

# Dipping Our Toes in Rising Waters

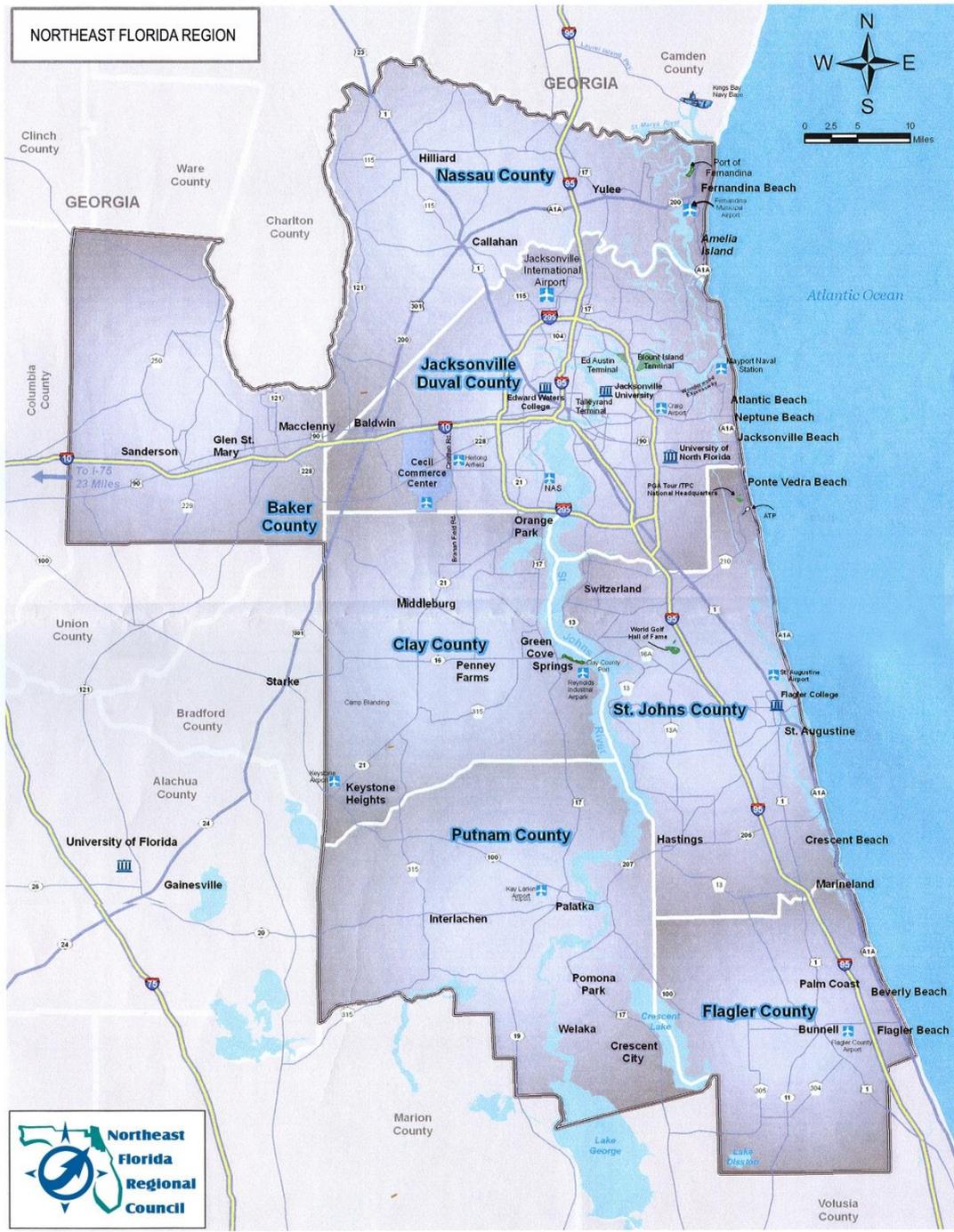
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NORTHEAST FLORIDA REGION



# Who are we?

The Council was formed in 1977 by the seven counties in Northeast Florida to “ensure a broad-based regional organization that can provide a truly regional perspective enhancing the ability and opportunity of local governments to resolve issues and problems transcending their individual boundaries.”

