

City of Fort Lauderdale

Strategic Historic Preservation Plan



Welcome!

- Welcome by Trisha Logan, Historic Preservation Planner, City of Fort Lauderdale
- Fort Lauderdale Preservation Plan Elements by Lisa Craig, Principal, The Craig Group
- Resilience by Angela Schedel, Taylor Engineering
- Risk Mapping for Fort Lauderdale by Angela Schedel
- Resources Available in Florida for Adaptation by Angela Schedel and Lisa Craig
- Adaptation Strategies for Historic Properties by Lisa Craig and Kimberly Rose





Welcome!

Trisha Logan, Historic Preservation Planner, City of Fort Lauderdale



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Meet Our Team

- *Lisa Craig, Principal, The Craig Group*
- *Angela Schedel, Ph.D., P.E., Vice President, Community Resilience, Taylor Engineering*
- *Kimberly Rose, Preservation Associate, The Craig Group*



Fort Lauderdale Preservation Plan Elements

Lisa Craig, Principal, The Craig Group



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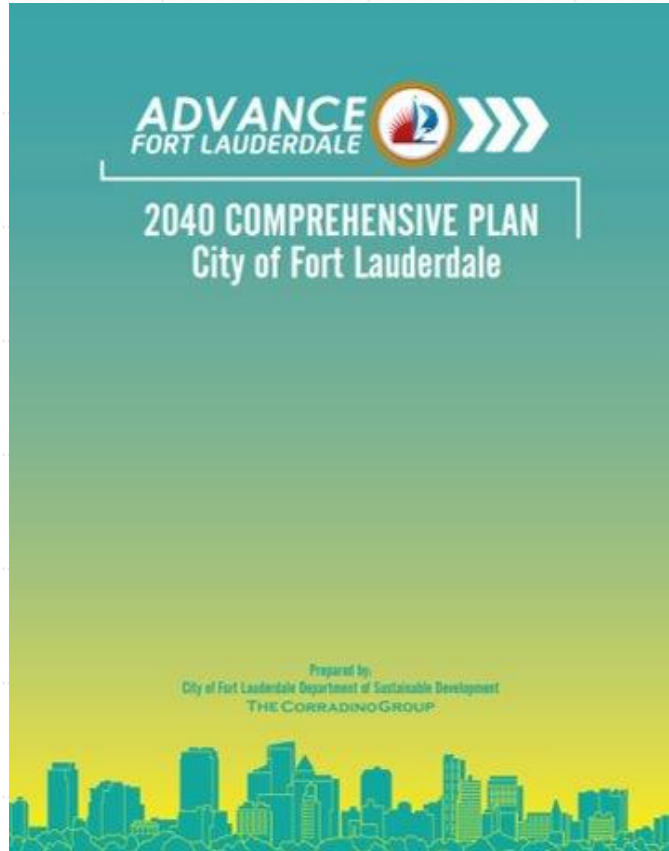
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Advance Fort Lauderdale: 2040 Comprehensive Plan

“...a blueprint for orderly and sustainable land development over the next decade and beyond.”



Comprehensive Plan elements:

- Future land use
- Housing
- Transportation
- Infrastructure
- Water supply
- Coastal management
- Community health and safety
- Conservation
- Parks and recreation
- **Historic preservation**
- Public school facilities
- Intergovernmental coordination
- Capital improvements



Comprehensive Plan

Aligns with the cylinders of excellence outlined in the City of Fort Lauderdale “Fast Forward” Vision Plan

- Infrastructure
- Business Development
- Public Places
- Public Safety
- Internal Support
- Neighborhood Enhancement

Neighborhood Enhancement: Healthy and diverse neighborhoods

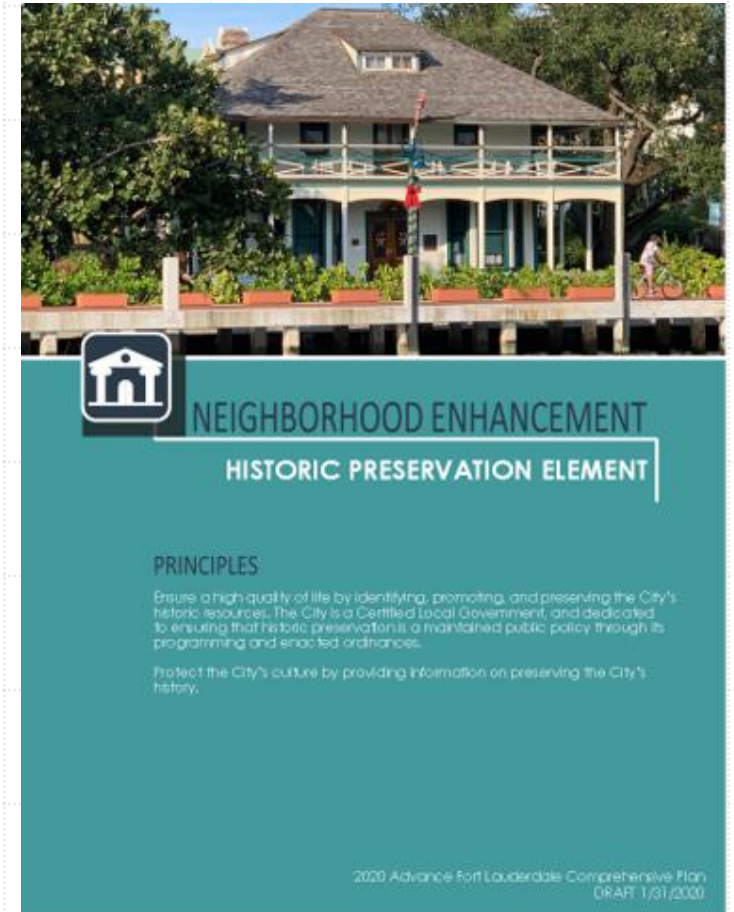
-  FUTURE LAND USE ELEMENT
-  URBAN DESIGN ELEMENT
-  HOUSING ELEMENT
-  HISTORIC PRESERVATION ELEMENT
-  CONSERVATION ELEMENT



Historic Preservation Element

PRINCIPLES

- Ensure a high quality of life by identifying, promoting, and preserving the City's historic resources.
- The City is a Certified Local Government and dedicated to ensuring that historic preservation is a maintained public policy through its programming and enacted ordinances.
- Protect the City's culture by providing information on preserving the City's history.



Historic Preservation Element: Goals

- GOAL 1:
 - The City shall prepare and adopt a long-term approach to historic preservation which identifies and evaluates the City's historic resources.
- GOAL 2:
 - Provide educational and incentive opportunities to further the City's historic preservation goals.
- GOAL 3:
 - Ensure historic preservation goals are met through the coordination and implementation of various local, state, and national preservation tools.



Historic Preservation Element: Objectives

GOAL 1: LONG-TERM APPROACH TO IDENTIFY AND EVALUATE

1. Strategic Historic Preservation Plan
2. Resource Identification
3. Records of Historic Resources

GOAL 2: EDUCATION AND INCENTIVES

1. Incentives and Funding Opportunities
2. Educational Tools

GOAL 3: COORDINATION/IMPLEMENTATION OF TOOLS

1. United Land Development Regulations
2. Design Guidelines
3. Archaeological Resource Protection
4. City-Owned Resources
5. Resilience
6. Intergovernmental Coordination



Historic Preservation Element: Strategic Preservation Plan and Resilience

Resilience

The City shall adjust historic preservation and archaeological resource programs according to changing environmental conditions.

Develop a climate and environment resiliency prioritization based on each individual resource's susceptibility to climate and environmental change/events.

Monitor changes in local economy and development patterns to identify impacts to historic and archaeological resources and develop a resiliency prioritization of resources that require protection.

“Seek guidance from the National Park Service and the Florida Department of State, Division of Historical Resources in developing a **historic preservation disaster management plan and coordinate historic, archaeological and cultural resource planning with Broward County post-disaster redevelopment plans.**”



Resilience

Angela Schedel, Ph.D., P.E., Vice President, Community Resilience, Taylor Engineering



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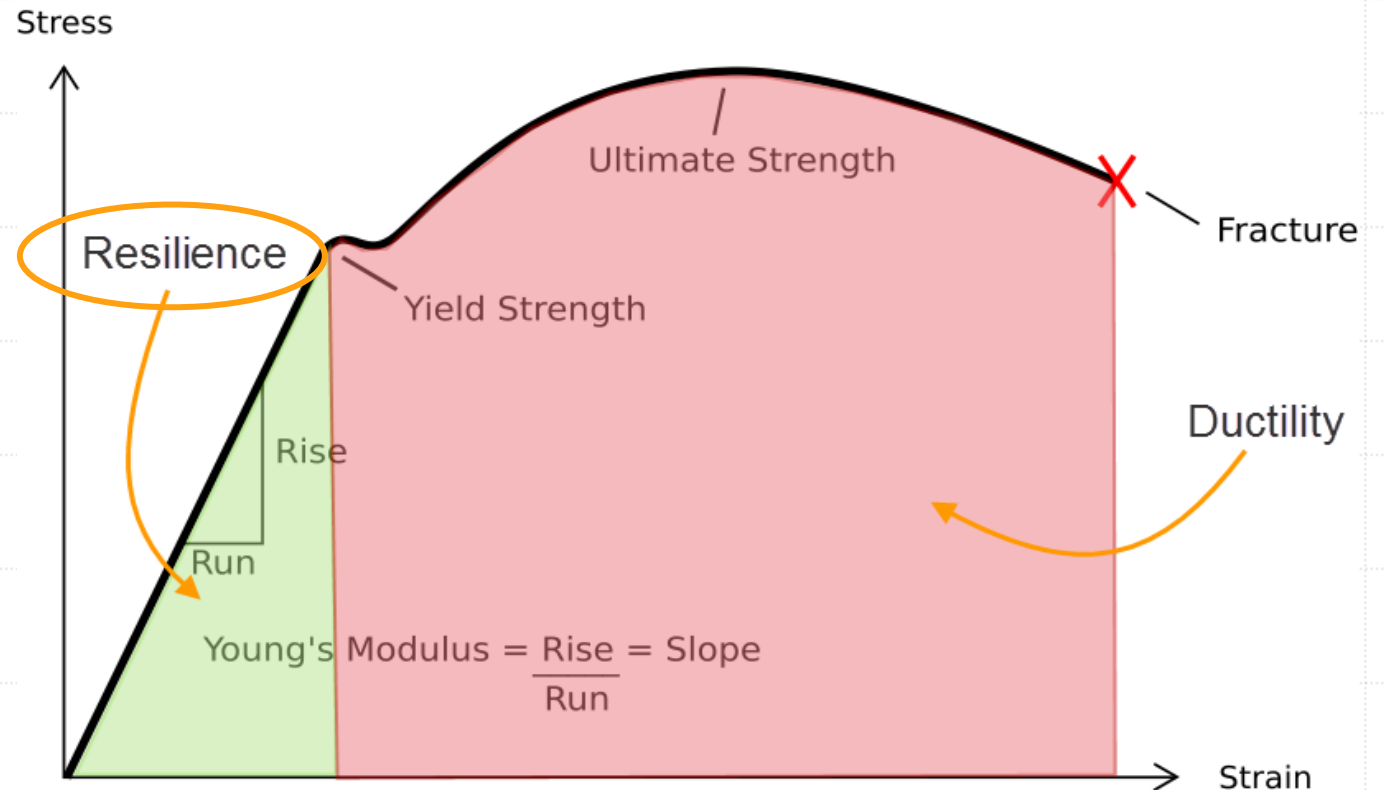
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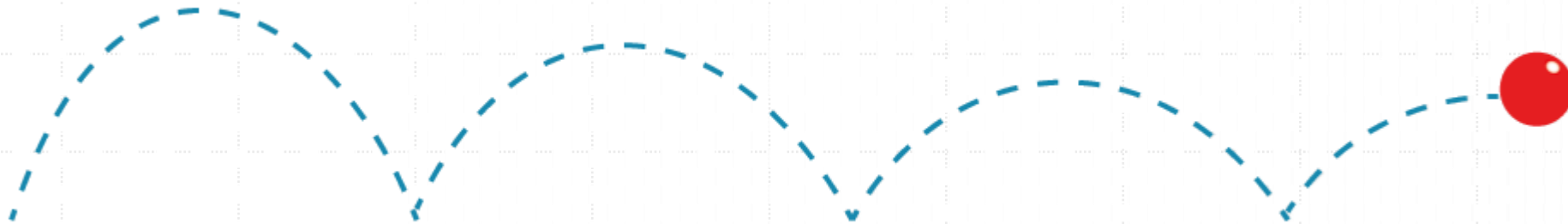
Resilience Defined

