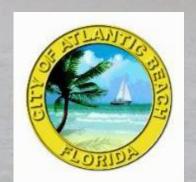
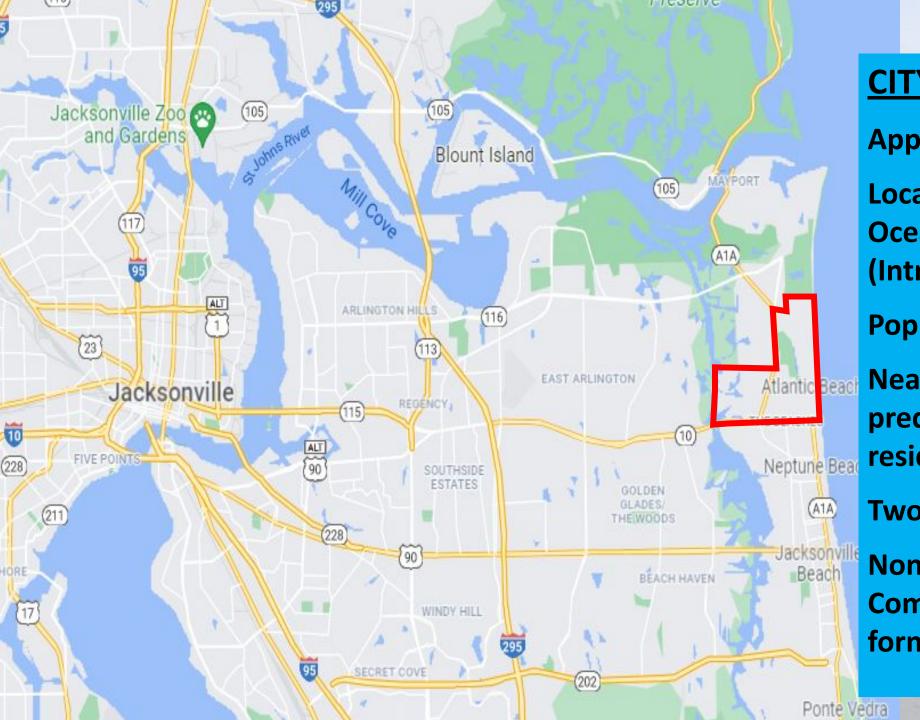
Sustainability In Action

City of Atlantic Beach, FL

JEPB – UNF Environmental Symposium October 15, 2021





CITY OF ATLANTIC BEACH

Approx. 3 square miles

Located between Atlantic Ocean and San Pablo Creek (Intracoastal Waterway)

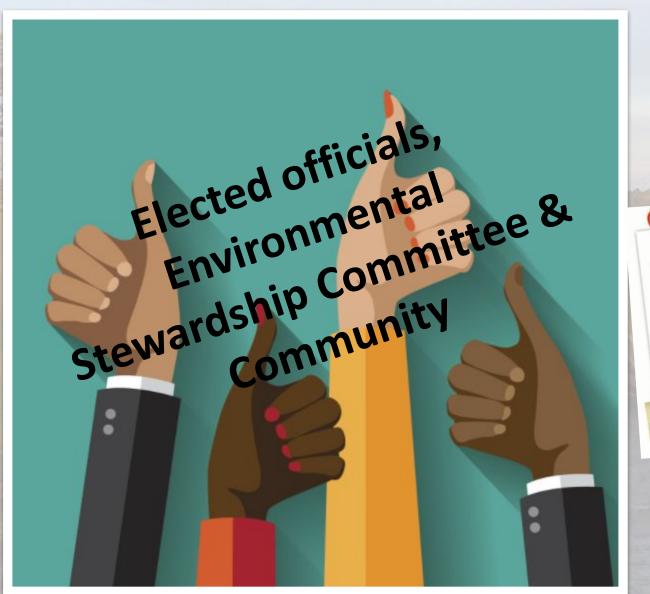
Population less than 14,000

Nearly fully developed – predominate land use is residential

Two Commercial corridors

Non-partisan & Commissioner – Manger form of government.

- How COAB was SUCCESSFUL -





Sustainability In Action

2017 COAB began process of seriously planning for sustainable and resilient future by establishing an Environmental Stewardship Committee

2018 Commission made environmental stewardship and LEED a priority

2019 COAB became LEED certified



Sustainability In Action

2019 COAB completed Coastal Vulnerability
Assessment

2021 COAB completed Adaptation Plan

2021 LEED 4.1 certification in-progress

2021 Green Works Community Action Plan

Environmental Stewardship Committee



Purpose:

- (1) To study and make recommendations to the City Commission and City staff with respect to the City's:
 - a. Maritime forest;
 - b. Parks and open spaces;
 - c. Beautification of public and private spaces; and
 - d. Environmental stewardship.
- (2) Act as a motivating and coordinating body to encourage joint public and private participation in promoting these purposes.