*- Interlocal Agreement*

# NEFRC Mission

- \* To be a dynamic network of local governance, providing visionary leadership, advocacy, and coordination between counties and local, state and federal governmental agencies to preserve and enhance the quality of Northeast Florida's economic, natural, built and social environment by:
  - \* Actively serving as a convener of regional issues
  - \* Fostering public awareness of diverse regional issues
  - \* Identifying trends, issues and opportunities for the Region
  - \* Building consensus for Regional solutions through coordination and cooperation
  - \* Providing a regionally focused forum for comprehensive and functional planning
  - \* Furnishing technical and administrative assistance to local governments and other stakeholders, and
  - \* Maintaining expertise among staff and pursuing technologies that support the successful implementation of the mission.

# Northeast Florida Regional Council

- \* Regional Forum for over 36 years
- \* 7 Counties & 27 Municipalities
- \* Board of Directors – 31 Voting Members (LEOs & Gubs) + 4 Ex-Officio Non-Voting Members
- \* Responsibilities under 19 separate statutes
- \* Staff to 13 separate organizations
- \* Program areas ranging from growth management to economic development to visioning to domestic security to dispute resolution to emergency preparedness to regional leadership to public policy development to...

# NEFRC Role

- \* Conveners
- \* Policy setting and consistency review: Strategic Regional Policy Plan
- \* [www.nefrc.org](http://www.nefrc.org)
- \* Regional Leadership Academy
  - \* [www.nefrla.com](http://www.nefrla.com)
- \* Regional Community Institute
  - \* [www.rcinef.org](http://www.rcinef.org)

# Strategic Regional Policy Plan

- \* Affordable housing
- \* Emergency preparedness
- \* Natural resources of regional significance
- \* Economic development
- \* Transportation
- \* Also: Demographics, Health, Energy
- \* Key: All local government Comprehensive Plans must be consistent with the SRPP
- \* Undergoing update now

# Strategy: Create a “critical mass” of folks who care about regional issues

- \* 2005-NEFRC creates the Regional Leadership Academy
- \* Graduates become members of the Regional Community Institute (RCI), along with current NEFRC Board Members
- \* RCI does assigned/agreed upon policy work related to the future of Northeast Florida for NEFRC

# Policy Work: Find out what the region thinks about the future

- \* 2007-RCI is asked to create a workplan to do a vision to be used in the update of the Strategic Regional Policy Plan
- \* Partnership with ULI, NFTPO, SJRWMD, SJRA, JaxUSA, UNF
- \* 2008-Educational Events on Quality of Life and Mobility Check
- \* 2009-Reality Check and County Checks. SLR map part of background materials
- \* 2010- Generation Check, Growth Pattern Polling

# Policy Work: A 50 year vision for growth and development

- \* 2010-RCI First Coast Vision committees recommend aspirational goals , strategies to achieve them, measures of success and action items
- \* October 2011- RCI Board of Directors Chair Bob Rhodes, Esq., presents First Coast Vision to the NEFRC Board.

# Action Item from First Coast Vision

- \* Create a set of vulnerability maps for the region. Bring together leadership and experts from the region to determine climate change impact and , if indicated, mitigation and adaptation plans.
- \* NEFRC calls for information and opinions on climate change from January –June 2012
- \* Information collected mostly relates to sea level rise

# Policy Work: Sea Level Rise

- \* “The Northeast Florida Regional Council asks the Regional Community Institute of Northeast Florida, Inc. to consider Sea Level Rise and its potential to impact Northeast Florida. If they determine our Region is vulnerable, we ask them to determine working assumptions for level of rise and planning timeframe, to assist local governments in assessing their resiliency, and to recommend regional strategies if they believe it appropriate.”