- Ability to bounce back quickly from adversity
- Recover without changing into something different



Resilience Defined

- Ability to bounce back quickly from adversity
- Recover without changing into something different



Resilience Defined

- How to achieve resilience?
 - Awareness
 - Adaptation
 - Acceptance



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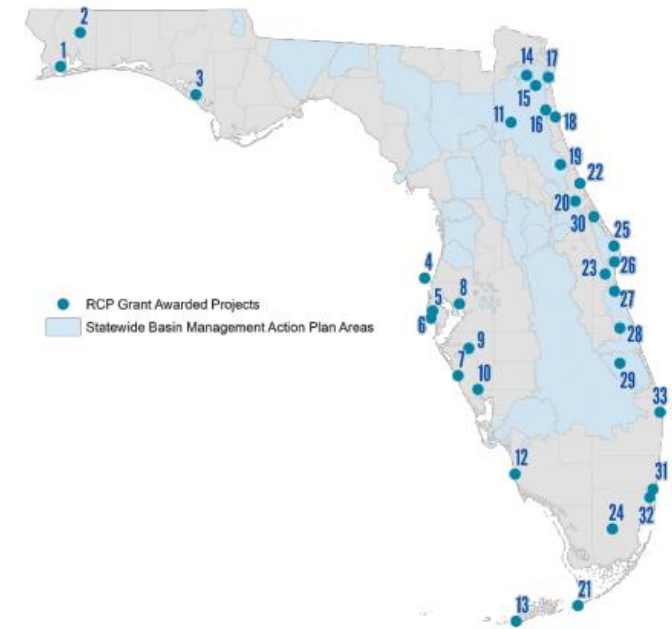
Taylor
Engineering |
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Florida Resilient Coastlines Program (FRCP)

- Started in 2018 with 13 funded projects totaling \$569,000
- FRCP grant projects require no match
- Local Vulnerability Assessments & Resilience/Adaptation Plans
- Peril of Flood Compliance
- Since program inception, FRCP funded:
 - 101 planning & implementation projects
 - Totaling \$7.2M
 - Average of \$72,000 per community

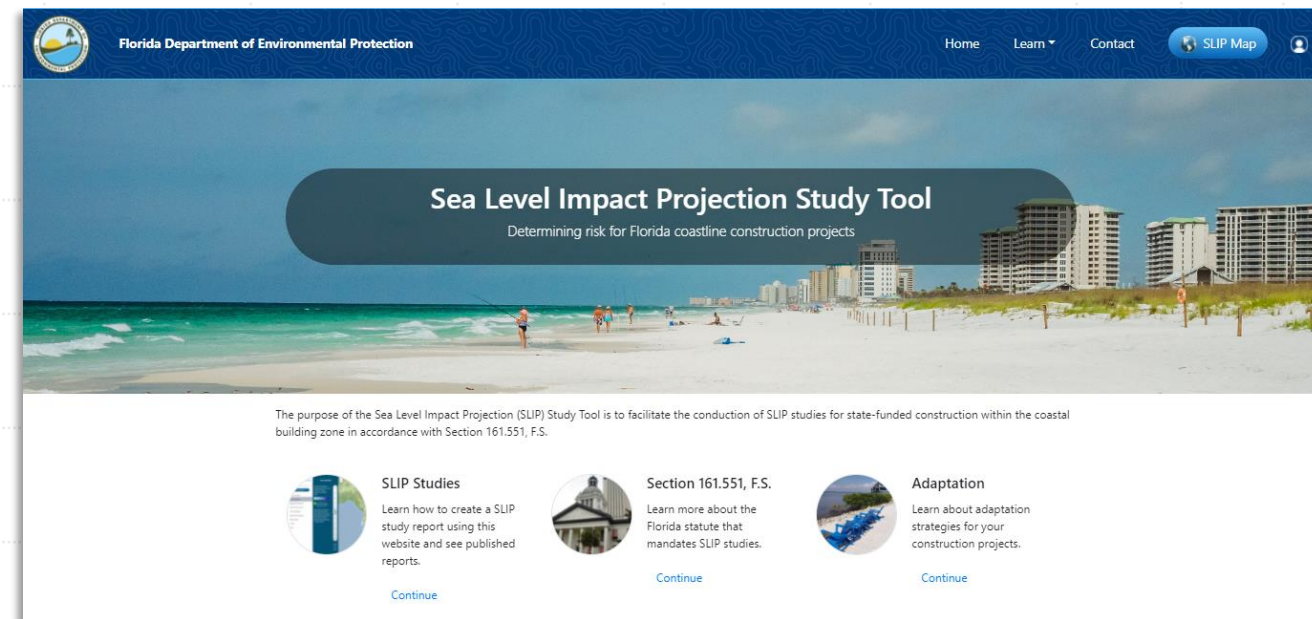


FLORIDA RESILIENT COASTLINES PROGRAM (RCP) GRANT AWARDS



New Florida Statute–2020 –161.551 –SLIP Study

- SB 178 passed by FL Legislature in 2020 session with bipartisan support
- Applies to state-financed construction in the Coastal Building Zone
- DEP to develop a standard for a sea level impact projection (SLIP) study
- SLIP studies to be published on DEP website



New Florida Statute–2021–380.093–Resilient FL

- Senate Bill 1954 & companion House Bill 7019 both passed UNANIMOUSLY
- Established the following:
 - Resilient Florida Grant Program - \$520M funding
 - Annual Statewide Flooding & Sea Level Rise Resilience Plan
 - Florida Flood Hub for Applied Research & Innovation
 - Comprehensive Statewide Flood Vulnerability And Sea Level Rise Data Set And Assessment



Resilient Florida Grant Program

Projects to adapt critical assets

Critical Assets (s. 380.093 (1)(2) Definitions)

1. **Transportation assets and evacuation routes**
 - Airports, bridges, bus terminals, ports, major roadways, marinas, rail facilities, railroad bridges
2. **Critical infrastructure**
 - Wastewater treatment facilities & lift stations, stormwater treatment facilities & pump stations, drinking water facilities, water utility conveyance systems, electric production & supply facilities, solid & hazardous waste facilities, military installations, communications facilities, disaster debris management sites
3. **Critical community and emergency facilities**
 - Schools, colleges, universities, community centers, correctional facilities, disaster recovery centers, emergency medical service facilities, emergency operation centers, fire stations, health care facilities, hospitals, law enforcement facilities, local government facilities, logistical staging areas, affordable public housing, risk shelter inventory, state government facilities
4. **Natural, cultural, and historical resources**
 - Conservation lands, parks, shorelines, surface waters, wetlands, historical and cultural assets



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New Florida Statute – 2022 – CS/HB7053

- Combined Senate/House Bill 7053 had only one “Nay” vote – passed both houses
- Established the following:
 - Office of Resilience and provides for appointment of Chief Resilience Officer
 - Revises vulnerability assessment requirements for noncoastal communities
 - Requires projects to be ranked in Statewide Flood & Sea Level Rise Resilience Plan
 - Requires Florida Flood Hub for Applied Research & Innovation to provide tidal, storm surge, and rainfall-induced flooding datasets



Risk Mapping for Fort Lauderdale

Angela Schedel, Ph.D., P.E., Vice President, Community Resilience, Taylor Engineering



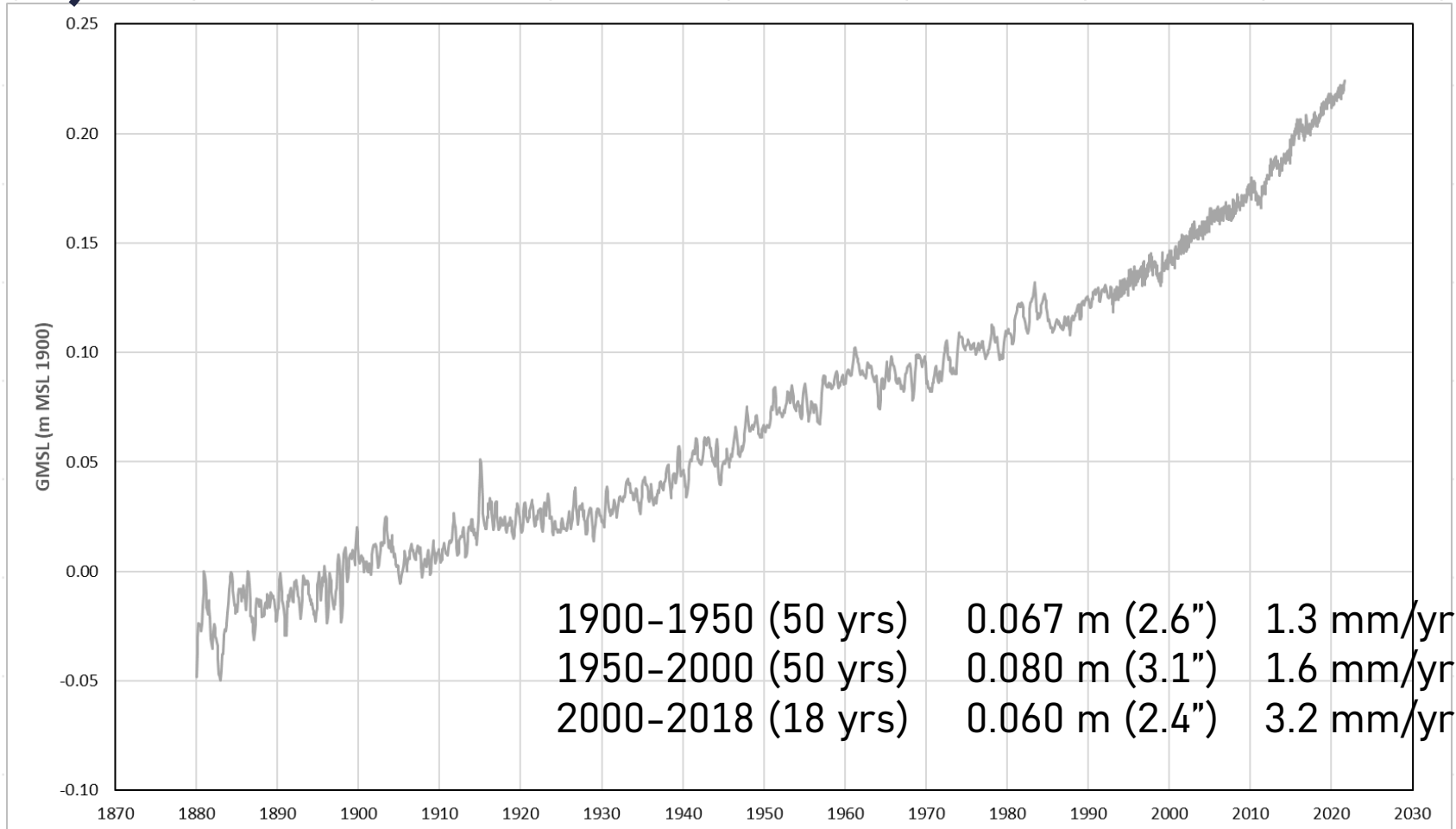
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Historic Trend of Global Mean Sea Level (GMSL) 1880-2020