 July 2019 COAB became first city in Florida to receive LEED for Cities Silver certification; Score of 58

Recognizes and Awards Performance

- Measurable Performance is Evaluated on factors as diverse as citywide infrastructure, services, sustainability and quality of life
- Goals, Plans, Policies, Strategies and Projects that led to achieving the Performance are critical
- Performance is Scored relative to a robust data set
- LEED for Cities Certification is a part of the journey not the





Integrative Process



Natural Systems & Ecology



Transportation & Land Use



Water Efficiency



Energy & GHG Emissions



Materials & Resources



Quality of Life



Innovation



Regional Priority



Leadership in Sustainability and Quality of Life

- Cultivating a New Generation of High-Performance Cities
- Attracting new capital human and financial
- Enabling Smarter, Data-Driven Engagement connecting silos
- Innovating the ways in which cities across the world compare, benchmark and compete
- What gets measured, gets done; what gets measured, gets improved; what gets improved and done, gets celebrated!

Other Reasons to Certify

- Obtain a baseline
- Help decide priorities
- Help make better informed decisions
- Benchmarking and comparison with other cities, sharing resources and best practices (avoiding recreating the wheel)
- Getting all your departments and authorities measuring the same vital, useful metrics and in the same way

- All your metrics in one place where you can do holistic tracking and analyzing
- Keeping collaboration and advancement progressing forward
- Early adopter and leader have more flexibility, support and limelight
- Risk mitigation (e.g., Moody's score; proactive assessment)
- Help other small coastal cities

Roadmap- Top 10 Overall

- 1. Develop a Vulnerability, Adaptation, and Resiliency Plan to address impacts related to climate change and extreme weather events.
- 2. Education and outreach to the community. (Vulnerability, Resiliency, and Adaptation)
- 3. Ban Styrofoam and non-recyclable plastic containers from food and retail outlets.
- 4. Increase recycling receptacles in the public realm.
- 5. Develop incentives for water efficiency measures in landscaping and building design
- 6. Require that public infrastructure and facility managers consider energy consumption implications for new or upgraded infrastructure investments.
- 7. Incorporate best practice sustainability principles into neighborhood planning.
- 8. Develop and adopt an official Complete Streets policy
- 9. Establish enterprise zones, arts or cultural districts, or overlay zoning that encourages businesses in the creative industries to cluster together and integrate with surrounding neighborhoods.
- 10. Provide services to enable residents and businesses to recycle and reduce their waste footprint.

- COAB Challenges / Issues -

- Staff time
- Coordination between city departments
- Relying on others for data (i.e. waste collection data)
- Budget for implementation
- Time for implementation
- Potential change in leadership





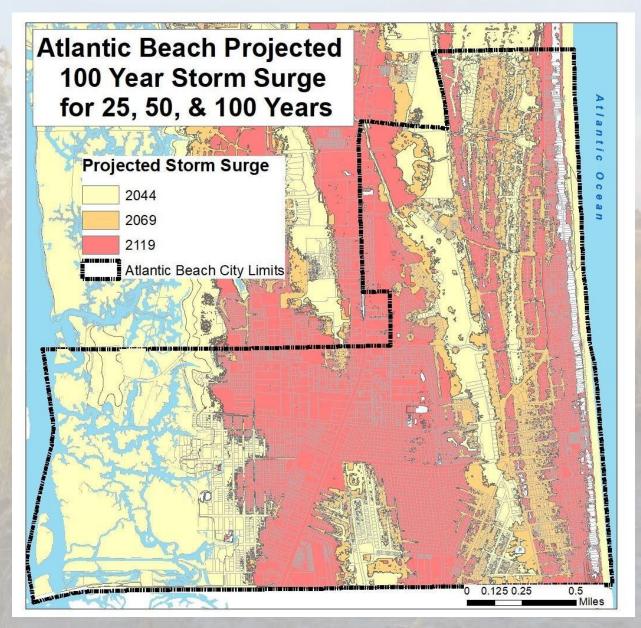
Green Works Community Action Plan (CAP)

<u>LIVING DOCUMENT</u> - that is meant to display and guide the city's current and future sustainability and resiliency-based endeavors that range from community programs and projects, policy development to infrastructure improvements – all with measurable outcomes. Measuring progress and performance leads to better management, more improvement, and ultimately, transformation.

