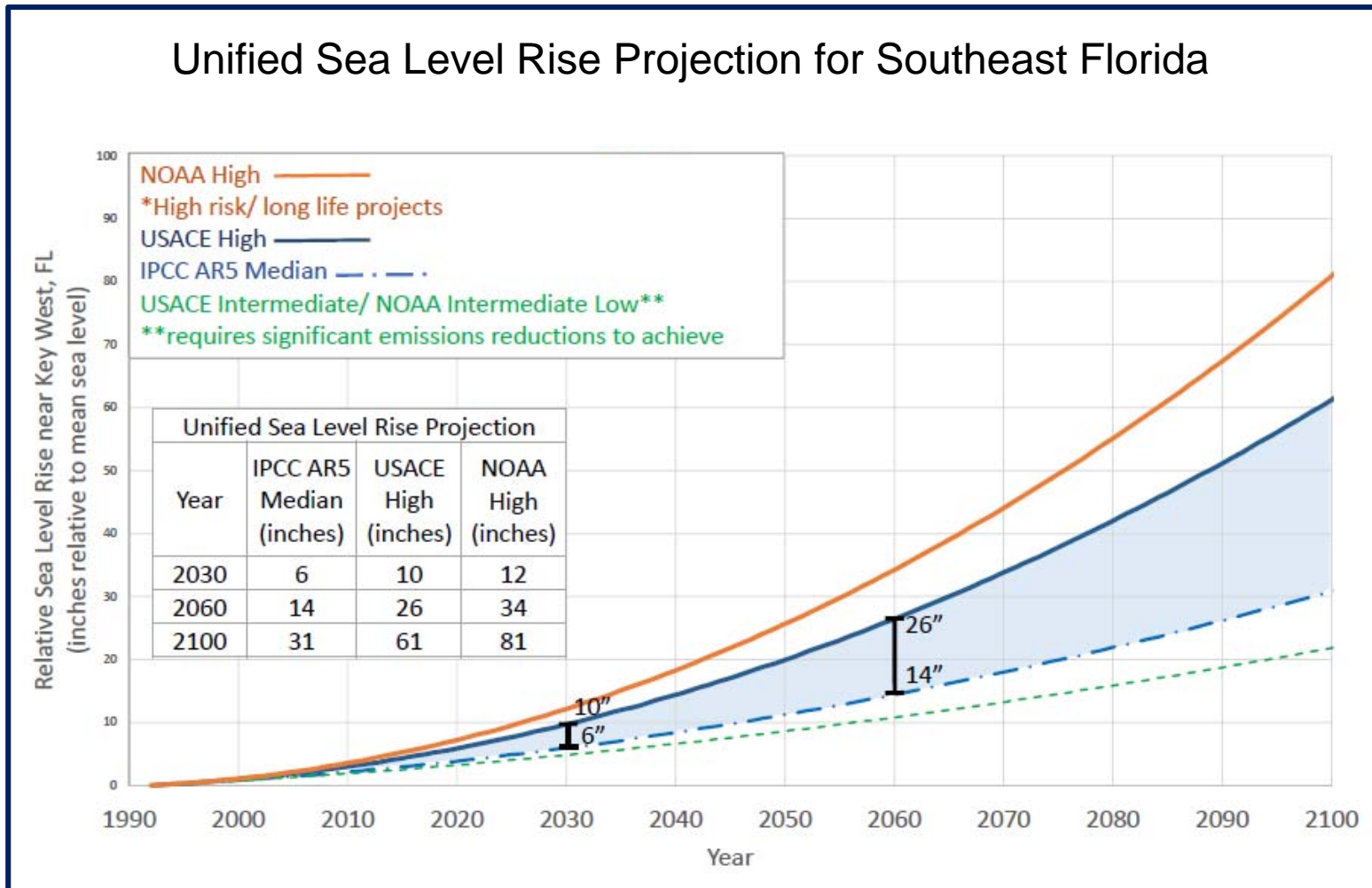


Climate Change in SE Florida

- Sea level rise
- Coastal and inland flooding
- Saltwater intrusion
- Increased storm intensity
- Extreme rainfall and drought
- Rising Temperatures
- Beach erosion
- Ocean acidification