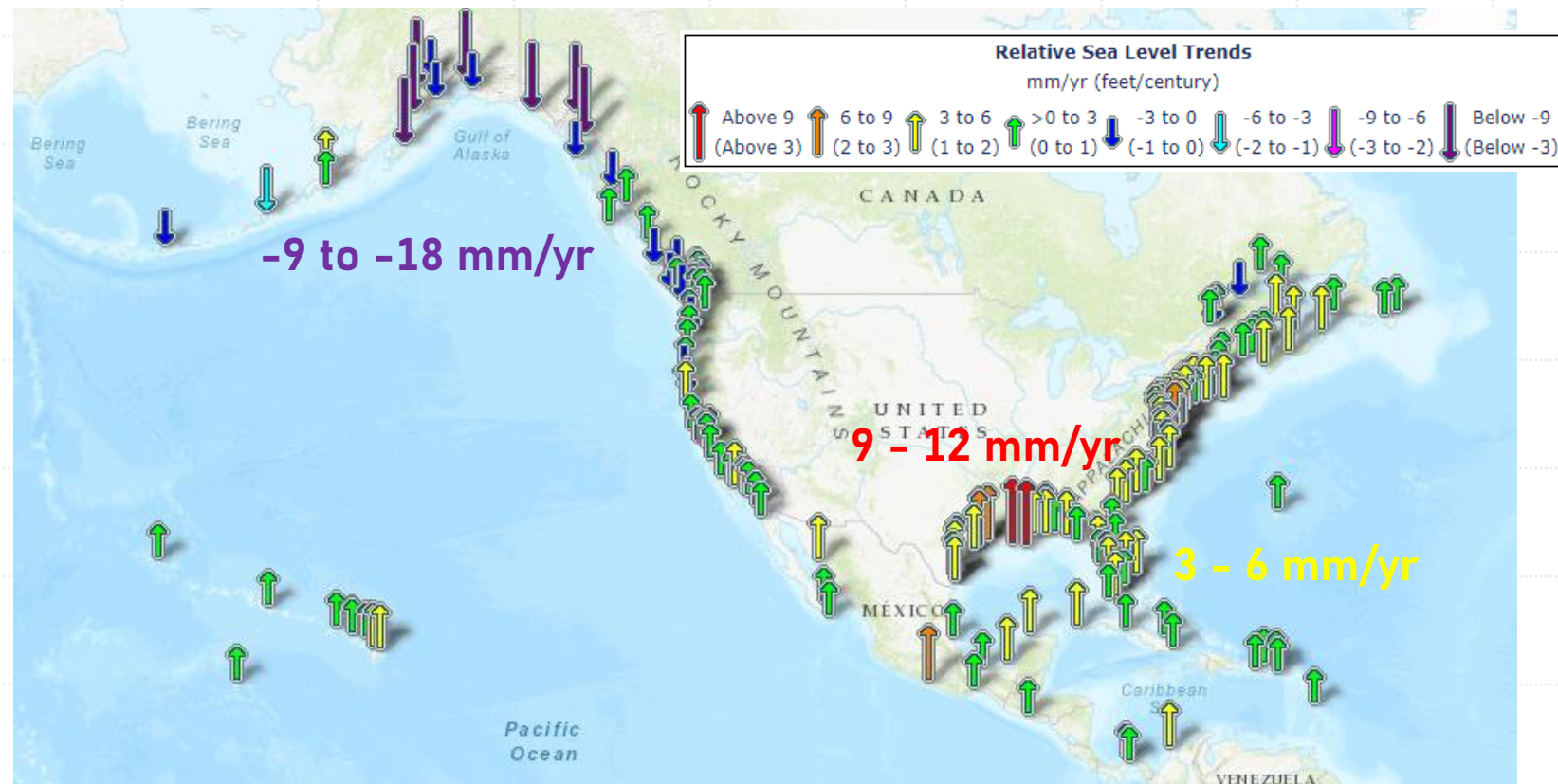


Data from CSIRO (Commonwealth Scientific and Industrial Research Organisation, Australia) and U of Colorado

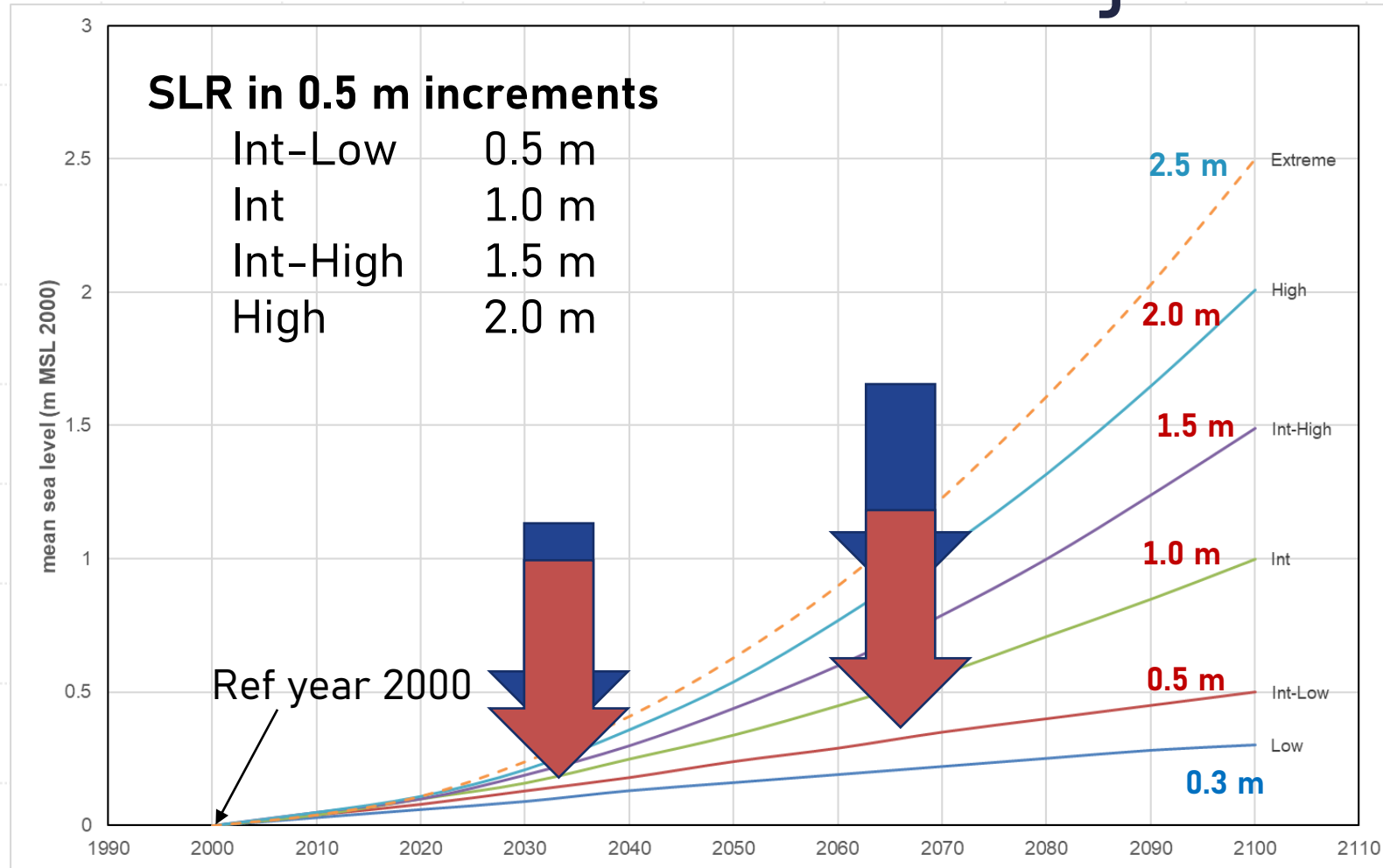


National Oceanographic & Atmospheric Administration (NOAA) Sea Level Trends

- <https://tidesandcurrents.noaa.gov/sltrends/sltrends.html>

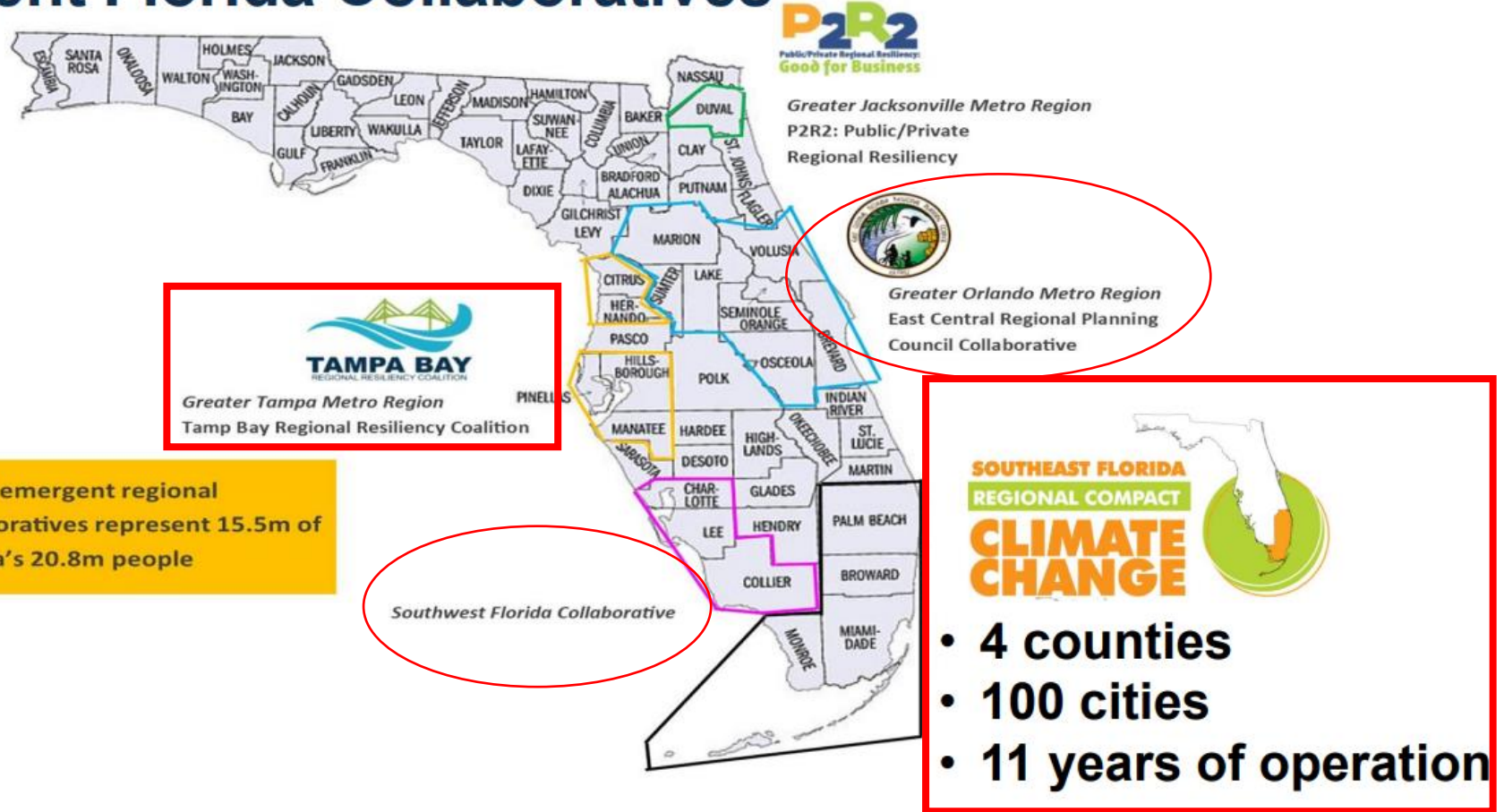


NOAA 2017 Sea Level Rise Projections



Regional Plans and Emergent Collaboratives

Emergent Florida Collaboratives



Southeast Florida Regional Climate Compact Unified SLR Projection (2019)

