

# Adaptation Action Areas

## Overview

The 2011 Florida Legislature made significant changes to the state's growth management laws, including creating Adaptation Action Areas (AAA). In accordance with Section 163.3164(1) and Section 163.3177(6)(g)(10), Florida Statutes, an AAA is an optional designation within the coastal management element of a local government's comprehensive plan which identifies one or more areas that experience coastal flooding due to extreme high tides and storm surge, and that are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure needs and adaptation planning. In 2014, the City adopted Ordinance No. C-14-27 amending the Comprehensive Plan to incorporate a new goal, objective, and thirteen policies associated with AAAs.



Minimum AAA qualifying criteria may include, but are not limited to the following:

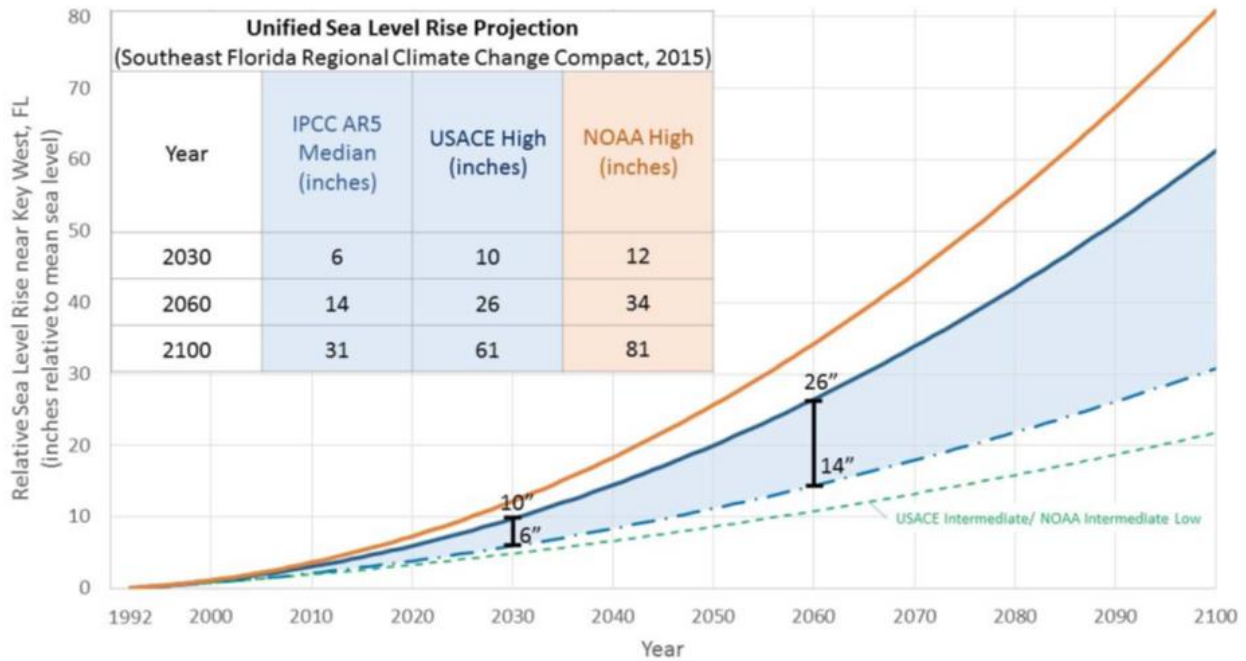
- Areas experiencing coastal flooding; and
- Areas experiencing or projected to be experiencing tidal flooding; or
- Areas with hydrological connections to coastal waters; or
- Areas below, at, or near mean higher high water; or
- Storm surge evacuation zones; or
- Areas with other related impacts of sea level rise.

In 2013, the City of Fort Lauderdale, in collaboration with the South Florida Regional Planning Council and Broward County, served as a pilot community to test the development and advancement of adaptation policy options, including its integration into the City's Comprehensive Plan as a text amendment. The intent of the amendment was to increase the City's resiliency to the impacts of climate change and rising sea levels by providing the foundation and framework for the development and implementation of adaptation strategies and measures in order to reduce risk to these challenges. The City Commission approved amending the Comprehensive Plan's Coastal Management Element and Administration Element to incorporate Adaptation Action Areas in October 2014. In January 2015, the Florida Department of Economic Opportunity recognized and accepted the adopted comprehensive plan amendment.

The designation of AAA through this Community Investment Plan represents the City's commitment to invest public dollars to reduce the vulnerability of those areas to coastal flooding. Designated locations are being prioritized for infrastructure and other improvements intended to reduce impacts to assets currently experiencing coastal flooding as well as reduce the areas future risk and vulnerability to the effects of sea level rise. These improvements can range widely from the installation of tidal valves to incorporating sea level rise projections into the design of new construction capital projects. Additional information regarding the sea level rise projection that the City Commission has adopted for use is provided here.



## Unified Sea Level Rise Projection



Information Source: Southeast Florida Regional Climate Change Compact Counties

**Southeast Florida Unified Sea Level Rise Projection.** These projections are referenced to mean sea level at the Key West tide gauge. The projection includes three global curves adapted for regional application: the median of the IPCC AR5 RCP8.5 scenario as the lowest boundary (blue dashed curve), the USACE High curve as the upper boundary for the short term for use until 2060 (solid blue line), and the NOAA High curve as the uppermost boundary for medium and long term use (orange solid curve). The incorporated table lists the projection values at years 2030, 2060 and 2100. The USACE Intermediate or NOAA Intermediate Low curve is displayed on the figure for reference (green dashed curve). This scenario would require significant reductions in greenhouse gas emissions in order to be plausible and does not reflect current emissions trends.

The Southeast Florida Regional Climate Change Compact’s (Compact) Unified Sea Level Rise (SLR) Projection is included in both the City’s Press Play Fort Lauderdale: Strategic Plan 2018 and Fast Forward Fort Lauderdale: Vision Plan 2035 documents, outlined in the City of Fort Lauderdale Comprehensive Plan’s Coastal Management Element’s new Policy 3.1.6, and provides a technical foundation for recommendations in the Compact’s Regional Climate Change Action Plan. The projection was the result of a collaborative working group consensus of local scientists specializing in SLR. The Compact’s SLR work group reconvened in 2015 to update the SLR projection after reviewing the scientific literature published since 2011 when the original projections was developed. This resulted in a new updated SLR projection guidance document finalized in October 2015. The City Commission recognized the updated SLR projection by Resolution 15-279 on December 15, 2015.

### Alignment to Approved Plans

The AAA initiative aligns with and advances our Fast Forward Fort Lauderdale: Vision Plan 2035 WE ARE READY, Press Play Fort Lauderdale: Strategic Plan 2018, and Sustainability Action Plan, as well as regional plans such as the Southeast Florida Regional Climate Action Plan. Specific strategic connections include the following:

- Press Play Fort Lauderdale: Strategic Plan 2018  
Infrastructure Cylinder of Excellence  
Goal 2: Be a sustainable and resilient community.