Motion of NEFRC, August 2012

# Policy Work: RCI Emergency Preparedness Committee on Sea Level Rise

- \* Determine if we are we vulnerable
- \* If so, assumptions for level of rise and timeframes
- \* Community Resiliency Assessments of interested coastal and waterfront communities
- \* Use what was learned to make policy recommendations to NEFRC Board in October 2013

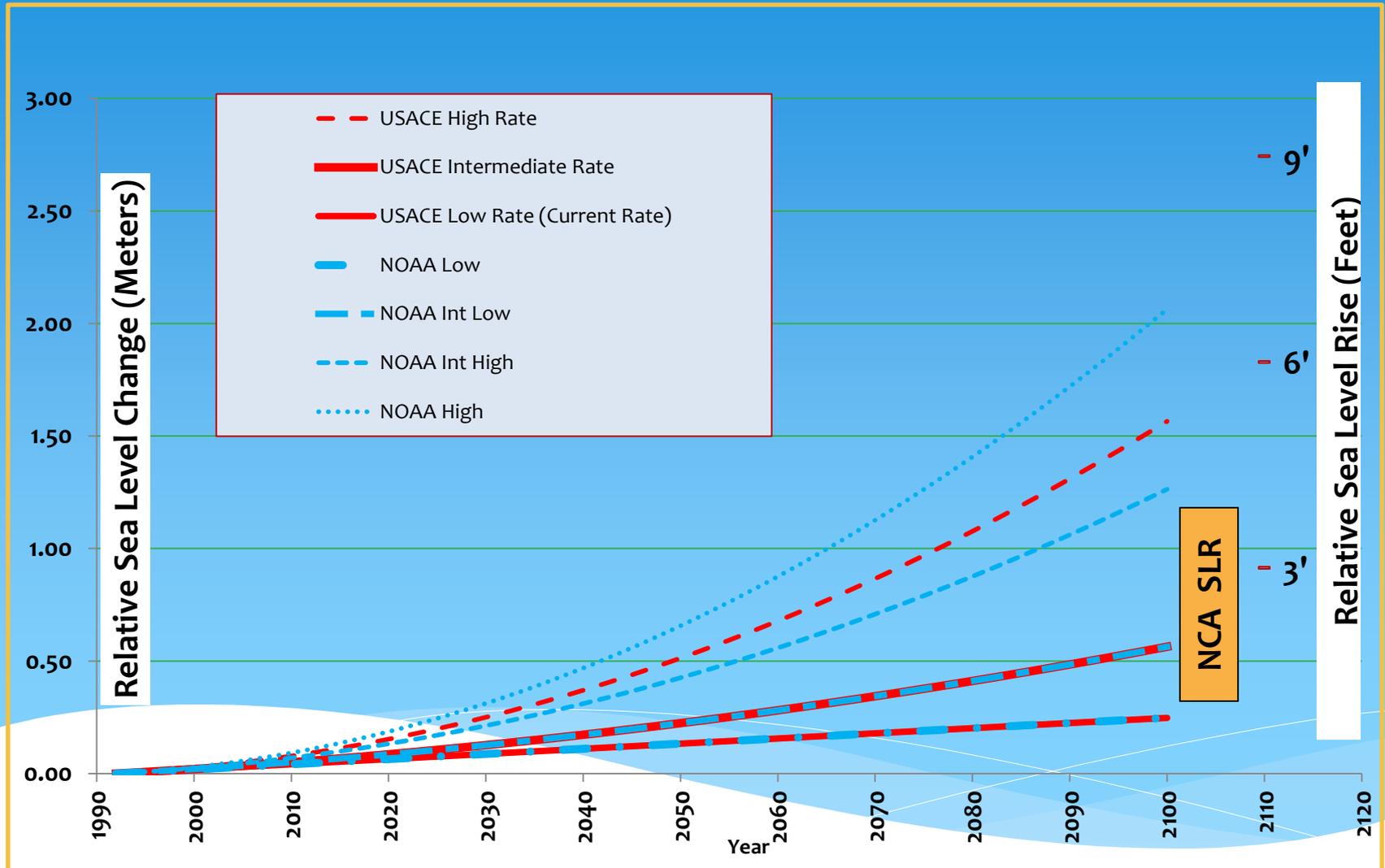
## Historic Relative Sea Level Change - Florida Atlantic Coast

Relative Sea Level Change = Estimated Global Sea Level Trend (1.7 mm/yr) + local Vertical Land Motion

Reference: NOAA Technical Report NOS CO-OPS 065, *Estimating Vertical Land Motion from Long-Term Tide Gauge Records*, May 2013