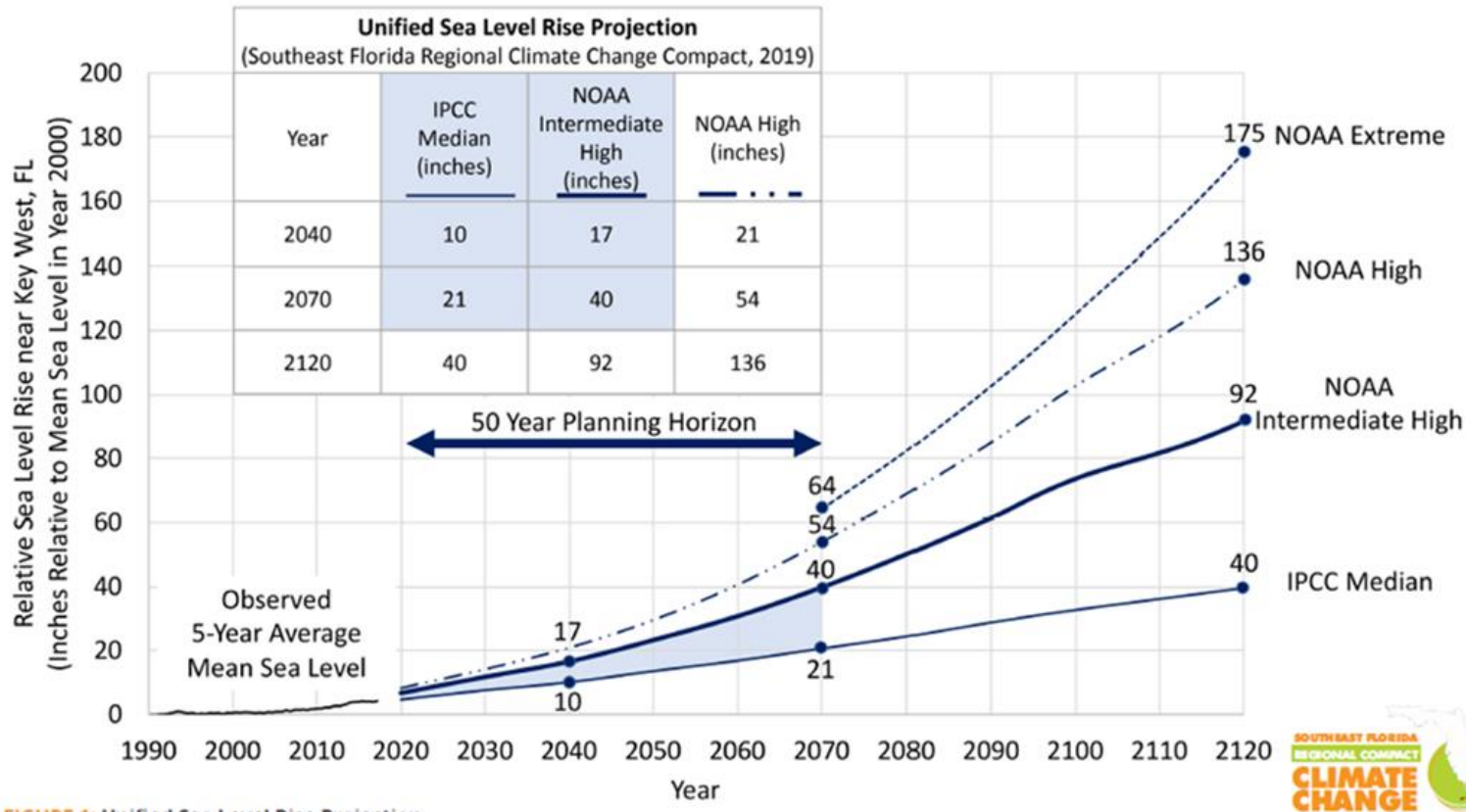






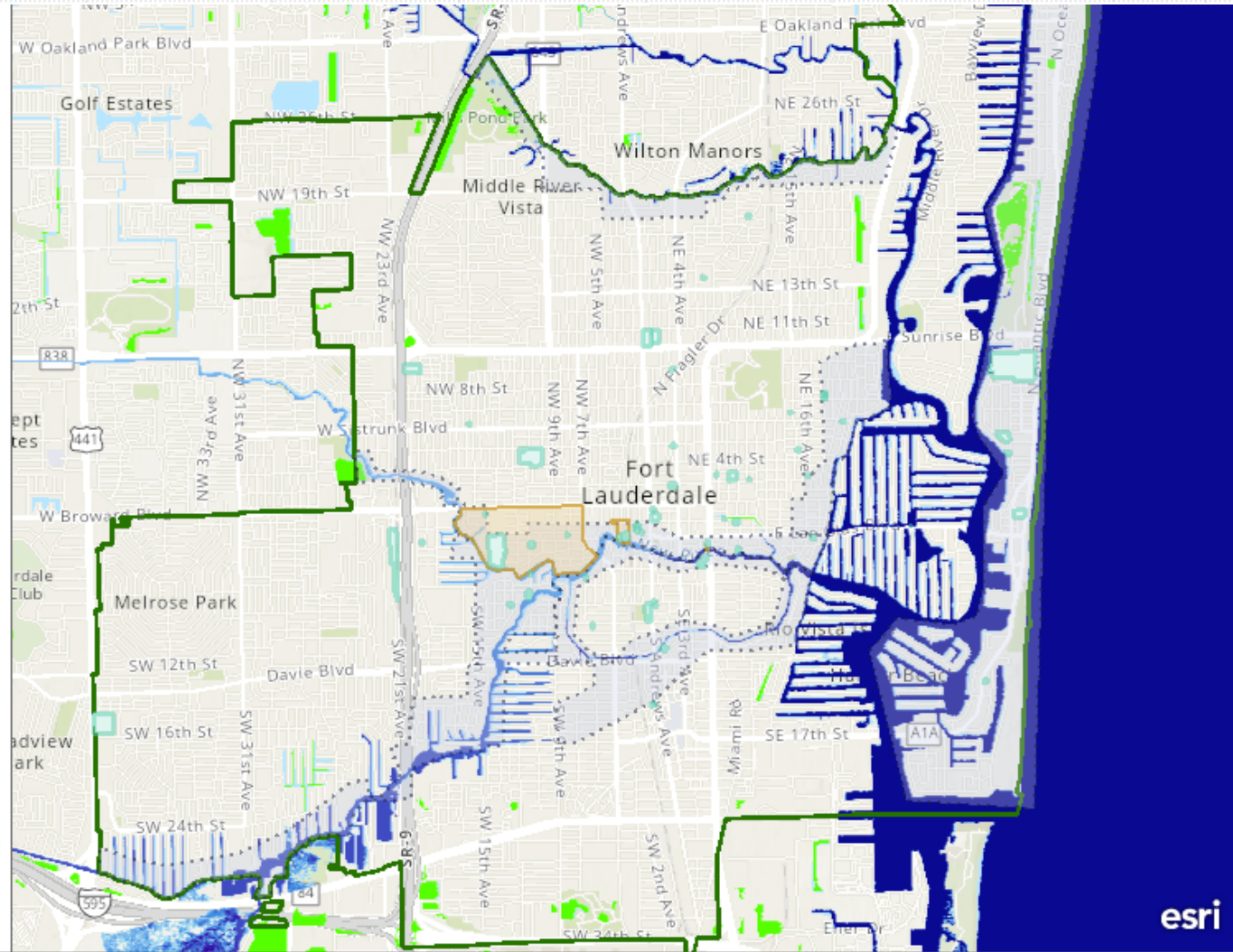
FIGURE 1: Unified Sea Level Rise Projection



2040 Int.-Low Sea Level Rise Scenario

- HistoricProperty**

- Fort Lauderdale Historic Districts**

- Archeologyzones_ftl**

- Fort Lauderdale Municipal Boundary**


SLR .69ft MHHW IL2040








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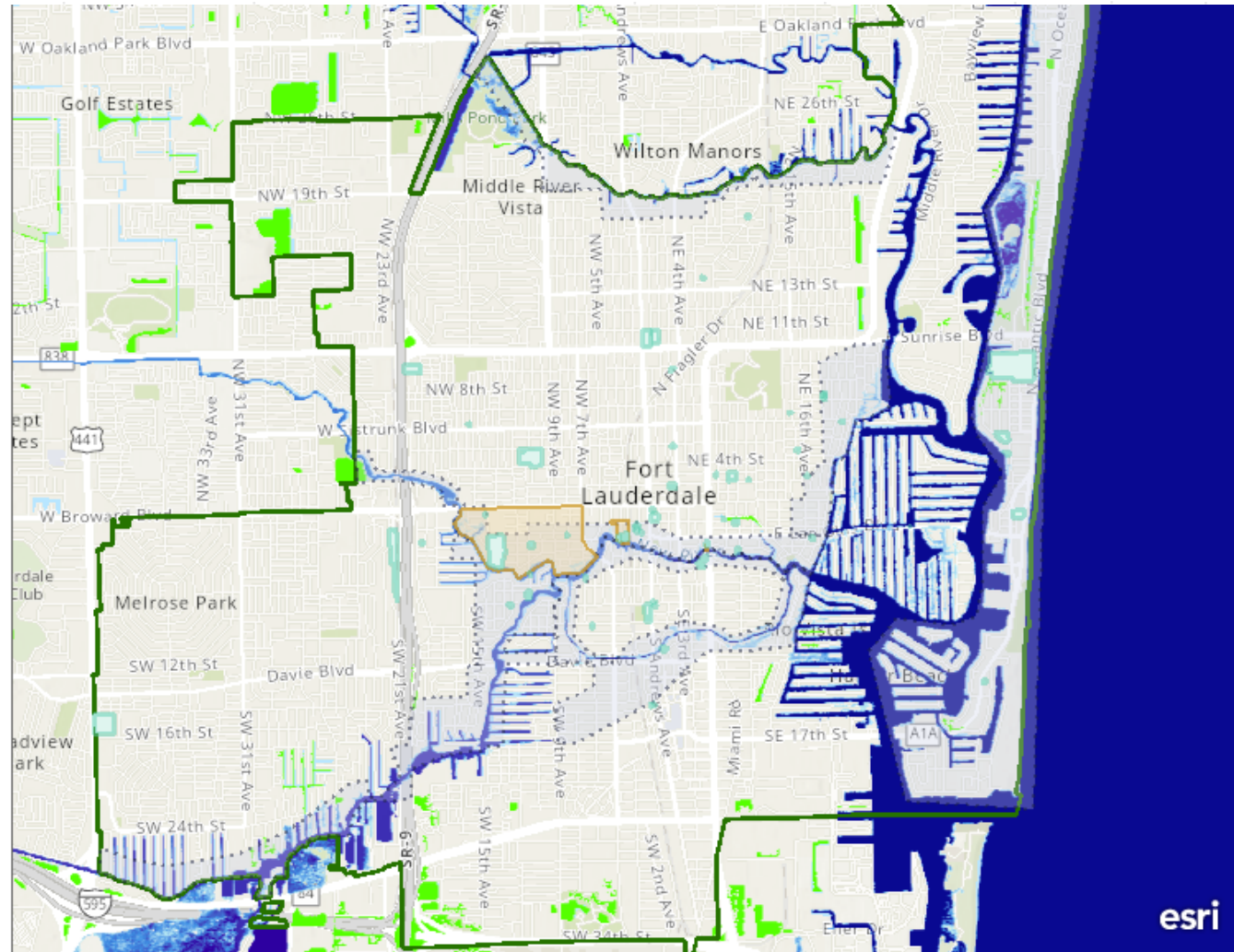
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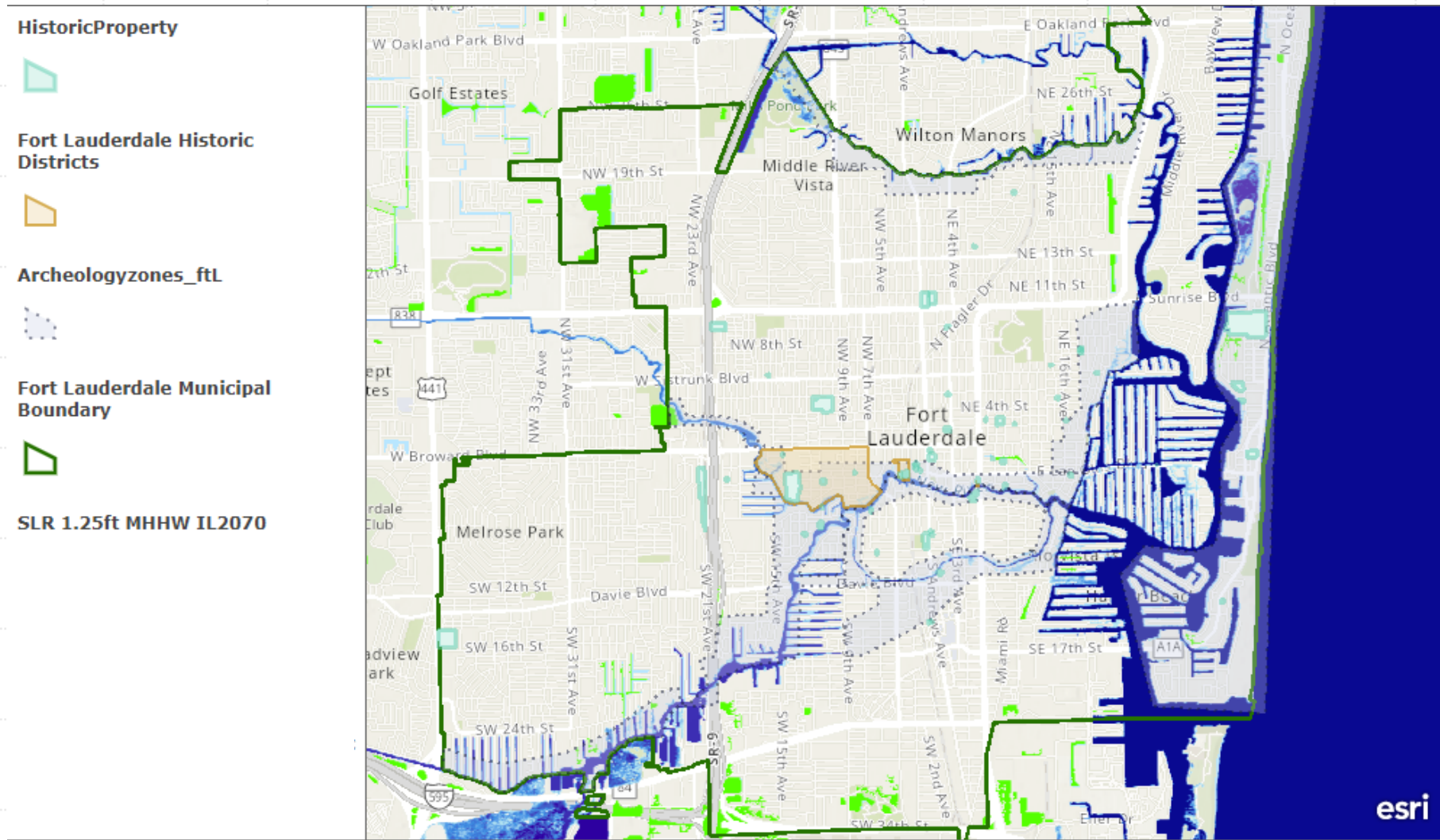
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2040 Int.-High Sea Level Rise Scenario