- Objective 2: Reduce flooding and adapt to sea level rise.
  - Strategic Initiative 5: Identify potential AAAs and develop AAA policies.
- Objective 3: Improve climate change resiliency by incorporating local, regional and mega-regional plans.
  - Strategic Initiative 1: Implement the Sustainability Action Plan (SAP); align it with the Southeast Florida Regional Climate Action Plan (SFRCAP) and the Seven Counties-50 Years Southeast Florida Prosperity Plan, and monitor progress.
- Sustainability Action Plan
  - Leadership Chapter
  - Goal 4: Prepare for Climate Change Impacts
    - Action 4.1.1: Include adaptation strategies into the City’s plans.
    - Action 4.1.2: Enhance communication about climate change adaptation in coordination with other agencies and municipalities.
    - Action 4.1.3: Partner with local, regional and state agencies or educational institutions to increase preparedness.



In addition, this initiative is responsive to our residents as reflected in the 2018 Neighbor Survey that indicated our residents are well informed about climate change issues and the impacts to our community, with 62% indicating they have observed coastal water level increases and 62% indicating they have observed increased flooding. Satisfaction with the prevention of tidal-related flooding was low, with only a 27% satisfaction rating.

Building upon the City’s leadership in the area of sustainability, the use of AAAs is another tool being integrated into operations to combat coastal flooding and reduce risk to rising sea levels. The designation of AAAs is an example of neighbors’ ideas, coupled with the best available data and integrated into our Vision Plan, being transformed into action through proactive and informed decision-making in order to build community today and meet the challenges of tomorrow.

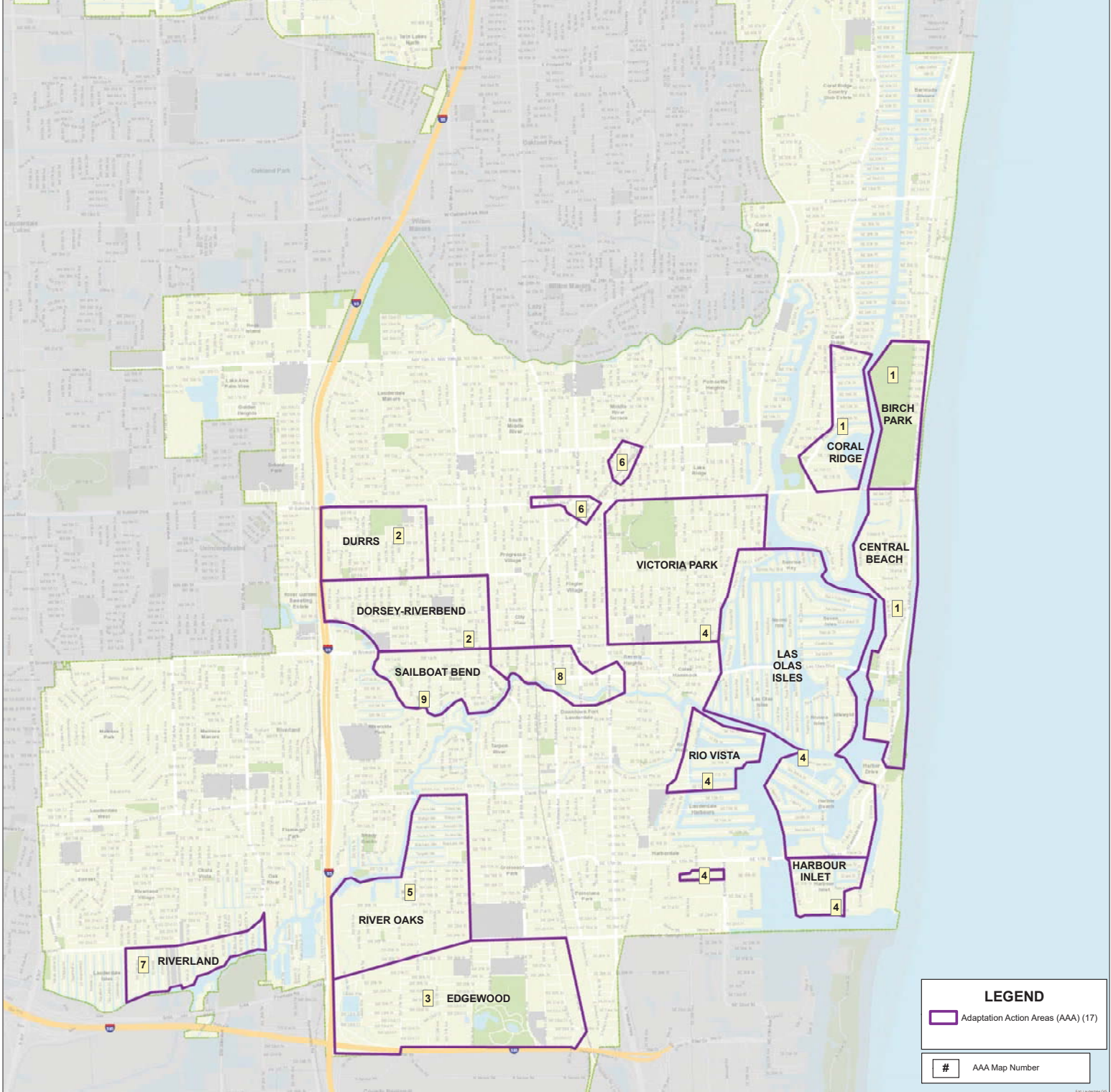
### City of Fort Lauderdale Adaptation Action Areas and Projects

The pages that follow provide maps outlining the City of Fort Lauderdale’s Adaptation Action Areas and projects programmed for funding within those AAAs. Areas were chosen if they meet the AAA minimum qualifications in state legislation as well as the criteria outlined in the City Comprehensive Plan. CIP projects were identified for inclusion that reduce vulnerability and/or increase resilience to coastal flooding in designated AAA locations. The “Designated Adaptation Action Areas and Projects” maps are reviewed and updated annually by staff for inclusion in the five-year Community Investment Plan (CIP) for funding consideration.

Table 1 below summarizes the status of designated CIP projects in the Adaptation Action Areas. The FY2019 CIP included 42 active projects identified in the 17 AAAs, of which 14 projects had been completed. For this update, funded CIP projects as of June 2019 were reviewed to identify projects that should be added or removed from this list. Reasons for deletion from this list may include cancellation, changes in scope which removed AAA related elements, or transfers of scope to other projects. Additions may include newly created or identified projects that match the eligibility criteria. This resulted in the addition of multiple projects and deletion of others. For the purposes of this chapter, a project is listed as completed when the construction activities have finished. Consequently, in the current fiscal year, the number of completed projects has increased to 16 and the number of completed and active projects has increased to 43.

