RESILIENCY OPEN HOUSE

WE ARE READY

We are a resilient and safe coastal community.



Tuesday, January 29, 2019

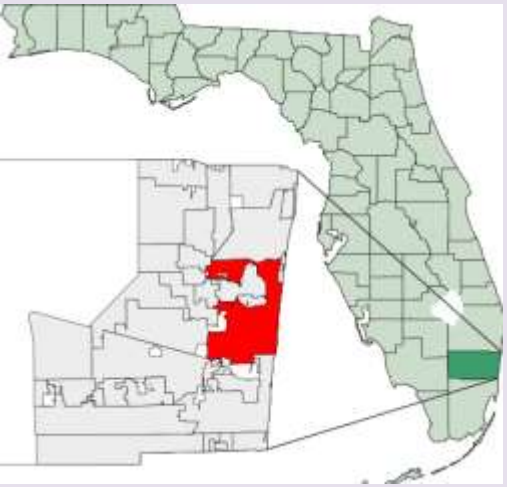
6:00 – 6:45 p.m. | See presentations on resiliency initiatives

6:45 – 7:30 p.m. | View displays, ask questions

City Hall, 1st floor Commission Chambers

100 North Andrews Avenue | Fort Lauderdale, FL 33301

Our Community



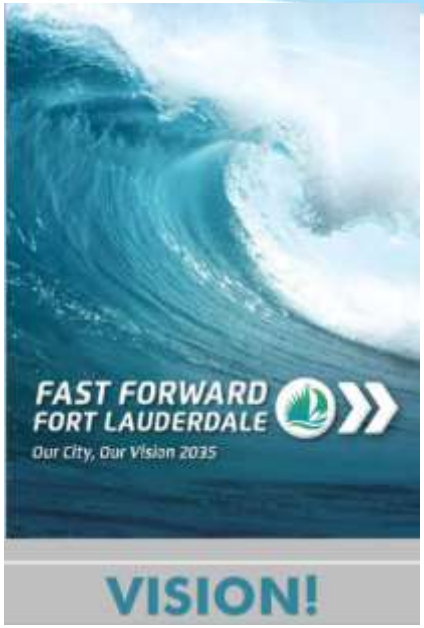


Area: 38.6 sq miles
Land: 34.7 sq miles
Water: 3.8 sq miles
Waterways: 165 miles

2018 Population: 182,827
2017 Visitors: 12.83 million
2017 Just Value Property: $49.2 Billion

"The Place You Never Want to Leave"

Our Vision



Implementation

PRESS PLAY
FORT LAUDERDALE
Our City, Our Strategic Plan 2018



G2 GOAL 2: Be a sustainable and resilient community.

Fort Lauderdale's roadways and bridges, water and wastewater systems, and drainage infrastructure will be more structurally sustainable to meet the needs of current and future generations. This will make our City increasingly resilient to inclement weather, high-tides, future water demands, and a growing population. Our community will utilize sustainable construction techniques and efficiencies to blend buildings with the natural environment, and increase recycling practices to minimize our environmental impact.

- Proactively maintain our water, wastewater, road and bridge infrastructure
- Reduce flooding and adapt to sea level rise
- Improve climate change resiliency by incorporating local, regional and mega-regional plans
- Reduce solid waste disposal and increase recycling
- Improve air and water quality and our natural environment
- Secure our community's water supply

DEFINING URBAN RESILIENCE

Resilience is about **surviving and thriving**, regardless of the challenge.

The ROCKEFELLER FOUNDATION

*Urban **resilience** is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.*







City Resilience Index





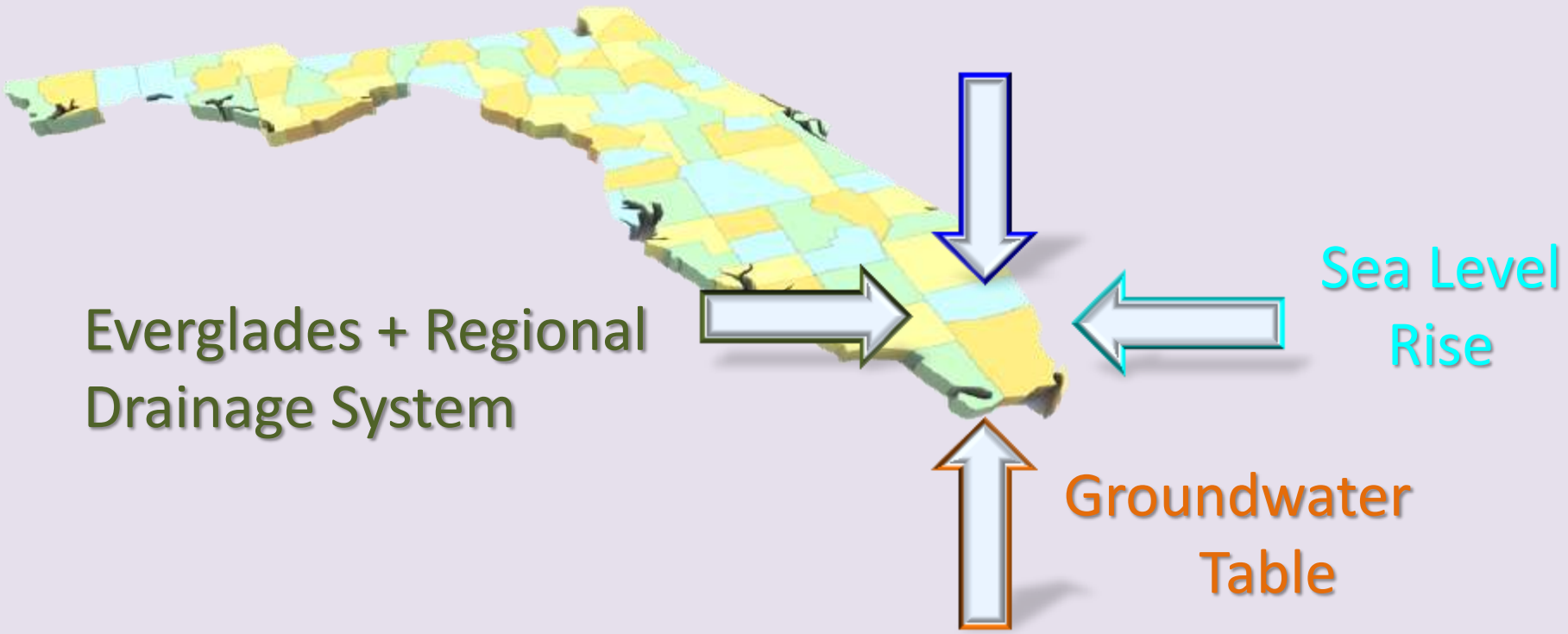
The Resilience of a City Relates to:

- Leadership and Strategy
- Health and Well Being
- Economy and Society
- Infrastructure and Ecosystems

https://assets.rockefellerfoundation.org/app/uploads/20160201132303/CRI-Revised-Booklet1.pdf

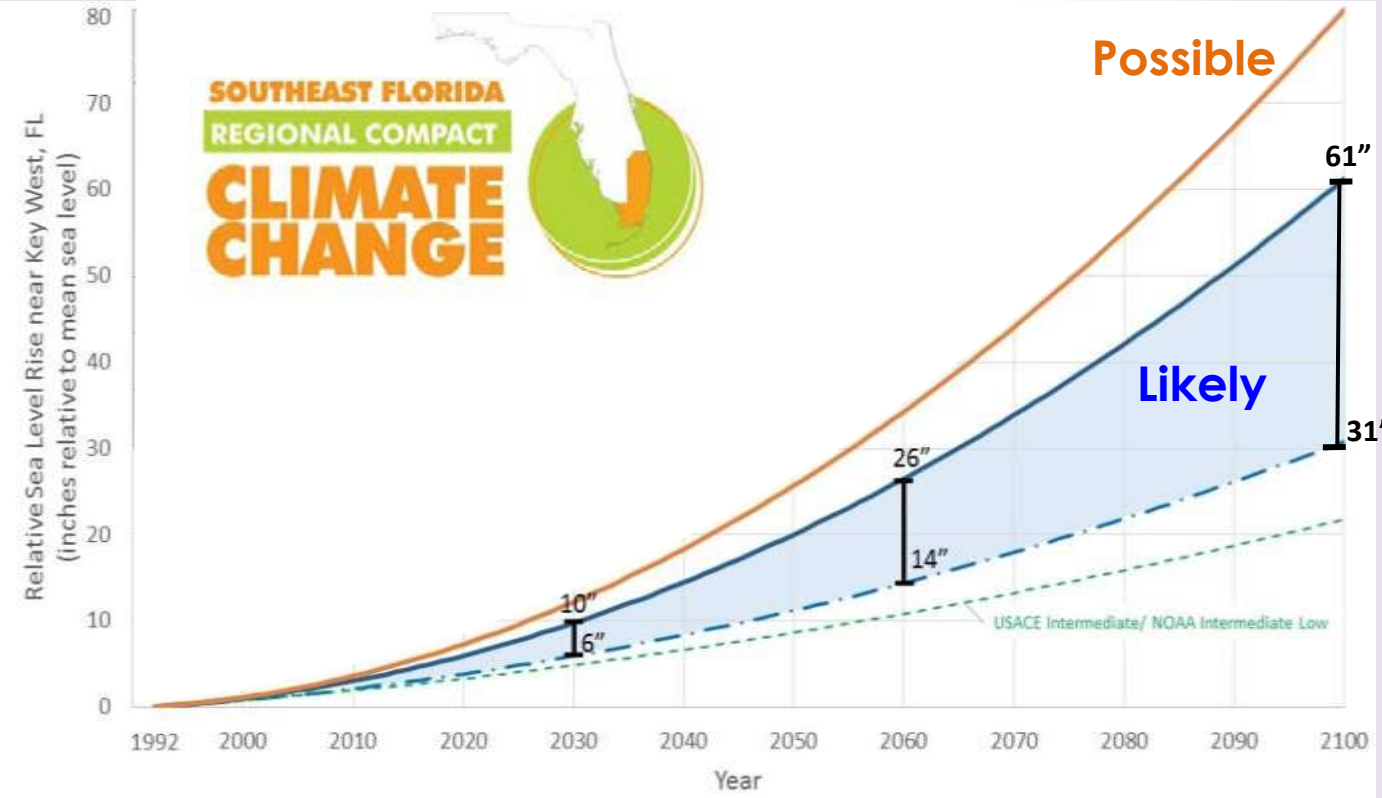
CAM #21-0883
Appendix 3-11B
Page 6 of 43

Stressors and Shocks



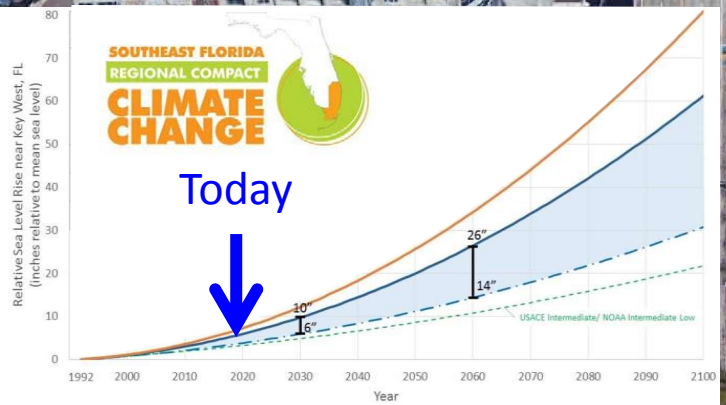
Projecting Sea Level Rise

2015 Unified Sea Level Rise (SLR) Projection for SE FL



- 3" SLR since 1992
- 2030: 6-10" SLR
- 2060: 14-26"
- Orange line for long term projects with low risk tolerance (2060: 34")

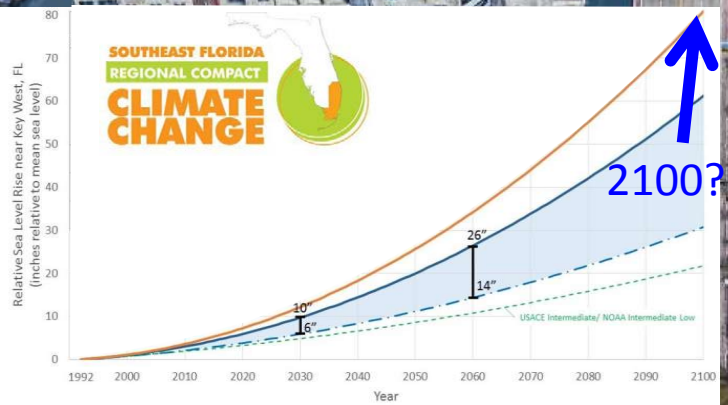
Fort Lauderdale – VENICE OF AMERICA



Downtown

© 2018 Google

Fort Lauderdale's Future Without Climate Action



Downtown 2100

© 2018 Google

A Culture of Resiliency

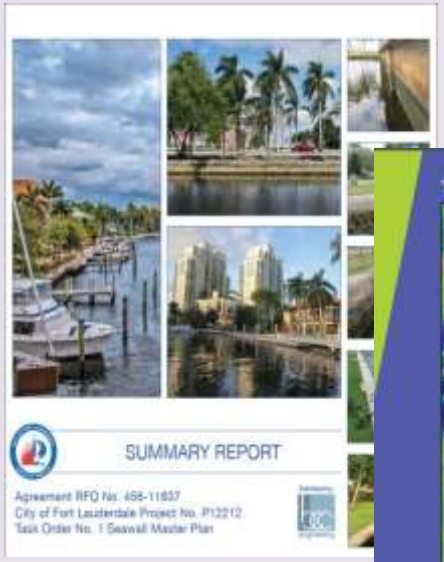


WE ARE READY

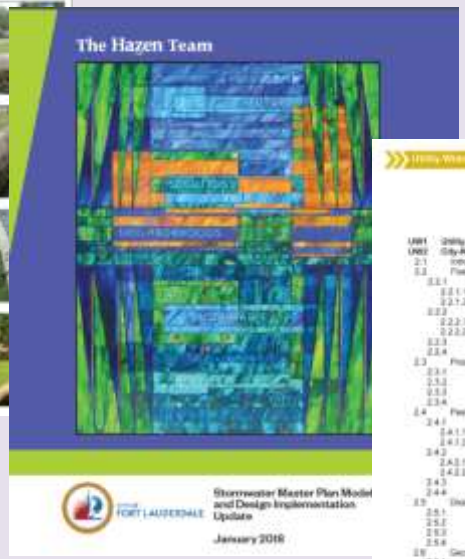
We are a resilient and safe coastal community.

Master Planning for Resiliency

Seawalls



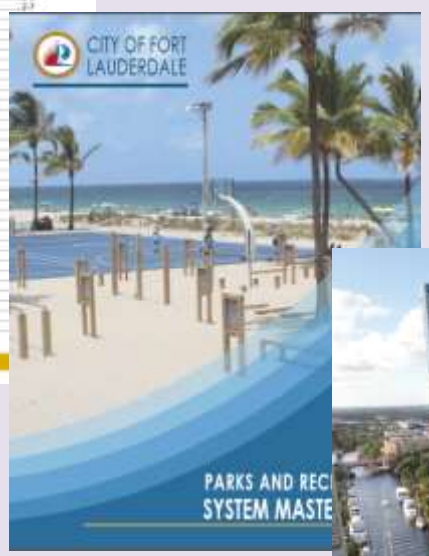
Stormwater



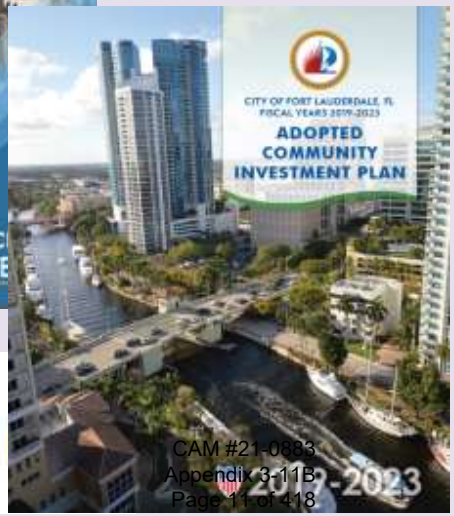
Utilities



Parks



Investments in Resiliency



WE ARE READY

We are a resilient and safe coastal community.

Partners in Resiliency



BROWARD COUNTY FLORIDA

SOUTHEAST FLORIDA REGIONAL COMPACT CLIMATE CHANGE

Council of Fort Lauderdale Civic Associations, Inc.
PO Box 30106
Fort Lauderdale FL 33303

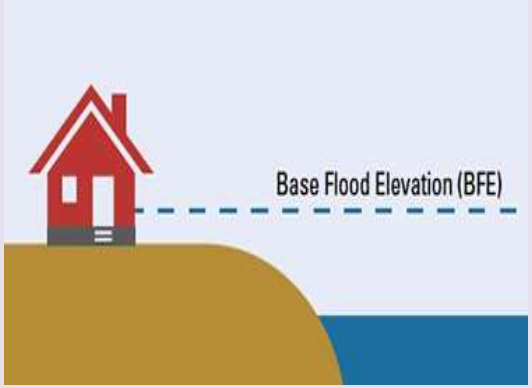
GREATER FORT LAUDERDALE CHAMBER OF COMMERCE
EXPERIENCE. BETTER. BUSINESS.

FAU FLORIDA ATLANTIC UNIVERSITY

Planning for Resiliency



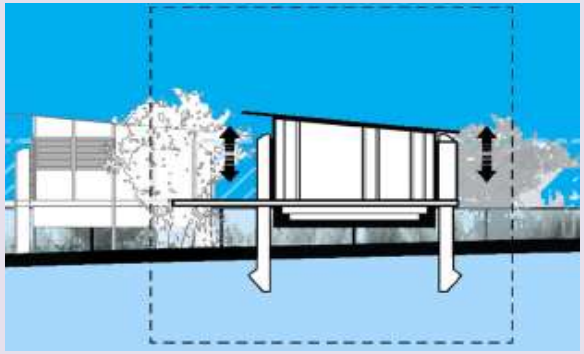
Planning for Resiliency



Adopted Regulations and Plans Related to Resilience

- Floodplain Ordinance (DSD - Floodplain Division)
- Seawall Ordinance (DSD - Building Department)
- Florida Friendly Landscape Code (DSD – Landscape Div.)
- Adaptation Action Areas adopted in Comprehensive Plan and Community Investment Plan (Public Works)
- NEA Botanizing North Beach Village (FAU and DSD – UDP Division)
- NOAA Sea Grant ADaPT Project (FAU and DSD – UDP Division)
- Technical Assistance Panel Studies - Riverwalk and Uptown Urban Village (ULI)





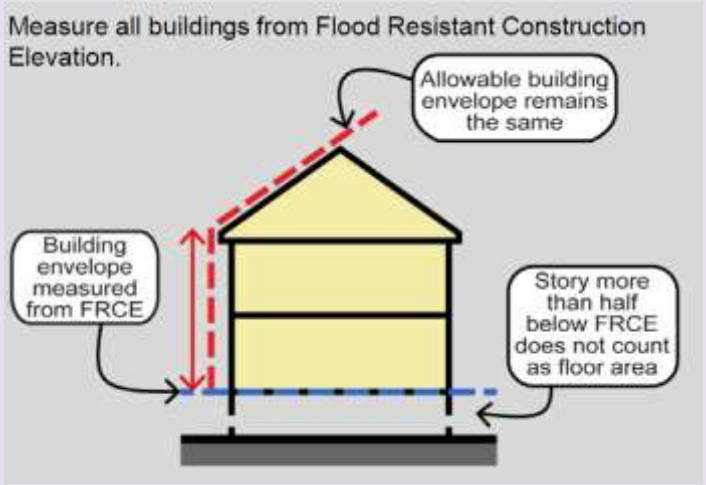


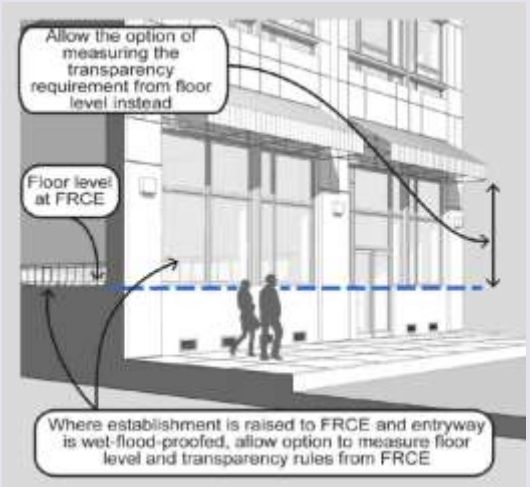
Proposed Resiliency Regulations

Proposed Regulations related to Resilience

- **Cool roof ordinance** (Public Works/Sustainability Department)
- **Consider maximum freeboard requirement without penalty for height** (DSD - Urban Design and Planning)
- **Review pervious areas requirements in zoning districts** (Public Works/ Sustainability Department and DSD- Urban Design and Planning)







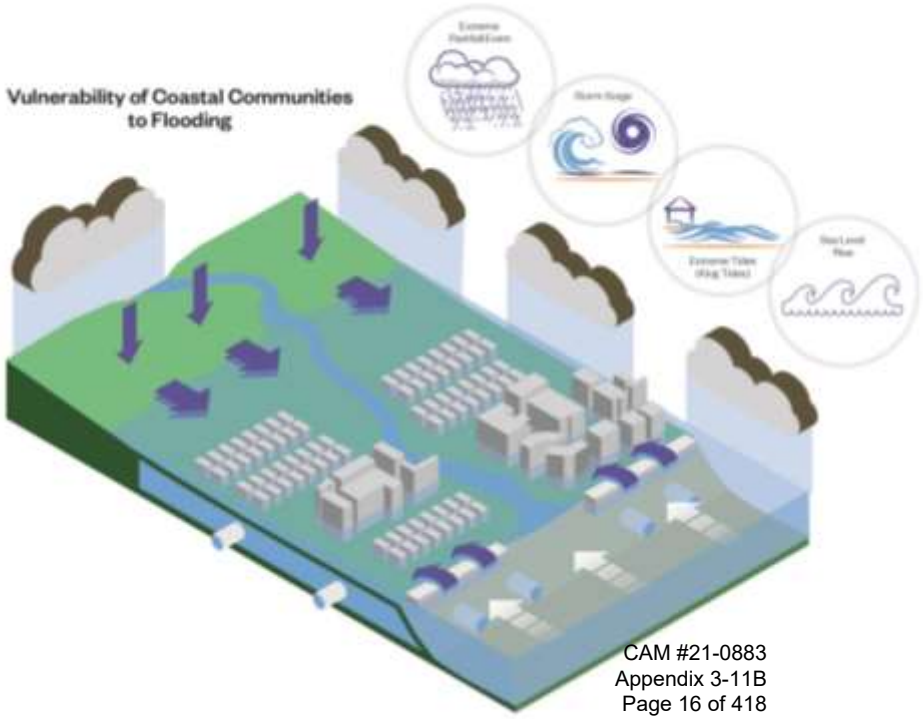
Studying Resiliency

Pending Resilience Study- Climate Vulnerability Assessment (DSD - Floodplain Management)

- FDEP Florida Resilient Coastlines Program Funding

- Conduct vulnerability assessment to identify entities at risk from sea level rise, storm surge, and other climate change-related impacts
  - Population groups
  - Socioeconomic indicators
  - Public investments
  - Infrastructure
  - Natural systems





Comprehensive Plan Update – Climate Change Element

- Reduce city-operation production of GHGs 80% by 2050.
- Develop new green building standards ordinance.
- Reduce fossil fuel use by 20% in city fleet by 2025.
- Encourage a mix of uses in development to reduce vehicle miles travelled.
- Enhance pedestrian and bicycle infrastructure.
- Expand tree canopy to 23.6% by 2025.
- Utilize blue-green (waterways and open space) infrastructure in public right of way.







Comprehensive Plan Update

Historic Preservation Element

- Develop a climate and environment resiliency program for historic and archaeological resources based on susceptibility to climate and environmental change/events.

Parks and Recreation Element

- Create a plan and prioritize specific parks in which to install renewable energy infrastructure (e.g. solar panels).
- Incorporate sustainable building and Florida Friendly landscaping design for all parks and recreation facilities (including retrofitting and/or renovation projects).

Infrastructure

- Reduce risks related to sea level rise and climate change in the City's water, sewer, and stormwater infrastructure.







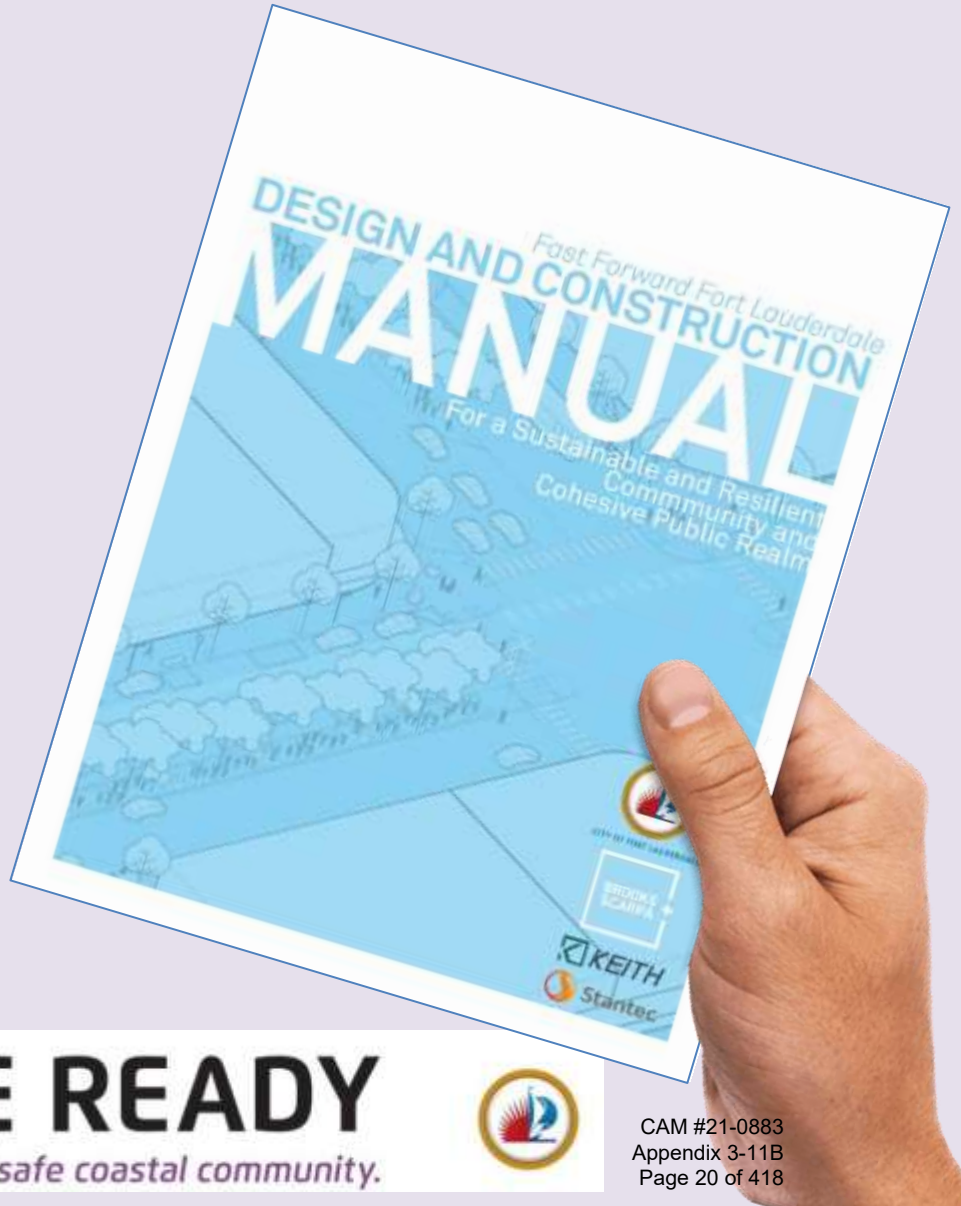
Designing for Resiliency



Design Manual

In 2017, the City began development on a community-wide manual to address sustainability and resiliency for projects in the public realm.

Fast Forward Fort Lauderdale Design and Construction Manual



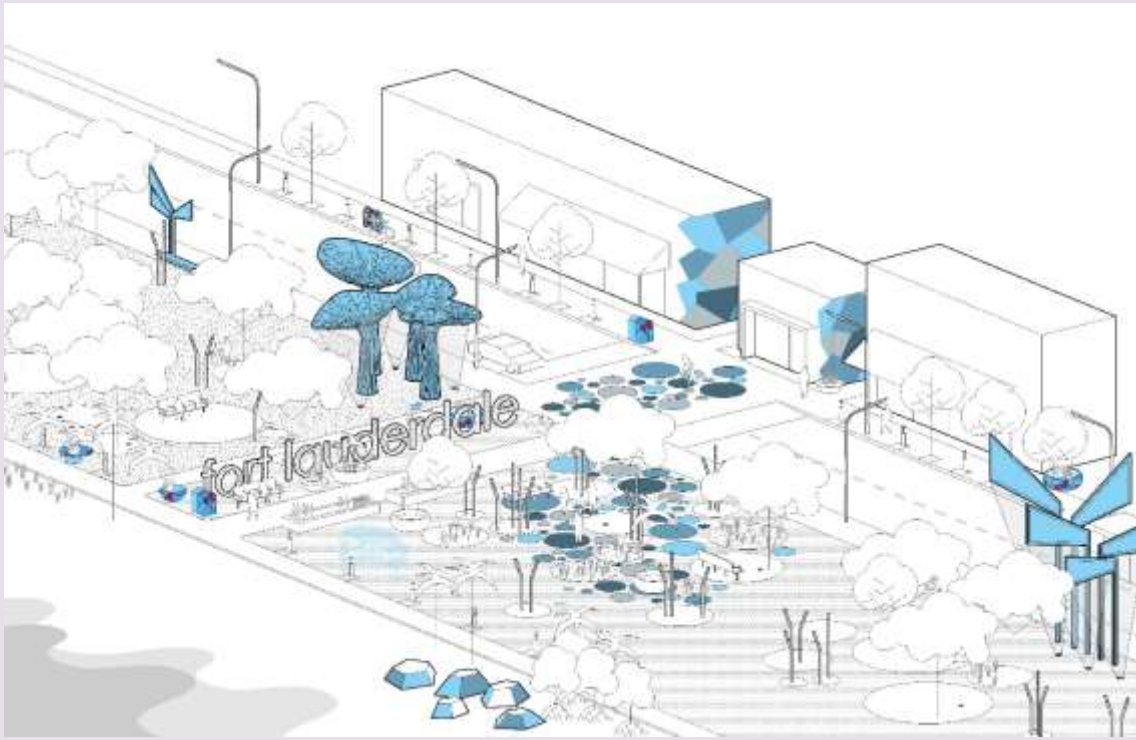
WE ARE READY

We are a resilient and safe coastal community.

Design Manual

The manual will be completed Summer 2019 and complements City goals by establishing a design framework that:

1) Celebrates our uniqueness of “place”
2) Promotes healthy and active lifestyles
3) Designs for increased flooding and climate change adaptation



WE ARE READY

We are a resilient and safe coastal community.

Building for Resiliency



Building for Resiliency



Building for Resiliency

Resiliency is built into everything we do:

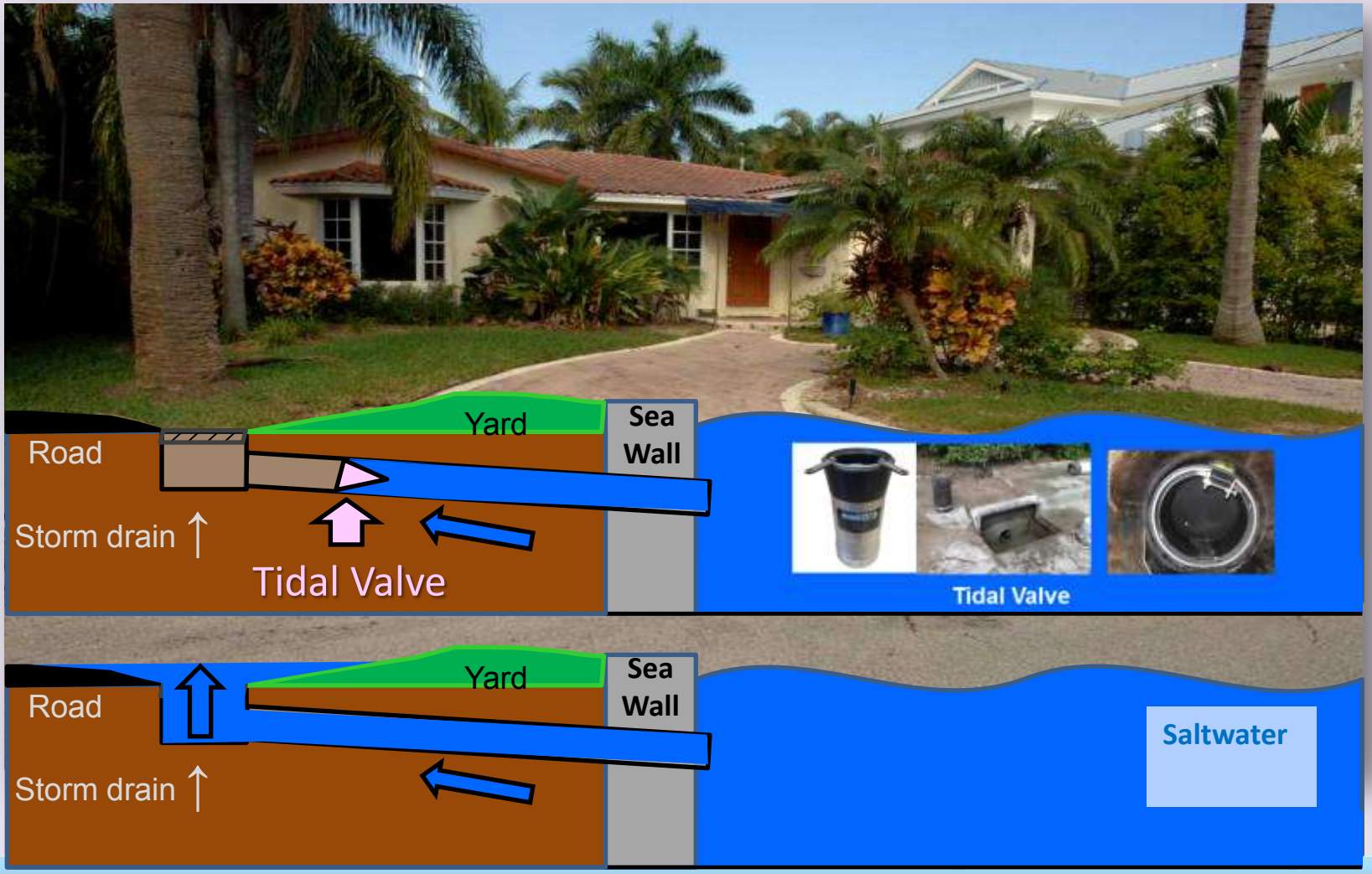
- **Adopted master plans**
- **Citywide asset management tools**
- **Stormwater CIP and operational projects**
- **Inflow/infiltration (I/I) investments**
- **Construction methods and materials**
- **Critical structure elevations**





We are already seeing results!

Tidal valves: over 160 installed (and >100 more planned)



Tidal Valves

SW 27th Terrace: new tidal valve and drainage system



Before



After

Tidal Valves

Bayshore Drive: new tidal valves (>1,000 benefitting parcels)



Before



After

Stormwater Master Plan

Phase II design plans complete for seven high-priority neighborhoods:

BROWARD COUNTY FLORIDA

Environmental Protection and Growth Management Department
ENVIRONMENTAL ENGINEERING AND PERMITTING DIVISION
Water and Environmental Licensing Section
1 North University Drive, Mailbox 201, Plantation, Florida 33324
Phone * 954-519-1483 Fax * 954-519-1412

December 04, 2018

City of Fort Lauderdale
Attention: Rares Petrica
100 N Andrews Ave
Fort Lauderdale, FL 33301

RE: Fort Lauderdale Stormwater Master Plan Conceptual
City of Fort Lauderdale, S/T/R (01-50-42)

This is to notify you of the Environmental Protection and Growth Management Department's (EPGMD) action concerning your application received 04/16/2018. The application has been reviewed for compliance with the following requirements:

ERP Review - GRANTED

EPGMD has the authority to review the project for compliance with the provisions of Chapter 373, Part IV, Florida Statutes pursuant to an agreement between EPGMD, DEP and the SFWMD. The agreement is outlined in a document entitled "DELEGATION AGREEMENT AMONG THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT, AND BROWARD COUNTY."

Based on the information submitted, Environmental Resource Permit No. 06-80003-P was issued on 12/04/2018.

Should you object to the conditions of the Environmental Resource Permit, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the attached "Notice of Rights", we will assume you concur with the action taken by EPGMD.

Broward County Surface Water Management Review - GRANTED

EPGMD has reviewed the project for compliance with the Surface Water Management requirements of Chapter 27, Article V Sec. 27-191 through 27-202 of the Broward County Code.

Based on the information submitted, Surface Water Management License No. SWM2018-081-0 was issued on 12/04/2018. The above named licensee is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents and specifications, as submitted by licensee, and made a part hereof.

Please be advised that no Certificate of Occupancy can be issued on this project until released, in writing, by all EPGMD divisions as required. Such release will be pending approval of any engineering certifications required by specific condition No. 15.

The above referenced approvals will remain in effect subject to the following:

1. Not receiving a filed request for a Chapter 120, Florida Statutes administrative hearing;
2. the attached SFWMD General Conditions;
3. the attached SFWMD Special Conditions;
4. the attached Broward County General Conditions;
5. the attached Broward County Specific Conditions;
6. the attached 17 exhibits.

Issuance of the above referenced Broward County license(s) constitutes a final agency determination. A person with a substantial interest may file a petition to request review of or to intervene in a review of a final administrative determination, subject to the provisions of Section 27-14, Broward County Code of Ordinance.

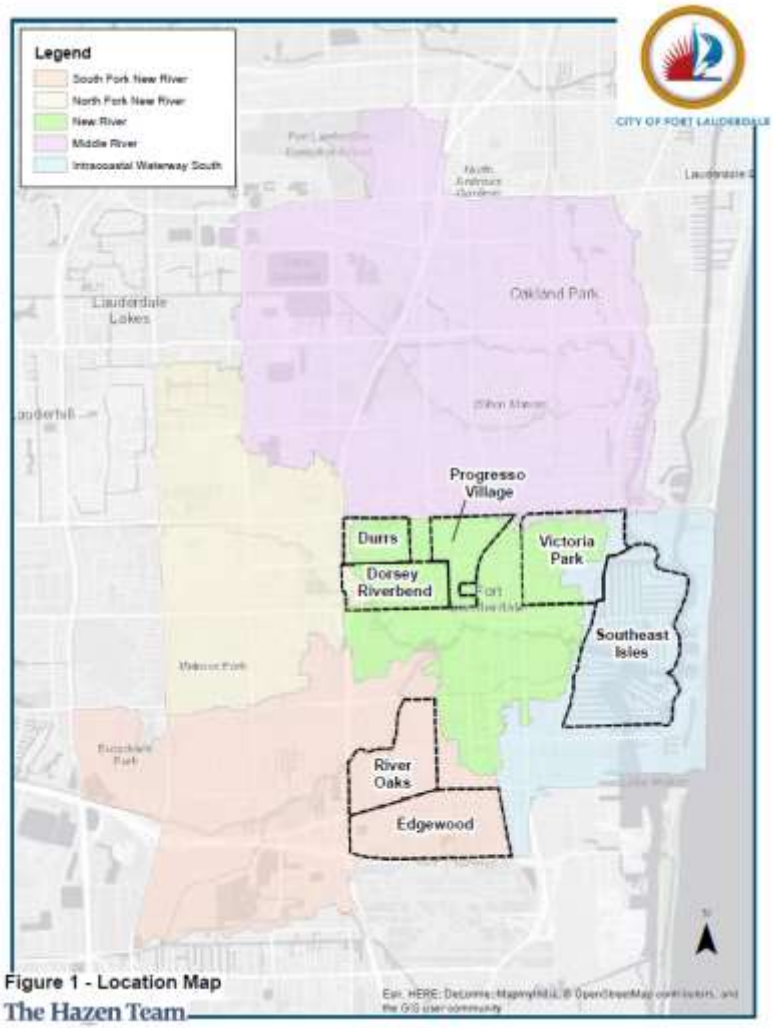


Figure 1 - Location Map

The Hazen Team

EXHIBIT - 1

Stormwater Master Plan

Phase II design plans complete for seven high-priority neighborhoods:



D-01 Water Quality
(through Dorsey Riverbend)

Discharge Point ID	Type of Discharge	Do the proposed improvements increase the amount of discharge at this point? (Y/N)	Total Length of New/Restored Swales (ft)	Total WQ Swale Treatment (acres)	Total Length of Proposed Infiltration (acres)	Total WQ Treatment Provided for Discharge (acres)
D-01	Outfall via Dorsey Riverbend	Y	3624	1.0	3524	3.6

Durrs Water Quality Treatment for Discharge

- Catch Basin
- Manhole
- Outfall
- Water Quality Structure
- Backflow Preventers
- Drainage Wells
- Pump Stations
- Exfiltration Trench
- Storm Sewer

New/Restored Swale

- D-01 Swales
- Permeable Pavement
- Canal Improvements
- Created Wetland
- Durrs Neighborhood Boundary
- Parcel

N

EXHIBIT - 10

Public Seawalls

Public seawall projects:

- Isle of Palm (May 2019)
- Cordova Road (July 2019)
- Ten additional segments to replace/elevate with Stormwater Phase II

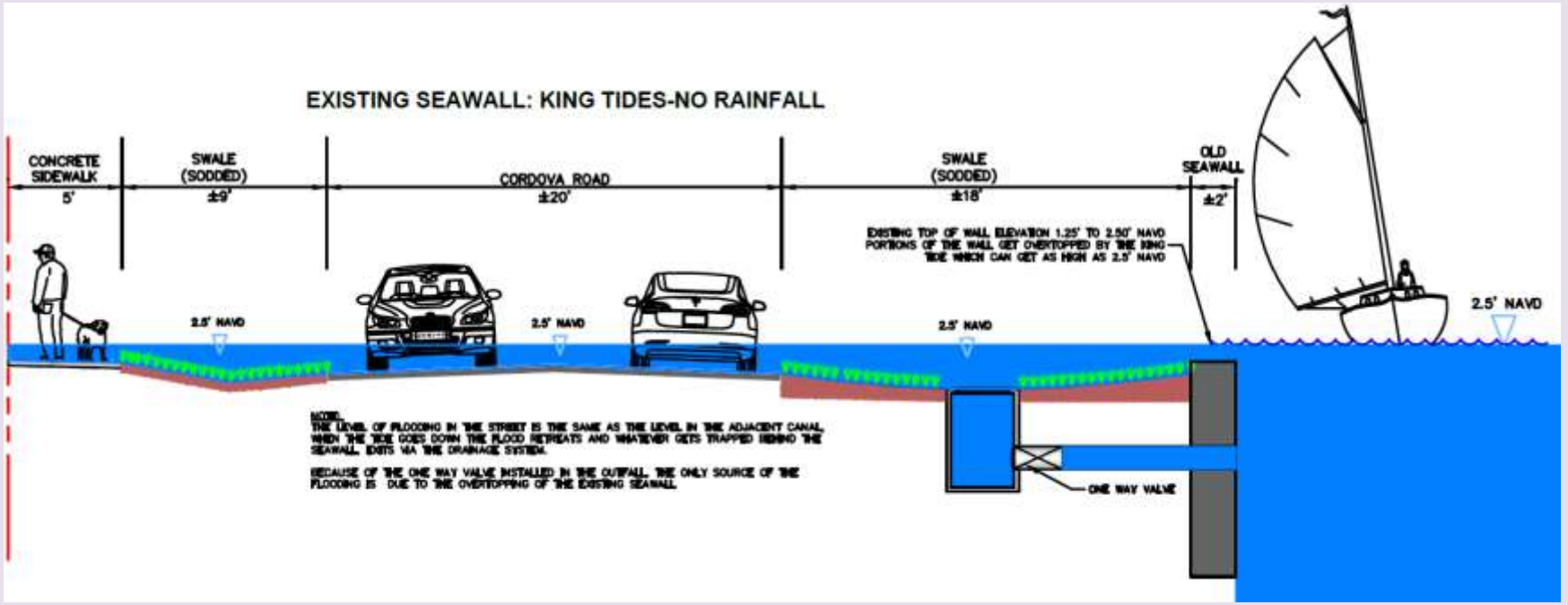


Before and after renderings during King Tide for the proposed Cordova Road seawall replacement project

Public Seawalls

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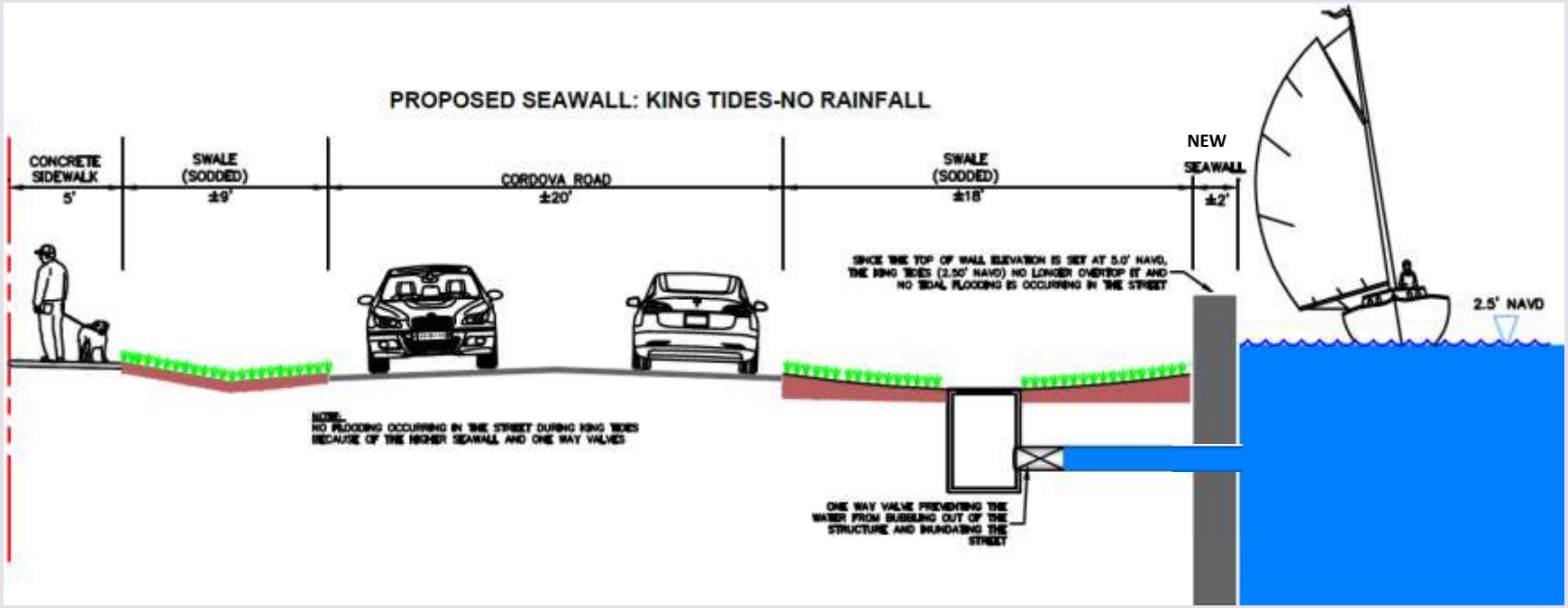


Before and after renderings during King Tide for the proposed Cordova Road seawall replacement project

Public Seawalls

Public seawall projects:

- Isle of Palm (May 2019)
- Cordova Road (July 2019)
- Ten additional segments to replace/elevate with Stormwater Phase II



Before and after renderings during King Tide for the proposed Cordova Road seawall replacement project

Inflow/Infiltration

Inflow/infiltration, or I/I, is the <u>most cost-effective method</u> to and improve the level of service for a wastewater utility while addressing rising groundwater .

<u>I/I program highlights</u>:

- **Lowers risk of sewer backups**
- **Reduces investment in larger pipes and facilities**
- **Improves public health and environment by reducing overflows**
- **Six critical basins**
- **216,000 feet (41 miles) with over 4,300 laterals to be completed by Sept 2020**



Inflow/Infiltration

Mainline sewer rehabilitation by lining:



Before



After

Inflow/Infiltration

Sewer manhole rehabilitation by lining:



Before



After

Inflow/Infiltration

Sewer lateral rehabilitation by lining:



Before



After

Inflow/Infiltration

Smoke testing underway to identify system weaknesses:



Illicit (non-approved) inlet







Missing/damaged clean-out caps

Facilities



New Fire Station No. 54

- Occupied on 12/12/18
- Finished floor elevation at 7.0’ (NAVD 88)
- Wind design load of 140 MPH or 180 MPH for 3-second intervals
- Florida Green Building Coalition (FGBC) Certification standards
- Sustainable design elements

Critical Elevations



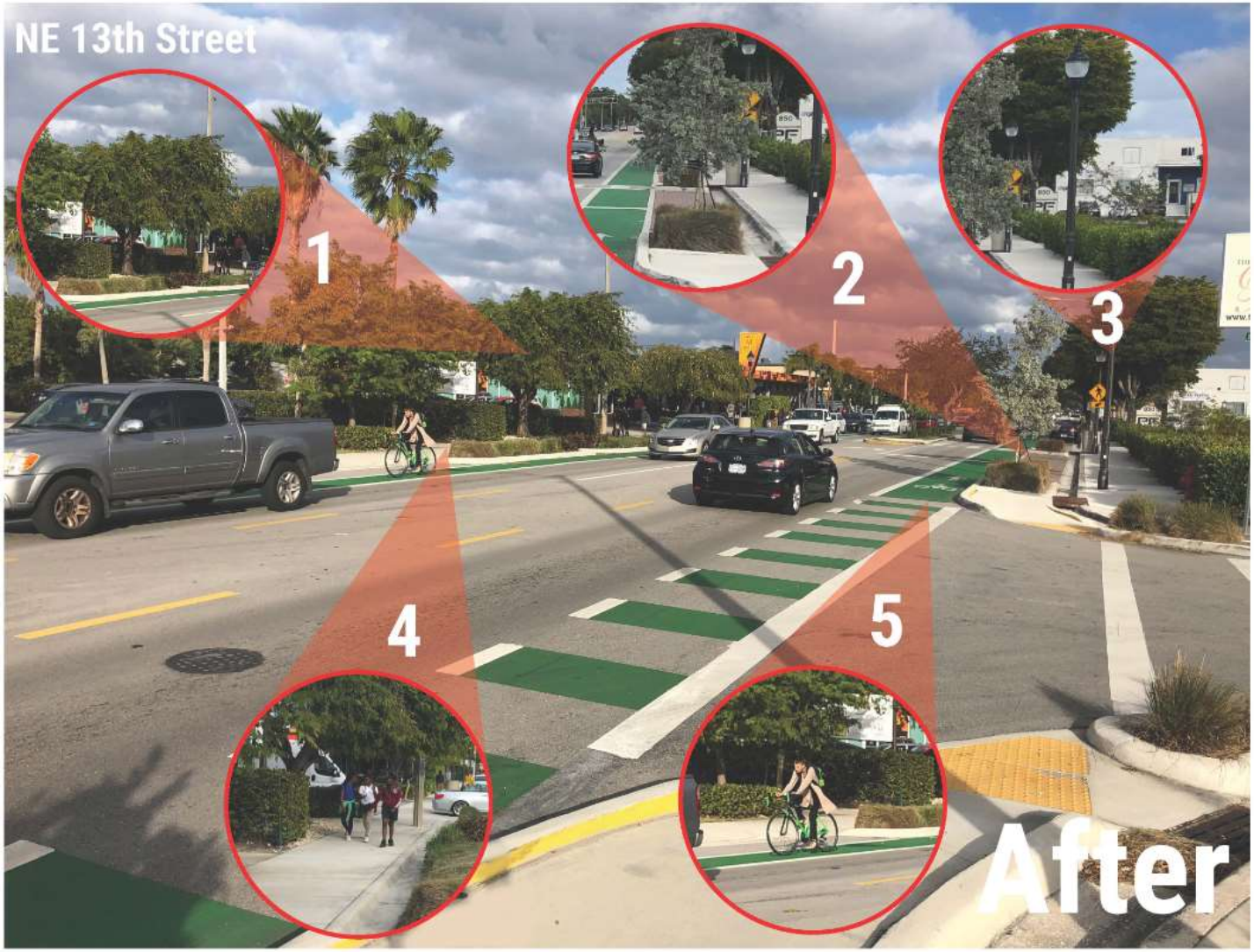
2015 tidal flooding





Retrofitting existing electric panels for wastewater lift stations reduces the likelihood of failing during King Tide or heavy rainfall events

Improving Mobility and Resiliency





Resiliency Improvements

1. Shade trees to reduce the urban heat island effect.
2. Pervious parking isles and bio-swales to reduce flooding issues.
3. LED lighting to help reduce energy costs.
4. Wider sidewalks to increase safety and encourage people to walk.
5. Green bike lanes to help reduce heat island effect, increase awareness of people biking, and help curb emissions.

Track Progress

Visit *Lauderworks* for more project-related information at:

https://gis.fortlauderdale.gov/lauderworks/



Funding Resiliency



Why Invest in Resiliency?

- Preserve neighborhoods
- Sustain property values and tax base
- Favorable cost benefit ratio for mitigation investments
- BECOME the city you never want to leave

National Benefit-Cost Ratio Per Peril *BCR numbers in this study have been rounded	Federally Funded	Beyond Code Requirements
Overall Hazard Benefit-Cost Ratio	6:1	4:1
Riverine Flood	7:1	5:1
Hurricane Surge	Too few grants	7:1
Wind	5:1	5:1
Earthquake	3:1	4:1
Wildland-Urban Interface Fire	3:1	4:1

Table 1. Benefit-Cost Ratio by Hazard and Mitigation Measure.

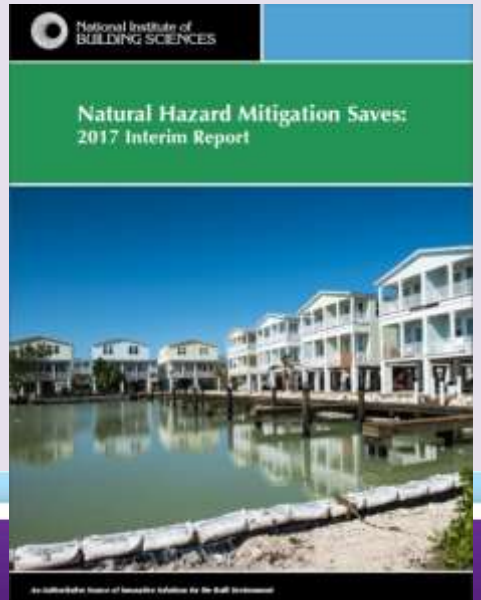
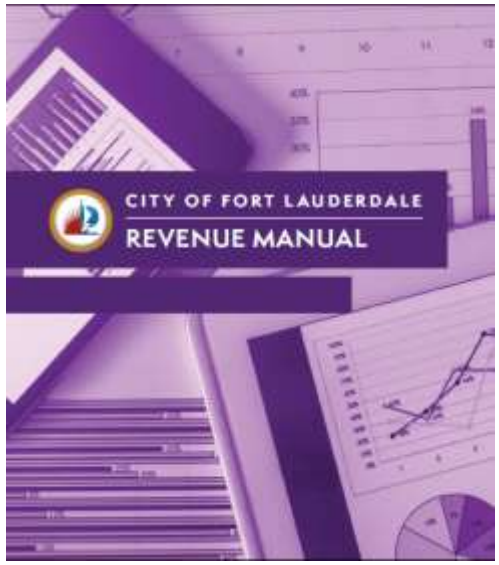




Figure 3. BCR of coastal flooding mitigation by elevating new homes above 2015 IRC requirements (state).

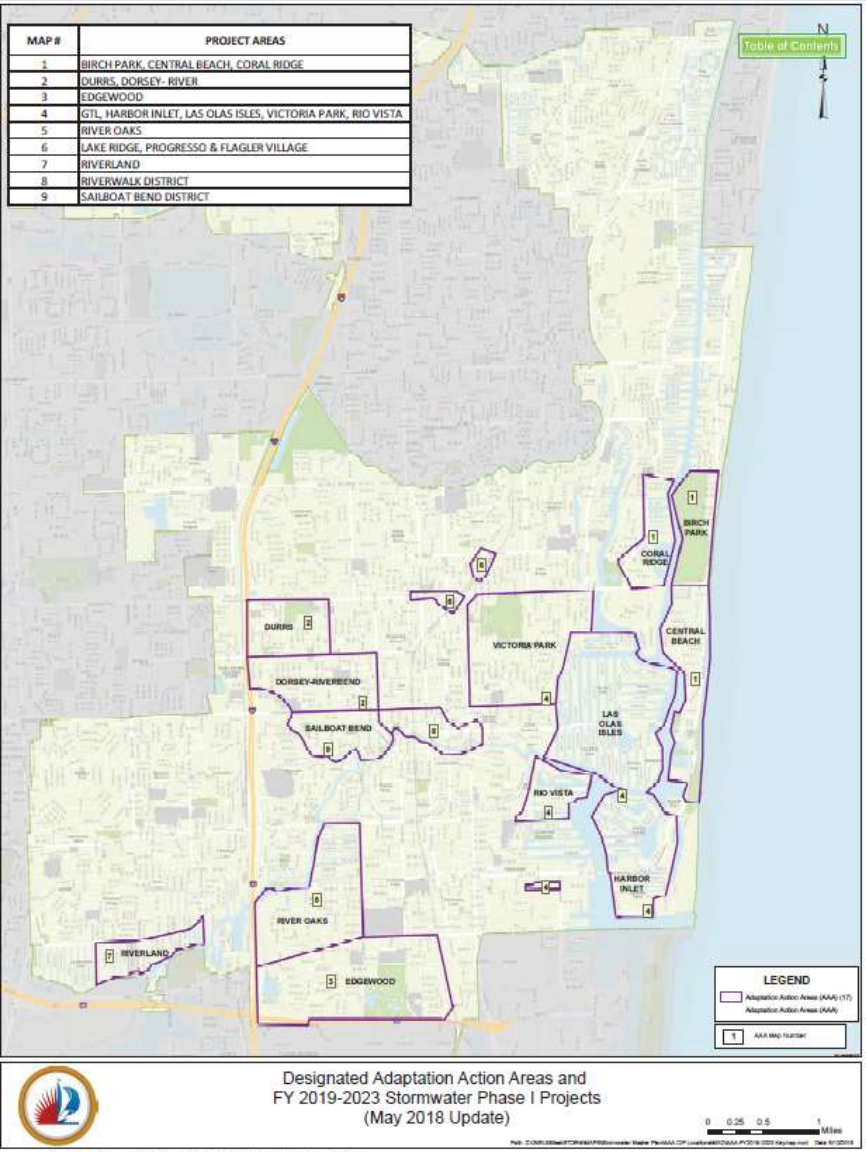
The Cost of Resiliency

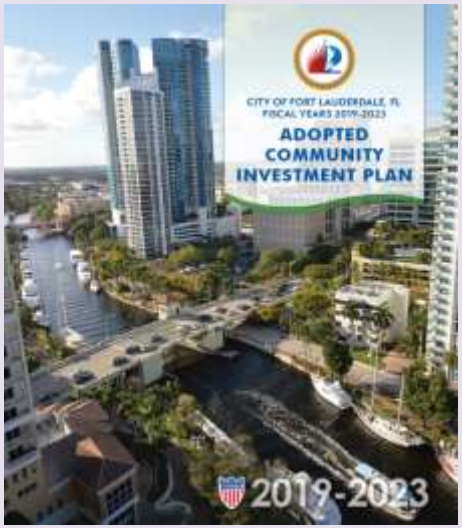
Stormwater Operations Funding





Funding Resiliency - 2019





- **17 Adaptation Action Areas** meeting
- **42** Capital Projects listed for **funding**
- **14** projects completed since FY2016

- $200M Water and Sewer Bond issued and implementation underway
- Select seawalls funded for elevation

Funding Resiliency

- **Revenue Bonds**
  - Water & Wastewater Bond
  - Stormwater Bond (pending)
- Utility Fees (R. Bond Debt Service)
- Special Revenue Funds
- Impact Fees
- Grant Funding
- Energy Service Contracts

- **General Obligation Bonds**
  - Public Safety
  - Parks
- Property Tax (G.O. Bond Debt Service)
- Property Tax Millage
- Special Assessments
- Private Investment
- P^3

CITY OF FORT LAUDERDALE

WE ARE READY

We are a resilient and safe coastal community.



Questions?



COMPREHENSIVE PLAN UPDATE

Infrastructure Task Force Presentation

Presented by:

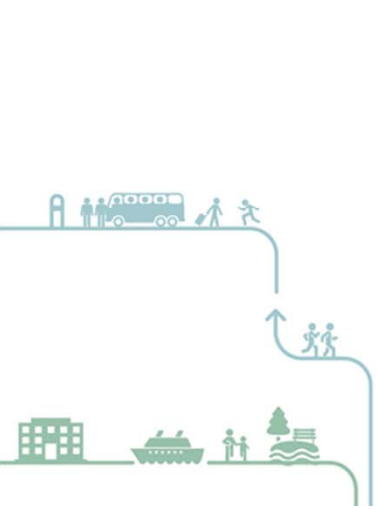
CITY OF FORT LAUDERDALE

THE CORRADINO GROUP

April 1, 2019

Today's Agenda

- What is the Comprehensive Plan?
- **Capital Improvements Element**
- Project Timeline







What goes into a Comprehensive Plan?

Existing Elements

- Administration and Implementation
- Future Land Use
- Infrastructure
- Housing
- Historic Preservation
- Transportation
- Conservation Coastal Management
- Parks and Recreation
- Education
- Intergovernmental Coordination
- **Capital Improvements**
- Solid Waste

New Elements

- Climate Change
- Urban Design
- Economic Development



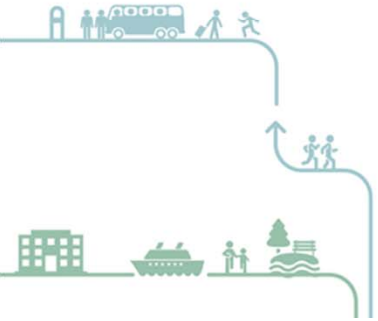


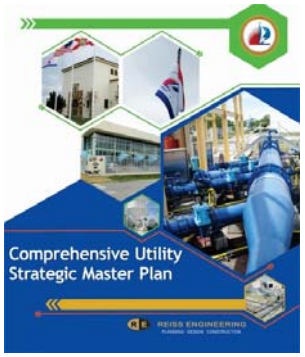
THE CORRADINO GROUP

Existing Master Plans, Studies and Reports

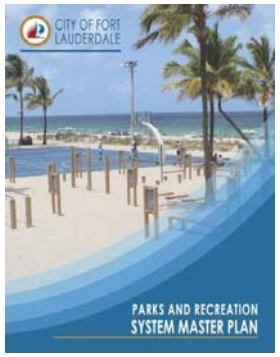
Press Play and Fast Forward
Wastewater Infiltration and Inflow Plan
Stormwater Master Plan
Comprehensive Utility Strategic Master Plan
Downtown and New River Master Plan
Central Beach Master Plan
Northwest Regional Activity Center Design Guidelines
Sustainability Action Plan
Parks Master Plan

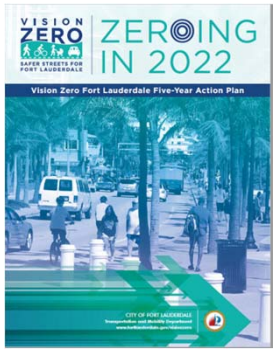
Connecting the Blocks
Complete Streets Manual
Vision Zero
South Andrews Avenue Master Plan
Neighborhood Design Criteria Revisions (NDCR)
Uptown Urban Village Plan
Affordable Housing and Economic Analysis
Design and Construction Manual











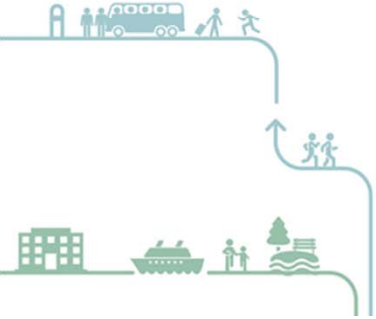


OBJECTIVE CI 1.1: Funding Capital Improvements

- The City Manager shall prepare and propose a five-year Capital Improvement Program and One-Year Capital budget to the City Commission annually as part of the Community Investment Plan (CIP) preparation process. The plan will include:

  1. Sources of funding
  2. Considerations of the Comprehensive Plan to develop the annual capital improvement plan
  3. Adherence to Level of Service Standards
     a) Estimate of costs
     b) Timing of program needs







OBJECTIVE CI 1.1: Funding Capital Improvements

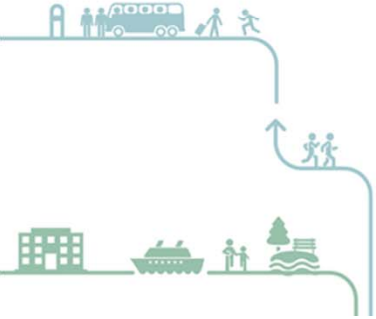


Ensure facility needs will not exceed the City's capacity to fund capital improvements:

1. Work with management and operational departments to assess and prioritize funding available for needs;
2. Needed to adequately service existing and development and development for which development orders were previously issued.

The Capital Improvements Element shall be reviewed annually:

1. Reference CIP as adopted and amended annually by the City Commission;
2. Ensure appropriate levels of funding; consider recapitalization, replacement costs, life cycle, annual depreciation needs, etc.;
3. Coordinate planning for City improvements with applicable government agencies;
4. Prioritize CIP projects based on hierarchy of program needs.

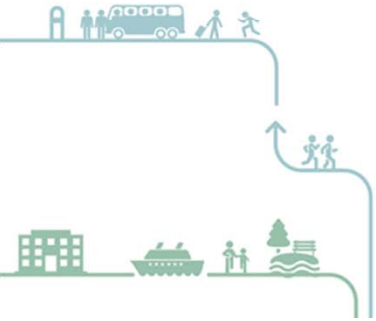




OBJECTIVE CI 1.1: Funding Capital Improvements

Capital projects will be evaluated using the following criteria:

1. Meets federal, state or legal requirement;
2. Project feasibility;
3. Costs and sources of funds;
4. Reduces risk and improves urgent safety needs;
5. Relevant level of service and performance measures;
6. Addresses aging infrastructure needs and maintenance of existing facilities;
7. Project consistency with existing approved plans and projects;
8. Improves traffic, mobility, connectivity, pedestrian safety and cyclist safety;
9. Environmental benefits;
10. Promotes or accelerates sustainable economic development.



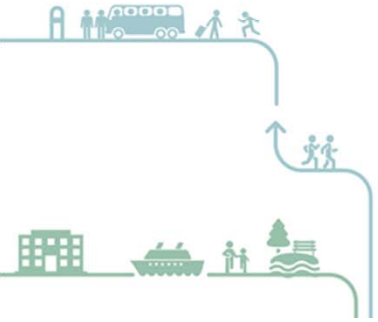




OBJECTIVE CI 1.1: Funding Capital Improvements

Examples of financing methods that may be used include:

1. General Fund Revenues
2. Enterprise Fund Revenues
3. General Obligation (GO) Bonds
4. Regulatory Fees
5. Special Assessments
6. Special Assessment Bonds
7. Revenue Bonds
8. Public Private Partnership
9. Energy Performance Contracts
10. Grants







OBJECTIVE CI 1.2: Public Facilities and Standards for Level of Service (LOS)

1. Capital improvements will adhere to all construction standards, minimize construction costs and assure acceptable useful life and minimum maintenance cost;

2. Water, sanitary sewer, and stormwater improvements will be designed and constructed to the size required to serve the City's projected needs;

3. Water and sanitary sewer support systems need not reflect full future demand, but should be designed to accept future facilities without the need to substantially redesign existing facilities;

4. Utilize existing and future sources of funding for water, stormwater and wastewater improvements including impact fees;

5. Ensure all enterprise funds are utilized for the intended purpose.





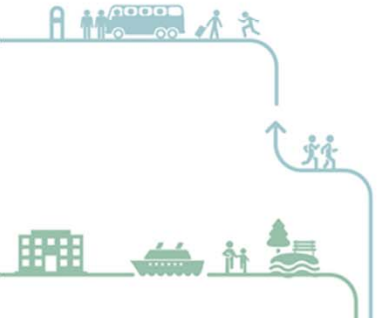


OBJECTIVE CI 1.2: Public Facilities and Standards for LOS (Water)

1. Assure that adequate water supplies and potable water facilities meet the adopted level of service, shall be available to serve new development no later than the issuance of a certificate of occupancy;

2. Implement the water supply projects described in the 10-Year Water Supply Facilities Plan. These improvements shall be incorporated into the Capital Improvements Element and City's budget on an annual basis;

3. Water supply projects to be undertaken within the next five years shall be included in the Five-year Capital Improvements Plan with identified, committed funding sources for the initial three years as required by Chapter 163, Florida Statutes.





OBJECTIVE CI 2.1: Infrastructure Concurrency Management (Water)

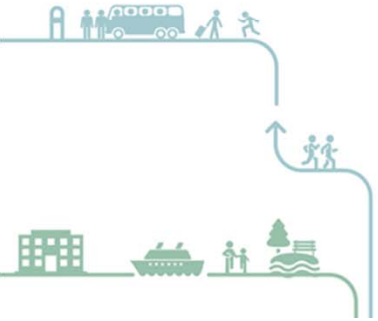
- Design capacity of potable water treatment facilities;
- Existing LOS measured by average number of gallons/day based on average flows experienced and number of equivalent residential units within service area;
- Existing potable water storage capabilities of the water system;
- Existing minimum water pressure;
- Adopted LOS standards for the potable water facility components;
- Existing capacities or deficiencies of the system;
- Capacities reserved for approved but unbuilt development;
- City improvements to facility based on approved development impact on existing capacities and identified deficiencies.

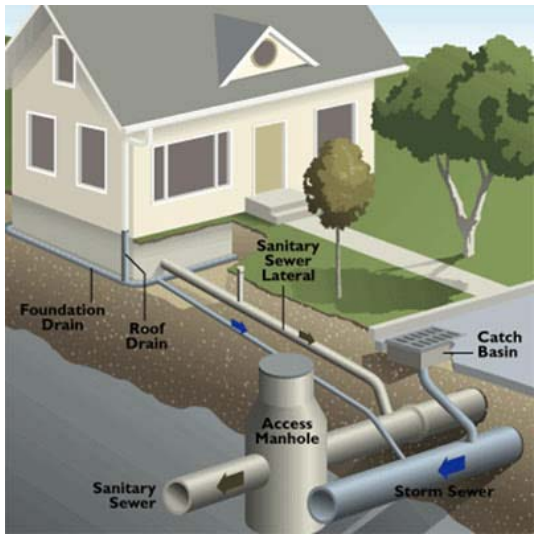




OBJECTIVE CI 2.1: Infrastructure Concurrency Management (Sanitary Sewer)

- Design capacity of the wastewater treatment facilities;
- Existing level of service standards measured by average number of gallons/day per unit based on average flows experienced at treatment plant and number of equivalent residential units within the service area;
- Adopted LOS standard for average daily flows per equivalent residential unit;
- Existing capacities or deficiencies of the system;
- Projected capacities reserved / deficiencies identified for approved but unbuilt development;
- City improvements to facility based on approved development impact on existing capacities and identified deficiencies.







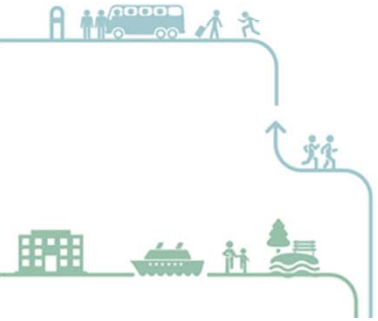
OBJECTIVE CI 2.1: Infrastructure Concurrency Management (Solid Waste)

- Provide for adequate solid waste collection and disposal consistent with Broward County's Comprehensive Plan solid waste generation rates;
- Design capacity of solid waste disposal facilities;
- Existing level of service measured by the number of units served per route;
- Adopted LOS standard for solid waste;
- Capacities reserved for approved but unbuilt development;
- Projected capacities or deficiencies due to approved but unbuilt development;
- City improvements to facility based on approved development impact on existing capacities and identified deficiencies.



OBJECTIVE CI 2.1: Infrastructure Concurrency Management (Stormwater)

- Existing Level of Service (LOS) determined by the City's roadway flood protection criteria and environmental regulations;
- Adopted LOS standards and metrics for stormwater and environmental protection as defined by the City's Watershed Asset Management Plan (WAMP);
- The City shall provide capital improvements related to stormwater management, operations and maintenance;
- Drainage improvements designed to improve flood protection and pollution controls to City's streets and roadways;
- Improvements will be identified and prioritized by WAMP through adopted LOS and in alignment with asset management best practices, as defined by the Institute of Asset Management (IAM).



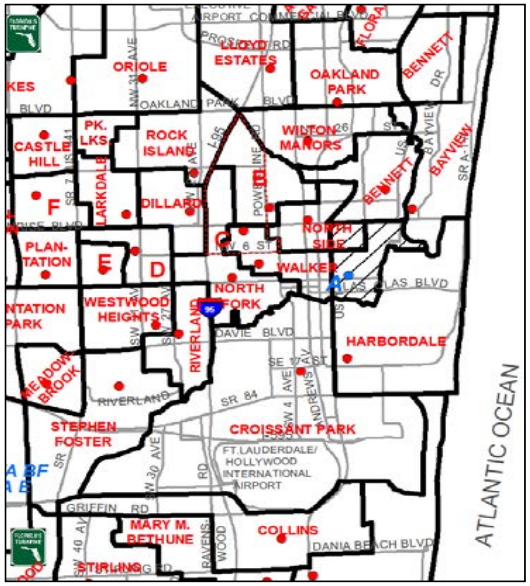






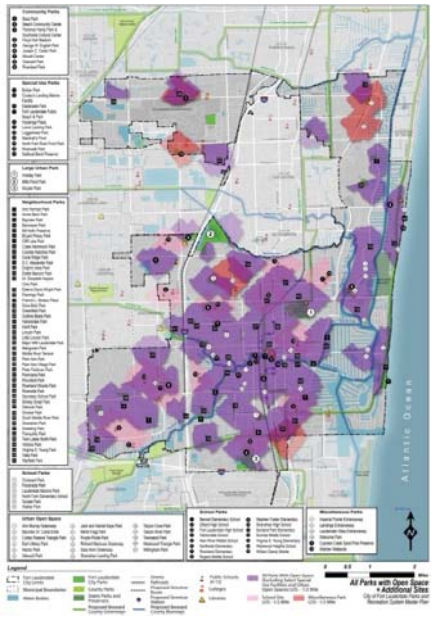
OBJECTIVE CI 2.2: School Board Capacity Coordination

- Broward County School Board shall coordinate with municipalities to ensure that public school facilities are available consistent with available financial resources and the adopted LOS;
- Five-Year District Educational Facilities Plan (DEFP) shall contain an annually updated, five-year financially feasible schedule of capital improvements to address existing deficiencies and maintain adopted LOS;
- Fort Lauderdale shall automatically amend its CIE to reflect any amendment, correction or modification to the Broward County School Board's adopted Five-Year DEFP;
- LOS for School Type A shall be 100% gross capacity (including relocatables);
- LOS for School Type B shall be 110% permanent Florida Inventory of School Houses (FISH) capacity.



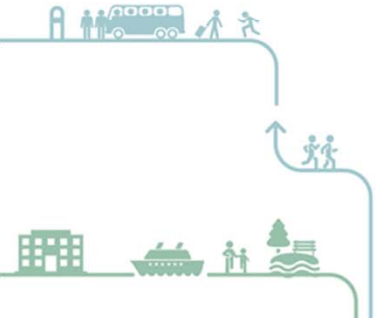
EVALUATION MEASURE PR 1.1.1: (updated)

City will provide parks and open space to meet LOS of 5-acres of park and open space per 1000 residents at service radius of less than 1/2 mile to parks, playgrounds and walking and biking trails for all residents.



