

# Community Input for Proposed Adaptation Planning

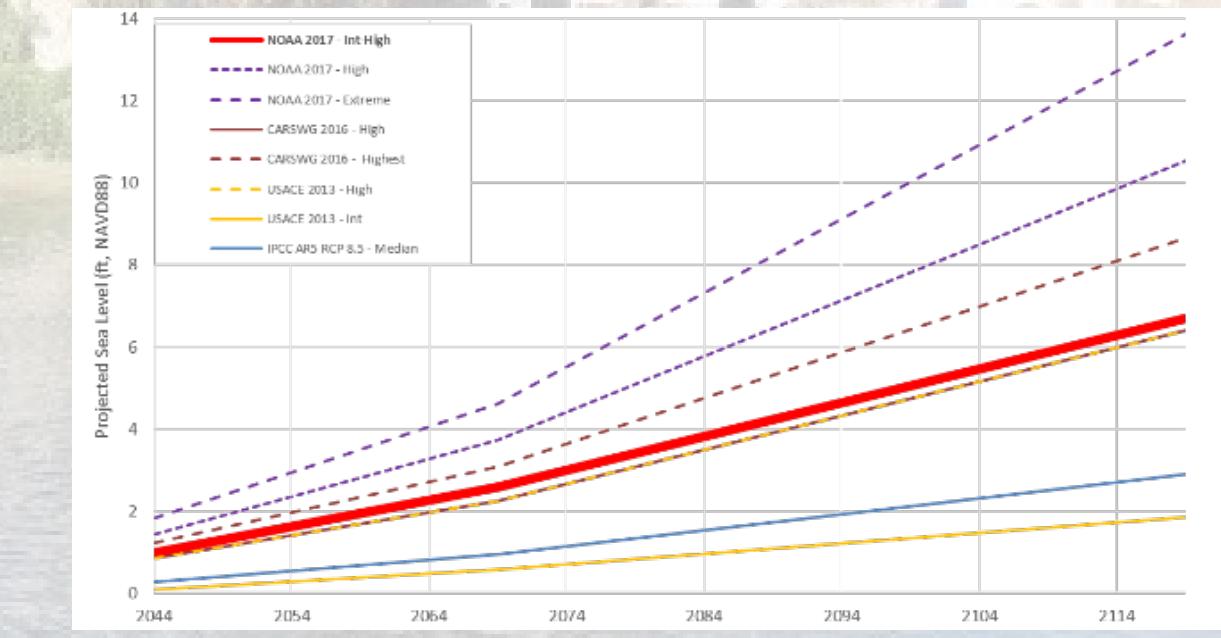
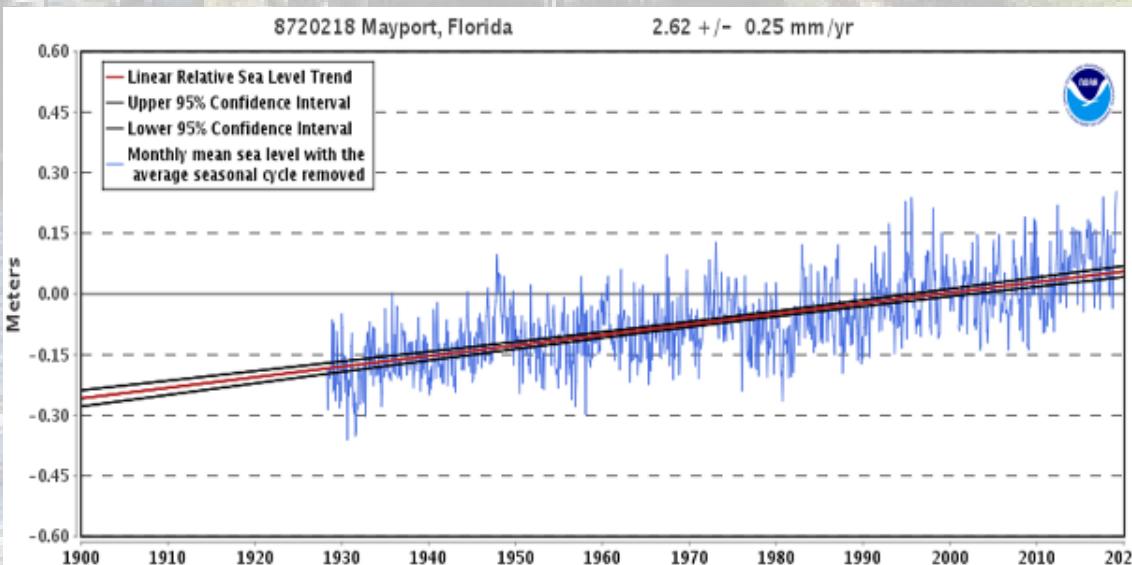
Atlantic Beach, FL