Tide Station (# and Name)	mm/yr
8720030 Fernandina Beach	2.30
8720218 Mayport	2.29
8721120 Daytona Beach *(Inactive)	2.32*
8723170 Miami Beach *(Inactive)	2.39*
8723970 Vaca Key **(<40 years)	2.90**
8724580 Key West	2.20

# Relative Sea Level Rise Scenarios for Mayport, FL



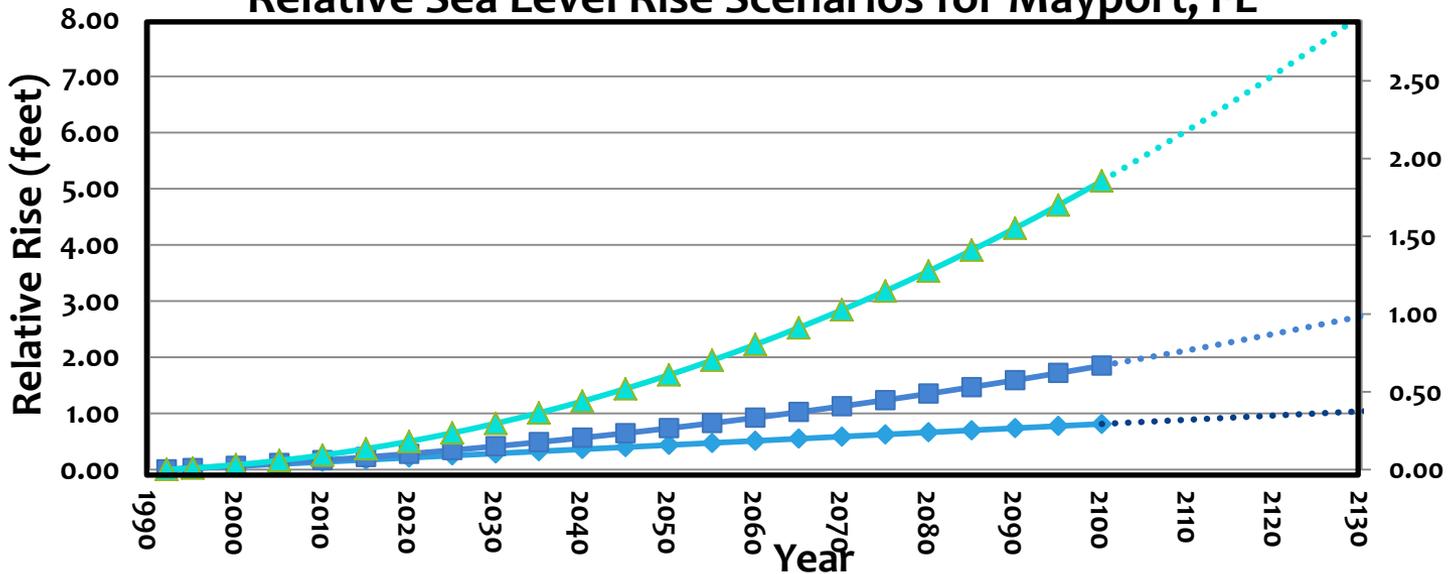
## Relative Sea Level Change Scenarios for Mayport, FL (feet)

Year	USACE NOAA Low	USACE Int. NOAA Int-Low (Mod. NRC Curve I)	NOAA Intermediate High	USACE High (Mod. NRC Curve III)	NOAA High	National Climate Assessment Draft Jan. 2013
SLR Scenario	Local Historic SLR	Global SLR +0.5m by 2100	Global SLR +1.2m by 2100	Global SLR +1.5m by 2100	Global SLR +2.0m by 2100	Global SLR +0.3m to +1.2m
1992	0.0	0.0	0.0	0.0	0.0	
2010	0.2	0.2	0.2	0.3	0.3	
2060	0.5	0.9	1.8	2.2	2.9	
2100	0.8	1.8	4.1	5.1	6.8	1.0 to 4.1
2110	0.9	2.1	5.6	6.0	8.0	