- HistoricProperty**

- Fort Lauderdale Historic Districts**

- Archeologyzones_ftl**

- Fort Lauderdale Municipal Boundary**

- SLR 1.41ft MHHW IH2040**




2070 Int.-Low Sea Level Rise Scenario



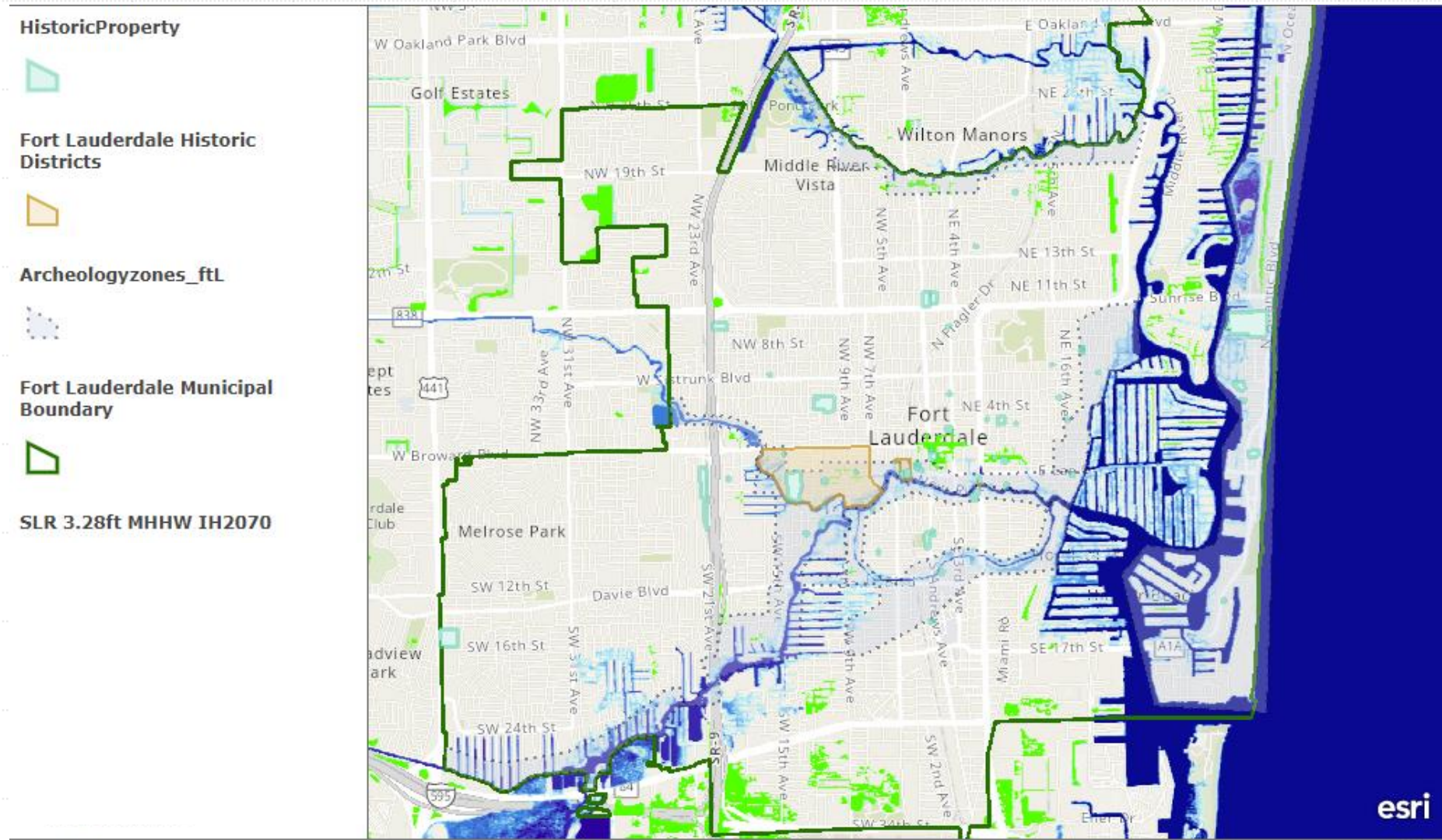
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2070 Int.-High Sea Level Rise Scenario



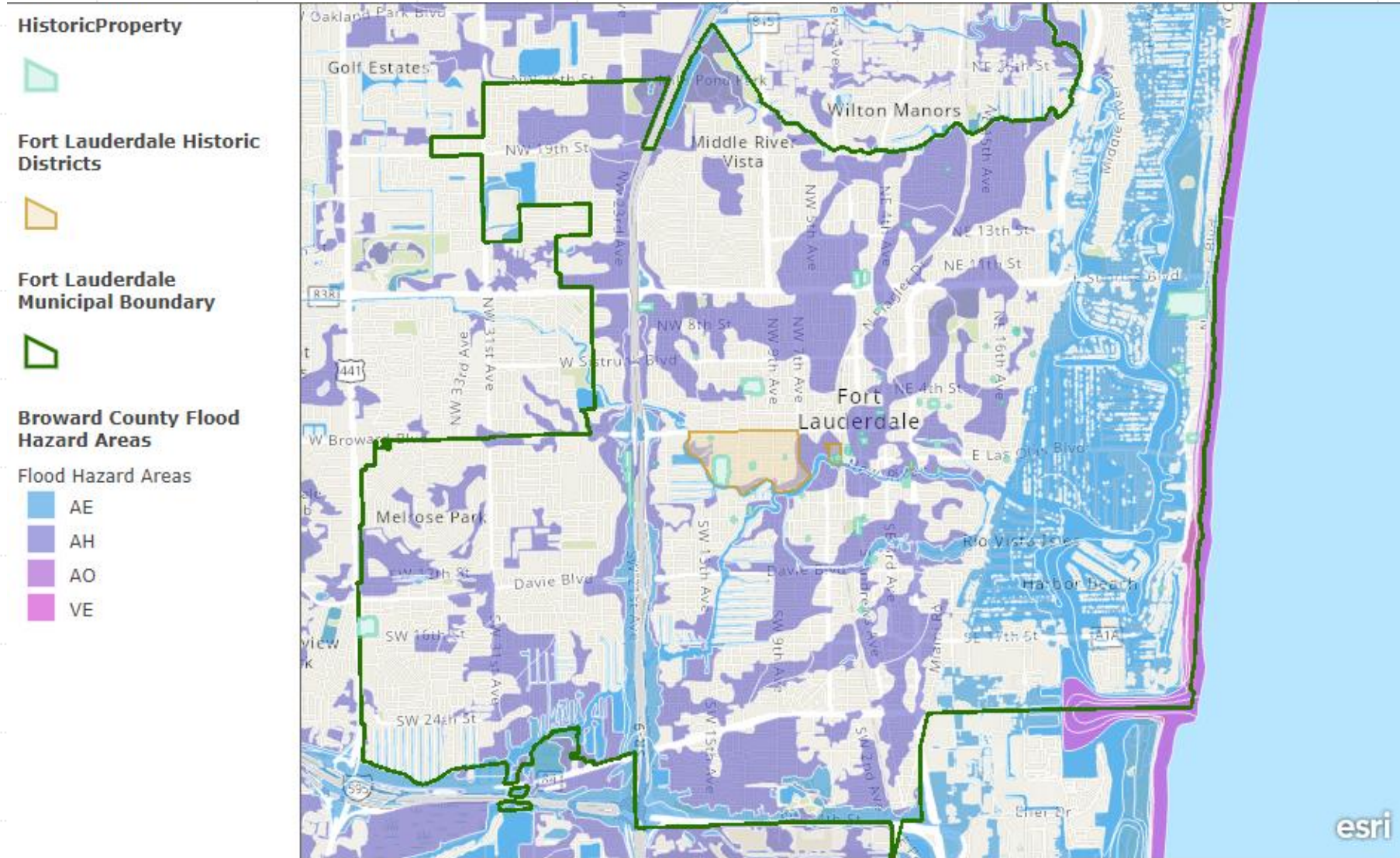
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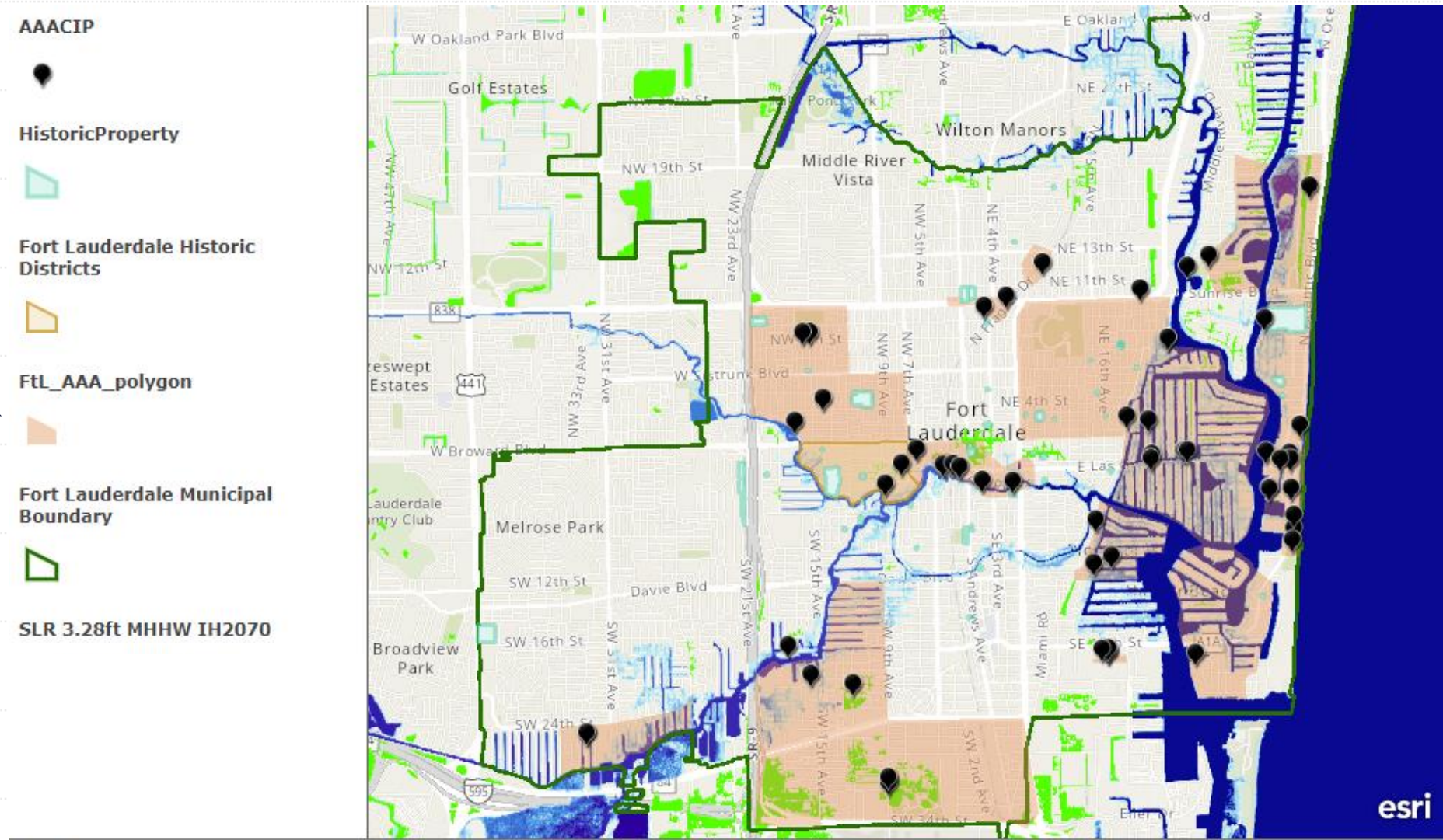