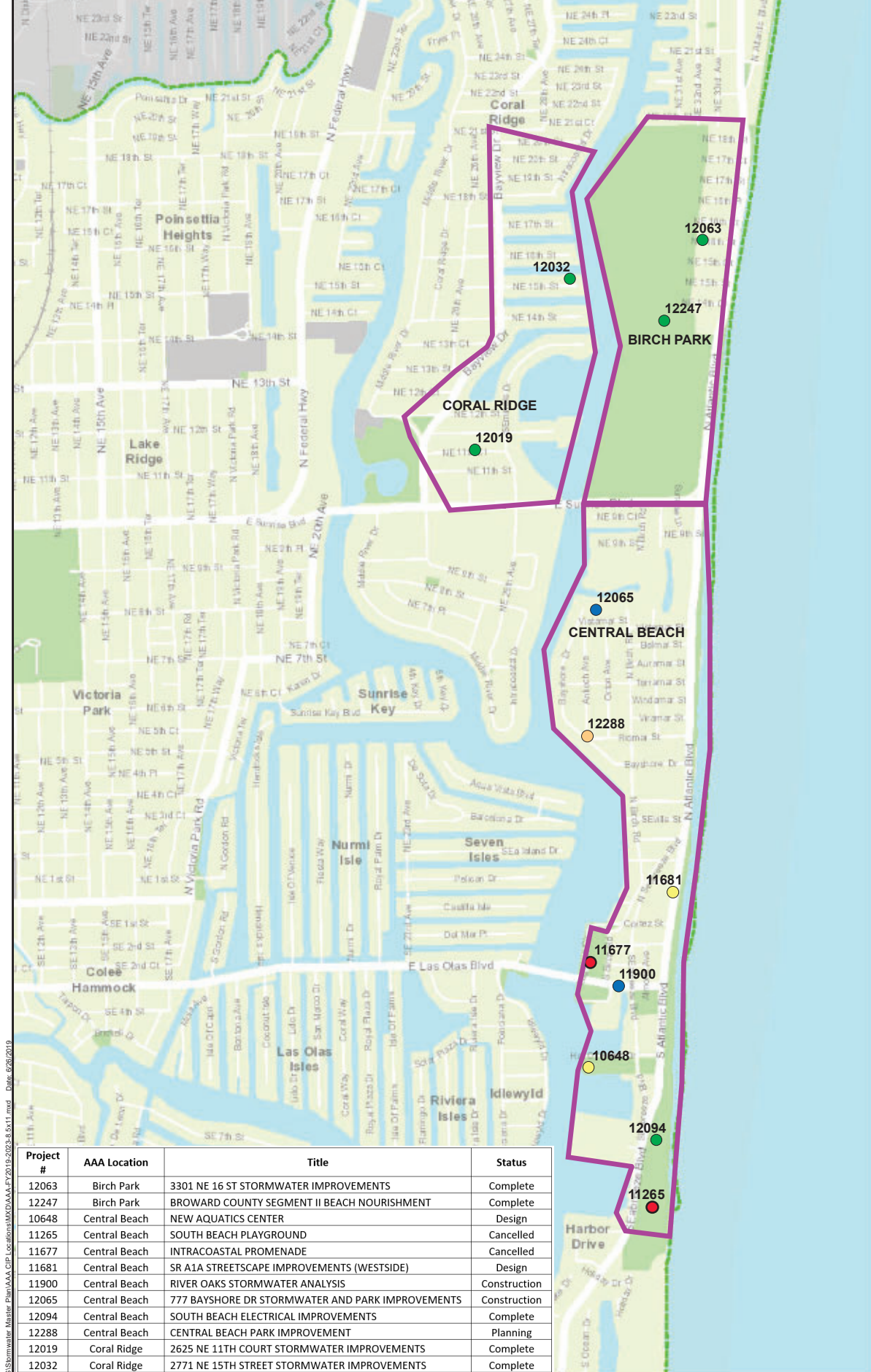
<b>Table 1: Summary of Designated Adaptation Action Areas (AAA) and Status of Projects in Those Areas</b>			
	<b>Designated AAAs</b>	<b># Active or completed AAA projects</b>	<b>Status (CIP Project #)* (Note: Changes from FY2019 CIP are shown in bold letters)</b>
1	Birch Park	2	2 Completed (12063, <b>12247</b> )
2	Central Beach	6	1 Completed (12094) 2 in Construction (11900, 12065) 2 in Design (10648, 11681) 1 in Planning (12288) 2 Cancelled ( <b>11677, 11265</b> )
3	Coral Ridge	2	2 Completed (12019, 12032)
4	Dorsey-Riverbend	1	1 in Design (11845)
5	Durrs	1	1 in Design (11844)
6	Edgewood	2	1 in Design (11842) 1 in Planning ( <b>12264</b> )
7	GTL (George T. Lohmeyer) Wastewater Plant	2	1 Completed (12106) 1 in Planning (11781)
8	Harbour Inlet	2	1 Completed (12026) 1 in Design ( <b>12087</b> )
9	Las Olas Isles	5	3 Completed (12112, 12120, <b>12339</b> ) 1 in Bidding ( <b>12014</b> ) 1 in Design (12074) 1 Cancelled ( <b>11968</b> )
10	Victoria Park	2	1 Completed (12035) 1 in Design (12082)
11	Rio Vista	3	1 in Complete (12025) 2 in Bidding ( <b>12034, 12337</b> )
12	River Oaks	2	2 in Design (11419, 11868)
13	Progresso & Flagler Village	2	1 in Completed ( <b>12064</b> ) 1 in Design (11843)
14	Lake Ridge	1	1 in Construction ( <b>12024</b> )
15	Riverland	2	1 Completed (12042) 1 in Design (12043)
16	Riverwalk District	6	3 Completed (11821, 11827, <b>12057</b> ) 1 in Bidding ( <b>11722</b> ) 2 in Design ( <b>12478, 12479</b> )
17	Sailboat Bend District	2	2 in Construction ( <b>12022, 12031</b> )
<b>Total</b>		<b>43</b>	*See Maps for Additional Project Detail

MAP #	PROJECT AREAS
1	BIRCH PARK, CENTRAL BEACH, CORAL RIDGE
2	DURRS, DORSEY- RIVER
3	EDGEWOOD
4	GTL, HARBOUR INLET, LAS OLAS ISLES, VICTORIA PARK, RIO VISTA
5	RIVER OAKS
6	LAKE RIDGE, PROGRESSO & FLAGLER VILLAGE
7	RIVERLAND
8	RIVERWALK DISTRICT
9	SAILBOAT BEND DISTRICT



FY 2020-2024  
 Designated Adaptation Action Areas and Projects  
 (June 2019)