Notes: USACE projections are for historic, modified NRC Curve I and modified NRC Curve III rates of sea level change developed for Northeast Florida per USACE Engineering Circular (EC) 1165-2-212. This EC is based on guidance in the National Research Council (NRC) report, *Responding to Changes in Sea Level; Engineering Implications* dated September, 1987. The projections are developed using the historic rate of sea level rise at Mayport as reported by NOAA (2.29 mm/yr). NOAA projections use the same EC equations modified for different global SLR scenarios. The NRC, USACE and NOAA guidance documents do not address dates beyond 2100. All projections start from 1992 control for the national survey datum per EC 1165-2-212. NOAA guidance: <http://cpo.noaa.gov/Home/Home/AllNews/TabId/315/ArtMID/668/ArticleID/80/Global-Sea-Level-Rise-Scenarios-for-the-United-States-National-Climate-Assessment.aspx> National Climate Assessment, Draft Report for Public Review, Jan 2013; <http://ncadac.globalchange.gov/>

# Are we vulnerable?

U.S. Army Corps of Engineers EC 1165-2-212  
Relative Sea Level Rise Scenarios for Mayport, FL

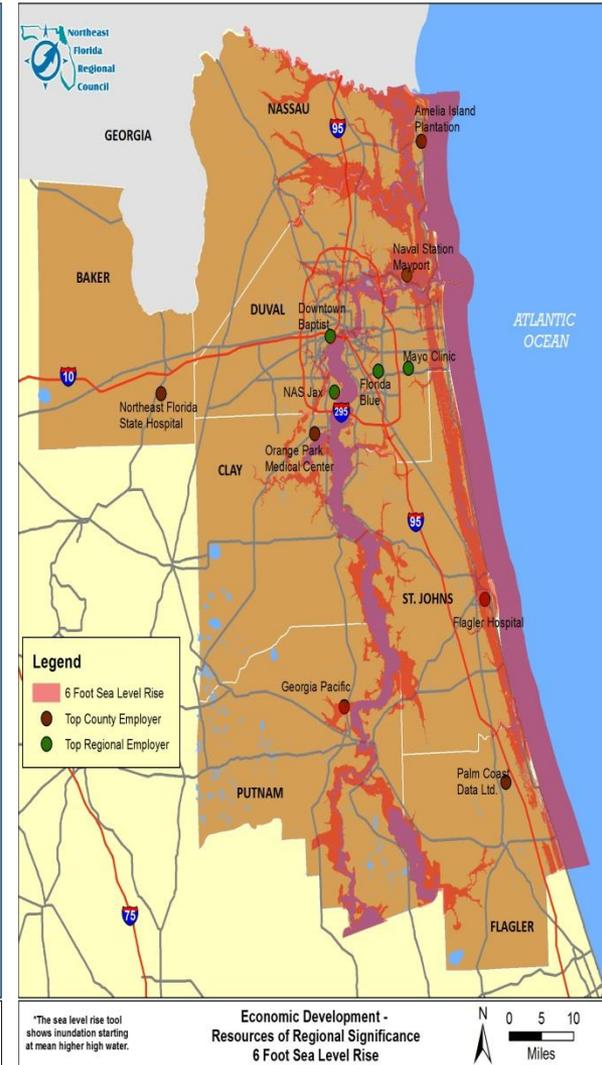
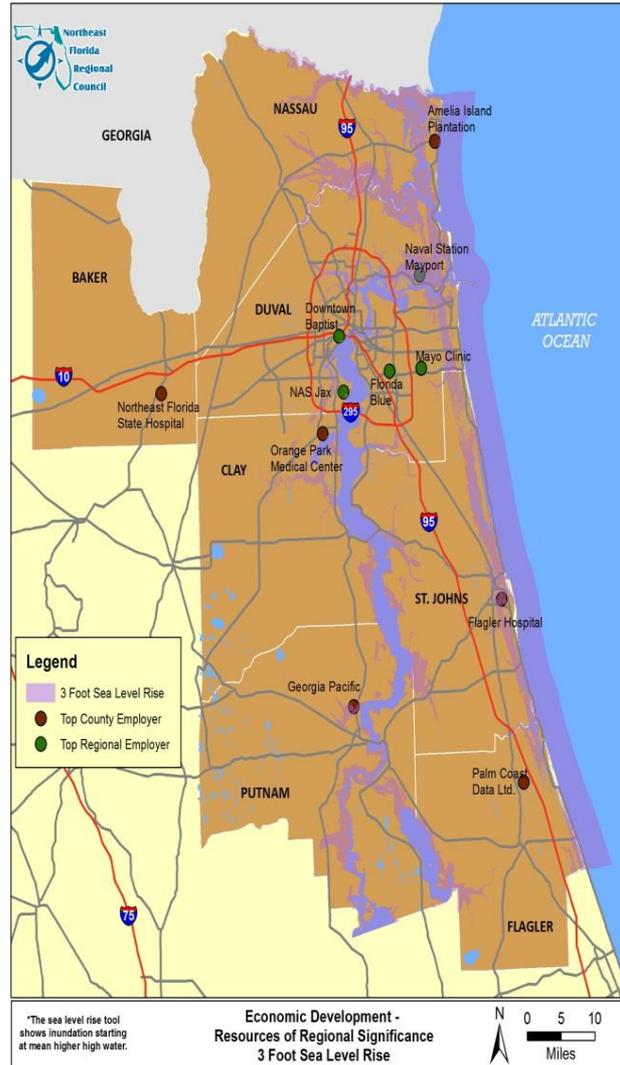