EVALUATION MEASURE PR 1.1.1a: Of the 5-acres per thousand resident LOS requirement, 2.0 acres shall be for neighborhood parks per 1000 residents.

EVALUATION MEASURE PR 1.1.1b: Of the 5-acres per thousand resident LOS requirement, 1.0 acre shall be community parks per 1000 residents.







Parks and Recreation Element

Projected Park Level of Service: Park Acreage Per 1,000 people

	2015	2020	2025	2030	2035	2040	2045
Population	175,228	179,997	208,747	222,915	232,419	240,134	247,613
Acres/1000 people	5.46	5.31	4.58	4.29	4.12	3.98	3.86

- Population projection to be revised by Broward County after 2020 Census
- Statewide 2013 Outdoor Comprehensive Plan Target: 6 acres
- Total park acreage- 956.5 acres





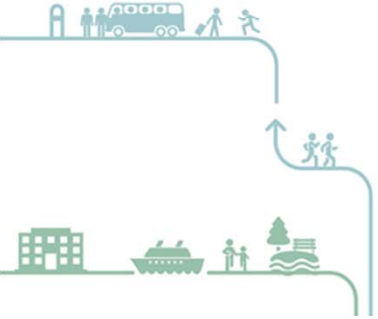


Parks and Recreation Element

Analysis of Park Acreage for Updated Park Level of Service: 5 Acres Per 1000 People

Year	2015	2020	2025	2030	2035	2040	2045
Population	175,228	179,997	208,747	222,915	232,419	240,134	247,613
Acres Needed to Maintain 5 Acres/1000 people Level of Service	876.1	900.0	1043.7	1114.6	1162.1	1200.7	1238.1
Additional Park Acreage Needed to Maintain Level of Service	None	None	87.2	158.1	205.6	244.2	281.6

- Population projection to be revised by Broward County after 2020 Census;
- Encourage publicly accessible open space through public realm requirements for new development projects.





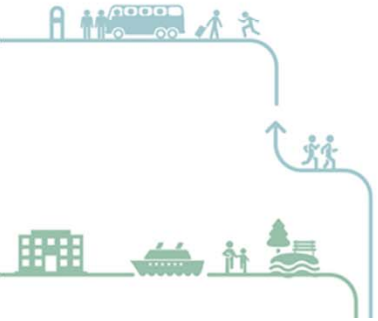




OBJECTIVE CI 1.2: Public Facilities and Standards for Transportation Level of Service

Prioritize capital improvements necessary to meet the adopted levels of service specified in the Transportation Element, giving consideration to the City's connected blocks policy, neighborhood needs and the following:

1. Prioritize roadway improvement projects that improve safety, complete existing network gaps, improve sustainability, support transit and:
   - Connecting the Blocks Program
   - Complete Streets Policy
   - Vision Zero Policy
2. Incorporate FDOT, County and MPO projects into Capital Improvements Program to track improvements within the City.



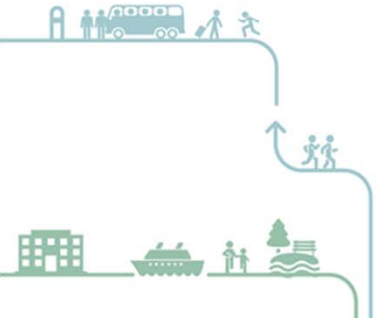




OBJECTIVE CI 2.1: Infrastructure Concurrency Management (Transportation)

Ensure infrastructure is available for existing and future development:

- Use adopted or as amended level of service standards for roadways and transit;
- Review design capacity based on different roadway and transit networks;
- Evaluate LOS standards based on multi-modal approach;
- Existing LOS measured by the average annual number of trips per day and peak hour trips;
- Projected capacities or deficiencies due to approved but unbuilt development;
- Planned improvements to be made to the roadway and transit network.



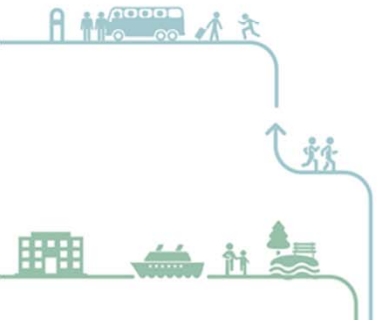


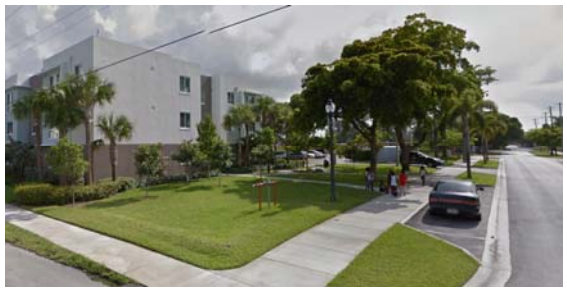


Roadway LOS

Existing Local Roads - Level of Service D acceptable for urban environment based on:

- Encourages slower driving through the streets and makes drivers more aware of their surroundings;
- Fast, free flowing traffic often dangerous for pedestrian and bicyclists
- Higher level of service would require prohibitive cost and societal impacts:
  - Lane additions
  - Bypass roads
  - Access management

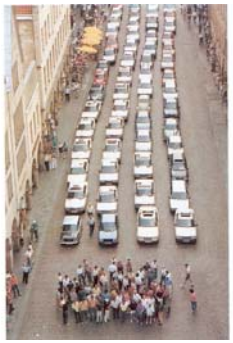






Roadway LOS

Multimodal Approach to Transportation;
(sustainability, efficiency, cost-effectiveness, environmental, health and social equity aspects)

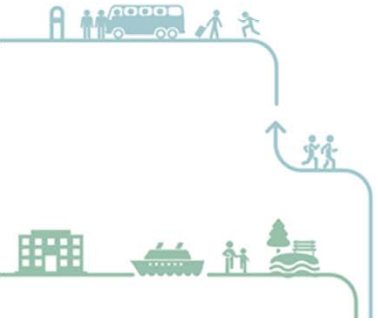






Constructing and Maintaining Roadways

Add Bike Lanes and Resurface 4 Lane Divided Urban Roadway	$1,148,368.61/mile*
Widen 2 Lane Divided Roadway to 4 Lanes and Add Bike Lanes	$5,456,415.25/mile*

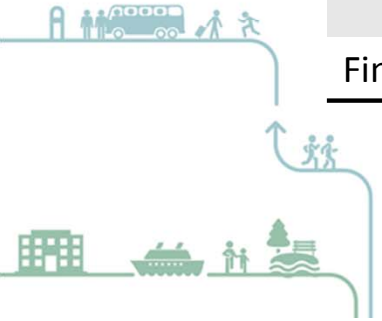
Source: FDOT
*Costs not inclusive of land acquisition





Project Timeline

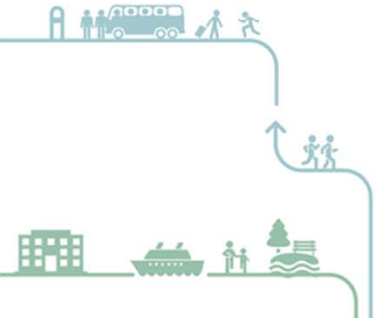
ADVANCE FORT LAUDERDALE	
Comprehensive Plan Draft Framework	March 2018
Community and Stakeholder Meetings	May 2018 – March 2019
Second Draft	April 2019
Public Workshops	May/June 2019
Planning & Zoning Board	July 2019
City Commission	September 2019
Broward County Planning Council	October 2019
Broward County Commission	November 2019
State and other agency reviews	December 2019 - February 2020
Final Plan Adoption	March 2020





Discussion

Questions and Comments?



THE CORRADINO GROUP

Thank You

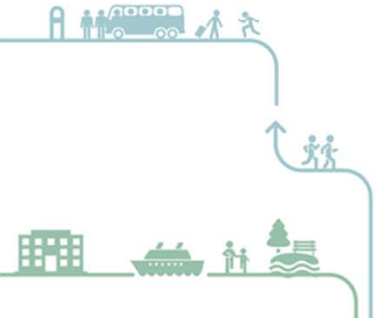
For Additional Comments and Questions, please visit:
http://www.fortlauderdale.gov/comprehensiveplan

Join our list to keep involved, receive updates and come to our workshops throughout the process!

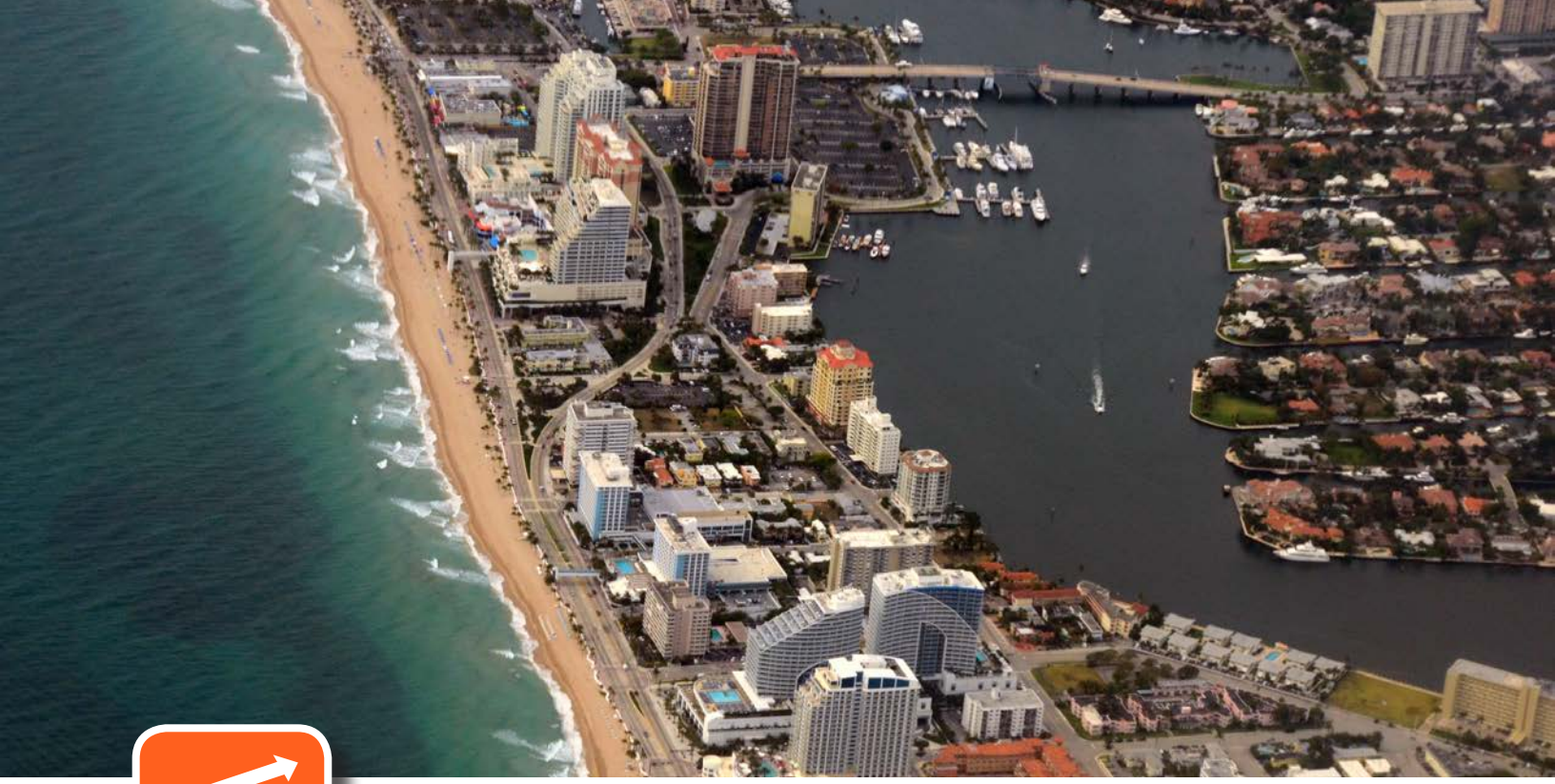
Drop us a note:

Staff contact:

Lorraine Tappen, AICP, LEED Green Associate
Principal Planner
Department of Sustainable Development
Urban Design and Planning Division
ltappen@fortlauderdale.gov
954-828-5018







INTERNAL SUPPORT

CAPITAL IMPROVEMENTS ELEMENT

PRINCIPLES

The Capital Improvement Element is the primary mechanism to consider which and where public facilities should be located to implement the City of Fort Lauderdale Comprehensive Plan. It describes standards to improve existing facilities and for constructing new facilities for at least a five-year period and includes a detailed schedule of funding, prioritization and timing for all capital projects within the City. It also includes guidelines for determining capital improvement needs using a combination of level of service standards, performance criteria from the Vision Scorecard and the FL2 STAT Community Investment Plan Ranking Team under the direction of the City Manager, the City Commission and the Capital Improvement Plan Committee.

In this way, the Capital Improvement Element is an integral part of the City of Fort Lauderdale's budget. The five-year capital improvement plan is presented to the City Commission annually for adoption.

The Capital Improvement Element will also implement components of the City of Fort Lauderdale's Vision Plan and Strategic Plan as they relate to:

1. Transportation as a pedestrian friendly and multi-modal City
2. A sustainable and resilient community
3. Unique, inviting and connected gathering places
4. Educational excellence
5. Public safety

GOALS, POLICIES, AND EVALUATION MEASURES

GOAL 1: The City will strive to provide infrastructure as appropriate to meet the standards set forth within the comprehensive plan elements, by preserving, modifying and replacing existing infrastructure and providing new infrastructure related to growth and resiliency.

OBJECTIVE CI 1.1: Funding Capital Improvements

Ensure that financial resources are available to provide capital improvements that meet existing needs and needs of planned future growth and in a cost-effective manner.

POLICY CI 1.1.1: The City Manager shall prepare and propose a five-year Capital Improvement Program and One-Year Capital budget to the City Commission annually as part of the Community Investment Plan preparation process, for adoption to meet present infrastructure deficiencies and future infrastructure needs as discussed in other Elements of this Comprehensive Plan as follows:



1. The proposed plan shall include sources of funding for each capital improvement or category of capital improvement.
2. Utilize the findings and recommendations of the Comprehensive Plan to develop the annual capital improvement plan.
3. The Capital Improvement Schedule should demonstrate that level of service standards will be maintained in a such a way that deficiencies and needs are addressed during the next five-year period.
4. The schedule of capital improvements provides an estimate of public facility costs including a delineation of when it will be needed, the general location of the facilities and projected revenue sources to fund the facilities. Projects necessary to ensure that any adopted level-of-service standards are achieved and maintained for the 5-year period are identified as either funded or unfunded and given a level of priority for funding.

POLICY CI 1.1.2: Identify public facilities needed to adequately service existing development and development for which development orders were previously issued.

POLICY CI 1.1.3: Capital projects will be evaluated using the following criteria:

1. **Meets federal, state or legal requirement** - Whether there is a federal, state, local mandate, grant, court order, judgment, or other requirement that the project must be completed.
2. **Project feasibility** - Whether there are obstacles to proceeding with the project (land acquisition, easements, approvals required, etc.)
3. **Costs and sources of funds** - Whether the project would impact the City's operating costs, debt service level, and/or whether the project would yield revenue.
4. **Reduces risk and improves urgent safety needs** - Whether the project reduces an immediate or future risk, addresses a public health and/or safety hazard, or addresses an urgent safety needs.

5. **Relevant level of service and performance measures** - Is the impact of the project measurable? Will completing the project improve key performance measures or result in efficiencies?
6. **Addresses aging infrastructure needs and maintenance of existing facilities** - Whether the project helps to repair or replace the City's aging infrastructure (e.g. bridges, seawalls, roads) or provides for capital maintenance of existing City facilities (e.g. community centers, swimming pools, or sports complex).
7. **Project consistency with existing approved plans and projects** - Whether the project is directly consistent with a Commission approved plan, advances the Strategic Plan, the Commission Annual Action Plan (CAAP), and/or the Vision Plan.
8. **Improves traffic, mobility, connectivity, pedestrian safety and cyclist safety** - Whether the project would result in filling mobility gaps, supporting more effective interconnectivity, and ensuring increased and safe accessibility to activities, events and locations (bikeway path, commuter rail).
9. **Environmental benefits** - Whether the project would address sea level rise, flooding, energy efficiency, water quality, water efficiency or other sustainability measures.
10. **Promotes or accelerates sustainable economic development** - Whether the project would directly result in capital investment, increased tax base, increased property values, or improved job opportunities.

POLICY CI 1.1.4: The Capital Improvements Element will be reviewed annually. The Plan will include:

- Sources of funding
- Considerations of the Comprehensive Plan to develop the annual capital improvement plan
- Adherence to Level of Service Standards
- Estimate of costs
- Timing of program needs



POLICY CI 1.1.4a: The five-year capital improvement schedule of the Capital Improvement Element shall incorporate by reference the Community Investment Plan as adopted and as amended annually by the City Commission.

POLICY CI 1.1.4b: Top priority will be given to appropriate levels and schedules of recapitalization including quantity, replacement cost, life cycle and annual depreciation/recapitalization needs when developing budget recommendations for the Community Investment Plan.

POLICY CI 1.1.4c: Coordinate planning for City improvements with applicable government agencies.

POLICY CI 1.1.4d: Prioritize CIP projects based on hierarchy of program needs.

POLICY CI 1.1.5: Examples of financing methods that may be used include:

1. **General Fund Revenues** - General tax revenues, transfers in from other funds, and other receipts that are not allocated by law or contractual agreement used for new construction as well as improvements to infrastructure primarily for community-wide benefit and use, such as municipal buildings and parks.
2. **Enterprise Fund Revenues** - Revenues from a fund that provides goods or services to the public for a fee that makes the entity self-supporting (e.g. Water and Sewer, Stormwater, Sanitation, Parking, and Airport Funds).
3. **General Obligation (GO) Bonds** - Obligations secured by the full faith and credit of a governmental unit or payable from the proceeds of ad valorem taxes of a government unit which require voter approval.
4. **Grants** - Priorities adopted by the Commission that direct staff's pursuit of funds used for capital projects when available.
5. **Regulatory Fees** - Fees that are imposed for a sovereign function and shouldn't exceed the regulated activity's cost such as Park Impact Fees and Water and Sewer Capital Expansion Fees.
6. **Special Assessments** - Used to construct and maintain capital facilities such that the construction improves the property and the assessment has been fairly and reasonably apportioned among the properties receiving the benefit.
7. **Special Assessment Bonds** - Bonds that provide for capital improvements and are paid in whole or in party by levying and collecting special assessment on the abutting, adjoining, contiguous, or other specially benefited property.
8. **Revenue Bonds** - These are typically bonds that finance income-producing projects and are secured by a specified revenue source (e.g. Parking Revenues, Stormwater Fees, Water and Sewer Rates).
9. **Public Private Partnership** - A contractual agreement between a public agency and private sector entity with the intention in delivering a service or facility for the use of the general public.
10. **Energy Performance Contracts** - Projects that guarantee energy, water, and operational savings that must be greater than the cost of the project.

POLICY CI 1.1.6: All legal, feasible, cost-effective methods of financing capital improvements shall be explored. Capital projects shall not be dictated by the nature of funding available except to the extent that the projects meet an initial test of being required to achieve City goals and to the extent that project must be placed in priority dictated by the nature of funds available.

OBJECTIVE CI 1.2: Public Facilities and Standards for LOS

Provide infrastructure, roads and public education facilities to meet existing needs and needs of planned future growth at the adopted level of service standards.

POLICY CI 1.2.1: **Water and Sewer** - Provide the necessary capital improvements to maintain water, wastewater and stormwater levels of service, based on service area proportional needs as described in the Infrastructure Element through 2040 and for consistency with the sustainability action plan as follows:

1. Capital improvements will adhere to all construction standards, minimize construction costs and assure acceptable useful life and minimum maintenance cost.
2. Water and sanitary sewer improvements will be designed and constructed to the size required to serve the City's projected needs. Water and sanitary sewer support systems need not reflect full future demand, but should be designed to accept future facilities without the need to substantially redesign existing facilities.

3. Utilize existing and future sources of funding for water and wastewater improvements including water and wastewater impact fees. Ensure all enterprise funds are continued and utilized for the intended purpose.
4. Assure that adequate water supplies and potable water facilities meeting the adopted level of service, shall be in place and available to serve new development no later than the issuance of a certificate of occupancy.
5. Implement the water supply projects described in the 10-Year Water Supply Facilities Plan. These improvements shall be incorporated into the Capital Improvements Element and City's budget on an annual basis.
6. Water supply projects to be undertaken within the next five years shall be included in the Five-year Capital Improvements Plan with identified, committed funding sources for the initial three years as required by Chapter 163, F.S.



POLICY CI 1.2.2: Transportation - Provide capital improvements necessary to meet the adopted levels of service specified in the Transportation Element, giving consideration to neighborhood needs and the following:

1. Prioritize roadway improvement projects that improve safety, complete existing network gaps, improve sustainability, support transit and reflect Connecting the Blocks Program, the Complete Streets Policy, and Vision Zero.

2. FDOT, County and MPO improvements within the City.

EVALUATION MEASURE CI 1.2.3: Stormwater - The City shall provide capital improvements related to the stormwater management, operations and maintenance including drainage improvements designed to improve flood protection and pollution controls to City's streets and roadways. These improvements will be identified and prioritized by the City's Watershed Asset Management Plan (WAMP) through adopted the Level of Service (LOS) and in alignment with asset management best practices, as defined by the Institute of Asset Management (IAM).

EVALUATION MEASURE CI 1.2.4: Solid Waste - Provide for adequate solid waste collection and disposal necessary to remain consistent with Broward County's Comprehensive Plan solid waste generation rates.

GOAL 2: Ensure adequate funding for infrastructure and capacity exist concurrent with development or redevelopment.

OBJECTIVE CI 2.1: Infrastructure Concurrency Management

Maintain Principles for constructing, extending or increasing capacity of public facilities. and principles for correcting existing deficiencies.

EVALUATION MEASURE CI 2.1.1: Concurrency Management System - The following is the Concurrency Management System used by the City for monitoring and ensuring adherence to: the adopted LOS standards, the availability of public facility capacity, and the schedule of capital improvements as defined in appropriate Comprehensive Plan elements. It includes guidelines for interpreting and applying LOS standards to applications for development orders (D.O.'s) and development permits (D.P.'s) and determining when the test for concurrency must be met, including the latest point in the application process for the determination of concurrency prior to the approval of an application. The Concurrency Management System provides a program that ensures D.O.'s and D.P's are issued in a manner that will not result in a reduction in the LOS below the adopted LOS standard for the affected facility.

1. Capacity and LOS Inventory

The provisions and requirements of the Concurrency Management System applies only to those facilities listed herein. The following inventories shall be maintained by the appropriate City departments and they will be used for the concurrency assessment of new development. The inventory shall be reviewed annually and updated as necessary.

a. Transportation



- Design capacity of different roadway and transit networks.
- The existing LOS measured by the average annual number of trips per day on a roadway link and the peak hour trips as provided in the last counts taken before November 1 by the Florida Department of Transportation, Broward County or the City.
- The status of service degradation on those roads classified as backlogged, based on the methodology described in the Transportation Element of this plan.
- The adopted level of service standards for roadways and transit.
- The existing capacities or deficiencies of the roadway and transit network. The capacities reserved for approved, but unbuilt development.
- The projected capacities or deficiencies due to approved but unbuilt development.
- The improvements to be made to the roadway and transit network by any approved developments pursuant to previous development orders and the impact of such improvements on the existing capacities or deficiencies.
- The improvements to be made to the roadway and transit network by the City, Broward County, the State of Florida Department of Transportation, or other public agency and the impact of such improvements on the existing capacities or deficiencies.

b. Sanitary Sewer



- The design capacity of the wastewater treatment facilities.
- The existing level of service standards measured by the average number of gallons per day per unit based on the average flows experienced at the treatment plant and the total number of equivalent residential units within the service area.
- The adopted LOS standard for average daily flows per equivalent residential unit.
- The existing deficiencies of the system.
- The capacities reserved for approved but unbuilt development.
- The projected capacities or deficiencies due to approved but unbuilt development.
- The improvements to be made to the facility by any approved developments pursuant to previous development orders and the impact of such improvements on the existing capacities or deficiencies.

c. Potable Water

- The design capacity of potable water treatment facilities.
- The existing LOS measured by the average number of gallons per day per unit based on the average flows experienced and the total number of equivalent residential units within the service area.
- The existing potable water storage capabilities of the water system. The existing minimum water pressure.
- The adopted LOS standards for the potable water facility components.
- The existing capacities or deficiencies of the system.
- The capacities reserved for approved but unbuilt development.
- The improvements to be made to the facility by any approved developments pursuant to previous development orders and the impact of such improvements on the existing capacities or deficiencies.
- The improvements to be made to the facility by the City and the impact of such improvements on the existing capacities or deficiencies.

ci. Solid Waste Disposal

- The design capacity of solid waste disposal facilities.
- The existing level of service measured by the number of units served per route.
- The adopted LOS standard for solid waste.
- The capacities reserved for approved but unbuilt development.
- The projected capacities or deficiencies due to approved but unbuilt development.
- The improvements to be made to the system by any approved developments pursuant to previous development orders and the impact of such improvements on the existing capacities or deficiencies.

cii. Stormwater Drainage

- The existing LOS determined by the current City's roadway flood protection criteria and environmental regulations.
- The adopted LOS standards and metrics for stormwater and environmental protection as defined by the City's Watershed Asset Management Plan (WAMP).



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OBJECTIVE CI 2.2: Coordination with School Board for School Capacities

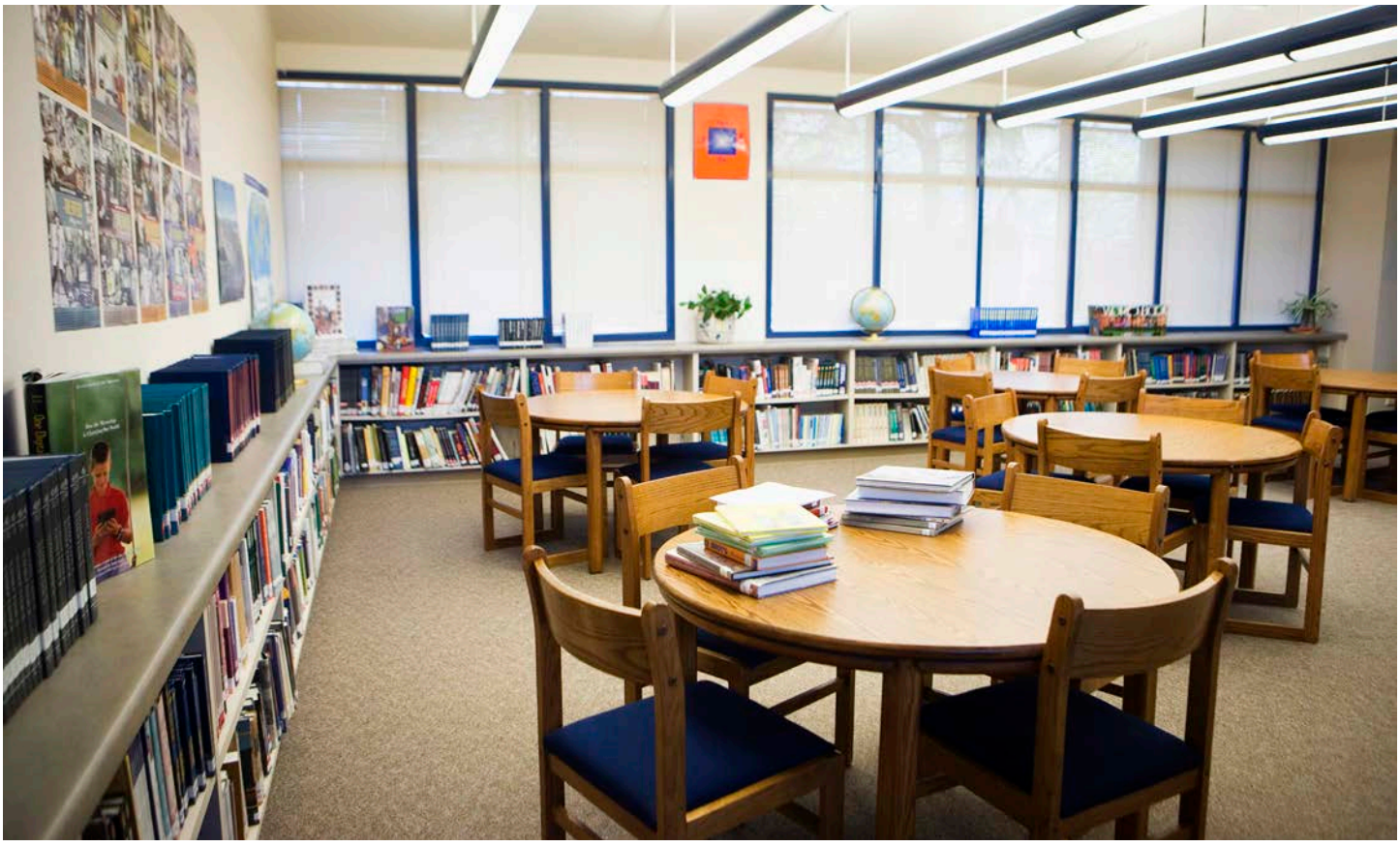
POLICY CI 2.2.1: The City of Fort Lauderdale shall advise Broward as needed in regards to school needs generated by City's growth. Broward County, in collaboration with the School Board of Broward County and the municipalities shall ensure that public school facilities are available for current and future students consistent with available financial resources and the adopted LOS.

POLICY CI 2.2.1a: Consistent with policies and procedures within the Interlocal Agreement for Public School Facility Planning the Five-Year District Educational Facilities Plan (DEFP) shall contain a five year financially feasible schedule of capital improvements to address existing deficiencies and achieve and maintain the adopted LOS in all concurrency service areas. This financially feasible schedule shall be updated on an annual basis and annually adopted into the CIE.

EVALUATION MEASURE CI 2.2.2: The LOS for School Type A shall be 100% gross capacity (including relocatables). The LOS for School Type B shall be 110% permanent Florida Inventory of School Houses (FISH) capacity.

POLICY CI 2.2.3: The LOS shall be adopted and incorporated into the PSFE of Broward County and the Municipalities' Comprehensive Plans.

POLICY CI 2.2.4: Fort Lauderdale shall automatically amend its CIE to reflect any amendment, correction or modification to the Broward County School Board's adopted Five-Year DEFP concerning costs, revenue sources, or acceptance of facilities pursuant to dedications or proportionate share mitigation, once adopted by the School Board.



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Appendix 3-11B
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Fort Lauderdale, FL

Water and Sewer Rate Study

Discussion of Results

April 16, 2019

Andrew Burnham
Kyle Stevens

Stantec

Utility's bond rated Aa1

Background

- Water and sewer systems are combined within a single enterprise fund and supported by user rates
- The City applies an annual 5.00% indexing adjustment to its water and sewer rates
- Stantec has reviewed the financial sustainability of the combined system annually since 2013 and supported the 2018 bond issuance
- Current rate structure and impact fees have not been updated in over ten years

Rate Study Overview

Key Elements

1. Revenue Sufficiency
2. Cost of Service
3. User Rates
4. Impact Fees

Revenue Sufficiency

Basic Parameters

- 10 year financial forecasting model
  - Updated annually as part of the budget process
- Reflects the most current data and assumptions:
  - FY 2019 budget (Revenues & Expenses)
  - 5-Year capital spending per public works
  - Billing data and account growth forecast
  - Forecasted debt issuance every 5 years (FY 2023)
  - ROI Phase out over a 4 year period (FY 2021)
- Analysis will be updated as part of FY 2020 budget

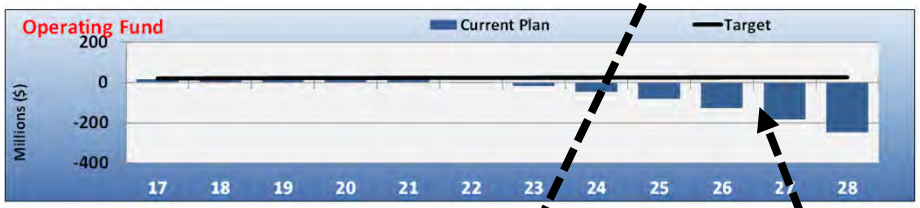
Revenue Sufficiency

FY 2019 Financial Forecast (No Adjustment)

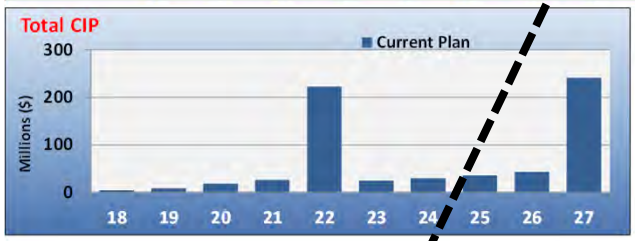
FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

SAVE CALC ROLL

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cumulative Change FY 2023	Cumulative Change FY 2028
Override ▶		5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Water Rate Increases	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	4.96%
Override ▶		5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	PS FY20 ▶	98.0%
Sewer Rate Increases	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	OMF FY20 ▶	100.0%
Rate Covenant	2.14	1.97	1.8	1.80	1.73	1.26	1.09	1.02	0.95	0.90	0.66	CIP Cash %	20%











0.00% Rate increase

Minimum Reserves Depleted

Coverage Impaired

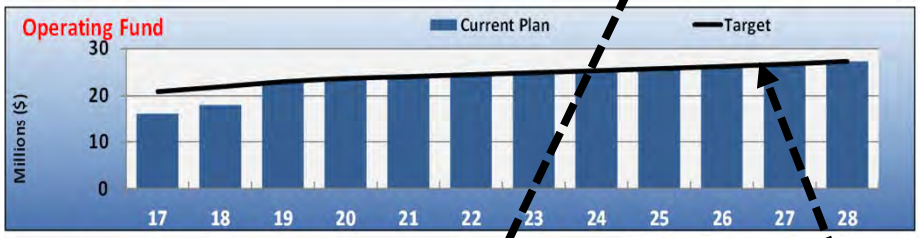
Revenue Sufficiency

FY 2019 Financial Forecast (Recommended Plan)

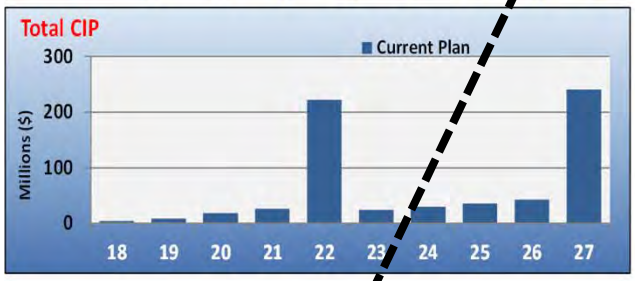
FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

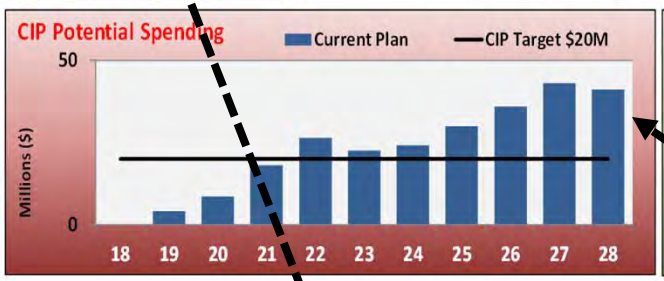
SAVE CALC ROLL

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cumulative Change FY 2023	Cumulative Change FY 2028
Override ▶		5.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%		
Water Rate Increases	0.00%	5.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	21.66%	55.19%
Override ▶		5.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	PS FY20 ▶	98.0%
Sewer Rate Increases	0.00%	5.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	OMF FY20 ▶	100.0%
Rate Covenant	2.14	1.97	1.86	2.02	2.19	1.80	1.77	1.91	2.04	2.24	1.95	CIP Cash %	20%











5.00% Rate increase needed FY 21 Forward

Minimum Reserves Maintained

Full Funding Cash CIP and New Debt

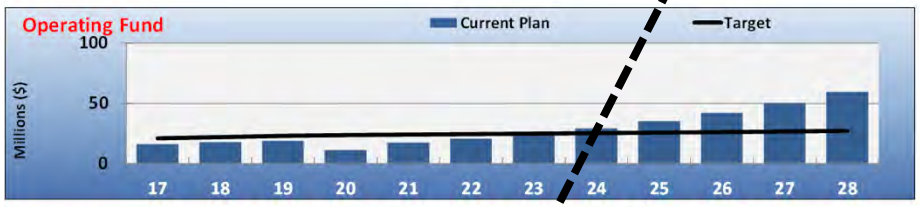
Revenue Sufficiency

FY 2019 Financial Forecast (No ROI Phase Out)

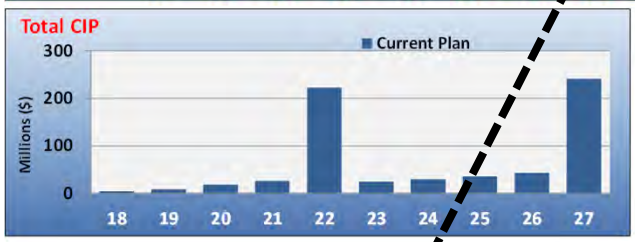
FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

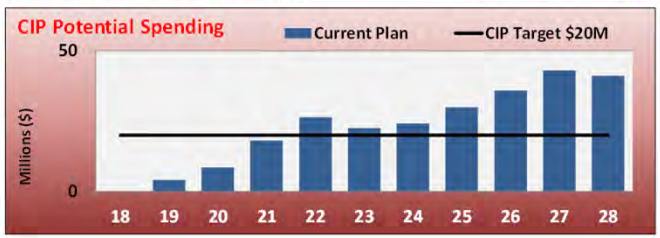
SAVE CALC ROLL

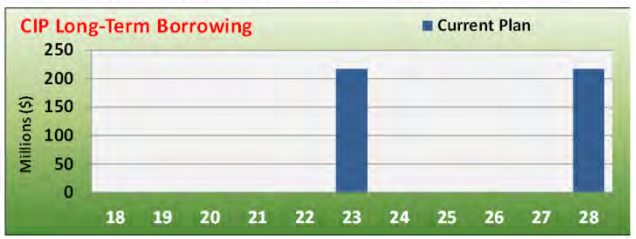
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cumulative Change FY 2023	Cumulative Change FY 2028
Override ▶		5.00%	0.00%	19.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%		
Water Rate Increases	0.00%	5.00%	0.00%	19.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	37.73%	75.92%
Override ▶		5.00%	0.00%	19.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	PS FY20 ▶	98.0%
Sewer Rate Increases	0.00%	5.00%	0.00%	19.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	OMF FY20 ▶	100.0%
Rate Covenant	2.14	1.97	1.86	2.63	2.83	2.31	2.26	2.42	2.58	2.82	2.45	CIP Cash %	20%











19.00% Rate increase needed FY 2021

Rate Study Overview

Key Elements

1. Revenue Sufficiency
2. Cost of Service
3. User Rates
4. Impact Fees

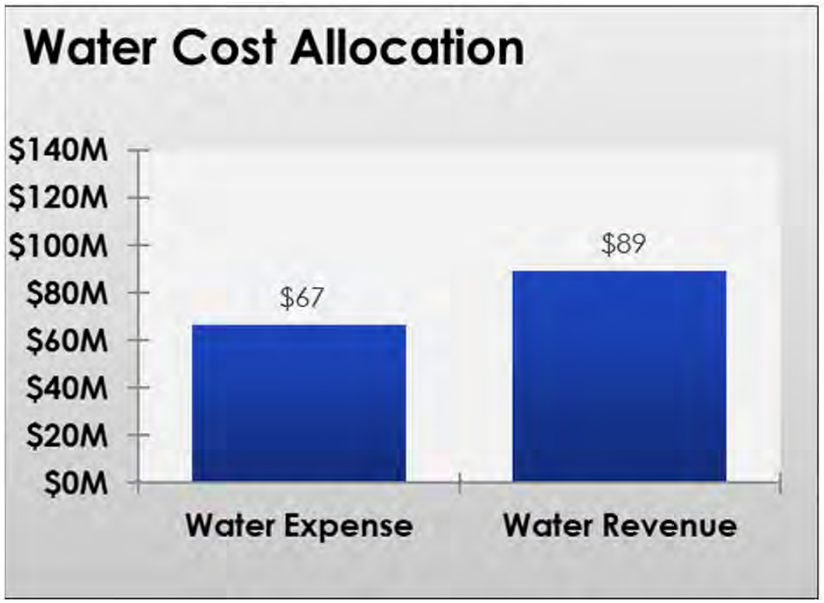
Cost of Service

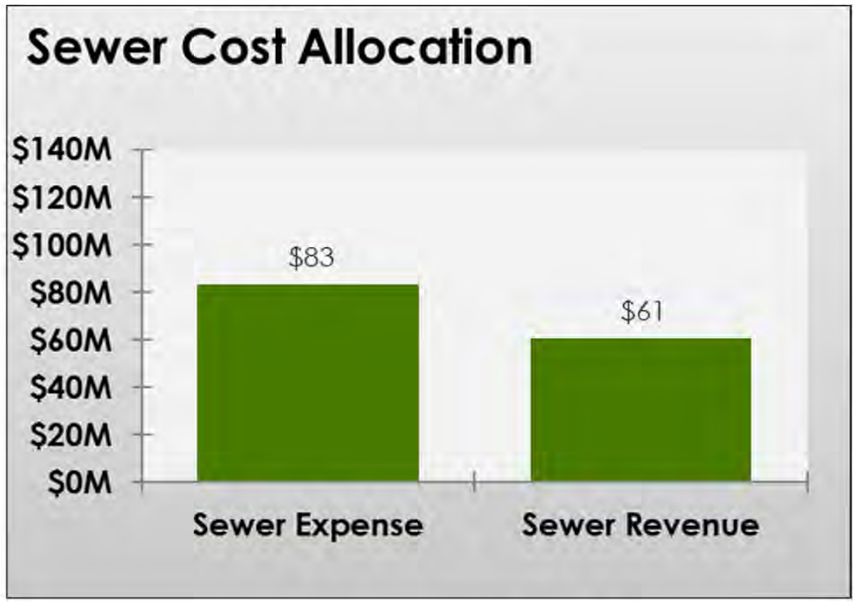
Base Parameters

- Based on the FY 2019 budget for water and sewer fund, intended to be “Revenue Neutral”
- Primary analysis sought to identify the unique cost of providing water and sewer services separately
- Analysis used relevant data, staff knowledge and expense type to allocate every line item in the utility budget (1,300 unique items)
- The City’s last similar analysis was 10+ years ago

Cost of Service

FY 2019 Cost of Service Results





Revenues $22M Over Cost

Revenues $22M Under Cost

Key Driver: Recent sewer system investment and organizational attention

Key Note: Analysis is a snapshot in time and allocations could change

Cost of Service

Recommendations

- Industry practice and future cost requirements would suggest a phased approach is most appropriate
- Modify annual rate indexing based on cost of service results

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Effective Date	10/1/19	10/1/20	10/1/21	10/1/22	10/1/23
Water Rate Adjustment	0.0%	3.6%	3.6%	3.6%	3.6%
Wastewater Rate Adjustment	0.0%	7.0%	7.0%	7.0%	7.0%
Overall Revenue Adjustment	0.0%	5.0%	5.0%	5.0%	5.0%

- Update cost of service analysis periodically (every 3-5 years) and adjust indexing plan as appropriate

Rate Study Overview

Key Elements

1. Revenue Sufficiency
2. Cost of Service
3. User Rates
4. Impact Fees

Base Parameters

General description of the City's rate structure:

Fixed Monthly Charge- Is dependent on meter size. Provides revenue stability to the utility by capturing a portion of customer related and “readiness to serve” costs.

Volumetric Charges- Charges are dependent on the level of metered water use by customer class. Recover remaining costs.

Objectives to consider in evaluating potential modifications for FY 2020:

- Recommendations will enhance rate payer equity
- Comport with cost of service findings
- Align with industry best practices

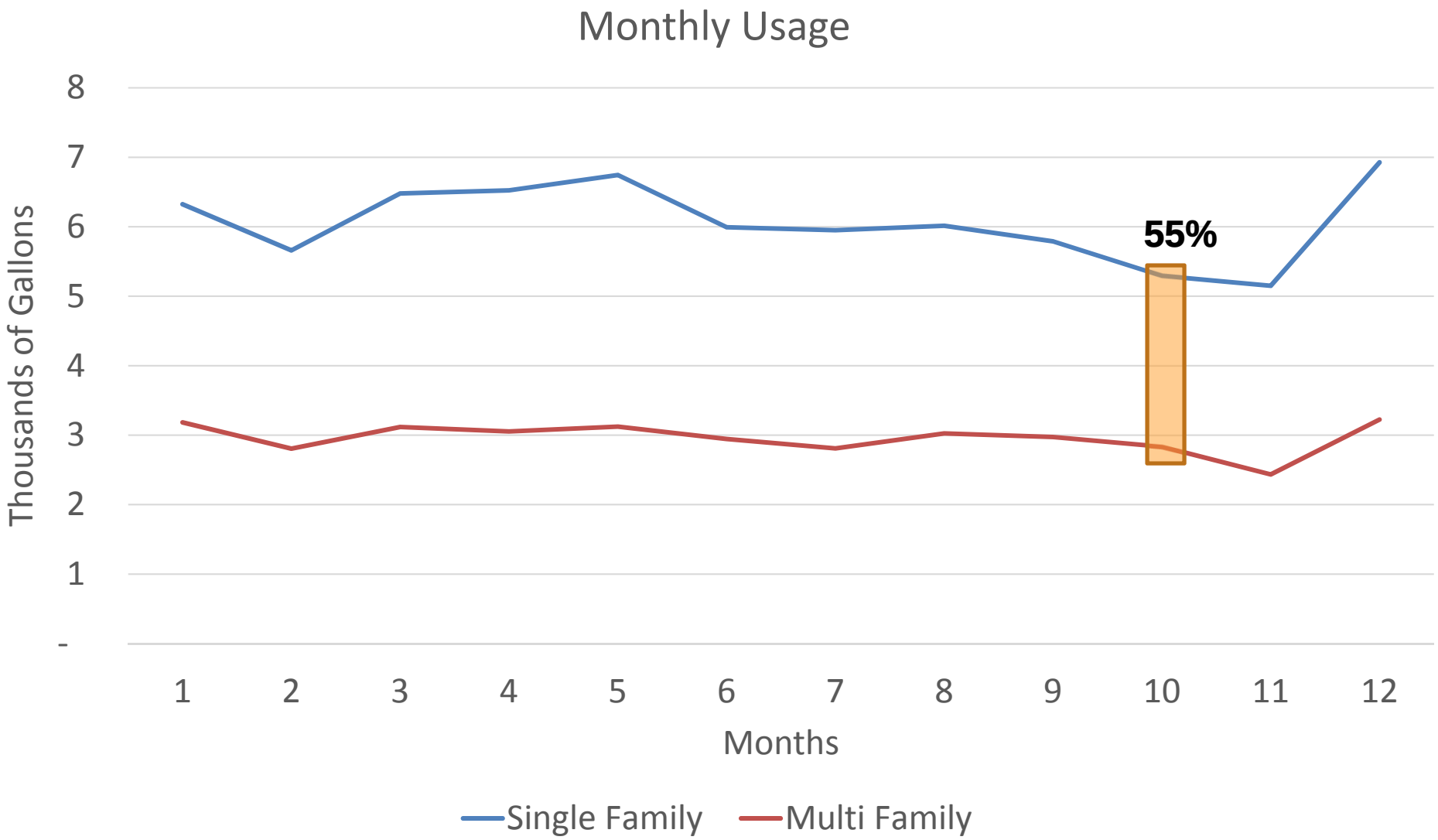
User Rates

Water Fixed Charge Update

Meter Size	Single-Family & Commercial		Multi-Family	Wholesale
Per Bill	$2.29		$2.29	$2.29
Per Unit		A →	$2.46	
5/8”	$4.48	← B		$36.52
3/4”	$6.71			$54.78
1”	$11.19			$ 91.30
1.5”	$22.38			$182.60
2”	$35.80			$292.17
3”	$78.32			$639.12
4”	$134.27			$1,095.63
6”	$302.19			$2,465.16
8”	$358.05			$2,921.67
10”	$939.88			$7,669.38
12”	$1,186.03			$9,678.03
16”	$1,365.06			$11,138.99

User Rate

Multifamily Usage Trends



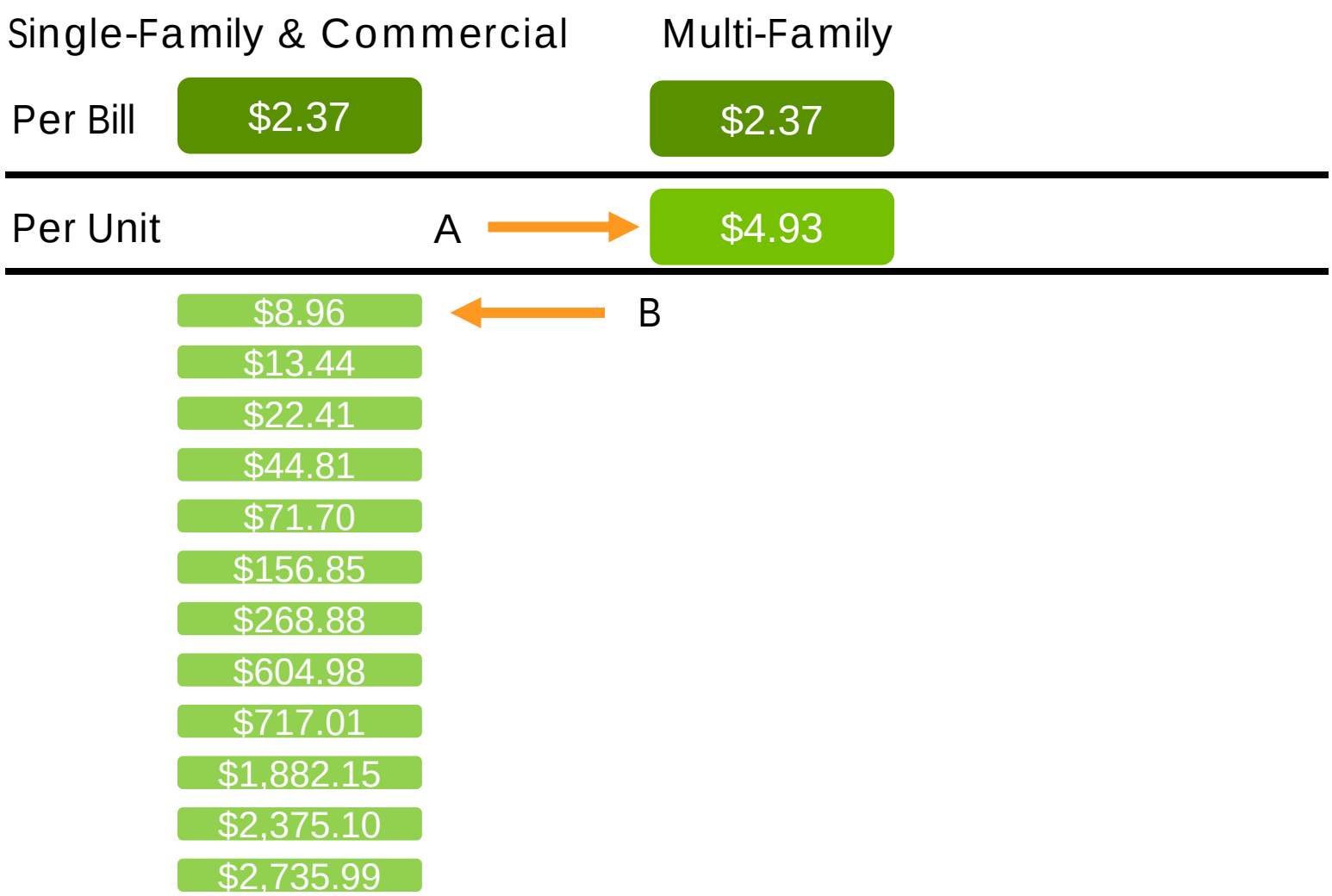
Water Fixed Charges

	Residential	Commercial	Multifamily
	Current	Proposed	Proposed	Proposed
Per Unit			$ 2.46
Per Bill		$ 2.29	$ 2.29	$ 2.29
5/8	7.56	$ 4.48	$ 4.48	
3/4	10.48	$ 6.71	$ 6.71	
1	16.36	$ 11.19	$ 11.19	
1 1/2	31.08	$ 22.38	$ 22.38	
2	48.72	$ 35.80	$ 35.80	
3	89.89	$ 78.32	$ 78.32	
4	148.73	$ 134.27	$ 134.27	
6	295.79	$ 302.10	$ 302.10	
8	472.25	$ 358.05	$ 358.05	
10	678.11	$ 939.88	$ 939.88	
12	1,266.13	$ 1,186.03	$ 1,186.03	
16	2,060.42	$ 1,365.06	$ 1,365.06	

	Wholesale	
	Current	Proposed
Per Bill		$ 2.29
5/8	$ 26.41	$ 36.52
3/4	$ 35.21	$ 54.78
1	$ 56.39	$ 91.30
1 1/2	$ 109.92	$ 182.60
2	$ 174.02	$ 292.17
3	$ 322.83	$ 639.12
4	$ 536.37	$ 1,095.63
6	$1,069.87	$ 2,465.16
8	$1,709.25	$ 2,921.67
10	$3,070.38	$ 7,669.38
12	$4,936.80	$ 9,678.03
16	$8,343.14	$11,138.87

User Rates

Sewer Fixed Charge Update



Sewer Fixed Charges

		Residential	Commercial	Multifamily
	Current	Proposed	Proposed	Proposed
Per Unit				$ 4.93
Per Bill		$ 2.37	$ 2.37	$ 2.37
5/8	$ 11.09	$ 8.96	$ 8.96	
3/4	$ 15.81	$ 13.44	$ 13.44	
1	$ 25.26	$ 22.41	$ 22.41	
1 1/2	$ 48.81	$ 44.81	$ 44.81	
2	$ 77.13	$ 71.70	$ 71.70	
3	$ 143.15	$ 156.85	$ 156.85	
4	$ 237.50	$ 268.88	$ 268.88	
6	$ 473.29	$ 604.98	$ 604.98	
8	$ 756.28	$ 717.01	$ 717.01	
10	$1,086.41	$ 1,882.15	$ 1,882.15	
12	$2,029.68	$ 2,375.10	$ 2,375.10	
16	$3,303.08	$ 2,735.99	$ 2,735.99	

User Rates

Current Volumetric Charges

Water:

WATER COMMODITY - MONTHLY USAGE CHARGES

		CONSUMPTION	RATE
SINGLE FAMILY (1,000 gallons per month)	BLOCK 1	0 - 3,000	$2.32
	BLOCK 2	4,000 - 8,000	$5.12
	BLOCK 3	9,000 - 12,000	$6.41
	BLOCK 4	13,000 - 20,000	$8.64
	BLOCK 5	> 20,000	$12.54
MULTIFAMILY RESIDENTIAL (1,000 gallons per month X number of dwelling units)	BLOCK 1	0 - 1,000	$2.32
	BLOCK 2	2,000 - 3,000	$5.12
	BLOCK 3	4,000 - 5,000	$6.41
	BLOCK 4	6,000 - 8,000	$8.64
	BLOCK 5	> 8,000	$12.54
COMMERCIAL		> 1,000	$5.29
MASTER METER (for each 1,000 gallons or fraction thereof)		> 1,000	$4.82

Sewer:

SEWER (WASTEWATER) COMMODITY - MONTHLY USAGE CHARGES

		CONSUMPTION	RATE
SINGLE & MULTIFAMILY RESIDENTIAL (UNITS THAT HAVE SEPARATE METERS)	BLOCK 1	0 - 3,000	$4.10
	BLOCK 2	4,000 - 20,000	$9.06
	BLOCK 3	> 20,000	N/A

Single family residences will not be charged a commodity charge for usage in excess of twenty-thousand (20,000) gallons per month per unit.

MULTIFAMILY RESIDENTIAL (multifamily units that are not separately metered - 1,000 gallons per month X number of units)	BLOCK 1	0 - 1,000	$4.10
	BLOCK 2	2,000 - 8,000	$9.06
	BLOCK 3	> 8,000	N/A

Multifamily residences will not be charged a commodity charge for usage in excess of eight-thousand (8,000) gallons per month per unit.

COMMERCIAL	> 1,000	$7.28

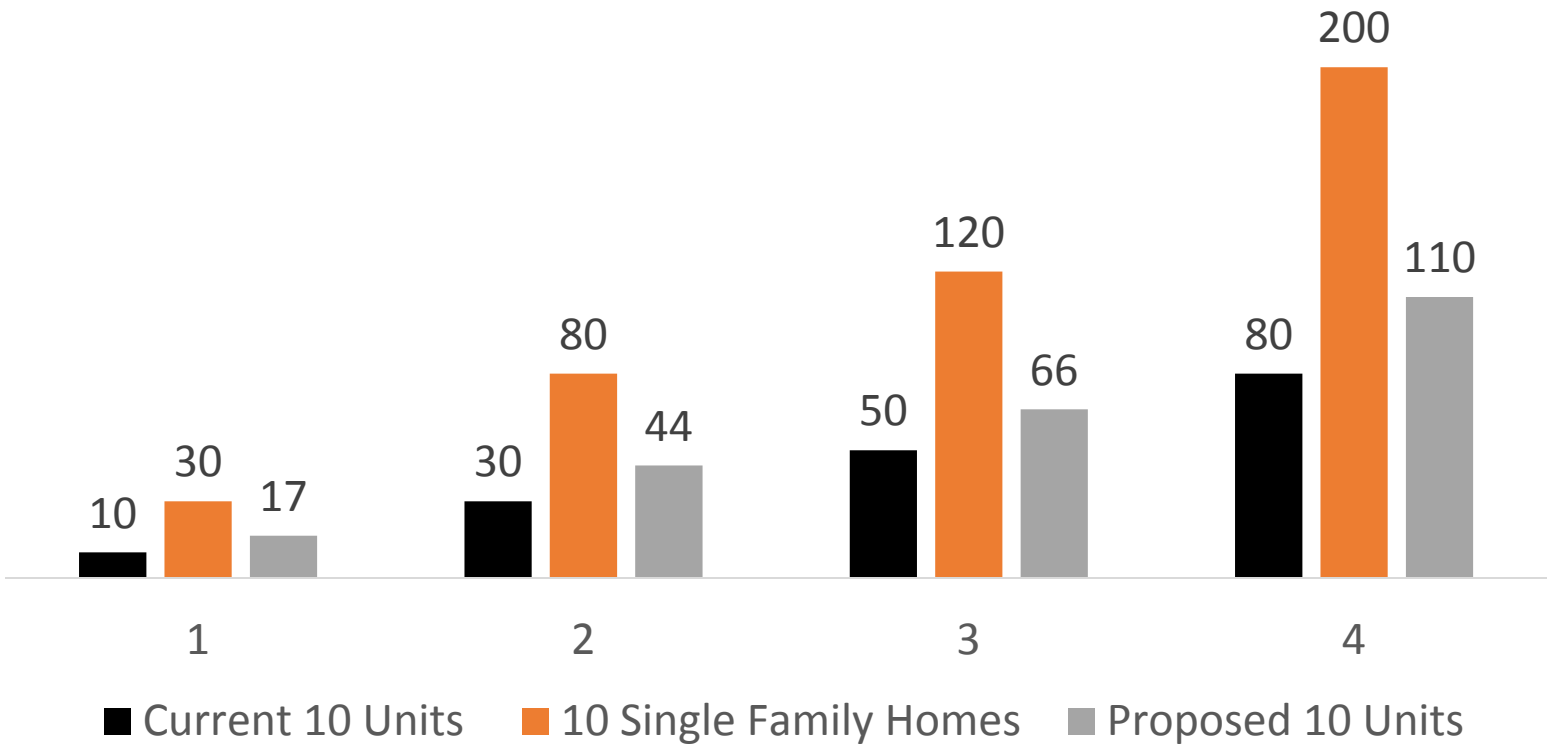
User Rates

Volume Rate Modifications

- Removal of the sewer billing cap, currently 20,000 gallons monthly for single family homes and 8,000 gallons per unit for multifamily units
- Update of the wholesale rate using cost allocation principles to insure the appropriate level of cost recovery
- Application of a 25% outside city surcharge to wholesale customers
- Resizing of Multi-family Tiers to insure the equity of tier ranges

User Rates

Multi-family Tier Sizing



User Rates

Updated Volume Rates

Water Volume Pricing

	Residential	Commercial	Multifamily	Wholesale
All		$ 5.59		$ 2.78
Tier 1	$ 2.45		$ 2.45	
Tier 2	$ 5.41		$ 5.41	
Tier 3	$ 6.77		$ 6.77	
Tier 4	$ 9.13		$ 9.13	
Tier 5	$ 13.25		$ 13.25	

Tier Break Points *

	Residential	Commercial	Multifamily	Wholesale
Tier 1	3,000	All Use	3,000	All Use
Tier 2	8,000		8,000	
Tier 3	12,000		12,000	
Tier 4	20,000		20,000	
Tier 5	> 20,000		> 20,000	

*Multiplied Against effective ERUs

Wastewater Volume Pricing

	Residential	Commercial	Multifamily
All		$ 7.39	
Tier 1	$ 4.16		$ 4.16
Tier 2	$ 9.19		$ 9.19

Tier Break Points*

	Residential	Commercial	Multifamily
Tier 1	3,000	All Use	3,000
Tier 2	>3,000		>3,000

*Multiplied Against effective ERUs

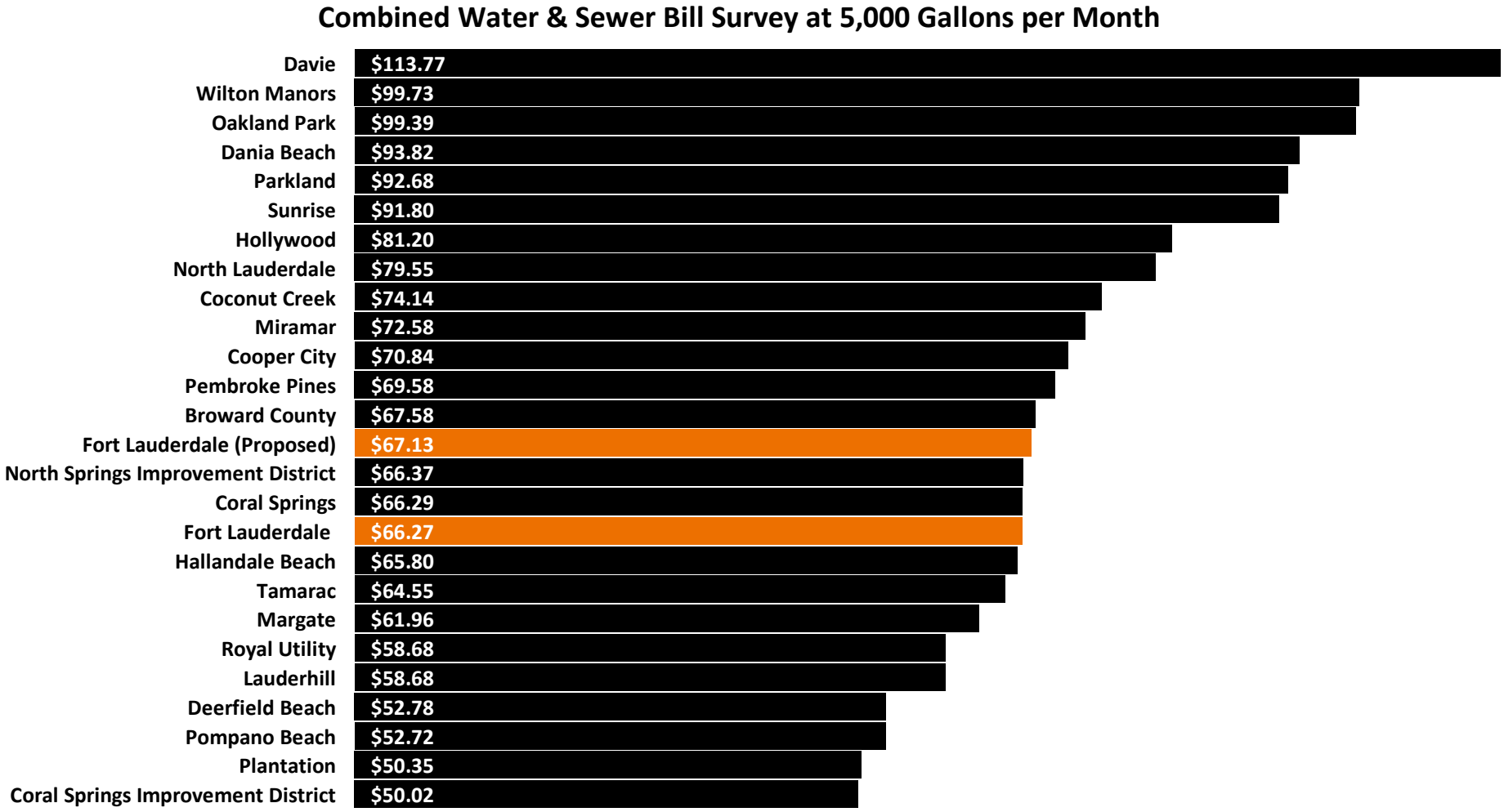
User Rates

Residential Water & Sewer 5/8" Meter Customer Impacts

K Gallons	Cumulative Bills	Current Total	Proposed Total	Change $	Change %
0	7%	$ 18.65	$ 18.10	$ (0.55)	-2.95%
1	15%	$ 25.07	$ 24.71	$ (0.36)	-1.44%
2	27%	$ 31.49	$ 31.32	$ (0.17)	-0.54%
3	41%	$ 37.91	$ 37.93	$ 0.02	0.05%
4	54%	$ 52.09	$ 52.53	$ 0.44	0.84%
5	64%	$ 66.27	$ 67.13	$ 0.86	1.30%
6	72%	$ 80.45	$ 81.73	$ 1.28	1.59%
7	77%	$ 94.63	$ 96.33	$ 1.70	1.80%
8	82%	$ 108.81	$ 110.93	$ 2.12	1.95%
9	85%	$ 124.28	$ 126.89	$ 2.61	2.10%
10	87%	$ 139.75	$ 142.85	$ 3.10	2.22%
15	94%	$ 223.79	$ 229.73	$ 5.94	2.65%
20	96%	$ 312.29	$ 321.33	$ 9.04	2.89%
25	98%	$ 374.99	$ 433.53	$ 58.54	15.61%
30	99%	$ 437.69	$ 545.73	$ 108.04	24.68%

User Rates

Water and Sewer Rate Survey 5/8” User @ 5,000 Gallons



21,476 Meters

User Rates

Commercial 5/8” Meter Customer Impacts

5/8" Meter				
K Gallons	Current Total	Proposed Total	Change $	Change %
0	$ 18.65	$ 18.10	$ (0.55)	-2.95%
5	$ 81.50	$ 83.00	$ 1.50	1.84%
10	$ 144.35	$ 147.90	$ 3.55	2.46%
20	$ 270.05	$ 277.70	$ 7.65	2.83%
30	$ 395.75	$ 407.50	$ 11.75	2.97%

1,879 Meters

1" Meter				
K Gallons	Current Total	Proposed Total	Change $	Change %
0	$ 41.62	$ 38.26	$ (3.36)	-8.07%
5	$ 104.47	$ 103.16	$ (1.31)	-1.25%
10	$ 167.32	$ 168.06	$ 0.74	0.44%
20	$ 293.02	$ 297.86	$ 4.84	1.65%
30	$ 418.72	$ 427.66	$ 8.94	2.14%
50	$ 670.12	$ 687.26	$ 17.14	2.56%

1,444 Meters

User Rates

Select Multi-Family Customer Impacts

Option A

Meter Size	Units	Monthly Water (Gal)	Monthly Sewer (Gal)	Total Existing	Total Proposed	$ Chg.	% Chg.
1"	20	50,000	50,000	$595.42	$618.79	$23.37	3.9%
2"	100	300,000	300,000	$3,603.85	$3,805.31	$201.46	5.6%
4"	280	3,000,000	3,000,000	$50,071.83	$47,305.68	-$2,766.15	-5.5%
4"	400	1,100,000	1,100,000	$11,462.23	$12,287.26	$825.03	7.2%
6"	370	1,300,000	1,100,000	$13,858.98	$14,084.07	$225.08	1.6%
8"	33	275,000	275,000	$5,387.19	$4,139.99	-$1,247.20	-23.2%

Option B

Meter Size	Units	Monthly Water (Gal)	Monthly Sewer (Gal)	Total Existing	Total Proposed	$ Chg.	% Chg.
1"	20	50,000	50,000	$595.42	$504.57	-$90.85	-15.3%
2"	100	300,000	300,000	$3,603.85	$3,173.76	-$430.09	-11.9%
4"	280	3,000,000	3,000,000	$50,071.83	$45,639.44	-$4,432.39	-8.9%
4"	400	1,100,000	1,100,000	$11,462.23	$9,734.22	-$1,728.01	-15.1%
6"	370	1,300,000	1,100,000	$13,858.98	$12,256.42	-$1,602.57	-11.6%
8"	33	275,000	275,000	$5,387.19	$4,970.67	-$416.52	-7.7%

User Rates

Select Wholesale Customer Impacts

Account	Usage (Kgal)	Current Total	Proposed Total	$ Change	% Change
Account 1	30,504	$ 159,867.72	$ 142,631.83	$ (17,235.89)	-10.8%
Account 2	105,646	$ 550,235.72	$ 453,518.07	$ (96,717.65)	-17.6%
Account 3	745	$ 24,101.90	$ 46,438.96	$ 22,337.06	92.7%
Account 4	845	$ 24,583.90	$ 46,785.21	$ 22,201.31	90.3%
Account 5	244,700	$1,279,571.68	$1,014,391.09	$(265,180.59)	-20.7%
Account 6	73,927	$ 369,166.58	$ 292,983.97	$ (76,182.61)	-20.6%

45 Meters

Presentation Overview

Today's Topics

1. Revenue Sufficiency
2. Cost of Service
3. User Rates
4. Impact Fees

Impact Fees

Impact Fee Update

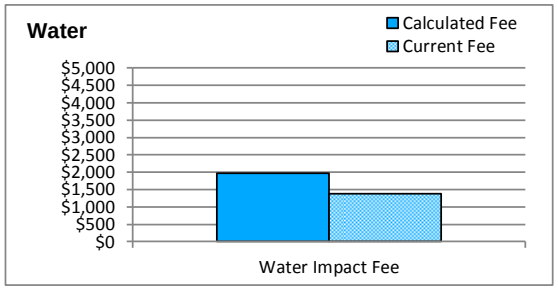
- Impact fees last updated 10+ years ago
- Analysis calculated the cost of capacity of the current water and sewer systems.
- Reviewed and updated the level of service provided to each ERU.
- The resulting fee represents the current cost to buy into the system for an ERU.

Impact Fees

Impact Fee Update

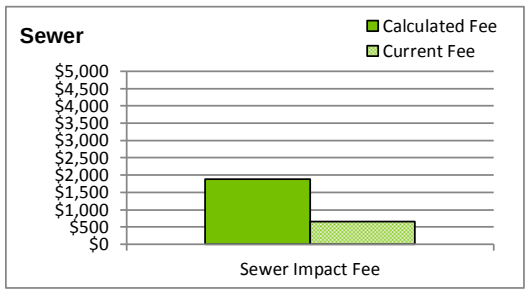
Water Impact Fee

Total Plant In Service	$	533,891,454
Expansion Capital Costs	$	-
Total Costs Buy-In Method	$	533,891,454
Cost per ERU	$	3,048
Debt Service Credit	$	(1,129)
Cost Recovery Percentage		100.0%
Total Calculated Fee:	**$**	**1,977**
Credit % (Incremental or Combined)		37.0%
Current Fee:	$	1,386
Dollar Change:	$	591
Percentage Change:		43%



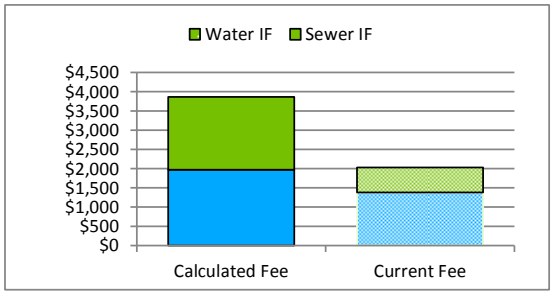
Sewer Impact Fee

Total Plant In Service	$	939,034,371
Expansion Capital Costs	$	-
Total Costs Buy-In Method	$	939,034,371
Cost per ERU	$	2,904
Debt Service Credit	$	(1,071)
Cost Recovery Percentage		100.0%
Total Calculated Fee:	**$**	**1,888**
Credit % (Incremental or Combined)		36.9%
Current Fee:	$	651
Dollar Change:	$	1,237
Percentage Change:		190%



Total Impact Fee

Current		
Water IF	$	1,386
Sewer IF	$	651
Total SDFs	**$**	**2,037**
Calculated		
Water IF	$	1,977
Sewer IF	$	1,888
Total Calculated SDFs	**$**	**3,860**
Dollar Change	$	1,823
Percent Change		89.5%



Impact Fee Recommendations

- The City should consider updating the impact fees charged to fully recovery the current cost of capacity for new connections.
- The City should consider assessing impact fee to new connections on the wholesale systems.


Questions/Discussions

CONSENT ORDER UPDATE

to

City of Fort Lauderdale Infrastructure Task Force

May 6, 2019 - 2 pm

CITY OF FORT LAUDERDALE



Presented by: Brandy Leighton PE, PMP
City of Fort Lauderdale
Sr. Project Manager – Consent Order

Patricia Carney PE, BCEE, DBIA
Hazen and Sawyer
Program Manager

Agenda

CITY OF FORT LAUDERDALE

- Consent Order Team
- Consent Order Background
- What's in the Consent Order?
- Key Milestones and Targets
- Expenditure Projections
- Accomplishments

Consent Order Team

CITY OF FORT LAUDERDALE

CITY OF FORT LAUDERDALE
City Management

City of Fort Lauderdale
Brandy Leighton PE PMP
Sr. Project Manager – Consent Order

Hazen

Hazen Team
Patricia Carney, PE, DBIA, BCEE
Program Manager

Project Manager II
Rohan Punit, PE

Project Manager II
Viviana Torres-Ortiz, PE

Procurement

IT

GIS

DSD

Engineering

Survey

and many others

CRAVEN THOMPSON & ASSOCIATES INC

CHEN•MOORE &ASSOCIATES

Dickey Consulting

STONER & ASSOCIATES, Inc. SURVEYORS - MAPPERS

JACOBS

Nova Consulting, Inc.

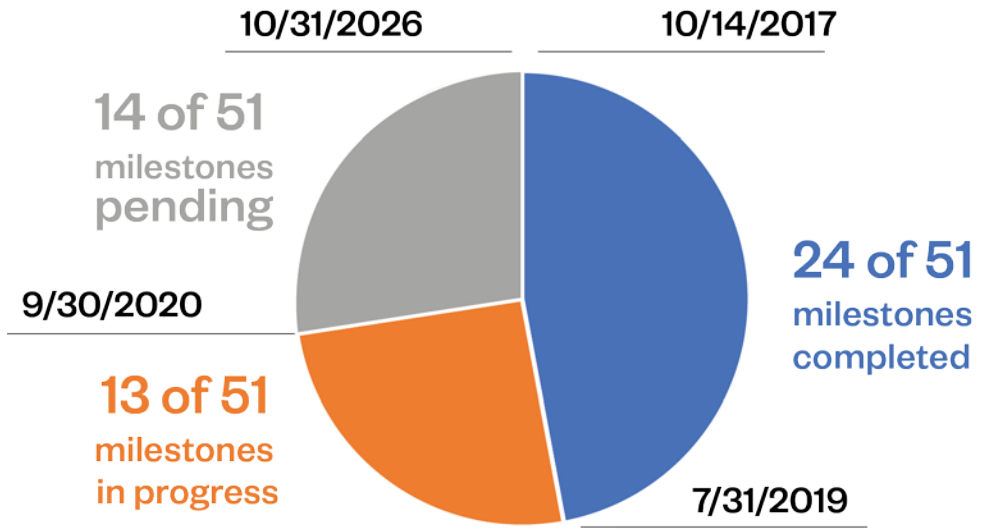
RADISE Infrastructure Engineers • Software Developers

THOMPSON & ASSOCIATES

Consent Order Background

CITY OF FORT LAUDERDALE

- Effective Date: September 29, 2017
- Completion Date: September 30, 2026
- Milestones:
  - Overall 51
  - First 21 months **24**



Collaboration with FDEP was key to effecting an agreement that was manageable and provides the greatest benefits to the neighbors.