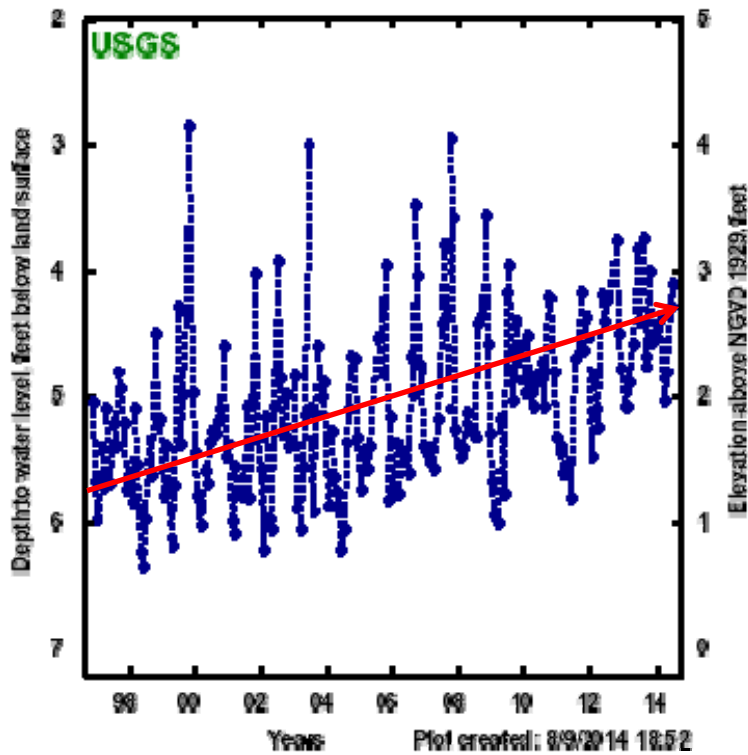
Resiliency Standards and Planning: What's the Urgency?



Measured SLR: 9" since 1900 (3" in last 23 years)

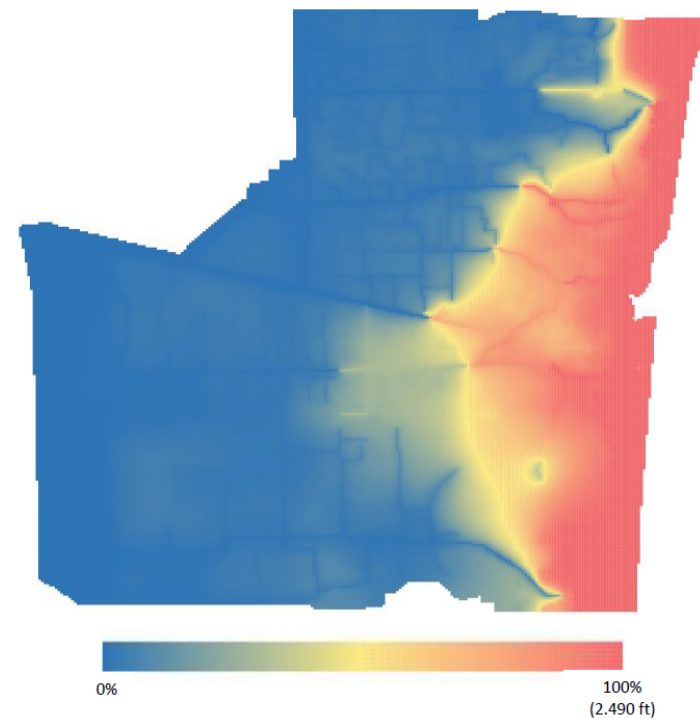
Rising Ground Water Levels

Recent Trend in Coastal GW Elevations



Measured

Increase in Wet-Season GW Elevation
(relative to SLR)



Modeled: Year 2060

Increase in Inland and Coastal Flooding



Storm-induced



Tidal and Surge



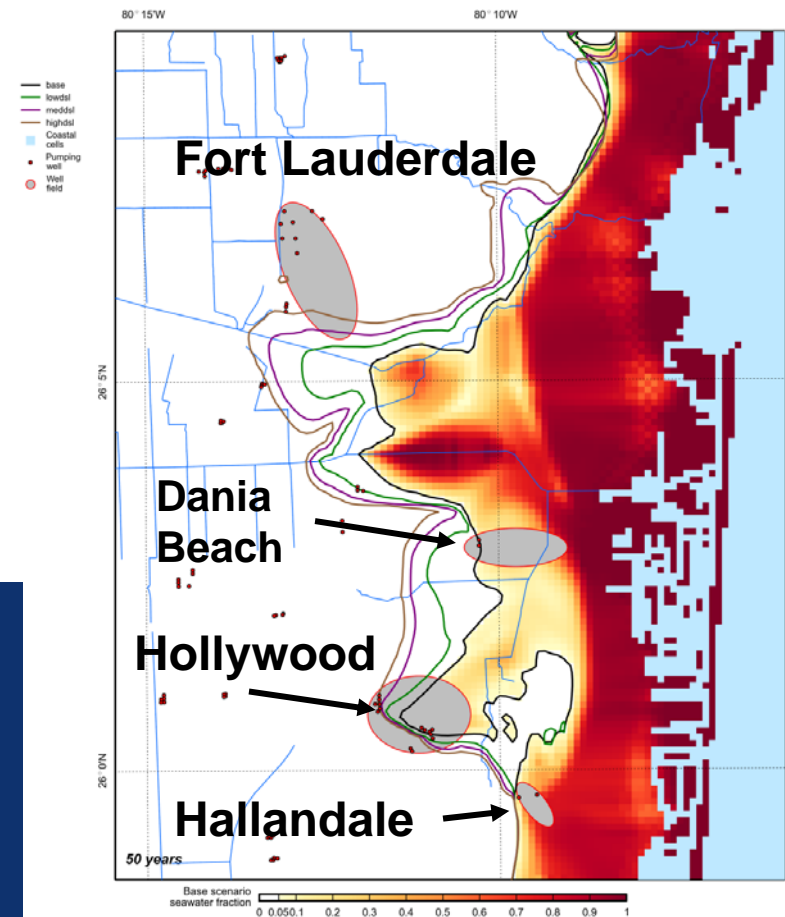
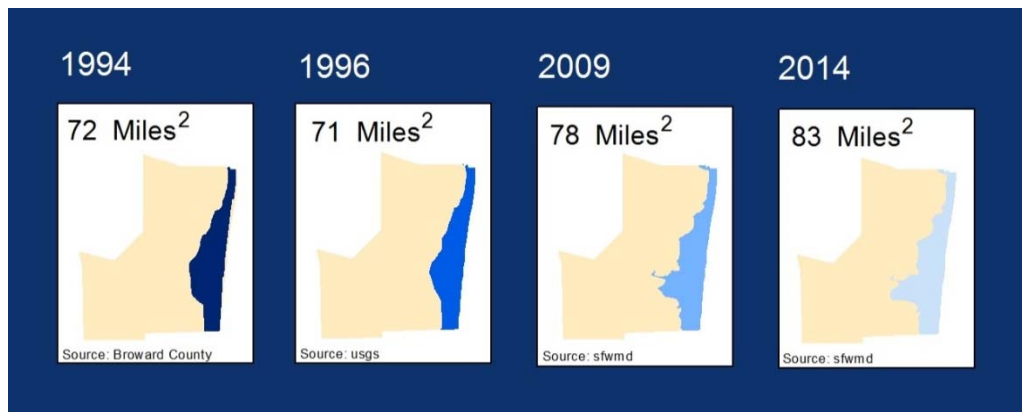
Impacted water managements systems