# Economic Development

One Foot

Three Feet

Six Feet

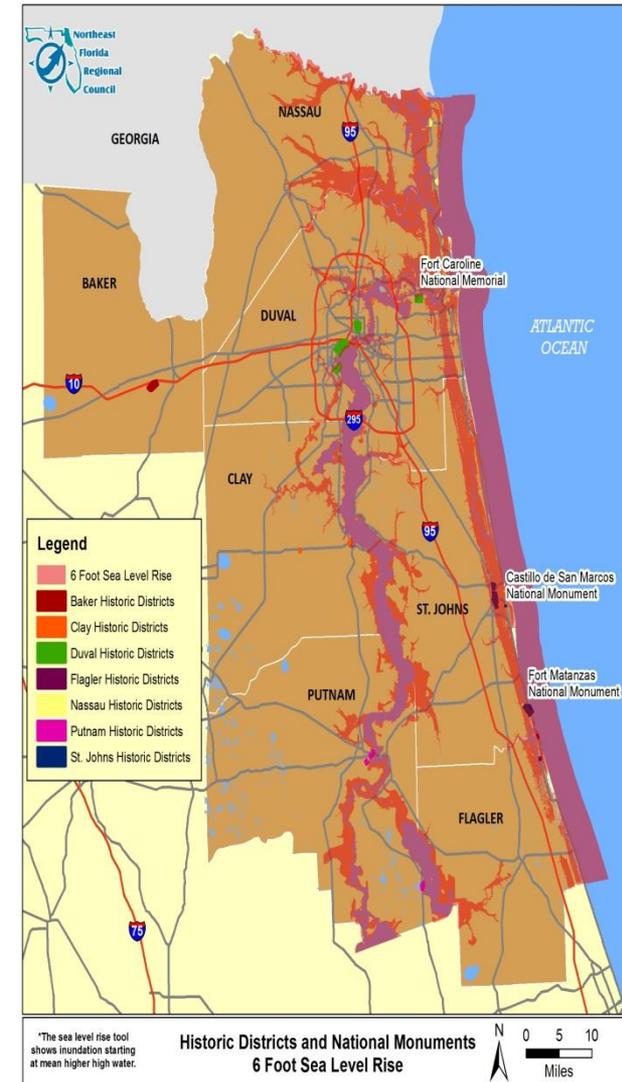