It is meant to be **adaptable**, allowing the City to check-in annually and adaptively manage based on economic, social, and environmental dynamic needs.

Energy & Climate	Green Buildings & Infrastructure	Governance, Community Outreach & Education	Natural Systems & Ecology	Quality of Life / Livability	Solid Waste	Transportation & Land Use	Water
City Lead by Example	Green Building Policy & Incentives	Good Governance & Oversight	Ecosystem Assessment	Demographic Assessment	Waste Performance	Transportation Performance	Water Access and Quality
Power Access, Reliability and Resiliency	Green Infrastructure Policy & Incentives	Innovation	Green Spaces	Quality of Life Performance	Special Waste Streams Management	Compact, Mixed Use and Transit Oriented Development	Water Performance
Energy & Greenhouse Gas Emissions Performance		Community Engagement	Natural Resource Conservation and Restoration	Trend Improvements	Responsible Sourcing for Infrastructure	Access to Quality Transit	Integrated Water Management
Energy Efficiency		Education	Light Pollution Reduction	Distributional Equity	Material Recovery	Alternative Fuel Vehicles	Stormwater Management
Greening the Energy Supply		Leadership Commitments	Resiliency Planning	Environmental Justice	Smart Waste Management Systems	Smart Mobility and Transportation Policy	Smart Water Systems
Renewable Energy			Biodiversity & Invasive Species	Housing and Transportation Affordability		High-Priority Site	
Low Carbon Economy			Outdoor Air Quality	Civic and Community Engagement		Infill & Redevelopment	
Grid Harmonization			Water in the Environment	Civil and Human Rights			
Climate Adaptation			Working Lands	Ambient Noise & Light	s:		
GHG Mitigation			. CRAINERO D	Arts & Culture			
				Historic	1.0 N		
				Preservation			
				Social & Cultural Diversity			
				Aging in the Community			

Sustainability In Action

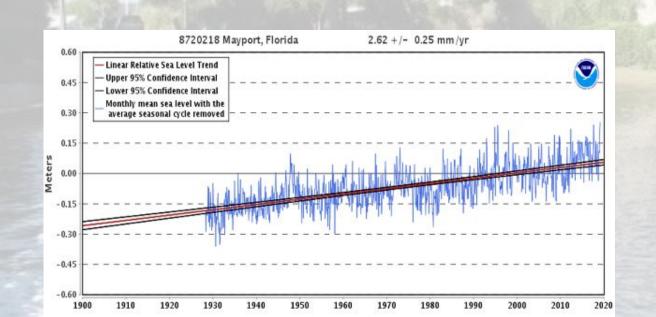


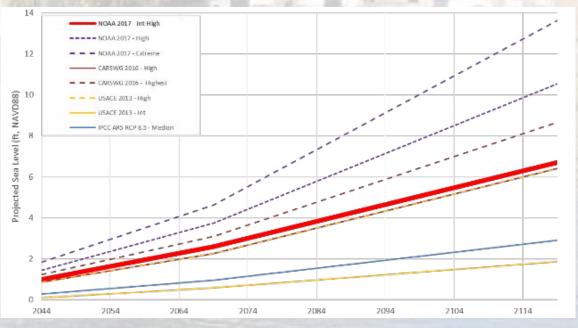
Coastal Vulnerability
Assessment Plan



Why conduct the study?

- Tidal records indicate steady rise in local sea level over past 90 years
- Rate of change in sea level rise is accelerating
- Atlantic Beach is flat and surrounded by tidal waters
- Parts of Atlantic Beach already experience "sunny day" flooding





Coastal Vulnerability Assessment

- Completed in June, 2019 / key step in adaptation planning process and recommended by our LEED procress
- Modeled 25, 50, & 100 year scenarios for:
 - Sea Level Rise
 - Nuisance or "Sunny Day" flooding
 - Storm Surge & Rainfall Flooding
 - 100-Year Flood Risks