What's in the Consent Order?

CITY OF FORT LAUDERDALE

- Fast Tracked Forcemain Repairs
- In-kind
- Pump Station Rehabilitations
- Infiltration/Inflow Removal
- Force Main Condition Assessment
- Modeling
- Mapping
- Asset Management / Capacity Management, Operations, and Maintenance
- Phase II Force Mains

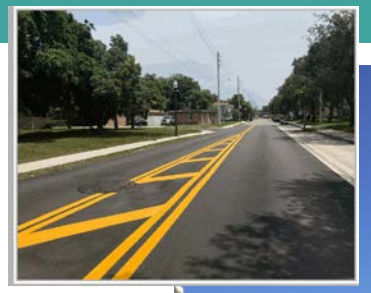


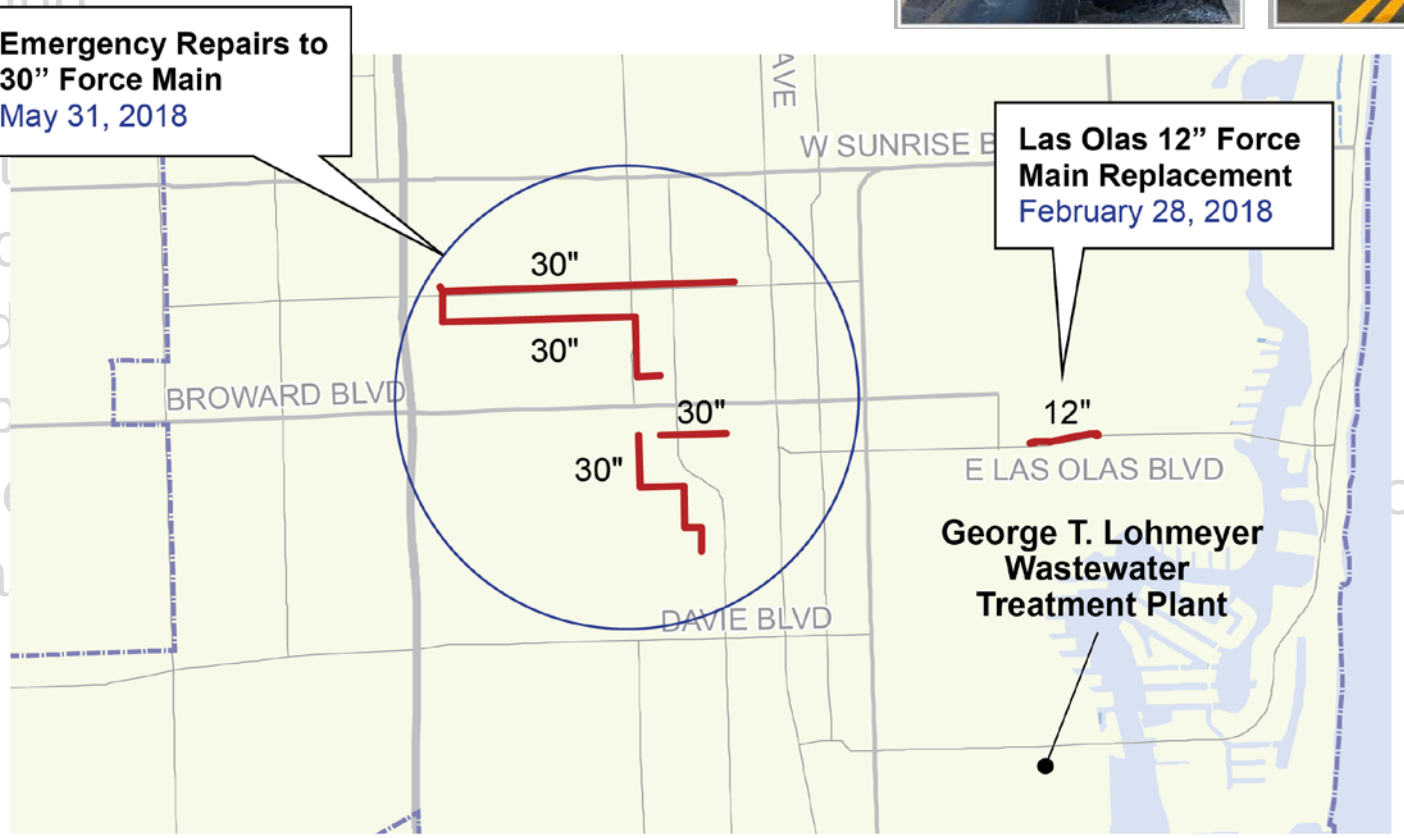
What's in the Consent Order?

CITY OF FORT LAUDERDALE

- Fast Tracked Forcemain Repairs
- In-kind
- Pu
- Infil
- Forc
- Mod
- Map
- Asse
- Pha









What's in the Consent Order?

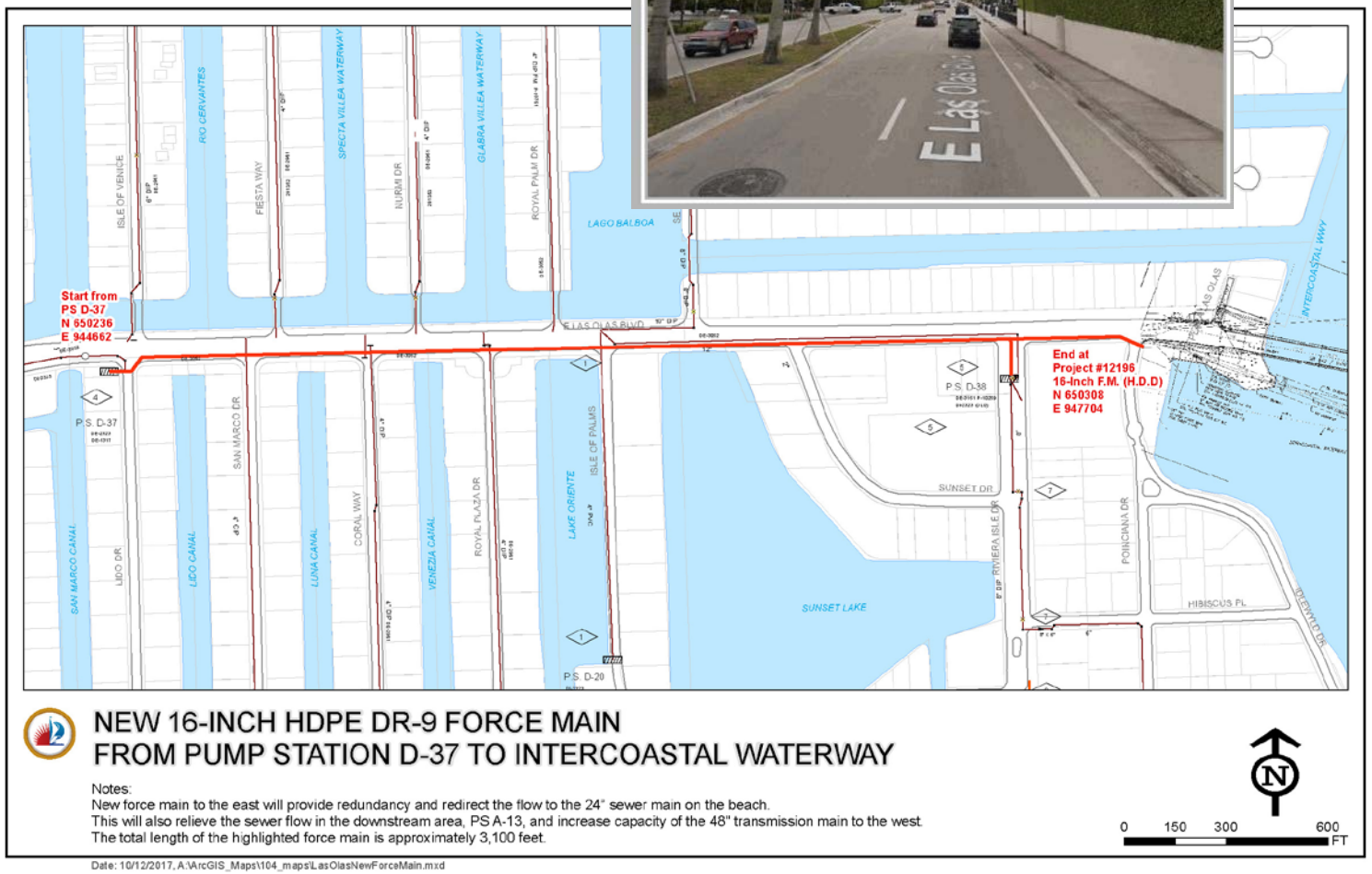
CITY OF FORT LAUDERDALE

- Fast Tracked Fc
- In-kind
- Pump Station R
- Infiltration/Inflow
- Force Main Con
- Modeling
- Mapping
- Asset Managem
- Phase II Force M

nce



EXHIBIT I



What's in the Consent Order?

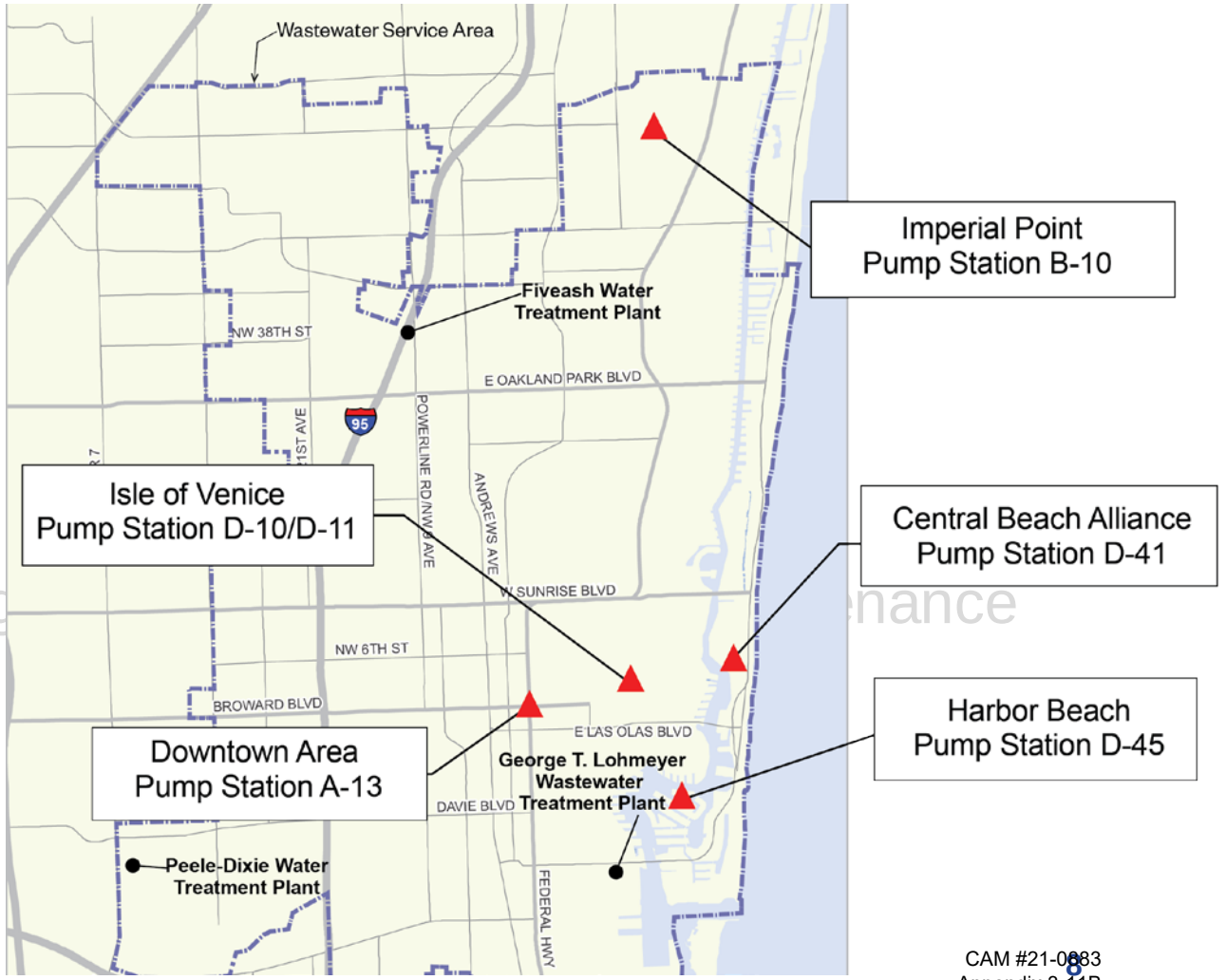
- Fast Tracked Forcemain Repairs
- In-kind
- Pump Station Rehabilitations











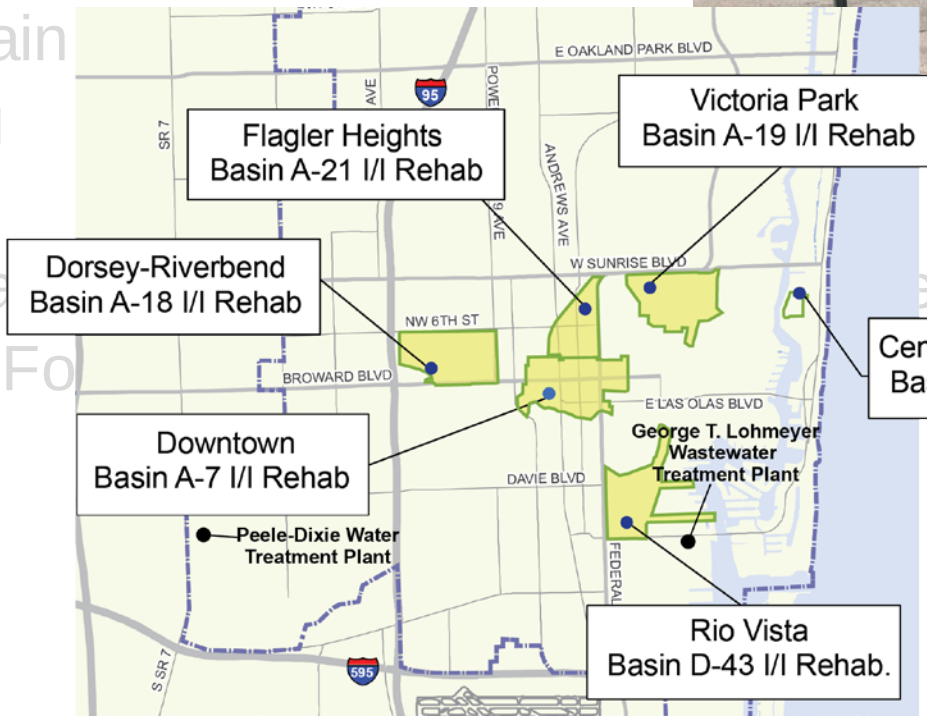
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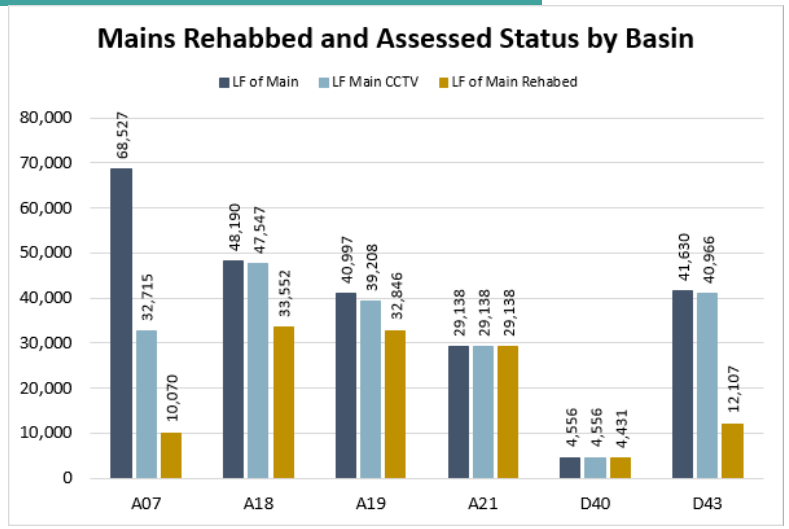
CITY OF FORT LAUDERDALE

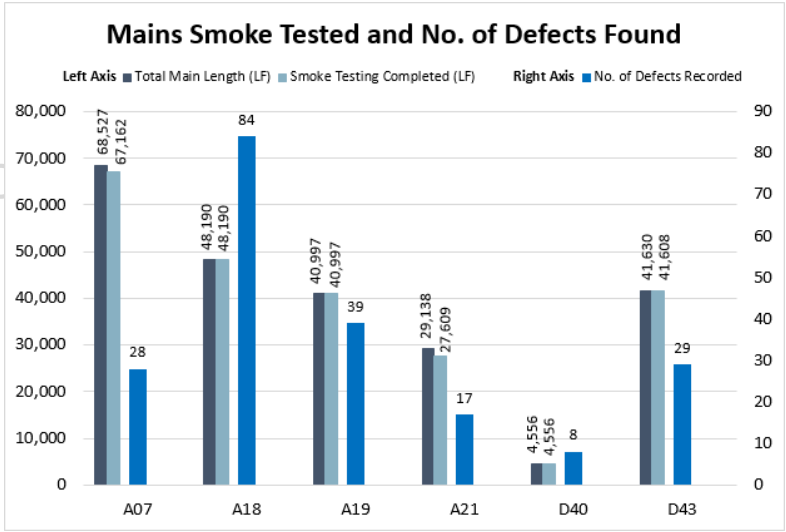
- Fast Tracked Forcemain Repairs
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- Mapping
- Asset Ma ent, Operatio
- Phase II Fo







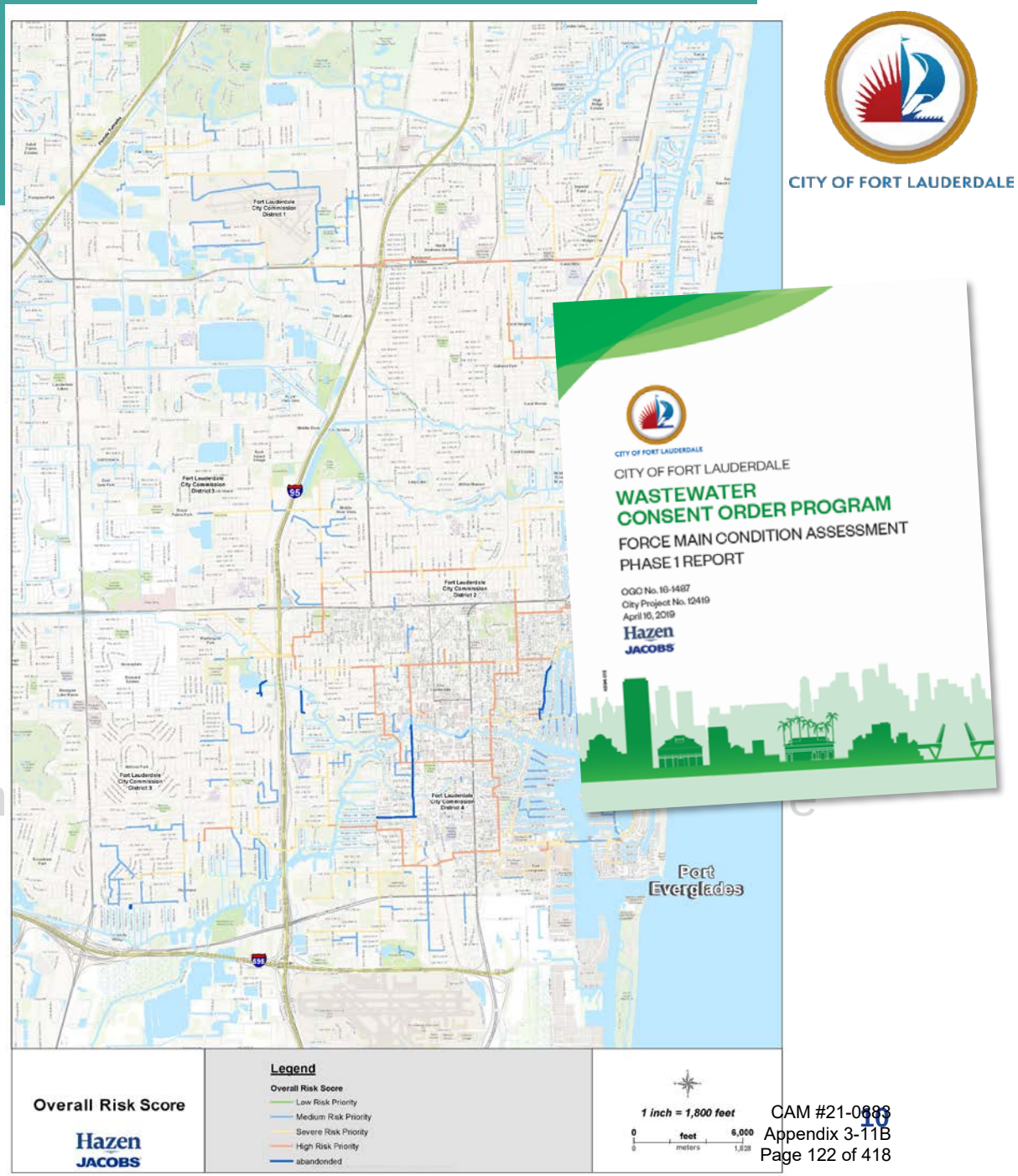




What's in the Consent Order?

- Fast Tracked Forcemain Repairs
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- Mapping
- Asset Manage m
- Phase II Forc

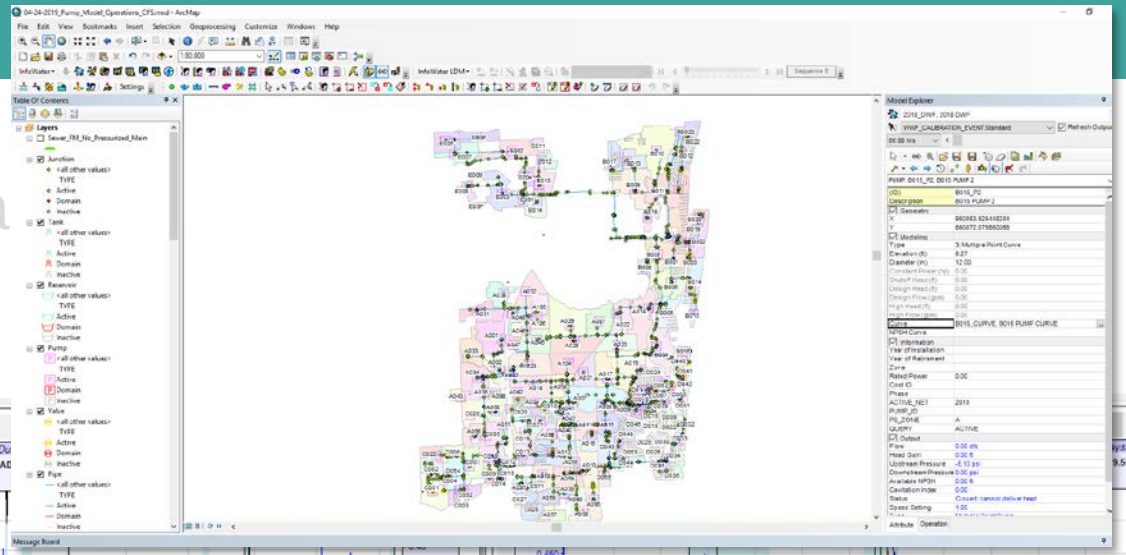


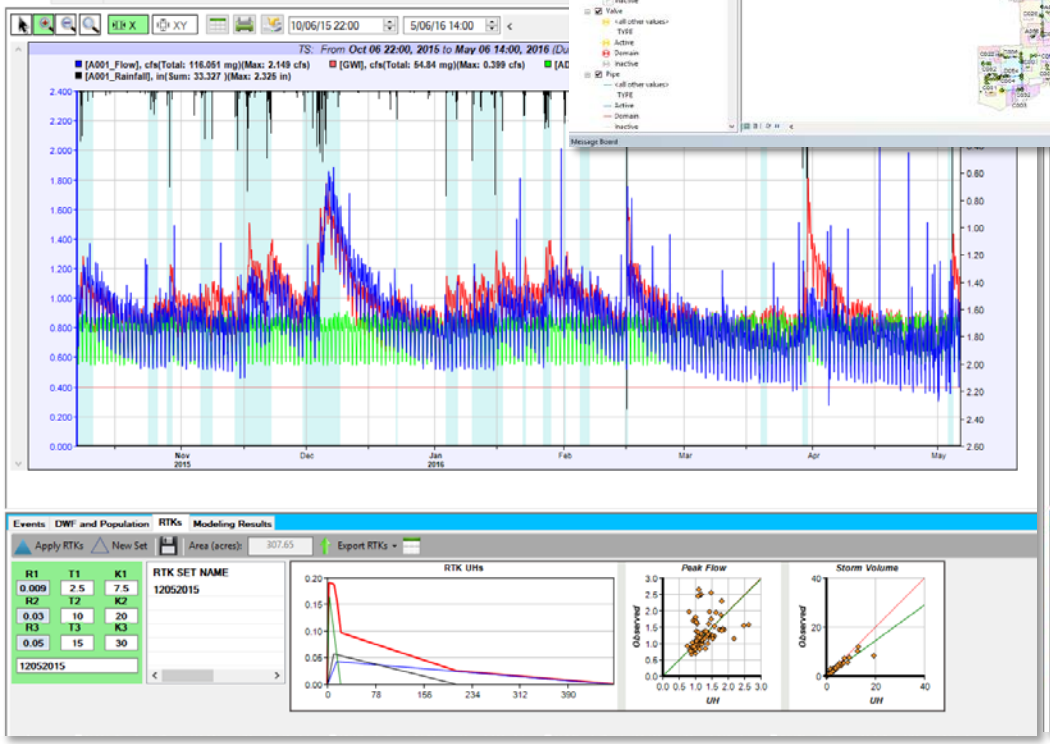


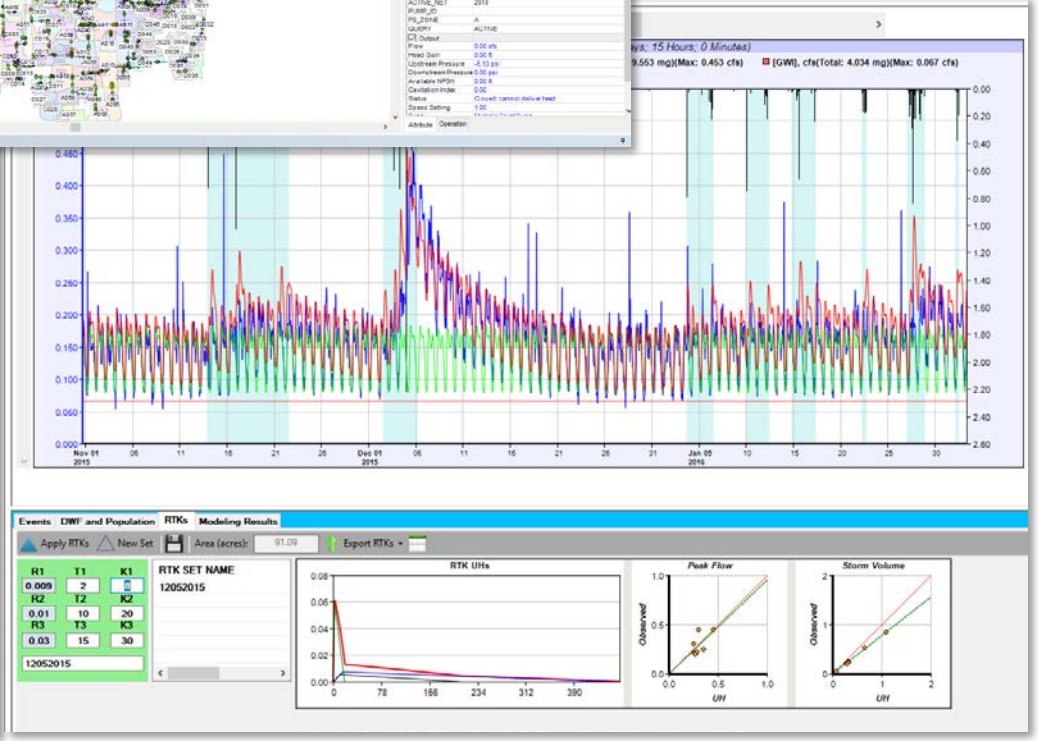
What's in the Consent Order?

CITY OF FORT LAUDERDALE

- Fast Tracked Forcemain Repa
- In-kind
- Pump Station Rehabilitations
- Infiltration/
- Force Mai
- **Modeling**
- Mapping
- Asset Mar
- Phase II F



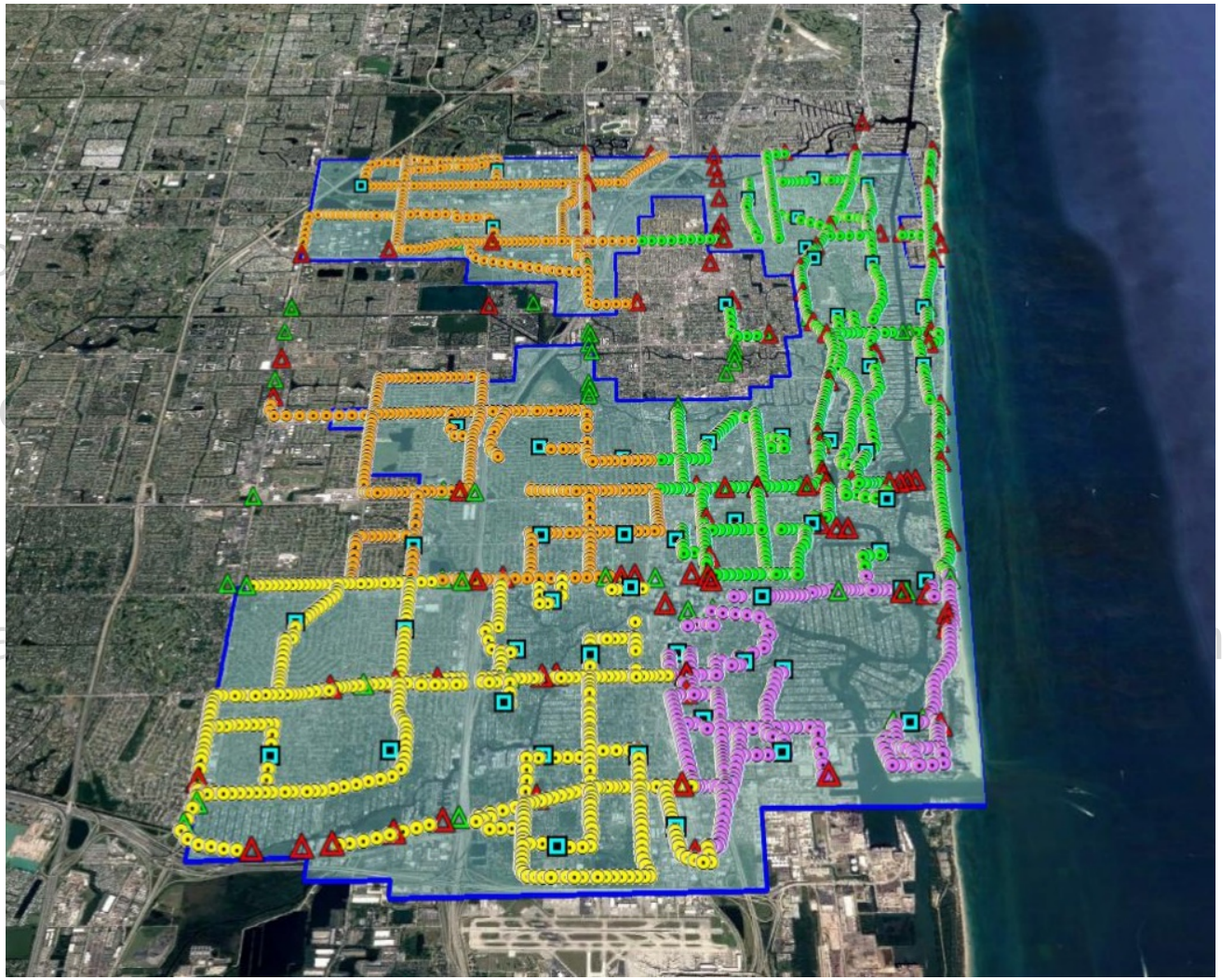




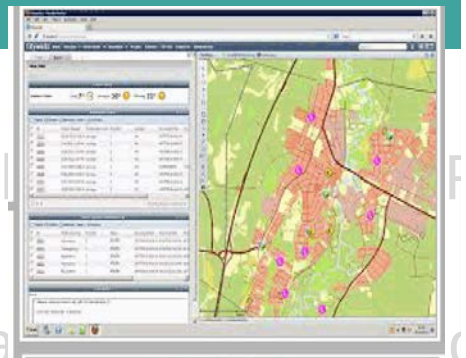
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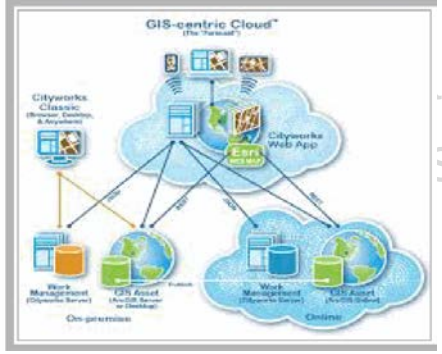
CITY OF FORT LAUDERDALE

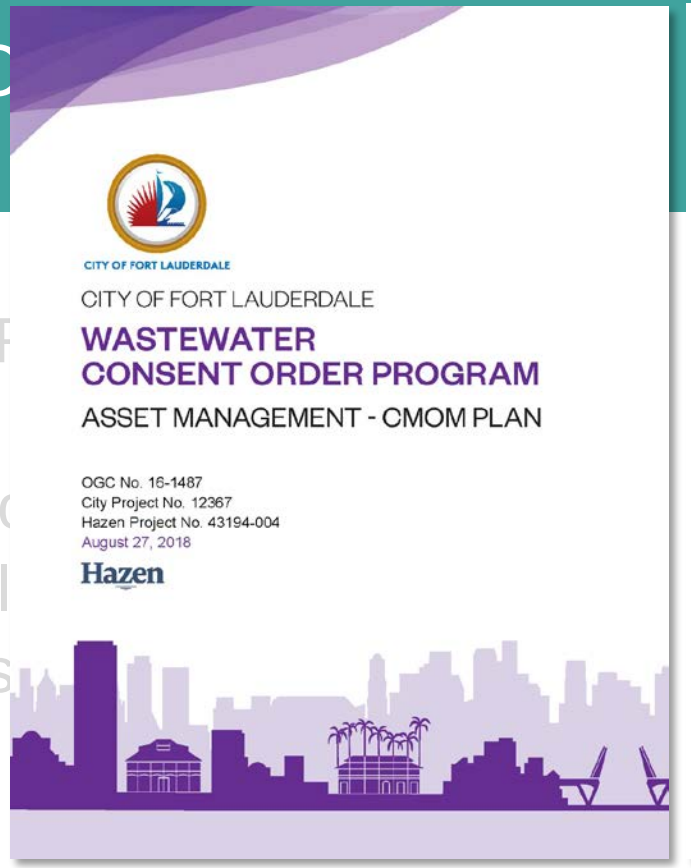
- Fast Tracked Forcemain R
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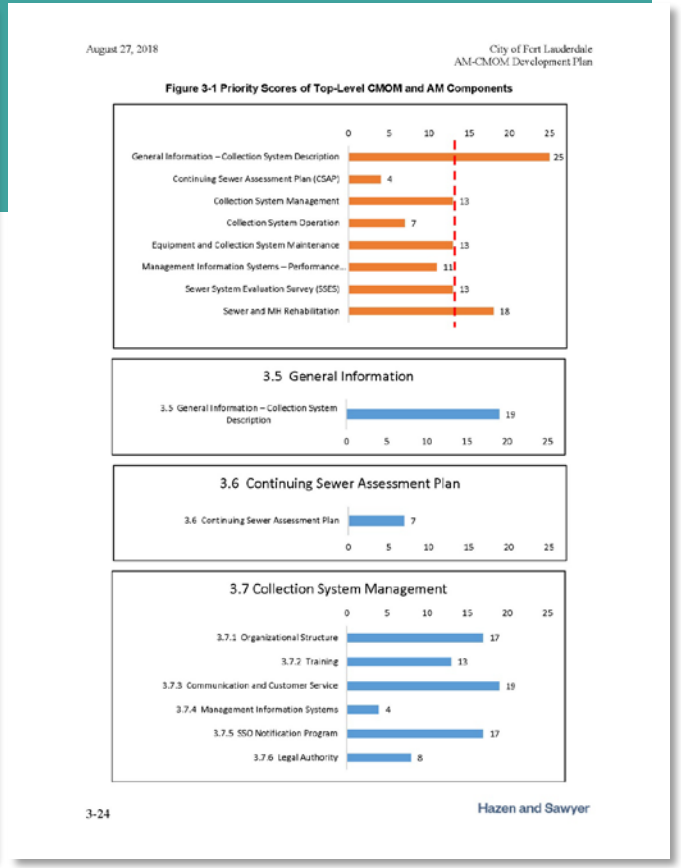


What's in the Consent C









- Fast Track
- In-kind
- Pump Sta
- Infiltration
- Force Ma
- Modeling
- Mapping
- **Asset Management / Capacity Management, Operations, and Maintenance**
- Phase II Force Mains

CITY OF FORT LAUDERDALE

What's in the Consent Order?



- Phase II Force Mains



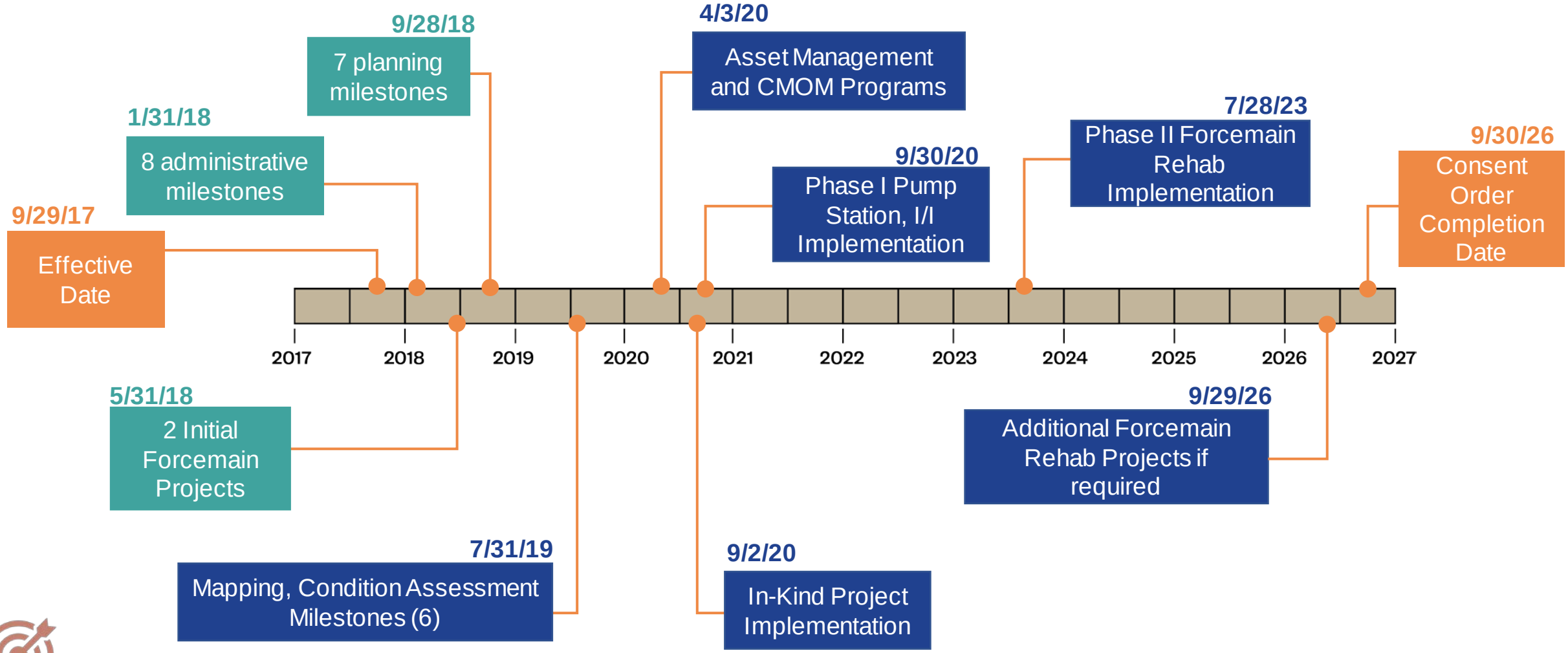
DCPs are scheduled to begin development





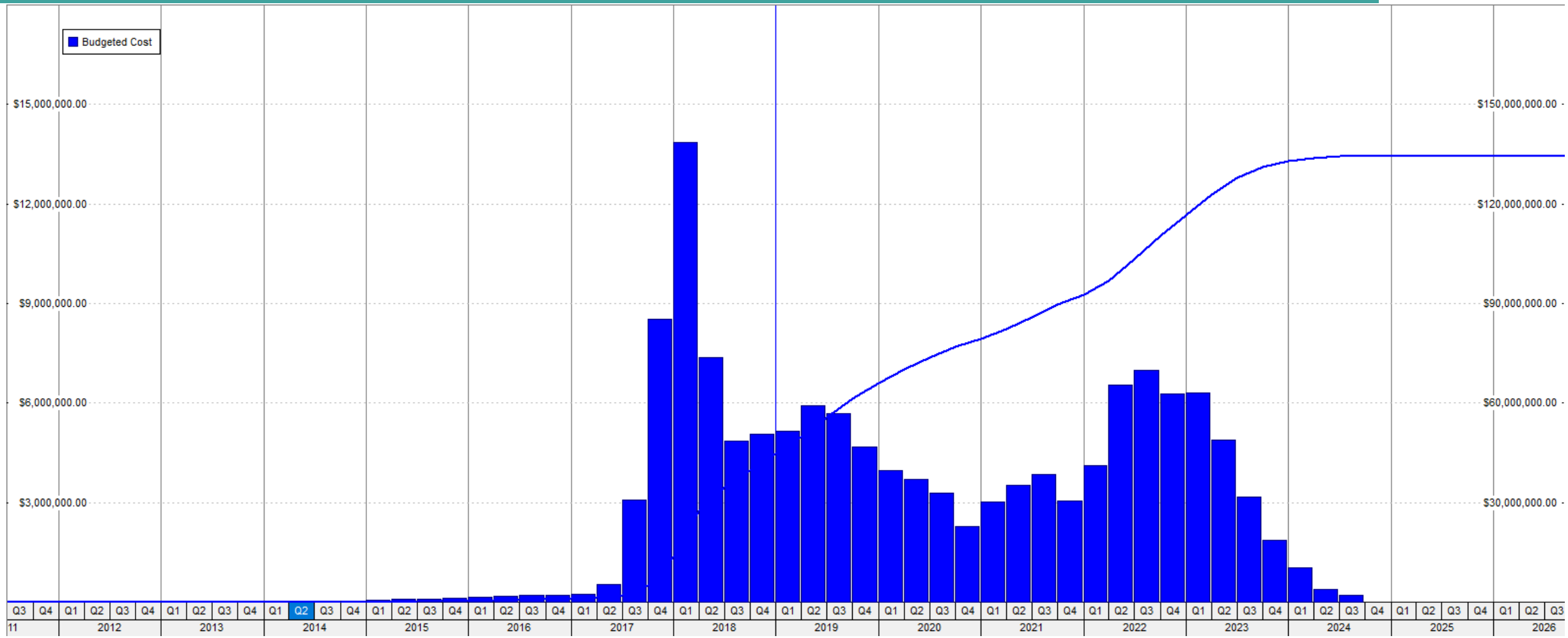
Key Milestones and Targets

CITY OF FORT LAUDERDALE



Expenditure Projections

CITY OF FORT LAUDERDALE



Accomplishments

CITY OF FORT LAUDERDALE

ACTION: In conjunction with city forces, tasks completed to date:

- **2** of **2** fast-track construction projects completed
- **1** In-kind project in partial bid phase (2020 construction end date)
- **3** of **5** Pump Stations completed
- **1** of **6** SSES basins completed
- **1** of 9 Phase 2 Forcemain projects constructed
- **3** of 9 Phase 2 Forcemain projects in planning
- **100%** of Planning Documents completed
- **Modeling, Mapping, and Condition Assessment** ongoing (due Summer 2019 and Spring 2020)



Questions?

Thank you.



CITY OF FORT LAUDERDALE

Gridics

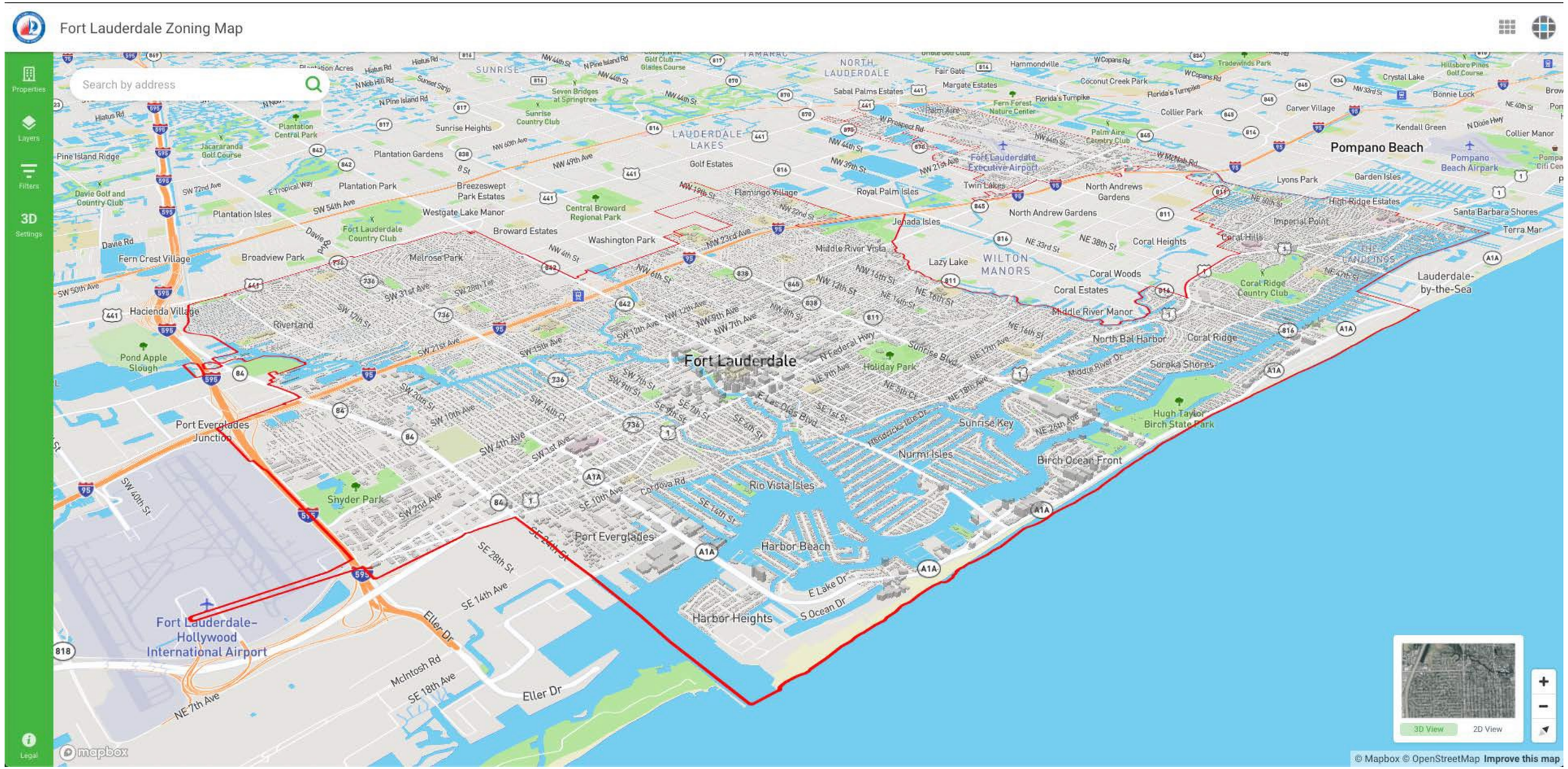
INTELLIGENT ZONING & DEVELOPMENT DATA SOLUTIONS

CodeHUB

Map Product Overview

3D City Base Map:

- View existing structures in 3D.
- Rotate map for varying viewpoints.
- Improve context around development decisions and discussions.



https://fortlauderdale.gridics.com

Gridics

3D City Base Map: - View and analyze mass, scale and architectural detail of downtown buildings based on context and area character.

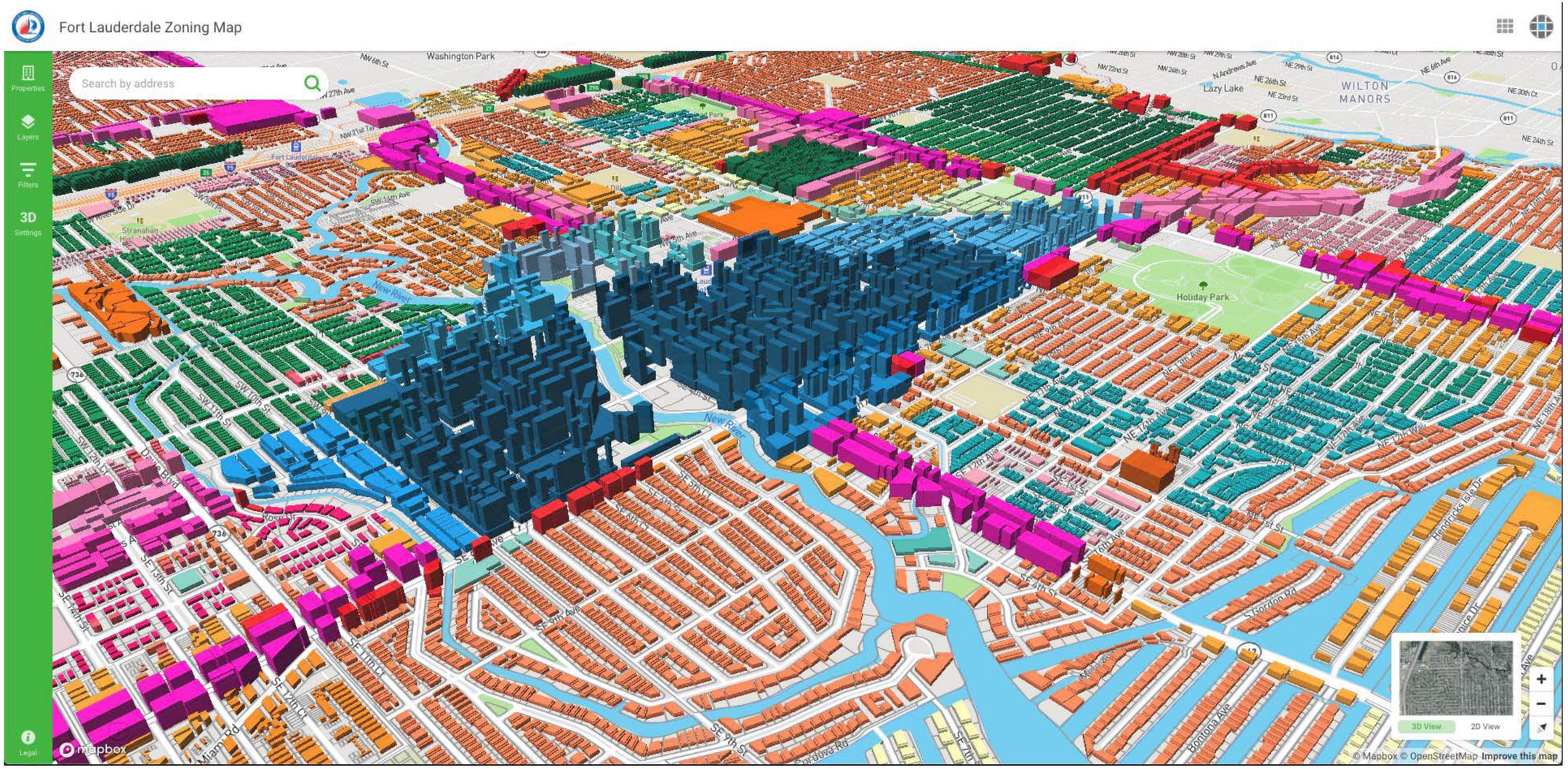


https://fortlauderdale.gridics.com

Gridics

3D Zoning Map:

- View development potential of each parcel, according to zoning
- Quickly visualize context of each area relative to neighboring zones.



https://fortlauderdale.gridics.com

Gridics

3D Zoning Map:

- Visualize maximum allowances relative to existing structures.

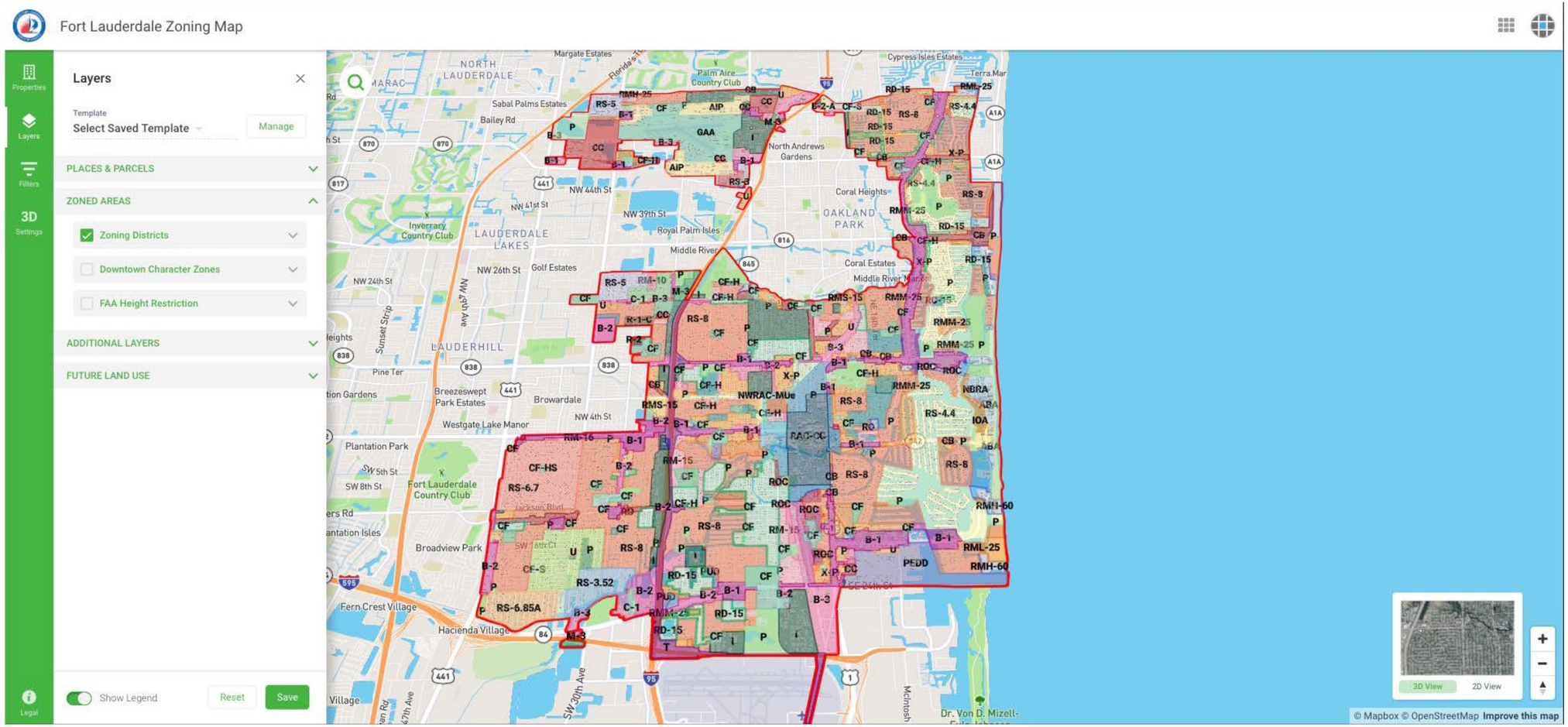


https://fortlauderdale.gridics.com

Gridics

3D Zoning Map:

- Easy to navigate interface and menus.
- Add custom data layers for review by staff and policy makers prior to approval.

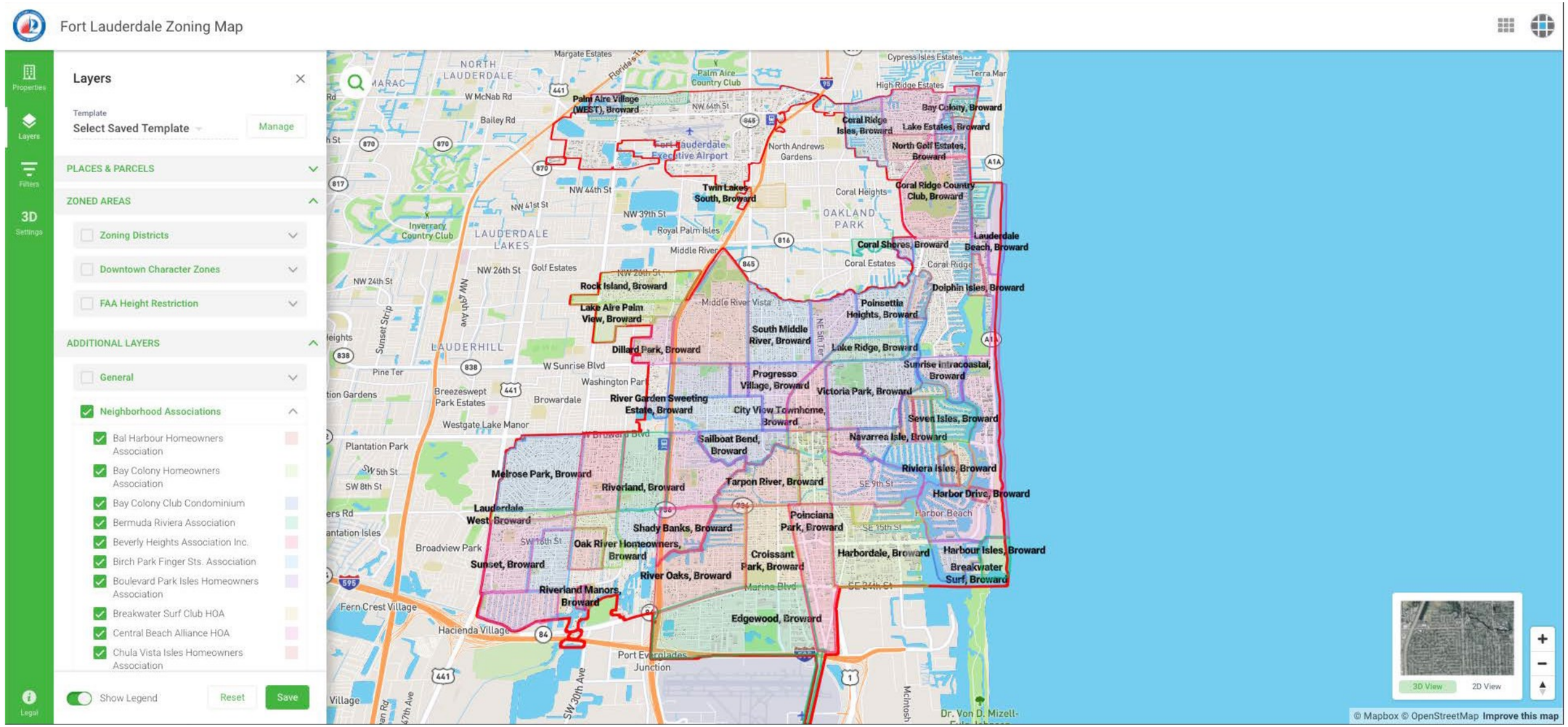


https://fortlauderdale.gridics.com

Gridics

Beyond Zoning

- View other commonly defined areas like opportunity zones, neighborhoods, districts and more.

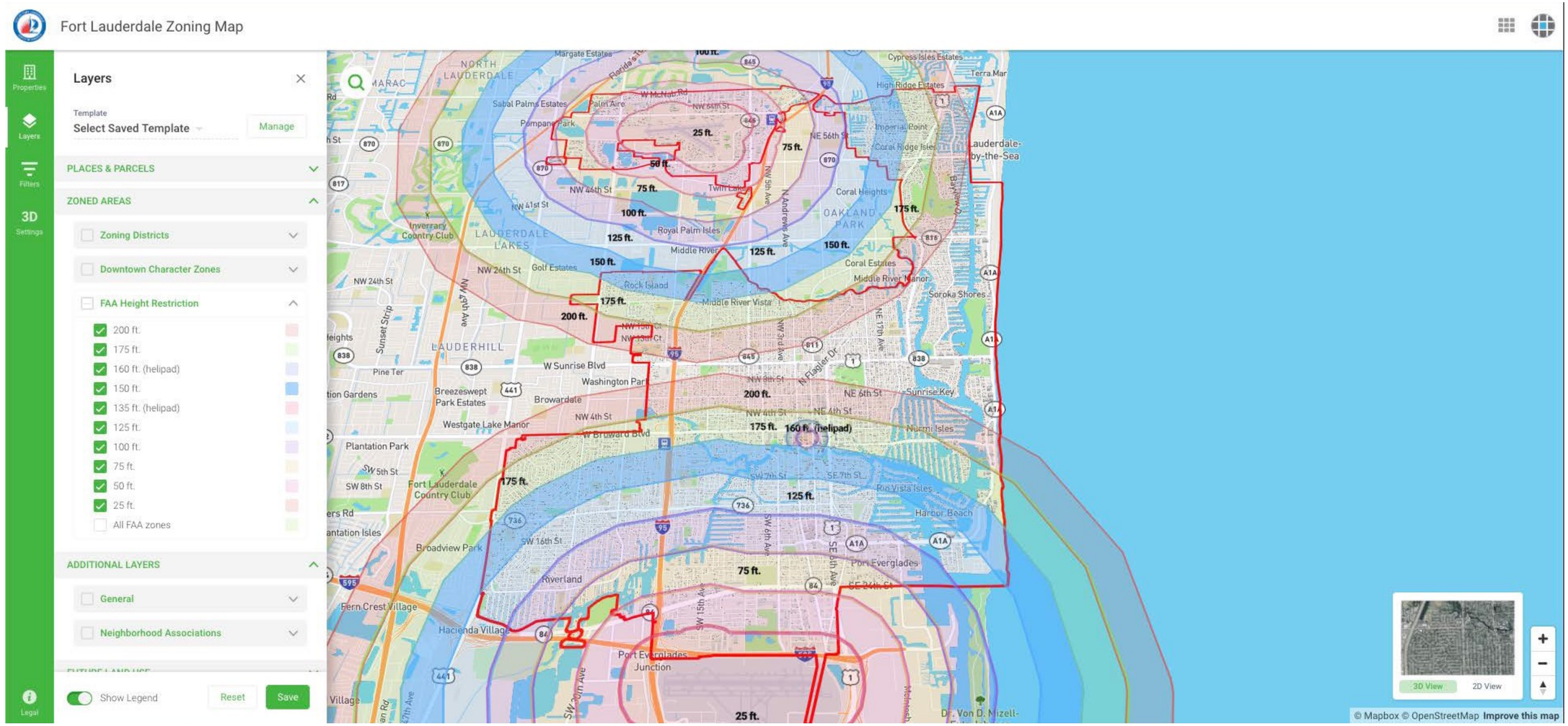


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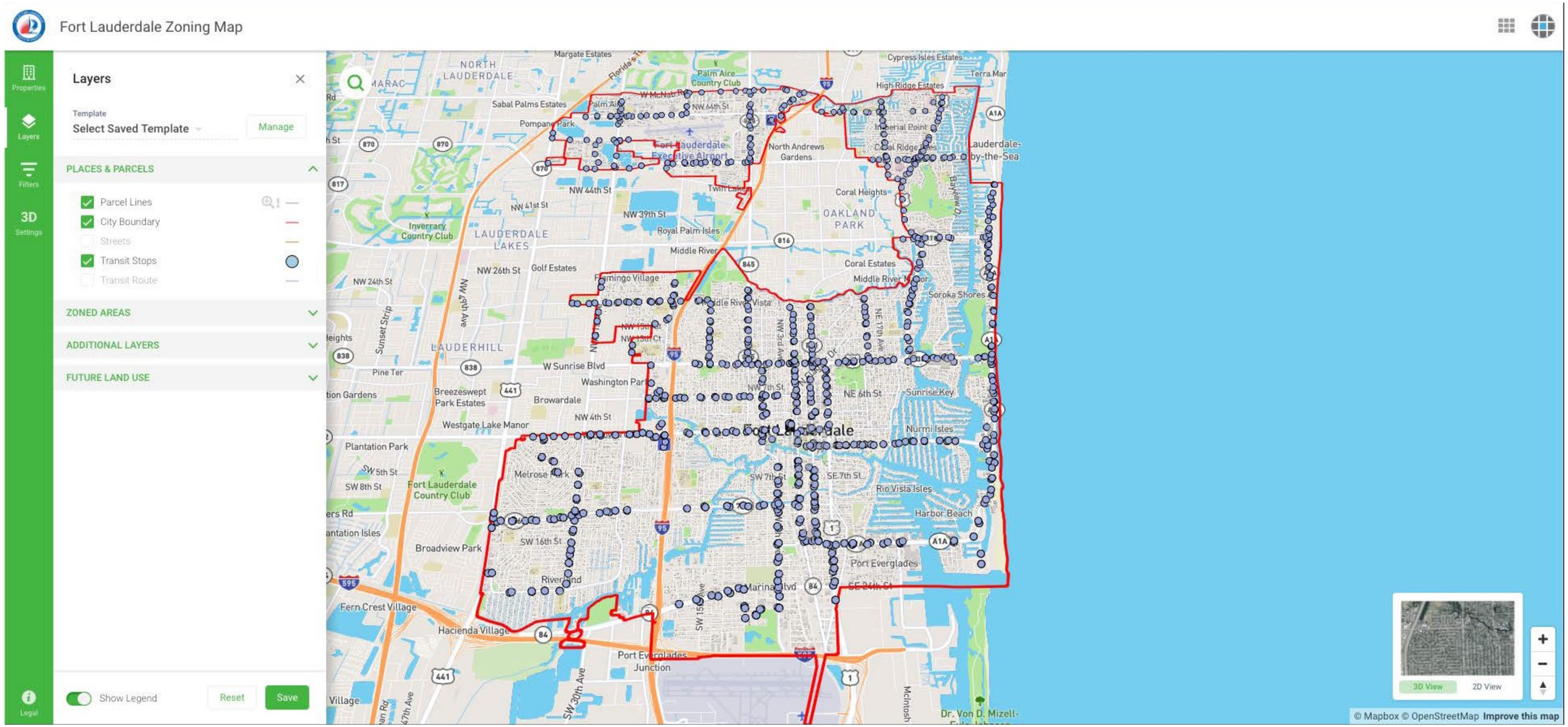


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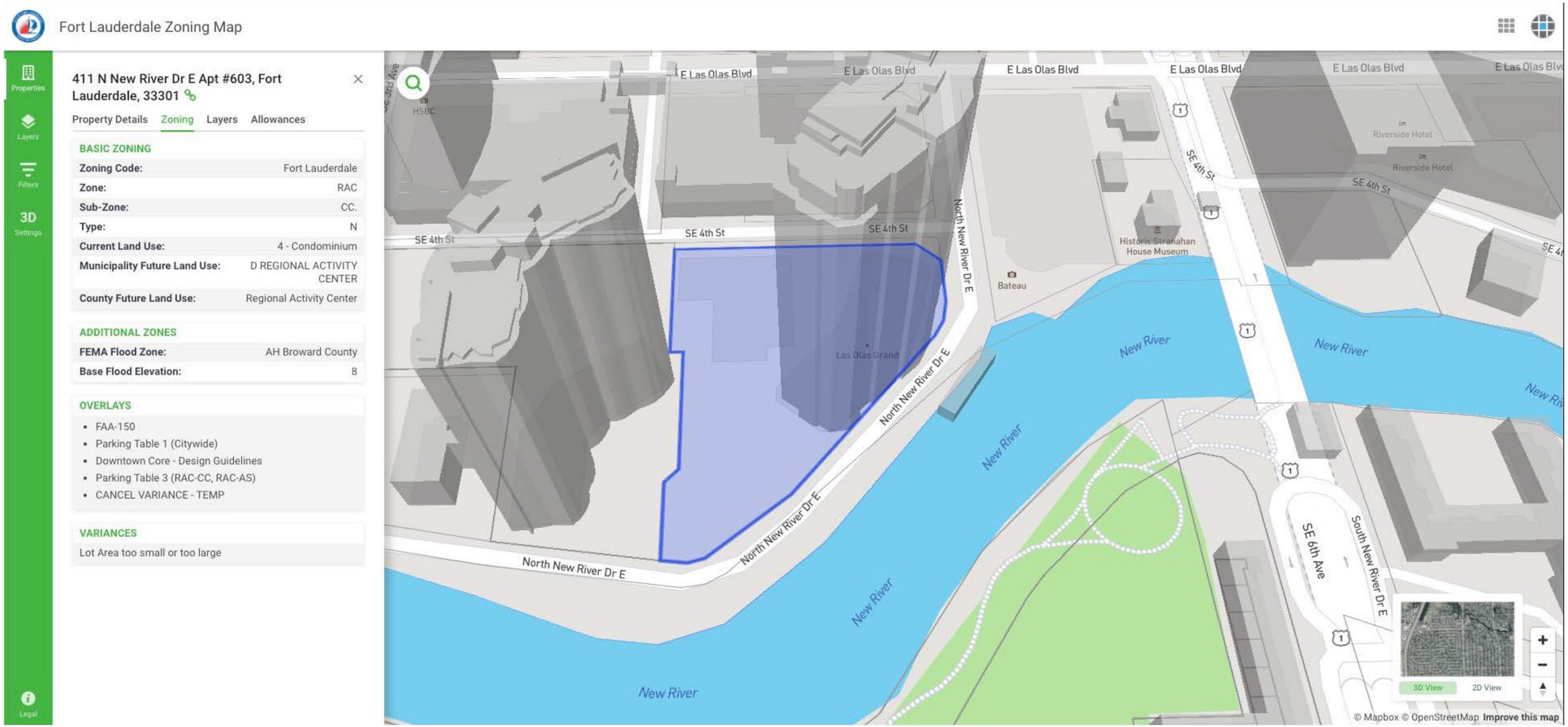


https://fortlauderdale.gridics.com

Gridics

Property Record & Zoning Details

- Tax assessor records and parcel shapes.
- Gridics unique calculated zoning details.

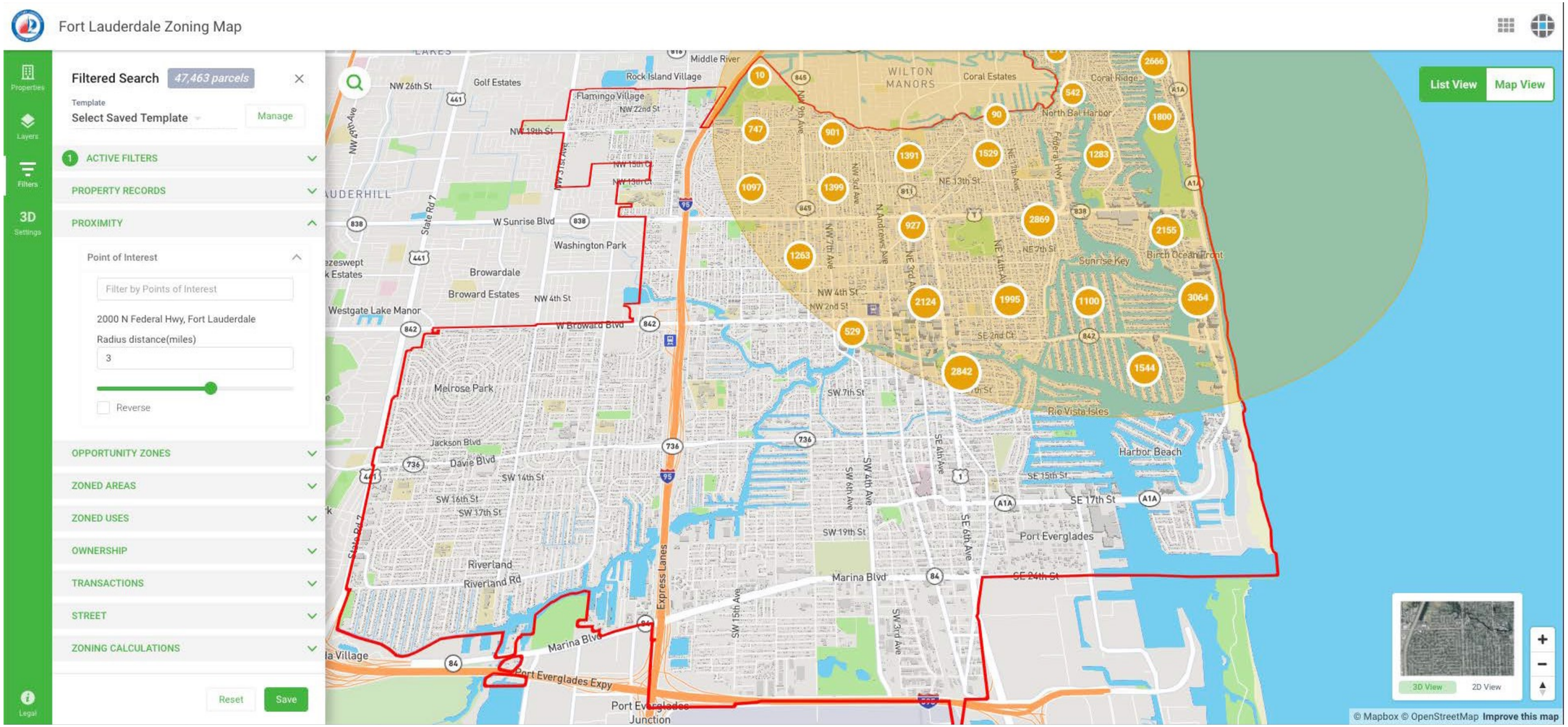


https://fortlauderdale.gridics.com

Gridics

Property Search Filters

- Identify economic development opportunities.
- Search use-specific properties, proximity.