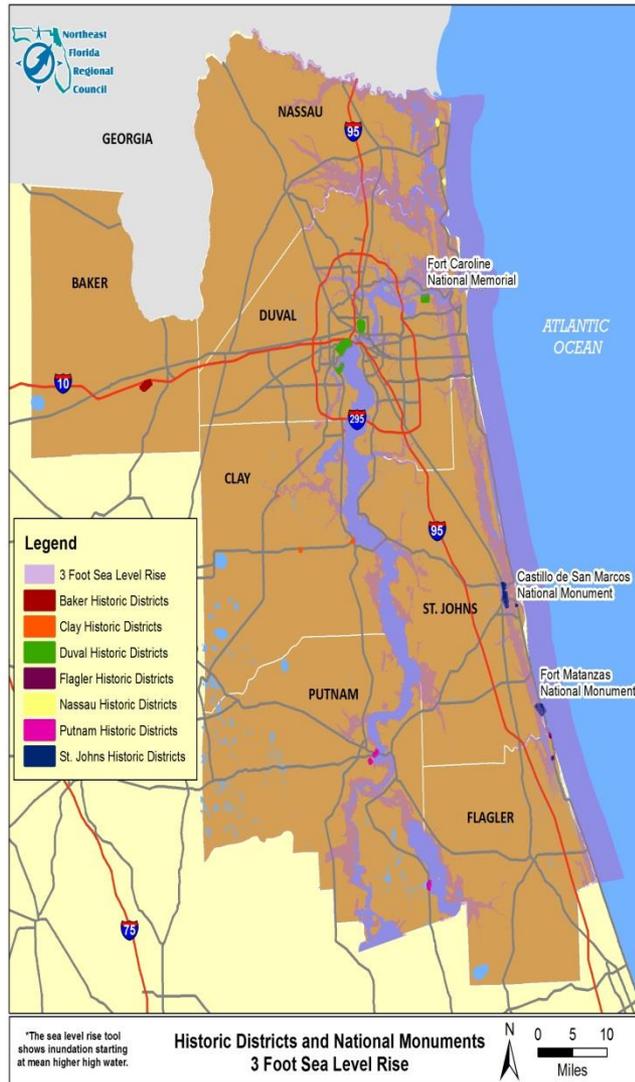
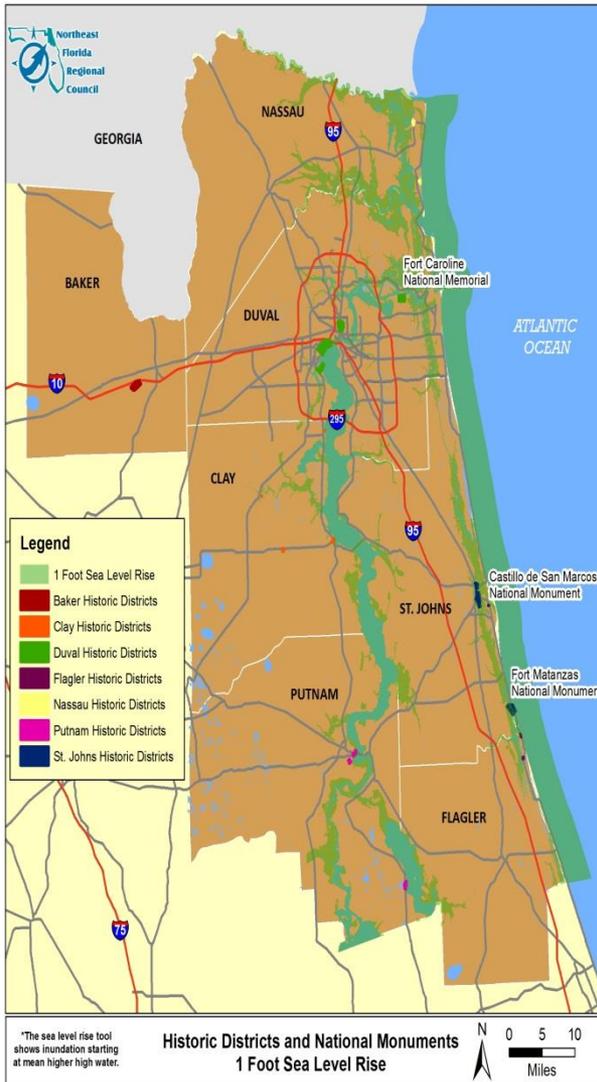