Project #	AAA Location	Title	Status
12063	Birch Park	3301 NE 16 ST STORMWATER IMPROVEMENTS	Complete
12247	Birch Park	BROWARD COUNTY SEGMENT II BEACH NOURISHMENT	Complete
10648	Central Beach	NEW AQUATICS CENTER	Design
11265	Central Beach	SOUTH BEACH PLAYGROUND	Cancelled
11677	Central Beach	INTRACOASTAL PROMENADE	Cancelled
11681	Central Beach	SR A1A STREETScape IMPROVEMENTS (WESTSIDE)	Design
11900	Central Beach	RIVER OAKS STORMWATER ANALYSIS	Construction
12065	Central Beach	777 BAYSHORE DR STORMWATER AND PARK IMPROVEMENTS	Construction
12094	Central Beach	SOUTH BEACH ELECTRICAL IMPROVEMENTS	Complete
12288	Central Beach	CENTRAL BEACH PARK IMPROVEMENT	Planning
12019	Coral Ridge	2625 NE 11TH COURT STORMWATER IMPROVEMENTS	Complete
12032	Coral Ridge	2771 NE 15TH STREET STORMWATER IMPROVEMENTS	Complete

**Legend**

**AAA Projects**

- Complete (5)
- Construction (2)
- Design (2)
- Project Initiation & Planning (1)
- Cancelled (2)