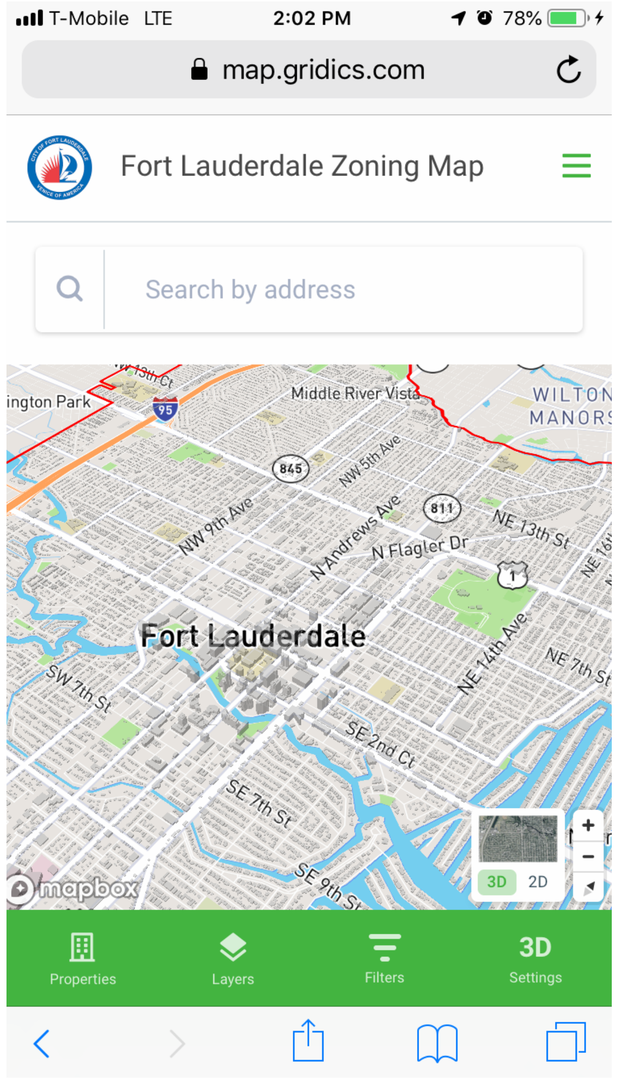


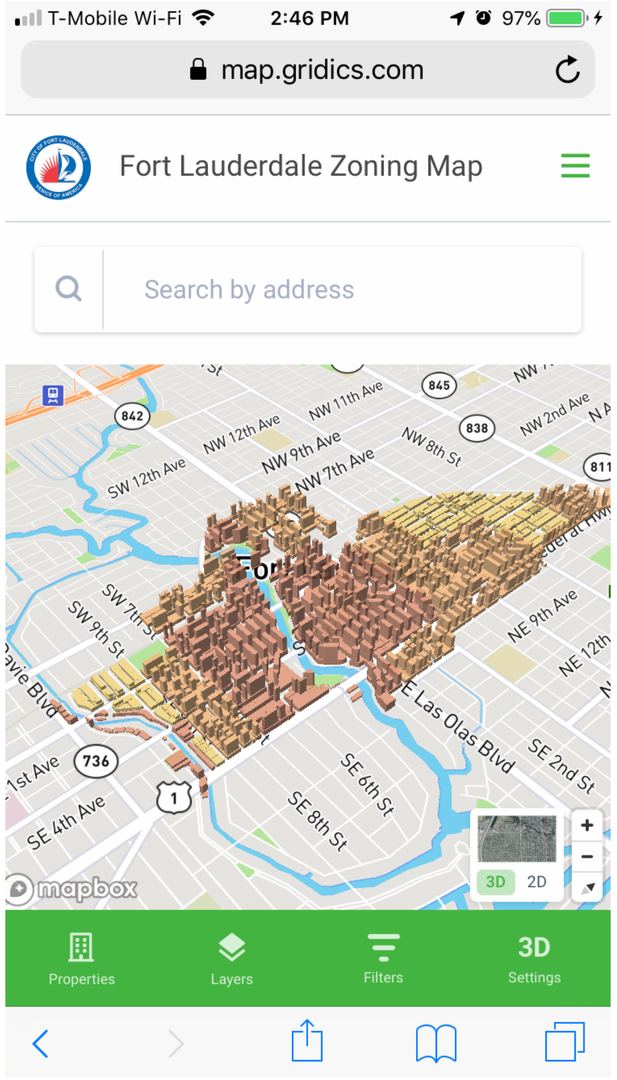
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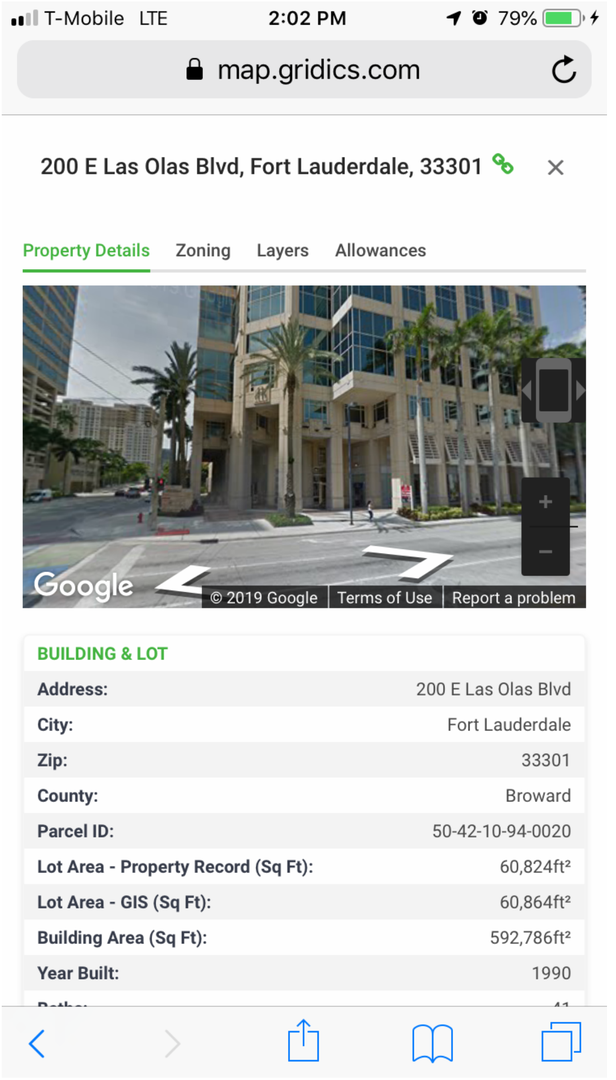
Gridics

Mobile Friendly

- Arm your staff with valuable zoning & property details in the field.
- Provide neighbors with on-hand information about development projects.
- Make your city more investor friendly.



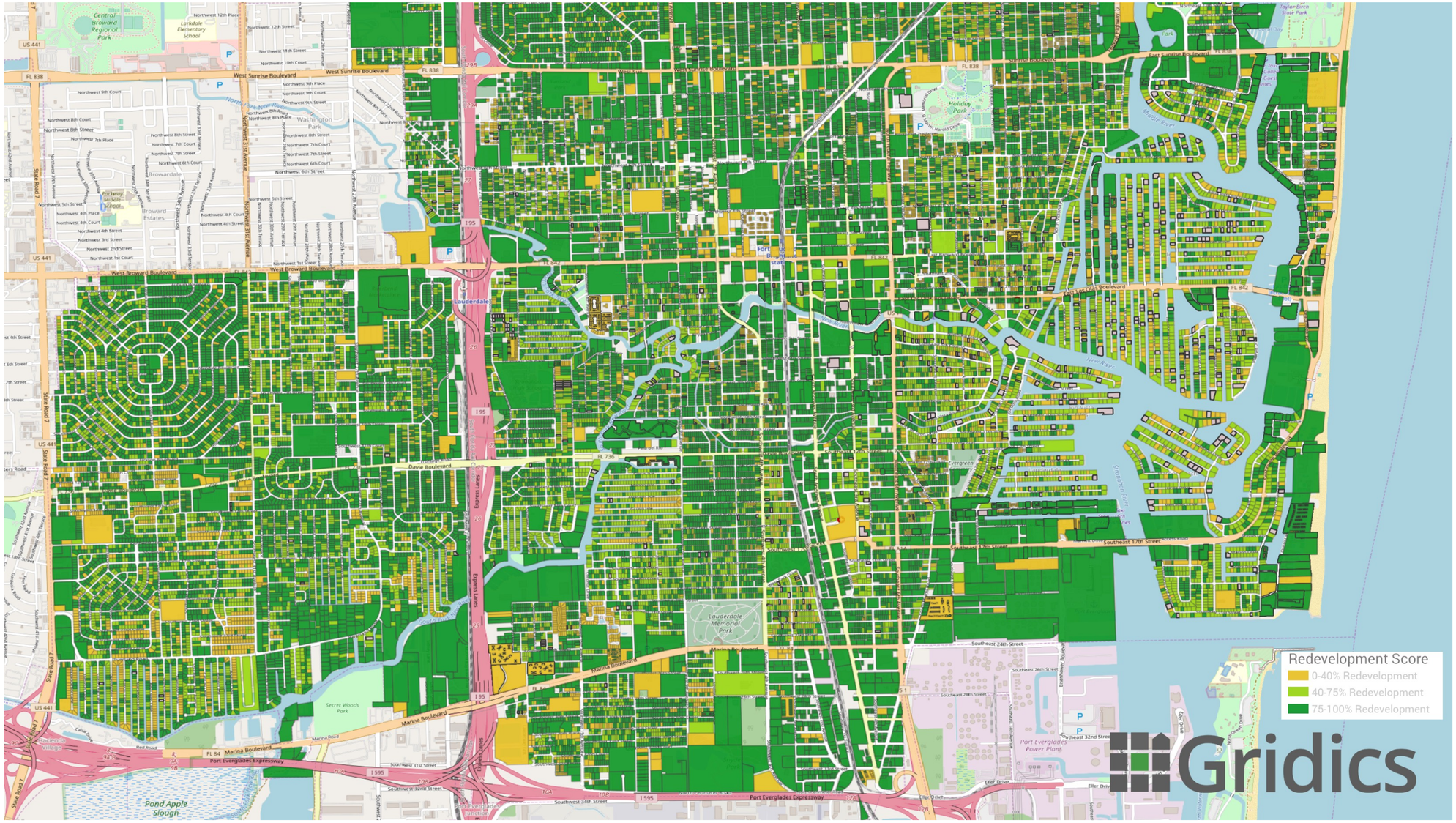




Gridics

Underlying Data Analysis

- Work with Gridics team to run custom data analysis in fraction of the time of traditional consultants.
- Parcel specific analysis of highest and best use.



Fort Lauderdale Leading the Way!



The City of Fort Lauderdale is the first ever city to have a 3D Zoning Map

Gridics is proud to partner with the City of Fort Lauderdale to help you drive municipal innovation and leadership.

Thank You For Your Time Today

Gridics

FY 19 – 24
Water Utilities Action Plan

October 2, 2019

Bottom Line

- CIP invests $610 million for Water, Wastewater and Stormwater infrastructure projects over the next five years
- Inclusive of $200 million bond for Stormwater needs
- The next 20 Years requires over $2 billion investment for infrastructure needs
- Investments at 3% of the systems asset value for Operations & Maintenance (Industry Best Practice) = $33 million annually

Water, Wastewater and Stormwater Investments



- The System
  - Water Treatment Facilities
    - Fiveash & Peele-Dixie
    - Prospect & Peele-Dixie Wellfields
  - Water Distribution System
  - Wastewater Collection System
  - Wastewater Treatment Facility – George T. Lohmeyer (GTL)
  - Stormwater Infrastructure System

Peele-Dixie Water Facility

- Peele-Dixie
  - Current capacity of 12 millions of gallons per day (MGD); current use of 9 MGD
  - Capacity can be expanded
  - May need to consider expansion as part of Fiveash project
  - Evaluation of water allocations
  - Current technology provides quality water product; updates anticipated

Fiveash Water Facility

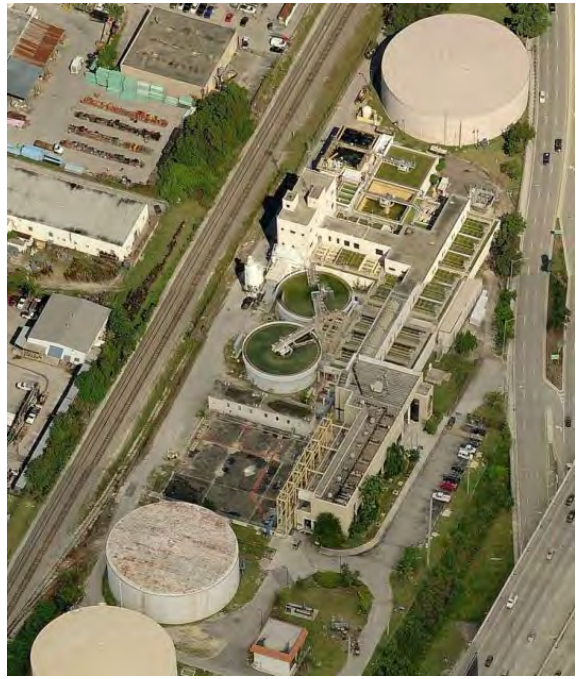


- Granular Activated Carbon (GAC)
  - GAC process not feasible for Fiveash
  - Operational costs too high
  - Results would not meet water quality expectations
- Fiveash Water Plant Evaluation
  - Plant is at the end of its useful life
  - Rebuild or refurbishment not feasible
  - Replacement is recommended

New Fiveash Water Facility Evaluation

- Potential Location
  - Adequate land available at Prospect wellfield site
  - Meets requirements for area needs, existing zoning, environmental conditions will need mitigation; site access routes will need to be determined, FAA height restrictions
  - Workable site based on initial review
  - Served by Prospect wellfield; Biscayne Aquifer
  - Future capacity needs not met
  - Future expansion requires consideration of Floridian Wells or C-51 Reservoir allocation

Fiveash Water Plant



- Considerations
  - Depends on level of risk City willing to assume
  - Conventional / Construction Manager at Risk /Public Private Partnership Options
  - Design/Build/Finance/Operate/Maintain
- Final Report due December, 2019 will include budgeted cost estimates

Peele-Dixie & Fiveash Wellfields

- Wellfields
  - Peele-Dixie - Broadview area
  - Fiveash – Prospect wellfields
  - Served by Biscayne wells
  - Expansion of capacity would require Floridian Aquifer Wells to be put into service
  - Current needs met with Biscayne Aquifer all allocations - future needs not met

Water Distribution



- Valve and water main location and mapping
  - Consultant contract on regular agenda
  - City Survey team and Distribution Crew engaged in location efforts
  - Update maps and atlas for locations – GIS ready
  - Requires future funding for installation of critical redundant valves and/or valve repairs
- Water main flushing / maintenance
  - Free chlorination per AWWA best management practices
  - Directional flushing program
  - Acquired the de-chlorination equipment used in watermain flushing
  - Consultant work on modeling water system
  - Installation of 22 auto-flushing devices by City crews plus manual flushing
  - Installation of 50 additional auto-flushing devices within the next year to maintain water quality

CAM #23-0603
Appendix B - Item 1B
Page 53 of 128

Water Distribution

- Elimination of dead-end water mains – develop annual program starting FY2021
  - Design work by consultant needed
  - Reserve portion of annual CIP funds for looping projects
  - Future funding needed for construction work
- CIP funding $53 million for repair or rehabilitation of 315,300 linear feet of watermain pipes = 59.7 miles
- Complete multiple valve connections with Pompano Beach – Interlocal Agreement
  - Provides redundancy to both communities along northern border
  - Protects both systems from cross contamination
  - Additional funding needed ~ $500,000

George T. Lohmeyer Wastewater Treatment Plant



- Rebuild Oxygen generation plant (Cryogenic Plant)
- Refurbish Injection Wells
- Continue to improve Electrical System
- Provide Generators for backup power to the entire plant
- Replacement of major pipe within plant underway
- Dedicated funding from the Regional System Partners

Wastewater Collection System

- CIP funding $20 million for repair or rehabilitation for 29 of the 186 pump stations
- CIP funding $177.5 million for repair or rehabilitation of 622,100 linear feet of major pipe – 117.8 miles
- Continue to locate valves and mapping
- Continue to upgrade and maintain pump stations

Wastewater Collection System

- Complete Inflow and infiltration work in 2020
  - 938 Maintenance holes assessed
  - 229,397 linear feet of sewer lines smoke tested - over 43.4 miles
  - 190,874 linear feet of sewers lined – over 36.1 miles
  - 1,634 laterals lined or closed
- Complete Force main assessments in 2020
  - 13,520 linear feet rehabilitated – 2.6 miles
  - 75,000 linear feet in design/permitting/construction – over 14.2 miles
- Continue Pump station replacements
  - 3 pump stations rehabilitated
  - 2 pump stations in design/permitting/construction
- 51 Consent Agreement milestones
  - 20 milestones completed
  - 15 completed ahead of schedule -

Stormwater



- Complete “hybrid” stormwater rate study by Stantec and present to Commission in November
- Critical funding for $200 million in storm system improvements designed for seven neighborhoods/basins
- Funding for design of storm water system improvements for remaining fifteen neighborhoods/basins is needed
- Anticipated funding needs of nearly $1 billion over next 20 years

Stormwater

- Currently have 165 tidal valves installed with 129 more scheduled to alleviate flooding and increase resiliency on sea level rise, pedestrian, and vehicle safety
- Installation of seven new stormwater pump stations improvements by performing an evaluation assessment of two stations to minimize flood risk
- Repair or rehabilitation of 115,000 linear feet of stormwater major pipe = 21.7 miles
- Perform dredging of various canals to provide proper flow of stormwater and reduce flooding

Technological Initiatives

- Supervisory Control and Data Acquisition (SCADA) improvements
- Asset Management Project
  - Implementation of Cityworks system
  - Provides an Asset Life Cycle which includes inventory, condition assessment, monitor, maintain and replace assets more cost effectively
  - Valued Based Decisions
- Smart Meters

Smart Metering



- Advanced Metering Infrastructure (AMI)
  - Contracts under review / financing being finalized for Commission consideration
  - Replaces all water meters with digital system
  - Improved accuracy will recoup lost revenues sufficient to pay for meters over 12 years
  - Allows pro-active notices to Neighbors of unusual usage or leaks before a large bill
  - Wireless reading eliminates manual reading of meters
  - Provides detailed usage reports to allow Neighbors to manage their water consumption and to alert them of potential high usage
  - Meter accuracy guaranteed 10 years

Work Smarter

- Expand Procurement Strategies
  - Bundling Projects
  - Conventional Procurement Methods
  - Job Order Contracts
  - Public Private Partnerships and Variations
- Add procurement staff
- Strategic Project Coordination

Summary

- Fiveash is at the end of it's normal life, replacement necessary - $200+ million needed – not yet budgeted
- Additional staff and equipment will be needed to perform flushing, valve location, installation & maintenance of self-flushing devices – Planned for FY21Budget
- AMI system will provide accurate meter reading/usage information to Neighbors allowing them to manage their water consumption effectively
- CIP funding will be needed for redundant valves, valve repairs, elimination of dead-end water mains, installation of valves on water main connections with Pompano Beach
- Stormwater infrastructure improvements are dependent on funding source – Rate Study

Next Steps

- What we need from Commissioners
  - Need approval of the Stormwater Rate Study
  - Direction for the Fiveash Treatment Facility
  - Action on the AMI project
  - Budget approval for additional procurement staff
  - Consideration of a mid-year adjustment for water main connection with Pompano Beach
  - Funding consideration for additional staff and equipment needed for redundant valves, valve repairs, elimination of dead-end water mains



Results of 40 Year Building Safety Inspections Program

CITY OF FORT LAUDERDALE

PUBLIC WORKS DEPARTMENT

11/22/2019

Program Requirements

Broward County Building Safety Inspection Program started in 2006 and it requires structural and safety inspections for buildings 40 years old or older and every 10 years thereafter.

- **The main goal of the program is to minimize the possibility of future building failure and better preparedness for hurricane winds.**



Program Administration

Broward County Board of Rules and Appeals provides a list of eligible buildings using information from County Property Appraiser's Office to City Building Department.

Building Department sends notification letters to property owner.

Owner has **90 days** to complete the inspections and submit to the Building Department.

If any deficiencies are noted, the Owner has **180 days** to complete the repairs in accordance with Florida Building Code.

Buildings Identified for Inspections

1. Holiday Park Activity Center;
2. Holiday Park Social Center;
3. Holiday Park Gym;
4. Parker Playhouse;
5. Art Serve;
6. War Memorial;
7. GTL Treatment Plant;
8. City Hall;
9. Police Department;
10. Aquatic Center West Building;
11. CMS Public Works.



Inspections Management

- City hired the consultant, Walters Zackria Associates, PLLC (WZA) to conduct the required inspections. After Commission approval, Notice to Proceed with the Inspections was issued to WZA to start on August 7th, 2017 with the completion date on February 3rd, 2018.
- WZA completed all inspections and reports on December 20th, 2017.
- The reports were transmitted to the Department of Sustainable Development for review on December 22nd 2017. WZA completed all inspections and reports on December 20th, 2017.
- City completed the repairs of 7 facilities and the reports were submitted to DSD . One facility is on hold due to the major future renovations and 3 facilities will require the structural repairs to be done by specialty contractor.

Holiday Park Activity Center Repairs Status



Facilities completed required repairs

WZA inspected repairs

Final report submitted to DSD

All work completed

Holiday Park Social Center, Art Serve and Gym Repairs Status



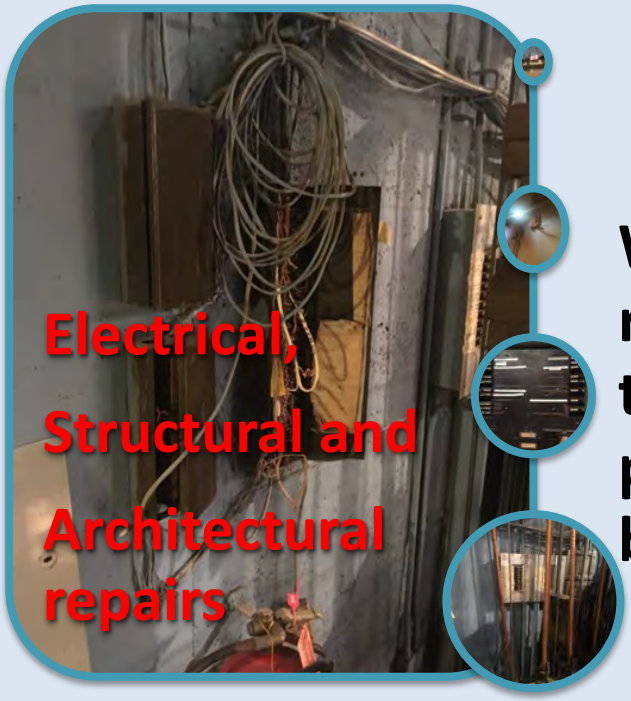
Facilities completed required repairs

WZA inspected repairs

Final report submitted to DSD

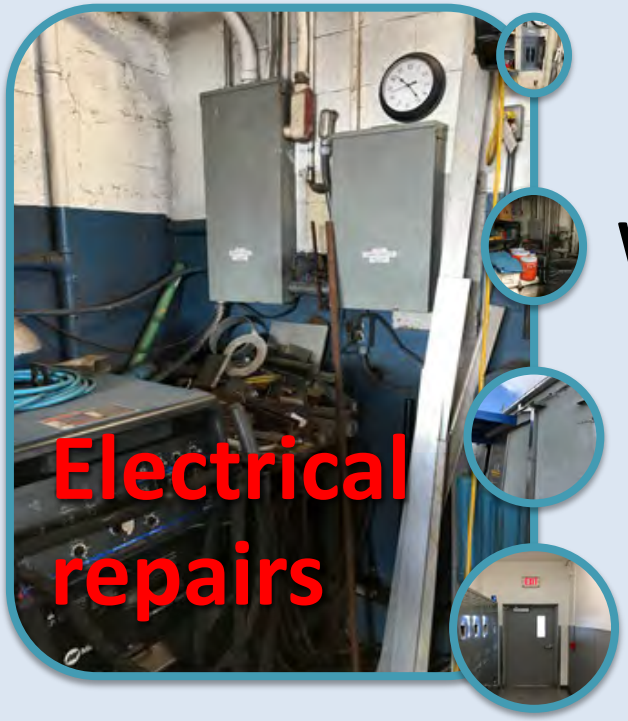
All work completed

War Memorial Repairs Status



We requested DSD to postpone the required repairs which will be done by the future tenant of the building as part of the major renovations. The building is currently not occupied

CMS Repairs Status



Public Works completed the required electrical repairs

WZA inspected repairs

Final report was submitted to DSD

All work completed

Swimming Hall of Fame Auditorium Repairs Status



Facilities addressed electrical and architectural repairs

Remaining structural repairs will be addressed via separate repair contract. Staff is preparing re-bid package (estimated bid date December 2019)

WZA will re-inspect electrical, structural and architectural repairs when all completed

We requested extension to be able to complete the remaining structural repairs required

Parker Playhouse Repairs Status



Broward County completed the required electrical repairs

WZA inspected repairs

Final report was submitted to DSD

All work completed

City Hall Repairs Status



Facilities completed electrical and architectural repairs

Remaining structural repairs will be addressed via separate repair contract. Staff is preparing re-bid package (estimated bid date December 2019)

WZA will re-inspect electrical, structural and architectural repairs when all completed

We requested extension to be able to complete the remaining structural repairs required

GTL Repairs Status



Public Works addressed all electrical and architectural repairs

Remaining structural repairs will be addressed via separate repair contract. Staff is preparing re-bid package (estimated bid date December 2019)

WZA will re-inspect electrical, structural and architectural repairs when all completed

We requested extension to be able to complete the remaining structural repairs required

Police Department Repairs Status



Facilities completed all repairs

WZA re-inspected the repairs and the final report was submitted to DSD. All work completed.

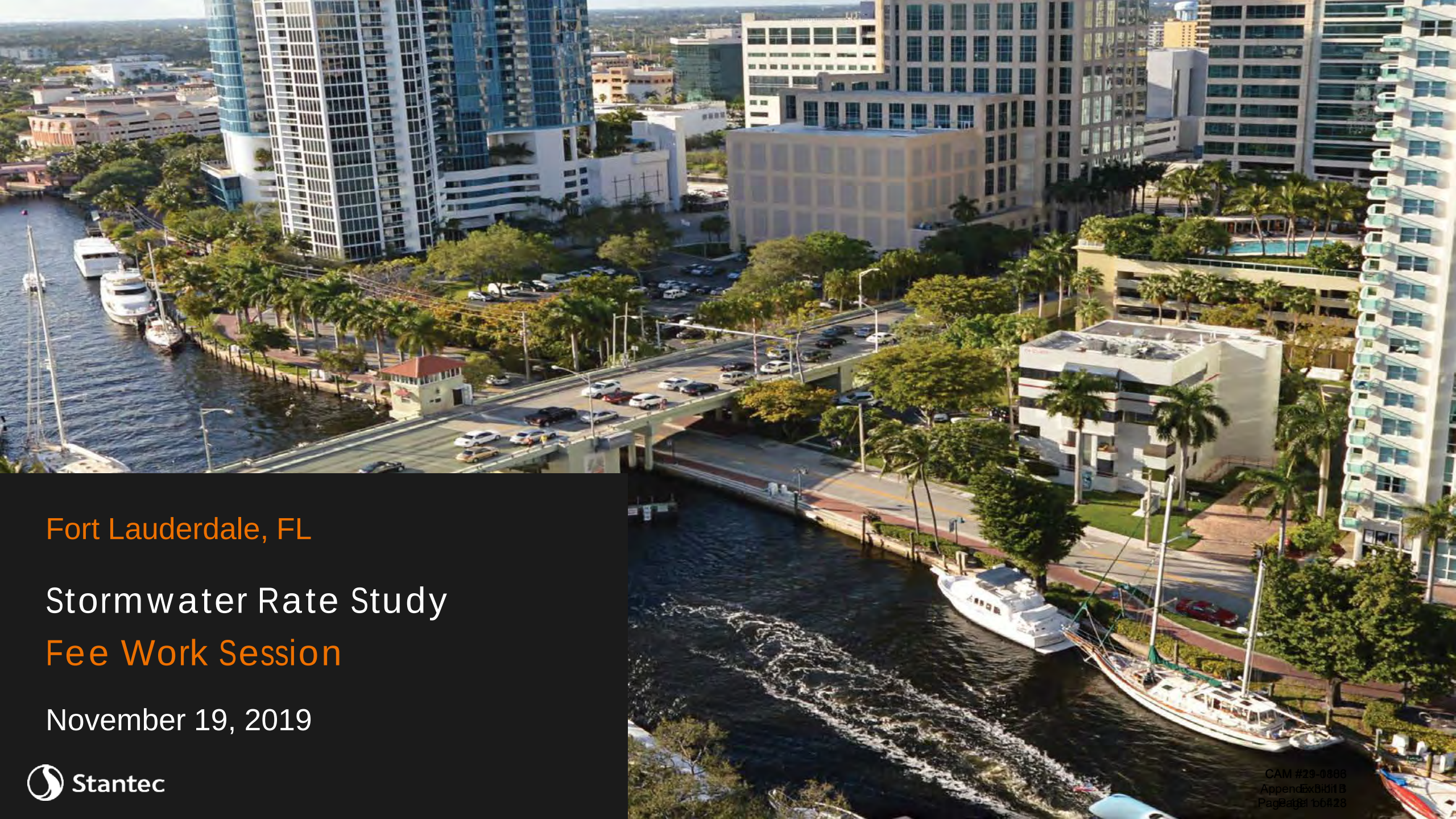
Summary

- 11 sites were identified for inspections, overall 483,633 sq.ft. of building space. Consultant completed all required inspections.
- All buildings required repairs. 7 sites had all repairs completed. 3 sites have only structural repairs pending and 1 site is on hold due to the future tenant renovations.
- The remaining structural repairs need to be completed by a specialty contractor. We are in the process of finalizing the bid documents (estimated bid in December of 2019).
- We requested time extension for remaining structural repairs to be done by specialty contractor.

Overall Summary

- **Visual Inspections performed by WZA and its consultants were in accordance with Broward County Board of Rules and Appeals 40 year inspection program. These inspections are limited to determining if the building structural and electrical systems are safe to occupy the building. They are in no way a determination as to the performance or long term viability of the individual structures. Please refer to FBC 2014 Chapter I - Section 110.15 "Building Safety Inspection Program" - (B.C Administrative Provisions).**

- **WZA concluded that currently there are no issues that pose critical danger to the life, safety and welfare of the occupants that would require closure of a facility or deem it as "an unsafe structure". However, WZA recommends that the items noted within each report should be addressed as soon as possible to remove any potential danger. City completed the majority of the required repairs with only structural portion remaining to be addressed.**



Fort Lauderdale, FL

Stormwater Rate Study

Fee Work Session

November 19, 2019

Stantec

CAM #29-0388
Exhibit 1
Page 1 of 128

Core Elements of the Study



Revenue Requirements

- Operations & Maintenance
- Renewal and Replacement
- Master Plan CIP

Cost Allocation

- Units of Service
- Effective Imp. Area
- Trip Generation

Fee Structure

- Identify Structures
- Customer Impacts

Method of Billing

- Utility Bill
- Tax Assessment

Project Timeline

2016

- Stormwater fee study analysis completed, and initial results presented.
- Trip generation and fee zones introduced as potential fee structures.

2017

- Refined version of fees presented to City Commission, which considered a hybrid approach between trip generation and the current structure.
- **City of Fort Lauderdale Infrastructure Task Force Committee-** Recommended the City Commission consider adopting a new stormwater rate methodology based upon the trip generation cost apportionment and to consider using the bond validation process immediately thereafter to validate the methodology.

2018

- **Budget Advisory Board-**Recommended that the City Commission change the methodology used for stormwater charges from using impervious surface to a trip generation model.
- City Commission provided direction to investigate hybrid structure further.
- Significant challenges arose regarding the ability to charge an updated fee using current billing data.

2019

Revenue Requirements

CAM #23-0386
Appendix B
Page 14 of 128

Near Term Needs of the Stormwater Utility

The Utility delivers service through three key areas:

- Operations and Maintenance (O&M) **$11.5M** — Funded
- Renewal and Replacement Capital Projects **$4M** — Funded
- Phase 1 Master Plan Capital Projects **$200M** — Unfunded
  - *Edgewood*
  - *River Oak*
  - *Dorsey Riverbend*
  - *Durrs Area*
  - *Progresso*
  - *Victoria Park*
  - *Southeast Isles*

Goal: Ensure the Stormwater Utility has the resources needed to invest in and maintain the stormwater system that protects the City.

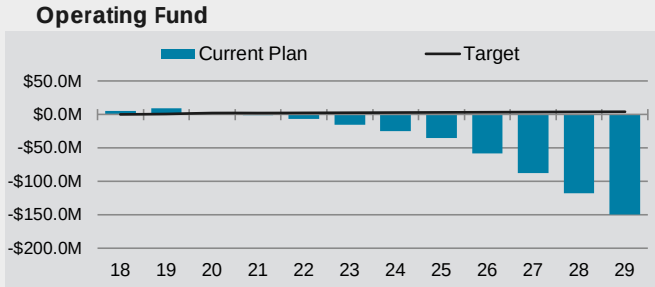
Diagnostic Scenario

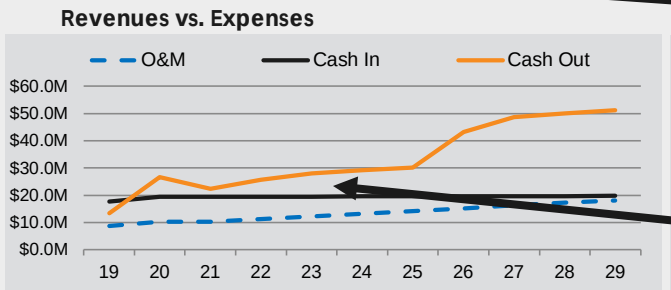
FAMS-XL | **FT. LAUDERDALE STORMWATER**

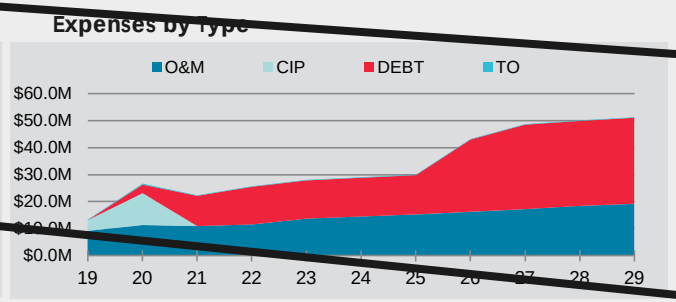
Stantec

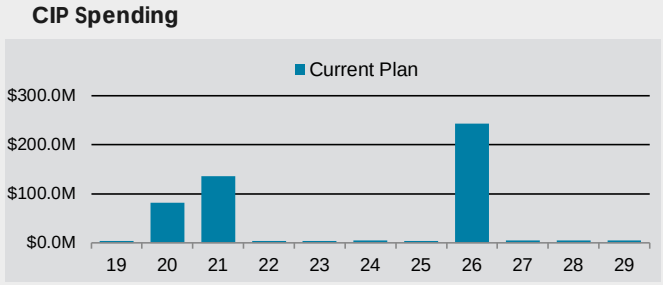
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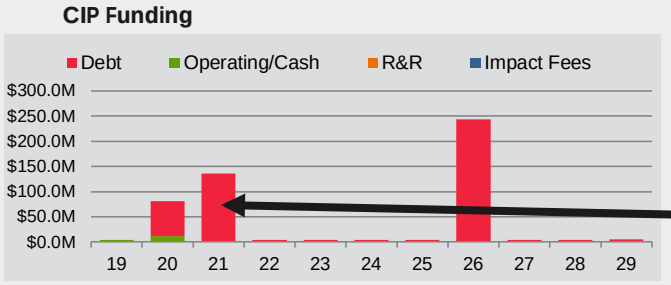
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Stormwater Revenue Plan	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	16.67%
Senior-Lien DSC	0.00	2.86	0.82	0.60	0.52	0.44	0.37	0.17	0.11	0.07	0.05	Scenario Manager	

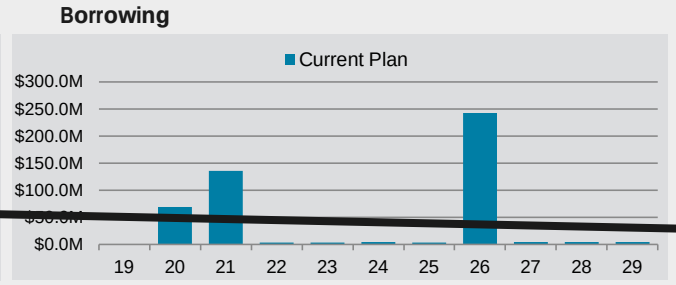












Current Revenue Level

Impaired Coverage

Deficit Spending

Debt Financing

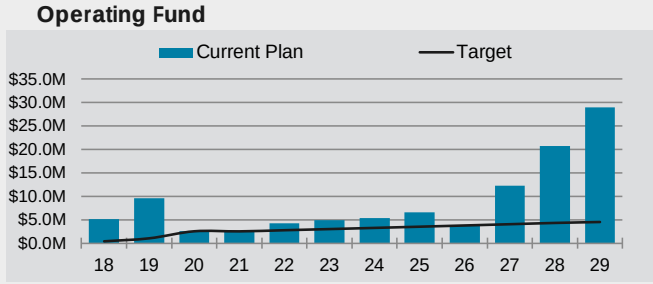
Required Revenue Adjustments

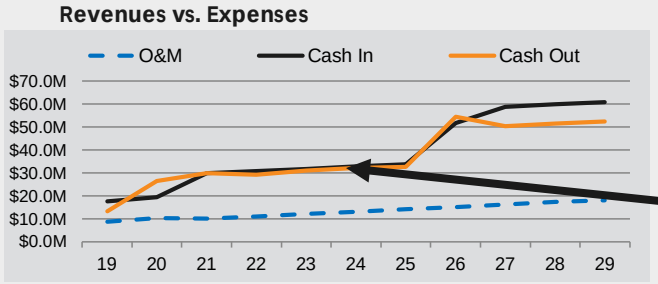
FAMS-XL | **FT. LAUDERDALE STORMWATER**

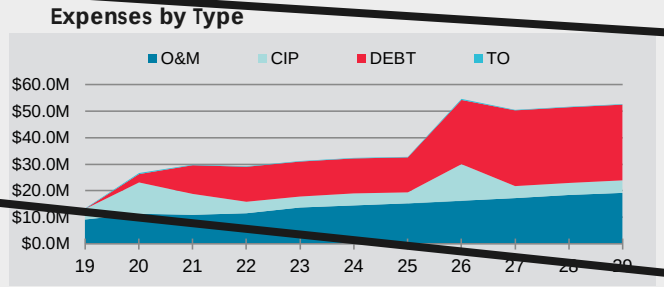
Stantec

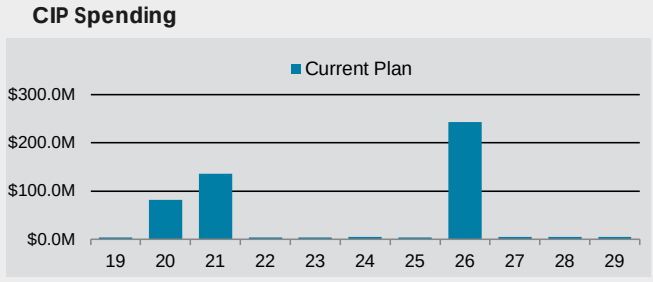
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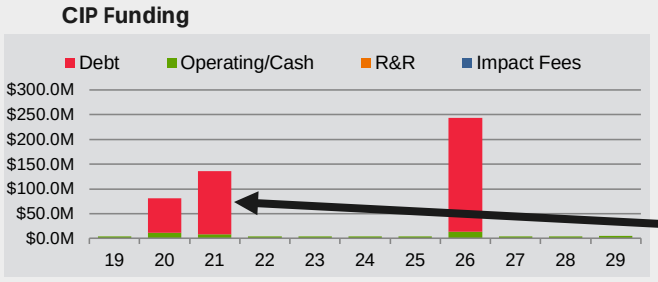
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2023	FY 2028
Stormwater Revenue Plan	0.00%	16.67%	54.00%	3.02%	2.91%	2.87%	2.79%	53.01%	37.68%	3.02%	1.83%	90.49%	345.12%
Senior-Lien DSC	0.00	2.86	1.82	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	Scenario Manager	

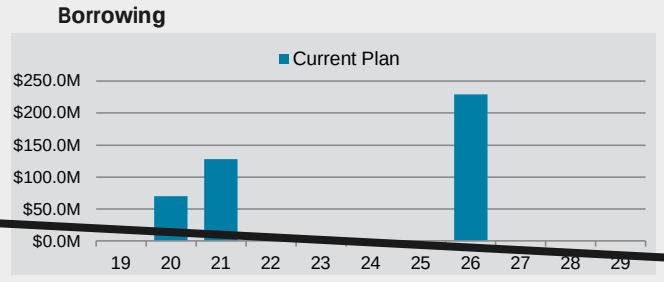












54% More Revenue Required

Proper Coverage

Balanced Cash Flow

Debt Financing

Cost Allocation

Recovery Basis

Options for Stormwater Cost Allocations

Method for Measured Units on Parcel

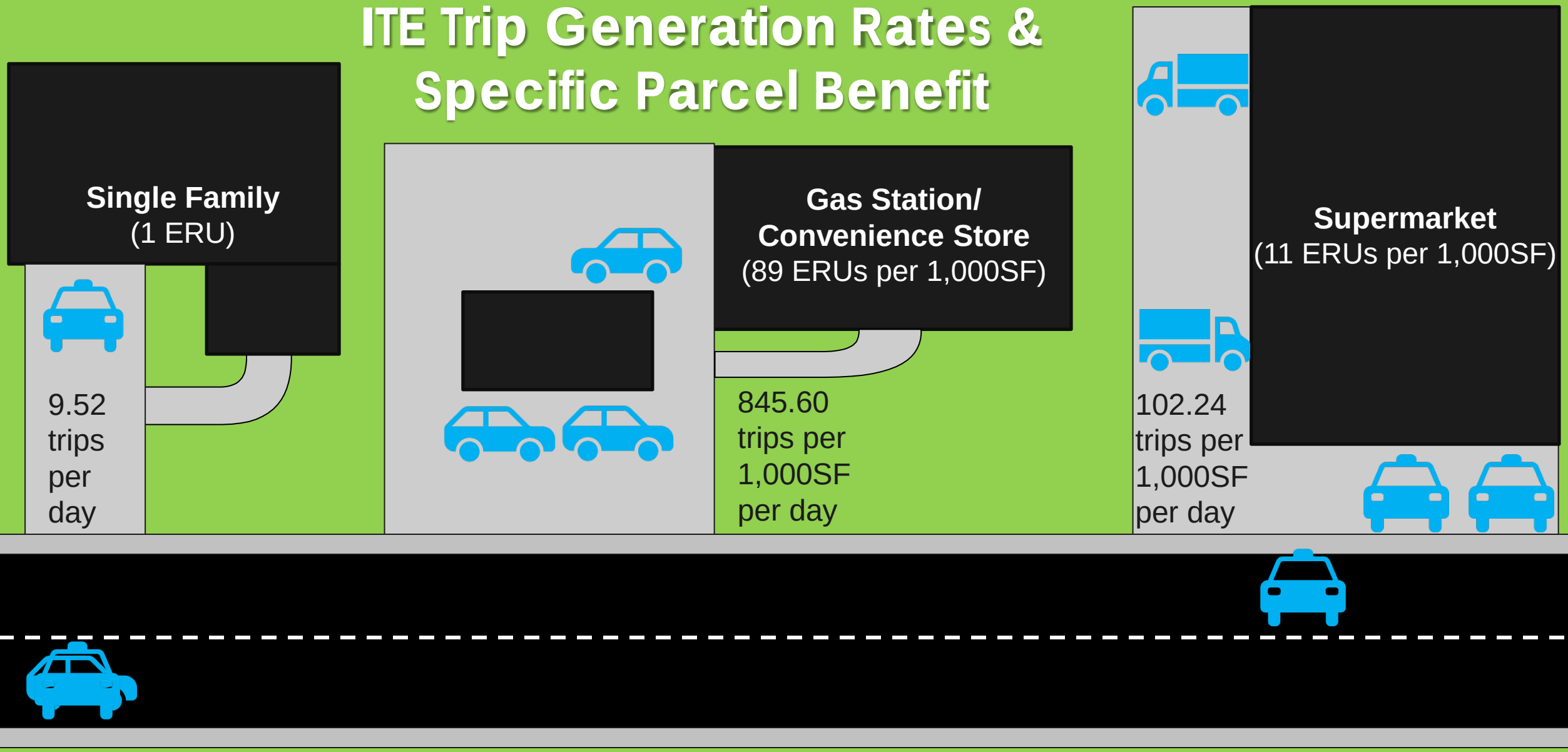
- Taxable Value
- Dwelling Units
- Gross Area
- Pervious Area
- Impervious Area
- Trip Generation







ITE Trip Generation Rates & Specific Parcel Benefit



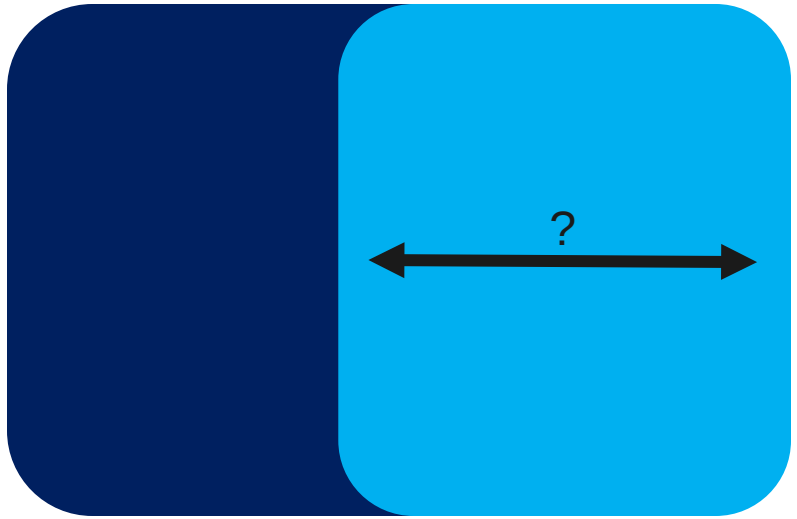
CAM #23-0806
Appendix B Exhibit B
Page 190 of 428

The Hybrid Model

Current Fee Structure (Effective Impervious)

Trip Generation

Revenue Requirement Split



Objective and Metric Based Split

Key Requirements:

- Updated Billing Units
- Creation of New Billing File
- Defensible Spilt of Cost
  - Quality vs. Quantity

Cost of Service Analysis

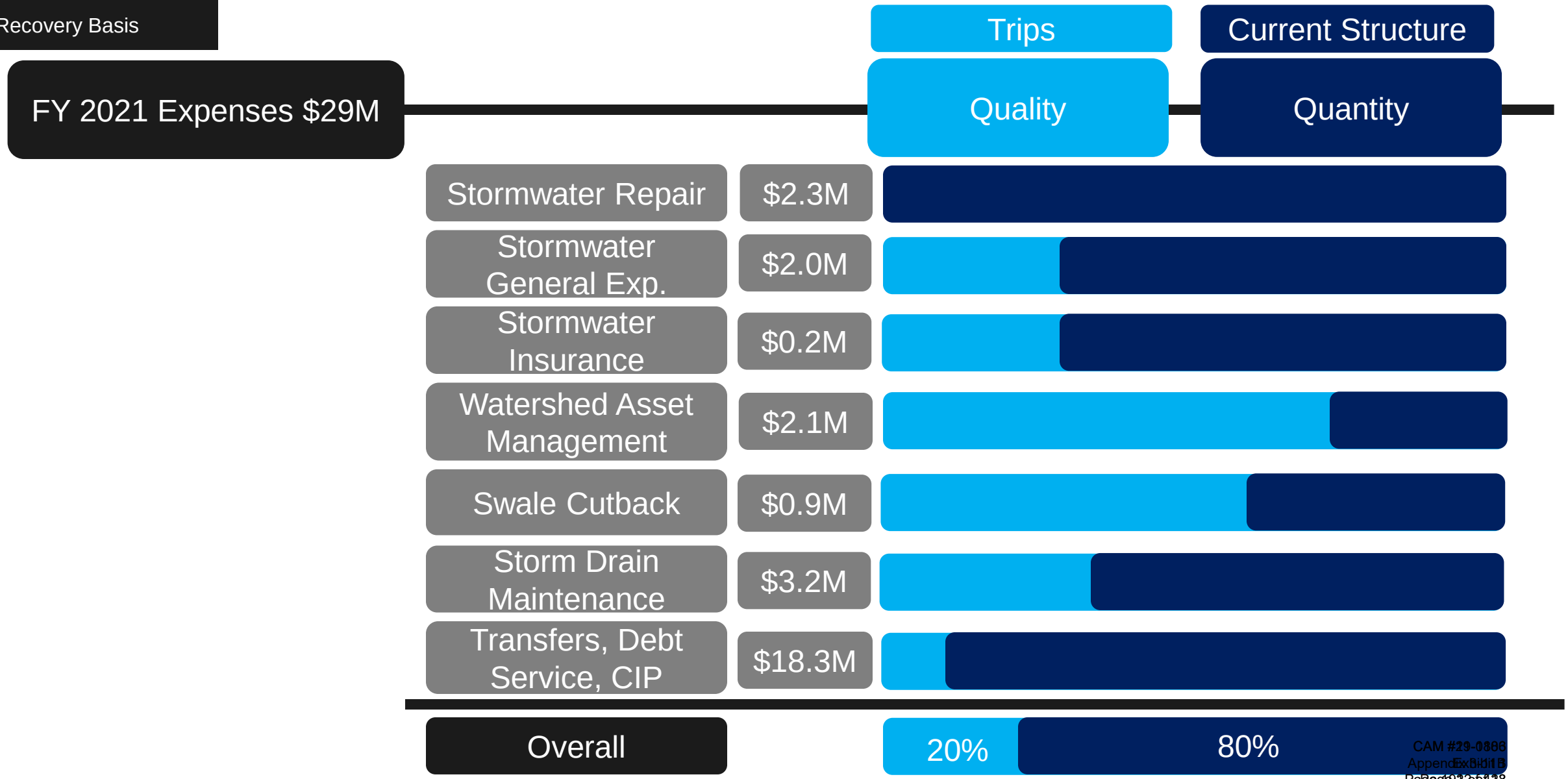
Quality

Quantity

CAM #23-0866
Exhibit B
Page 11 of 28

Cost Allocation

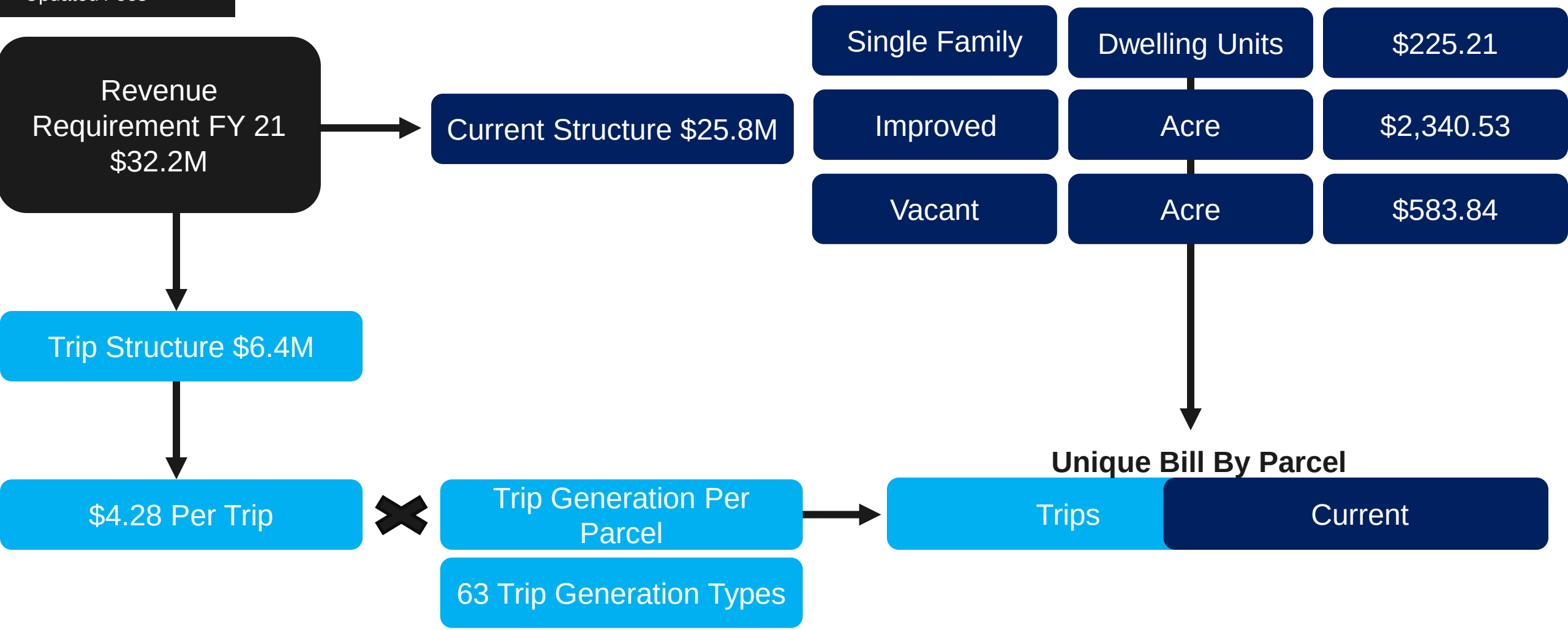
Recovery Basis



CAM #21-0366
Exhibit 1
Page 22 of 28

Fee Structure

Updated Fees



Updated Fees

Single Family Home (1 Dwelling Unit)



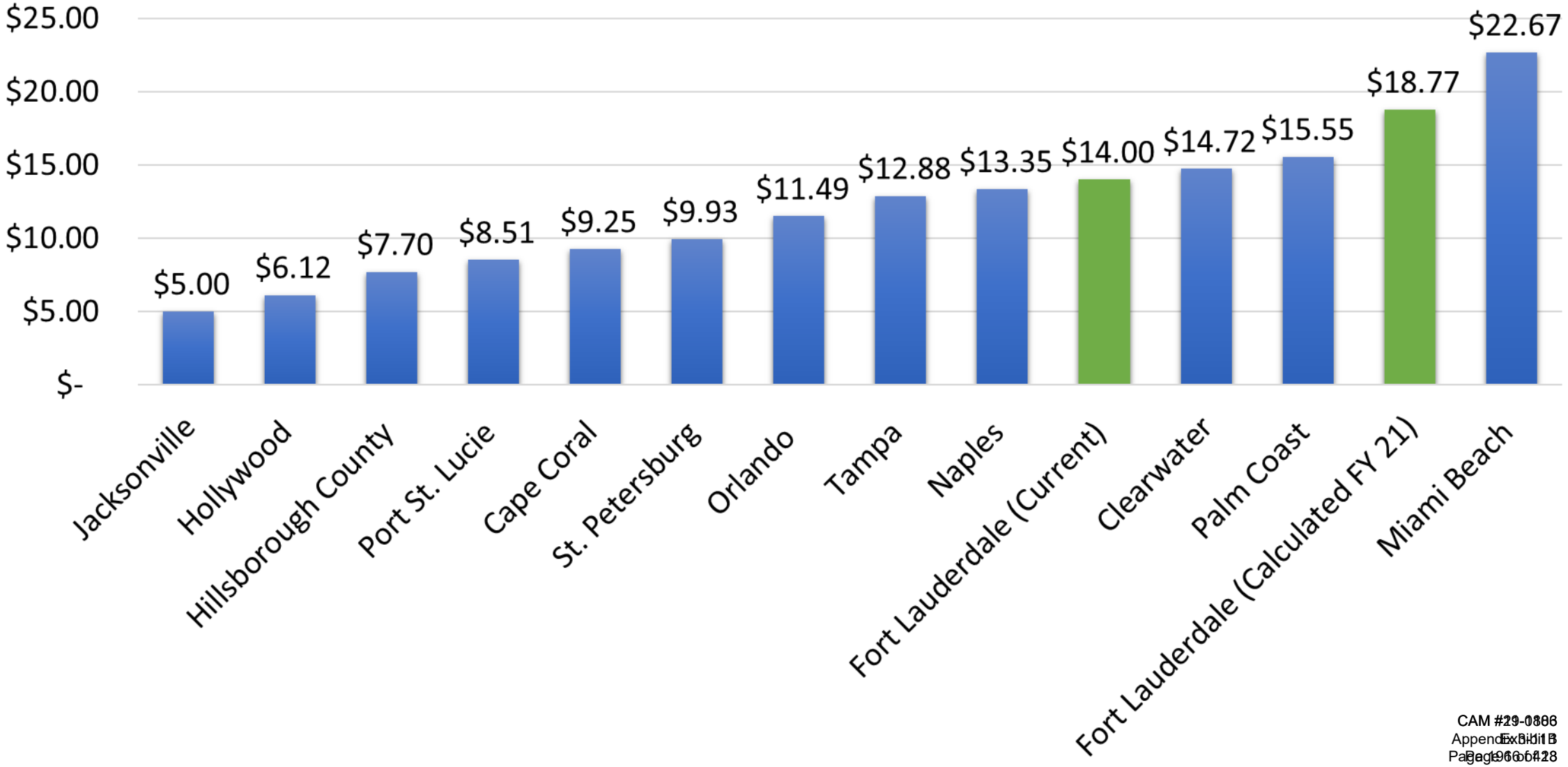
	Annual	Monthly
Current:	$168.00	$14.00
Calculated:	$225.21	$18.77
Change:	$57.21	$4.77

Bill Proportion:



Updated Fees

Single Family Fee Survey



Updated Fees

Condo Example (Dwelling Unit)



110 Units

	Annual	Monthly
Current:	$42.55	$3.55
Calculated:	$77.86	$6.49
Change:	$35.31	$2.94

Bill Proportion:



Updated Fees

Church Example (SQFT)



Building 20,901 SQFT
Parcel 36,750 SQFT

	Annual	Monthly
Current:	$1,428.71	$119.06
Calculated:	$2,596.36	$216.36
Change:	$1,167.65	$97.30

Bill Proportion:



Commercial Example (SQFT)



Building 120,158 SQFT
Parcel 82,526 SQFT

	Annual	Monthly
Current:	$3,208.30	$267.36
Calculated:	$23,105.14	$1,925.43
Change:	$19,896.84	$1,658.07

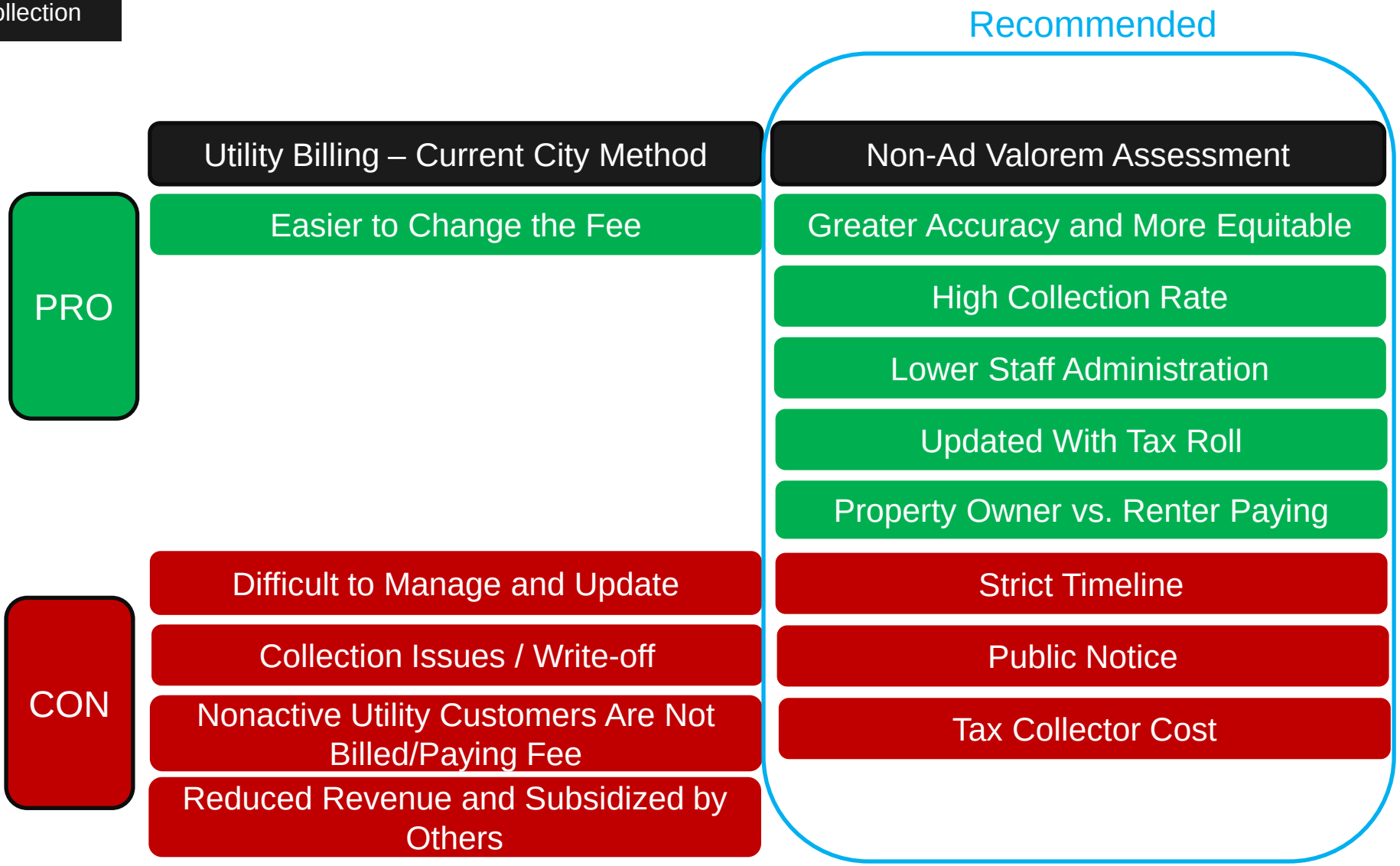
Trip Generation Current Structure

Bill Proportion: 81% 19%

Method of Billing

Method of Collection

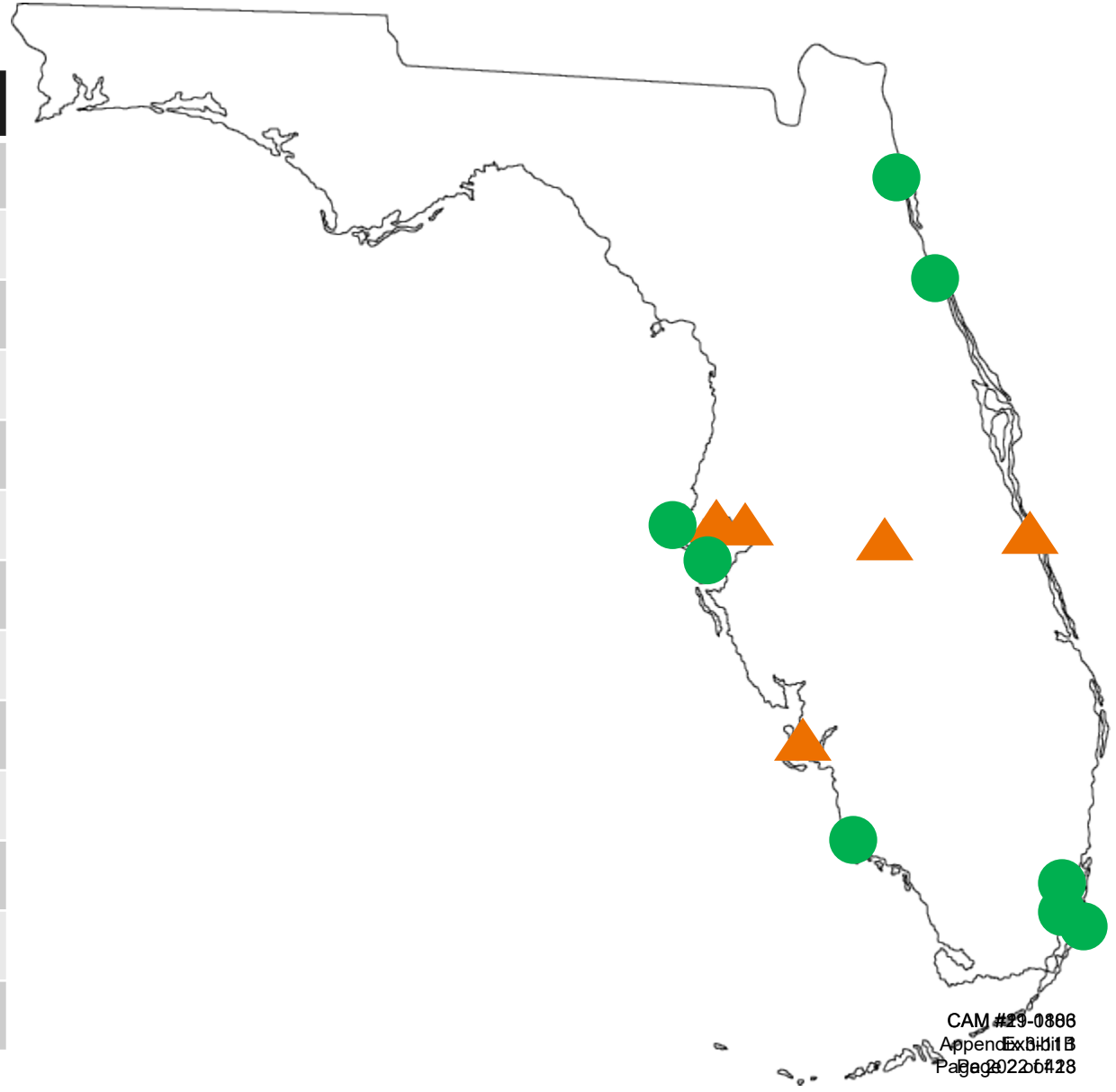
Stormwater Revenue Collection Method



Comparable Municipal Survey

Method of Collection

Utility	Assessment ▲	Utility Bill ●
Fort Lauderdale		X
Tampa	X	
St. Petersburg		X
Miami Beach		X
Palm Coast		X
City of Jacksonville		X
Hollywood		X
Cape Coral	X	
Hillsborough County	X	
Port St. Lucie	X	
Orlando	X	
Clearwater		X
Naples		X



CAM #23-0806
Appendix B Exhibit B
Page 22 of 28



Additional Questions/Discussion

Andrew Burnham
Vice President
(904) 631-5109
Andrew.Burnham@Stantec.com

Kyle Stevens
Managing Consultant
(904) 610-2910
Kyle.Stevens@Stantec.com



PLANT EVALUATION AT THE FIVEASH WATER TREATMENT PLANT UPDATE

January 6, 2020



Project Scope

Project Scope

- Existing Facility Condition Assessment
- Existing Water Resources Evaluation
- Treatment Systems Investigation



Project Findings

Existing Facility Condition Assessment

- Performed evaluation & visual inspection of existing facilities

- Conclusions
  - Facility has reached/exceeded projected useful life
  - Consistent with the findings of the 2017 Comprehensive Utility Strategic Master Plan
  - Not recommended for significant rehabilitation investment

Existing Water Resources Evaluation

- Assessed planning period needs (2035)
- Evaluated existing SFWMD water use permit (WUP) allocations
- Performed comparison of C-51 source with Floridan Aquifer source

- Conclusions
  - Existing WUP allocations are sufficient for planning period needs
  - Purchase/utilization of C-51 water is cost effective for post planning period requirements

Treatment Systems Investigation

- Investigated 18 Treatment Schemes
- Assessed ability to locate replacement facility at the existing Fiveash site
- Evaluated locating replacement facility at the Prospect Wellfield site
- Performed siting and cost analysis

Treatment Schemes Investigation

- Investigated 18 Treatment Schemes

- Primary Goals
  - Meet all regulatory requirements
  - Achieve enhanced/improved aesthetic objectives (color, taste/odor, etc.)
  - Establish “state of the art”/robust treatment system for the long term
  - Optimize fiscal and operational considerations
  - Plan for future considerations (future regulations, byproducts disposal, etc.)

Treatment Systems Investigation

- Conclusions
  - Multiple treatment schemes available
  - Prospect Wellfield site is most suitable for replacement facility
  - Most “state of the art”/robust treatment system would consist of nanofiltration and ion exchange system
  - Conceptual capital cost range $350 - $400+ million

Questions ?

CONSENT ORDER UPDATE

to

City of Fort Lauderdale Infrastructure Task Force

January 6, 2020 - 2 pm

CITY OF FORT LAUDERDALE



Presented by: Omar Castellon PE
City of Fort Lauderdale
Acting Assistant Director Public Works

Patricia Carney PE, BCEE, DBIA
Hazen and Sawyer
Program Manager

Agenda

CITY OF FORT LAUDERDALE



Consent Order Team



Consent Order Results to Date



Key Milestones and Targets



Accomplishments

Consent Order Team

CITY OF FORT LAUDERDALE

CITY OF FORT LAUDERDALE
City Management

City of Fort Lauderdale
Sr. Project Manager – Consent Order

Hazen

Hazen Team
Patricia Carney, PE, DBIA, BCEE
Program Manager

Project Manager II
Ray Ramos, PE

Project Manager II
Viviana Torres-Ortiz, PE

Project Manager II
Rohan Punit, PE

Procurement

IT

GIS

DSD

Engineering

Survey

and many others

CRAVEN THOMPSON & ASSOCIATES INC

CHEN•MOORE &ASSOCIATES

Dickey Consulting

STONER & ASSOCIATES, Inc. SURVEYORS - MAPPERS

JACOBS

Nova Consulting, Inc.

RADISE Infrastructure Engineers • Software Developers

THOMPSON & ASSOCIATES

Consent Order Results to Date

CITY OF FORT LAUDERDALE

RESULTS
where we are now

There are over 50 milestones in the Consent Order, and The City, along with assistance from the Hazen Team, has met every one to-date. The milestones include administrative items as well as construction and non-construction activities.

MILESTONES



51 Consent Order Milestones

22 milestones complete

16 milestones completed ahead of schedule

What's in the Consent Order and What is the Status?

CITY OF FORT LAUDERDALE

Consent Order Item	Status	% Complete	Due Date
Fast Tracked Force Main Repairs	Complete	100%	5/31/2018
Capacity Modeling	Complete - Pending FDEP Acceptance	99%	5/29/2019
System Mapping	Complete	100%	6/29/2019
Force Main Condition Assessment	Phase II Field Work	90%	3/26/2020
Asset Management / Capacity Management, Operations, and Maintenance	On Going	75%	3/27/2020
In-kind – In Construction	In Construction	70%	9/2/2020
Pump Station Rehabilitations	In Construction	99%	9/30/2020
Infiltration/Inflow Removal	In Construction	77%	9/30/2020
Phase II Force Mains	Ongoing	15%	9/30/2026

Accomplishments

CITY OF FORT LAUDERDALE

DESIGN/PERMITTING/BIDDING/CONSTRUCTION

FORCE MAIN PHASE I & II

PHASE 1

13,520 linear feet rehabilitated **100%**

PHASE 2

75,000 linear feet in design/permitting/ bidding/construction

PUMP STATIONS

4 pump stations rehabilitated

1 pump station in construction

IN-KIND PROJECTS

Pump Station D38 Rehabilitation
In construction
Scheduled Completion 9/2020

Force Main 2,500 LF
Constrcution to begin 1/2020

SSES/I/I

944 priority manholes assessed

229,397 linear feet of priority sewers smoke tested

190,874 sewers lined **1,634** laterals lined or closed

Accomplishments

CITY OF FORT LAUDERDALE

NON-CONSTRUCTION ACTIVITIES

AM, CMOM PLAN AM and CMOM Program Plan **complete** and submitted to FDEP and Program underway



SEWER SYSTEM



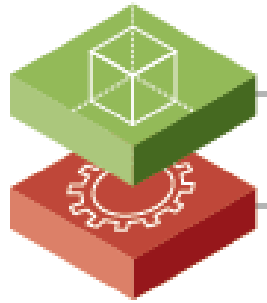
100% of sewer system mapped and certified



Force Main Condition Assesment - Plan and Phase 1 Complete, Phase 2/3 on-going

CAPACITY

100%



Model **complete**

Capacity Report **complete**

Accomplishments

CITY OF FORT LAUDERDALE

DESIGN/PERMITTING/BIDDING/CONSTRUCTION

FORCE MAIN PHASE I & II

PHASE 1

13,520 linear feet rehabilitated **100%**

PHASE 2

75,000 linear feet in design/permitting/ bidding/construction

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Phase II Force Mains

CITY OF FORT LAUDERDALE

B Repump Suction Lines (2) Pending Start of Design Criteria Package

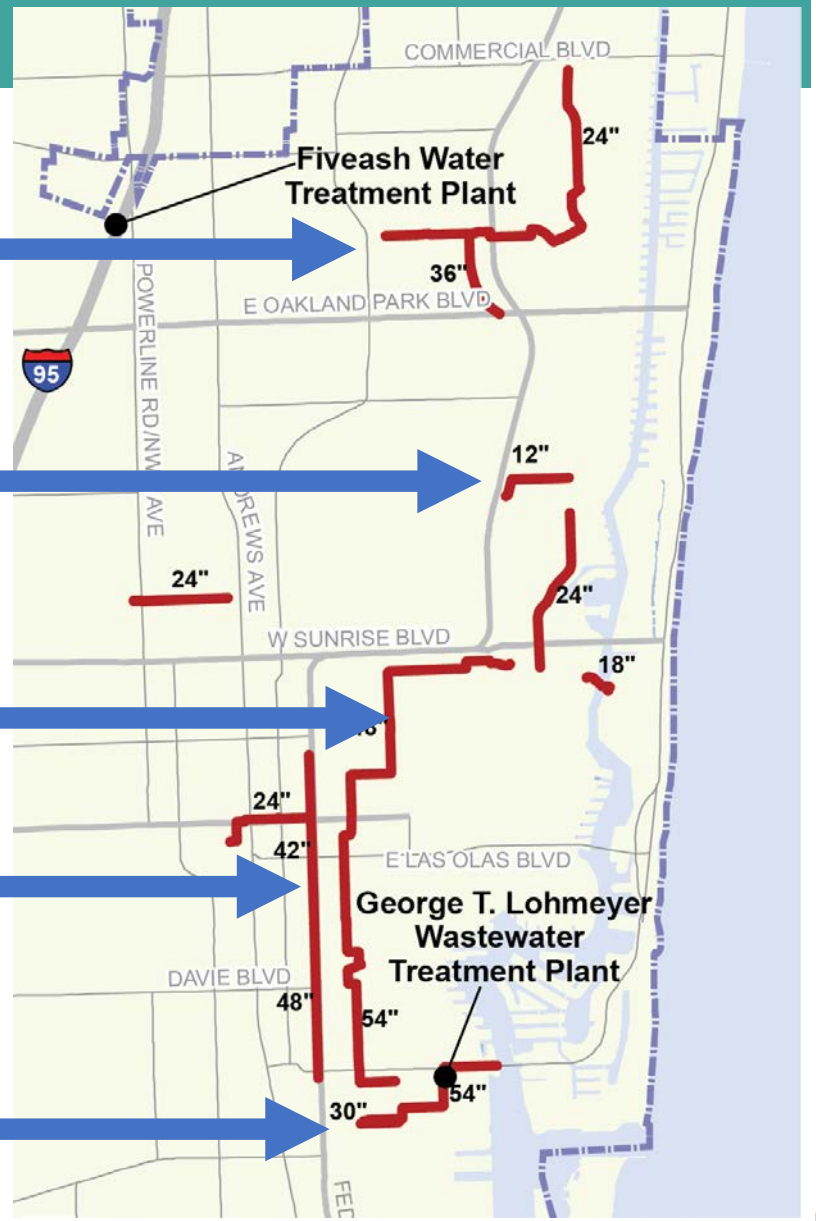
NE 9th St Crossing Easements acquired – about to Start Construction

NW 13th St Replacement Out for Bids

10th Ave FM Rehabilitation Pending Completion of Redundant Line

Redundant Line Out for Bids

GTL Redundant Eff Line In Design





Questions?

Thank you.



CITY OF FORT LAUDERDALE

Bridge Infrastructure Review

Public Works – Engineering Division

March 2, 2020

CITY OF FORT LAUDERDALE

Bridge Infrastructure

Commission Priorities – Strategic Plan
Goal: Be a sustainable and resilient community.
Objective: Proactively maintain our water, wastewater, road, and bridge infrastructure.

Contractors/Support Agencies:
Engineering Control Systems, Corp.
Lambert Brothers, Inc.
Florida Department of Transportation
Transystems Corporation

Bridge Master Plan Overview

Overview
53 city-owned bridges

Bridge Master Plan completed August 2014

What is the Master Plan?

- Identifies Deficiencies
- Reviews Substandard Geometric Elements
- Functional Ability Rating
- Structural Rating
- Rehabilitation & Replacement Schedule

Bridge Master Plan Overview



What's in the Master Plan?

- Field Inspection Reports
- Bridge History
- Repair Options
- Cost Estimates
- Constructability Issues
- Long/Short Term Recommendation

Bridges Infrastructure



Issues and Challenges

- Salt and brackish water effect
- Tides and sea level rise
- Aging infrastructure
- Access during improvement

Opportunities

- Enhance level of service and reduce risk to traveling public
- Introduce new materials and processes

Bridges Infrastructure:
Expenditures Overview

- $11.5M Replacement Budget (5 Years)
- $1M Annual Budget for Repair & Maintenance
- Average Maintenance Cost $100K per Bridge includes:
  - Painting
  - Reinforcement
  - Spalling Repair

Bridges Infrastructure:
Current FY 20 Projects

Construction:

- Coconut Isle Bridge
  - Construction Amount: $1.4 Million
  - Estimated Completion Date: January 2021

Design:

- South Ocean Drive
  - Cost Estimate: $3.6 Million
- West Lake Drive Bridge
  - Cost Estimate: $367,000

Planning:

- Bayview Drive Bridge
  - Cost Estimate: $ TBD



Bridges Infrastructure:
Scheduled for Maintenance



8 Locations:

- NE 1st Street Bridge
- Bayview Drive Bridge
- Bridge Mills Pond Canal
- NE 18th Avenue over Cypress Creek Canal
- NE 55th Street over Landing Inlet
- NE 15th Street over S. Fork Middle River
- Old Dixie Highway over S. Fork Middle River
- SE 9th Street over Tarpon River

Questions?