April 6, 2021



# Why are we concerned with Adaptation?

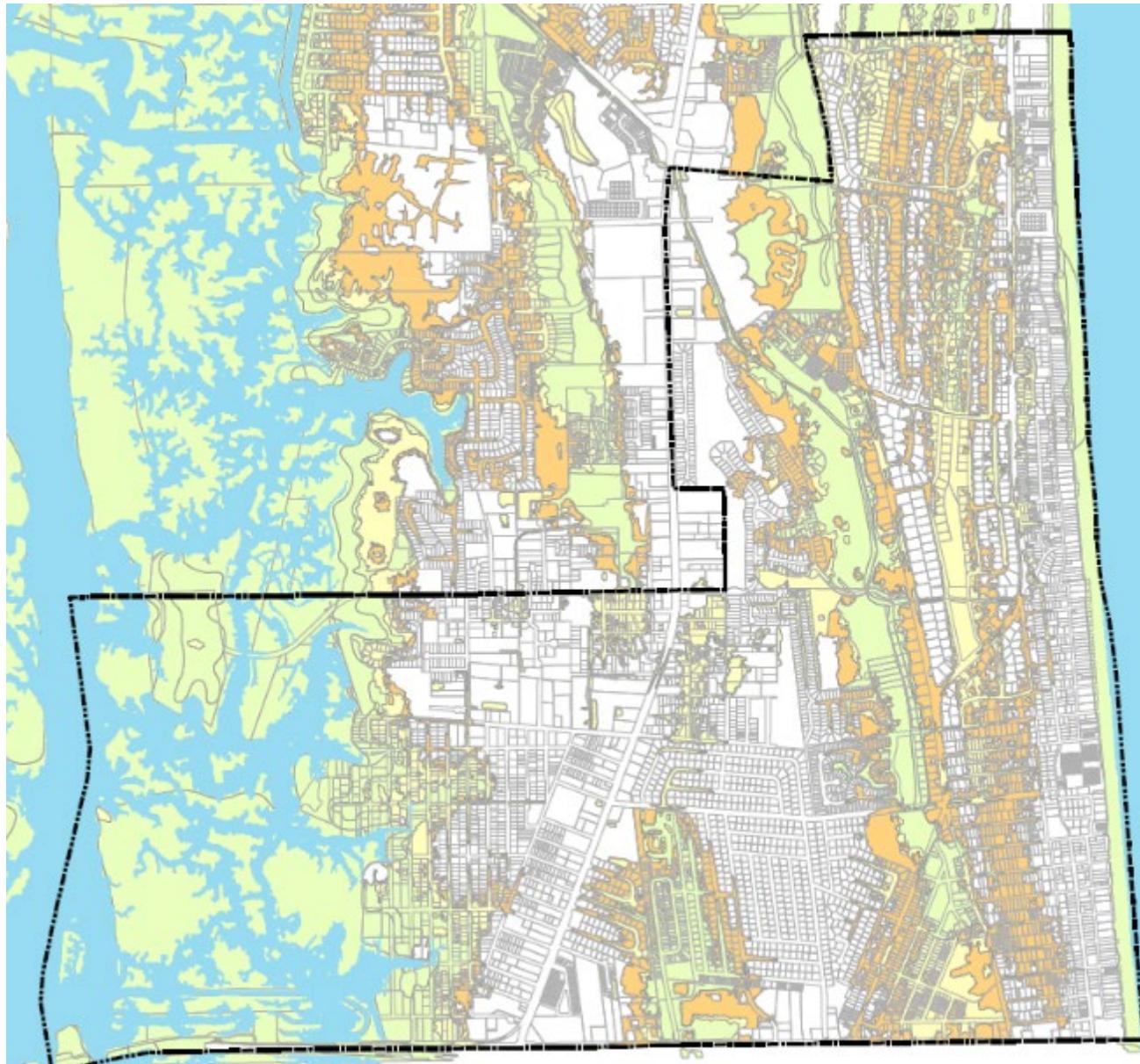
- Tidal records indicate steady rise in local sea level over past 90 years
- Rate of change in sea level rise is accelerating
- Atlantic Beach is flat and surrounded by tidal waters
- Parts of Atlantic Beach already experience “sunny day” flooding



# Coastal Vulnerability Assessment

- Completed in June, 2019
- Currently being updated to account for Utility Service areas outside of City Limits
- 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

# Coastal Vulnerability Assessment Results



- **Projected Future Extent of:**
  - Nuisance Flooding
  - 100-Yr Flood Events
- **Exposure Assessment:**
  - Properties & Buildings
  - Critical Facilities
  - Infrastructure
- **Interactive Map Link**