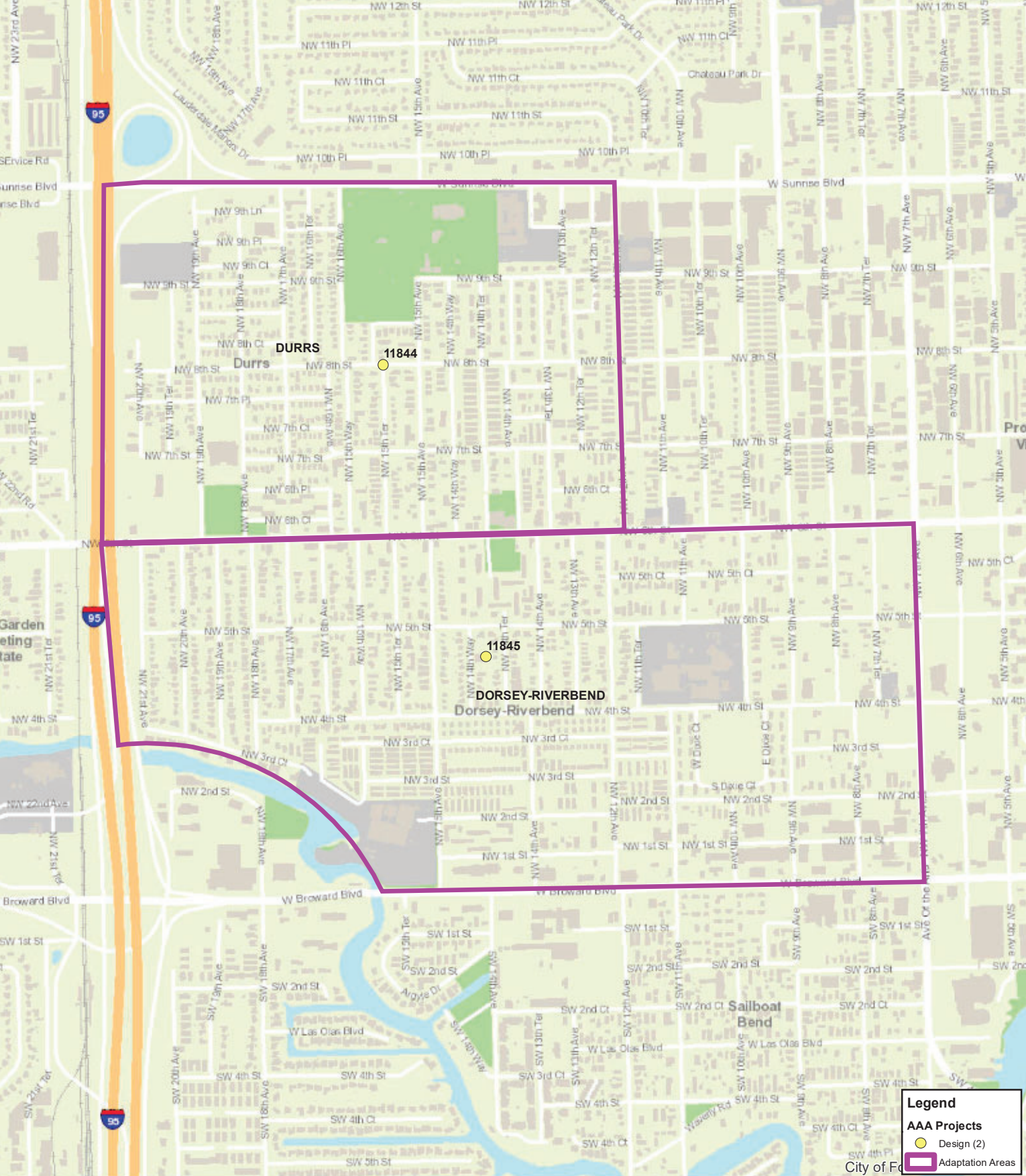
▭ Adaptation Areas



**Map #01**  
**FY 2020-2024**  
**Designated Adaptation Action Areas and Projects**  
**(June 2019)**

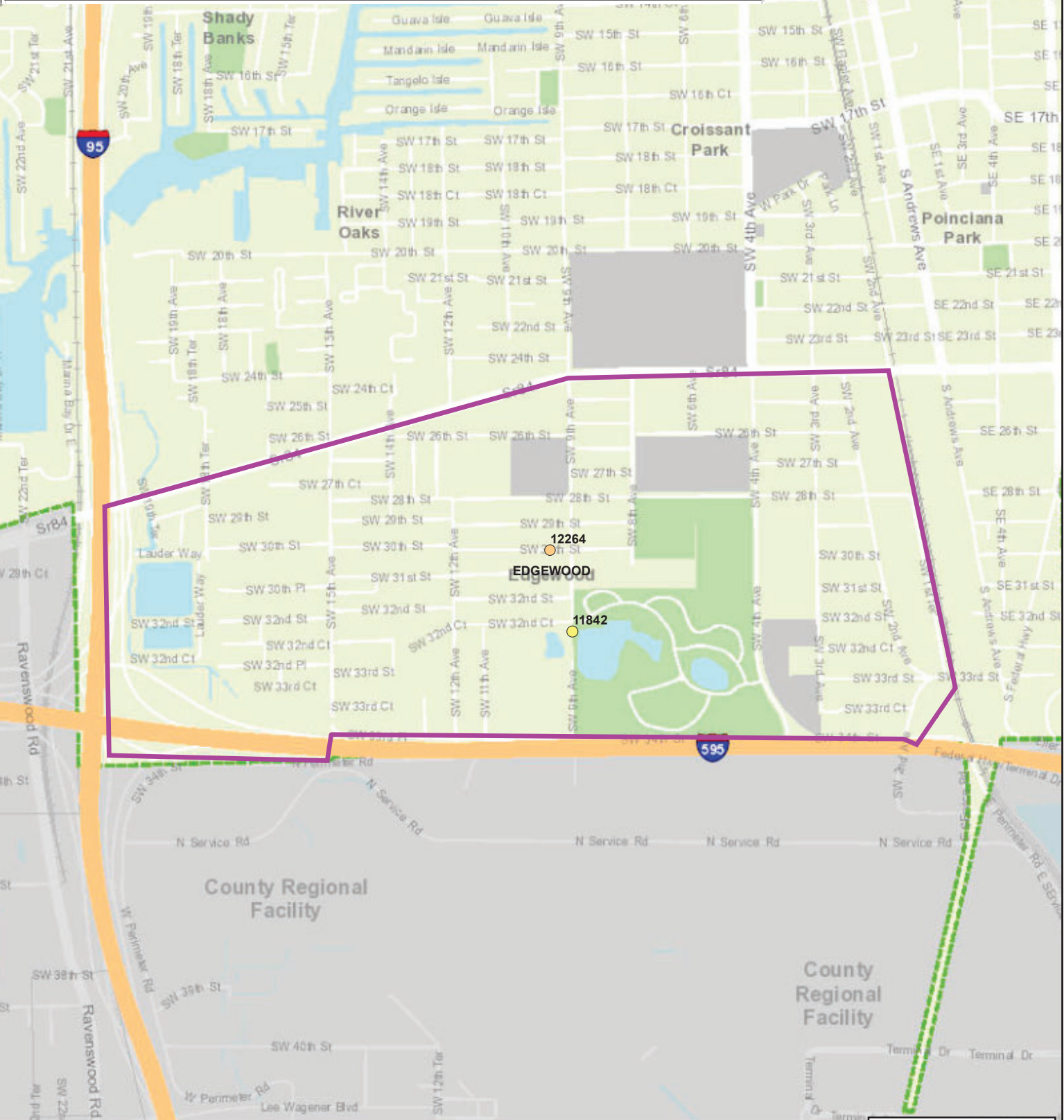
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Project #	AAA Location	Title	Status
11845	Dorsey-Riverbend	DORSEY RIVERBEND STORMWATER IMPROVEMENTS	Design
11844	Durrs	DURRS AREA STORMWATER IMPROVEMENTS	Design



**Map #02**  
**FY 2020-2024**  
**Designated Adaptation Action Areas and Projects**  
**(June 2019)**      FY 2020 - FY 2024 Proposed Community Investment Plan - 269

Project #	AAA Location	Title	Status
11842	Edgewood	EDGEWOOD STORMWATER PRELIMINARY DATA & REPORT	Design
12264	Edgewood	DRAINAGE CANAL DREDGING	Planning



**Legend**

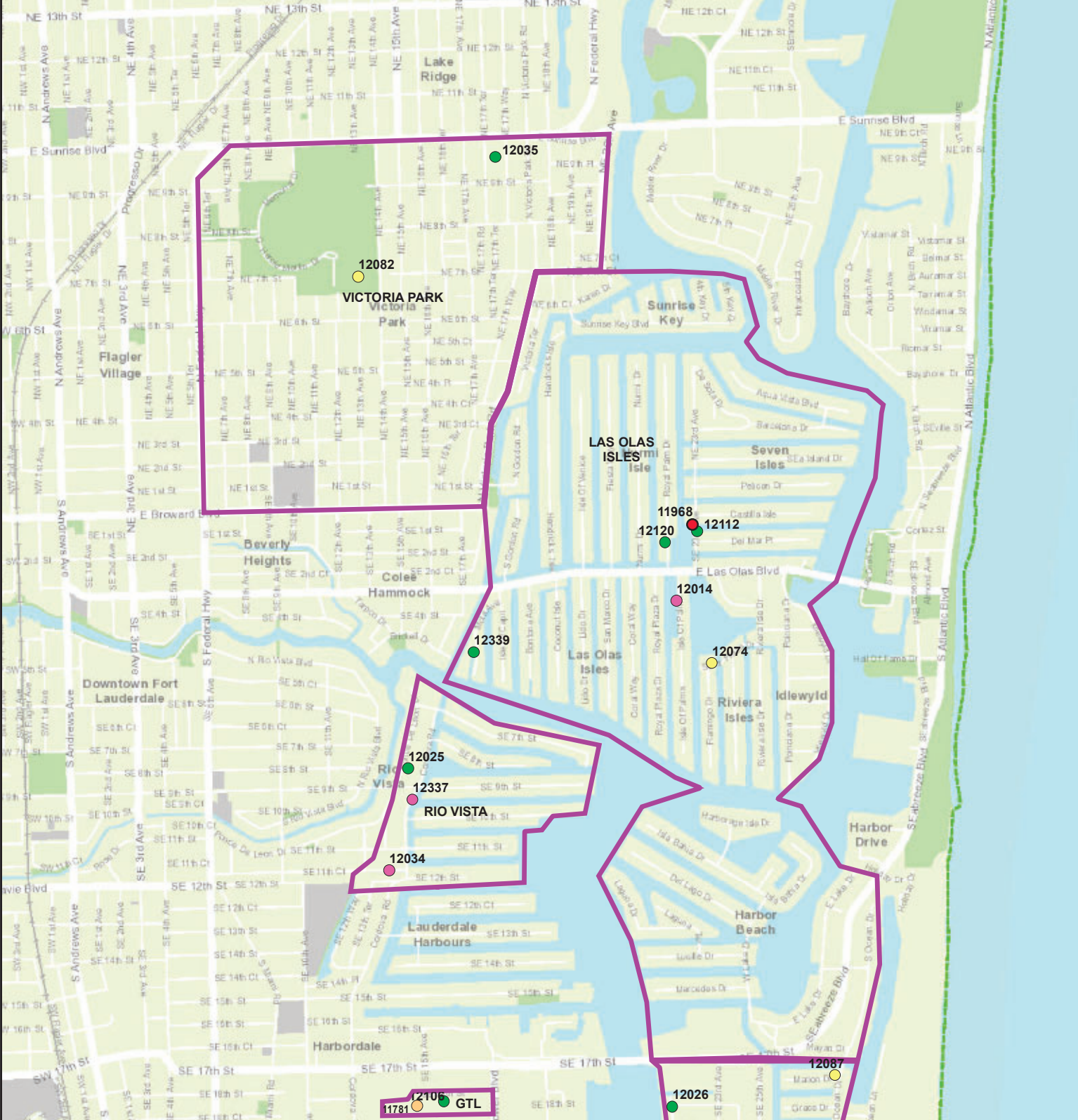
- AAA Projects
  - Design (1)
  - Project Initiation & Planning (1)
- Adaptation Areas