# Historic Districts and National Monuments

One Foot

Three Feet

Six Feet

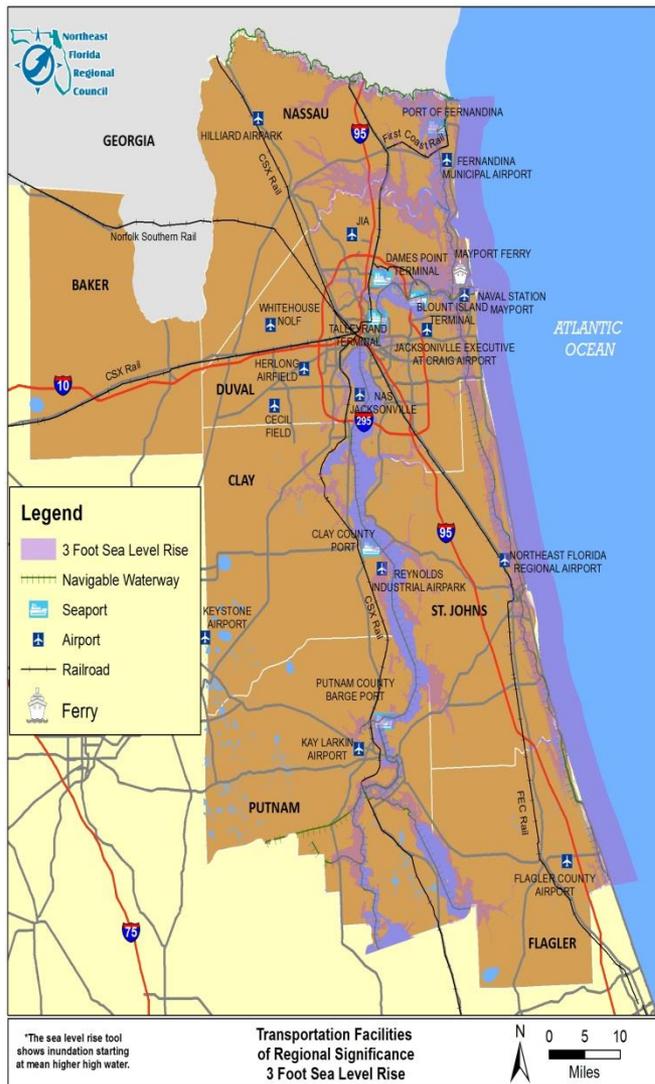


# Transportation

One Foot

Three Feet

Six Feet



# We are vulnerable: Assumptions

- \* 1'-3' by 2060 (3' to match GTM NERR Study)
- \* 3'-6' by 2110
- \* Probability of 6' is low, worst case
- \* Using the most simple NOAA coverage
- \* Start the conversation
- \* Use vulnerability review and input from Community Resiliency Assessments to identify policies for consideration (Committee Compilation) and Regional Action Plan

# Action: Create a Clearinghouse on Understanding Risk

- \* Tools for the Individual
- \* Building techniques that mitigate risk
- \* Regional maps
- \* Tool for local government (DEO statewide guide)
- \* Tools that link disaster planning to sea level rise

# Action: Engage the Community

- \* October 28, 2013 workshop for local government officials
- \* Create educational working group to advise NEFRC outreach campaign
- \* Create/Partner with resilient communities working group

# Action: Save Money

- \* Help communities participate in the Community Rating System. (Beware of Biggert-Waters!)
- \* Develop Northeast Florida assumptions to run the NOAA “What will Adaptation Cost” methodology when considering public, and eventually private, investments in vulnerable areas

# Action: Collaborate and Leverage Success

- \* Use strategies already in use in the region
- \* Close collaboration with the GTM NERR/UF Matanzas Basin Study
- \* Clearinghouse links to adaptation approaches
- \* COJ LID Manual as model for other communities
- \* Best Management Practices at NAS Jax as model

# Action: Engage the Business Sector in Long Term Resiliency

- \* NEFRC creates Public/Private Regional Resiliency (P2R2) to develop a regional strategy that will incentivize population and private development to locate outside of vulnerable areas
- \* Metrics: tax base, property values and private ownership in areas vulnerable to sea level rise and major flood
- \* Committee makeup: Homebuilder, Mortgage Banker, Risk Manager, Lawyer, Engineer, ULI NF rep, Jax USA rep, Realtor, Economist, Planner, RCI rep, NEFRC rep, County Govt. rep, Muni Govt. rep

# Next Steps

- \* Report given to NEFRC October 3, 2013
- \* Press release
- \* Join us on implementation!

[www.nefrc.org](http://www.nefrc.org)