## Projected Flood Zone

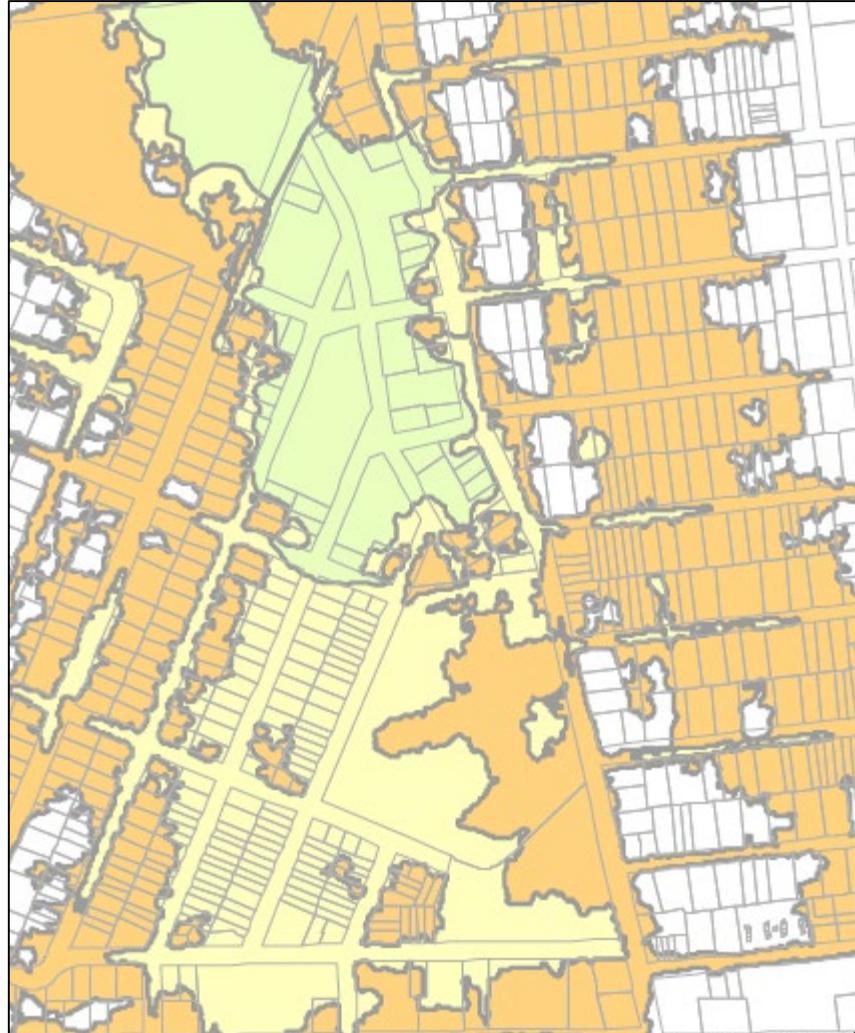
- Current
- 2044
- 2069
- Atlantic Beach City Limits