Map #03  
FY 2020-2024

Designated Adaptation Action Areas and Projects  
(June 2019)





Project #	AAA Location	Title	Status
11781	GTL	GT LOHMEYER WWTP CRYOGENIC PLANT UPGRADES	Planning
12106	GTL	GTL DRAINAGE SYSTEM	Complete
12026	Harbour Inlet	2100 SE 18TH STREET STORMWATER IMPROVEMENTS	Complete
12087	Harbour Inlet	BRIDGE REPLACEMENT AT SOUTH OCEAN DRIVE	Design
12014	Las Olas Isles	ISLE OF PALMS SEAWALL REPLACEMENT	Bidding
11968	Las Olas Isles	SEVEN ISLES SEAWALL IMPROVEMENTS	Cancelled
12074	Las Olas Isles	SOUTHEAST ISLES TIDAL AND STORMWATER IMPROVEMENTS	Design
12112	Las Olas Isles	GTL DRAINAGE SYSTEM	Complete
12120	Las Olas Isles	LAS OLAS ISLES, VENICE ISLES AND RIO VISTA STORMWATER AND TIDAL CONTROL	Complete
12339	Las Olas Isles	MOLA DRIVE SEAWALL REPAIR	Complete
12025	Rio Vista	1436 PONCE DE LEON DR STORMWATER IMPROVEMENTS	Complete
12034	Rio Vista	1416 SE 11 COURT STORMWATER IMPROVEMENTS	Bidding
12337	Rio Vista	CORDOVA ROAD SEAWALL REPAIR / REPLACEMENT	Bidding
12035	Victoria Park	1000 NE 17TH WAY STORMWATER IMPROVEMENTS	Complete
12082	Victoria Park	VICTORIA PARK STORM NEIGHBORHOOD IMPROVEMENTS	Design

**Legend**

**AAA Projects**

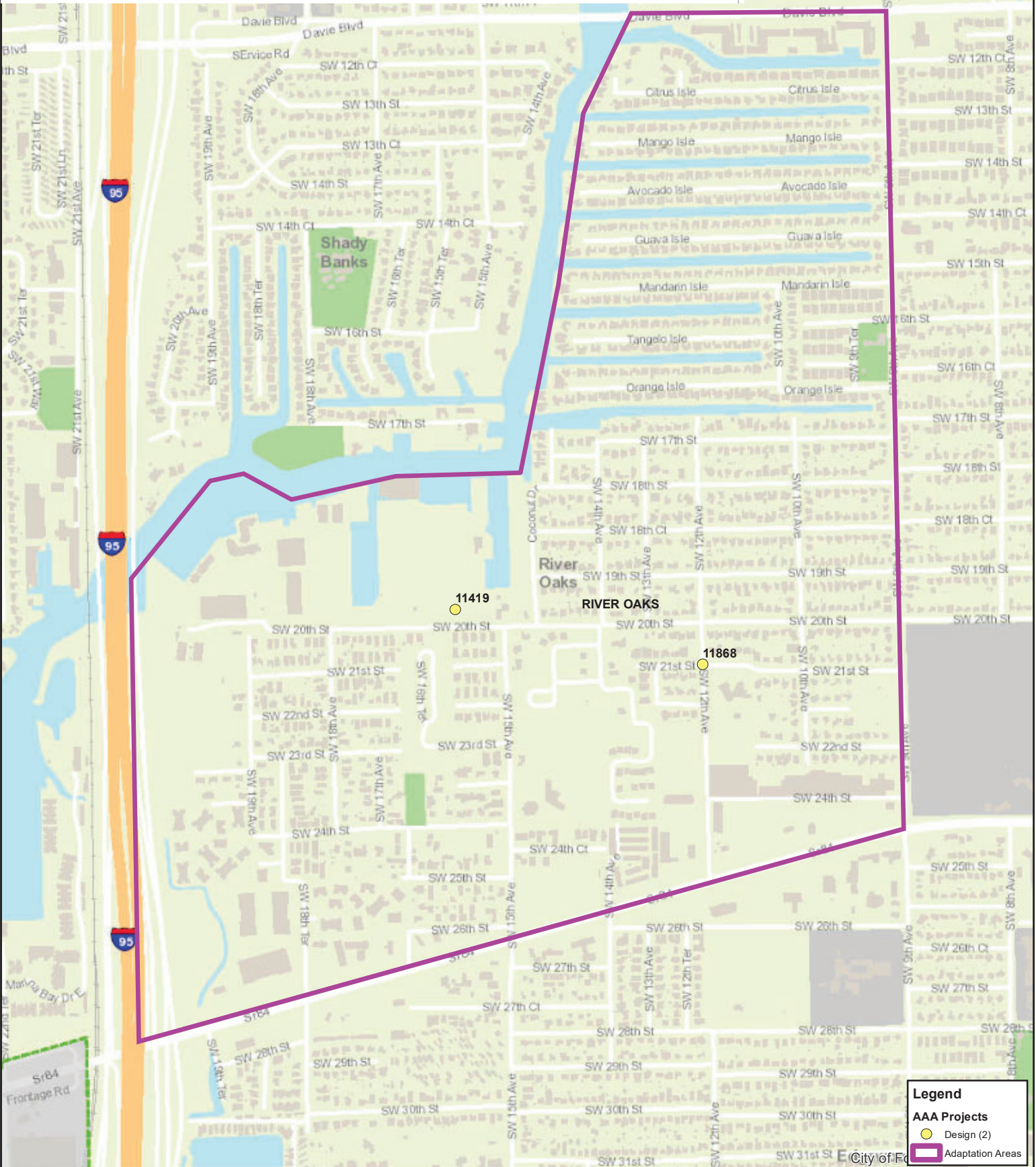
- Complete (7)
- Design (3)
- Bidding (3)
- Project Initiation & Planning (1)
- Cancelled (1)
- ▭ Adaptation Areas