CITY OF FORT LAUDERDALE

SEWALL REPLACEMENT PROGRAM

INFRASTRUCTURE TASK FORCE PRESENTATION

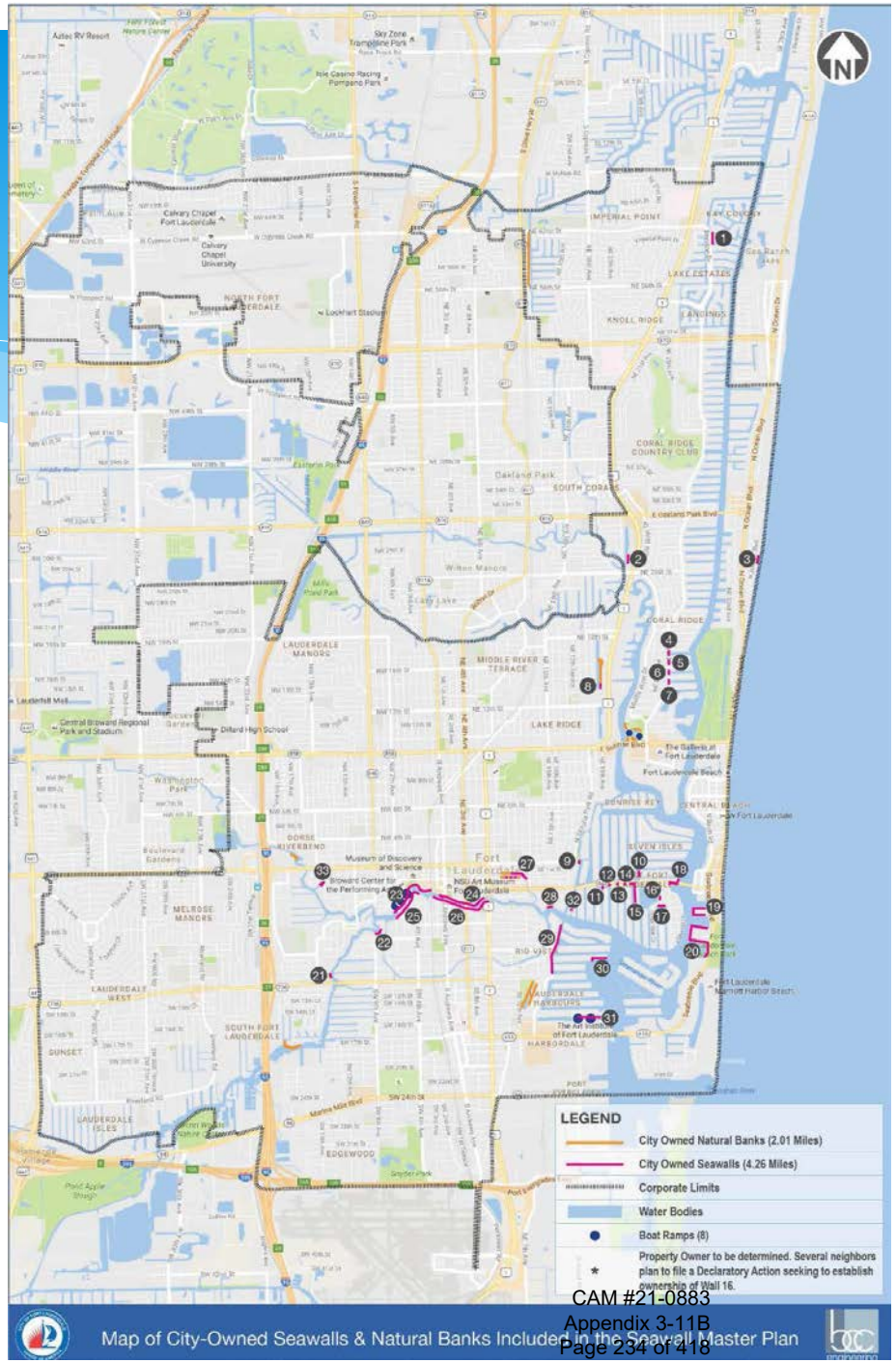
February 3, 2020

CITY HALL COMMISSION CHAMBERS

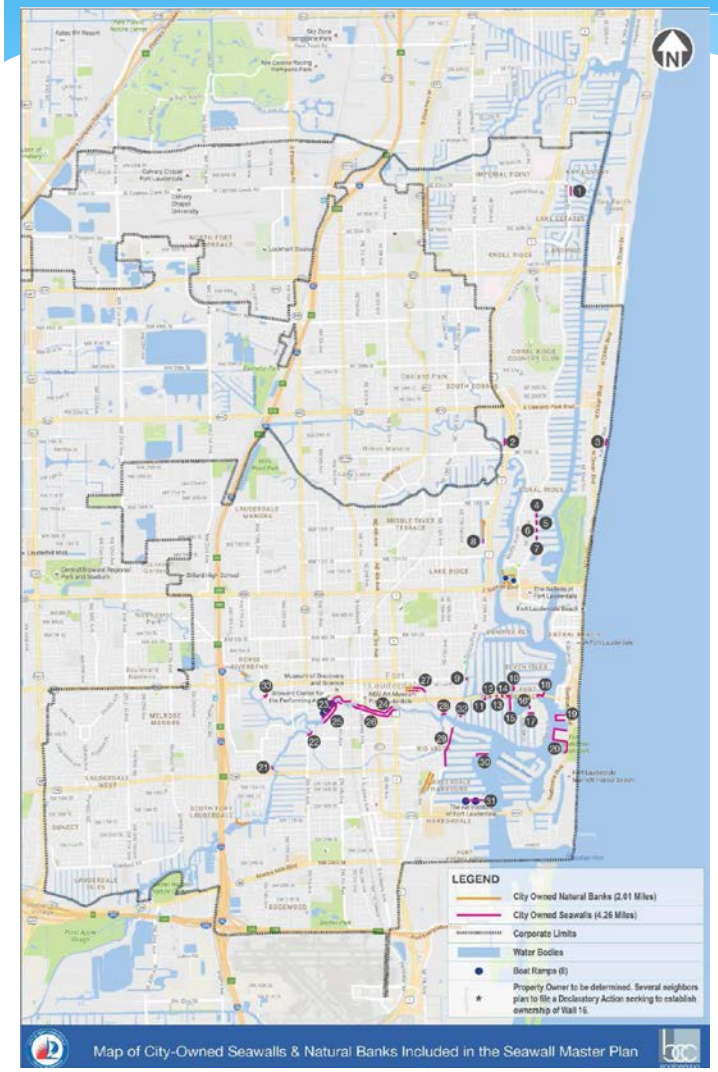
CITY OF FORT LAUDERDALE

SEAWALL ASSESSMENT STUDY

- The seawall assessment study was performed by BCC Engineering, Inc.
- The assessment consisted of 35 (4.41 miles) of city owned seawalls
-
- Thee final report was completed on February 5, 2018
- The assessment consisted of limited visual inspections, prioritization of seawalls for replacement/repair and general cost estimates for the repairs.



Seawall Assessment Study



Map of City-Owned Seawalls & Natural Banks Included in the Seawall Master Plan

- The seawall assessment study was performed by BCC Engineering, Inc.
- The assessment consisted of 35 (4.41 miles) of city owned seawalls.
- The final report was completed on February 5, 2018.
- The assessment consisted of limited visual inspections, prioritization of seawalls for replacement/repair and general cost estimates for the repairs.

SEAWALL MASTERPLAN ASSESSMENT

TABLE 2.5 – WALL VULNERABILITY* (Reference Figure 1 for seawall locations)

Wall	When Overtopped	Raising Required	When Addressed**	Funds Encumbered	Requiring Funding	Comments	Common Name
1	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. 0-5 Yr overtopping, deficiencies, portions failing.	Bayview Dr. at Bay Colony
2	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. 0-5 Yr overtopping, deficiencies, majority has failed.	Budget Inn Property
3	N/A	N/A	6-10 Yr	6-10 Yr	6-10 Yr	Deficiencies and exposure (beach) warrant 6-10 Yr replacement.	Loggerhead Park
4	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 17th St.
5	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 16th St.
6	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 15th St.
7	16-20 Yr	11-15 Yr	6-10 Yr	6-10 Yr	6-10 Yr	Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 14th St.
8	2036+	2036+	6-10 Yr	6-10 Yr	6-10 Yr	Deficiencies warrant 6-10 Yr replacement.	Lake Melva north of Ford Dealer
9	0-5 Yr	0-5 Yr	11-15 Yr	11-15 Yr	11-15 Yr	Lower risk location. Projected as overtopping, but no record of overtopping.	Victoria Park
[illegible]	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Deficiencies and high-profile location.	Seven Isles Dr. at Del Mar Pl.
11	16-20 Yr	11-15 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Deficiencies govern when wall is addressed.	City Pump Station
12	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	High priority. High profile location along critical east-west roadway.	E. Las Olas Blvd. east of Lido Dr.
13	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	High priority. High profile location along critical east-west roadway.	E. Las Olas Blvd. east of San Marco Dr.
14	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	High priority. High profile location along critical east-west roadway.	E. Las Olas Blvd. east of Coral Way
[illegible]	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Currently overtopping. High profile location.	Isle of Palms Dr.
16	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Currently overtopping. High profile location.	SE 25th Ave.
17	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	Mid-priority. Not currently overtopping. Available funds may bump to 0-5 Yr.	SE 5th St.
18	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Condition and high profile location along Las Olas Blvd.	E. Las Olas at ICWW
19	16-20 Yr	16-20 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Deficiencies warrant 0-5 Yr repair prior to raising 16-20 Yr.	Swimming Hall of Fame
20	11-15 Yr	11-15 Yr	11-15 Yr	11-15 Yr	11-15 Yr	Lower priority. Good condition and overtopping 11-15 Yr.	Bahia Mar
21	6-10 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	0-5 Yr overtopping but no overtopping noted. Low risk (park) location.	Coontie Hatchie Landings Park
22	11-15 Yr	6-10 Yr	6-10 Yr	6-10 Yr	6-10 Yr	Minor 6-10 Yr overtopping. Low risk (park) location. Recently rehabilitated.	Lewis Landing Park
23	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Riverwalk North west of CSX
24	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Riverwalk North east of CSX
25	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	SW 5th Ave.
26	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Riverwalk South
27	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Currently overtops.	Richard Mancuso Greenway
28	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Colee Hammock Park
[illegible]	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Currently overtopping and structural deficiencies. High profile.	Cordova Rd.
[illegible]	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Currently overtops. High profile.	SE 10th St.
31	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Replace 6-10 Yr.	Cox's Landing Boat Launch
32	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Currently overtopping. High profile.	Mola Ave.
33	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	No record of currently overtopping, however survey indicates overtopping.	Sailboat Bend Preserve
34	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	No record of overtopping. Survey indicates overtopping. High profile location.	Barcelona Dr. East of NE 26th Terrace
35	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	No record of overtopping. Survey indicates overtopping. High profile location.	SE 8th St.

*Timeframes are based on Work Program Windows in absence of detailed Vulnerability Analysis and uncertainties/variations in SLR projections.

**Wall Vulnerability (overtopping) may not govern when wall is addressed. See "Comments" for clarification.

Priority

Construction

Construction

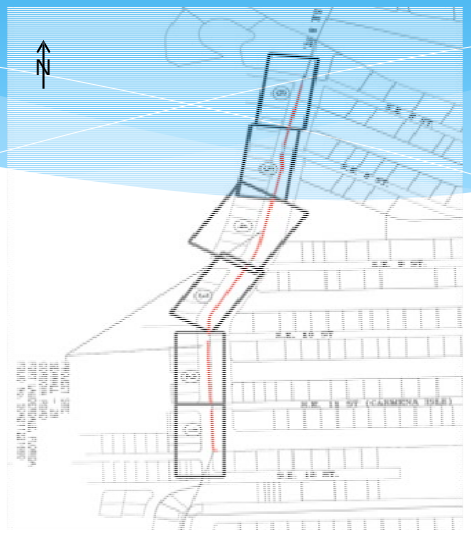
Priority

CORDOVA ROAD SEAWALL REPLACEMENT PROJECT CIP P12337

CITY OF FORT LAUDERDALE

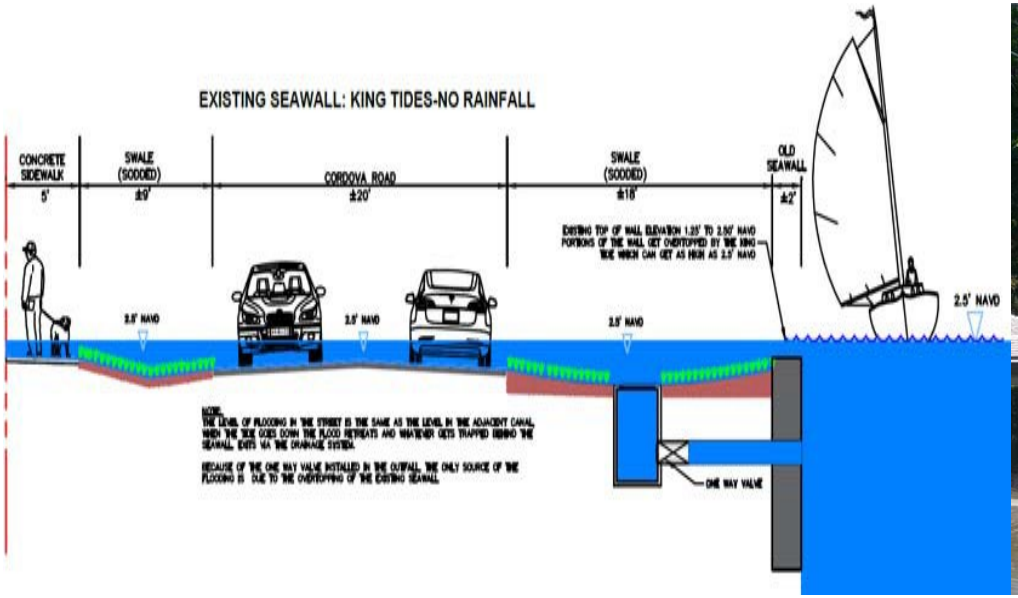
SCOPE OF WORK-SCHEDULE-COST

- Replace 2,200 linear feet of existing City-owned seawall
- Construct upland local drainage improvements benefitting the Cordova Road public right-of-way and mill and resurface Cordova Road
- Construction started October, 2019 and is expected to last 12 months.
- **Total: $6,616,300** (costs include Civil engineering inspection services and in-house project management fees, and construction fees and restoration)



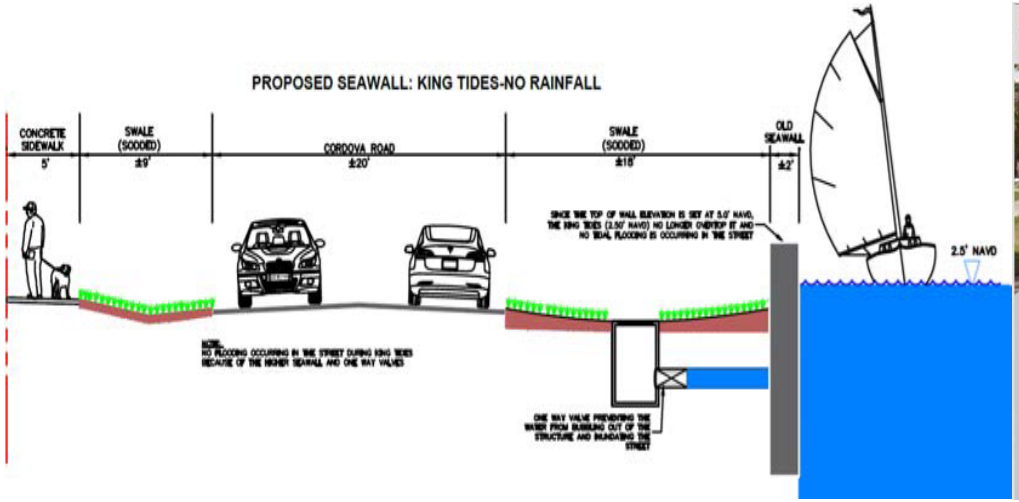


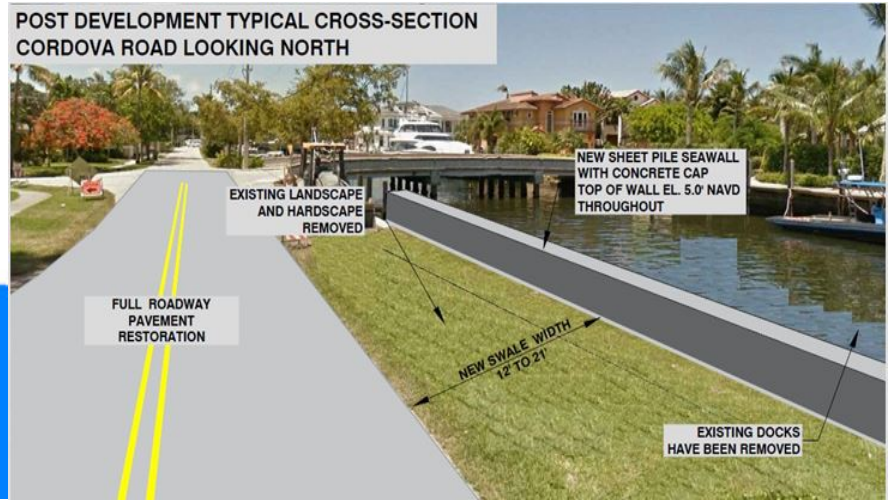
PRE DEVELOPMENT CONDITION





POST DEVELOPMENT CONDITION





CONSTRUCTION CURRENTLY ON-GOING

- Completed to date:
  - All docks have been removed
  - Vibration/noise monitoring devices installed
  - **500** linear feet (lf) of sheet piles out of the **2200** installed









BENEFITS TO NEIGHBORS

- Replace existing seawall that is low and in disrepair
- Improve level of service and reduce tidal impacts by elevating seawall to 5.0 *feet NAVD*, including:
  - Protect adjacent properties from wave and storm surge
  - Improve consistency of access to Rio Vista neighborhood
- Improve drainage along Cordova Road
- Provide a new roadway surface (driving)
- Remove unpermitted/unsightly water and electrical connections
- Swale rehabilitation/ Landscape Renewal

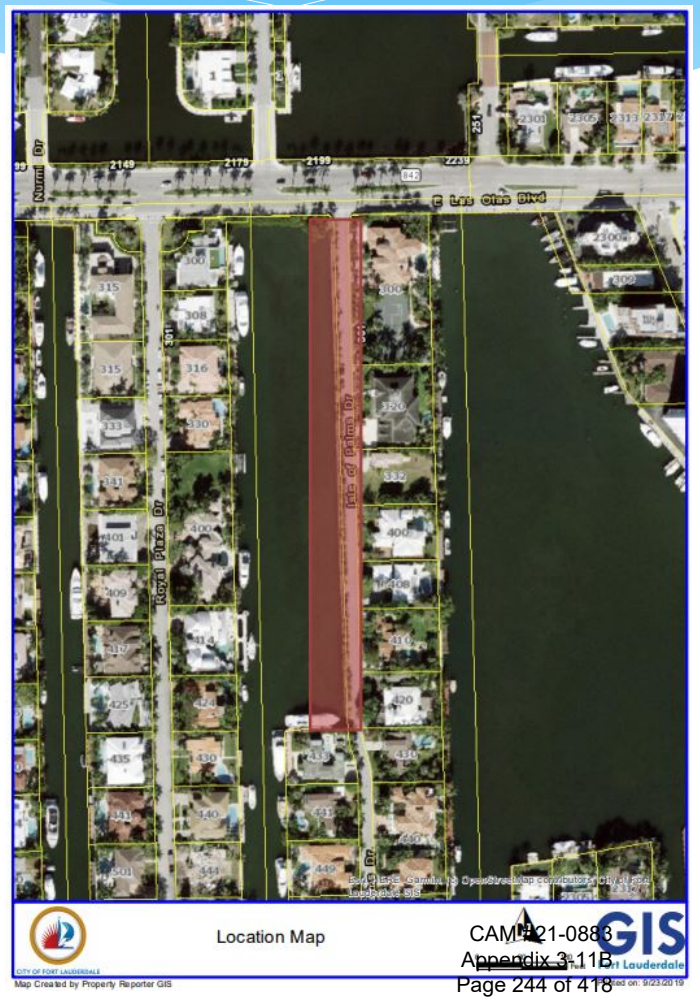
Goal: provide a resilient coastal roadway addressing projected sea level rise through 2060

ISLE OF PALMS SEAWALL REPLACEMENT PROJECT CIP 12014

CITY OF FORT LAUDERDALE

SCOPE OF WORK-SCHEDULE-COST

- Replace 900 linear feet of existing City-owned seawall
- Construct upland local drainage improvements benefitting the Isles of Palms public right-of-way and mill and resurface
- January and is expected to last 9 months.
- **Total: $2,414,158** (costs include Civil engineering inspection services and in-house project management fees, and construction fees and restoration)



ESTIMATED CONSTRUCTION SCHEDULE

* November 5, 2019
  - Contract award by City Commission
* Notice to Proceed (NTP) for Construction issued January 27, 2020
* February 3rd, 2020 Contactor mobilization
* September/November 2020
  - Construction fully completed

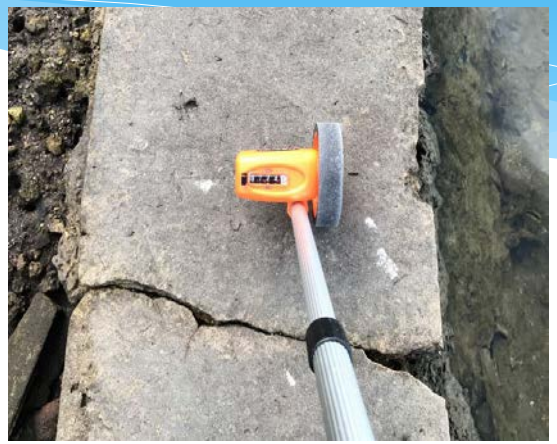


ESTIMATED CONSTRUCTION COSTS

- Seawall replacements costs and landscape: $2,221,021
- Land side drainage improvements, milling and re-surfacing of Cordova Rd.: $193,137
- **Total: $2,414,158** (costs include in-house project management fees)

EXISTING ISLE OF PALMS SEAWALL (STRUCTURAL CONDITION)

* Coral rock seawall
* Construction date: unknown
* Average cap el. : 1.26’ NAVD
* Condition: Poor with significant horizontal and vertical displacement with loss of fill from behind the wall
* 2018 Seawall Assessment Study recommended replacement and raising within 0-5 years









EXISTING ISLE OF PALMS SEAWALL (CURRENT TOP OF WALL ELEVATION)

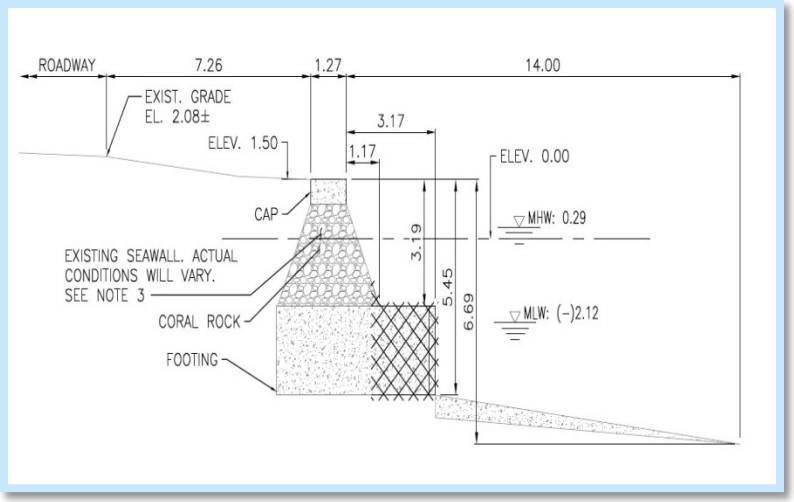
* Average cap el. : 1.26’ NAVD

* Typical king tide elevations range between 1.5’ to 2.5’ NAVD and are projected to increase.

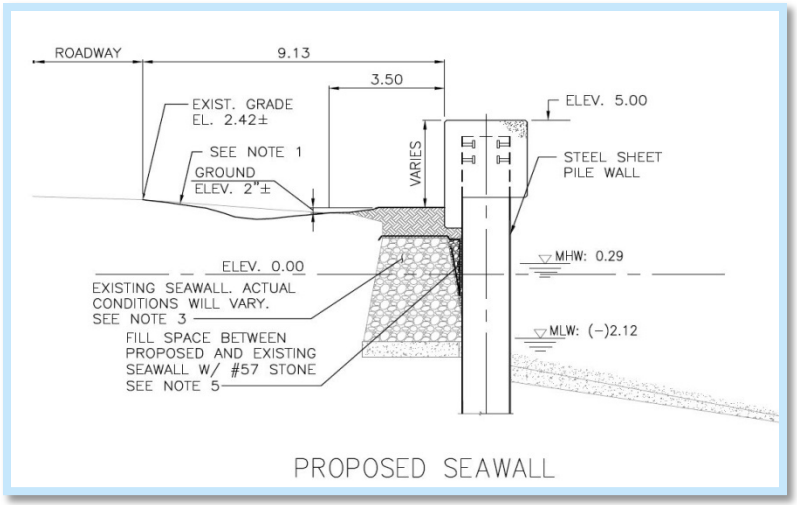


TYPICAL CROSS-SECTION (LOOKING SOUTH)

Existing



Proposed



ISLE OF PALMS DRIVE (LOOKING SOUTH)

Existing

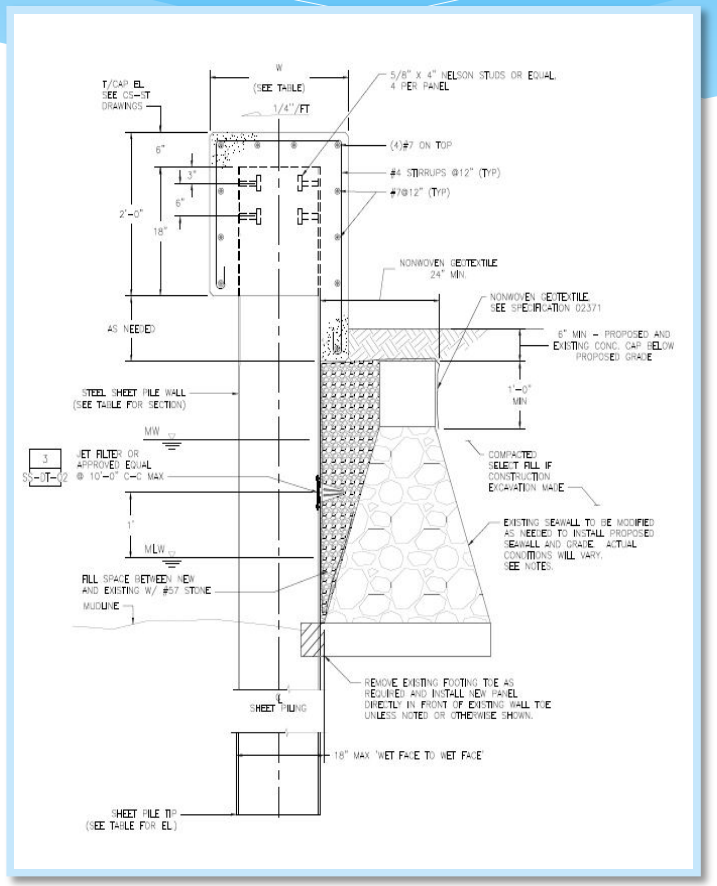


Proposed



CONSTRUCTION SPECIFICATIONS

- Seawall elevation (top of concrete cap) – 5.0' NAVD
  - Approximately 3.5 feet higher than existing seawall
  - NAVD – datum used to determine base flood elevations
- Steel sheet pile
  - 28 feet in length
  - Coated for protection against corrosion
    - Urethane zinc primer
    - Polyamine epoxy
- Concrete cap
  - 26 in wide x 24 in height
  - Will look like a concrete wall from roadside



BENEFITS TO THE NEIGHBORS

* Reduced frequency, intensity and duration of tidal flooding on Isle of Palms Drive
  - Protect adjacent properties from storm surge
  - Improved traffic
  - Safer access to Isle of Palms neighborhood
* Improved local right-of-way drainage
* New roadway surface (driving) course
* Help maintain property value
* Protect existing infrastructure by replacing deteriorated seawall
* Swale width to increase by a minimum of 1.5 feet
  - New sod and landscape will be installed

IMPACTS DURING CONSTRUCTION

* Traffic
  - Expect west (southbound lane) to be closed
  - Flaggers will direct traffic
* Noise and vibration
  - Sheet pile driving
    - Contractor will monitor noise and vibration to comply with contract specifications
    - City will retain independent vibration and noise monitoring services
  - Concrete trucks, materials deliveries, paving equipment

PROJECT WEBSITE

* Frequently Asked Questions (FAQ) Document
* Project Flyers, Presentations
* General Information About Project Milestones

https://www.fortlauderdale.gov/departments/public-works/engineering/isle-of-palms-seawall-3838

QUESTIONS?

* Public Works Engineering Division contacts:

Francisco Rios, EI
Project Manager (Isle of Palms Seawall) – (PW-Eng)
frios@fortlauderdale.gov
954-828-5807

Juan Carlos , EI
Project Manager (Cordova Seawall) – (PW-Eng)
jsamuel@fortlauderdale.gov
954-828-6270

Rares Petrica, P.E.
Senior Project Manager – (PW-Eng)
rpetrica@fortlauderdale.gov
954-828-6270

Omar Castellon, P.E., PMP, ENV SP
Chief Engineer, Public Works – Engineering Division (PW-Eng)
ocastellon@fortlauderdale.gov
954-828-5064

Bridge & Seawall Infrastructure Review

Public Works – Engineering Division

February 3, 2020

CITY OF FORT LAUDERDALE

Bridge Infrastructure

Commission Priorities – Strategic Plan
Goal: Be a sustainable and resilient community.
Objective: Proactively maintain our water, wastewater, road, and bridge infrastructure.

Contractors/Support Agencies:
Engineering Control Systems, Corp.
Lambert Brothers, Inc.
Florida Department of Transportation
Transystems Corporation

Bridge Master Plan Overview

Overview
51 city-owned bridges

Bridge Master Plan completed August 2014

What is the Master Plan?

- Identifies Deficiencies
- Reviews Substandard Geometric Elements
- Functional Ability Rating
- Structural Rating
- Rehabilitation & Replacement Schedule

Bridge Master Plan Overview



What's in the Master Plan?

- Field Inspection Reports
- Bridge History
- Repair Options
- Cost Estimates
- Constructability Issues
- Long/Short Term Recommendation

Bridges Infrastructure



Issues and Challenges

- Salt and brackish water effect
- Tides and sea level rise
- Aging infrastructure
- Access during improvement

Opportunities

- Enhance level of service and reduce risk to traveling public
- Introduce new materials and processes

Bridges Infrastructure:
Expenditures Overview

- $11.5M Replacement Budget (5 Years)
- $1M Annual Budget for Repair & Maintenance
- Average Maintenance Cost $100K per Bridge includes:
  - Painting
  - Reinforcement
  - Spalling Repair

Bridges Infrastructure:
Current FY 20 Projects

Construction:

- Coconut Isle Bridge
  - Construction Amount: $1.4 Million
  - Estimated Completion Date: January 2021

Design:

- South Ocean Drive
  - Cost Estimate: $3.6 Million
- West Lake Drive Bridge
  - Cost Estimate: $367,000

Planning:

- Bayview Drive Bridge
  - Cost Estimate: $ TBD



Bridges Infrastructure:
Scheduled for Maintenance



8 Locations:

- NE 1st Street Bridge
- Bayview Drive Bridge
- Bridge Mills Pond Canal
- NE 18th Avenue over Cypress Creek Canal
- NE 55th Street over Landing Inlet
- NE 15th Street over S. Fork Middle River
- Old Dixie Highway over S. Fork Middle River
- SE 9th Street over Tarpon River

Questions?

CITY OF FORT LAUDERDALE

Seawall Infrastructure

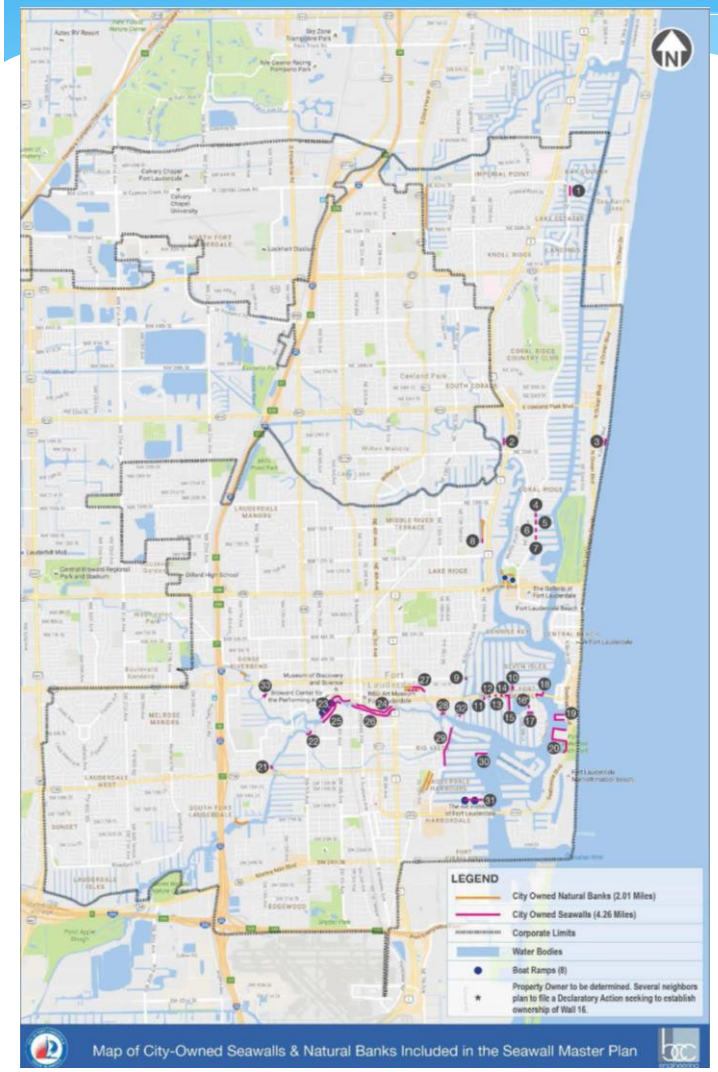
Public Works – Engineering Division

CITY OF FORT LAUDERDALE

Seawall Infrastructure

Commission Priorities – Strategic Plan
Goal: Be a sustainable and resilient community.
Objective: Proactively maintain our water, wastewater, road, and bridge infrastructure.

Seawall Assessment Study



Map of City-Owned Seawalls & Natural Banks Included in the Seawall Master Plan

- The seawall assessment study was performed by BCC Engineering, Inc.
- The assessment consisted of 35 (4.41 miles) of city owned seawalls.
- The final report was completed on February 5, 2018.
- The assessment consisted of limited visual inspections, prioritization of seawalls for replacement/repair and general cost estimates for the repairs.

Seawall Masterplan Assessment

TABLE 2.5 – WALL VULNERABILITY* (Reference Figure 1 for seawall locations)							
Wall	When Overtopped	Raising Required	When Addressed**	Funds Encumbered	Requiring Funding	Comments	Common Name
1	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. 0-5 Yr overtopping, deficiencies, portions failing.	Bayview Dr. at Bay Colony
2	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. 0-5 Yr overtopping, deficiencies, majority has failed.	Budget Inn Property
3	N/A	N/A	6-10 Yr	6-10 Yr	6-10 Yr	Deficiencies and exposure (beach) warrant 6-10 Yr replacement.	Loggerhead Park
4	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 17th St.
5	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 16th St.
6	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 15th St.
7	16-20 Yr	11-15 Yr	6-10 Yr	6-10 Yr	6-10 Yr	Deficiencies warrant 6-10 Yr replacement.	Bayview Dr. north of NE 14th St.
8	2036+	2036+	6-10 Yr	6-10 Yr	6-10 Yr	Deficiencies warrant 6-10 Yr replacement.	Lake Melva north of Ford Dealer
9	0-5 Yr	0-5 Yr	11-15 Yr	11-15 Yr	11-15 Yr	Lower risk location. Projected as overtopping, but no record of overtopping.	Victoria Park
10	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Deficiencies and high-profile location.	Seven Isles Dr. at Del Mar Pl.
11	16-20 Yr	11-15 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Deficiencies govern when wall is addressed.	City Pump Station
12	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	High priority. High profile location along critical east-west roadway.	E. Las Olas Blvd. east of Lido Dr.
13	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	High priority. High profile location along critical east-west roadway.	E. Las Olas Blvd. east of San Marco Dr.
14	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	High priority. High profile location along critical east-west roadway.	E. Las Olas Blvd. east of Coral W
15	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Currently overtopping. High profile location.	Isle of Palms Dr.
16	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Currently overtopping. High profile location.	SE 25th Ave.
17	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	Mid-priority. Not currently overtopping. Available funds may bump to 0-5 Yr.	SE 5th St.
18	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Condition and high profile location along Las Olas Blvd.	E. Las Olas at ICWW
19	16-20 Yr	16-20 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Deficiencies warrant 0-5 Yr repair prior to raising 16-20 Yr.	Swimming Hall of Fame
20	11-15 Yr	11-15 Yr	11-15 Yr	11-15 Yr	11-15 Yr	Lower priority. Good condition and overtopping 11-15 Yr.	Bahia Mar
21	6-10 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	0-5 Yr overtopping but no overtopping noted. Low risk (park) location.	Coontie Hatchie Landings Park
22	11-15 Yr	6-10 Yr	6-10 Yr	6-10 Yr	6-10 Yr	Minor 6-10 Yr overtopping. Low risk (park) location. Recently rehabilitated.	Lewis Landing Park
23	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Riverwalk North west of CSX
24	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Riverwalk North east of CSX
25	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	SW 5th Ave.
26	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Riverwalk South
27	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Currently overtops.	Richard Mancuso Greenway
28	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Partial repair/raising.	Colee Hammock Park
29	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Top priority. Currently overtopping and structural deficiencies. High profile.	Cordova Rd.
30	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Currently overtops. High profile.	SE 10th St.
31	0-5 Yr	0-5 Yr	6-10 Yr	6-10 Yr	6-10 Yr	No record of currently overtopping. Replace 6-10 Yr.	Cox's Landing Boat Launch
32	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	Currently overtopping. High profile.	Mola Ave.
33	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	No record of currently overtopping, however survey indicates overtopping.	Sailboat Bend Preserve
34	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	No record of overtopping. Survey indicates overtopping. High profile location.	Barcelona Dr. East of NE 26th Terrace
35	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	0-5 Yr	No record of overtopping. Survey indicates overtopping. High profile location.	SE 8th St.
*Timeframes are based on Work Program Windows in absence of detailed Vulnerability Analysis and uncertainties/variations in SLR projections.							
**Wall Vulnerability (overtopping) may not govern when wall is addressed. See "Comments" for clarification.							

Priority

Construction

Construction

Priority

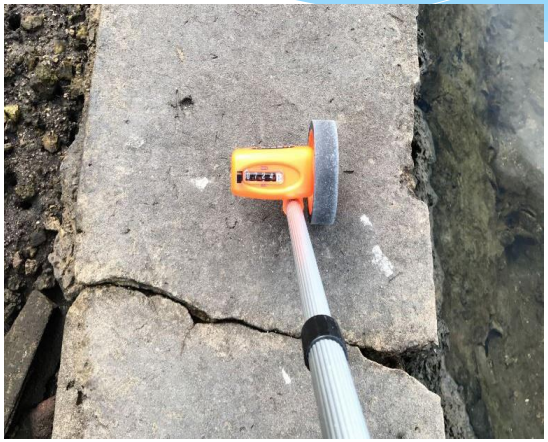
Current Seawall Projects

1. Isle of Palms Seawall Replacement
2. Cordova Road Seawall Replacement

CITY OF FORT LAUDERDALE

Existing Isle of Palms Seawall: Structural Condition

- **Constructed of:**
  Coral rock seawall
- **Construction Date:**
  Unknown
- **Average Cap Elevation:**
  1.26’ NAVD
- **Condition**:
  Poor with significant horizontal and vertical displacement with loss of fill from behind the wall
- **2016 Seawall Assessment Masterplan Recommendation:**
  Replacement and Raising within 0-5 years









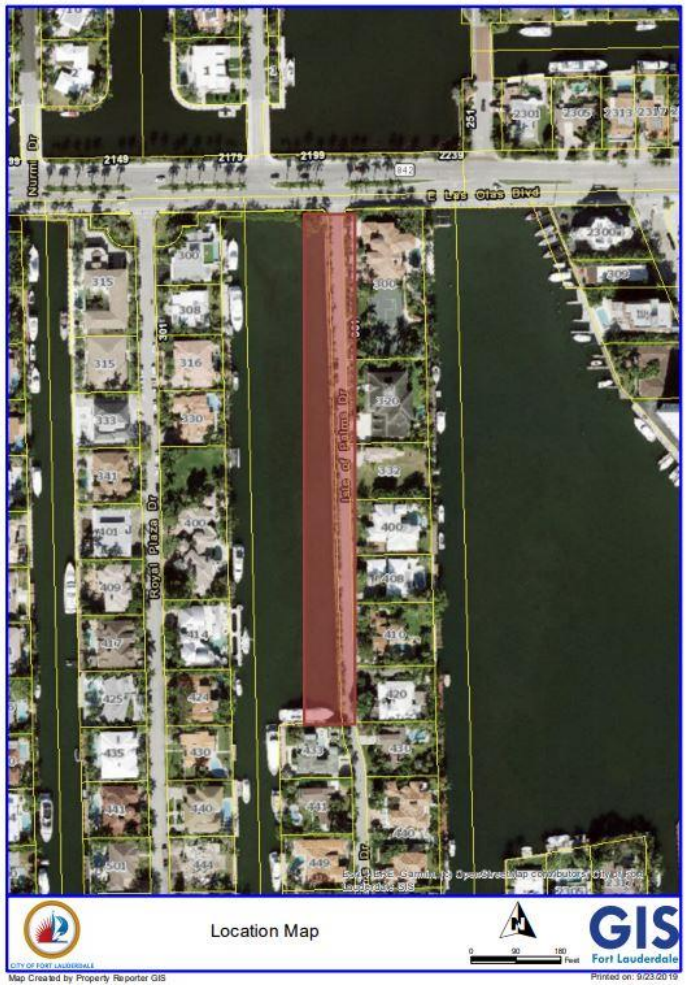
Isle of Palms Seawall: Current Top of Wall Elevation

- **Current Average Cap Elevation:**
  1.26’ NAVD

- Typical King Tide elevations range between 1.5’ to 2.5’ NAVD and are projected to increase.



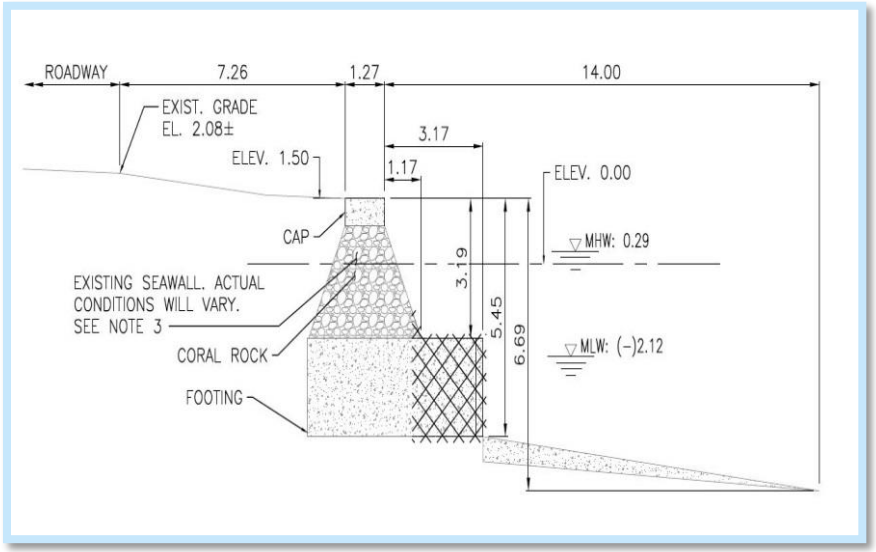
Isle of Palms Seawall: Scope of Work



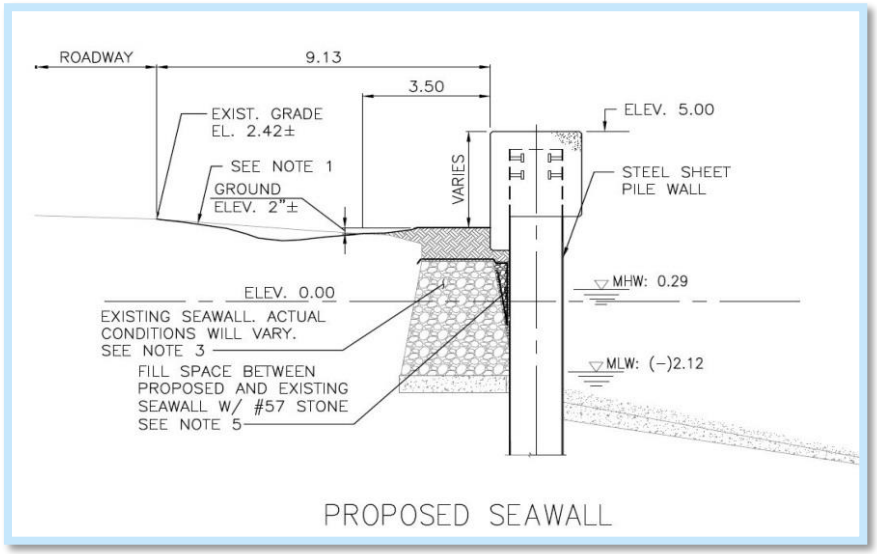
- Replace approximately 900 linear feet of existing City-owned seawall along west side of Isle of Palms Drive
- Construct upland local drainage improvements benefitting the Isle of Palms Drive public right-of-way
- Mill and re-surface the existing roadway along seawall length

Typical Cross-Section

Existing



Proposed

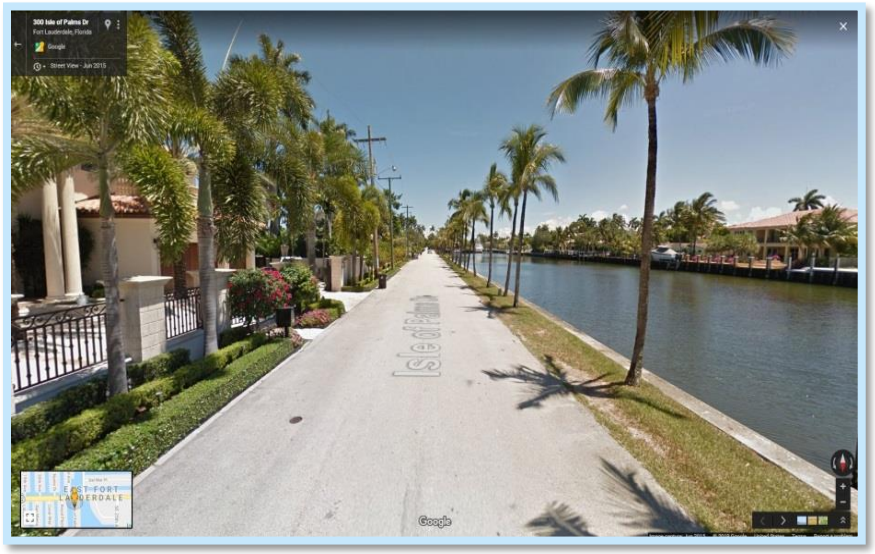


Looking South

Isle of Palms Drive Preview

Existing

Proposed

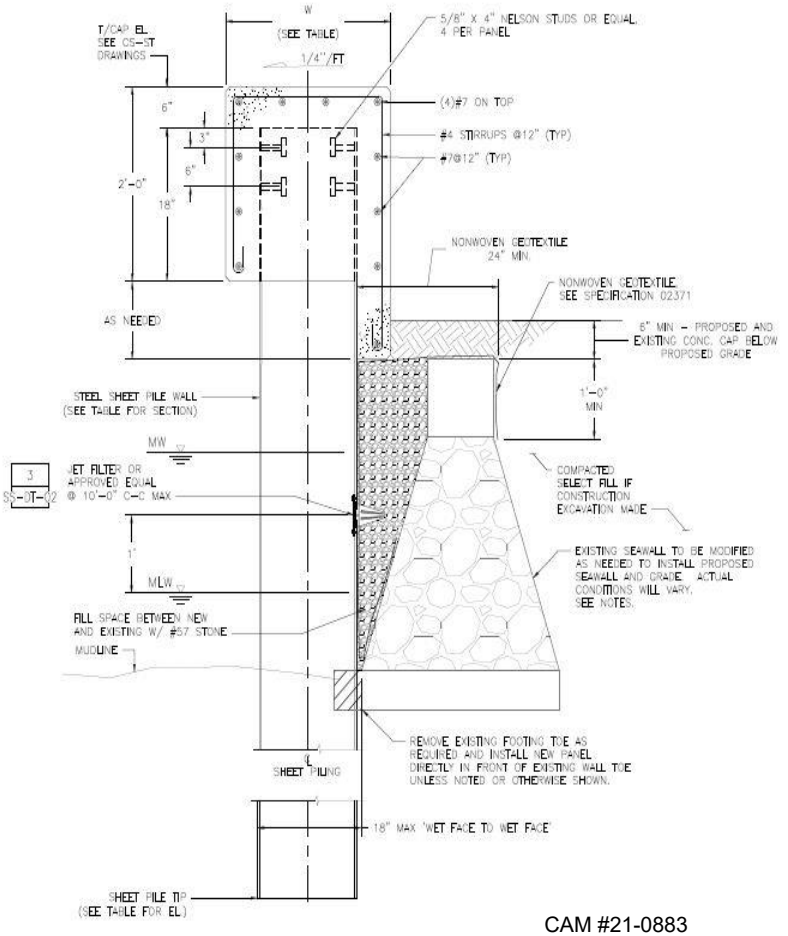




Looking South

Construction Specifications

- **Seawall elevation** (top of concrete cap) – 5.0’ NAVD
  - Approximately 3.5 feet higher than existing seawall
  - NAVD – datum used to determine base flood elevations
- **Steel sheet pile**
  - 28 feet in length
  - Coated for protection against corrosion
    - Urethane zinc primer
    - Polyamine epoxy
- **Concrete cap**
  - 26 in wide x 24 in height
  - Will look like a concrete wall from roadside



Benefits to Neighbors

- Reduced frequency, intensity and duration of tidal flooding on Isle of Palms Drive
  - Protect adjacent properties from storm surge
  - Improved traffic
  - Safer access to Isle of Palms neighborhood
- Improved local right-of-way drainage
- New roadway surface (driving) course
- Help maintain property value
- Protect existing infrastructure by replacing deteriorated seawall
- Swale width to increase by a minimum of 1.5 feet
  - New sod and landscape will be installed

Impacts During Construction

- **Traffic**
  - Expect west (southbound lane) to be closed
  - Flaggers will direct traffic
- **Noise and vibration**
  - Sheet pile driving
    - Contractor will monitor noise and vibration to comply with contract specifications
    - City will retain independent vibration and noise monitoring services
  - Concrete trucks, materials deliveries, paving equipment

Tentative Schedule

- **November 5, 2019:** Contract award by City Commission
- **Mid December, 2019:** Contract to be fully executed
- **Early to mid January 2020:** Notice to Proceed (NTP) for Construction
- **Late September 2020:** Construction fully completed

Project Website

- Frequently Asked Questions (FAQ) Document
- Project Flyers, Presentations
- General Information About Project Milestones
- URL: https://www.fortlauderdale.gov/departments/public-works/engineering/isle-of-palms-seawall-3838

Current Seawall Projects

1. Isle of Palms Seawall Replacement
2. Cordova Road Seawall Replacement

CITY OF FORT LAUDERDALE

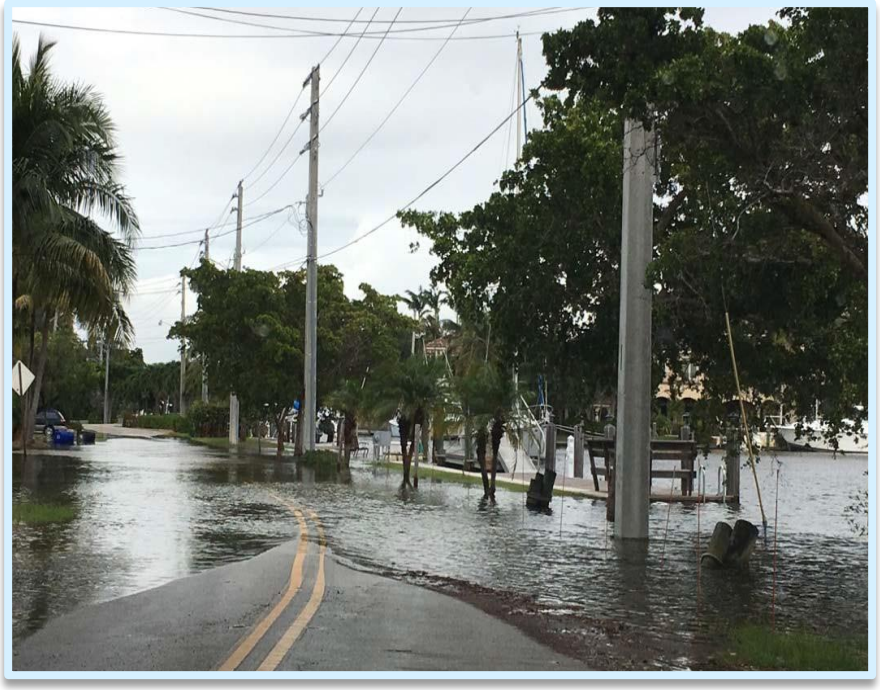
Cordova Road Seawall: Scope of Work



- Repair/replace 2,200 linear feet of existing City-owned seawall
- Construct upland local drainage improvements benefitting the Cordova Road public right-of-way
- Mill and resurface the existing roadway
- Fully restore project job site

Cordova Road Seawall: Construction Schedule

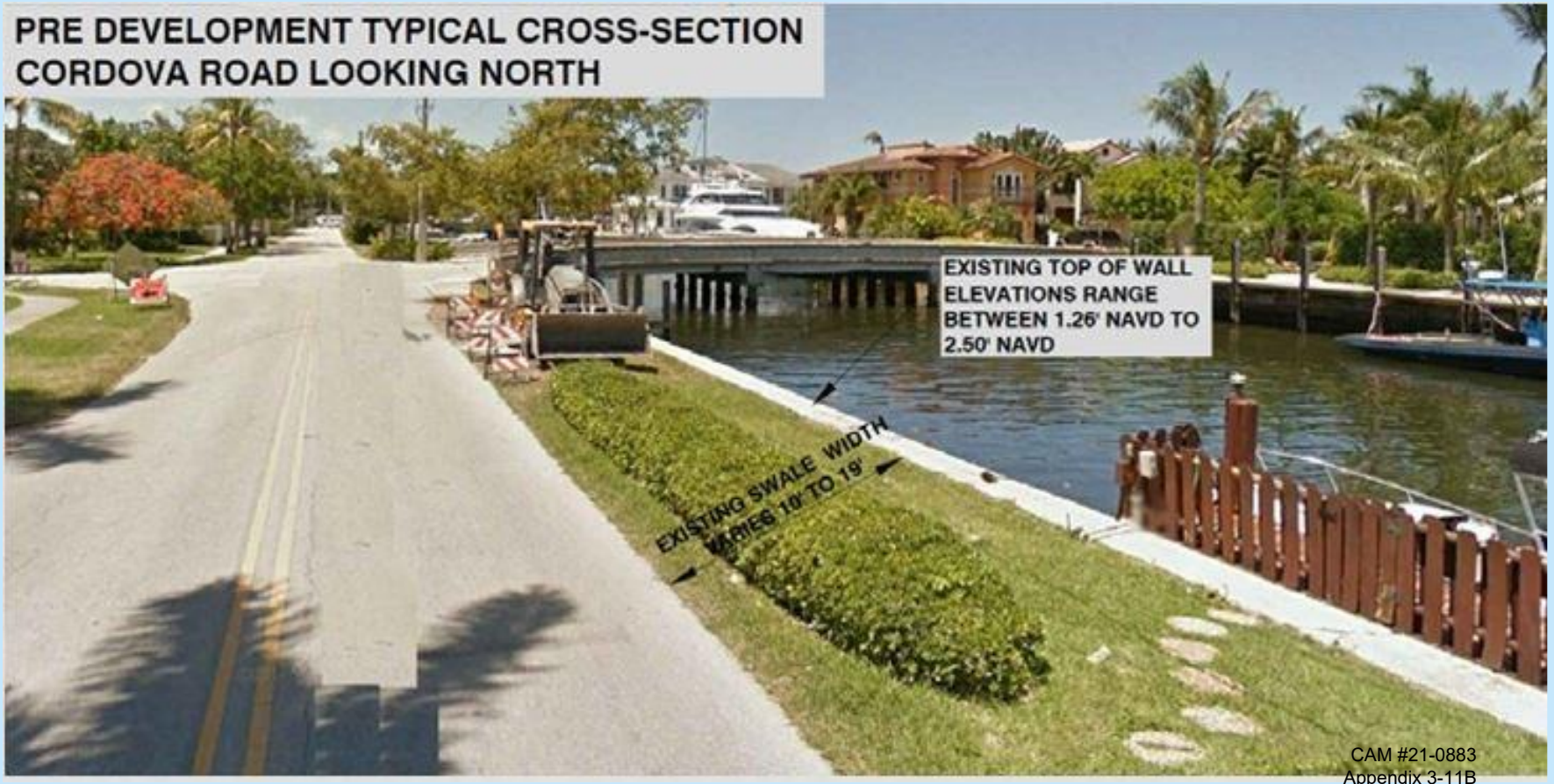
- **February 2019:** Permitting
- **January 2019 – July 2019**: Bidding & Contract award
- **October 2019:** Construction Purchase Order Issued to Custom Built Marine Construction
- **October 2019:** Construction commences
- **October 2020:** Estimated twelve (12) month construction schedule for project completion.



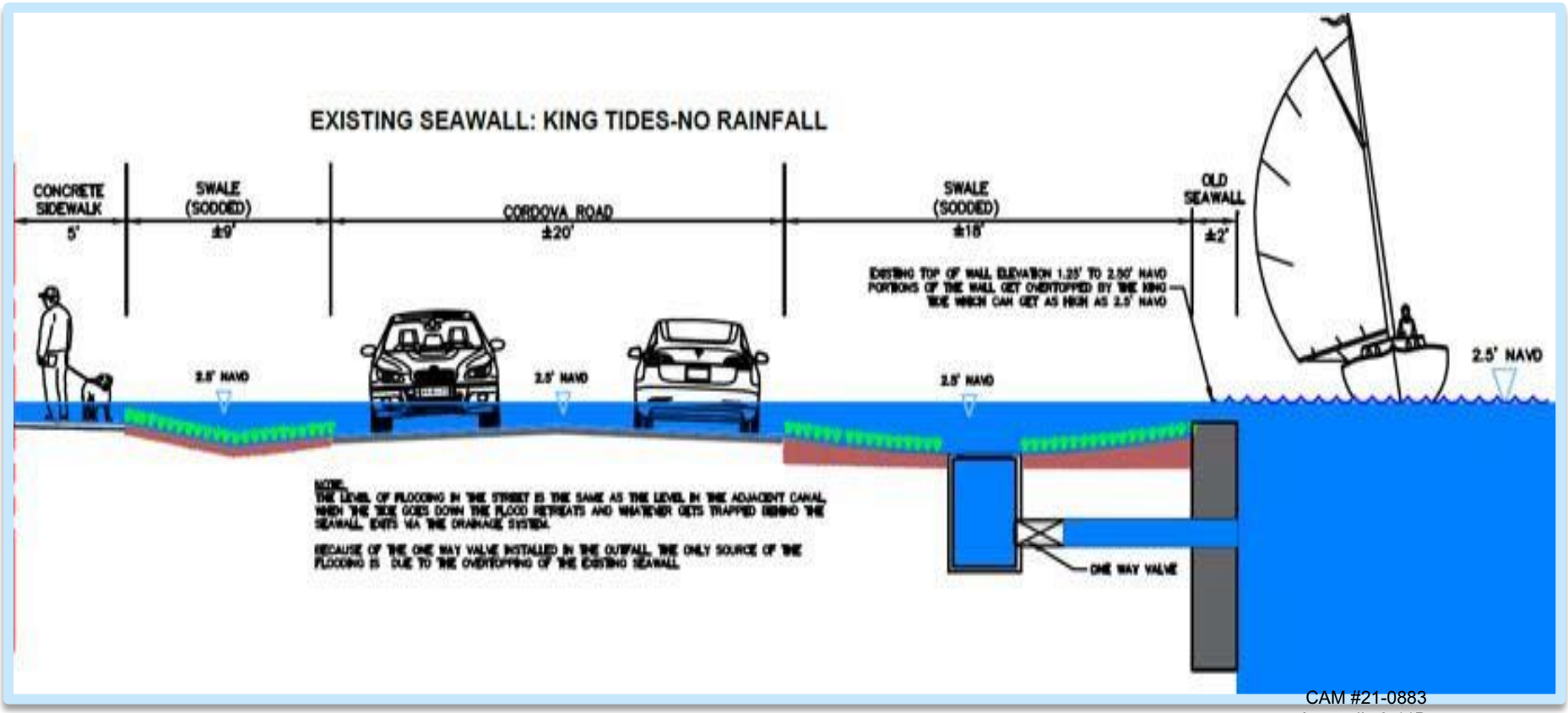
Pre-development Condition



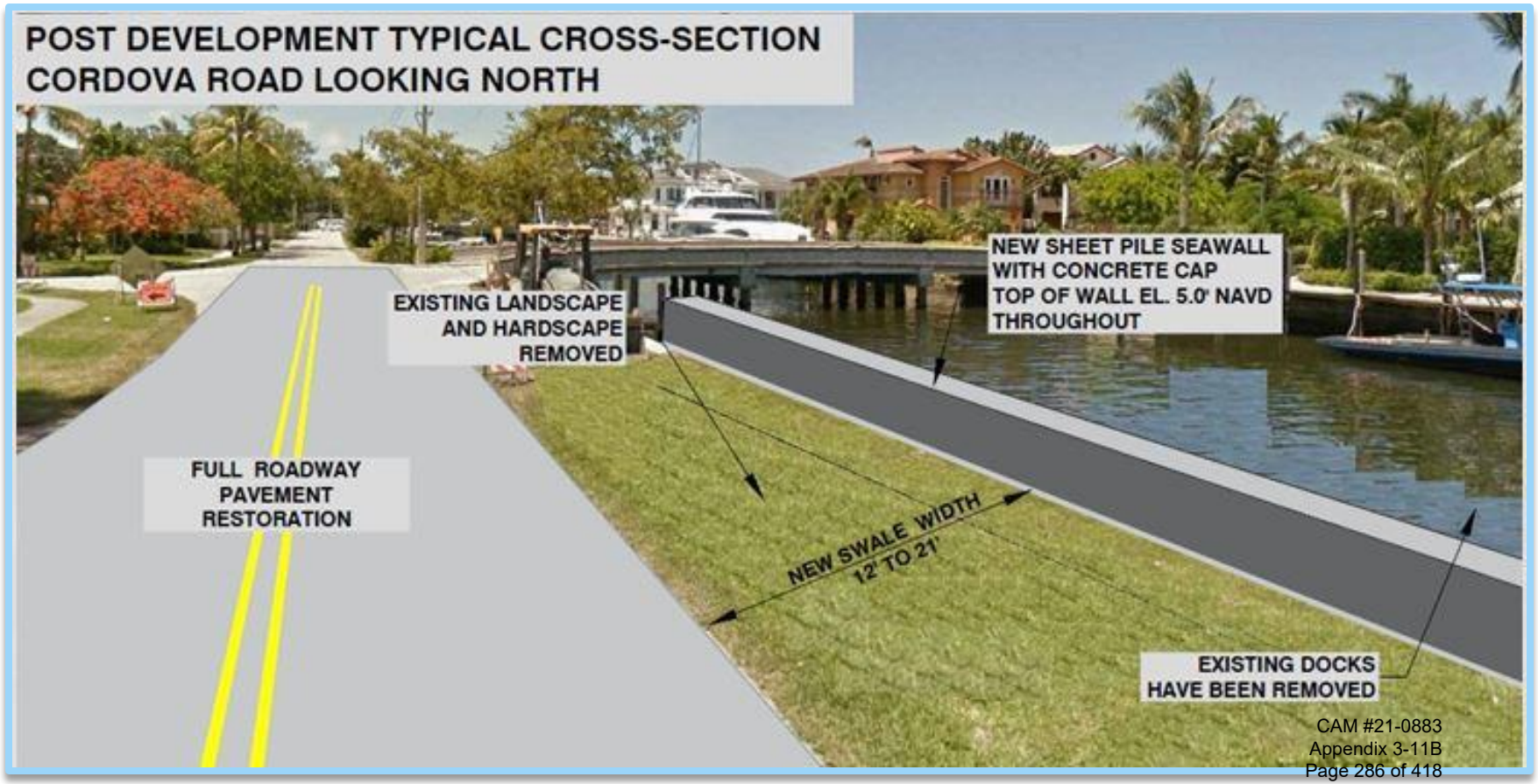
Pre-development Condition



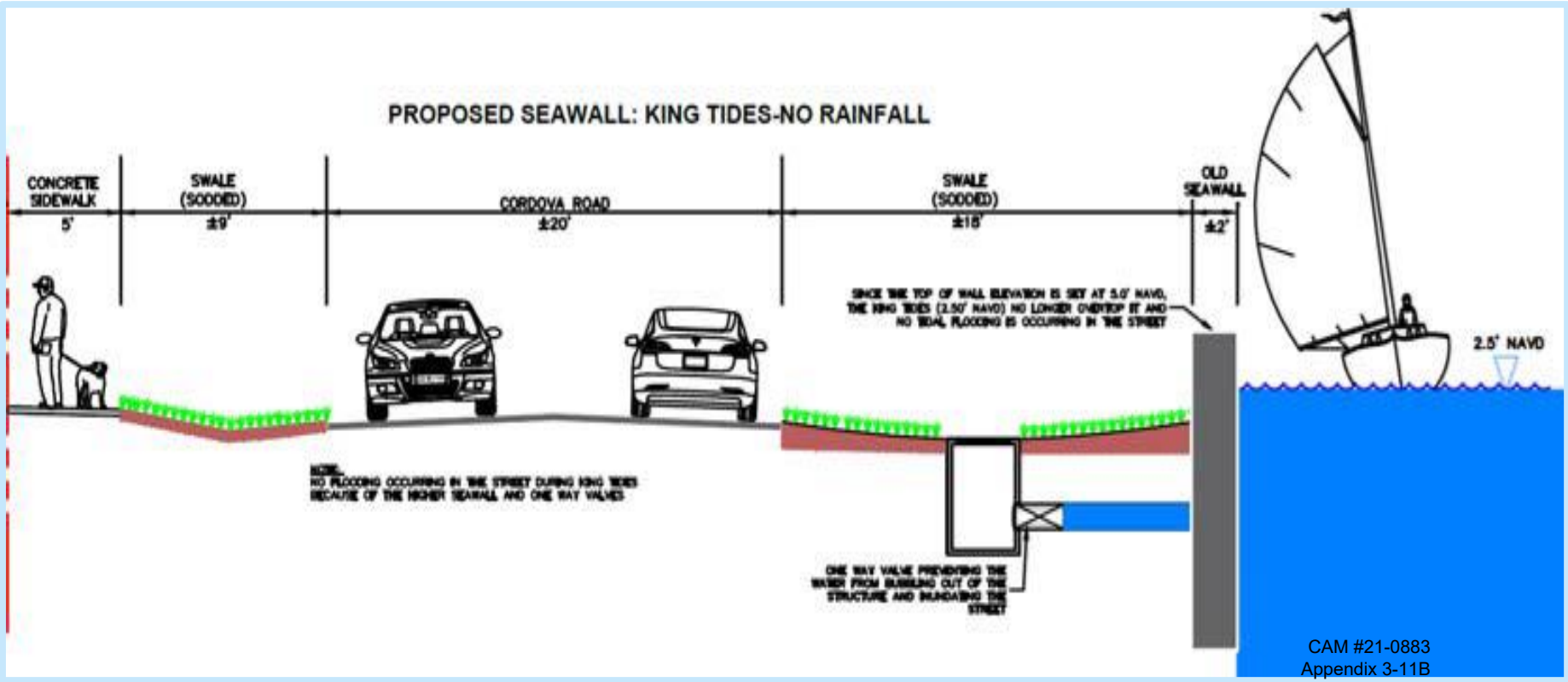
Pre-development Condition



Post Development Condition



Post Development Condition



Benefits to Neighbors

Goal:
Provide a resilient coastal roadway addressing projected sea level rise through 2060.

- Replace existing seawall that is low and in disrepair
- Improve level of service and reduce tidal impacts by elevating seawall to *5.0 feet NAVD*, including:
  - Protect adjacent properties from wave and storm surge
  - Improve consistency of access to Rio Vista neighborhood
- Improve drainage along Cordova Road
- Provide a new roadway surface (driving)
- Remove unpermitted/unsightly water and electrical connections
- Swale rehabilitation/ Landscape Renewal

Questions?

CITY OF FORT LAUDERDALE

Capacity Availability Analysis



Capacity Availability Analysis

- When a potential development goes through the Development Review Committee (DRC) process it must exhibit that it can provide fire protection, potable water, and wastewater service once complete per the City's adequacy requirements outlined in the Unified Land Development Code.
- An analysis is performed by the City to determine if the existing water and wastewater infrastructure can provide these services.

Capacity Availability Analysis – Proposed Demand

- The proposed demand resulting from the development is determined through Equivalent Residential Connection (ERC) calculations using 'Table A' from the City's *Guidelines for the Calculation of Sanitary Sewer Connection Fees:*
  - 1 ERC = 300 **maximum** gallons per day (GPD) of water demand
  - 1 ERC = 175 **average** GPD of sewer demand
  - Credits for existing uses are also calculated resulting in a net demand

Table A

TYPE OF USE	UNIT OF MEASURE	ERC per UNIT	REF. CODE
Equivalent Residential Connection	----	1.000	----
Single Family House, Duplex, Triplex	each	1.000	R01
Condominium, Apartment	each	0.805	R03
Mobile Home	lot	0.559	R04
Vehicular Repair	1000 SF	0.473	C01
Gas Station (fueling only)	fuel pump	0.550	C02
Laundry and/or Dry Cleaning (staff operated machines)	1000 SF	2.773	C03
Laundry (coin operated machines)	1000 SF	8.659	C04
Merchandising	1000 SF	0.550	C05
Warehouse (mixed use)	1000 SF	0.368	C06
Warehouse (homogenous, bulk storage use)	1000 SF	0.177	C07
Self Service Storage	1000 SF	0.068	C08
Restaurant	1000 SF	2.495	C09
Fast Food Service	1000 SF	3.455	C10
Bar, Cocktail Lounge	1000 SF	1.236	C11
Office	1000 SF	0.636	C12
Day Child Care	1000 SF	0.632	C13
Place of Worship	1000 SF	0.523	C14
School	student	0.042	C15
Hotel (with restaurant and/or meeting rooms)	rental room	0.868	C16
Hotel (without restaurant and meeting rooms)	rental room	0.255	C17
Movie Theater	seat	0.009	C18

Capacity Availability Analysis – Water/Sewer

Transmission/distribution networks

- The networks between the connection points at the development to the treatment plants are evaluated to ensure there is enough capacity to handle the proposed and existing demand.
- This includes water mains, gravity sewer mains, wastewater pumping stations, force mains, etc.
- The age/condition of the pipe at the point of connection is also reviewed.

Treatment Plants

- Proposed demand, previously committed demand, and current demand are reviewed to determine capacity availability at water and wastewater treatment plants.

Capacity Availability Analysis - Recommended Improvements

- If the existing water and wastewater infrastructure is deemed to lack capacity or beyond its useful life then improvements are recommended.
- Examples include:
  - Upsizing of gravity sewer mains or water mains
  - Rehabilitation or improvement of pump station
  - Replacement of pipe

Capacity Availability Analysis - Recommended Improvements

Subject: **WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER**
Tarpon Lofts – DRC Case No. R19034
400 SE 9th Court, Fort Lauderdale, Florida 33316

Dear Mr. Celenski,

According to the information submitted, the project consists of a 6-story 9-unit residential building. There are proposed water and sewer connections to City of Fort Lauderdale (City) utilities along SE 9th Court. This project lies within the City's Pump Station (PS) A-11 basin and will increase the average day water demand by approximately 0.002 million gallons per day (MGD) and the average day sewer demand by approximately 0.001 MGD. PS A-16 currently discharges into the gravity system upstream of PS A-11 and the proposed development. The following is one of the City's major initiatives near the proposed development:

Project #12412 – Pump Station A-16 Upgrade and Force Main Replacement
Estimated Design Completion: February 2020
Estimated Construction Completion: July 2021

We believe that once this project is complete there will be sufficient capacity in the sanitary sewer system to accommodate the proposed development. Further, with the understanding that the proposed development would not seek a Certificate of Occupancy prior to July 2021, we are confident that the described infrastructure improvement will be complete and PS A-11 will be able to accommodate the proposed project's calculated demands.

Additionally, the gravity sewer main is approximately 50 years old and is of a vitrified clay material. Due to the material and the age of the pipe, it can be reasonably estimated that the pipe is in poor condition. We recommend replacement of approximately 360 linear feet of gravity sewer main along SE 9th Court with a polyvinyl chloride (PVC) pipe.

Capacity Availability Analysis – Recommended Improvements

Evaluation of impact of Permitted Wastewater Plant Capacity: The City of Fort Lauderdale owns and operates the George T. Lohmeyer Regional Wastewater Treatment Plant (GTL), which provides wastewater treatment for the City of Fort Lauderdale. The Broward County's Environmental Protection and Growth Management Department's (EPGMD) Environmental Licensing & Building Permitting Division's licensed capacity for GTL is 48 MGD-AADF (Million Gallons per Day – Annual Average Daily Flow). The annual average daily flow (AADF) to the plant is 35.942 MGD. Combining the committed flows for previously approved projects of 4.593 MGD plus the 0.115 MGD net contribution from the project results in a total projected flow of 40.65 MGD. This is less than the permitted treatment plant capacity of 48 MGD. Therefore, the treatment plant has sufficient capacity to serve this project. See Figure 6 below.

Recommended Wastewater Infrastructure Improvements: Approximately 1,270 linear feet (LF) of 10-inch sewer along NW 7th Terrace needs to be upsized to at least a 12-inch sewer, 440 LF of 12-inch sewer along NW 4th Street needs to be upsized to at least a 14-inch sewer, and 40 LF of 12-inch sewer immediately upstream of PS A-36 needs to be upsized to at least a 16-inch sewer. Additionally, improvements to PS A-36 are needed to prevent excessive runtimes.

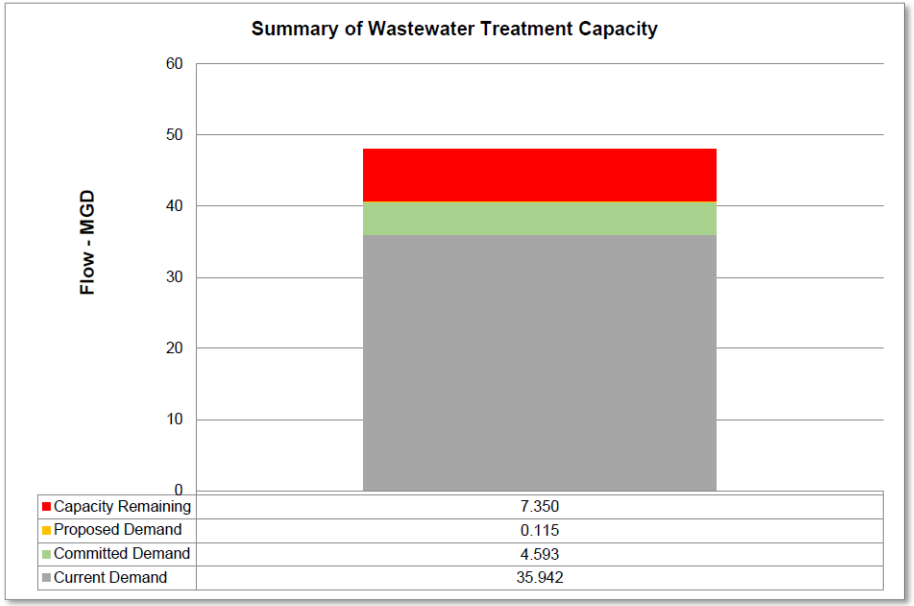


Figure 6

Capacity Availability Analysis – Recommended Improvements

CITY OF FORT LAUDERDALE

WATER CAPACITY ANALYSIS

Requested Demand: Based on the applicant's site plan and building use information, the estimated potable water demand will increase approximately 28,442 gallons per day (GPD) which equates to 0.028 million gallons per day (MGD). Water use demands are calculated based on the City's "*Guidelines for the Calculations of Sanitary Sewer Connection Fees*".