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FEMA Special Flood Hazard Area



Adaptation Action Areas & 2070 Int.-High Sea Level Rise Scenario



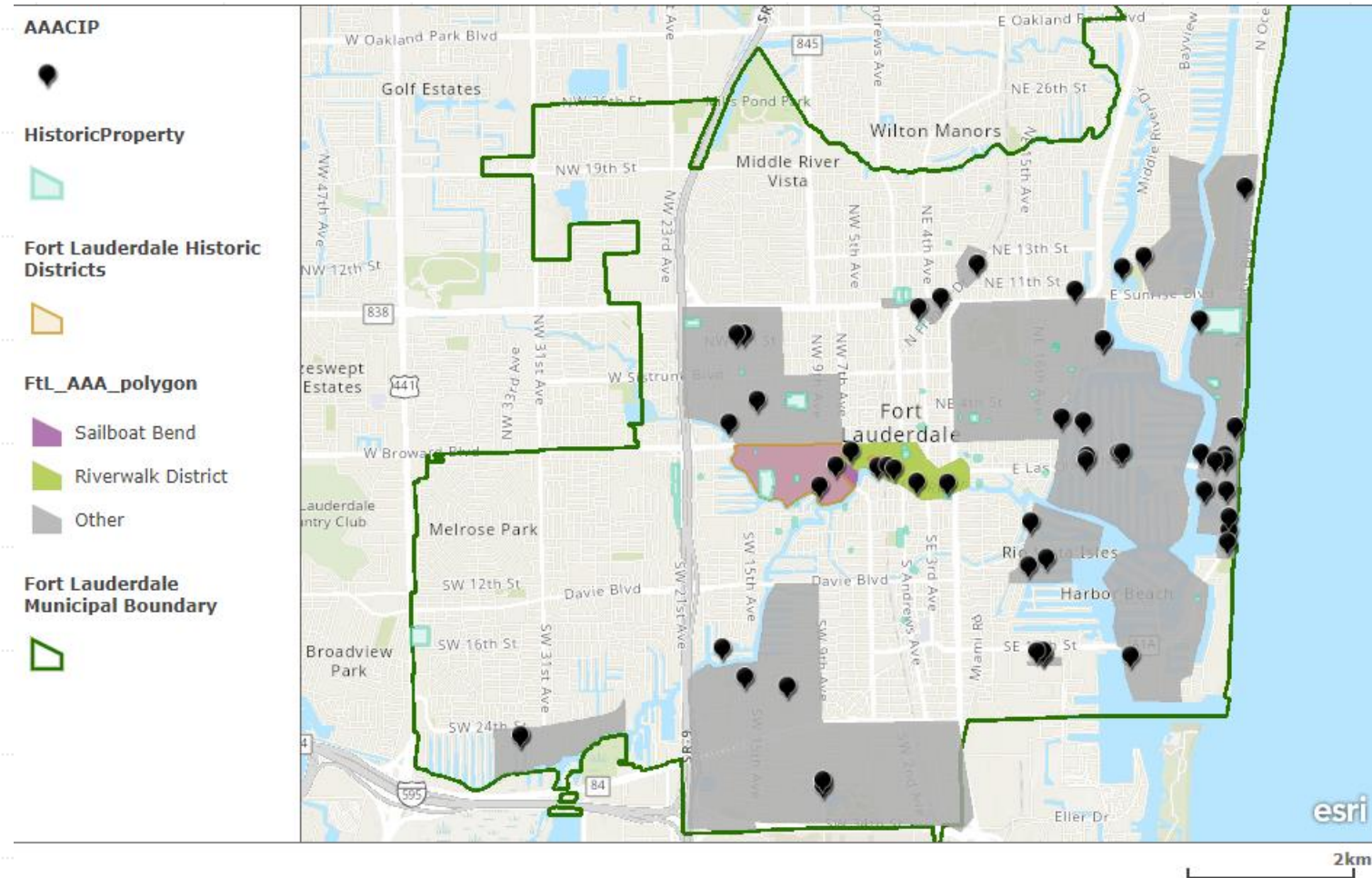
What is AAA? Adaptation Action Area

- 2011 FL Legislature created AAA: s.163.3164(1) and 163.177(6)(g)(10)
- Optional designation with a Comprehensive Plan
 - For coastal communities with a Coastal Management Element
 - Identifies area experiencing coastal flooding
 - Purpose is for prioritizing funding for increasing resilience



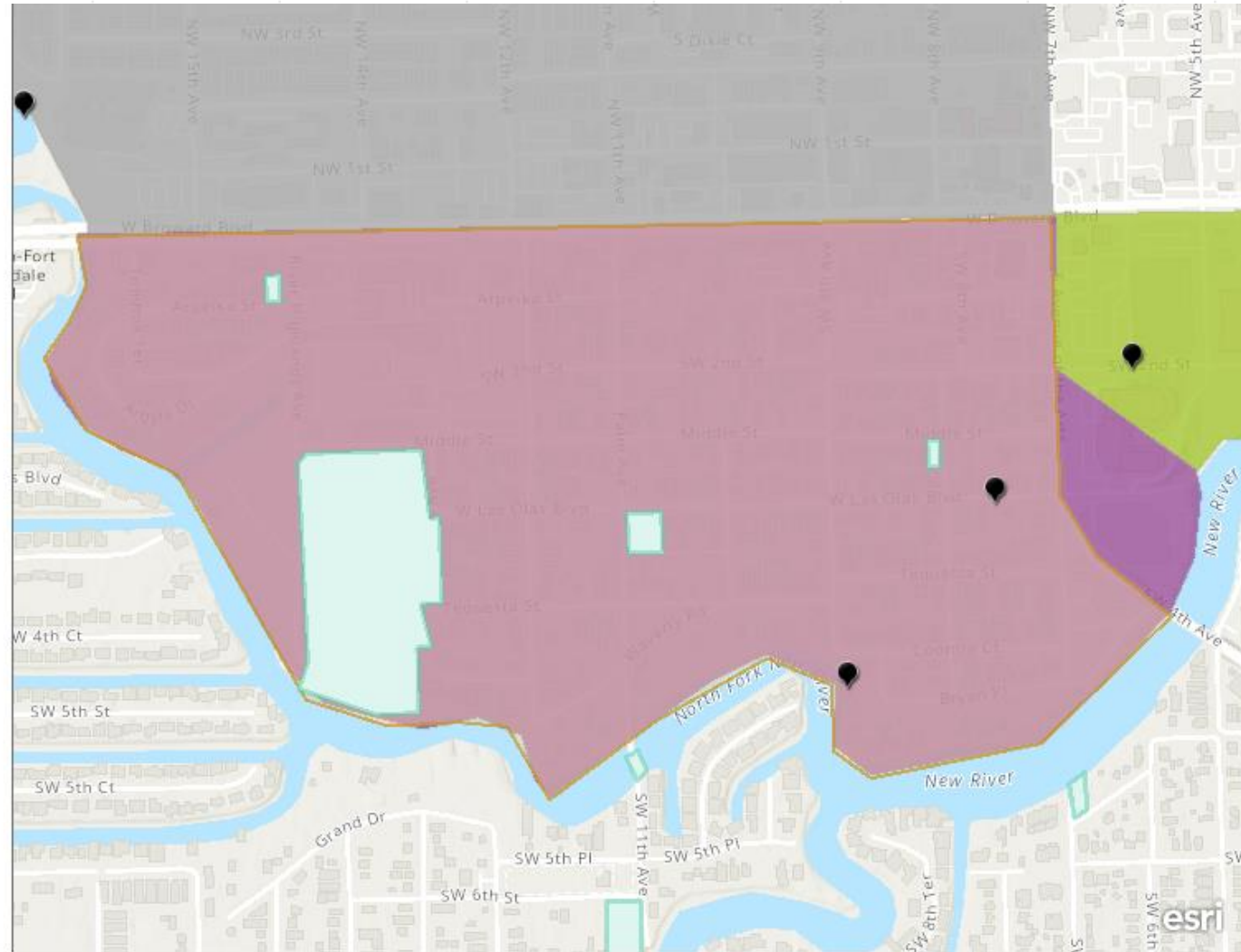
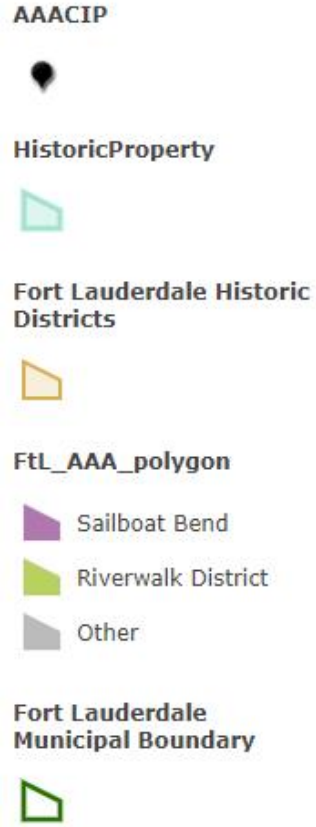
Adaptation Action Areas