# Focus Areas of Concern

Marsh Oaks



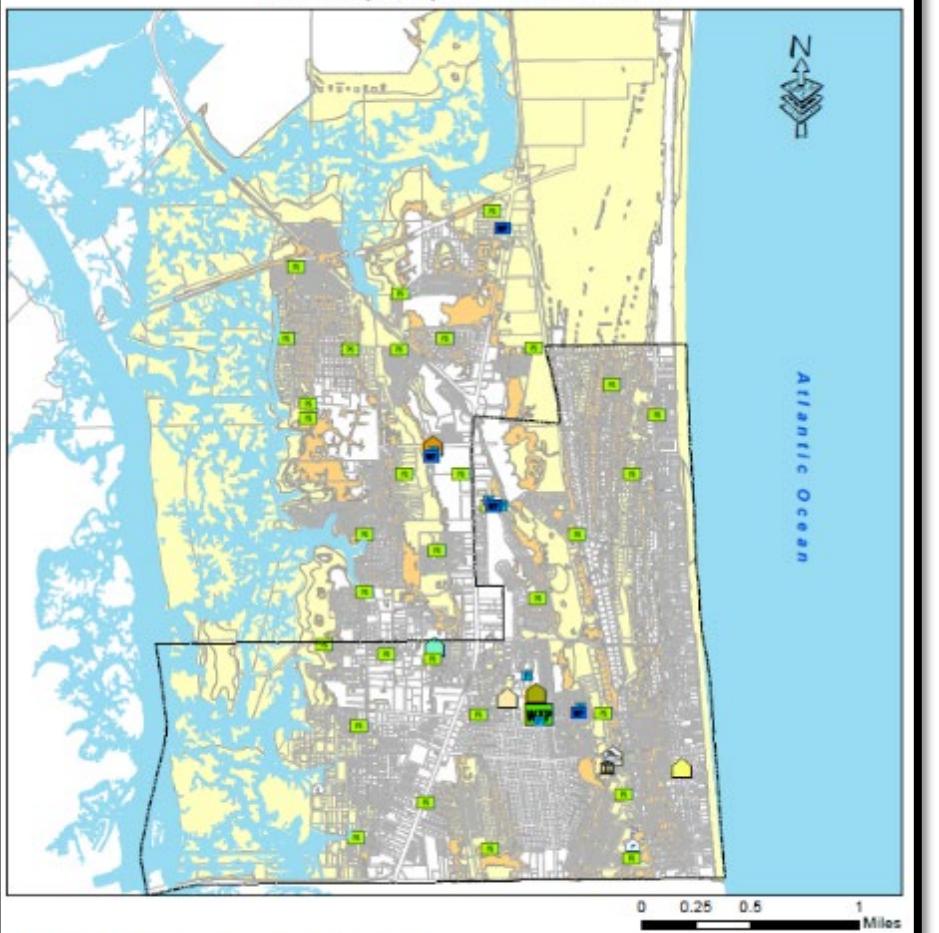
Salt Air /Core City



Aquatic Gardens



## Atlantic Beach Projected 100 Year Flood Zones for 25, 50, & 100 Years



### Critical Facilities and Infrastructure

- Water Treatment Plant
- Potable Water Well
- Pump/Lift Station
- Wastewater Treatment Facility
- Police & Fire Station
- City Hall
- Adele Grage Cultural Center
- Gail Baker Community Center
- Jordan Park Community Center
- Utilities Office Building
- Public Works Facility
- Atlantic Beach Elementary School

**Projected Flood Zone**

- 2044
- 2069
- Atlantic Beach City Limits

# Vulnerable Critical Facilities & Infrastructure

2069 Scenarios	City Hall, Police & Fire Station	Public Utilities Facility	Public Works Facility	Lift Stations (#)	Potable Water Wells (#)	Potable Water Plants (#)	Waste-water Facility	Atlantic Beach Elem. School	Adele Grage Center	Gail Baker Center	Jordan Park Center
SLR-Only	N	N	N	Y (1)	N	N	N	N	N	N	N
Nuisance Flooding	N	N	N	Y (7)	Y (2)	Y (1)	N	N	N	N	N
100-Yr Flood Risk	Y	N	N	Y (23)	Y (4)	Y (2)	N	Y	N	Y	N



November, 2015 flooding

# Next Step: Adaptation Planning

Identify strategies to minimize impacts of future flood risks and create a more Resilient Coastal Community

- Protection
- Accommodation
- Strategic Relocation
- Avoidance
- Procedural



*“Resiliency is the ability to collaboratively prepare for, prevent, absorb, recover from and more equitably adapt for damage from chronic stressors (i.e., aging infrastructure and sea level rise) and adverse events (i.e., hurricanes, extreme heat and high-intensity flooding).”*

**COJ City Council Special Committee on Resiliency**

# Protection

- Hard & Soft structurally defensive measures

- Seawalls
- Dry Floodproofing
- Beach Renourishment



# Accommodation

- Altering design, construction and use of structures to handle periodic flooding
  - Incorporate future risks into Infrastructure Planning, Design & Construction
  - Elevating Structures
  - Stormwater Retrofits
  - Green Infrastructure



# Strategic Relocation

- Relocating vulnerable structures or developed areas to safer locations
  - Transition of vulnerable land from private to public ownership
  - Transfer of development rights



## City plans to return South Shores area to natural floodplain

FEMA gives Jacksonville \$3.4M grant to buy 17 homes, tear them down

By Jim Piggott - Reporter

Posted: 2:52 PM, February 15, 2019

Updated: 6:12 PM, February 15, 2019

News4JAX



# Avoidance

- Anticipatory actions taken to direct new development to safer areas
  - Land Conservation
  - Conservation Easements
  - Increased Setbacks



# Procedural

- Procedural strategies aim to increase awareness of vulnerabilities and adaptation options or incorporate such information into plans or policies
  - Community Outreach & Education
  - Wetland Buffers
  - Comprehensive Plan changes to address Sea Level Rise
  - Real Estate Disclosures



# Next Steps

- Discussion with Environmental Stewardship Committee on April 14<sup>th</sup>
- Review City of Jacksonville Resiliency Policies & Strategies
- Develop Draft Adaptation Plan
- Present Draft Adaptation Plan to the Commission on May 24<sup>th</sup>
- COAB Coastal Vulnerability, Resiliency & Adaptation Planning Website:  
<https://www.coab.us/875/Coastal-Vulnerability-Resiliency-and-Ada>