Evaluation of impact on existing distribution pipe (flow & capacity): According to the site plan, the applicant is proposing to utilize the existing water mains and existing service connections along SE 17th Street to the south of the property. The InfoWater hydraulic model was analyzed to determine the impact of this project on the local distribution network and the results showed that the existing network could handle the proposed flow. However, after discussing the development and proposed service connections with City Utilities staff, various improvements to the local distribution network are recommended to accommodate the desired service connections. These improvements would replace aging CIP water mains, improve redundancy of the network, and improve constructability of proposed services (meters, fire service lines, etc.). The specifics of these improvements are described below.

Evaluation of impact of Permitted Water Plant Capacity: The Fiveash and the Peele Dixie Water Treatment Plants are designed to treat 70 MGD and 12 MGD of raw water respectively (82 MGD total). The total permitted Biscayne aquifer water withdrawals for these plants is limited to 52.55 MGD per the South Florida Water Management District (SFWMD) permit number 06-00123-W.

The current twelve-month rolling average production at the two plants is 39.57 MGD. The previously committed demand from the development projects in the permitting or the construction stage is 4.402 MGD. Combining these figures with the demand from the proposed project of 0.028 MGD, the required production would be 44.00 MGD. This is less than the allowable withdrawal limit of 52.55 MGD. Therefore, the water plants have sufficient capacity to serve this project. See Figure 5 on the next page.

Recommended Water Infrastructure Improvements: The 16-inch CIP water main on the south side of SE 17th Street should be replaced with DIP from the connection with the 24-inch main and should be extended to connect to the 12-inch CIP main to the east replacing roughly 620 LF of aging CIP and installing a total of 1200 LF of DIP. Additionally, the 180 LF 8-inch service main on the west side of the site should be upsized to a 16-inch main and the 10-inch service main on the east side of the site should be disconnected from the 12-inch CIP main and reconnected to the proposed 16-inch DIP main.

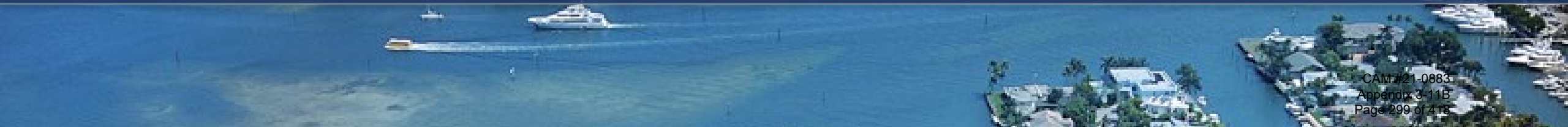
Presentation to the Infrastructure Task Force Advisory Committee

October 19, 2020 – 2:00 pm

CITY OF FORT LAUDERDALE



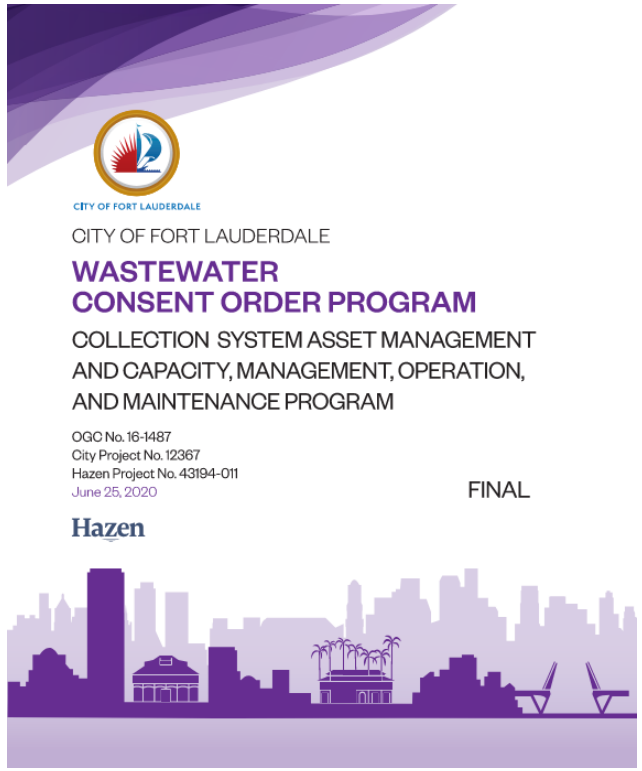
Presented by: Hazen



What is an AM-CMOM?

CITY OF FORT LAUDERDALE

- AM-CMOM = Asset Management- Capacity Management, Operation and Maintenance
- Required by Consent Order
- Based on EPA Guidelines
- The AM portion resulted in development of maps to visualize the risk of the collection and transmission system



How is Risk Calculated?

CITY OF FORT LAUDERDALE

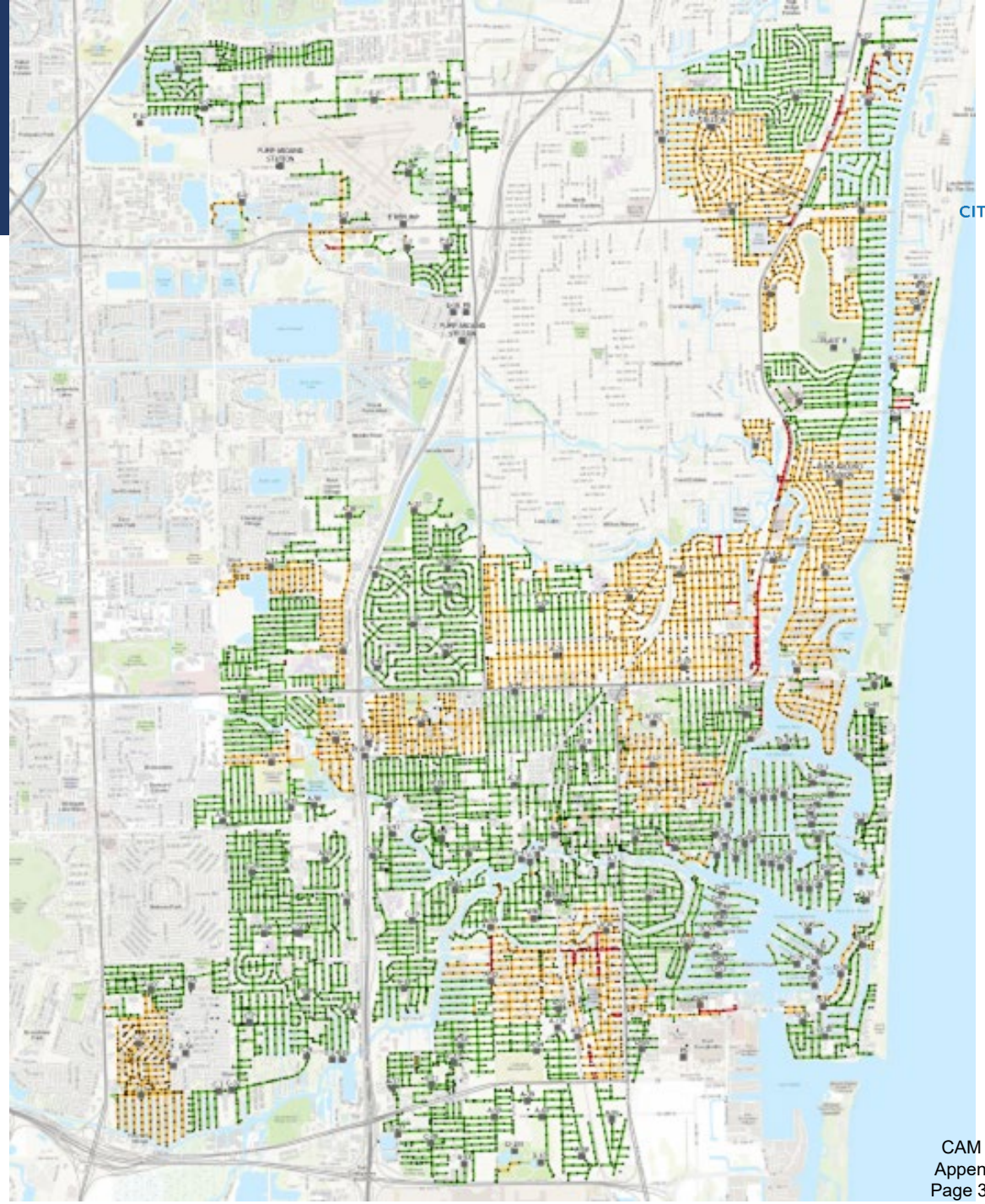
Risk Assessment Criteria (Risk = LOF x COF)	GM	PS	FM
Likelihood of Failure (LOF)			
Pipe age and material	x		x
Potential for overflow		x	
Condition		x	
Expected service life		x	
Pipe break information (2014–2018)			x
Force main peak operating pressures			x
Pipe layout profile			x
External and internal physical factors (includes proximity to saltwater intrusion)	x		x
Pipe maintenance (includes cleaning and previous inspections)	x		x
Consequence of Failure (COF)			
Financial impact (including diameter, depth, surface type)	x		x
Community impact (residential and essential services, environmental compliance, surface type)	x		x
Financial impact (horsepower)		x	
Community impact (average dry weather flow, residential and essential services, environmental compliance)		x	
Proximity to potable water wellfield or private water wells			x
System reliability			x

COF, LOF and Risk Score for Various Assets

CITY OF FORT LAUDERDALE

- Gravity System
- Pump Station
- Force Main System

Gravity LOF



CITY OF FORT LAUDERDALE

Legend

- Manhole
- Pump Station

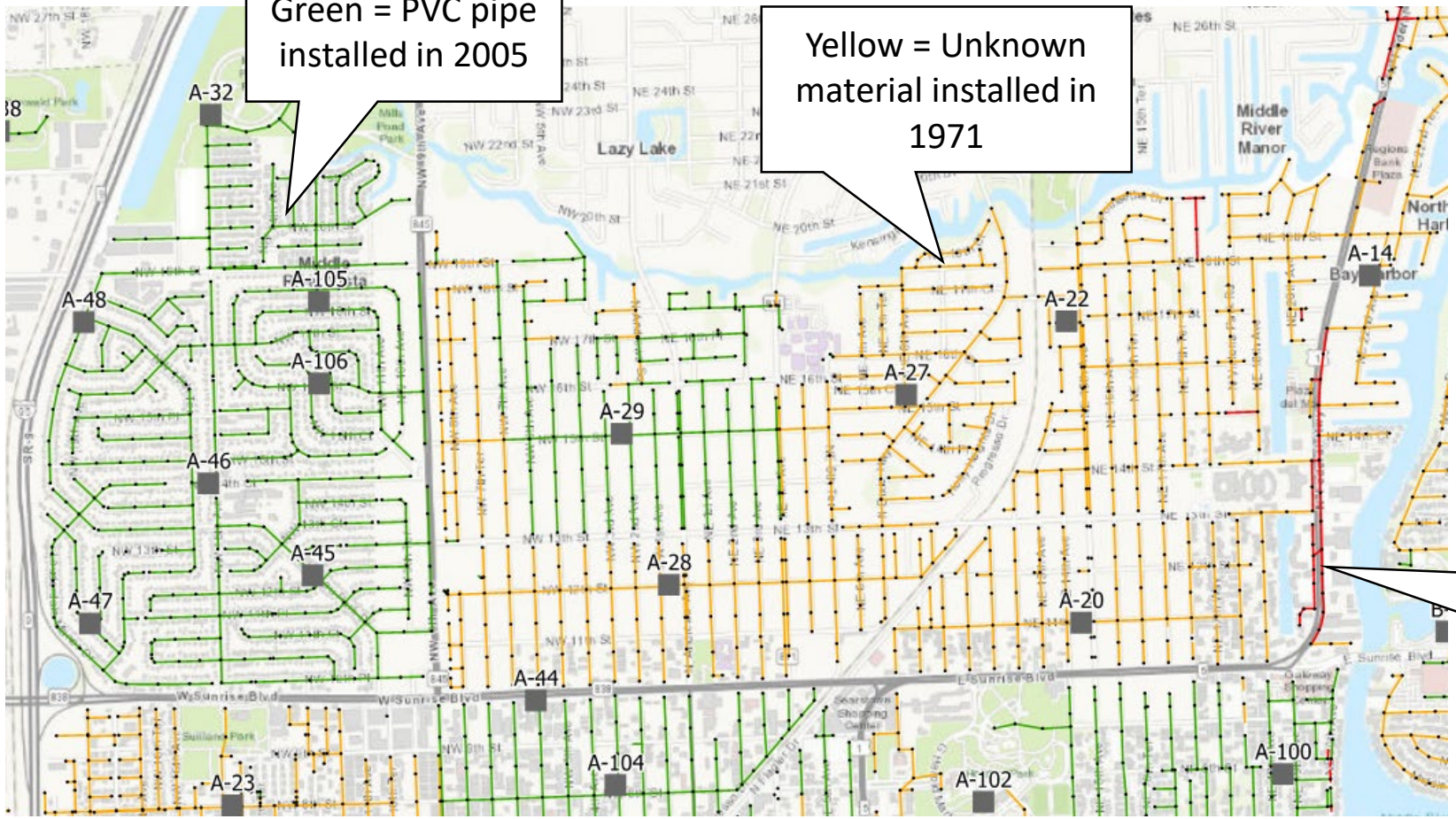
Gravity Main LOF

Overall LOF Score

- 1.4 - 3.2
- 3.2 - 5.0
- 5.0 - 7.4

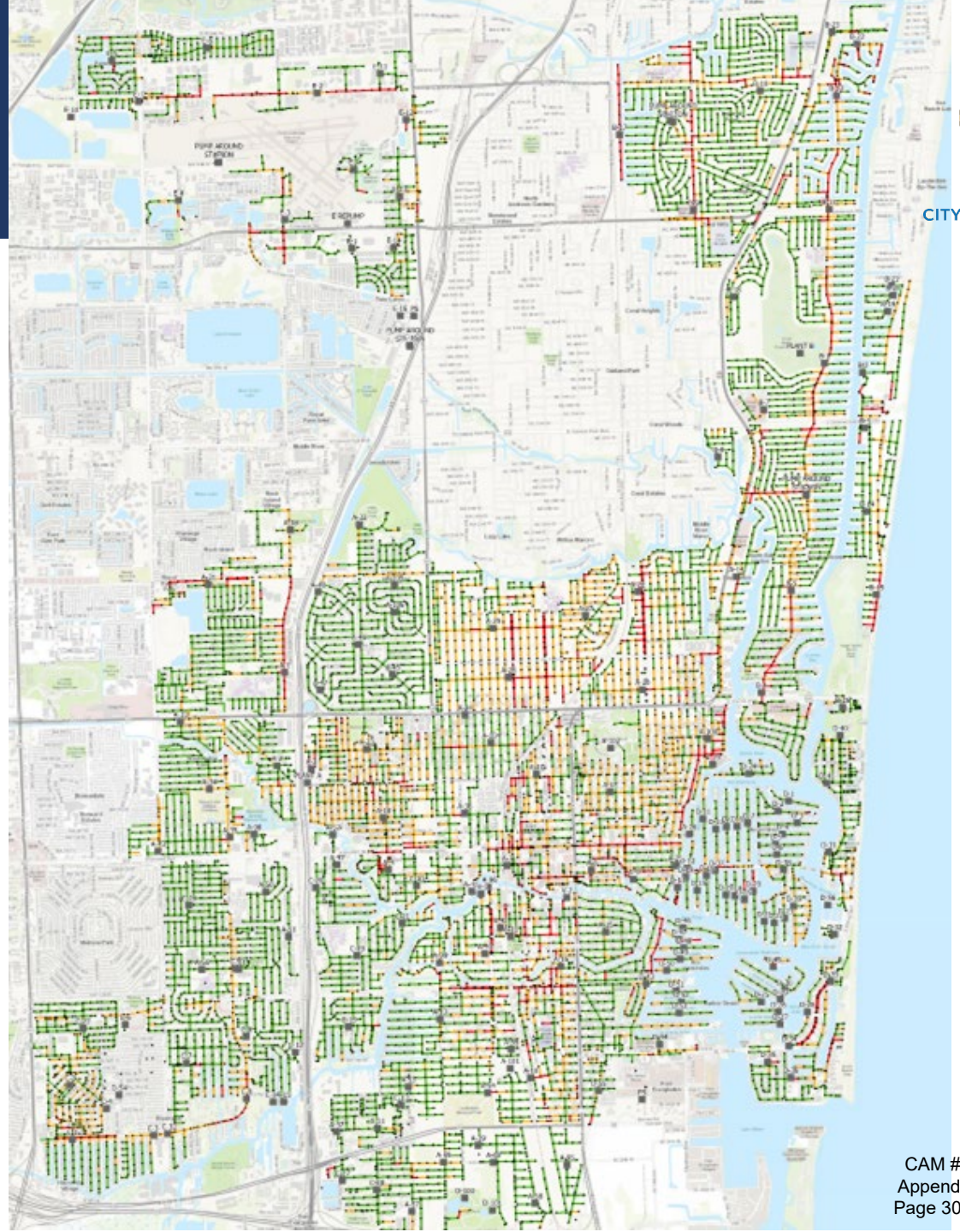
Gravity LOF

CITY OF FORT LAUDERDALE



This data also informs as to which areas need further investigation

Gravity COF



CITY OF FORT LAUDERDALE

Legend

- Manhole
- Pump Station
  - Pump Station

Gravity Main COF

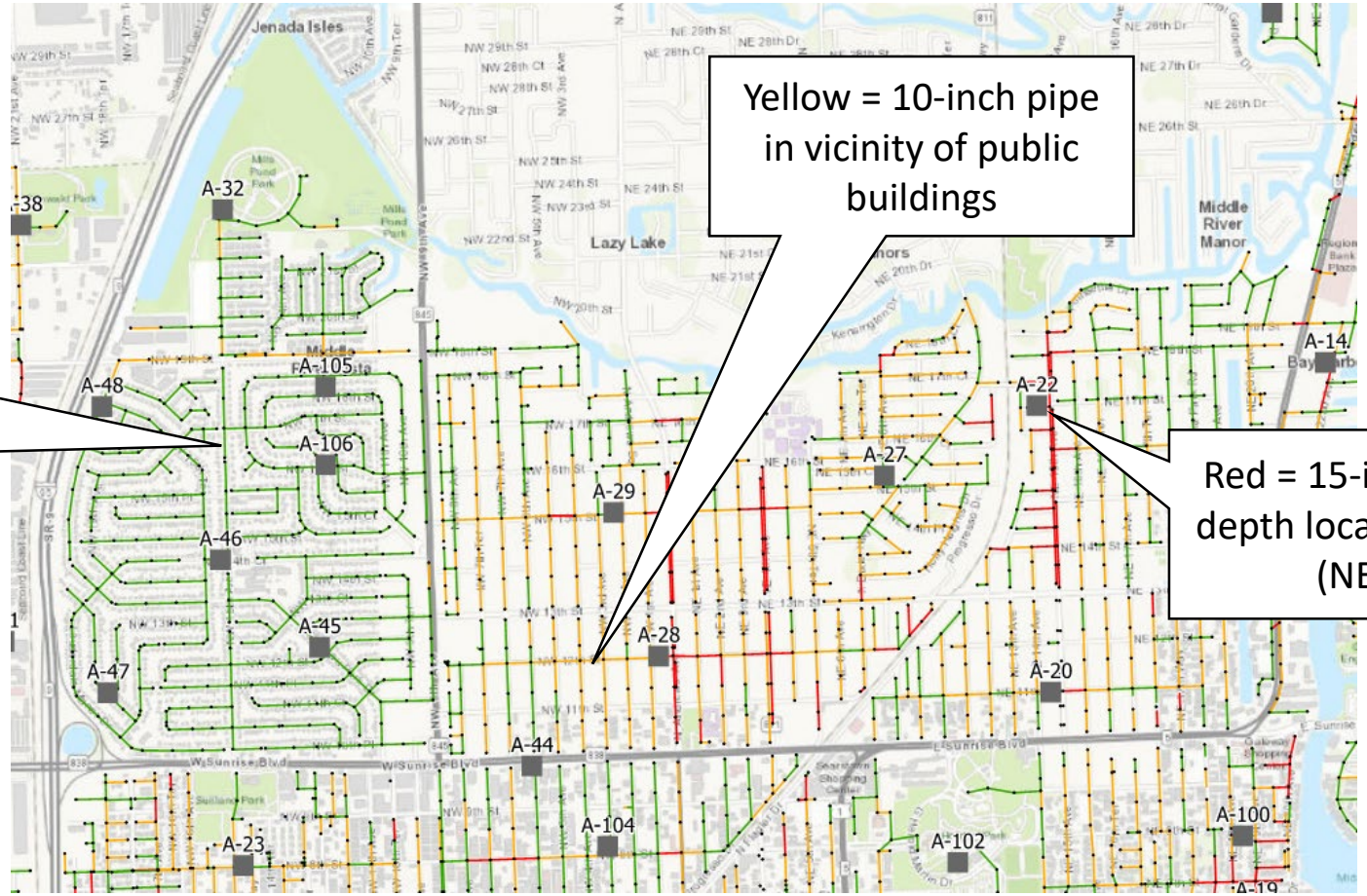
Overall COF Score

- 1.0 - 4.4
- 4.4 - 5.7
- 5.7 - 10

Gravity COF

CITY OF FORT LAUDERDALE

Green = 8-inch pipe not located near essential services or bodies of water

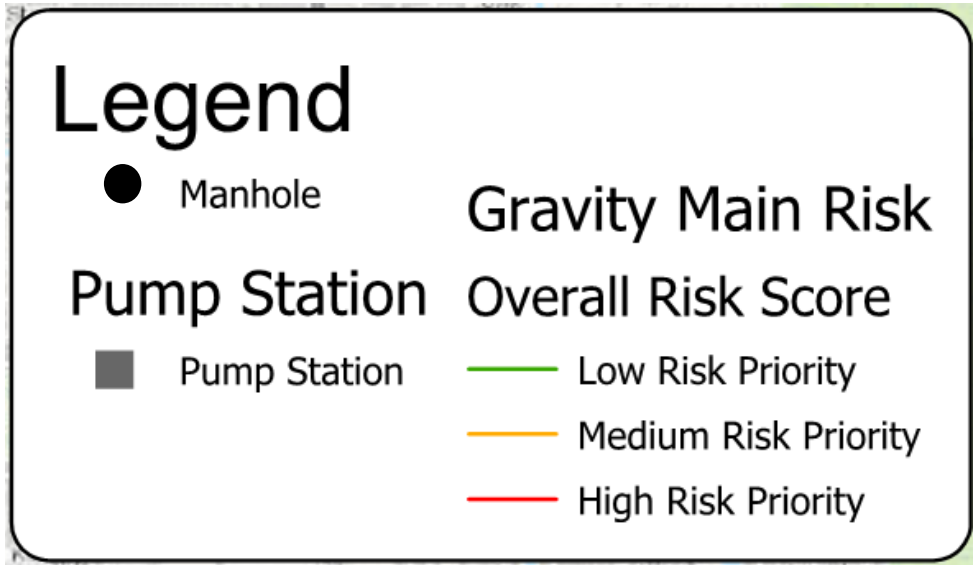


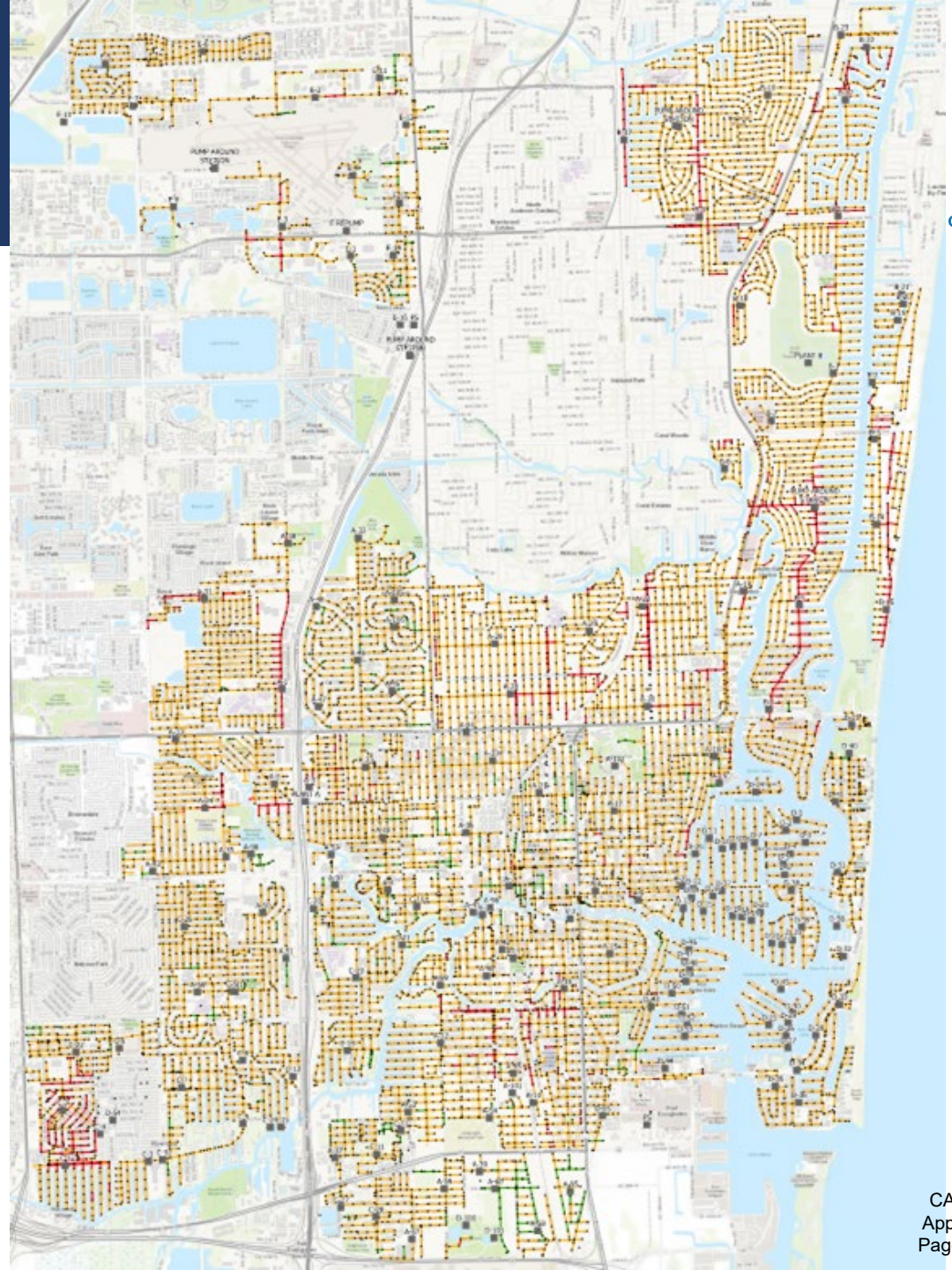
Yellow = 10-inch pipe in vicinity of public buildings

Red = 15-inch pipe 12-foot depth located on busy road (NE 15th Ave)

This data also informs as to which areas need further investigation

Gravity Risk Score

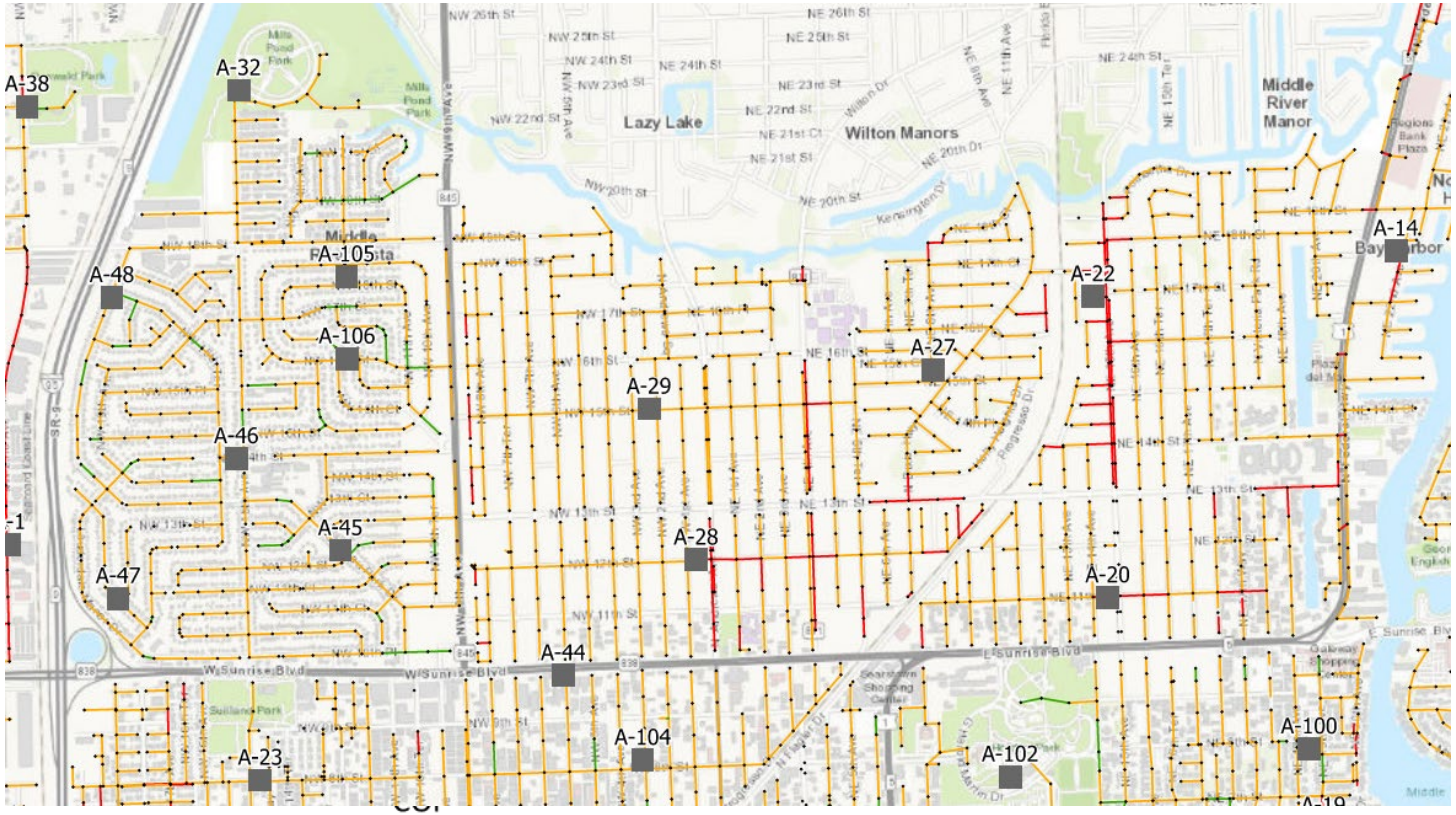




CITY OF FORT LAUDERDALE

Gravity Risk Score

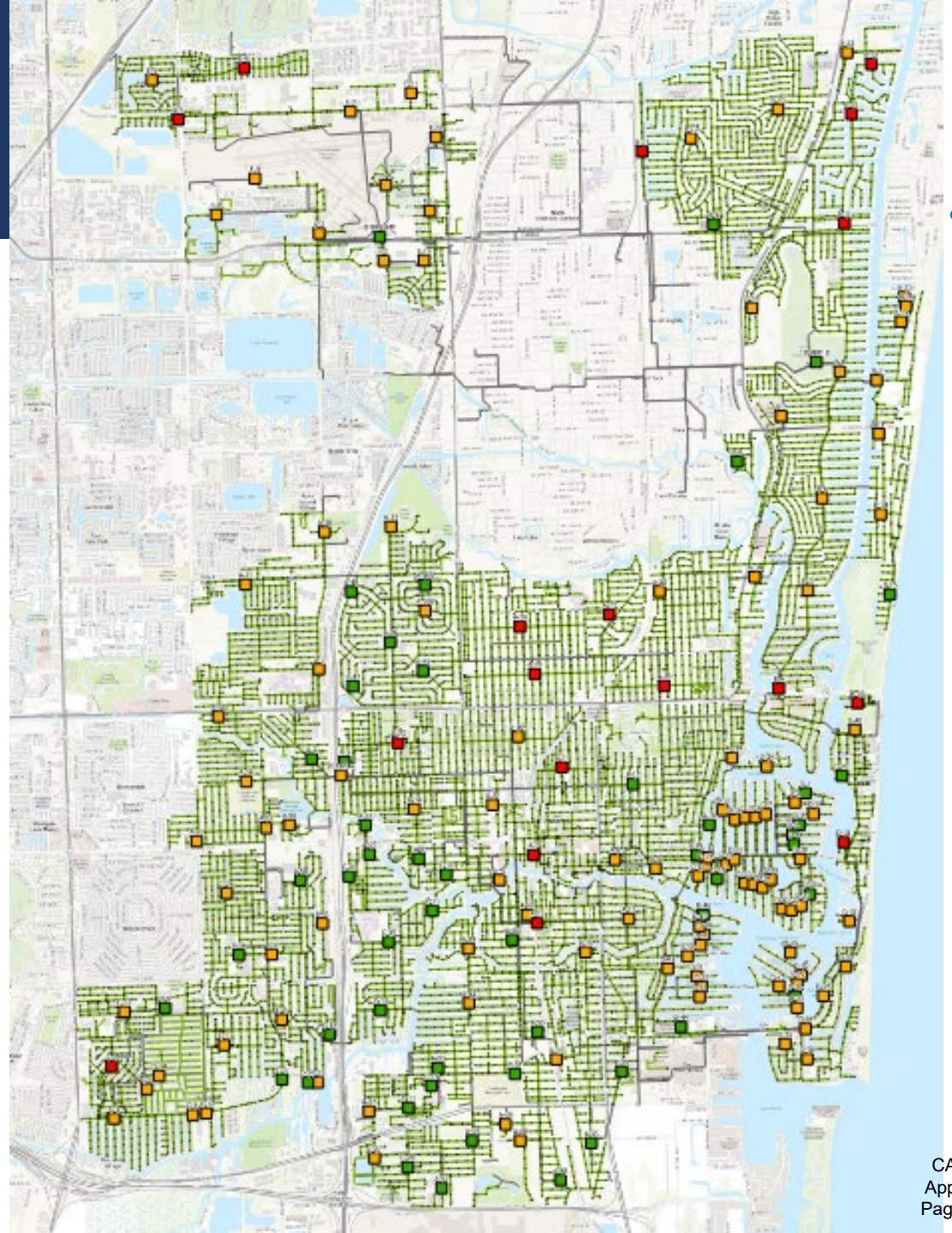
CITY OF FORT LAUDERDALE



LOF	1	4	7	10
1	1	4	7	10
2	2	8	14	20
4	4	16	28	40
7	7	28	49	70
10	10	40	70	100

1 - 4	Low Risk Priority
5 - 28	Medium Risk Priority
29 - 100	High Risk Priority

Pump Station Risk Score



CITY OF FORT LAUDERDALE

Legend

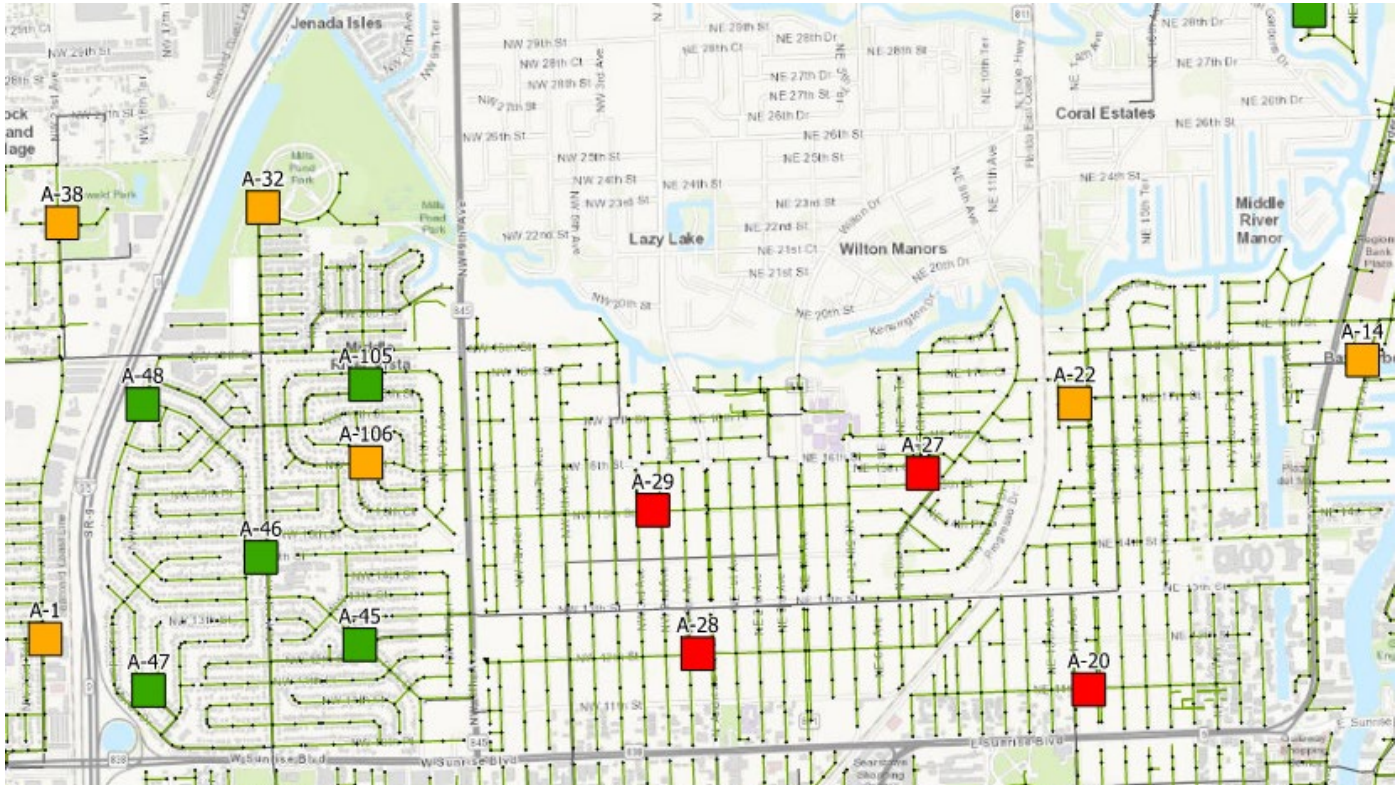
- Manhole
- Force Main
- Gravity Main

Pump Station Risk
Overall Risk Score

- Low Risk Priority
- Medium Risk Priority
- High Risk Priority

Pump Station Risk Score

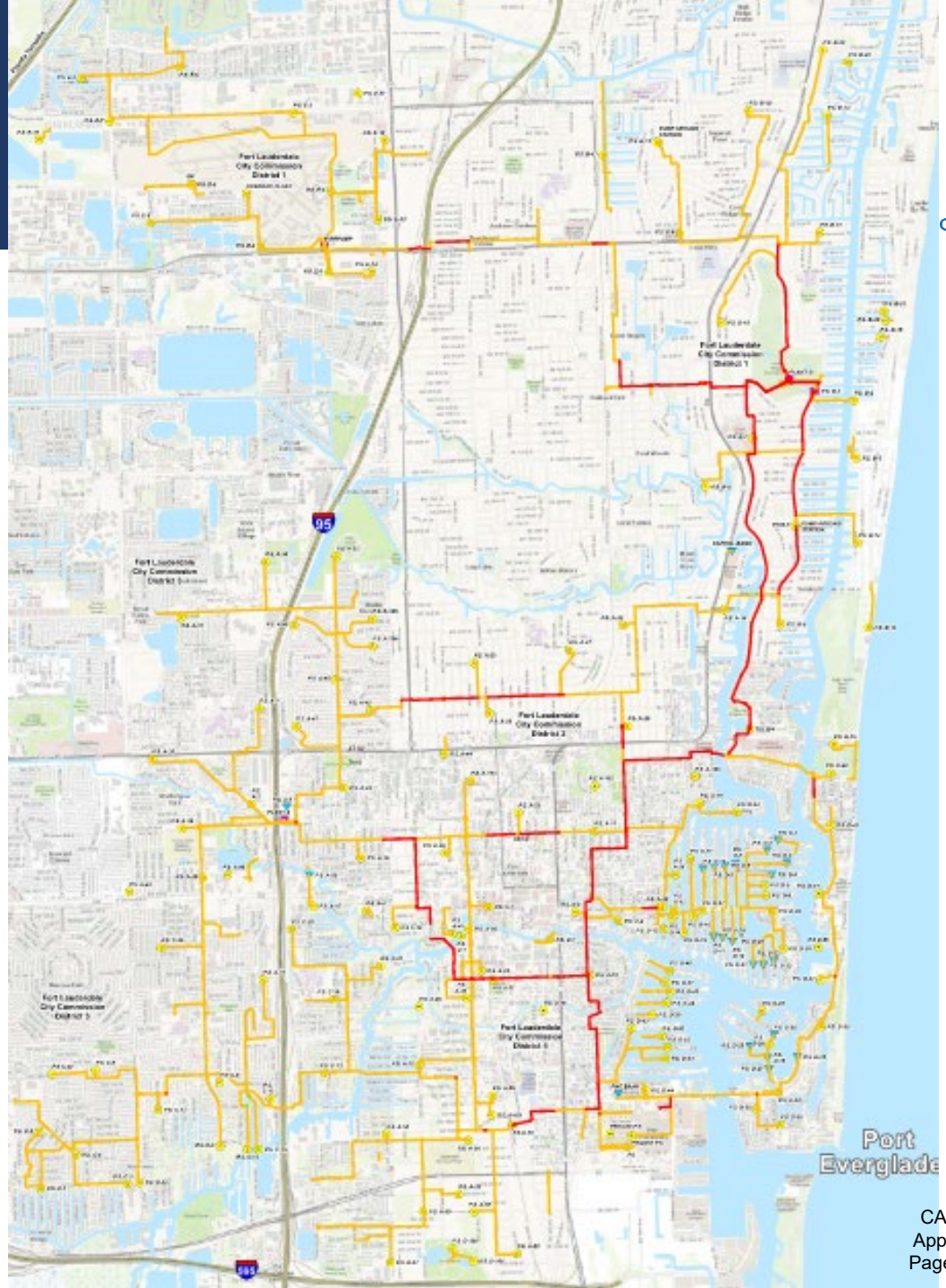
CITY OF FORT LAUDERDALE



LOF \ COF	1	4	7	10
1	1	4	7	10
2	2	8	14	20
4	4	16	28	40
7	7	28	49	70
10	10	40	70	100

1 - 4	Low Risk Priority
5 - 28	Medium Risk Priority
29 - 100	High Risk Priority

Force Main Risk Score



CITY OF FORT LAUDERDALE

Legend

Overall Risk Score

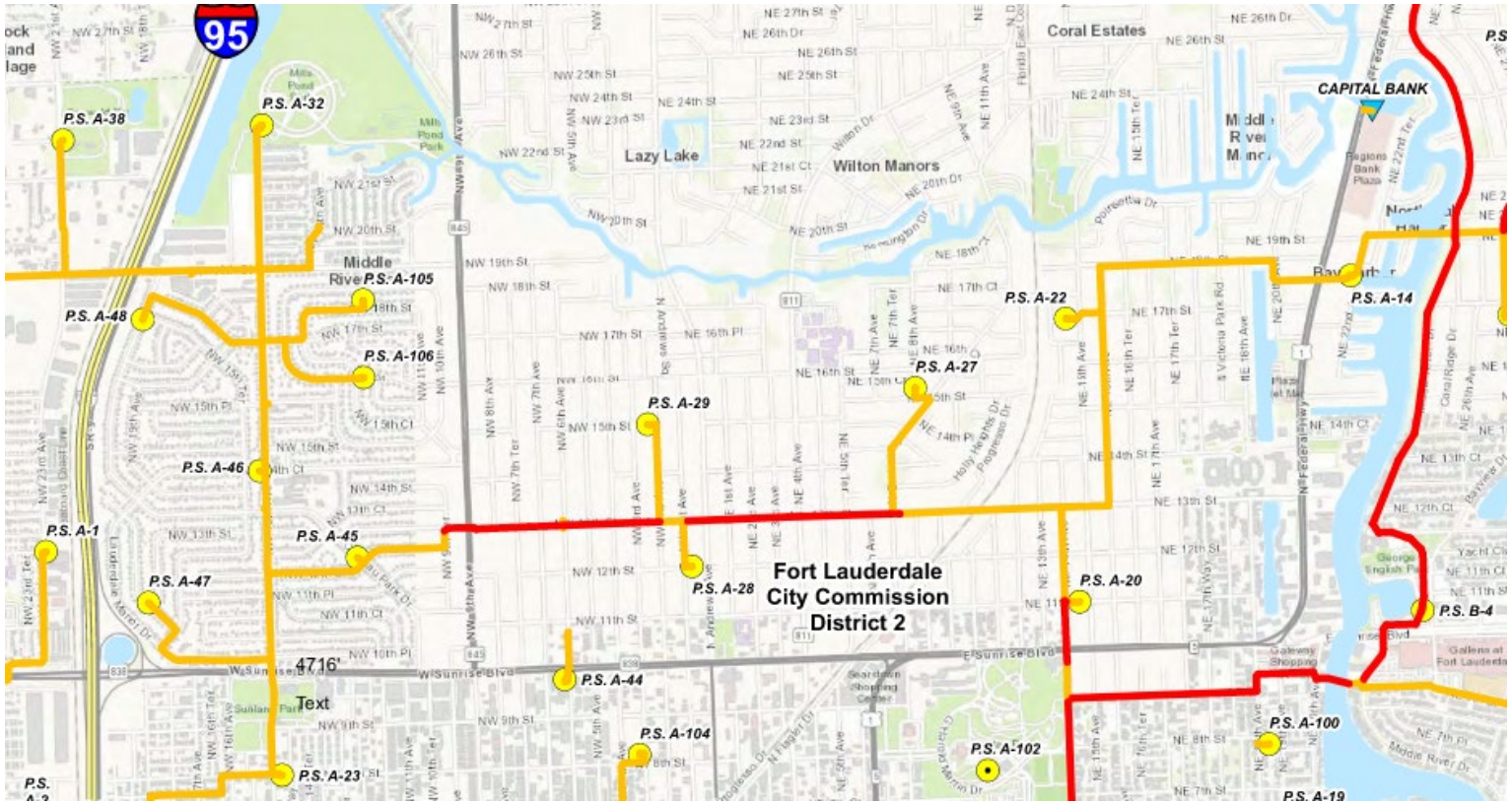
- Low Risk Priority
- Medium Risk Priority
- High Risk Priority

Pump Station Locations

- Pump Station
- Lift Station
- Repump Station

Force Main Risk Score

CITY OF FORT LAUDERDALE



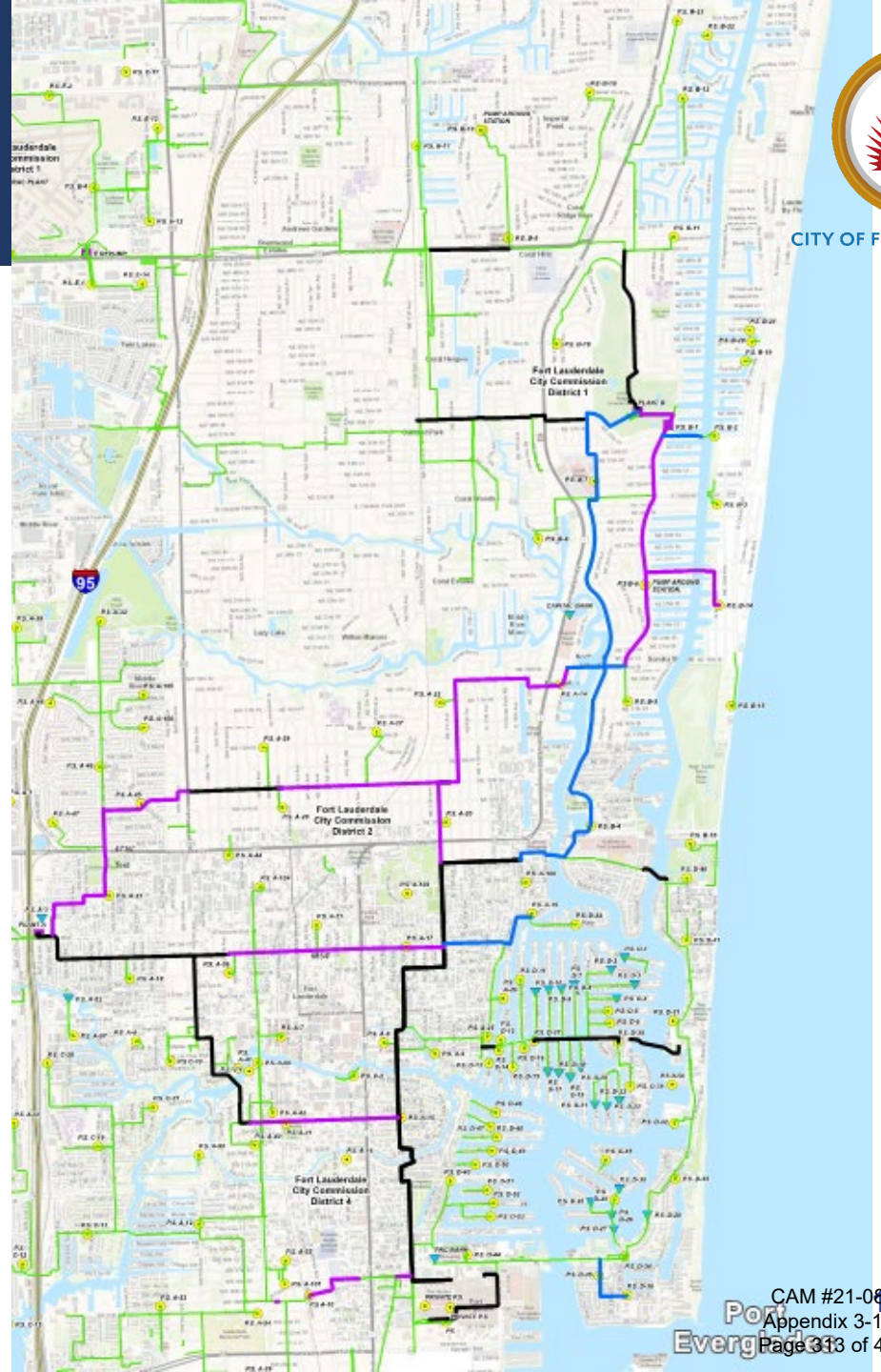
COF

LOF	1	4	7	10
1	1	4	7	10
2	2	8	14	20
4	4	16	28	40
7	7	28	49	70
10	10	40	70	100

1 - 4	Low Risk Priority
5 - 28	Medium Risk Priority
29 - 100	High Risk Priority

FM Recommended Future Work

- The Consent Order required the Force Main Condition Assessment (FMCA) Report to provide a list of Projects to be added to Phase II of the Consent Order.
- The FMCA Report also recommended other FMs to be rehab/replaced as part of the City's CIP.



Legend

Capital Planning

- Current Consent Order Project
- Recommended Rehab/Replacement Project to be Added to CIP
- Recommend Rehab/Replacement Project to be Added to Phase II Consent Order
- No Further Assessment

CITY OF FORT LAUDERDALE



Questions?

Thank you.

CITY OF FORT LAUDERDALE



Backup Slides

CITY OF FORT LAUDERDALE

Projects to be Added to Phase II of Consent Order

CITY OF FORT LAUDERDALE

Project	Limits of Project	Length of Project	Pipe Size/Material	Rationale
1	Victoria Park FM Replacement	4,700 feet	16-inch cast-iron pipe	Due to recent pipe failure.
2	NE 36th Street Repair Project	1,200 feet	12-inch cast-iron pipe	Due to recent pipe failure.
3	South Middle Force Main Crossing	1,800 feet	12-inch DIP	Due to recent pipe failure.
4	Pump Station D-36 Discharge FM Replacement	2,000 feet	8-inch and 10-inch cast-iron pipe	Due to recent pipe failure.
5	Replacement of FM from Pump Station B Discharge to the Middle River	27,500 feet (of replacement FM)	42-inch DIP	High risk of failure. Note this project is currently in construction as part Project P 12566.

Sections of Force Main that Need to be Added as a Future Rehabilitation/Replacement Project

CITY OF FORT LAUDERDALE

Project	Limits of Project	Length of Project	Pipe Size/Material	Rationale
1	Bayview Drive from NE 21st Street to NE 37th Court and to the suction side of Repump Station B	9,600 feet	16-inch and 18-inch cast-iron pipe	Very high likelihood of failure. Segments of this FM have reported multiple breaks. This section of FM also includes stormwater conflict structure which may increase the deterioration of the main.
2	From Pump Station B-14 to the 16-inch cast-iron FM on Bayview Drive	3,400 feet	12-inch cast-iron pipe	More than 50-year-old FM with a subaqueous crossing is connected to the other recommended project to be replaced.
3	NE 5th Street between NW 6th Avenue and NE 14th Avenue	5,600 feet	16-inch cast-iron pipe and 18-inch and 20-inch DIP	High risk of failure. Maintenance concerns have been reported on this FM.
4	SE 7th Street between SW 5th Avenue and SE 9th Avenue	4,900 feet	36-inch DIP	High risk of failure. High consequence of failure. Maintenance concerns have been reported on this FM.
5	From Eastern End of NW 13 Street Phase 2 and PS A-3	5,600 feet	30-inch cast-iron pipe	High risk of failure. High consequence of failure. Maintenance concerns have been reported on this FM.
6	NW 13th Street Phase 2 Project	3,200 feet	24-inch cast-iron pipe	FM is more than 50 years old with medium to high likelihood of failure.
7	NW 13th Street Phase 3 Project	7,600 feet	20-inch, 18-inch, and 14-inch cast-iron pipe	FM is more than 50 years old with medium to high likelihood of failure.
8	NW 13th Street Phase 4 Project	8,100 feet	16-inch, 14-inch, 12-inch, and 10-inch cast-iron pipe	FM is more than 50 years old with medium to high likelihood of failure.
9	Along SW 19th Street between SW 3rd Avenue and SW 4th Avenue	100 feet	30-inch DIP	High risk of failure.
	Along SW/SE 18th Court between SW 1st Avenue and SE 1st Avenue, along SE 1st Avenue between SE 18th Court and Mariner Drive, along Mariner Drive between SE 1st Avenue and East of SE 4th Avenue	2,000 feet	30-inch and 36-inch DIP	High risk of failure.
	Near intersection of A1A and SE 10th Avenue	400 feet	36-inch DIP	High risk of failure.
10	Rehabilitation of Repump Station B Discharge Force Main from Repump Station B to George English Park	18,600 feet	42-inch DIP	High risk of failure

Gravity Mains COF and LOF Parameters

CITY OF FORT LAUDERDALE

Likelihood of Failure Score
- Years Since Pipe Installation and Pipe Material
- External and Internal Physical Factors
- Pipe Maintenance





RISK

Consequence of Failure Score
- Financial Impact on Utility
  - *Pipe diameter*
  - *Depth to pipe invert*
  - *Surface Type*
- Community Impact on Utility
  - *Residential and Essential Services Impact*
  - *Environmental Compliance*
  - *Surface Type*

Pump Stations COF and LOF Parameters

CITY OF FORT LAUDERDALE

Likelihood of Failure Score
- Potential for Overflow based on modeling results
- Condition
- Service Life





RISK

Consequence of Failure Score
- Financial Impact on Utility
  - *Total horsepower of station*
- Community Impact
  - *Residential and Essential Services Impact*
  - *Environmental Compliance*
  - *Average Dry Weather Flow*

Force Mains COF and LOF Parameters

CITY OF FORT LAUDERDALE

Likelihood of Failure Score
- Years Since Pipe Installation
- Pipe Material
- Pipe Break Information
- Peak Operating Pressure
- Pipe Layout Profile
- External and Internal Factors
- Pipe Maintenance





RISK

Consequence of Failure Score
- Pipe Diameter
- Proximity to Potable Water
- Residential and Essential Services Impact
- System Reliability
- Financial Impact on Utility
- Community Impact
- Environmental Compliance

FMCA Phase 1

CITY OF FORT LAUDERDALE

LOF

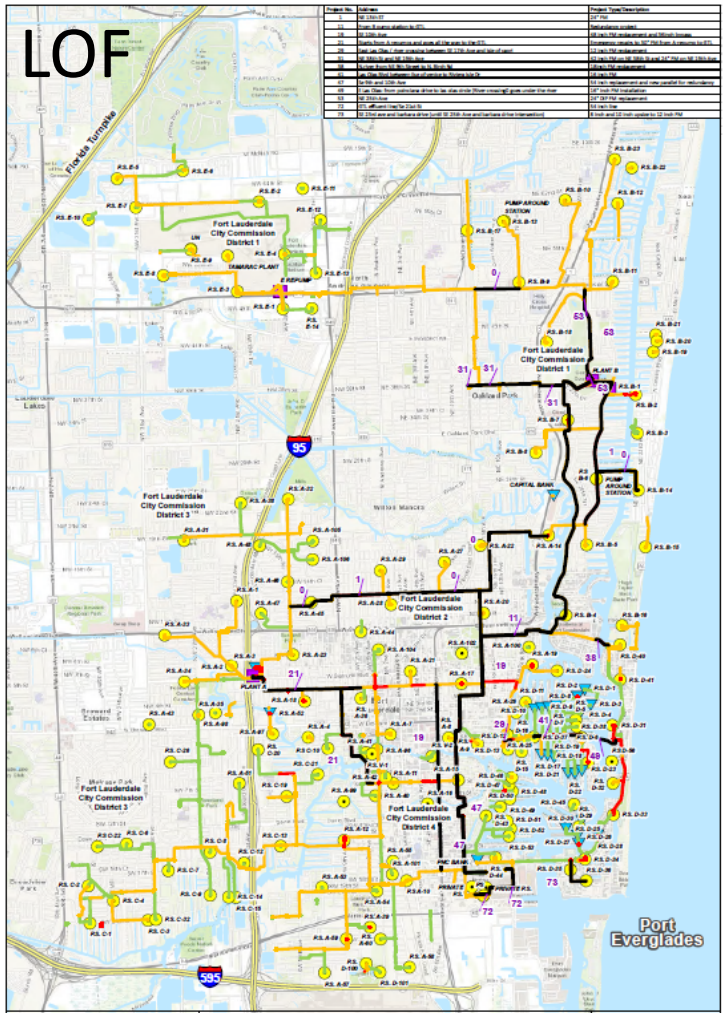


Figure 9 - City-owned Pressurized Mains Overall LOF Score

Hazen JACOBS

Legend

Overall LOF Score: 1.9 - 3.7; 3.8 - 5.5; 5.6 - 7.3

Capital Planning: CIP Projects

Pump Station Locations: Pump Station; Lift Station; Repump Station

1 inch = 4,000 feet

COF

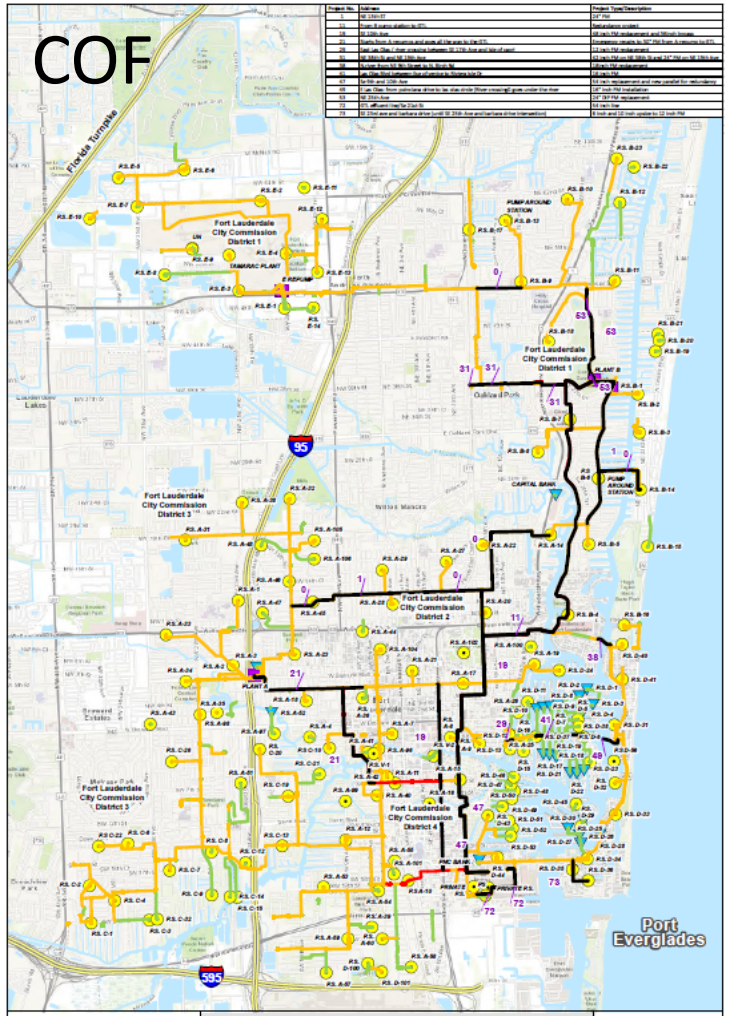


Figure 18 - City-owned Pressurized Mains Overall COF Score

Hazen JACOBS

Legend

Overall COF Score: 1.4 - 3.3; 3.4 - 7.6; 7.7 - 8.7

Capital Planning: CIP Projects

Pump Station Locations: Pump Station; Lift Station; Repump Station

1 inch = 4,000 feet

Risk Score

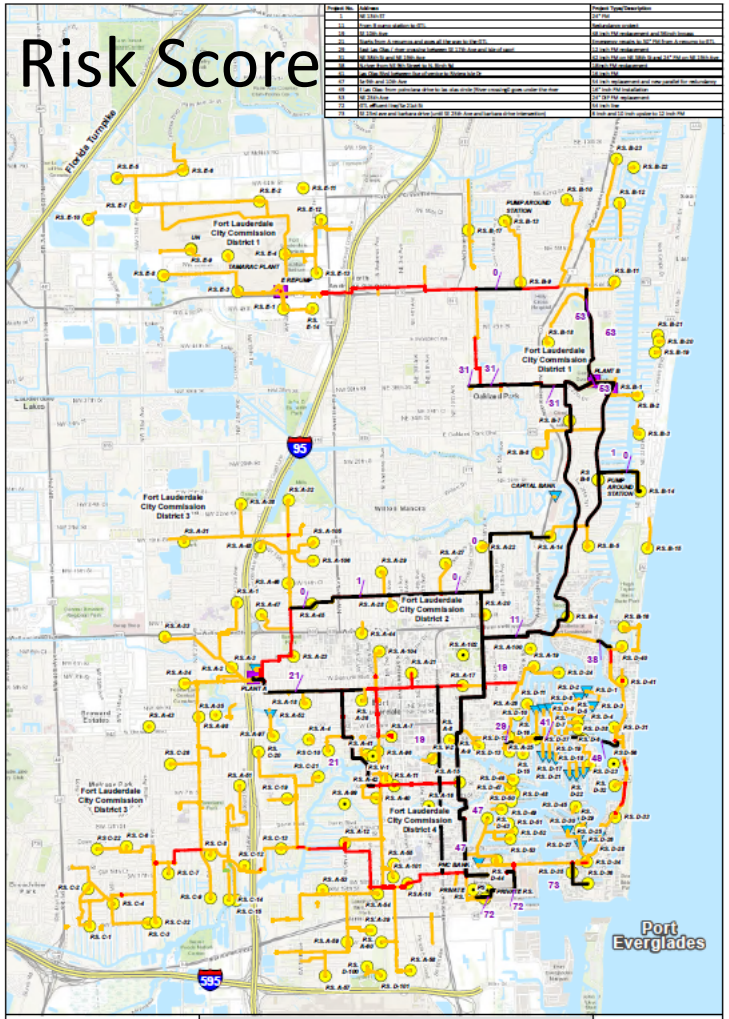


Figure 22 - City-owned Pressurized Mains Overall Risk Score

Hazen JACOBS

Legend

Overall Risk Score: Low Risk Priority; Medium Risk Priority; High Risk Priority

Capital Planning: CIP Projects

Pump Station Locations: Pump Station; Lift Station; Repump Station

1 inch = 4,000 feet

FMCA Phase 1

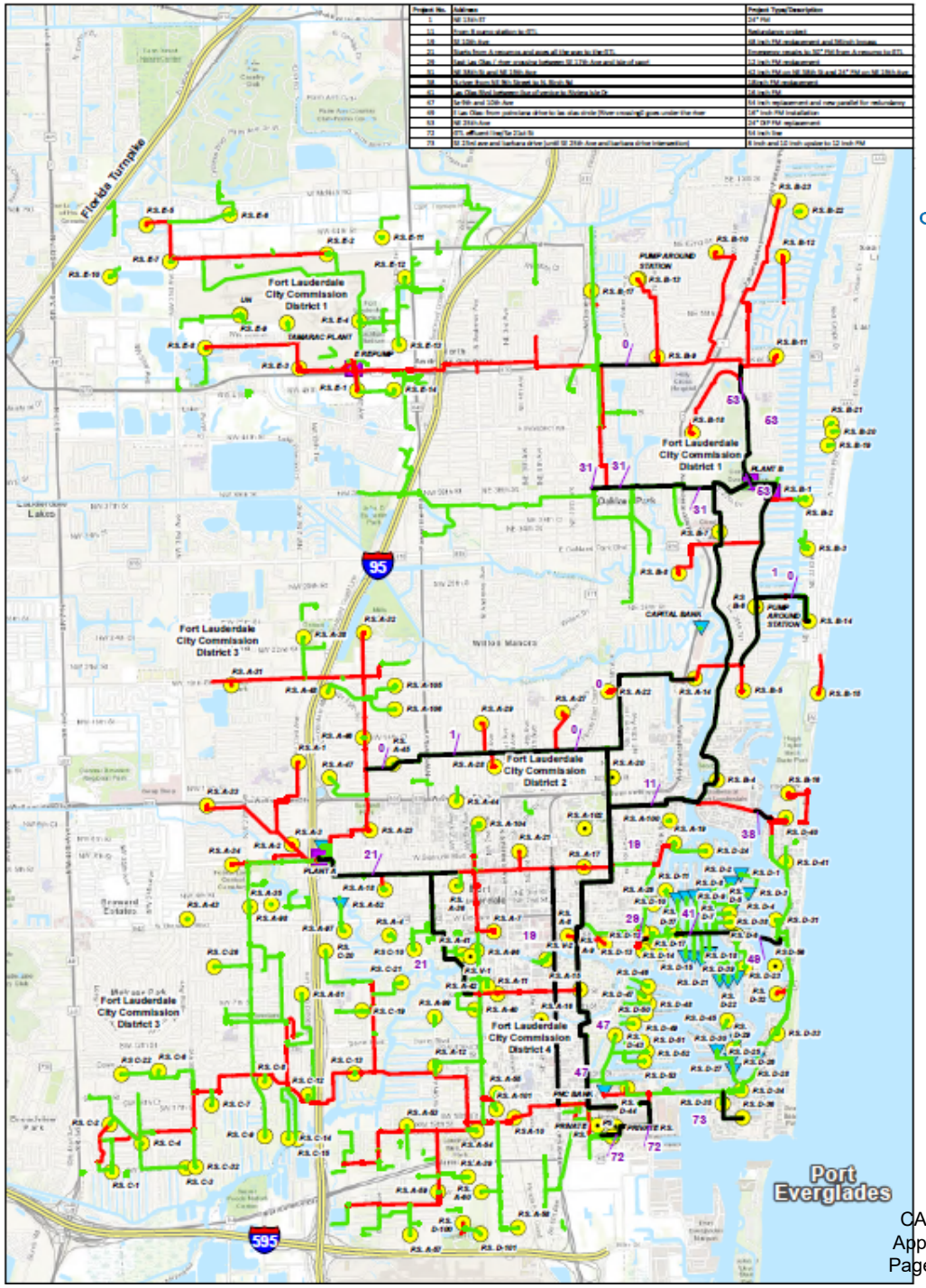
Tier 1 Assessment and no Further Assessment Segments

Figure 19 - City-owned Pressurized Mains Tiers

Hazen JACOBS

Legend

Tier	Capital Planning	Pump Station Locations
1	CIP Projects	Pump Station
no further assessment		Lift Station
		Repump Station



CITY OF FORT LAUDERDALE

Force Main Tier 1 Condition Assessment

CITY OF FORT LAUDERDALE







Infrastructure Task Force Advisory Committee Report

WATER & SEWER BUDGET/EXPENDITURE UPDATE

BY: Aneisha Daniel

TITLE AND CONTENT LAYOUT WITH LIST

1

$200 Million Original Appropriation to Current

2

Funding Changes by Category

3

Project Status Update

WATER & SEWER BOND

Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
Finance Total	11,860,125	21,560,125	45%
Fiveash Upgrades Total	40,100,000	40,631,002	1%
I&I Total	11,291,592	14,435,046	22%
Master Plan/Report Total	9,772,360	1,202,000	-713%
Peele Dixie Upgrades Total	310,000	310,000	0%
Sewer Basin Total	4,048,522	3,933,133	-3%
Sewer Force main Total	100,766,833	99,469,598	-1%
Watermain Total	21,850,568	23,006,875	5%
Grand Total	**200,000,000**	**204,547,779**	**5%**

FINANCE CATEGORY

Index Code / Project Title	Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
FD495.01 WATER & SEWER MASTER PLAN 2017	Finance		19,576,271	(19,576,271)
FD496.01 WATER & SEWER REGIONAL MASTER PLAN 2017	Finance		1,983,854	(1,983,854)
FD454.01 WATER & SEWER GENERAL CAPITAL PROJECTS	Finance	10,271,251		10,271,251
FD451.01 REGIONAL WASTEWATER SYSTEM	Finance	1,588,874		1,588,874
	Finance Total	**11,860,125**	**21,560,125**	**(9,700,000)**

FIVEASH UPGRADE & PEELE DIXIE PROJECTS

Index Code / Project Title	Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
P11589.495 FIVEASH WTP DISINFECTION IMPROVEMENTS	Fiveash Upgrades	33,500,000	32,031,002	1,468,998
P12399.495 FIVEASH WTP PCCP REPLACEMENT	Fiveash Upgrades	4,000,000	3,880,000	120,000
P12404.495 EXCAVATE & DISPOSE OF DRY LIME SLUDGE	Fiveash Upgrades	2,600,000	4,600,000	(2,000,000)
P12485.495 FIVEASH WTP FILTERS REHABILIATION	Fiveash Upgrades		120,000	(120,000)
P12395.495 PEELE DIXIE ELECTRICAL STUDIES	Peele Dixie Upgrade	210,000	210,000	-
P12396.495 PEELE DIXIE SURGE PROTECTION UPGRADES	Peele Dixie Upgrade	100,000	100,000	-
	Peele Dixie Upgrade	310,000	310,000	-

INFLOW & INFILTRATION PROJECTS

Index Code / Project Title	Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
P11563.495 VICTORIA PARK SEWER BASIN A-19 REHAB	I&I	5,892,153	5,592,153	-5%
P11566.495 RIO VISTA SEWER BASIN D-43 REHAB	I&I	1,215,964	3,568,391	66%
P12049.495 FLAGLER HEIGHTS SWR BASIN A-21 LATERALS	I&I		1,091,027	100%
P12055.495 BASIN A-18 SANITARY SWR COLL SYSTM REHAB	I&I	4,183,475	4,183,475	0%
	I&I Total	**11,291,592**	**14,435,046**	**22%**

MASTER PLAN REPORT CATEGORY

Index Code / Project Title	Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
P12367.495 ASSET MANAGEMENT & CMOM PROGRAMS	Master Plan/Report	729,180	-	729,180
P12367.496 ASSET MANAGEMENT & CMOM PROGRAMS	Master Plan/Report	170,820	-	170,820
P12368.496 SEWER CAPACITY ANLY FOR GRAVITY & FM	Master Plan/Report	37,360	-	37,360
P12375.495 PROG MGMT OF CONSENT ORDER PROJECTS	Master Plan/Report	385,000	752,000	(367,000)
P12375.496 PROG MGMT OF CONSENT ORDER PROJECTS	Master Plan/Report	115,000	115,000	-
P12400.495 PROSPECT WELLFIELD ELC STUDIES & TESTING	Master Plan/Report	185,000	185,000	-
P12402.495 PEELE DIXIE WELLFIELD ELC STUD & TESTING	Master Plan/Report	150,000	150,000	-
P12418.495 WTR & W/WTR D & C SYSTEM MAPPING	Master Plan/Report	4,000,000	-	4,000,000
P12419.495 FORCE MAIN ASSESSMENT	Master Plan/Report	3,813,200	-	3,813,200
P12419.496 FORCE MAIN ASSESSMENT	Master Plan/Report	186,800	-	186,800
P12368.495 SEWER CAPACITY ANLY FOR GRAVITY & FM	Master Plan/Report	762,640	-	762,640
	Master Plan/Report	**10,535,000**	**1,202,000**	**9,333,000**

SEWER BASIN CATEGORY

Index Code / Project Title	Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
P12133.495 PUMP STN A-13 REDIRECTION E OF FEDERAL	Sewer Basin		478,014	(478,014)
P12202.495 LIFT STATN D-11 FLOW ANALYSIS & REDESIGN	Sewer Basin	1,254,020	1,254,020	-
P12415.495 PUMP STATION A-7 UPGRADE	Sewer Basin	2,031,862	2,031,862	-
P12456.495 SEWER BASIN D-40 REHAB	Sewer Basin		169,237	(169,237)
	Sewer Basin Total	**3,285,882**	**3,933,133**	(647,251)

Index Code / Project Title	Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
P12319.495 EMERG REPAIR 30" FM - REPUMP TO GTL WWTP	Sewer Force main	8,542,313	2,697,299	-217%
P12352.495 S MIDDLE RIVER FORCE MAIN RIVER CROSSING	Sewer Force main		609,000	100%
P12383.496 NE 25TH AVE FORCE MAIN REPLACEMENT	Sewer Force main	4,784,890	4,784,890	0%
P12384.496 NE 38TH ST 42" FM & NE 19TH AV 24" FM	Sewer Force main	11,096,690	11,096,690	0%
P12385.496 SE 10TH AV 48" FM REPL & 36" BYPASS	Sewer Force main	19,711,450	18,326	-107460%
P12386.496 54" FM RPL SE 9TH/10TH AV & NEW PARALLEL	Sewer Force main	14,589,850	6,072	-240181%
P12387.496 EFFLUENT MAIN REHABILITATION	Sewer Force main	8,184,000	8,184,000	0%
P12388.495 NE 13TH ST 24" FORCE MAIN REPLACEMENT	Sewer Force main	3,313,090	3,313,090	0%
P12389.495 18" FM RPL ACROSS NEW RVR FRM 9TH/ BIRCH	Sewer Force main	2,112,550	2,112,550	0%
P12390.495 16" FM ALONG LAS OLAS BLVD PHASE 2	Sewer Force main	2,500,000	2,500,000	0%
P12406.496 REDUNDANT FORCE MAIN FROM B-REPUMP	Sewer Force main	23,900,000	10,377	-230217%
P12407.495 SUBACQUEOUS FM CROSSING REINSTATEMENT	Sewer Force main	609,000	-	#DIV/0!
P12413.495 FM FROM PUMP STN D-35 TO D-36 UPSIZE	Sewer Force main	580,000	580,000	0%
P12414.495 GRAVITY PIPE IMPV TO DWNTWN COL SYSTM	Sewer Force main	843,000	843,000	0%
P12566.496 REDUNDANT SEWER FM NORTH TO GTL WWTP	Sewer Force main		24,725,379	100%
P12567.496 REDUNDANT SEWER FM SOUTH TO GTL WWTP	Sewer Force main		35,750,000	100%
P12569.495 NE 5TH STREET FORCE MAIN IMPROVEMENT	Sewer Force main		1,929,050	100%
P12570.495 36TH STREET FORCE MAIN IMPROVEMENT	Sewer Force main		309,875	100%
	Sewer Force main Total	100,766,833	99,469,598	-1%

SEWER FORCE MAIN CATEGORY

WATERMAIN CATEGORY

Index Code / Project Title	Category	Original Bond Funds Appropriation on April 3, 2018	Current Bond Funds Appropriations as of October 15, 2020	Difference
P10814.495 CENTRAL NEW RIVER W/MAIN RIVER CROSSING	Watermain	1,632,562	1,632,562	0%
P10850.495 VICTORIA PARK A NORTH-SMALL WATERMAINS	Watermain	4,961,073	4,435,773	-12%
P11080.495 PORT CONDO SMALL WATER MAIN IMPROVEMENTS	Watermain	557,559	557,559	0%
P11901.495 VICTORIA PK STH SM WATERMAINS IMPROVEMNT	Watermain	5,437,049	5,149,658	-6%
P12180.495 CROISSANT PARK SMALL WATER MAINS	Watermain	3,460,125	3,060,125	-13%
P12184.495 DAVIE BLVD 18" WM ABAN I-95 TO SW 9 AVE	Watermain	525,500	2,075,500	75%
P12391.495 BERMUDA RIVIERA SML WTRMN IMPROVEMENTS	Watermain	5,276,700	4,976,700	-6%
P12463.495 CORAL SHORES SML WATERMAIN IMPROVEMENTS	Watermain		1,118,998	100%
	Watermain Total	21,850,568	23,006,875	5%

CURRENT WATER & SEWER BOND BUDGET/EXPENDITURE

Category	Current Bond Funds Appropriations as of October 15, 2020	Actuals	Encumbrances
Finance Total	21,560,125	16,563,534	1,695,809
Fiveash Upgrades Total	40,631,002	5,093,190	217,248
I&I Total	14,435,046	10,899,582	3,157,107
Master Plan/Report Total	1,202,000	631,641	228,396
Peele Dixie Upgrades Total	310,000	14,292	77,965
Sewer Basin Total	3,933,133	1,943,311	1,840,698
Sewer Force main Total	99,469,598	36,954,533	32,357,214
Watermain Total	23,006,875	16,776,583	1,781,593
Grand Total	**204,547,779**	**88,876,668**	**41,356,030**

ACTUAL SPENT BY PROJECT STATUS

Project Status	Actuals & Encumbrances
Master Plans & Report	18,280,801
Bidding & Planning	4,187,190
Design	39,837,582
Construction	65,229,826
Completed	2,697,299
Total	**130,232,698**

QUESTIONS?