- 2013- AAA pilot study for FLL, led by DEO and South FL Regional Planning Council
- 2014- FLL adopted an ordinance amending the Comp Plan
- Community Investment Plan (CIP) contains AAA areas and projects



Sailboat Bend AAA

- 2 Stormwater Improvement Projects



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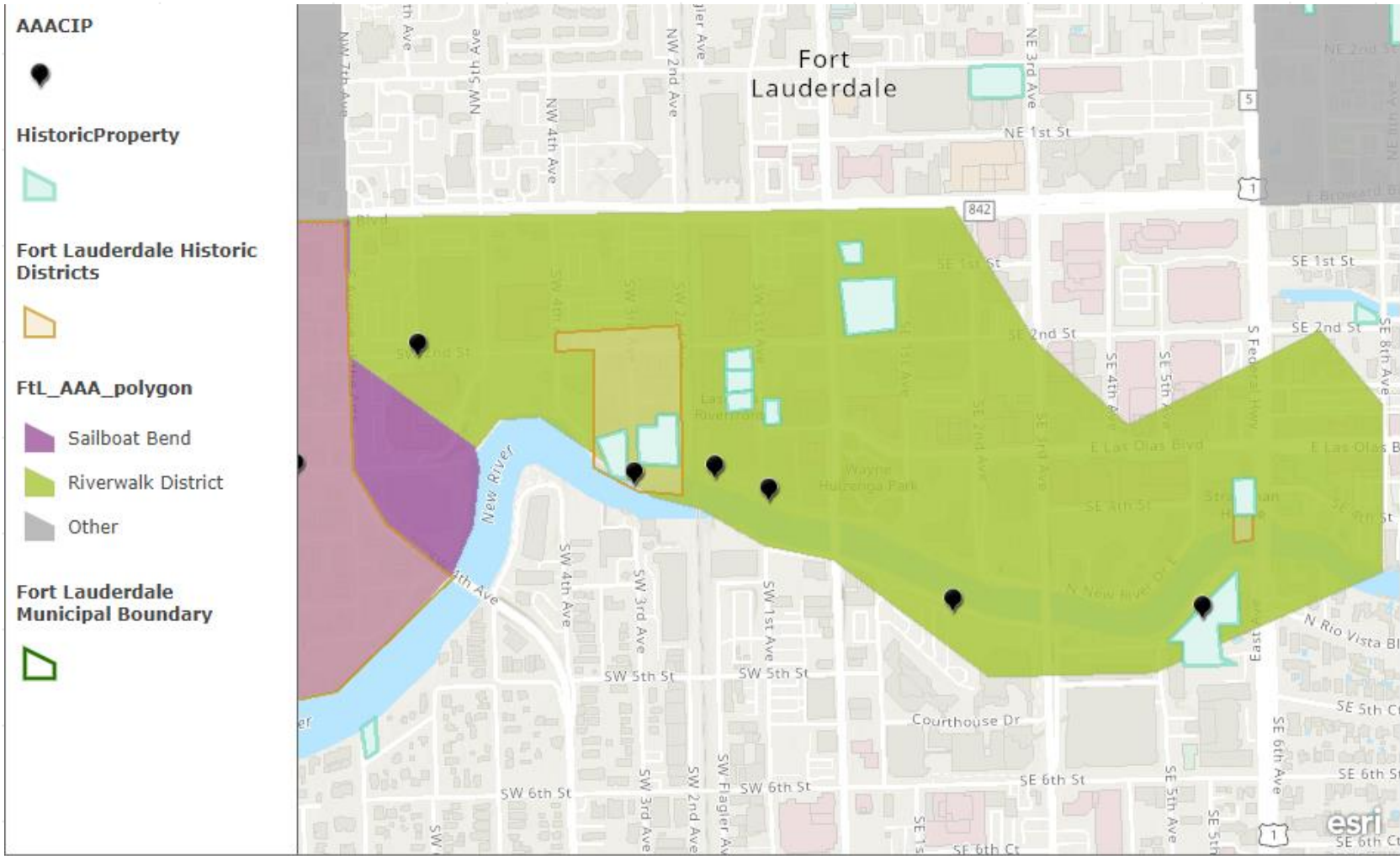
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Riverwalk District AAA

- 6 projects including:
 - Stormwater improvements
 - Stormstation emergency generators
 - Electrical improvements
 - Seawall replacements



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Resources Available in Florida for Adaptation

Angela Schedel, Ph.D., P.E., Vice President, Community Resilience, Taylor Engineering

Lisa Craig, Principal, The Craig Group



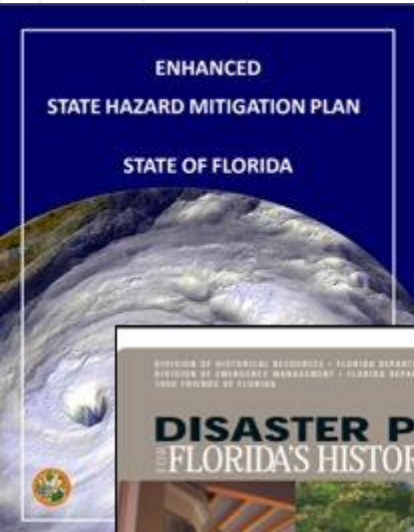
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Climate & Disaster Resilience Planning & Policy Florida Planning Documents



- State Hazard Mitigation Plan
- Florida Adaptation Planning Guidebook
- Disaster Planning for Florida's Historic Resources
- Post-Disaster Development Plan
- Resilient Florida
 - Comp plan amendments
 - Vulnerability assessments
 - Adaptation/resilience plans
 - Projects to adapt critical assets including natural, cultural, and historic resources



Pensacola Adaptation Plan

- Emergency management plans include climate change projections and adaptation
- Utilize local authority to protect open space & wetlands to increase resilience.
- Incorporate Better Site Design, Low Impact Development (LID) and green infrastructure principles (living shorelines) into local codes.
- Develop permeable surfaces and green incentives for residents and businesses.
- Encourage stormwater fee reduction based on beneficial pervious surface area.
- Explore grant opportunities to provide direct funding to property owners.
- Develop a rebate program or provide installation financing or tax credits to property owners.
- Promote an awards and recognition program.
- Identify areas of frequent “nuisance flooding” and create a public database for future reference.
- Partner with innovative construction projects to showcase changes that mitigate for flooding .



Best Practices for Climate & Disaster Resilience

- Update zoning ordinance to incentivize flood adaptation for historic resources
- Create an incentive for flood adaptation
- Integrate historic properties & cultural resources into resilience planning (LMS)
- Protect historic viewsheds by limiting construction in scenic vistas
- Update city plans to be consistent with state plans
- Survey, photo-document & 3-D Laser-scan most vulnerable historic properties
- Complete archaeological survey of most vulnerable sites
- Collect economic impact data
- Develop flooding adaptation design guidelines
- Develop a disaster-preparedness toolkit for property / business owners





St. Augustine Preservation Master Plan

(Resilient Heritage in the Nation's Oldest City)



St. Augustine Preservation Master Plan (Resilient Heritage)

- Revise Zoning Consistent with Neighborhood Character
(*allowance for floodplain management*)
- Establish Zoning Overlays to Protect Vistas around Historic Resources
- Balance Flood Mitigation & Historic Neighborhood Character
 - Limit Height of Floor Level of First occupied Floor to Reduce Overall Elevated Building Height
 - Require Screening for Elevated Foundations and Raised Equipment
- Revise Architectural Guidelines for Historic Preservation & Associated Ordinances
 - Incorporate Flood and Storm Mitigation Alternatives
 - Allow Broader Use of Staff Approval Following a Hazardous Event



St. Augustine Preservation Master Plan (Resilient Heritage)

Hazard Mitigation

- Engage in the Hazard Mitigation Planning Process
- Documentation of Historic and Cultural Resources Related to Potential Hazards
- Provide Protection for City-owned Historic and Cultural Resources
- Create an Expedited Review Process for Disaster Response
- Identify Preservation Partners to Assist in Post-Flood Review Process
- Establish a Debris Management Plan
- Develop and Integrate a Plan for Historic Preservation into Local Response
- Develop Information for Property Owners
- Prepare Design Guidelines for Flood Mitigation



Adaptation Strategies for Historic Properties

Lisa Craig, Principal, The Craig Group

Kimberly Rose, Preservation Associate, The Craig Group



Strategies to Consider



PREVENTION



STRUCTURAL



PROPERTY
PROTECTION



NATURE-BASED



PUBLIC
AWARENESS AND
EDUCATION

Design Guidelines for Flooding Adaptation

Charleston, SC

Somers Point, NJ

Boston, MA

Schenectady, NY

Nantucket, MA

Georgetown, SC

Baltimore, MD

Newport, RI

Hoboken, NJ

St. Augustine, FL



THE SECRETARY
OF THE INTERIOR'S
STANDARDS FOR
REHABILITATION &

GUIDELINES
ON FLOOD
ADAPTATION FOR
REHABILITATING
HISTORIC
BUILDINGS



U.S. Department of the Interior
National Park Service
Technical Preservation Services



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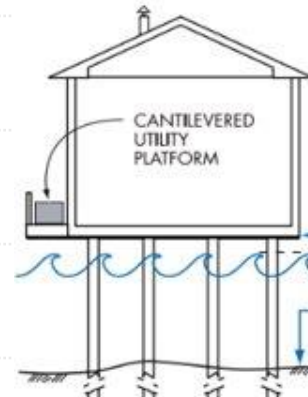
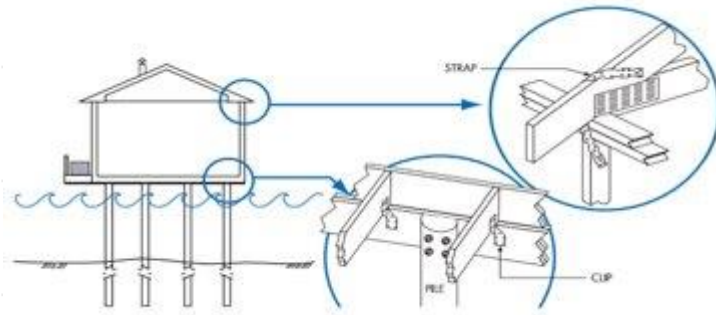
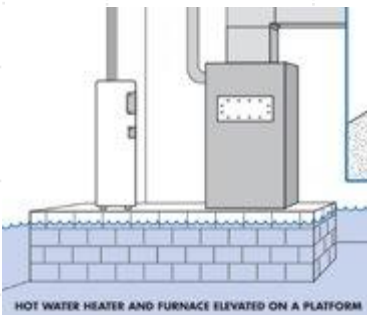
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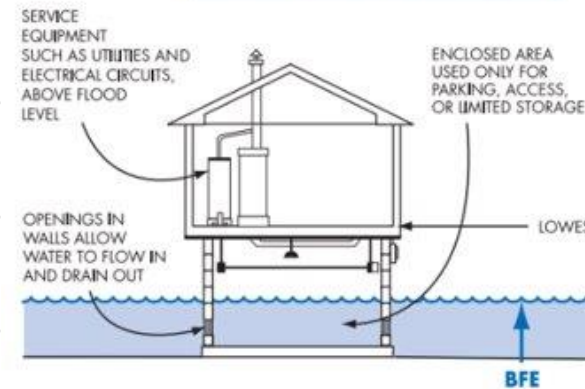
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Disaster Adaptation- Flooding/Hurricanes

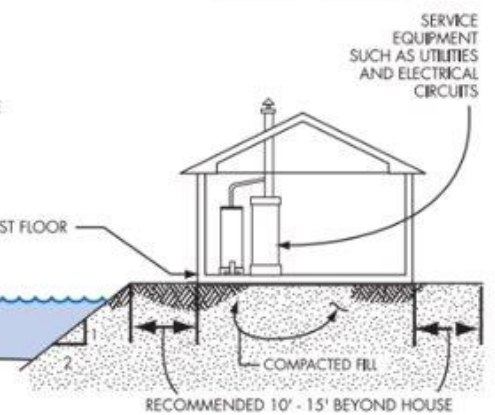
- **Raise utilities** above flood level
- Install **hurricane straps**
- **Elevate** on foundation walls or fill