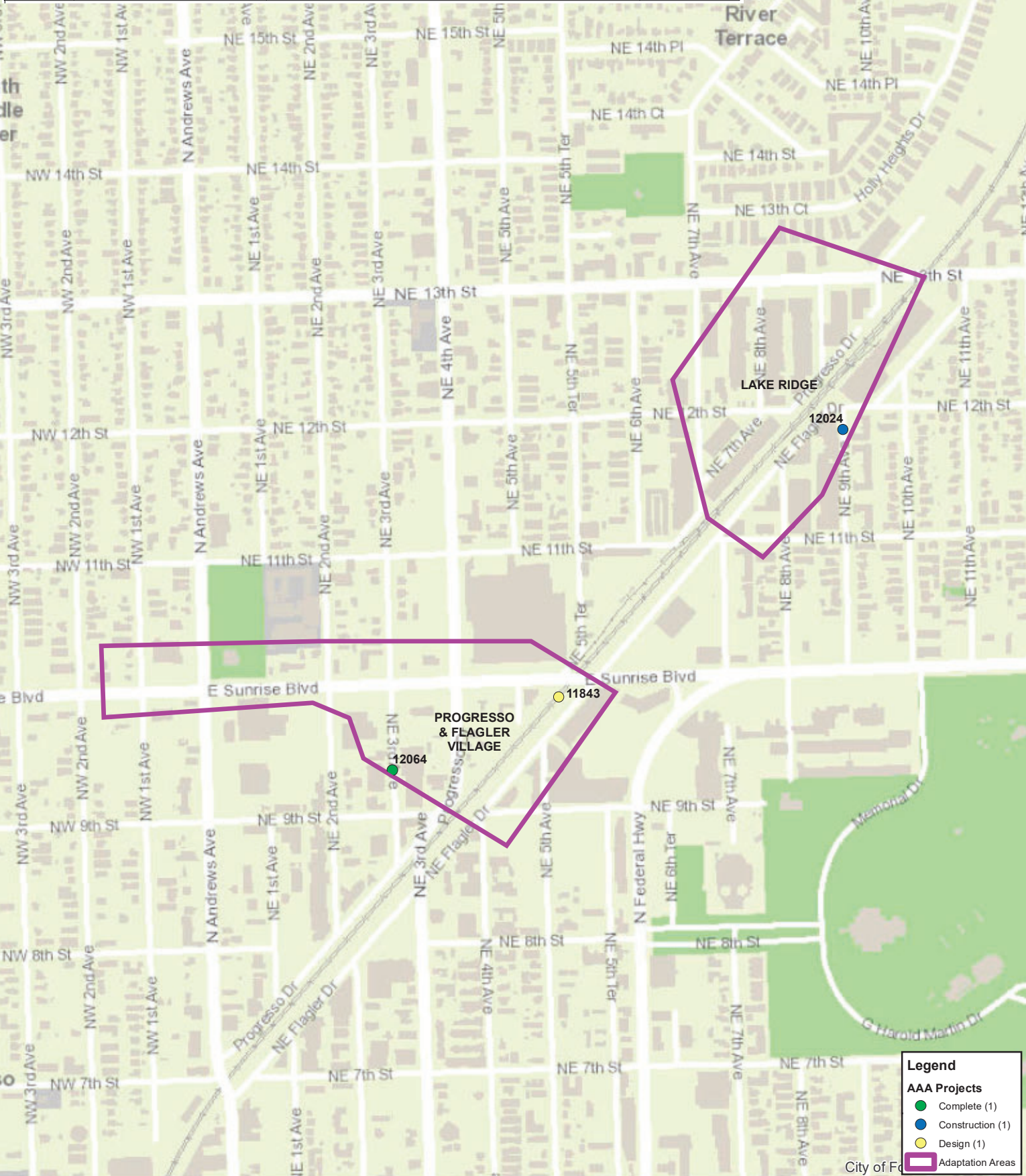
**Map #04**  
**FY 2020-2024**  
**Designated Adaptation Action Areas and Projects**  
**(June 2019)**

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Project #	AAA Location	Title	Status
11419	River Oaks	RIVER OAKS STORMWATER PARK	Design
11868	River Oaks	RIVER OAKS STORMWATER ANALYSIS	Design



Project #	AAA Location	Title	Status
12024	Lake Ridge	1137 NE 9TH AVENUE STORMWATER IMPROVEMENTS	Construction
11843	Progresso & Flagler Village	PROGRESSO STORMWATER IMPROVEMENTS	Design
12064	Progresso & Flagler Village	915 NE 3RD AVE STORMWATER IMPROVEMENTS	Complete