Capacity Availability Analysis



Capacity Availability Analysis

- When a potential development goes through the Development Review Committee (DRC) process it must exhibit that it can provide fire protection, potable water, and wastewater service once complete per the City's adequacy requirements outlined in the Unified Land Development Code.
- An analysis is performed by the City to determine if the existing water and wastewater infrastructure can provide these services.

Capacity Availability Analysis – Proposed Demand

- The proposed demand resulting from the development is determined through Equivalent Residential Connection (ERC) calculations using 'Table A' from the City's *Guidelines for the Calculation of Sanitary Sewer Connection Fees:*
  - 1 ERC = 300 **maximum** gallons per day (GPD) of water demand
  - 1 ERC = 175 **average** GPD of sewer demand
  - Credits for existing uses are also calculated resulting in a net demand

Table A

TYPE OF USE	UNIT OF MEASURE	ERC per UNIT	REF. CODE
Equivalent Residential Connection	----	1.000	----
Single Family House, Duplex, Triplex	each	1.000	R01
Condominium, Apartment	each	0.805	R03
Mobile Home	lot	0.559	R04
Vehicular Repair	1000 SF	0.473	C01
Gas Station (fueling only)	fuel pump	0.550	C02
Laundry and/or Dry Cleaning (staff operated machines)	1000 SF	2.773	C03
Laundry (coin operated machines)	1000 SF	8.659	C04
Merchandising	1000 SF	0.550	C05
Warehouse (mixed use)	1000 SF	0.368	C06
Warehouse (homogenous, bulk storage use)	1000 SF	0.177	C07
Self Service Storage	1000 SF	0.068	C08
Restaurant	1000 SF	2.495	C09
Fast Food Service	1000 SF	3.455	C10
Bar, Cocktail Lounge	1000 SF	1.236	C11
Office	1000 SF	0.636	C12
Day Child Care	1000 SF	0.632	C13
Place of Worship	1000 SF	0.523	C14
School	student	0.042	C15
Hotel (with restaurant and/or meeting rooms)	rental room	0.868	C16
Hotel (without restaurant and meeting rooms)	rental room	0.255	C17
Movie Theater	seat	0.009	C18

Capacity Availability Analysis – Water/Sewer

Transmission/distribution networks

- The networks between the connection points at the development to the treatment plants are evaluated to ensure there is enough capacity to handle the proposed and existing demand.
- This includes water mains, gravity sewer mains, wastewater pumping stations, force mains, etc.
- The condition of the pipe at the point of connection is also reviewed.

Treatment Plants

- Proposed demand, previously committed demand, and current demand are reviewed to determine capacity availability at water and wastewater treatment plants.

Capacity Availability Analysis - Recommended Improvements

- If the existing water and wastewater infrastructure is deemed to lack capacity then improvements are recommended.
- Examples include:
  - Upsizing of gravity sewer mains or water mains
  - Rehabilitation or improvement of pump station

Capacity Availability Analysis - Recommended Improvements

Subject: **WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER**
FAT Village East & West – DRC Case Nos. R19059 & R19060
501 NW 1st Avenue, Fort Lauderdale, Florida 33311

Dear Mr. Harrison,

According to the information submitted, the project is a mixed-use development consisting of a total of 437 residential units (312 units for the East and 125 units for the West), restaurants, general retail space, an art studio, office spaces, and a 145-room hotel. There are proposed water and sewer connections to City of Fort Lauderdale (City) utilities along NW 1st Avenue, NW 5th Street, and NW 6th Street as well as a proposed gravity main along North Andrews Avenue. According to the information submitted, this project lies within the City's Pump Station (PS) A-21 basin and will increase water and sewer demand by approximately 0.163 million gallons per day (MGD).

A review of the utility services impacted by the proposed development indicate that the existing sewer infrastructure would not be able to serve the proposed development and improvements would be necessary. A proposed pump station to serve the project and approximately 1,500 linear feet of upstream gravity mains is recommended in order to accommodate the proposed flow.

Once the required improvements are completed, there will be sufficient capacity in the sanitary sewer system to accommodate the proposed development. The capacities shall not be considered available and the Certificate of Occupancy will not be issued until all required improvements are complete and approved by the regulatory agencies that have jurisdiction.

Capacity Availability Analysis – Recommended Improvements

Evaluation of impact of Permitted Wastewater Plant Capacity: The City of Fort Lauderdale owns and operates the George T. Lohmeyer Regional Wastewater Treatment Plant (GTL), which provides wastewater treatment for the City of Fort Lauderdale. The Broward County's Environmental Protection and Growth Management Department's (EPGMD) Environmental Licensing & Building Permitting Division's licensed capacity for GTL is 48 MGD-AADF (Million Gallons per Day – Annual Average Daily Flow). The annual average daily flow (AADF) to the plant is 35.942 MGD. Combining the committed flows for previously approved projects of 4.593 MGD plus the 0.115 MGD net contribution from the project results in a total projected flow of 40.65 MGD. This is less than the permitted treatment plant capacity of 48 MGD. Therefore, the treatment plant has sufficient capacity to serve this project. See Figure 6 below.

Recommended Wastewater Infrastructure Improvements: Approximately 1,270 linear feet (LF) of 10-inch sewer along NW 7th Terrace needs to be upsized to at least a 12-inch sewer, 440 LF of 12-inch sewer along NW 4th Street needs to be upsized to at least a 14-inch sewer, and 40 LF of 12-inch sewer immediately upstream of PS A-36 needs to be upsized to at least a 16-inch sewer. Additionally, improvements to PS A-36 are needed to prevent excessive runtimes.

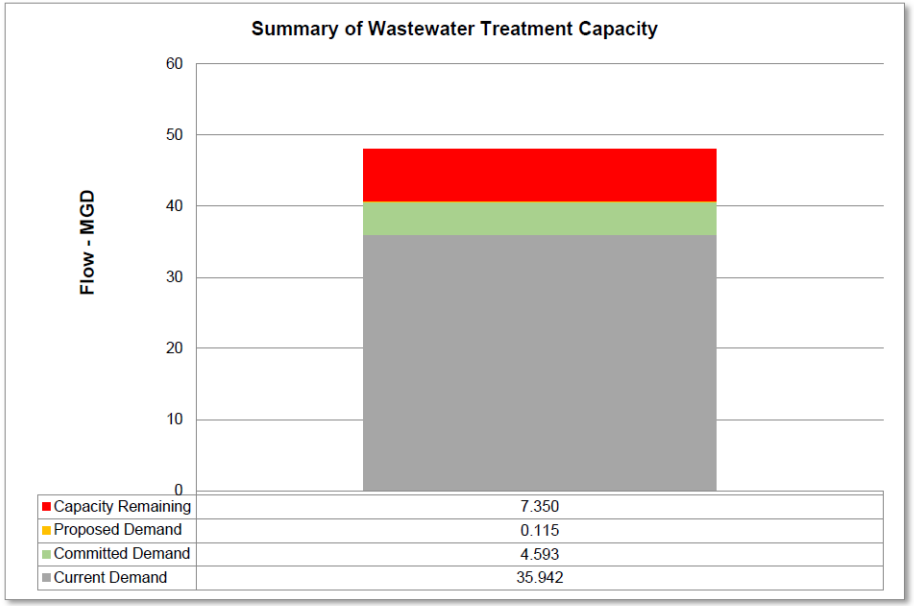


Figure 6

Capacity Availability Analysis – Recommended Improvements

CITY OF FORT LAUDERDALE

All-America City

WATER CAPACITY ANALYSIS

Requested Demand: Based on the applicant's site plan and building use information, the estimated potable water demand will increase approximately 28,442 gallons per day (GPD) which equates to 0.028 million gallons per day (MGD). Water use demands are calculated based on the City's "*Guidelines for the Calculations of Sanitary Sewer Connection Fees*".

Evaluation of impact on existing distribution pipe (flow & capacity): According to the site plan, the applicant is proposing to utilize the existing water mains and existing service connections along SE 17th Street to the south of the property. The InfoWater hydraulic model was analyzed to determine the impact of this project on the local distribution network and the results showed that the existing network could handle the proposed flow. However, after discussing the development and proposed service connections with City Utilities staff, various improvements to the local distribution network are recommended to accommodate the desired service connections. These improvements would replace aging CIP water mains, improve redundancy of the network, and improve constructability of proposed services (meters, fire service lines, etc.). The specifics of these improvements are described below.

Evaluation of impact of Permitted Water Plant Capacity: The Fiveash and the Peele Dixie Water Treatment Plants are designed to treat 70 MGD and 12 MGD of raw water respectively (82 MGD total). The total permitted Biscayne aquifer water withdrawals for these plants is limited to 52.55 MGD per the South Florida Water Management District (SFWMD) permit number 06-00123-W.

The current twelve-month rolling average production at the two plants is 39.57 MGD. The previously committed demand from the development projects in the permitting or the construction stage is 4.402 MGD. Combining these figures with the demand from the proposed project of 0.028 MGD, the required production would be 44.00 MGD. This is less than the allowable withdrawal limit of 52.55 MGD. Therefore, the water plants have sufficient capacity to serve this project. See Figure 5 on the next page.

Recommended Water Infrastructure Improvements: The 16-inch CIP water main on the south side of SE 17th Street should be replaced with DIP from the connection with the 24-inch main and should be extended to connect to the 12-inch CIP main to the east replacing roughly 620 LF of aging CIP and installing a total of 1200 LF of DIP. Additionally, the 180 LF 8-inch service main on the west side of the site should be upsized to a 16-inch main and the 10-inch service main on the east side of the site should be disconnected from the 12-inch CIP main and reconnected to the proposed 16-inch DIP main.

CONSENT ORDER UPDATE

to City of Fort Lauderdale Infrastructure Task Force

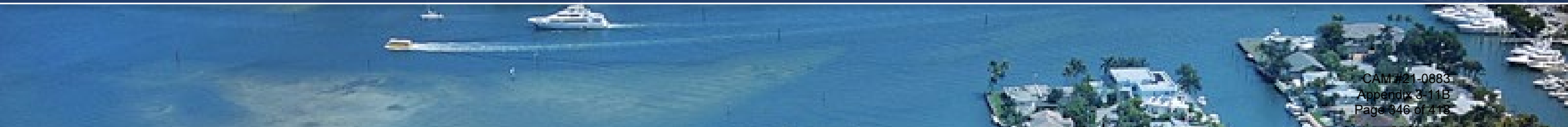
January 7, 2020 - 2 pm

CITY OF FORT LAUDERDALE



Presented by: **Omar Castellon, PE, PMP**
City of Fort Lauderdale
Chief Engineer

Patricia Carney PE, BCEE, DBIA
Hazen and Sawyer
Program Manager



Force Main Condition Assessment

CITY OF FORT LAUDERDALE

In their October 19, 2020 meeting, the Infrastructure Task Force requested a presentation of:

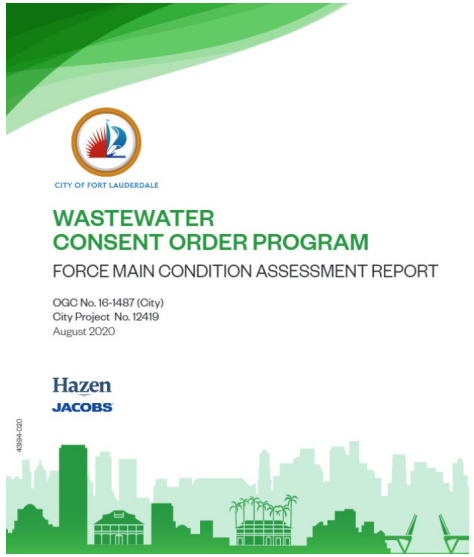
- the Reiss report high-risk force mains and,
- the risk scores for force mains presented to the FDEP in fulfillment of the Consent Order.



Force Main Condition Assessment and Repair /Replacement Recommendations

CITY OF FORT LAUDERDALE

Comprehensive Utilities Strategic Master Plan (CUSMP), 2017
AKA – the Reiss Report

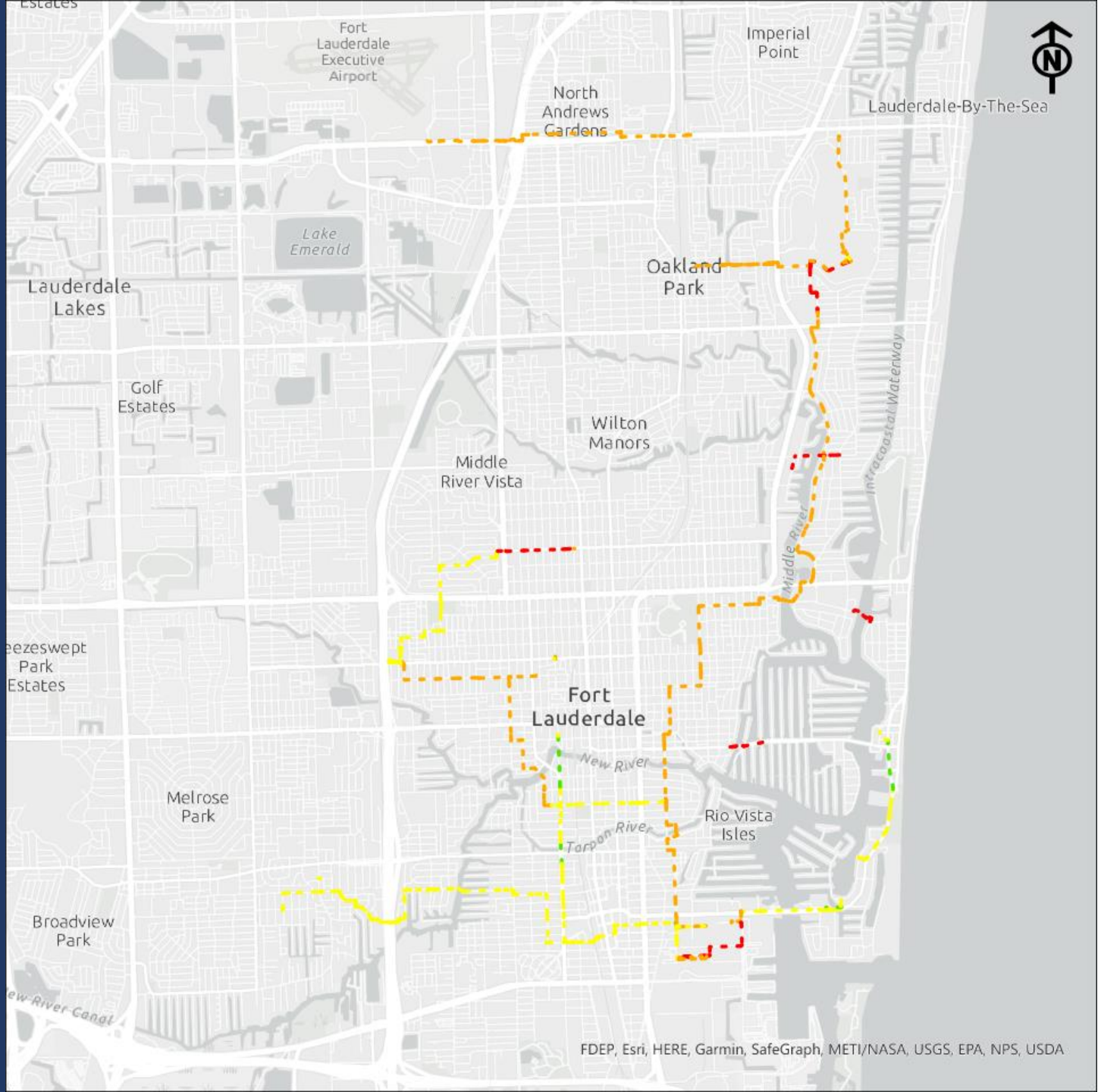


Force Main Condition Assessment Report (FMCA), 2020*

** required as part of the consent order*

Results Summary

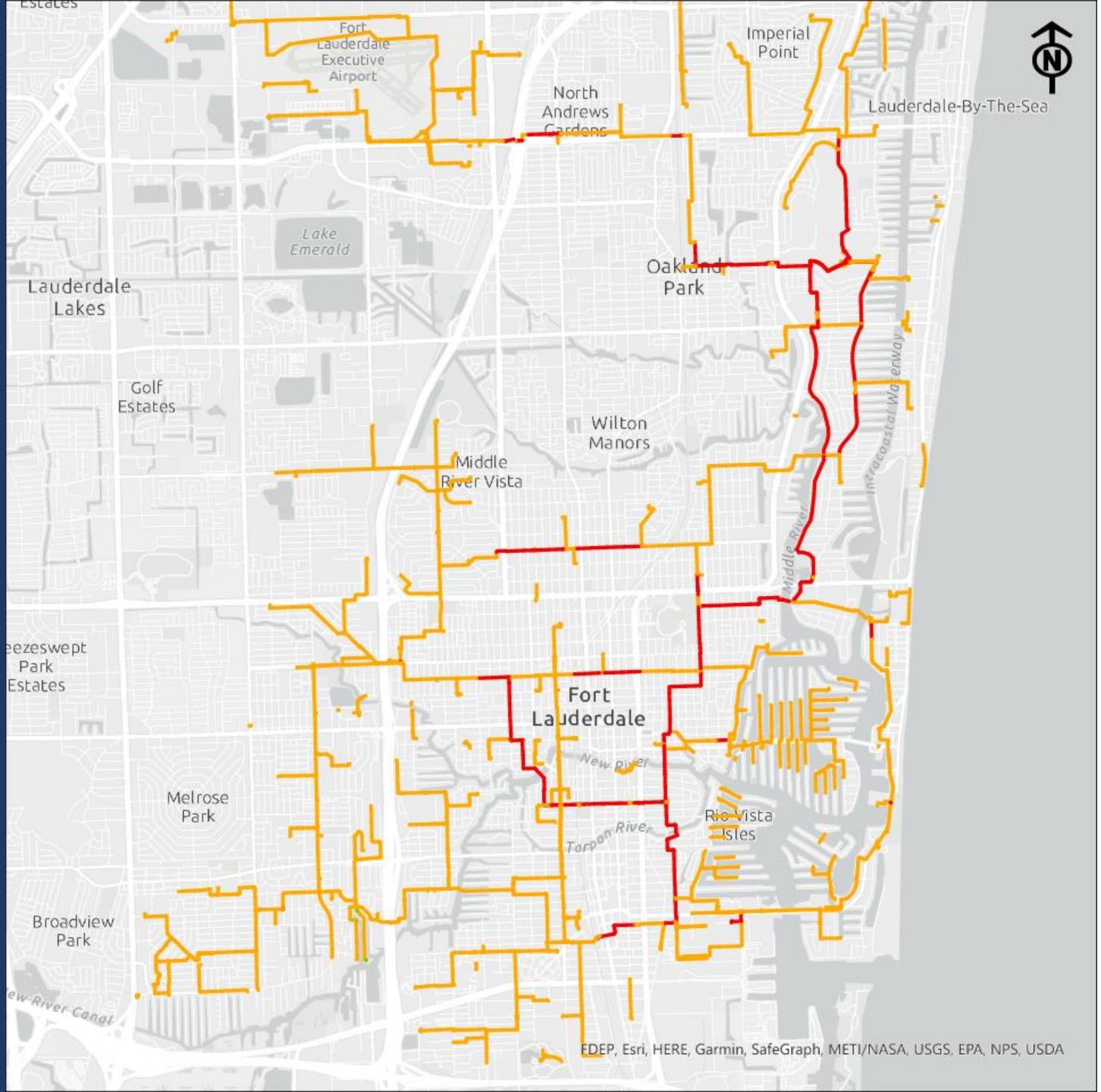
CUSMP Risk Scores



CITY OF FORT LAUDERDALE

Results Summary

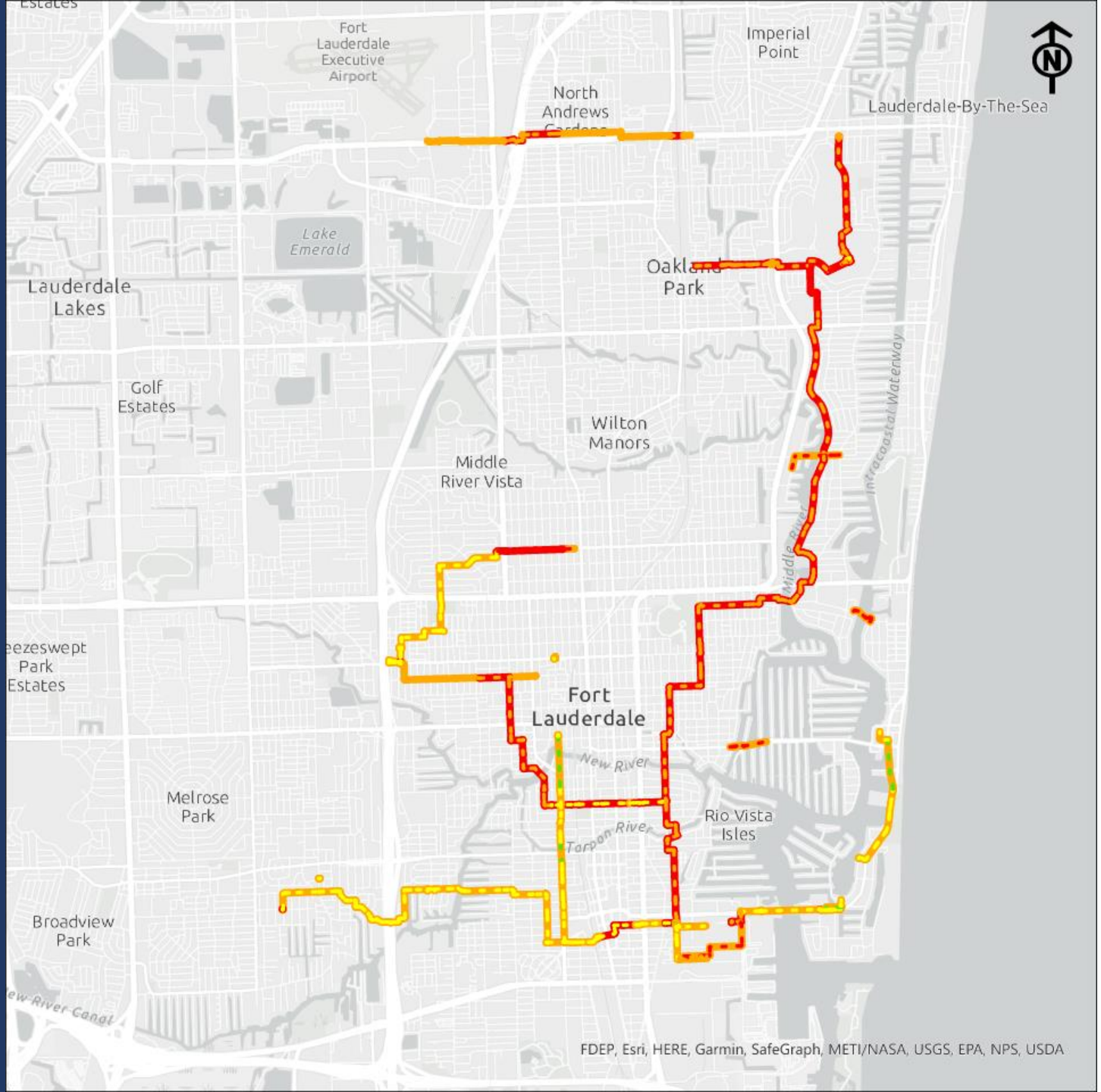
FMCA Scores



CITY OF FORT LAUDERDALE

Results Summary

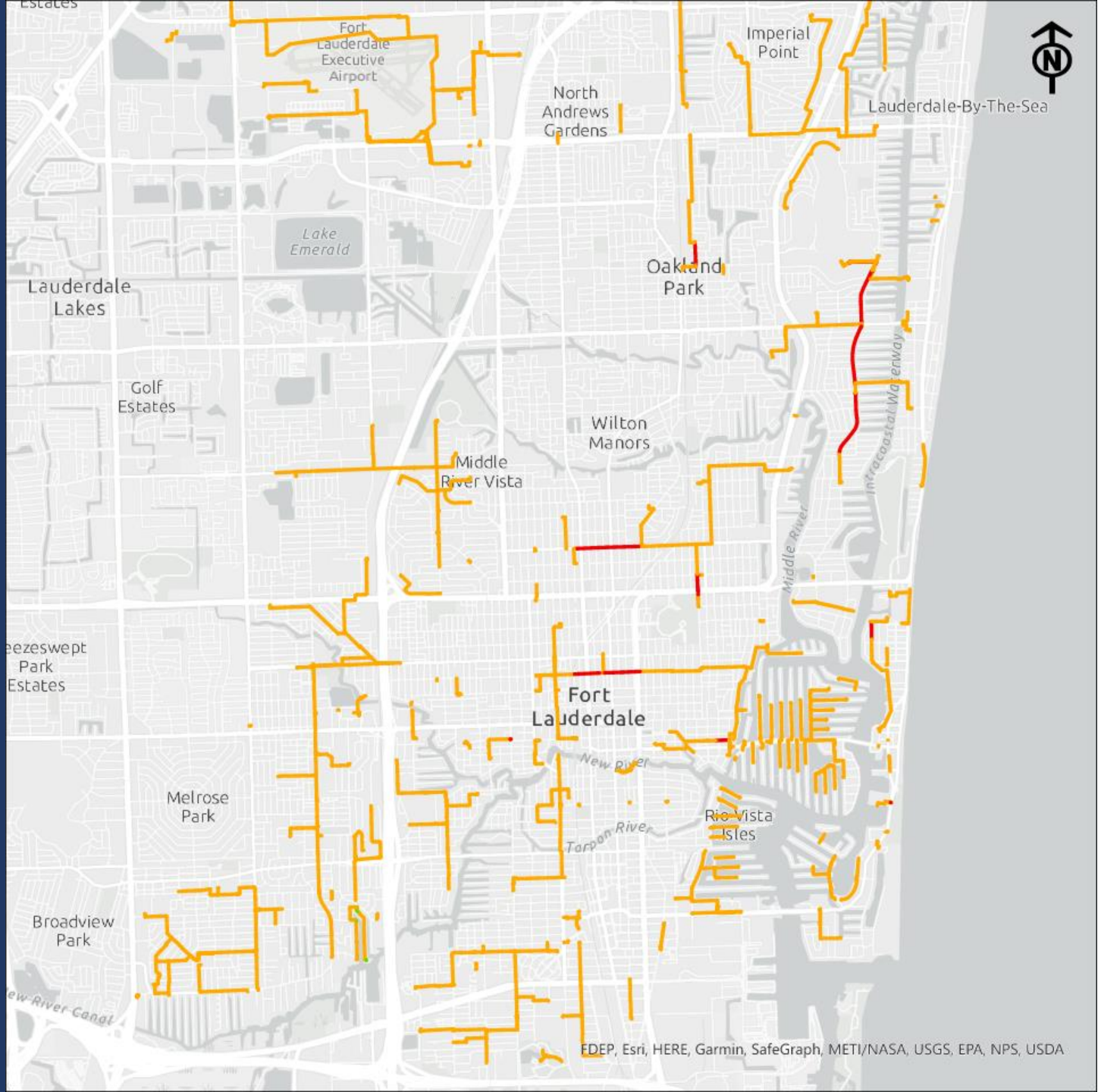
CUSMP vs FMCA Scores



CITY OF FORT LAUDERDALE

Results Summary

FMCA Scores for Force Mains not Evaluated by CUSMP



CITY OF FORT LAUDERDALE

Summary of Miles of Force Main in Various Risk Categories in CUSMP and FMCA

CITY OF FORT LAUDERDALE

CUSMP Risk Category	Miles of Force Main		FMCA Risk Category	Miles of Force Main
Low	1.14		Low	0.04
Low-Medium	10.59		Medium	91.87
Medium-High	14.61	25.19		
High	3.12		High	16.85
Total Analyzed	29.45		Total Analyzed	108.76
Not Analyzed	79.31		Not Analyzed	0.00
Total	108.76		Total	108.76



Comparison of Scope of Assessment



CITY OF FORT LAUDERDALE

System Components Analyzed and Data Sources

CITY OF FORT LAUDERDALE

Reiss Report (CUSMP)

- 24" and greater diameter pipe and pipe within 1 mile of WWTP
- 30 of 109 miles assessed

- City GIS, staff interviews, limited site visits, uncalibrated hydraulic model

Force Main Condition Assessment (FMCA)

- All active City-owned force mains
- 109 miles assessed

- City GIS, staff interviews, limited site visits, calibrated hydraulic model, field soil resistivity and pipe to soil potential measurements

Analysis (Likelihood and Consequence of Failure)

CITY OF FORT LAUDERDALE

Reiss Report (CUSMP)

- LoF score 1 to 5
  - material, age, 2035 max hr flow
- CoF score 1 to 5
  - Diameter and redundancy

Force Main Condition Assessment (FMCA)

- LoF score 1 to 10
  - material, age, operating pressure, break history, pipe profile, corrosion potential, maintenance
- CoF score 1 to 10
  - Diameter and reliability
  - Proximity to Potable Well Field
  - Environmental Compliance
  - Residential / Essential Services Impact
  - Financial and Community Impact



Questions?

Thank you.

CITY OF FORT LAUDERDALE



Backup Slides



CITY OF FORT LAUDERDALE

Reiss Risk Criteria

CITY OF FORT LAUDERDALE

Table WW6-1. Risk Prioritization Criteria – Large-Diameter Pipes

Category	Basis	Weighting	Low Probability				High Probability
			1	2	3	4	5
Likelihood of Failure	Pipe Material[1]	33.3%	PVC or HDPE	--	Unknown or DIP	RCP	PCCP, VCP, CIP
	Installation Date	33.3%	2000 or later	1990 - 2000	1980-1990, Unknown	1970 - 1980	Earlier than 1970
	LOS Require-ments[2,3]	33.3%	Velocity < 5 fps (Meets LOS requirements)	--	Velocity 5-6 fps (Almost meets LOS requirements)	--	Velocity > 6 fps (Fails LOS requirements)
Consequence of Failure	Pipe Diameter	50%	<24"	--	24" – 36"	--	>36"
	Redundancy	50%	Full Redundancy	--	Partial Redundancy	--	No backup/ redundancy

[1]PVC=PolyVinyl Chloride pipe, HDPE=High Density PolyEthylene pipe, DIP=Ductile Iron Pipe, RCP=Reinforced Concrete Pipe, PCCP=Pre-stressed Concrete Cylinder Pipe, VCP=Vitrified Clay Pipe, CIP= Cast Iron Pipe.

[2]Level of service assessed from the 2035 Max Hour forced flow output.

[3]Gravity pipelines assessment does not include velocity.

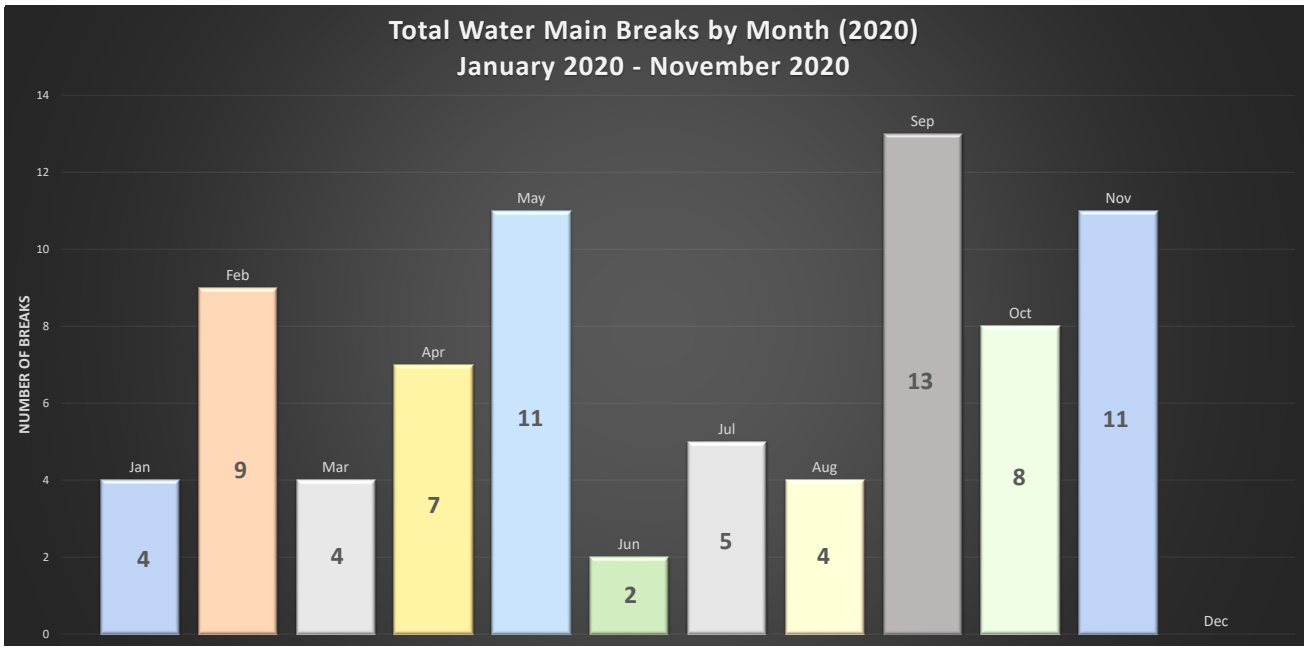
FMCA LoF Criteria

CITY OF FORT LAUDERDALE

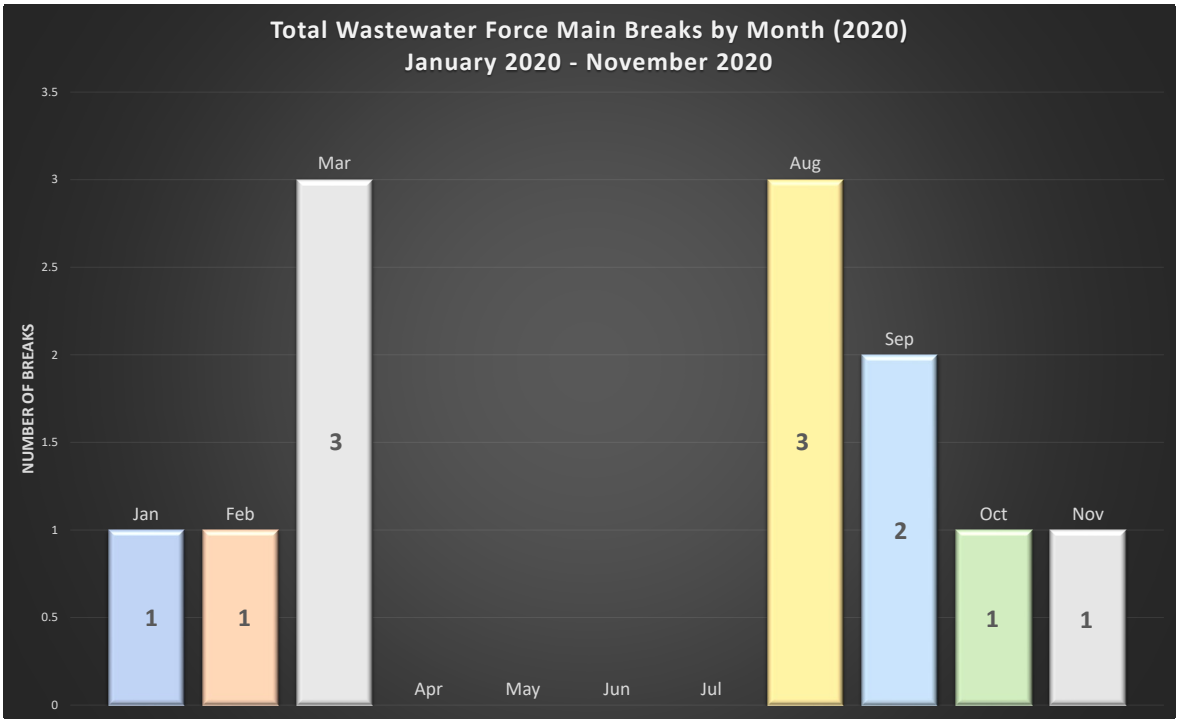
Table 1 - LOF Scoring Criteria

Likelihood Category	Negligible = 1	Unlikely = 2	Possible = 4	Likely = 7	Very Likely = 10
Years since pipe installation	< 20 years	≥ 20 years to < 30 years	≥ 30 years to < 40 years	≥ 40 years to < 50 years	≥ 50 years or unknown
Pipe material	HDPE, PVC, or PE	DIP ≤ 30 years old	Cast-iron pipe	• DIP ≥ 30 years old/DIP without date of installation • AC pipe • Prestressed concrete cylinder pipe installed in the 1970s	Unknown
Pipe break information (from 2014 through 2018)	0 breaks	Not used	No historical pipe break information available/provided from 2014 through 2018	At least one break in pipe segment	Two or more breaks in pipe segment
FM peak operating pressures	Modeled FM peak operating pressure < 60 psi	Not used	Modeled FM peak operating pressure between 60 and 100 psi	Not used	Modeled FM peak operating pressure > 100 psi
Pipe layout profile	No ARV/high point on segment	Not used	One ARV/high point on segment	Not used	Not used
Pipe maintenance	Not used	Not used	Pipe maintenance records are not available	Not used	Not used
External and internal physical factors affecting the asset/proximity to salt water intrusion	• Pipe is above water table and outside the salt water intrusion line. • PVC, HDPE, and PE are the pipe materials.	Pipe is below the water table and outside of the salt water intrusion line.	Pipe is above water table and in salt water intrusion line.	Pipe is within groundwater and inside the salt water intrusion line or brackish.	Pipe is within groundwater and inside the salt water intrusion line.

CAM #21-0883
Appendix 3-11B
Page 360 of 418



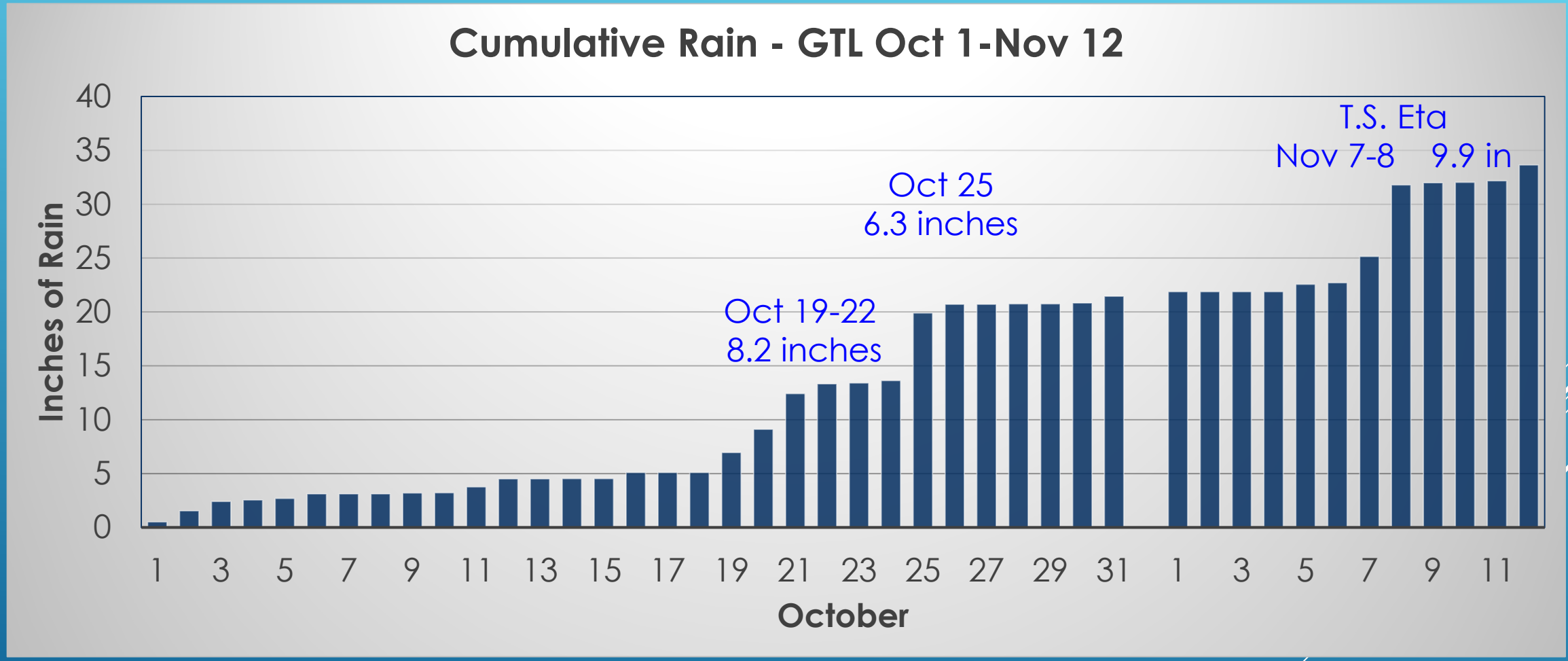
Water Mains	4 inch to 60 inch



Wastewater Mains	6 inch to 60 inch

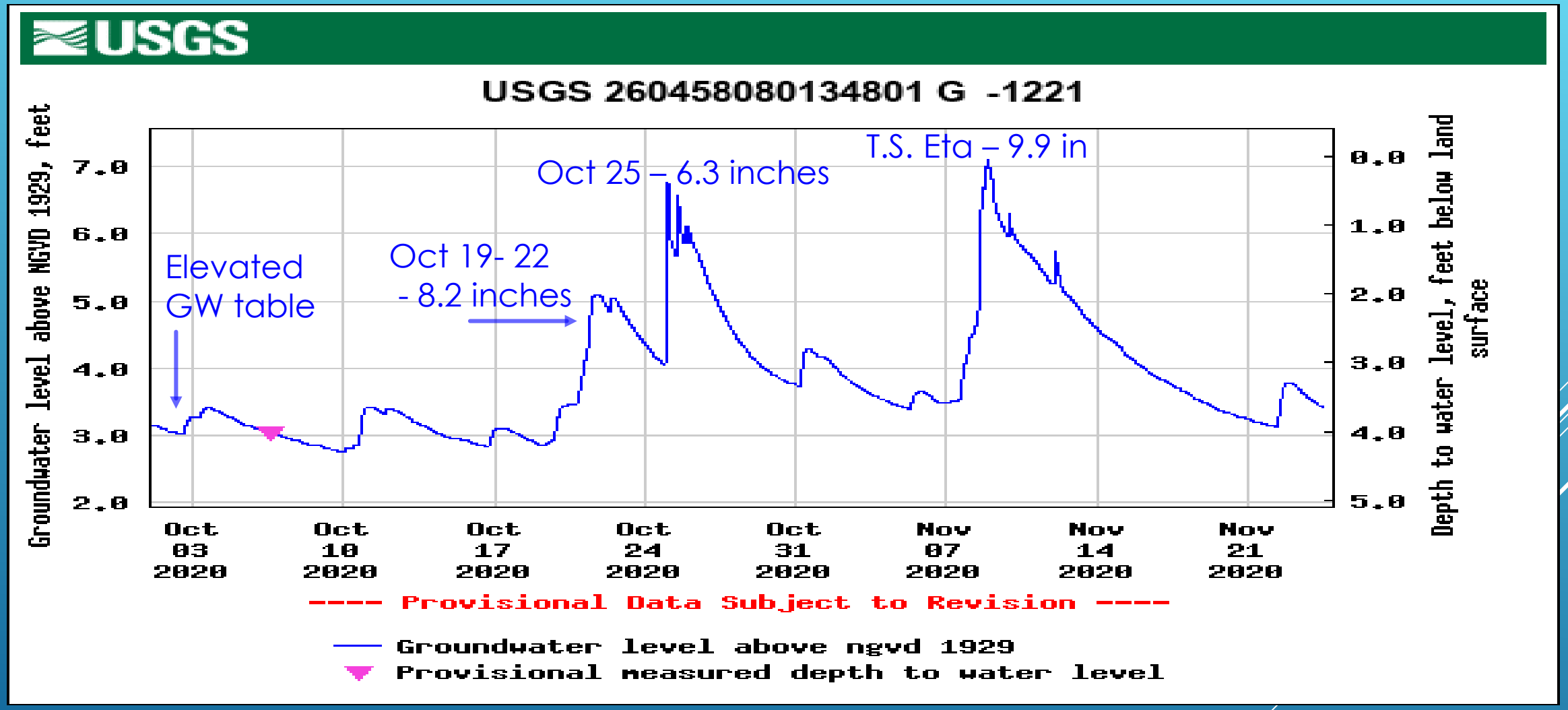
BRIEF OVERVIEW OF RECENT RAIN EVENTS AND IMPACTS TO THE WASTEWATER TREATMENT SYSTEM

RAINFALL OCT 1 – NOV 12, 2020



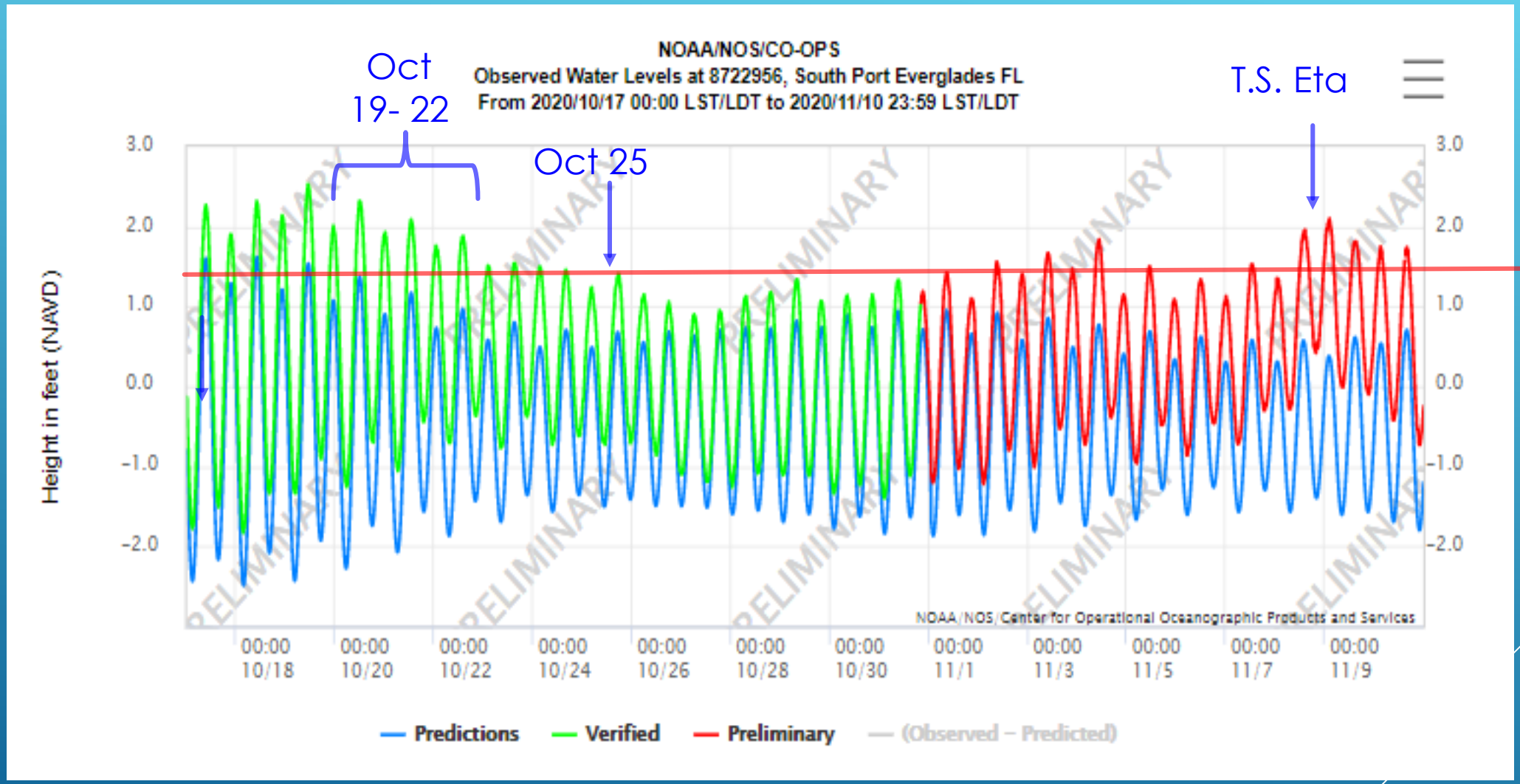
From Oct 1 – Nov 10, GTL recorded 32 inches of rainfall, nearly 60% of the annual rainfall total in 40 days. Rainfall amounts were higher in other areas of the City.

GROUNDWATER IN OCT-NOV 2020



We entered into October with an elevated GW table which was already contributing to Inflow and Infiltration (I &I). The rains in mid October exacerbated the impact prior to the fully saturated conditions achieved during T.S. Eta. The GW table is still high on Nov. 21.

HIGH TIDE IN OCT 17-NOV 10 2020



King tides contributed to the elevated groundwater table and localized street flooding. T.S. Eta created a mild storm surge.

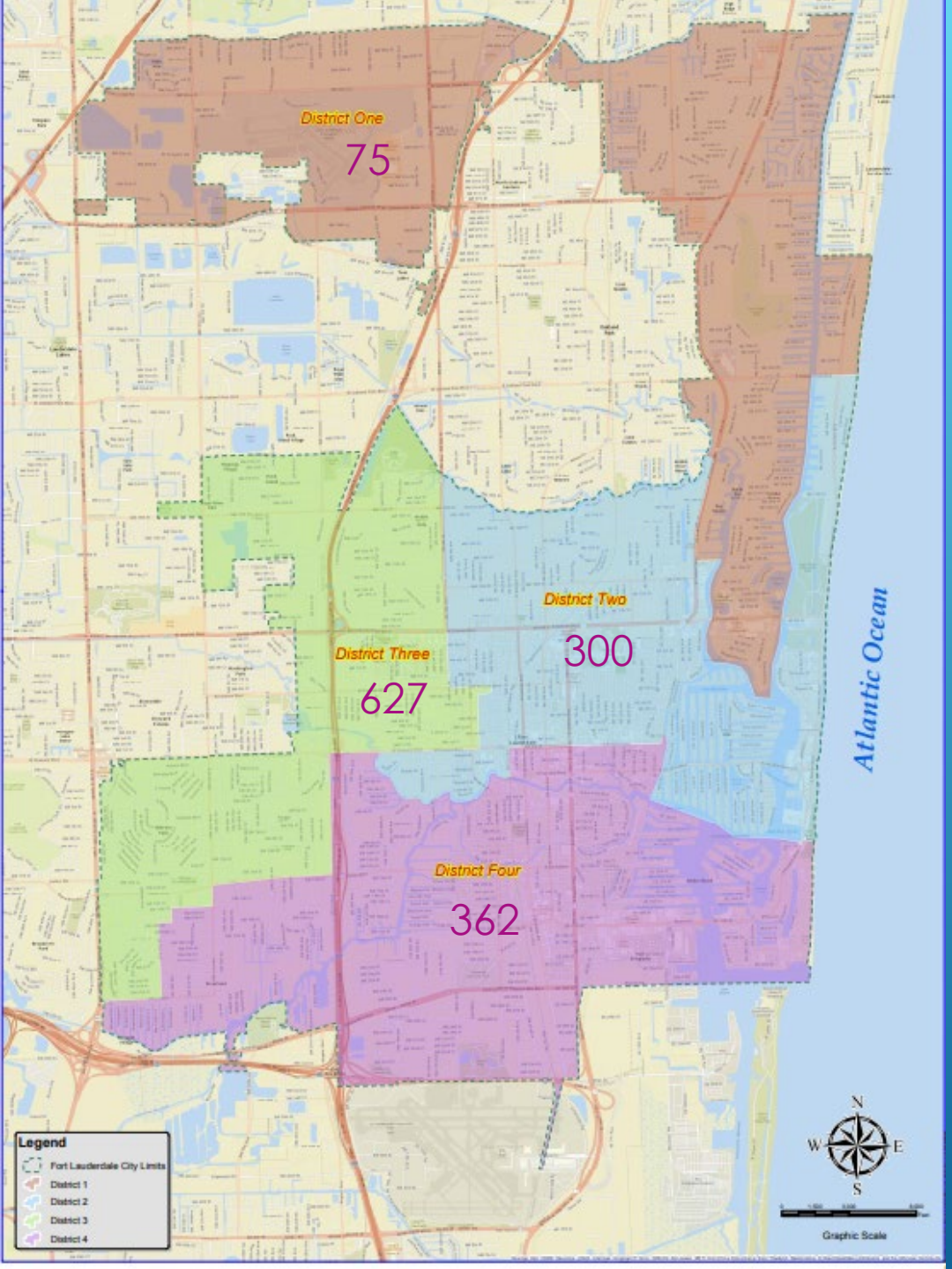
SYSTEM CAPACITY, FLOODING CRITERIA AND NEIGHBOR EXPECTATIONS

Stormwater System Capacity - Generally speaking, roadways remain clear and passable following three (3) inches of rain in a 24 hour period. 30+ inches in 40 days and >9 inches in 24 hours during T.S. ETA exceeded the capacity of the system.

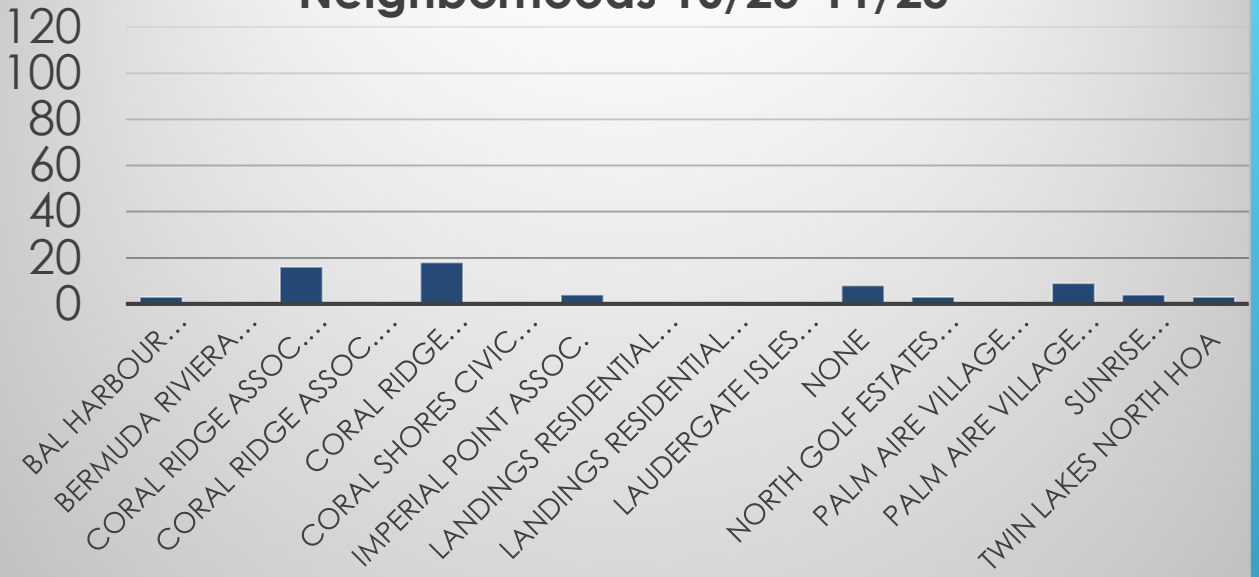
Flooding Criteria – Ponding on roadways clears within a 72-hour period. Most neighborhoods met this criteria after the Oct 25 and the Nov 7-8 rainfall events.

Neighbor Expectations – Generally expect limited ponding that lasts <24 hours regardless of the amount of rainfall.

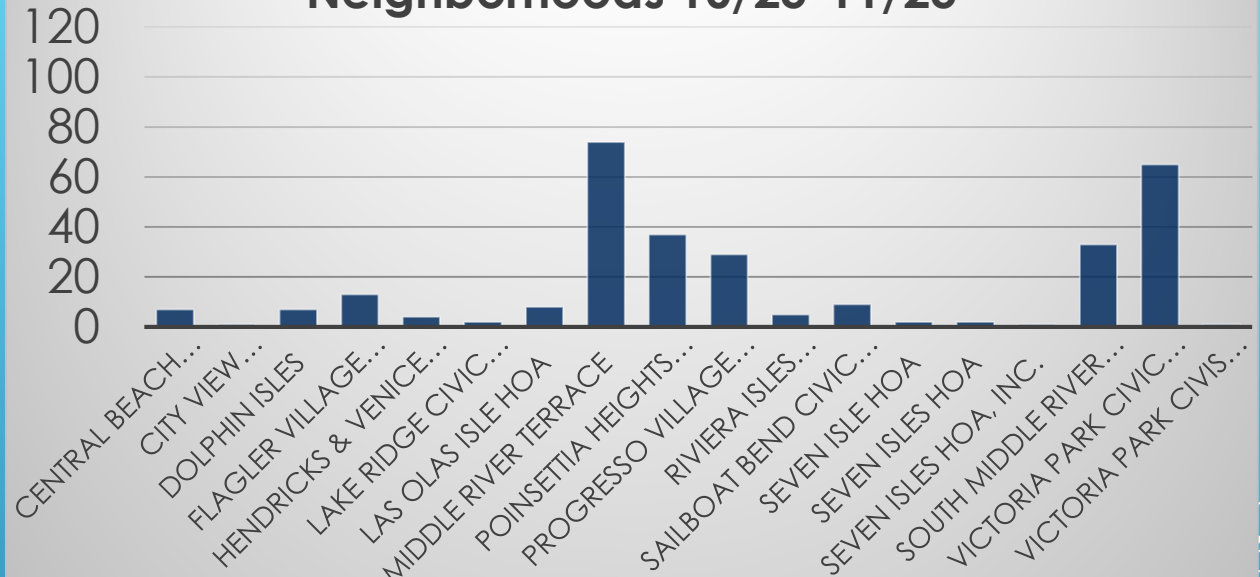
FLOODING COMPLAINTS RELATED TO OCT 25 AND T.S. ETA THROUGH NOV 25



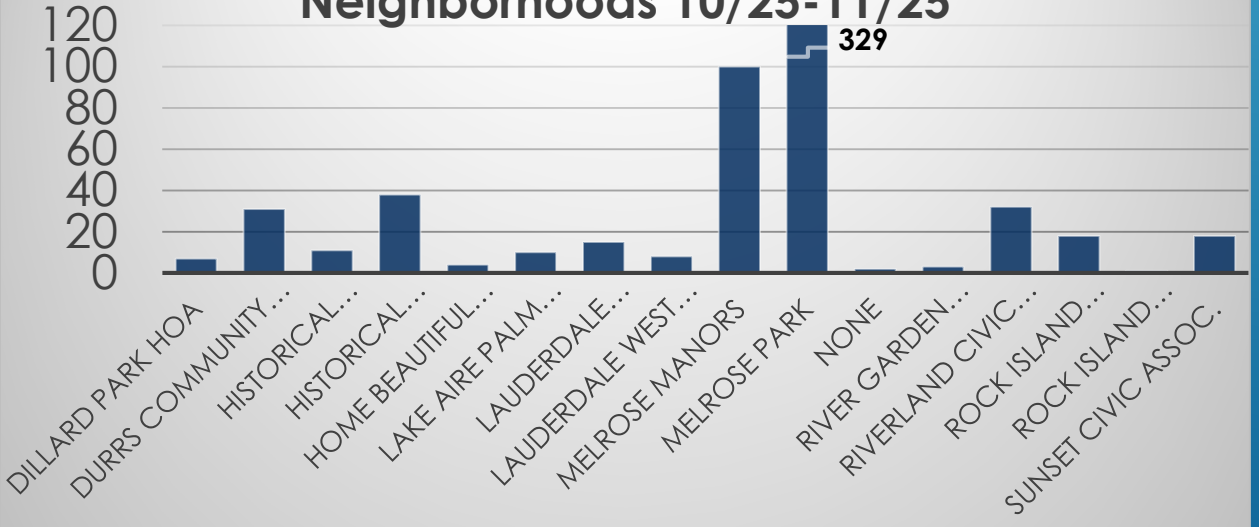
District 1 Flooding Complaints by Neighborhoods 10/25-11/25



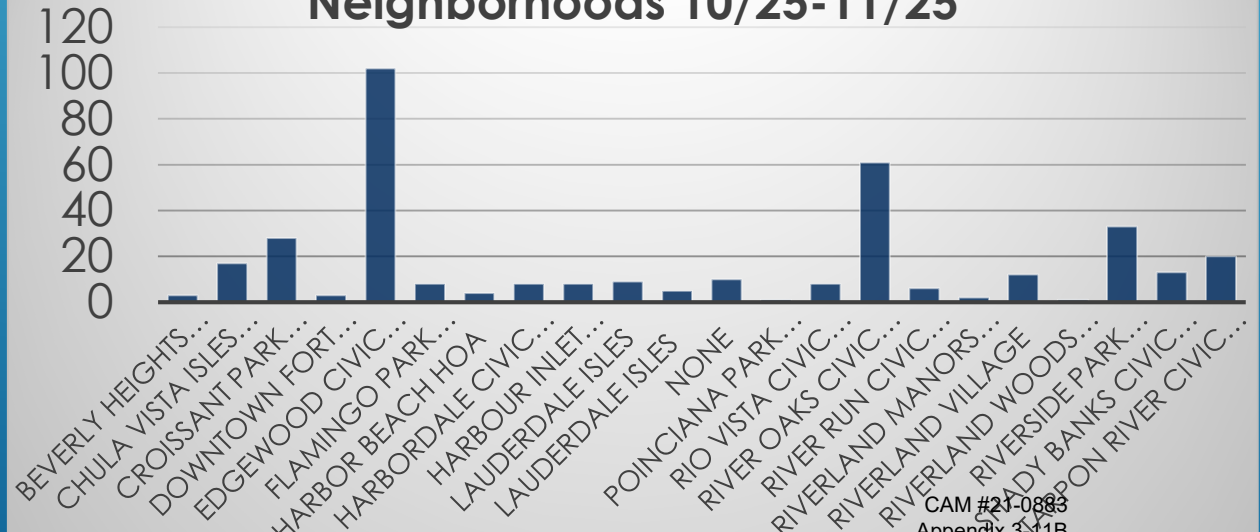
District 2 Flooding Complaints by Neighborhoods 10/25-11/25

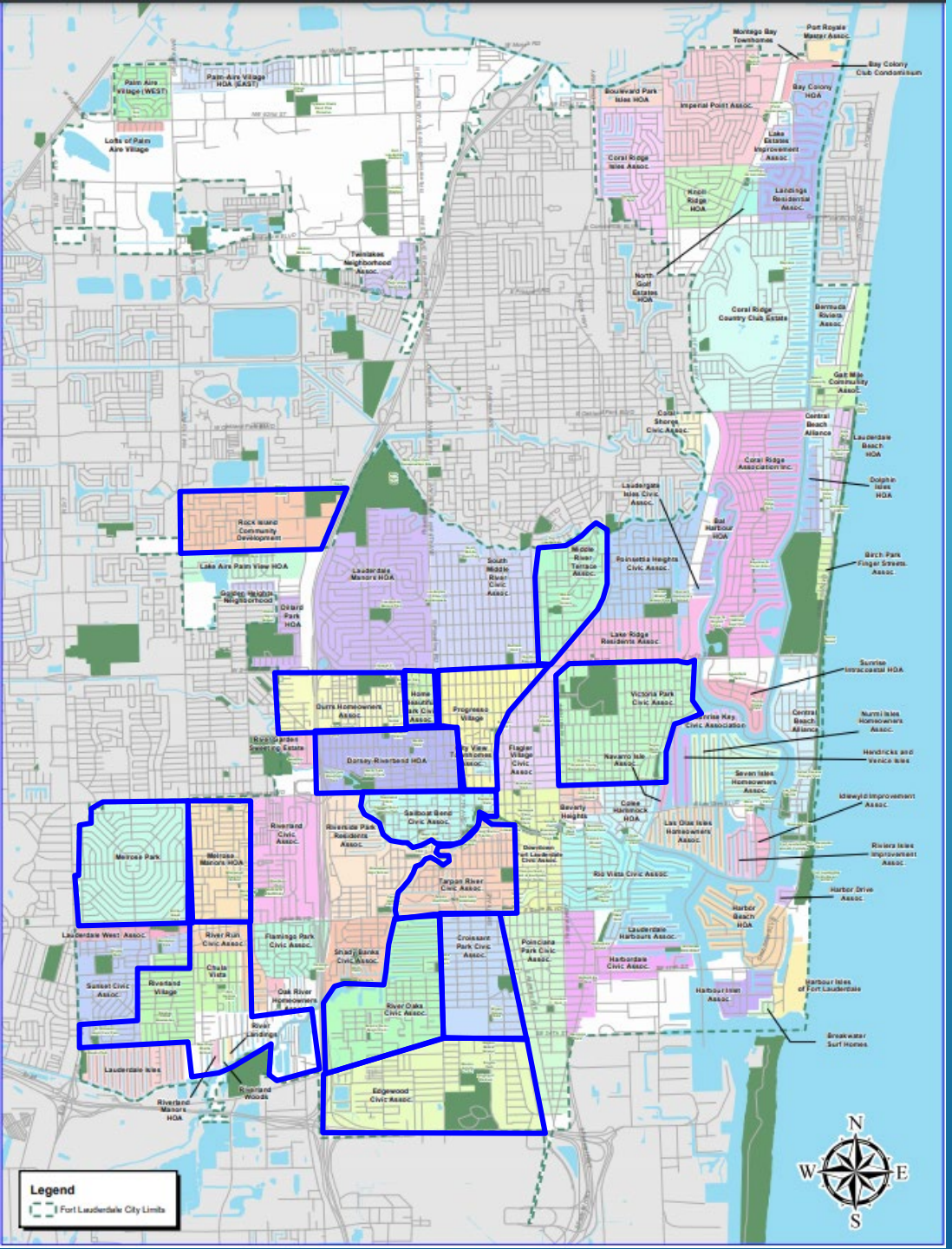


District 3 Flooding Complaints by Neighborhoods 10/25-11/25



District 4 Flooding Complaints by Neighborhoods 10/25-11/25





FLOODED NEIGHBORHOODS

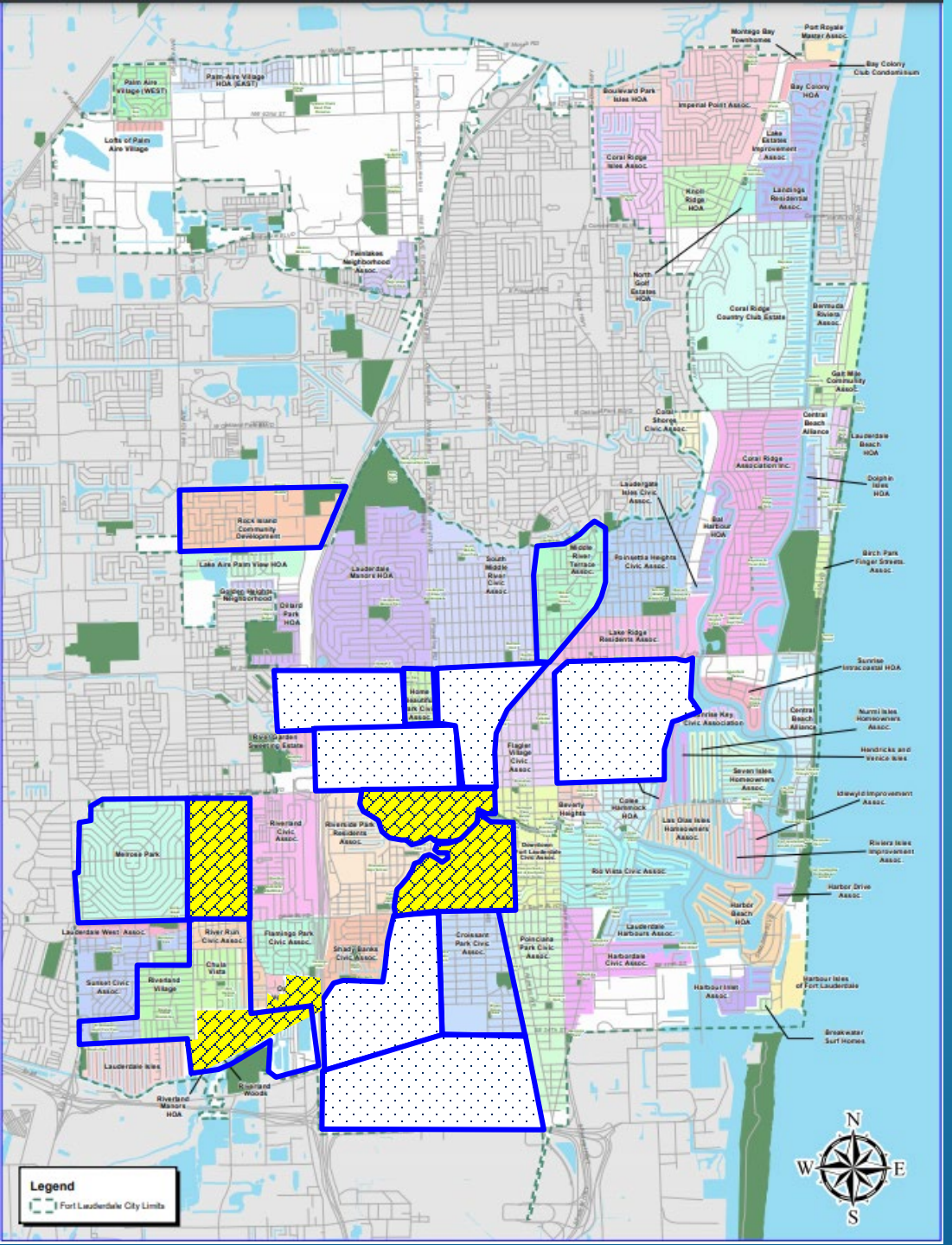
Rock Island
Middle River Terrace
Durrs
Home Beautiful
Progresso Village
Victoria Park
Dorsey Riverbend

Melrose Park
Melrose Manor
Sailboat Bend
Tarpon River

Riverland Area
River Oaks
Croissant Park
Edgewood

Some neighborhoods had homes that flooded but did not meet the flooding criteria (Shady Banks).

STORMWATER MASTER PLAN NEIGHBORHOODS



Pending Construction

Durrs
Dorsey Riverbend
Victoria Park
Southeast Isles (not shown)
Progresso Village
River Oaks
Edgewood

Prioritized for Planning/Design

Melrose Manor
Riverland Area
Sailboat Bend
Tarpon River
Flagler Village (not shown)
Harbour Inlet (not shown)
Harbour Isles (not shown)

Most impacted neighborhoods have been prioritized for stormwater improvements through the master planning process.

Other neighborhoods outside of the master plan neighborhoods could be address through future capital improvements or operational level projects.

Water & Sewer Master Plan 2017

Revenues Appropriated by City Commission on 4.3.2018 (CAM #18-0336)	$	200,000,000.00
Interest on Revenues	$	4,547,778.64
Total Appropriated Amount	$	204,547,778.64

Bond Funded Projects by Category	Total Budget Amount	Actuals spent to Date as of November 23, 2020	% Spent to Date as of November 23, 2020	Encumbrances as of November 23, 2020	Balance as of November 23, 2020
Finance	30,828,221.00	16,745,836.00	54%	1,428,185.31	12,654,199.69
Fiveash Upgrades	25,928,046.00	5,117,769.08	20%	204,371.38	20,605,905.54
I&I	14,800,046.00	11,449,161.40	77%	2,619,888.14	730,996.46
Master Plan/Report	1,202,000.00	689,542.68	57%	175,913.99	336,543.33
Peele Dixie Upgrades	310,000.00	25,868.00	8%	71,505.00	212,627.00
Sewer Basin	3,933,133.00	1,948,879.43	50%	1,840,698.34	143,555.23
Sewer Force main	104,539,457.64	39,727,685.46	38%	31,606,586.32	33,205,185.86
Watermain	23,006,875.00	17,040,966.53	74%	1,533,241.68	4,432,666.79
Grand Total	**204,547,778.64**	**92,745,708.58**	**45.34%**	**39,480,390.16**	**72,321,679.90**

CITY OF FORT LAUDERDALE, FL | FY 2022

GENERAL FUND CAPITAL PROJECT FUNDING NEEDS

August 17, 2021



Community Investment Plan (CIP)

Community Investment Plan (CIP) has a unique and important responsibility to decipher what the community needs to build now and into the future.