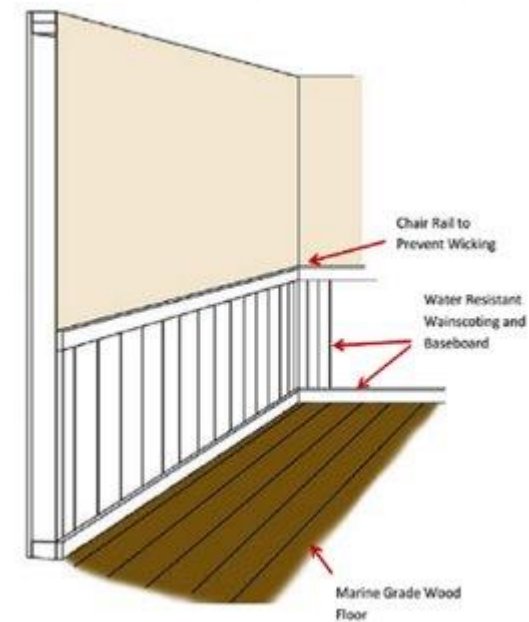
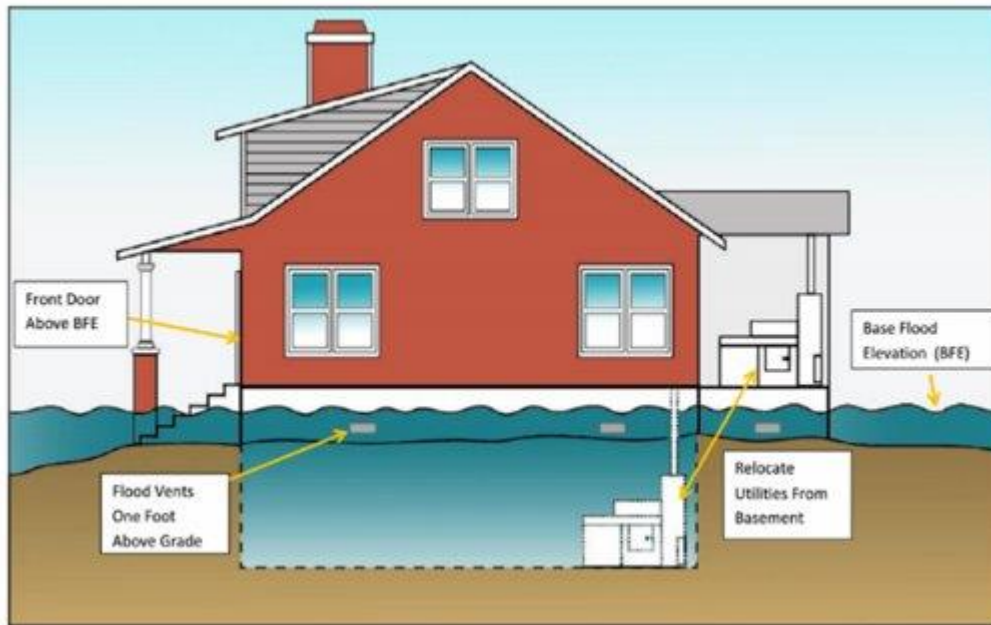
Elevate on Foundation Walls



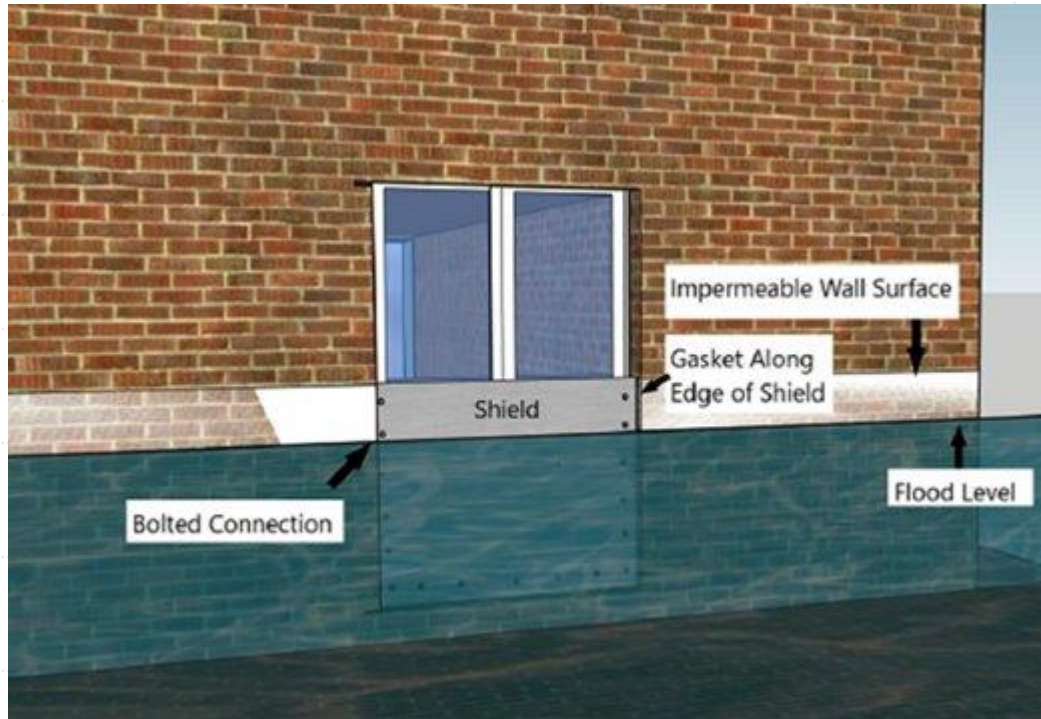
Elevate on Fill



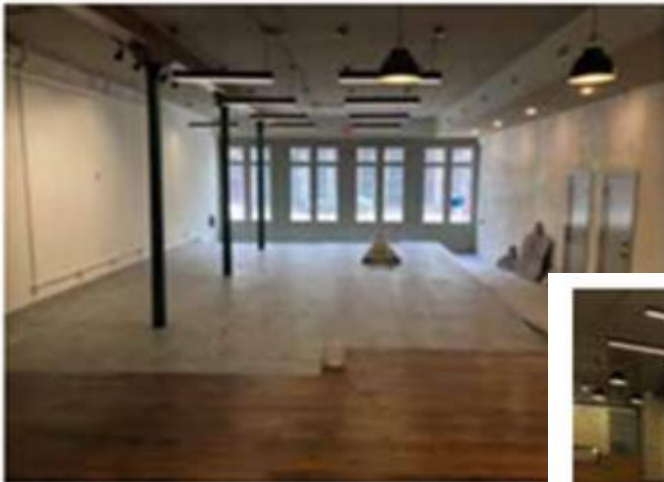
Flooding Adaptation- Wet Floodproofing



Flooding Adaptation- Dry Floodproofing



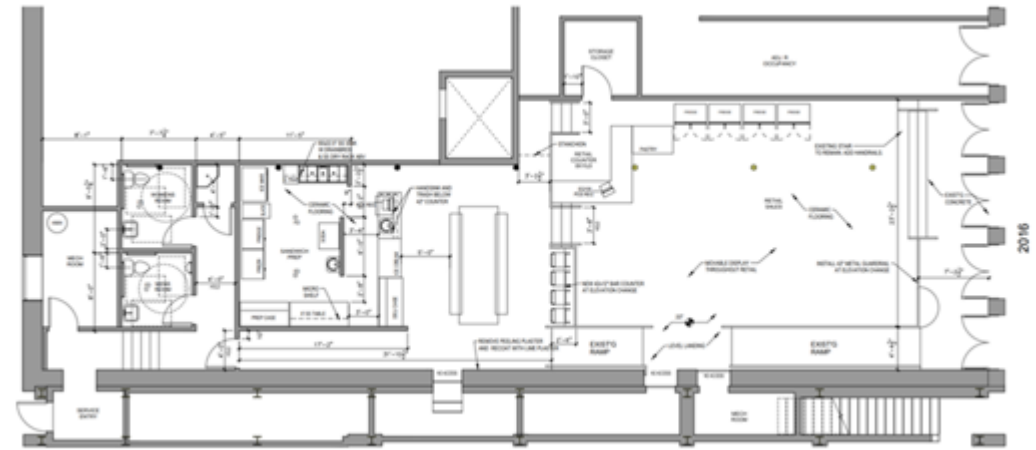
Flooding Adaptation- Interior Elevation



(c) Photo: Galveston Historical Foundation



(b) Photo: Galveston Historical Foundation



(a) Drawing: Brax Easterwood, Architect, for Galveston Historical Foundation



Flooding Adaptation- Exterior Elevation & Relocation

- **Exterior elevation** works for some properties if designed with site considerations, streetscape context and landscaping plans fully realized.
- **Relocation** is a viable consideration under the Secretary of the Interior's Standards if the property is relocated in a comparable historic setting and the property is in imminent threat of loss.



Financing Adaptation & Recovery

- Mitigation Rebates
- Tax Incentives
- Public-Private partnerships (“P3s”)
- FEMA Grants
 - Hazard Mitigation Grant Program
 - BRIC
- NPS Grants
- HUD Grants
 - Rebuild Florida Critical Facility Hardening Program
- Local Authority (Florida)
- Relocating within the City
- Market-based Incentives



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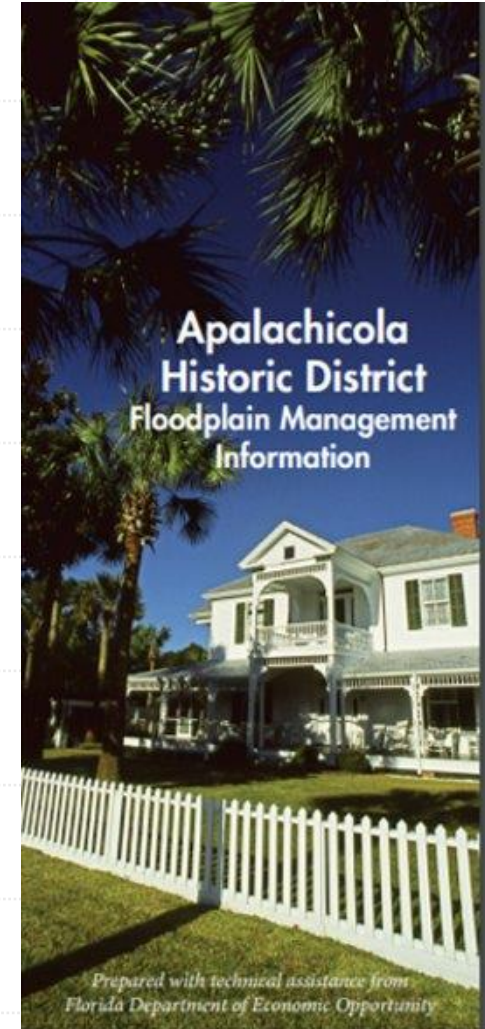
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Climate & Disaster Resilience Tools

- Which of the following disaster tools would be of greatest value to Fort Lauderdale?
 - Disaster Adaptation Design Guidelines
 - Hazard Mitigation Plan for Historic District
 - Disaster Planning Toolkit for Historic Property owners
 - Economic Analysis of Value of Historic Preservation & Assessment of Disaster Cost
 - 3-D Visual Documentation of Historic District
 - Public Policy Guidance for Disaster Adaptation for Historic and Cultural Resources
 - Public Education and Awareness Tools for Community Disaster Preparedness
 - Resource List of Successful Adaptation Strategies for Historic Properties and Cultural Resources



Thank You

- Strategic Historic Preservation Plan Workshop
 - Thursday, March 31, 2022
 - Morning: 9:30 AM- 11:30 AM
 - Evening: 6:00 PM-8:00 PM
- Scan the code to take our survey!



<https://www.thecraiggrouppartners.com/upcoming-events>



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