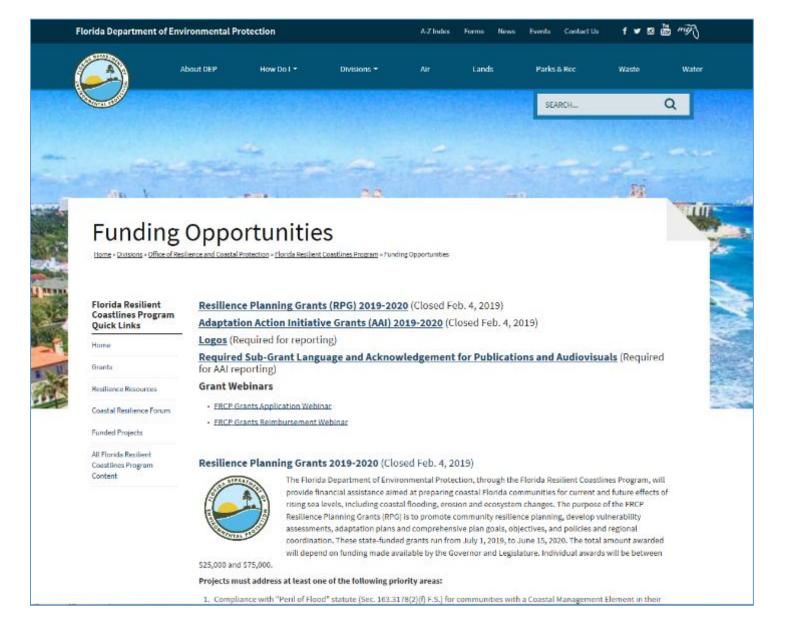


Assessed potential risks to property and infrastructure/facilities

Goals of this Study

- Use best available science to develop a reasonable estimate of local sea level rise
 - Apply predicted sea levels to estimate future flood risk
 - Assess future flood risk for impacts to:
 - Roadways
 - Water & Wastewater Utilities
 - Homes & Businesses
 - Ecosystems
- Served as the basis for development of an Adaptation Plan

Funding for Vulnerability Assessment



- How COAB was SUCCESSFUL -





- COAB Challenges / Issues -

Staff time

Grant deadlines/ reporting

Coordination with consultants

Atlantic Beach Projected 100 Year Flood Zones for 25, 50, & 100 Years 0.25 0.5 Critical Facilities and Infrastructure Water Treatment Plant Public Works Facility Atlantic Beach Elementary School Potable Water Well Pump/Lift Station Wastewater Treatment Facility Projected Flood Zone Police & Fire Station 2044 City Hall 2069 Adele Grage Cultural Center Atlantic Beach City Limits Gail Baker Community Center Jordan Park Community Center

Utilities Office Building

Sustainability In Action

Adaptation Plan



Goals of Adaptation Plan

 Protect, plan for and adapt to the impacts of sea level rise and climate change for our citizens and infrastructure

- Identify goals and strategies to minimize risk
- Establish a process to implement strategies
- Identify the tools to take action
- Identify priorities and timeframes for implementation of strategies



Coastal Vulnerability - Sensitivity & Ranking

- Identified areas/assets that are more sensitive to flooding than others
- Mapped critical assets inside COAB and our service. Exposure of each asset ranked according to current and future flooding.



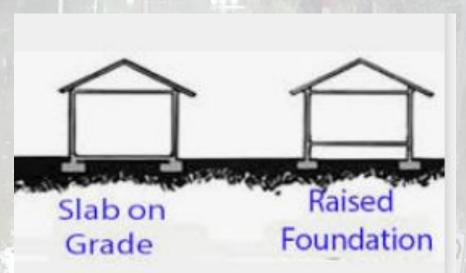


Adaptation Recommendations - City Limits



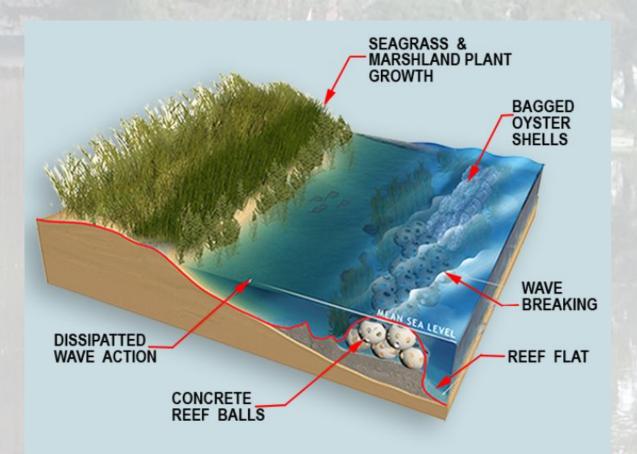






Increase Finished Floor Elevations in the 500-year Flood zone

Adaptation Recommendations West of Mayport Rd.