Saltwater Migration Constrains Water Supplies

2060: 2 feet SLR

- 35 MGD in predicted loss of water supply wells
- 40% coastal wellfield capacity
- 16% total wellfield capacity



Regional Collaboration in Resiliency

The Southeast Florida Regional Climate Change Compact



A Region Responds to a Changing Climate

Southeast Florida Regional Climate
Change Compact Counties

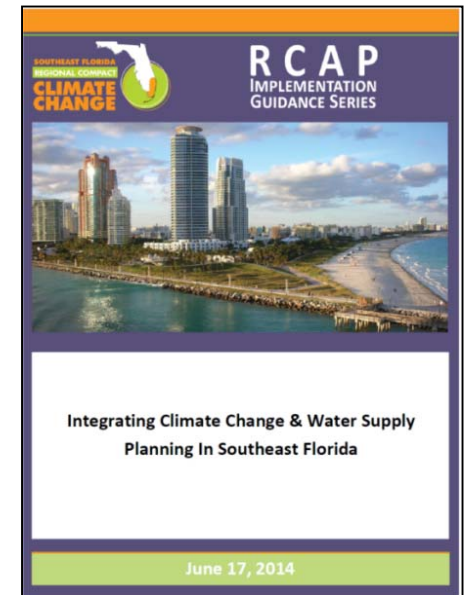
Regional Climate Action Plan

October 2012



Major Accomplishments

- Integration of climate change across operations
- Regional Sea Level Rise Projection (2012, 2015)
- Vulnerability Assessments
- RCAP Implementation Workshops and Work Groups
- Expanded partnerships
- Regional capacity building
- Adaptation Action Area planning designations
- Cross-sector engagement
- Secured external resources
- Sustained regional commitment



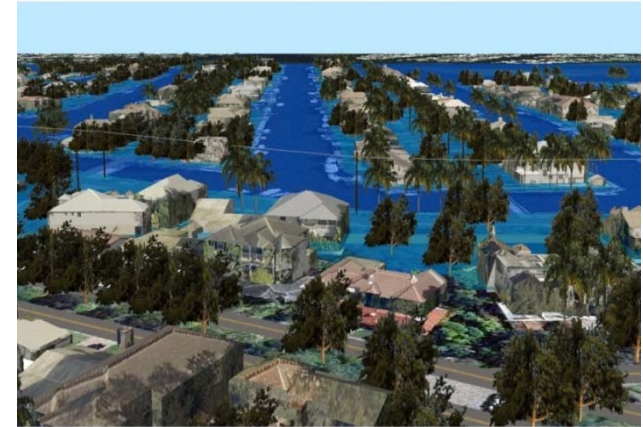
Challenges

- Rate of development
- Length of government process
- Lack of coordinated resiliency planning, standards, and investments



Implementation in Broward County

- Advanced climate and SLR models
 - Water supply and adaptation planning
- Shoreline resiliency goals and investments
- Risk and economic assessments
- Resiliency collaboration with U.S. Army Corps
 - Resiliency standards
- Planned update to county flood maps to include SLR
 - Planning standards
- Update to County Climate Action Plan (adopted in 2016)



Next Steps

- Commitment of compact funds to centralized staffing
- Formalize structure of Compact via interlocal agreement (Chapter 163.01 F.S.)
- Collaboration with RAND Corporation
 - Regional land use, planning, and economics
- Expanded business engagement: development, design and regional economics
- Emissions reductions: agency and community
- 2017 Regional Climate Action Plan Update



Questions?
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