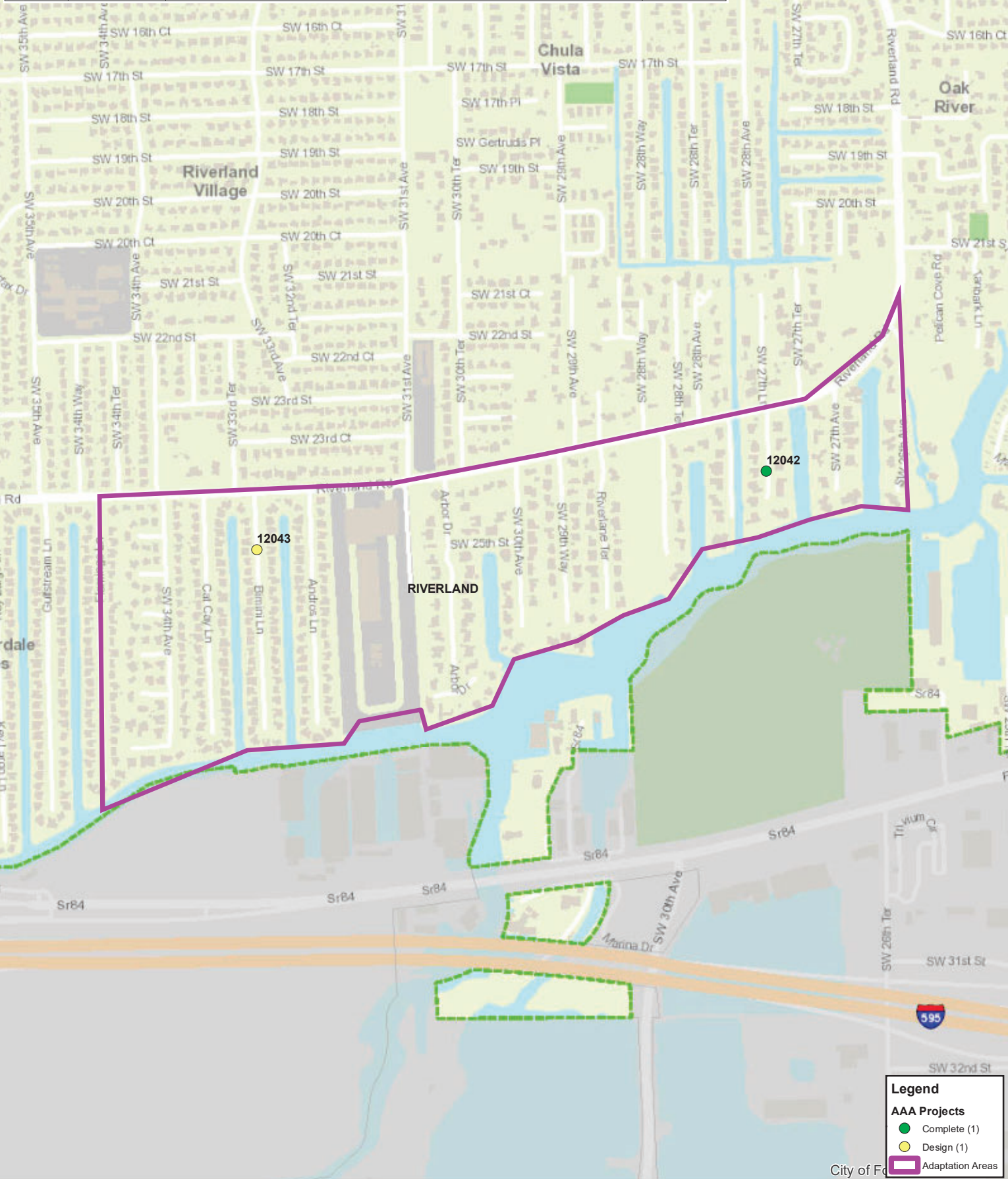


**Legend**

- AAA Projects
- Complete (1)
- Construction (1)
- Design (1)
- Adaptation Areas

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Project #	AAA Location	Title	Status
12042	Riverland	2365 SW 27 TERRACE AND RIVERLAND ROAD STORMWATER IMPROVEMENTS	Complete
12043	Riverland	2449 BIMINI LANE STORMWATER IMPROVEMENTS	Design



**Legend**

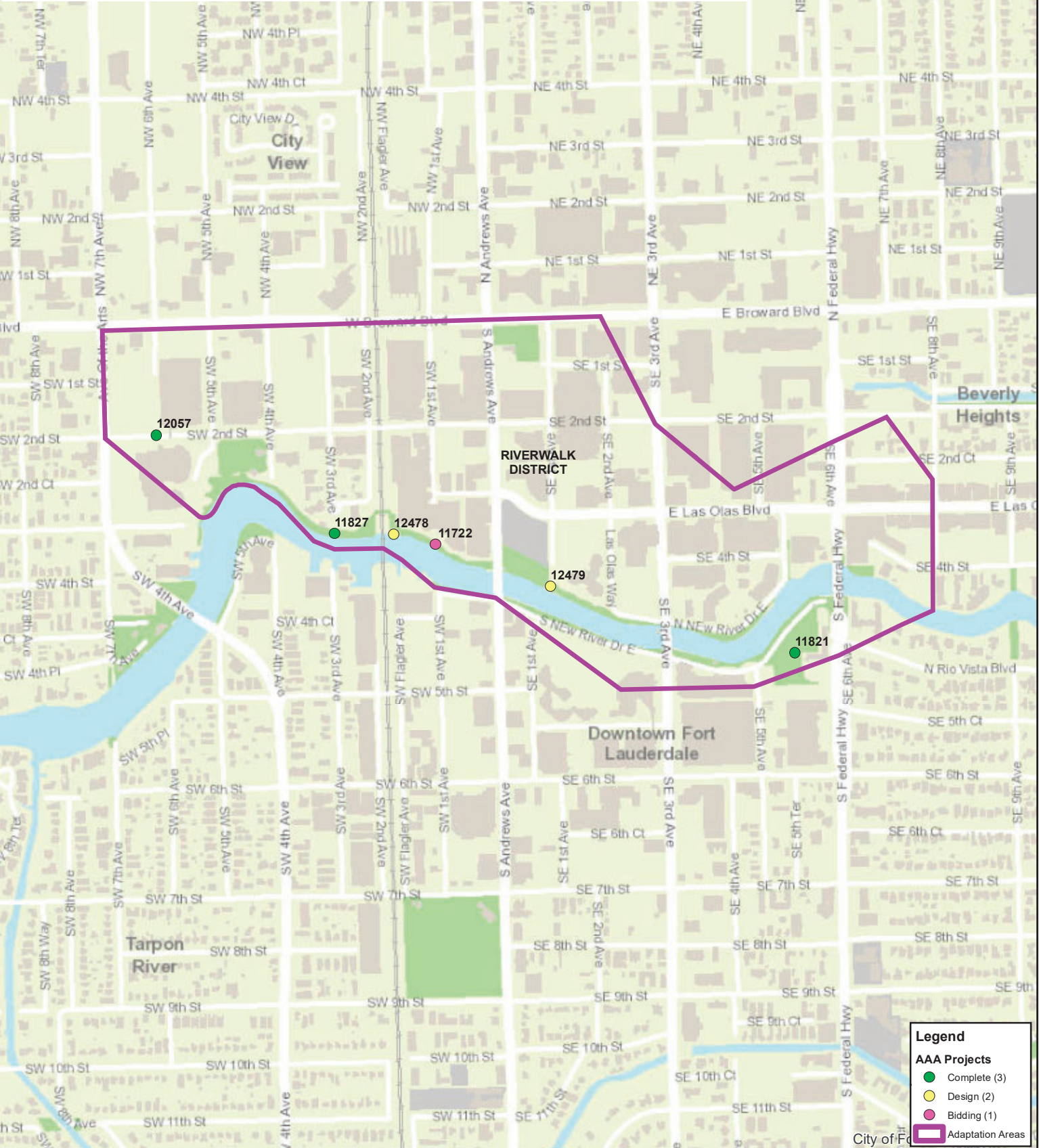
- AAA Projects
  - Complete (1) ●
  - Design (1) ●
- Adaptation Areas



Map #07  
 FY 2020-2024  
 Designated Adaptation Action Areas and Projects  
 (June 2019)

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Project #	AAA Location	Title	Status
11722	Riverwalk District	RIVERWALK SEAWALL REPLACEMENT NORTHSIDE	Bidding
11821	Riverwalk District	SMOKER PARK, NORTH RIVERWALK & ESPLANADE PARK ELECTRICAL IMPROVEMENTS	Complete
11827	Riverwalk District	SEAWALL REPLACEMENT ALONG NEW RIVER	Complete
12057	Riverwalk District	2505 RIVERLAND TERRACE STORMWATER IMPROVEMENTS	Complete
12478	Riverwalk District	STORMSTATION 1 FIXED EMERG GENERATORS	Design
12479	Riverwalk District	STORMSTATION 2 FIXED EMERG GENERATORS	Design



**Legend**

- AAA Projects
- Complete (3)
- Design (2)
- Bidding (1)
- Adaptation Areas



**Map #08**  
**FY 2020-2024**  
**Designated Adaptation Action Areas and Projects**  
**(June 2019)**

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Project #	AAA Location	Title	Status
12022	Sailboat Bend	700-1000 WEST LAS OLAS BOULEVARD STORMWATER IMPROVEMENTS	Construction
12031	Sailboat Bend	500 BLOCK SW 9TH TERRACE STORMWATER IMPROVEMENTS	Construction



**Legend**

- AAA Projects
- Construction (2)
- Adaptation Areas



Map #09  
FY 2020-2024

Designated Adaptation Action Areas and Projects  
(June 2019)

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