Conserve properties located along the marsh edge to maintain or develop the ability to reduce wave impacts on the immediately adjacent upland areas

Adaptation Recommendations Major Drainageways

 Protect & enhance performance of major drainageways

 Initiate an in-depth study (Major drainage projects in context of CIP)

 Develop 50 year plan for managing major drainageways

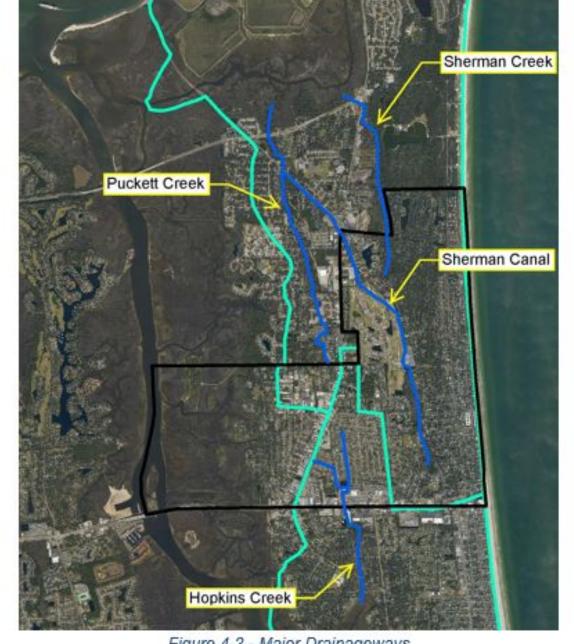
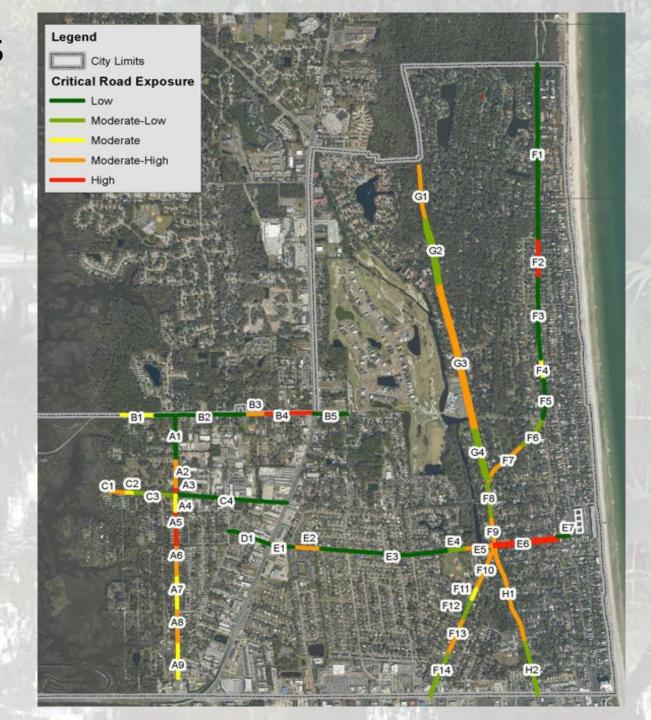


Figure 4-3 - Major Drainageways

Adaptation Recommendations Roadways

- •Improvements to major ingress and egress
- Determine improvements for vulnerable roads prior to repaving to increase resilience
- Share data with FDOT to help their decision process for State Roads



Recommendation	Action	Timeframe for Initiation	
Review all capital projects in context of adaptation	Incorporate into project planning procedures		
Building and zoning code review	Initiate review process and produce report of recommended actions	Near-Term	
Policies to encourage homeowner resiliency projects	Establish policies	Mid-Term	
Reinforce value of trees for absorbing runoff	Develop educational materials; coordinate with COJ efforts	Near-Term	
Real estate disclosures	Initiate discussions with Property Appraiser and develop approach for implementation	Mid-Term	
Education and Public Engagement Tools	Develop/adapt educational materials	Near-Term	
Low maintenance buffers on City property	Establish policy	Immediate	
Marsh restoration partnering w/ COJ, JAXPORT, USACE	Begin planning, discuss with relevant agencies, determine funding sources	Long-Term	
Work with COJ on vulnerability outreach program	Begin coordination and development of outreach materials	Mid-Term	
Invasive species mapping in riparian areas	Complete map and develop eradication plan	Near-Term	
Maintain federal authorization for beach renourishment	Maintain contact with USACE, COJ and FDEP to assure authorization is maintained	Ongoing	

SPEED LIMIT

- How COAB was SUCCESSFUL -





- COAB Challenges / Issues -

 LACK of \$\$\$ to implement – major projects = major money.

- Staff time and grant deadlines
- Coordination with consultants

Change in political leadership

Tips for success-

- Communication with elected officials (individual & group)
- Communication with citizens (public meetings, website, newsletters, etc.)
- Communication with staff (kick-off meetings, emails, etc.)
- Education (provide tools to public)
- Engage citizens or volunteer groups
- Start city budget talks early in the process