Capital Projects	Maintenance Projects
• Must have a value of $50,000 or more	• Must have a value of $50,000 or more
• Have a useful life in excess of 10 years	• Must be a project that replaces/repairs existing infrastructure, equipment, or facilities (examples include street resurfacing, roof replacements, etc.)
• Must be classified as a capital asset when placed into service	

Community Investment Plan (CIP)

The methodology utilized to develop the Community Investment Plan includes:

- Needs assessments performed by City staff
- Input from City Commission appointed advisory boards/committees
- Various studies performed by consultants with expertise in their respective discipline

The projects represent requests but not necessarily needs

Proposed FY 2022 – FY 2026 Capital Investment Plan (CIP) Funding

Fund	Unspent Balance as of May 7, 2021	FY 2022 Funding	FY 2023 - FY 2026 Funding	TOTALS
Water & Sewer Master Plan/Water & Sewer Master Plan 2017	$ 111,138,182	$ 47,003,936	$ 200,089,491	$ 358,231,609
Stormwater/Stormwater Bond	$ 80,260,205	$ 133,796,924	$ 15,863,126	$ 229,920,255
Central Region/Wastewater/Water & Sewer Regional Master Plan	$ 85,025,937	$ 15,341,961	$ 98,997,389	$ 199,365,287
General Obligation Bond 2020 Construction - Parks	$ 66,072,779	$ -	$ 120,000,000	$ 186,072,779
General Obligation Bond 2019 Construction - Police Station	$ 99,057,599	$ -	$ -	$ 99,057,599
General Capital Projects	$ 24,012,107	$ 17,562,297	$ 49,673,037	$ 91,247,441
Federal Aviation (FAA) Grant /Florida Department of Transportation (FDOT)	$ -	$ 8,146,122	$ 27,441,129	$ 35,587,251
Other Funds	$ 29,853,498	$ 2,771,329	$ 2,000,000	$ 34,624,827
Parking	$ 8,300,617	$ 3,775,000	$ 13,846,829	$ 25,922,446
Community Redevelopment Agency	$ 25,264,174	$ -	$ -	$ 25,264,174
Park Impact Fees	$ 14,158,344	$ -	$ 8,000,000	$ 22,158,344
Airport	$ 16,956,989	$ 1,539,455	$ 2,121,200	$ 20,617,644
Surtax Funds	$ -	$ 10,277,243	$ 8,165,000	$ 18,442,243
Special Obligation Bond 2020 Construction - Utility Undergrounding	$ 8,761,040	$ -	$ -	$ 8,761,040
Gas Tax	$ 2,357,547	$ 1,000,000	$ 4,000,000	$ 7,357,547
American Rescue Plan 2021	$ -	$ 2,899,890	$ -	$ 2,899,890
Sanitation	$ 8,789	$ 255,151	$ 900,000	$ 1,163,940
GRAND TOTAL	$ 571,227,807	$ 244,369,308	$ 551,097,201	$ 1,366,644,316

Unfunded General Fund: Projects by Department

Department	Unfunded Amount*
City Manager's Office	TBD
Finance	$ 268,715,777
Fire Rescue	$ 10,721,250
Information Technology Services	$ 9,689,401
Public Works	$ 1,773,163
Transportation and Mobility	$ 219,304,000
GRAND TOTAL	$ 510,203,591

**Excludes operating expenses associated with these projects.*

Unfunded General Fund Project:
City Manager's Office

Project	Project Title	District	Funding Received (All Years)	Unspent Balance as of 05/07/2021	Unfunded
To Be Determined	Public Transportation System Tunnel	All	$0	$0	To Be Determined

Unfunded General Fund Project:
City Manager's Office – Public Transportation System

Project Goal

- The City Manager's Office is seeking to design, construct, operate, and maintain a subsurface public transportation system

Project Background

- Total Estimated CIP Cost to connect downtown Fort Lauderdale with Fort Lauderdale Beach is yet to be determined

Unfunded General Fund Project: Finance

Project	Project Title	District	*Funding Received	Unspent Balance as of May 7th, 2021	**Unfunded
P12547	City-County Joint Government Center Campus	All	$750,000	$536	$268,715,777

**$750,000 has been received for construction of the project.*

As of April 6, 2021 (CAM 21-0093), The City Commission and the Broward County Commission acting as the Unified Direct Procurement Authority (UDPA) directed staff to solicit Financial Advisor services for the Joint Government Center Campus (JGCC) project. KPMG Corporate Finance LLC has been selected as the Financial Advisor for the JGCC project. The City's financial commitment is 43% of the $1.2 million estimated costs or $516,000.

**As of June 23, 2021 (CAM 21-054), the Fund breakdown is 60%-General Fund, 23%-Other Funds, 9%-Water and Sewer Fund, and 8%-Parking Fund.

Unfunded General Fund Project:
Finance

Project Goal

- To develop of a joint government center campus in downtown Fort Lauderdale to serve as the new offices for both the City of Fort Lauderdale and Broward County.

Project Background

- Total Estimated Cost of City-County Joint Government Center Campus:
  - $625 million
    - City Share = 43% (348,847 per square feet) or $269 million
    - Estimated Annual "Availability Payment" = $14.8 million
    - Estimated Annual Operation and Maintenance Expense = $2.4 million ($7 per square foot)
    - Estimated Renewal and Replacement Annual Payment – To Be Determined (TBD) (3-5% of city share of project cost)
    - Reduced Current Rental Expenses = $1.5 million
    - Reduced Operating Expenses – TBD

Unfunded General Fund Project:
Fire Rescue

Project	Project Title	District	Funding Received	Unspent Balance as of 05/07/ 2021	Unfunded
FY20130190	Public Safety Training Facility	All	$0	$0	$10,721,250

Unfunded General Fund Project:
Fire Rescue

Project Goal

- To build a Public Safety training facility that will enable the City to meet the training needs of all Fort Lauderdale Public Safety entities.
  - Meets National Fire Protection Association (NFPA), State, Accreditation, International Organization for Standardization (ISO) guidelines
  - Keeps training within city limits
  - Increases unit availability for incident response
  - Reduces of travel time from out of jurisdiction training facilities

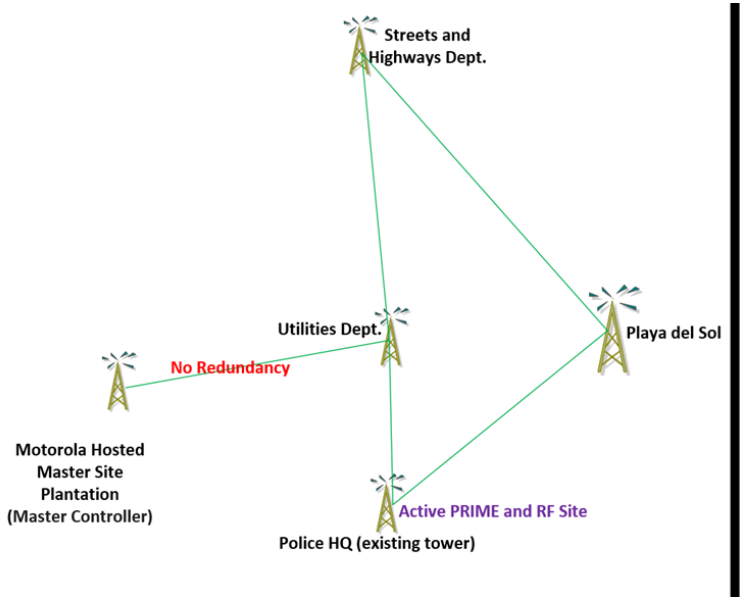
Project Background

- Total Estimated Cost of Public Safety Training Facility:
  - $10,721,250
  - Potential revenue offsets for Public Safety Training from other Fire agencies and entities - $362,365 annually
  - Land usage and site to be determined

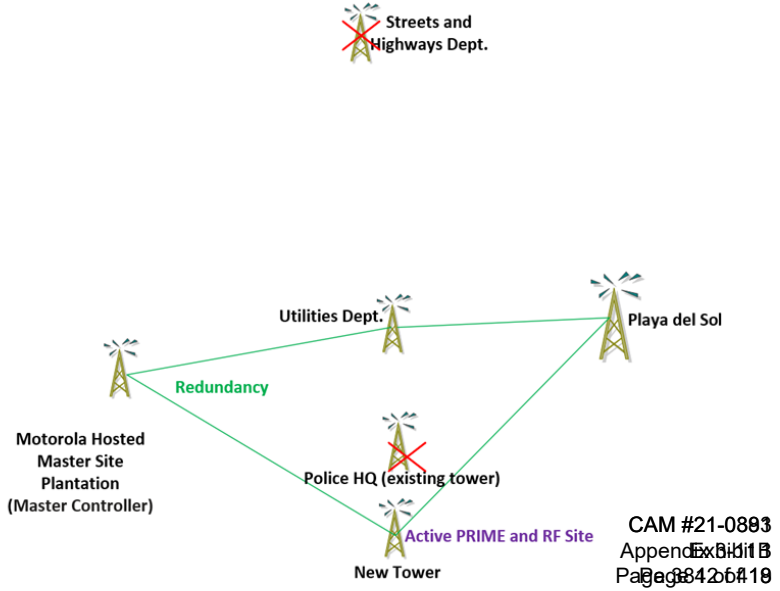
Unfunded General Fund Project:
Information Technology Services

Project	Project Title	District	Funding Received	Unspent Balance as of 05/07/2021	Unfunded
FY20221085	Radio Tower Relocation	All	$0	$0	$6,689,401
FY20221100	Broadband Network	All	$0	$0	$3,000,000
		TOTALS	**$0**	**$0**	**$9,689,401**

Existing Radio Communications Network



Proposed Radio Communications Network



Unfunded General Fund Project:
Information Technology Services

Project Goal – Radio Tower Relocation

- Create resilient microwave paths for the radio communications system
- Relocate Physical Radio Tower to improve future use for site

Project Background – Radio Tower Relocation

- Total Estimated Cost of the Radio Tower Relocation:
  - $6,689,401
- The current radio communications system is a Motorola 4 site, 12 channels linear simulcast system consisting of two main networks:
  - A signaling (RF) network
  - A microwave network
- The microwave network is designed in a ring (redundant loop) with a single RF network connection (no redundancy) to the Master Controller.

Unfunded General Fund Project:
Information Technology Services

Project Goal – Broadband Network

- The project will provide a comprehensive updated Smart Broadband Master Plan to include the deployment of Wi-Fi services and broadband access to underserved and at-risk populations.

Project Background – Broadband Network

- Total Estimated Cost of the Radio Tower Relocation:
  - Phase 1-$3,000,000 (Design, Engineering, Permitting)
  - Phase 2-$15,600,000 - $25,600,000 (Construction)
- In parallel with the construction the City would undergo a phased transition away from existing managed services—and the associated monthly recurring costs, eliminating considerable annual general fund obligations.
- Over the construction period, the City's operating spend on network services would be reduced overtime due to the reduction in existing network services and the ability to use less expensive dedicated internet access (DIA) and other services through the new Smart City Broadband Network (SCBN).

Unfunded General Fund Project:
Public Works

Project	Project Title	District	Funding Received	Unspent Balance as of 05/07/2021	Unfunded
P12446*	Public Works Joint Facility	I	$3,761,606	$3,712,310	$1,773,163

**The Public Works Joint Facility has $3,712,310 in Unspent Balance ($0 Unspent Balance in the General Fund, $1,962,474 in the Water and Sewer Fund, and $1,749,836 in the Stormwater Fund)*

Unfunded General Fund Project:
Public Works

Project Goal - Public Works Joint Facility

- This project is for the Design-Build Construction of a new facility (offices and storage) and new access roads for the stormwater operations team, the water meter shop team and the road repair and maintenance team.

Project Background - Public Works Joint Facility

- Total Estimated Cost for the Public Works Joint Facility:
  - $5,534,769 ($1,773,163 unfunded)
- The Public Works Stormwater and Roadway Services Teams are currently working out of the Utilities Central Maintenance Facility and exceed the capacity of their available staffing and equipment space
- Managers of both programs are working at a separate facility

Unfunded General Fund Project:
Transportation and Mobility

Request Type	Estimated Unfunded Amount	Project Examples
Major Projects	$188,400,000	Las Olas Mobility, Laudertrail
Streetscape Projects	$21,664,000	NE 4th Street, NW 15th Avenue, Birch & Breakers, Sunrise Lane
Neighborhood Mobility Master Plan Implementation	$3,500,000	Twin Lakes North, Palm Aire Village West, Lake Ridge, Tarpon River, Shady Banks, CRCCE
Intersections & Traffic Calming	$3,181,000	Cordova/SE 12th, Riverland Road
Bike & Pedestrian Projects	$2,419,000	Bayview Drive Bike Lanes, New Sidewalks
Utility Box Wraps	$140,000	Citywide Utility Boxes
TOTAL	**$219,304,000**	

Potential Financing Sources for these Projects

Fund Balance	Grants, Surtax Funds, Legislative Appropriations	Public Private Partnerships (Availability Payments)
Revenue or General Obligation Bonds	Dedicated Millage Rate Increase	Special Assessments

Office of Management and Budget



City of Fort Lauderdale

Proposed FY 2022 - FY 2026 Community Investment Plan

Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
Housing and Community Development Block Grant Fund (108)									
P11963	2014 NCIP LAUDERDALE MANORS DECO ST SIGN	35,000	-	-	-	-	-	-	35,000
P11802	2012 NCIP LAUDERDALE MANORS CROSSWALKS	25,000	-	-	-	-	-	-	25,000
P12309	MELROSE PARK STREET LIGHTING	2,370	2,370	-	-	-	-	-	2,370
P11959	2014 NCIP GOLDEN HEIGHTS SPEED HUMPS	(16,000)	(16,000)	-	-	-	-	-	(16,000)
P12344	FIRE ALERTING SYSTEM - REPLACEMENT	82,345	82,345	-	-	-	-	-	82,345
P12542	ROADWAY & SIDEWALK REPLACEMENTS	102,425	60,890	500,000	500,000	500,000	500,000	**500,000**	2,602,425
	Housing and Community Development Grant Fund (108) Total*	**231,140**	**129,605**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**2,731,140**
American Rescue Plan 2021 (Fund 127)									
P11722	RIVERWALK SEAWALL REPLACEMENT NORTHSIDE	-	-	2,899,890	-	-	-	-	2,899,890
	American Rescue Plan 2021 (Fund 127) Total*	**-**	**-**	**2,899,890**	**-**	**-**	**-**	**-**	**2,899,890**
Grants Fund (129)									
P12186	GEORGE ENGLISH PARK BOAT RAMP 2016	618,553	400,000	-	-	-	-	-	618,553
P11056	CYPRESS CREEK SAND PINE PARK	247,702	247,702	-	-	-	-	-	247,702
P12519	MADE TO MOVE FLAGLER GREENWAY	100,000	100,000	-	-	-	-	-	100,000
P12369	RIVERWALK FLOATING DOCKS PHASE I	46,675	27,764	**-**	-	-	-	-	46,675
P12370	BILL KEITH PRESERVE SHORELINE STABILIZTN	29,881	17,346	**-**	-	-	-	-	29,881
P12594	SURTAX-ONE-WAY PAIRS	-	-	**975,000**	**2,762,500**	**2,762,500**	-	-	6,500,000
P12595	SURTAX - NW 15TH AVENUE STREETSCAPE	-	-	**2,000,000**	-	-	-	-	2,000,000
P12596	SURTAX-NEW SIDEWALKS DESIGN	-	-	**360,000**	**2,640,000**	-	-	-	3,000,000
P12515	NORTH FORK RIVERFRONT PARK	150,000	5	**-**	-	-	-	-	150,000
P12087	SURTAX-BRIDGE REPLACEMENT AT SOUTH OCEAN DRIVE	-	-	**2,553,217**	-	-	-	-	2,553,217
P12299	SURTAX-WEST LAKE DRIVE BRIDGE RESTORATION	-	-	**1,617,300**	-	-	-	-	1,617,300
P12134	SURTAX-SIDEWALK AND PAVER REPLACEMENT	-	-	**1,252,300**	-	-	-	-	1,252,300
FY 20221107	SURTAX-NW 15TH AVENUE LIGHTING			**996,669**					996,669
FY 20221108	SURTAX-LAS OLAS FINGER STREETS ASPHALT	-	-	**522,757**	-	-	-	-	522,757
	Grants Fund (129) Total*	**1,192,811**	**792,817**	**10,277,243**	**5,402,500**	**2,762,500**	**-**	**-**	**19,635,054**
Building Permit Fund (140)									
P12235	LAND & ASSET MANAGEMENT SYSTEM PROJECT	23,917	23,908	-	-	-	-	-	23,917
P12267	DSD BUILDING - COOLING SYSTM REPLACEMENT	3,074	3,074	-	-	-	-	-	3,074
P12560	GREG BREWTON CENTER (DSD)	19,139,787	18,244,530	-	-	-	-	-	19,139,787
	Building Permit Fund (140) Total	**19,166,778**	**18,271,512**	**-**	**-**	**-**	**-**	**-**	**19,166,778**
Special Assessments Fund (319)									
P11714	IDLEWYLD UNDERGROUNDING OF UTILITIES	538	538	-	-	-	-	-	538
P11716	SEVEN ISLES UNDERGROUNDING OF UTILITIES	1	1	-	-	-	-	-	1
	Special Assessments Fund (319) Total	**539**	**539**	**-**	**-**	**-**	**-**	**-**	**539**
General Capital Projects Fund (331)									
P12337	CORDOVA ROAD SEAWALL REPLACEMENT	937,436	469,241	-	-	-	-	-	937,436
P12247	BROWARD CTY SEGMENT II BEACH NOURISHMENT	-	-	3,333,333	3,333,333	3,333,334	-	-	10,000,000
P12435	BREAKERS AVENUE STREETSCAPE IMPROVEMENTS	2,663,605	1,869,401	-	-	-	-	-	2,663,605
P12014	ISLE OF PALMS SEAWALL REPLACEMENT	623,307	543,605	-	-	-	-	-	623,307
P12087	BRIDGE REPLACEMENT AT SOUTH OCEAN DRIVE	482,026	362,428	-	-	-	-	-	482,026
P12089	BRIDGE REPLACEMENT AT COCONUT ISLE	117,659	1	-	-	-	-	-	117,659
P11937	ENTERPRISE RESOURCE PLANNING (ERP)	33,457	33,457	-	-	-	-	-	33,457
P12171	BUTLER BUILDING UPGRADE AT GTL WELLFIELD	1,158,440	195,750	-	-	-	-	-	1,158,440
P12344	FIRE ALERTING SYSTEM - REPLACEMENT	108,918	19,776	-	-	-	-	-	108,918
P12164	FACILITIES ASESSMNT - INT REPAIR/ CONSTR	668,576	668,576	200,000	200,000	200,000	250,000	**250,000**	1,768,576
P12134	SIDEWALK AND PAVER REPLACEMENT	701	1	1,000,000	1,000,000	1,000,000	1,000,000	**1,000,000**	5,000,701
P12162	FACILITIES ASESSMNT - HVAC, ELECT, PLUMB	2,815,975	2,815,975	1,300,000	1,300,000	1,300,000	1,000,000	**1,000,000**	8,715,975
P12315	AQUATICS COMPLEX RENOVATIONS	2,272,844	239,900	-	-	-	-	**-**	2,272,844
P11065	ELECTRICAL IMPROVEMENTS NEW RIVER DOCKS	607,431	584,911	-	-	-	-	**-**	607,431

City of Fort Lauderdale

Proposed FY 2022 - FY 2026 Community Investment Plan

Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
P12056	CITYWIDE CAMERA INITIATIVE	453,089	422,691	-	-	-	-	-	453,089
P12335	MILLS POND PARK NEW RESTROOMS	(54,916)	(182,326)	**54,916**	-	-	-	-	-
P12010	BRIDGE RESTORATION	530,943	321,993	1,100,000	1,582,025	1,551,838	948,615	**1,148,615**	6,862,036
P12223	ANNUAL ASPHALT RESURFACING CONTRACT	8,309	8,237	-	-	-	-	-	8,309
P12163	FACILITIES ASESSMNT - EXT REPAIR/ CONSTR	302,870	302,870	250,000	250,000	250,000	250,000	**250,000**	1,552,870
P12299	WEST LAKE DRIVE BRIDGE RESTORATION	480,212	237,616	**911,142**	-	-	-	**602,214**	1,993,568
P11722	RIVERWALK SEAWALL REPLACEMENT NORTHSIDE	307,484	289,024	**1,598,750**	-	-	-	-	1,906,234
P12503	LIFEGUARD TOWER REPLACEMENTS	-	-	-	-	-	-	**160,000**	160,000
P12470	NW 15TH AVE COMPLETE STREETS PROJECT	24,698	4,471	-	~~**1,030,000**~~	-	-	-	24,698
P12090	NEIGHBORHOOD TRAFFIC CALM & PED SAFETY	127,363	127,363	-	-	-	-	-	127,363
P12318	NE 4TH STREET IMPROVEMENTS	62,314	-	-	-	-	-	-	62,314
P12285	TWIN LAKES NORTH ANNEXATION IMPROVEMENTS	94,000	1	-	-	-	-	-	94,000
P12161	FACILITIES ASESSMNT - ROOFING PRIORITIES	507,638	266,361	250,000	250,000	250,000	500,000	**500,000**	2,257,638
P12235	LAND & ASSET MANAGEMENT SYSTEM PROJECT	44	40	-	-	-	-	-	44
P12374	CITY HALL COOLING TOWERS STL FRAME REHAB	57,573	49,861	-	-	-	-	-	57,573
P12198	CITY HALL SECURITY IMPROVEMENTS	1,947	1,947	-	-	-	-	-	1,947
P11825	MARINE FACILITIES MAINTENANCE	31,915	1	-	-	-	-	-	31,915
P12267	DSD BUILDING - COOLING SYSTM REPLACEMENT	501	1	-	-	-	-	-	501
P12018	MEDIAN BEAUTIFICATION - ENTRYWAY SIGNS	1,608	1,608	-	-	-	-	-	1,608
P10918	NEW FIRE STATION 13	53,726	53,726	**3,948,354**	-	-	-	-	4,002,080
P11715	LAS OLAS ISLES UNDERGROUNDING UTILITIES	1	1	-	-	-	-	-	1
P12326	SHADY BANKS ENTRYWAY	82,596	82,596	-	-	-	-	-	82,596
P12450	SEBASTIAN STREET PLAYGROUND REPLACEMENT	32,077	18,692	-	-	-	-	-	32,077
P12341	MILLS POND PARK BOAT RAMP REPLACEMENT	32,037	(6,132)	-	-	-	-	-	32,037
P12472	COCONUT ISLE DRIVE MILLING & RESURFACING	6,900	6,900	-	-	-	-	-	6,900
P12369	RIVERWALK FLOATING DOCKS PHASE I	24,241	5,330	-	-	-	-	-	24,241
P12308	PILING REPLACEMENTS ALONG NEW RIVER	62,121	62,121	-	-	-	-	-	62,121
P12370	BILL KEITH PRESERVE SHORELINE STABILIZTN	12,535	-	-	-	-	-	-	12,535
P11714	IDLEWYLD UNDERGROUNDING OF UTILITIES	35,607	12,847	-	-	-	-	-	35,607
P12440	NW 15TH AVE TWIN LAKES ROAD CLOSURE	50,000	50,000	-	-	-	-	-	50,000
P10909	SE FIRE STATION DESIGN & CONSTRUCTION	165,013	108,777	-	-	-	-	-	165,013
P12085	FACILITY MAINTENANCE PRIORITIES	40,546	40,546	-	-	-	-	-	40,546
P12377	TARPON RIV TRAFFIC CALMING IMPROVEMENTS	20,483	5,081	-	-	-	-	-	20,483
P12297	CARTER PARK STORMWATER IMPROVEMENTS	36,883	1	-	-	-	-	-	36,883
P11963	2014 NCIP LAUDERDALE MANORS DECO ST SIGN	32,243	1,831	-	-	-	-	-	32,243
P12201	COONTIE HATCHEE PARK LAGOON	14,608	1	-	-	-	-	-	14,608
P12328	SOUTHEAST EMERGENCY MEDICAL SUB-STATION	1,864,434	1,864,434	-	**3,129,153**	-	-	-	4,993,587
P11608	2010 NCIP RIVER GARDEN/ SWEETING MONUMEN	26,774	26,774	-	-	-	-	-	26,774
P11802	2012 NCIP LAUDERDALE MANORS CROSSWALKS	25,000	-	-	-	-	-	-	25,000
P11607	2010 NCIP DILLARD PARK CURBING	150	150	-	-	-	-	-	150
P11725	DISTRICT TWO PARK	7,908	7,908	-	-	-	-	-	7,908
P11696	2011 NCIGP HARBOR BCH LANDSCAPED MEDIANS	12,252	12,252	-	-	-	-	-	12,252
P10914	NEW FIRE STATION 54	1	1	-	-	-	-	-	1
P11681	SR A1A STREETSCAPE IMPROVEMENTS	12,194	-	-	-	-	-	-	12,194
P11510	2009 NCIGP HARBOR BEACH HOA	11,620	11,620	-	-	-	-	-	11,620
P12065	777 BAYSHORE DRV STRMWTR IMPROVEMENTS	4	4	-	-	-	-	-	4
P11595	CENTRAL BCH WAYFINDING & INFO SIGNAGE	10,516	10,516	-	-	-	-	-	10,516
P11762	CONCRETE AND PAVER MAINTENANCE 2011/12	1	1	-	-	-	-	-	1
P12158	CORDOVA ROAD COMPLETE STREET PROJECT	159,735	159,735	-	-	-	-	-	159,735
P12091	CITY WAYFINDING & INFO SIGNAGE	8,372	8,372	-	-	-	-	-	8,372
P11811	MILLS POND PARK PLAYGROUND EQUIPMENT 12	7,307	7,307	-	-	-	-	-	7,307
P12447	ROADWAY REPAIR FACILITY	1,108	25	-	-	-	-	-	1,108

City of Fort Lauderdale

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P12045	CITYWIDE WATERWAY SURVEYS MASTERPLAN	837	837	-	-	-	-	-	837
P11632	RIVIERA ISLES UTILITIES UNDERGROUNDING	15	15	-	-	-	-	-	15
P12343	PARKER PLAYHOUSE RENOVATION	-	-	600,000	600,000	700,000	700,000	**700,000**	3,300,000
P12547	CITY-COUNTY JOINT GOVERNMENT CENTER CAMPUS	536	-	-	-	-	-	-	536
P12549	SEAWALL MAINTENANCE	873,352	491,680	~~**470,000**~~	~~**470,000**~~	~~**470,000**~~	~~**470,000**~~	-	873,352
P12544	POLICE K-9 TRAINING TRAILER	50,999	48,341	-	-	-	-	-	50,999
P12543	NCIP CITY MATCH	6,979	6,979		-	-	-	-	6,979
P12330	CITY OWNED SEAWALL RESTORATION/ REPLCMNT	1,049,345	1,049,345	**1,309,477**	**3,130,523**	**470,000**	**470,000**	**470,000**	6,899,345
P12597	NE 1ST STREET BRIDGE	209,759	209,759	1,206,325	-	-	1,759,698	-	3,175,782
FY20180622	SE 13TH STREET BRIDGE	-	-	-	705,180	-	-	**2,542,326**	3,247,506
FY20180620	BAYVIEW DRIVE BRIDGE OVER LONGBOAT INLET	-	-	-	146,300	1,074,500	-	-	1,220,800
FY 20200858	SE 8TH STREET BRIDGE REPLACEMENT	-	-	-	-	2,285,400	1,936,411	-	4,221,811
P12309	MELROSE PARK STREET LIGHTING	250,000	250,000	-	-	-	-	-	250,000
P11486	NW PROGRESSO	314	314	-	-	-	-	-	314
P12509	TEMPORARY FIRE STATION 13	209,674	148,183	-	-	-	-	-	209,674
P12510	PANTHERS WAR MEMORIAL IMPROVEMENTS	800,000	-	-	-	-	-	-	800,000
P11419	RIVEROAKS STORMWATER PARK	432,650	344,972	-	-	-	-	-	432,650
P12568	FIRE STATION 49 AND 53 HVAC REPLACEMENTS	64,197	64,197	-	-	-	-	-	64,197
FY20130199	CITY HALL ELEVATOR MAINTENANCE UPGRADE	-	-	-	-	-	2,851,000	-	2,851,000
FY 20210980	SE 9th AVE PEDESTRIAN CONNECTION	-	-	-	-	-	166,600	-	166,600
P12599	ADA-COMPLIANT BUS STOPS	100,000	33,294	**200,000**	-	-	-	-	300,000
P12600	TRAFFIC FLOW IMPROVEMENTS	200,000	200,000	**(200,000)**	175,972	500,000	-	-	675,972
FY 20210979	RIO VISTA SE 6TH AVE TRAFFIC CALMING	-	-	-	-	-	239,200	-	239,200
P12546	27 METER DIVE TOWER	698,478	-	-	-	-	-	-	698,478
P12575	CITY HALL 8TH FLOOR RENOVATIONS	97,500	47,954	-	-	-	-	-	97,500
P12586	LAKE RIDGE PLAN IMPLEMENTATION	59,844	57,234	-	-	-	-	-	59,844
P12592	FIRE-PUBLIC SAFETY CAPITAL ENHANCEMENTS	-	-	-	-	~~**2,200,000**~~	-	-	-
P12598	RIVERLAND ROAD TRAFFIC CALMING	200,000	3,430	~~**100,000**~~	-	-	~~**260,800**~~	-	200,000
P12578	POOL RESURFACING CARTER CROIS RIVERLND	189,391	189,391	-	-	-	-	-	189,391
FY20221050	BAYVIEW DRIVE NORTH BIKE LANES	-	-	-	-	-	40,000	-	40,000
FY20221052	SUNRISE LANE DISTRICT STREETSCAPES	-	-	-	-	-	220,800	-	220,800
FY20221063	LAS OLAS ISLES SIGNALIZED CROSSWALKS	-	-	**500,000**	-	-	-	-	500,000
P12639	CARTER PARK CONCESSION BLDG ROOF REPL	241,277	241,277	-	-	-	-	-	241,277
	General Capital Projects Fund (331) Total	**24,012,107**	**15,593,400**	**17,562,297**	**15,802,486**	**12,915,072**	**12,332,324**	**8,623,155**	**91,247,441**
Gas Tax Fund (332)									
P11945	ANNUAL ASPHALT CONCRETE RESURFACING	551,075	551,075	-	-	-	-	-	551,075
P12223	ANNUAL ASPHALT RESURFACING CONTRACT	1,313,659	812,200	~~**1,000,000**~~	~~**1,000,000**~~	~~**1,000,000**~~	~~**1,000,000**~~	-	1,313,659
P12301	ANNUAL MICROSURFACING	314,245	314,245	-	-	-	-	-	314,245
P12518	ANNUAL ASPHALT RESURFACING	-	-	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	5,000,000
P12517	ANNUAL CONCRETE & PAVER STONES CONTRACT	178,568	-	-	-	-	-	-	178,568
	Gas Tax Fund (332) Total	**2,357,547**	**1,677,520**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**7,357,547**
Fire Rescue Bond 2005 Series Fund (336)									
P10918	NEW FIRE STATION 13	4,500,606	3,829,509	-	-	-	-	-	4,500,606
P10909	SE FIRE STATION DESIGN & CONSTRUCTION	66,756	560	-	-	-	-	-	66,756
P10914	NEW FIRE STATION 54	60,474	8,437	-	-	-	-	-	60,474
	Fire Rescue Bond 2005 Series Fund (336) Total	**4,627,836**	**3,838,506**	**-**	**-**	**-**	**-**		**4,627,836**
EXCISE TAX BOND CONSTRUCTION 1998C (344)									
P11827	SEAWALL REPLACEMENT ALONG NEW RIVER	(16,539)	(16,539)	-	-	-	-	-	(16,539)
	Excise Tax Bond Construction 1998C (344) Total	**(16,539)**	**(16,539)**	**-**	**-**	**-**	**-**		**(16,539)**

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CRA Beach Fund (346)									
P12315	AQUATICS COMPLEX RENOVATIONS	2,721,966	1	-	-	-	-	-	2,721,966
P11900	LAS OLAS BLVD CORRIDOR IMPROVEMENTS	743,104	331,520	-	-	-	-	-	743,104
P11681	SR A1A STREETSCAPE IMPROVEMENTS	8,101,127	8,017,802	-	-	-	-	-	8,101,127
P12373	DC ALEXANDER PARK IMPROVEMENT PROJECT	124,846	96,503	-	-	-	-	-	124,846
P11595	CENTRAL BCH WAYFINDING & INFO SIGNAGE	378,120	370,710	-	-	-	-	-	378,120
P12546	27 METER DIVE TOWER	2,699,292	-	-	-	-	-	-	2,699,292
P12134	SIDEWALK AND PAVER REPLACEMENT	100,000	-	-	-	-	-	-	100,000
	CRA Beach Fund (346) Total	**14,868,455**	**8,816,536**	**-**	**-**	**-**	**-**	**-**	**14,868,455**
CRA - Northwest Progresso Heights (NWPFH) Fund (347)									
P12096	SISTRUNK PHASE II UNDERGRND UTILITIES	3,178,929	3,178,929	-	-	-	-	-	3,178,929
P12166	OFF-STREET PARKING	2,075,708	2,071,201	-	-	-	-	-	2,075,708
P12097	NEW CARTER PARK SENIOR CENTER	2,065,505	2,065,505	-	-	-	-	-	2,065,505
P12443	SISTRUNK CROSSWALKS	435,441	419,258	-	-	-	-	-	435,441
P12427	MID-BLOCK FLASHING BEACON NW 9 AVE/NW 2	116,546	116,546	-	-	-	-	-	116,546
P12278	SWEETING PARK DOCK REPLACEMENT	3,049	1,371	-	-	-	-	-	3,049
P11608	2010 NCIP RIVER GARDEN/ SWEETING MONUMEN	35,000	35,000	-	-	-	-	-	35,000
P12507	NPF STREETSCAPE IMPROVEMENT PROJECT	500,000	159,625	-	-	-	-	-	500,000
P12621	PROVIDENT PARK IMPROVEMENTS	914,336	914,336	-	-	-	-	-	914,336
P12519	MADE TO MOVE FLAGLER GREENWAY	71,205	71,205	-	-	-	-	-	71,205
	CRA - Northwest Progresso Heights (NWPFH) Fund (347) Total	**9,395,719**	**9,032,976**	**-**	**-**	**-**	**-**	**-**	**9,395,719**
Central City CRA Fund (348)									
P12557	THE NE 4TH AVE COMPLETE STREET PROJECT	1,000,000	848,675	-	-	-	-	-	1,000,000
	Central City CRA Fund (348) Total	**1,000,000**	**848,675**	**-**	**-**	**-**	**-**	**-**	**1,000,000**
Park Impact Fees Fund (350)									
P12461	MILLS POND PARK ARTIFICIAL TURF	2,957,841	2,957,841	-	-	-	-	-	2,957,841
P11900	LAS OLAS BLVD CORRIDOR IMPROVEMENTS	(292)	(292)	-	-	-	-	-	(292)
P12334	HOLIDAY PARK FIELD CONVERSION	171,264	171,264	-	-	-	-	-	171,264
P12452	FLORENCE C. HARDY PARK IMPROVEMENTS	1,346	1,346	-	-	-	-	-	1,346
P12058	LAS OLAS TUNNEL TOP PARK	1,518,278	1,518,278	-	-	-	-	-	1,518,278
P12201	COONTIE HATCHEE PARK LAGOON	51,548	-	-	-	-	-	-	51,548
P12460	BILL KEITH PRESERVE BOARDWALK EXTENSION	52,202	-	-	-	-	-	-	52,202
P12426	RIVERLAND ROAD PARK	259	259	-	-	-	-	-	259
P11813	BENNETT ELEMENTARY PLAYGROUND	52	52	-	-	-	-	-	52
FY 20190784	PARK IMPACT FEES - LAND ACQUISITION	-	-	-	-	-	8,000,000	-	8,000,000
P12315	AQUATICS COMPLEX RENOVATIONS	403,599	77,940	-	-	-	-	-	403,599
P11419	RIVEROAKS STORMWATER PARK	29,223	-	-	-	-	-	-	29,223
P12584	AQUATICS COMPLEX NORTH OBSERVATION DECK	3,079,201	-	-	-	-	-	-	3,079,201
P12373	DC ALEXANDER PARK IMPROVEMENT PROJECT	5,500,000	5,500,000	-	-	-	-	-	5,500,000
P12186	GEORGE ENGLISH PARK BOAT RAMP 2016	393,823	393,823	-	-	-	-	-	393,823
	Park Impact Fees Fund (350) Total	**14,158,344**	**10,620,511**	**-**	**-**	**-**	**8,000,000**	**-**	**22,158,344**
GO BOND 2019 CONSTRUCTION - POLICE STATION (Fund 352)									
P12573	NEW POLICE HEADQUARTERS	99,057,599	98,028,080	-	-	-	-	-	99,057,599
	GO Bond 2019 Construction - Police Station (Fund 352) Total	**99,057,599**	**98,028,080**	**-**	**-**	**-**	**-**	**-**	**99,057,599**
GO BOND 2020 CONSTRUCTION - PARKS (Fund 353)									
P12058	LAS OLAS TUNNEL TOP PARK	9,092,691	9,092,691	-	-	-	-	-	9,092,691
P12563	PROPERTY ACQUISITION PARKS BOND	11,262	10,975	-	-	-	-	-	11,262
P12553	HORTT PARK PLAYGROUND REPLACEMENT	21,171	16,385	-	-	-	-	-	21,171
P12555	COONTIE HATCHEE PARK PLYGRND REPLACEMENT	7,445	-	-	-	-	-	-	7,445
P12574	LOCKHART STADIUM COMMUNITY CENTER	18,012	18,012	-	-	-	-	-	18,012
P12500	VIRGINIA S YOUNG PARK	263,775	7,642	-	-	-	-	-	263,775

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Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
P12582	AQUATIC CENTER SOUTH BLDG REPLACEMENT	10,040,986	10,042,486	-	-	-	-	-	10,040,986
P12583	HECTOR PARK IMPROVEMENTS	59,939	2,033	-	-	-	-	-	59,939
FY20210005	FUTURE PARKS PROJECTS	35,678,116	35,678,116	~~40,000,000~~	**40,000,000**	40,000,000	40,000,000	-	155,678,116
P12623	DISTRICT 4 - SW 5TH CT AND SW 12TH AVE	24,139	24,139	-	-	-	-	-	24,139
P12632	JOSEPH C CATER PARK IMPROVEMENTS	1,360,000	1,360,000	-	-	-	-	-	1,360,000
P12633	HOLIDAY PARK IMPROVEMENTS	2,090,000	2,090,000	-	-	-	-	-	2,090,000
P12635	DISTRICT 3 - NW 6 STREET ACQUISITION	5,593	5,593	-	-	-	-	-	5,593
P12624	DISTRICT 1 - LOCKHART PARK	2,400,000	2,400,000	-	-	-	-	-	2,400,000
P12627	LAUDERTRAIL	4,999,650	4,767,150	-	-	-	-	-	4,999,650
	General Obligation Bond 2020 Construction - Parks (Fund 353) Total	**66,072,779**	**65,515,222**	**-**	**40,000,000**	**40,000,000**	**40,000,000**	**-**	**186,072,779**
SO BOND 2020 CONSTRCTN - UTILITY UNDERGR (354)									
P11715	LAS OLAS ISLES UNDERGROUNDING UTILITIES	8,761,040	8,749,750	-	-	-	-	-	8,761,040
	Special Obligation Bond 2020 Construction - Utility Undergroudning (354) Total	**8,761,040**	**8,749,750**	**-**	**-**	**-**	**-**	**-**	**8,761,040**
Sanitation Fund (409)									
P12235	LAND & ASSET MANAGEMENT SYSTEM PROJECT	8,789	8,789	-	-	-	-	-	8,789
FY20180635	PLANT A AND FORMER TRASH TRANSFER STATION REMEDIATION	-	-	**-**	**900,000**	-	-	-	900,000
FY20180603	PLANT A STORMWATER TREATMENT FACILITY UPGRADES	-	-	255,151	-	-	-	-	255,151
	Sanitation Fund (409) Total	**8,789**	**8,789**	**255,151**	**900,000**	**-**	**-**	**-**	**1,163,940**
Central Region/Wastewater Fund (451/458)									
P11781	GTL WWTP CRYOGENIC PLANT UPGRADES	15,685,051	1,157,024	-	-	-	-	-	15,685,051
P12176	GTL MOTOR CONTROL CENTERS REHABILITATION	3,580,346	809,075	~~3,761,951~~	~~3,721,720~~	**6,025,133**	**6,551,861**	**326,861**	16,484,201
P11773	GTL PLANT REHABILITATION OF PCCP PIPE	4,864,720	4,309,065	-	-	-	-	-	4,864,720
P11917	GTL REACTOR 1 & OXYGEN BLDG MCC ELEC UPG	3,179,197	175,000	-	-	-	-	-	3,179,197
P12251	CLARIFIER PIPE REPLACEMENT	1,235,600	1,235,600	-	-	-	-	-	1,235,600
P00401	REGIONAL REPLACEMENT/RECAPITALIZATION	209,622	209,622	**545,143**	**366,181**	**3,254,449**	**1,061,491**	**5,684,385**	11,121,271
P12451	UNDRGRND INJECTION CONTROL (UIC) PERMITS	1,700,000	1,700,000	-	-	-	-	-	1,700,000
P12252	GEORGE T LOHMEYER INTERIOR PAINTING	1,398,720	1,398,720	-	-	-	-	-	1,398,720
P12348	GTL EFFLUENT PUMPS REPLACEMENT	3,041,035	1,589,469	-	-	-	-	-	3,041,035
P12438	FREIGHT ELEVATOR REPLACEMENT - GTL WWTP	1,144,992	260,327	-	-	-	-	-	1,144,992
P12172	ELECTRICAL MAINTENANCE	323,866	323,866	-	-	-	-	-	323,866
P12170	GTL CONCRETE RESTORATION	466,934	466,934	-	-	-	-	-	466,934
P12171	BUTLER BUILDING UPGRADE AT GTL WELLFIELD	439,193	114,767	-	-	-	-	-	439,193
P12169	GTL ODOR CONTROL SYSTEM	2,897,802	2,897,801	**-**	**2,321,234**	-	-	-	5,219,036
P12190	UTILITIES ASSET MANAGEMENT SYSTEM	510,613	404,896	**139,828**	**54,200**	~~37,281~~	~~37,281~~	-	704,641
P12114	ELECTRICAL/ SCADA EVALUATION	369,157	369,157	-	-	-	-	-	369,157
P11854	REGIONAL WASTEWATER METER REPLACEMENT	204,814	204,680	-	-	-	-	-	204,814
P12375	PROG MGMT OF CONSENT ORDER PROJECTS	261,449	1	-	-	-	-	-	261,449
P12255	GEORGE T LOHMEYER EXTERIOR PAINTING	271,380	254,862		**314,553**	-	-	-	585,933
P12468	GTL CHLORINE SCRUBBER	-	-		**429,524**				429,524
P12532	REDUNDANT EFFLUENT PIPELINE TO WELLFIELD	-	-	-	-	~~2,500,000~~	~~2,500,000~~	-	-
P12528	GTL CHLORINE FLASH MIX REMODEL	3,060,093	2,704,594	-	-	-	-	-	3,060,093
P12529	EFFLUENT PUMPS STANDBY GENERATOR & ADMIN BLDG IMPROVEMEN	478,887	478,884	**13,695,566**	~~6,236,270~~	~~4,363,730~~	~~2,763,730~~	-	14,174,453
P12530	DEEPWELL ELECTRIC POWER, INSTRUMENTATION & CONTROL	2,311,000	2,295,566	-	-	-	-	-	2,311,000
P12601	GTL ROADWAY RESURFACING	200,000	200,000	-	-	-	-	-	200,000
FY 20200864	GEORGE T. LOHMEYER (GTL) BELT PRESSES	-	-	-	-	~~1,427,401~~	~~1,708,297~~	**1,852,048**	1,852,048
P12384	NE 38TH ST 42" FM & NE 19TH AV 24" FM	-	-	~~2,632,875~~	**8,135,931**	**300,000**	-	-	8,435,931
P12383	NE 25th AVE 24 FOR MAIN REPLACEMENT	1,277,249	1,277,249	**86,104**	~~715,549~~	~~737,014~~	~~759,125~~	-	1,363,353
P12512	GTL CHLORINE BUILDING ROOF REPLACEMENT	10,818	10,818	-	-	-	-	-	10,818
P12566	REDUNDANT SEWER FM NORTH TO GTL WWTP	814,017	344,563	-	-	-	-	-	814,017
P12572	RIO VISTA TARPON RVR SUBAQUEOUS REDUN FM	413,495	191,828	-	-	-	-	-	413,495
FY 20150275	FLORIDA DEPARTMENT ENVIRONMENTAL PROTECTION PERMIT	-	-	228,498	-	-	-	-	228,498
P12387	EFFLUENT MAIN REHABILITATION	-	-	~~2,100,000~~	**1,499,715**	-	-	-	1,499,715
P12602	GTL BUILDING INRATRUCTURE REPLACEMENT	44,732	44,732	200,000	200,000	-	-	-	444,732

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Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
FY 20210959	DEEPWELL MECHANICAL INTEGRITY TESTING & PIPE REPLACEMENT	-	-	-	297,663	**1,200,000**	-	-	1,497,663
FY 20221034	GTL SLUDGE HOLDING TANK COVERS AND ROOF	-	-	**196,822**	**1,188,143**	**-**	**-**	**-**	1,384,965
FY 20221035	GTL SLUDGE PUMP REHAB	-	-	-	-	**-**	**446,907**	**2,446,225**	2,893,132
FY 20221037	SLUDGE FLOW METER REPLACEMENT	-	-	**250,000**	**-**	**250,000**	**-**	**-**	500,000
FY 20221038	SECONDARY SERVER ROOM	-	-	-	**-**	**100,000**	**100,000**	**100,000**	300,000
FY 20221041	GTL CLARIFIER REHABILITATION	-	-	-	**-**	**840,968**	**3,496,568**	**4,381,768**	8,719,304
FY 20221042	GTL REACTOR REHABILITATION	-	-	-	**300,000**	**3,625,843**	**3,375,000**	**-**	7,300,843
FY 20170517	GTL GRIT PUMPS REPLACEMENT	-	-	-	-	-	-	**59,214**	59,214
FY 20170520	GTL SLUDGE HOLDING TANK DECANTING	-	-	-	-	-	-	**284,227**	284,227
P12593	RIO VISTA WM & ROADWAY IMPROVEMENTS	1,022,683	25,484	-	-	-	-	-	1,022,683
	Central Region/Wastewater Fund (451/458) Total	**51,417,465**	**25,454,584**	**15,341,961**	**15,107,144**	**15,596,393**	**15,031,827**	**15,134,728**	**127,629,518**
Water Expansion/Impact Fee Fund (452)									
P12564	C-51 RESERVOIR	-	-	**1,800,000**	-	-	-	-	1,800,000
	Water Expansion/Impact Fee Fund (452) Total	**-**	**-**	**1,800,000**	**-**	**-**	**-**	**-**	**1,800,000**
Sewer Expansion/Impact Fee Fund (453)									
P12605	NEW PUMPING STATION FLAGLER VILLAGE A-24	-	-	**900,000**	-	-	-	-	900,000
	Sewer Expansion/Impact Fee Fund (453) Total	**-**	**-**	**900,000**	**-**	**-**	**-**	**-**	**900,000**
Water/Sewer Master Plan Fund (454)									
P11991	DOWNTOWN SEWER BASIN PS A-7 REHABILITION	6,007,604	1,149,641	-	-	-	-	-	6,007,604
P11901	VICTORIA PK STH SM WATERMAINS IMPROVEMNT	463,907	22,436	-	-	-	-	-	463,907
P12055	BASIN A-18 SANITARY SWR COLL SYSTM REHAB	1,315,117	910,659	-	-	-	-	-	1,315,117
P12133	PUMP STN A-13 REDIRECTION E OF FEDERAL	326,270	260,903	-	-	-	-	-	326,270
P11887	NW SECOND AVE TANK RESTORATION	95,987	22,292	-	-	-	-	-	95,987
P12485	FIVEASH WTP FILTERS REHABILIATION	887,902	48,189	-	-	-	-	-	887,902
P12462	CORAL RIDGE SMALL WATERMAIN IMPROVEMENTS	65,056	65,056	**240,000**	**60,000**	-	-	-	365,056
P12294	FIVEASH WTP ELECTRICAL VOLTAGE UPGRADE	866,490	554,469	-	-	-	-	-	866,490
P11566	RIO VISTA SEWER BASIN D-43 REHAB	1,260,419	341,886	-	-	-	-	-	1,260,419
P12413	FM FROM PUMP STN D-35 TO D-36 UPSIZE	608,057	207,179	-	-	-	-	-	608,057
P12190	UTILITIES ASSET MANAGEMENT SYSTEM	1,222,981	844,015	**501,739**	**302,817**	~~**133,773**~~	~~**133,773**~~	-	2,027,537
P12463	CORAL SHORES SML WATERMAIN IMPROVEMENTS	617,758	443,684	-	-	-	-	-	617,758
P12272	CITYWIDE FM VLV & AIRE RELEASE VLV REHAB	834,578	834,578	**(834,578)**	-	-	-	-	-
P12484	REFURB FIVEASH WTP MG STEEL TANK (NORTH)	1,458,835	485,429	-	-	-	-	-	1,458,835
P12428	CYPRESS CRK RD INFLOW & INFILTRATION REH	255,264	183,099	**(255,264)**	-	-	-	-	-
P12180	CROISSANT PARK SMALL WATER MAINS	128,272	128,272	-	-	-	-	-	128,272
P12429	RENO 6300 NW 21 AVE METER SHOP RELOCATIO	599,416	599,416	-	-	-	-	-	599,416
P12465	HARBOR BEACH SEWER BASIN D-34 REHAB	-	-	**851,450**		-	-	-	851,450
P12295	PLE DIXIE AIR STRIPPERS & HYPOCHOLORITE	182,843	-	-	-	-	-	-	182,843
P12375	PROG MGMT OF CONSENT ORDER PROJECTS	1,013,442	158,728	-	-	-	-	-	1,013,442
P12476	FIVEASH WELLFIELD PUMP REPLACEMENT	513,610	55,146	**500,914**	~~**500,000**~~	~~**500,000**~~	~~**500,000**~~	-	1,014,524
P12464	TARPON RIVER A-11 SEWER BASIN REHAB	1,390,473	1,390,473	**1,046,845**	~~**500,000**~~	~~**500,000**~~	~~**500,000**~~	-	2,437,318
P12178	UTILITIES STORAGE BUILDING(STEEL PREFAB)	8,604	8,604	-	-	-	-	-	8,604
P11882	PUMP STATION B-22 REHABILITATION	1,204,209	508,613	-	-	-	-	-	1,204,209
P11563	VICTORIA PARK SEWER BASIN A-19 REHAB	309,779	1	-	-	-	-	-	309,779
P12049	FLAGLER HEIGHTS SWR BASIN A-21 LATERALS	768,568	768,568	-	-	-	-	-	768,568
P12412	PUMP STATIONS A-16 UPGRADE	1,719,107	1,616,333	-	-	-	-	-	1,719,107
P12410	PUMP STATIONS C-1 & C-2 REPLACEMENT	160,205	100,684	**772,522**	~~**1,375,000**~~	-	-	-	932,727
P12259	PUB WRKS ADMIN BUILDING AIR CONDITIONING	2,504,998	2,391,023	-	-	-	-	-	2,504,998
P12051	CONTRACT SUPERVISORY CNTRL & DATA ACQUIS	147,417	76,942	-	-	-	-	-	147,417
P10850	VICTORIA PARK A NORTH-SMALL WATERMAINS	875	875	-	-	-	-	-	875
P11589	FIVEASH WTP DISINFECTION IMPROVEMENTS	36,322	28,472	-	-	-	-	-	36,322
P11080	PORT CONDO SMALL WATER MAIN IMPROVEMENTS	12,183	12,183	-	-	-	-	-	12,183
P12446	PUBLIC WORKS JOINT FACILITY	1,962,474	1,961,223	~~**475,000**~~	-	-	-	-	1,962,474

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Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
P12202	LIFT STATN D-11 FLOW ANALYSIS & REDESIGN	987	987	-	-	-	-	-	987
P11664	BASIN B-6 SANITARY SEWER SYSTEM REHAB	-	-	**2,000,000**		-	-	-	2,000,000
P12235	LAND & ASSET MANAGEMENT SYSTEM PROJECT	1,253	1,253	-	-	-	-	-	1,253
P12435	BREAKERS AVENUE STREETSCAPE IMPROVEMENTS	986,396	986,396	-	-	-	-	-	986,396
P12537	FIVE-ASH WELLFIELD WEST GENERATOR REPLACEMENT	650,000	650,000	**(650,000)**	-	-	-	-	-
P12526	UTILITIES EMERGENCY OPERATIONS CENTER & ADMINISTRATION	284,621	284,621	**1,881,839**		-	-	-	2,166,460
P12296	NEW UTILITIES CENTRAL LABORATORY-PEELE DIXIE WATER	179,500	179,500	**2,442,882**	~~**359,500**~~	~~**1,229,000**~~	-	-	2,622,382
P12525	UTILITIES CENTRAL WAREHOUSE	992,062	992,062	-	-	-	-	-	992,062
P12538	SOIL MITIGATION AT SLUDGE PIT PROPERTY	100,000	100,000	-	-	-	-	-	100,000
P12401	PROSPECT WELLFIELD BONDING AND GROUNDING TESTING	97,216	97,216	-	-	-	-	-	97,216
P12531	NORTH NEW RIVER DRIVE EAST	452,770	452,770	-	-	-	-	-	452,770
P12527	CONVERSION OF BACK WASH PUMP	195,551	3		-	-	-	-	195,551
P12536	PEELE DIXIE WTP INJECTION WELL MECHANICAL INTEGRITY	4,703	4,703	-	-	-	-	-	4,703
P12534	FIVEASH WTP-SLUICE GATES REPLACEMENT	18,128	18,128	~~**200,000**~~	~~**200,000**~~	-	-	-	18,128
P12533	FIVEASH WTP-DIESEL BLDG SOUND PROOF CEILING PANEL	20,000	20,000	-	~~**100,000**~~	-	-	-	20,000
P12393	FIVEASH ELECTRICAL SYSTEM REPLACEMENTS (2015-2020)	2,438,138	2,191,193	~~**2,438,834**~~		-	**2,561,434**	-	4,999,572
P12399	FIVEASH WTP PCCP REPLACEMENT	-	-	~~**567,947**~~	~~**567,947**~~	-	-	-	-
P12403	PEELE-DIXIE WTP CHEMICAL STORAGE IMPROVEMENTS	-	-	-	**1,244,776**	-	-	-	1,244,776
P12405	UTILITIES WIDE AREA NETWORK SCADA IMPROVEMENTS	-	-	-	~~**3,689,710**~~	~~**2,849,230**~~	-	-	-
FY 20150184	CORAL RIDGE COUNTRY CLUB SMALL WATERMAIN	-	-	-	-	~~**380,000**~~	-	**572,640**	572,640
FY 20150185	SEA RANCH LAKES SMALL WATER MAINS	-	-	-	**1,806,053**	**1,806,053**	-	-	3,612,106
FY 20150187	LAUDERDALE BY THE SEA SMALL WATER MAIN IMPROVEMENTS	-	-	-	-	~~**300,000**~~	-	**320,801**	320,801
FY 20190722	WELLFIELD COMMUNICATIONS	-	-	~~**300,000**~~	~~**400,000**~~	**300,000**	**400,000**	**100,000**	800,000
FY 20150189	LAKE AIRE PALM VIEW SMALL WATER MAINS	-	-	-	-	**465,792**	**605,680**	-	1,071,472
P12603	CONVERSION OF FOUR HIGH SERVICE PUMPS TO VFD	150,000	150,000	~~**250,000**~~	~~**100,000**~~	-	-	-	150,000
P12417	MISCELLANEOUSE WATER QUALITY IMPROVEMENTS	69,000	69,000	-	-	-	-	-	69,000
FY 20190735	MEMBRANE CLEANING SYSTEM UPGRADE	-	-	-	-	-	~~**100,000**~~	-	-
FY 20190731	A-32, B-16, E-6, AND E-7 PUMPING STATION REPLACEMENT	-	-	-	~~**572,384**~~	-	-	-	-
FY 20190764	SEWER BASIN E-5 GRAVITY LINING	-	-	~~**550,504**~~	**102,618**	~~**500,000**~~	**1,468,756**	-	1,571,374
FY 20190739	SW 11 STREET & SW 30 AVENUE SMALL WATER MAIN REPLACEMENT	-	-	-	~~**1,082,021**~~	-	-	-	-
FY 20200836	CORDOVA ROAD WATERMAIN	-	-	-	~~**200,028**~~	-	-	**197,028**	197,028
FY 20150204	DURRS A-23 SEWER BASIN LATERALS	-	-	-	-	~~**590,128**~~	-	-	-
FY 20190746	SMALL WATER MAIN REPLACEMENT - SEABREEZE BLVD	-	-	-	-	-	**828,024**	**5,635,336**	6,463,360
FY 20150176	SW 29 STREET SMALL WATERMAINS	-	-	-	-	**448,872**	-	-	448,872
FY 20190747	SMALL WATER MAIN REPLACEMENT - SW 10TH COURT	-	-	-	-	-	**473,898**	-	473,898
P11465	17TH STREET CAUSEWAY - LARGE WATER MAIN REPLACEMENT	183,130	183,130	**397,384**	~~**980,888**~~	~~**1,010,315**~~	~~**1,040,624**~~	-	580,514
P12604	SMALL WATER MAIN REPLACEMENT - HENDRICKS ISLE	1,075,132	1,005,237	**537,262**	-	-	-	-	1,612,394
P12605	NEW PUMPING STATION FLAGLER VILLAGE A-24	269,382	144,506	**757,079**	-	-	-	-	1,026,461
FY 20200837	PIER SIXTY-SIX WATER MAIN	-	-	-	-	~~**140,020**~~	-	**140,020**	140,020
P12416	WATERMAIN IMPROVEMENTS AREA 1	-	-	-	-	**1,272,510**	-	-	1,272,510
P12388	NW 13TH ST 24 FORCE MAIN REPLACEMENT	3,701,996	3,634,009	-	-	~~**2,273,805**~~	~~**6,251,391**~~	-	3,701,996
FY 20190755	SMALL WATER MAIN REPLACEMENT - SW 37 TERRACE	-	-	-	-	-		**350,000**	350,000
P12606	CORAL RIDGE COUNTRY CLUB ESTATES B11 BASIN REHAB	232,543	232,543	**900,000**	~~**500,000**~~	~~**500,000**~~	~~**500,000**~~	-	1,132,543
FY 20150214	LAS OLAS ISLED D37 BASIN REHAB	-	-	~~**950,000**~~	**325,025**	~~**950,000**~~	~~**950,000**~~	-	325,025
P12607	CORAL RIDGE B-4 SEWER BASIN REHAB	122,677	122,677	~~**1,600,000**~~	~~**500,000**~~	-	-	350,000	472,677
FY 20190730	SEWER BASIN E-6 GRAVITY LINING	-	-	~~**226,992**~~	-	-	-	-	-
P12390	16 FORCE MAIN ALONG LAS OLAS BLVD PHASE 2	1,755,423	1,753,524	-	-	-	-	-	1,755,423
FY 20150182	POINSETTIA DR. SMALL WATERMAIN IMPROVEMENTS	-	-	-	**395,526**	**3,433,057**	-	-	3,828,583
FY 20150202	RIVER OAKS A-12 SEWER BASIN LATERALS	-	-	-	-	-	~~**4,315,839**~~	-	-
P12408	FORCE MAIN (FROM PUMP STATION A-54 TO A-10) UPSIZE	-	-	**430,254**	-	-	-	-	430,254
P12608	TRIPLEX PUMPING STATION REHABILITATION	364,199	364,199	~~**3,476,384**~~	~~**3,476,384**~~	~~**3,376,384**~~	~~**2,176,384**~~	-	364,199
FY 20150181	LAUDERHILL SMALL WATERMAINS IMPROVEMENTS	-	-	-	-	~~**2,266,583**~~	-	**465,826**	465,826
FY 20190750	SMALL WATER MAIN REPLACEMENT - NORTH GORDON ROAD	-	-	-	-	-	~~**554,347**~~	**563,773**	563,773

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Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
P12184	DAVIE BLVD 18" WM ABAN I-95 TO SW 9 AVE	-	-	**1,553,817**	-	-	-	-	1,553,817
FY 20211001	REPUMP B TO GEORGE ENGLISH PARK 42' REHAB	-	-		-	-	-	**1,661,000**	1,661,000
FY 20190752	SMALL WATER MAIN ABANDONMENT - SE 25TH AVENUE	-	-	**385,157**	-	-	-	-	385,157
FY 20190751	PEELE DIXIE WATER TREATMENT PLANT DISTRIBUTION	-	-	-	-	-	~~403,563~~	-	-
FY 20150178	SW 1 STREET (SW 28 AVE THRU SW 29 AVE) WATER MAINS	-	-	-	-	-	-	**310,076**	310,076
FY 20150177	2535 NORTH FEDERAL HIGHWAY SMALL WATERMAINS	-	-	-	**425,794**	-	-	-	425,794
FY 20200866	BRIDGE PIPE ASSESSMENTS	-	-	-	-	-	~~280,000~~	-	-
P12581	PEELE DIXIE WTP FACILITY IMPROVEMENTS	435,000	435,000				-	-	435,000
FY 20150228	ANALYSIS OF CHEMICAL ADDITION SYTEMS-PEELE DIXIE	-	-	-	**104,000**	-	-	-	104,000
P10814	CENTRAL NEW RIVER W/MAIN RIVER CROSSING	690,006	690,006	**2,529,294**	-	-	-	-	3,219,300
P12564	C-51 RESERVOIR	13,747,600	13,728,735	**(1,800,000)**	-	-	-	-	11,947,600
P12389	18" FM RPL ACROSS NEW RVR FRM 9TH/ BIRCH	956,221	925,804	-	-	-	-	-	956,221
P12392	FIVEASH WTP ELECTRICAL STUDIES AND TESTING	250,000	250,000	**65,340**	~~118,600~~	-	-	-	315,340
P12609	BASIN D-36 SANITARY SEWER COLLECTION SYSTEM REHAB	328,608	328,608	-	-	-	-	-	328,608
P12610	BASIN B-23 SANITARY SEWER COLLECTION SYSTEM REHAB	296,694	296,694	-	-	**395,936**	**636,301**	-	1,328,931
P12611	BASIN A-29 SANITARY SEWER COLLECTION SYSTEM REHAB	297,564	297,564	-	-	-	-	-	297,564
FY 20221027	SE 25th AVE WATERMAIN REPLACEMENT	-	-	-	-	-	**1,321,866**		1,321,866
FY 20221040	REPLACE A/C BACK UNITY PEELE DIXIE MEMBRANE BLDG	-	-	**50,000**	-	-	-	-	50,000
FY 20221047	FIVEASH WELLFIELD ELECTRICAL UPGRADES	-	-	-	-	**450,000**	**2,567,000**	**1,333,500**	4,350,500
FY 20221048	HARDENING OF WASTEWATER GENERATORS	-	-	-	-		**2,015,000**	-	2,015,000
P12631	PROSPECT WELLFIELD DIESEL TANK REPLACMNT	440,000	440,000	-	-	-	-	-	440,000
P12554	PEELE DIXIE OLD PLANT ELECTR CONNECTION	63,086	63,086	-	-	-	-	-	63,086
	Water/Sewer Master Plan Fund (454) Total	**60,798,608**	**47,272,225**	**14,303,936**	**4,766,609**	**8,572,220**	**12,877,959**	**12,000,000**	**113,319,332**
Parking Fund (461)									
P11993	PARKING TECHNOLOGIES UPDATE	-	-	~~1,700,000~~	**1,700,000**	-	-	-	1,700,000
P12183	PARKING ADMIN & CITY PARK GARAGE REPAIRS	3,194,525	3,178,865	**2,775,000**	2,000,000	2,646,829	-	-	10,616,354
P12378	NORTH BEACH PARKING LOT	915,080	915,080	-	-	-	-	-	915,080
P12354	NORTH GALT SHOPS	1,008,250	502,716	~~275,000~~	-	-	-	-	1,008,250
P12091	CITY WAYFINDING & INFO SIGNAGE	943,019	943,019	-	-	-	-	-	943,019
P12315	AQUATICS COMPLEX RENOVATIONS	500,000	-	-	-	-	-	-	500,000
P12376	3RD AVE ON-STREET PARKING & STREETSCAPE	59,188	59,188	-	-	-	-	-	59,188
P12434	SW 2ND AVE MEDIAN PARKING	647,057	486,173	~~500,000~~	-	-	-	-	647,057
P11900	LAS OLAS BLVD CORRIDOR IMPROVEMENTS	36,500	36,500	-	-	-	-	-	36,500
P11660	PARKING ADMIN BLDG STRUCTURAL REPAIRS	19,533	19,533	-	-	-	-	-	19,533
P12235	LAND & ASSET MANAGEMENT SYSTEM PROJECT	917	917	-	-	-	-	-	917
P12638	CROSSROADS SPG CNTR PRKG LOT STRMWTR IMP	226,548	13,920	-	-	-	-	-	226,548
P12513	FTL BEACH PARKING LOTS IMPROVEMENTS	750,000	750,000	-	-	-	-	-	750,000
FY2021007	PARKING FACILITY REHABILITATION	-	-	**1,000,000**	**1,500,000**	**2,000,000**	**2,000,000**	**2,000,000**	8,500,000
	Parking Fund (461) Total	**8,300,617**	**6,905,911**	**3,775,000**	**5,200,000**	**4,646,829**	**2,000,000**	**2,000,000**	**25,922,446**
Airport Fund (468)									
P12355	AIRPORT DRAINAGE IMPROVMENTS PHASE 1	2,026,753	1,987,621	-	-	-	-	-	2,026,753
P12358	FXE AIRFIELD SIGNAGE REPLACEMENT	1,472,763	290,798	-	-	-	-	-	1,472,763
P12189	AIRFIELD ELECTRICAL VAULT IMPROVEMENTS	478,306	478,306	-	-	-	-	-	478,306
P12289	EXECUTIVE AIRPORT PARKING LOT	(255)	(255)	-	-	-	-	-	(255)
P12243	TAXIWAY FOXTROT RELOCATION	3,124,968	318,808	-	-	-	-	-	3,124,968
P12290	AIRPORT U.S. CBP FACILITY CANOPY	13,808	13,808	-	-	-	-	-	13,808
P12459	PARCEL 21B NRA MITIGATION AND MAINTENANC	470,212	9,600	-	-	-	-	-	470,212
P12455	TAXIWAY INTERSECTION IMPROVEMENTS	1,080,000	1,080,000	-	-	-	-	-	1,080,000
P12261	FXE DWNTWN HELISTOP ELEVATOR REPLACEMENT	35,278	3	-	-	-	-	-	35,278
P12437	AIRPORT DECORATIVE STREET POSTS	24,106	24,106	-	-	-	-	-	24,106
P12444	FXE DESIGN TW INTERSECTION IMPROVMENTS	8,755	8,755	-	-	-	-	-	8,755
P12474	MID-FIELD TAXIWAY EXTENS AND RUN-UP AREA	970,319	727,288	**311,800**	**311,800**	-	-	-	1,593,919

City of Fort Lauderdale

Proposed FY 2022 - FY 2026 Community Investment Plan

Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
P12323	FTL EXECUTIVE MASTER DRAINAGE PERMIT	1,913	1,913	-	-	-	-	-	1,913
P12070	MASTER PLAN UPDATE	17,523	17,523	-	-	-	-	-	17,523
P12235	LAND & ASSET MANAGEMENT SYSTEM PROJECT	1,834	1,834	-	-	-	-	-	1,834
P12541	SECURITY AND ACCESS SYSTEM UPGRADE	600,000	600,000	-	-	-	-	-	600,000
P12521	RUNWAY 27 AND 13-31 BYPASS TAXIWAYS	238,650	238,650	**133,259**	-	-	-	-	371,909
P12522	RUNWAY 13 RUN-UP AREA	171,814	171,814	-	-	-	-	-	171,814
P12540	RUNWAY 27 BY-PASS TAXIWAYS	124,234	124,234	20,000	-	-		**30,000**	174,234
P12539	TAXIWAY GOLF PAVEMENT REHAB	71,408	71,408	**236,900**	-	-	-	-	308,308
P12612	RUNWAY 9 TAXIWAY INTERSECTION IMPROVEMENTS	22,000	22,000	~~**140,000**~~	-	-	-	-	22,000
FY 20200884	TAXIWAYS B & G REALIGNMENT	-	-	**420,900**	**12,500**	-	-	-	433,400
FY 20200886	RUNWAY 13-31 PAVEMENT SEALING	-	-	**104,400**	**11,600**	-	-	-	116,000
FY 20221079	RUNWAY 9 RUN-UP RELOCATION & SOUTH END TAXIWAYS	-	-	**312,196**				-	312,196
FY 20221095	ENVIRONMENTAL ASSESSMENT FOR RUNWAY 9 EXTENSION	-	-	-	**125,000**			-	125,000
P12520	RUNWAY INCURSION MITIGATION	2,342,021	1,416,386	-	-	-	-	-	2,342,021
FY 20210989	TAXIWAY L&P EXTENSION & RUN-UP AREA	-	-	-	-	**25,000**	**289,800**	-	314,800
P12356	AVIATION EQUIP & SERV FACILITY EXPANSION	3,660,579	3,573,779	-	-	-	-	-	3,660,579
FY 20210990	RUNWAY 9-27 PAVEMENT REHABILITATION PROJECT	-	-	-	**159,000**	**250,000**	~~**258,000**~~	-	409,000
FY 20210991	RUNWAY 9 WESTERN EXTENSION & PARALLEL TW EXTENSION	-	-	-	-	320,300	586,200	-	906,500
	Airport Fund (468) Total	**16,956,989**	**11,178,379**	**1,539,455**	**619,900**	**595,300**	**876,000**	**30,000**	**20,617,644**
Stormwater Fund (470)									
P12034	1416 SE 11 COURT STORMWATER IMPROVEMENTS	393,474	57,272	-	-	-	-	-	393,474
P12190	UTILITIES ASSET MANAGEMENT SYSTEM	951,501	814,917	**180,955**	**74,541**	~~**48,250**~~	~~**48,246**~~	-	1,206,997
P11419	RIVEROAKS STORMWATER PARK	710,997	304,455	-	-	-	-	-	710,997
P12264	DRAINAGE CANAL DREDGING	751,143	693,599	**275,000**	**371,372**	-	-	-	1,397,515
P12361	CITYWIDE CANAL DREDGING PLAN - CYCLE 1	870,519	870,519	-	-	-	-	-	870,519
P12020	HECTOR PARK STORMWATER IMPROVEMENTS	196,293	36,109	-	-	-	-	-	196,293
P12023	800-850 SW 21 TERR STORMWATER IMPROVMENT	296,675	296,675	-	-	-	-	-	296,675
P12074	SOUTHEAST ISLES TIDAL AND STRMWTR IMPR	136,886	957	-	-	-	-	-	136,886
P12028	4848 NE 23RD AVE STORMWATER IMPROVEMENTS	32,271	32,271	-	-	-	-	-	32,271
P12043	2449 BIMINI LN STORMWATER IMPROVMENTS	116,571	113,429	-	-	-	-	-	116,571
P11869	CITYWIDE STORMWATER ANALYSIS	313,726	313,726	50,000	**500,000**	50,000	50,000	-	963,726
P12082	VICTORIA PARK TIDAL & STRMWTR IMPROVMENT	119,315	102,668	-	-	-	-	-	119,315
P12022	700-1000 W LAS OLAS BLVD STORMWATER	10,552	7,546	-	-	-	-	-	10,552
P11842	EDGEWOOD STORMWATER IMPROVEMENTS	107,295	95,143	-	-	-	-	-	107,295
P12031	500 BLCK SW 9TH TERR STORMWATER IMPROVEM	26,954	26,954	-	-	-	-	-	26,954
P12118	SURVEY FOR CITYWIDE STRMWTR MODEL	100,000	100,000	-	-	-	-	-	100,000
P12191	DRAINAGE CANAL SURVEYING AND ASSESSMENT	218,128	218,128	-	-	-	-	-	218,128
P11844	DURRS AREA STORMWATER IMPROVEMENTS	75,082	64,507	-	-	-	-	-	75,082
P11868	RIVER OAK STORMWATER ANALYSIS	70,064	51,053	-	-	-	-	-	70,064
P12065	777 BAYSHORE DRV STRMWTR IMPROVEMENTS	57,736	57,736	-	-	-	-	-	57,736
P12478	STORMSTATION 1 FIXED EMERG GENERATORS	497,521	460,844	-	-	-	-	-	497,521
P12479	STORMSTATION 2 FIXED EMERG GENERATORS	414,813	378,775	-	-	-	-	-	414,813
P11843	PROGRESSO STORMWATER IMPROVEMENTS	48,113	33,189	-	-	-	-	-	48,113
P11845	DORSEY RIVERBEND STORMWATER IMPROVEMENTS	45,636	35,061	-	-	-	-	-	45,636
P12123	EOC DATA ROOM AT FIRE STATION 53	18,000	18,000	-	-	-	-	-	18,000
P12045	CITYWIDE WATERWAY SURVEYS MASTERPLAN	19,316	19,316	-	-	-	-	-	19,316
P12446	PUBLIC WORKS JOINT FACILITY	1,749,836	1,748,585	-	-	-	-	-	1,749,836
P12435	BREAKERS AVENUE ROAD IMPROVEMENTS	1,076,396	1,076,396	-	-	-	-	-	1,076,396
P12523	1716 SE 7TH STREET STORMWATER IMPROVEMENTS	347,147	347,147	-	-	-	-	-	347,147
P12524	32-101 S. GORDON ROAD STORMWATER IMPROVEMENTS	86,143	86,143	-	-	-	-	-	86,143
FY20180604	BAYVIEW DR. FROM SUNRISE BLVD.TO OAKLAND PARK BLV	-	-	**322,000**	**473,000**	-	-	-	795,000

City of Fort Lauderdale

Proposed FY 2022 - FY 2026 Community Investment Plan

Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
P12613	DOWNTOWN TIDAL VALVES - #1-10	319,708	319,708	-	-	-	-	-	319,708
P12614	3032 NE 20 COURT STORMWATER IMPROVEMENTS	188,284	150,823	-	-	-	-	-	188,284
P12615	1544 ARGYLE DRIVE STORMWATER IMPROVEMENTS	206,068	192,978	**275,969**	-	-	-	-	482,037
P12616	NE 16TH STREET STORMWATER IMPROVEMENTS	281,481	252,738	-	-	-	-	-	281,481
P12617	1801 NE 45TH STREET STORMWATER IMPROVEMENTS	91,803	91,803	**245,000**	-	-	-	-	336,803
FY 20200823	NW 21ST AVENUE PIPE REHABILITATION	-	-	**1,210,000**	-	-	-	-	1,210,000
FY20180606	DOWNTOWN TIDAL VALVES - #11-19	-	-	**305,000**	-	-	-	-	305,000
FY20180616	DOWNTOWN TIDAL VALVES - #43-54	-	-	**220,000**	-	-	-	-	220,000
FY20180605	DOWNTOWN TIDAL VALVES - #30-42	-	-	**292,000**	-	-	-	-	292,000
FY 20200820	NE 7TH STREET AND NE 2ND AVE STORMWATER IMPROVEMENTS	-	-	~~**303,600**~~	-	-	-	-	-
FY20180610	DOWNTOWN TIDAL VALVES - #20-29	-	-	212,000	-	-	-	-	212,000
FY20180617	DOWNTOWN RIVERWALK DISTRIC TIDAL VALVES - HIMMARSHEE STREET	-	-	209,000	-	-	-	-	209,000
FY 20190773	MELROSE MANORS NEIGHBORHOOD IMPROVEMENTS	-	-	-	1,395,000	-	-	-	1,395,000
FY 20200824	NE 4TH STREET DRAINAGE IMPROVEMENTS	-	-	-	-	**450,000**	-	-	450,000
FY 20200822	NE 11TH CT. AND SEMINOLE DR. STORMWATER IMPROVEMENTS	-	-	-	**376,000**	~~**50,000**~~	-	-	376,000
FY 20190774	SAILBOAT BEND STORMWATER IMPROVEMENTS	-	-	-	**132,000**	**500,000**	-	-	632,000
FY 20190772	RIVERLAND ROAD STORMWATER IMPROVEMENTS	-	-	-	**132,000**	**718,250**	-	-	850,250
FY 20190771	NE 32 AVENUE AND NE 30TH STREET	-	-	-	**87,000**	**500,000**	-	-	587,000
FY 20200825	HOLLY HEIGHTS DR STORMWATER IMPROVEMENTS	-	-	-	**87,000**	351,000	-	-	438,000
FY 20200827	SE 1 & 2 STREETS, WEST OF US1 STORMWATER IMPROVEMENTS	-	-	-	**154,000**	455,000	-	-	609,000
FY 20200818	TARPON RIVER STORMWATER IMPROVEMENTS	-	-	-	-	**500,000**		-	500,000
FY 20200819	HARBOR ISLES STORMWATER IMPROVEMENTS	-	-	-	-	**500,000**	-	-	500,000
FY 20200821	FLAGLER VILLAGE NEIGHBORHOOD IMPROVEMENTS	-	-	-	-	-	-	**600,000**	600,000
FY 20210943	NW 30th AVE AND NW 17TH CT STORMWATER IMPROVEMENTS	-	-	-	-	-	**336,000**	-	336,000
FY 20210944	NE 56TH STREET AMD 22ND AVENUE STORMWATER IMPROVEMENTS	-	-	-	-	-	625,000	-	625,000
FY 20210945	1390 SW 26TH TERRACE STORMWATER IMPROVEMENTS	-	-	-	-	-	**618,000**	-	618,000
FY 20210946	1641 SW 28 TERRACE STORMWATER IMPROVEMENTS	-	-	-	-	-	**340,000**	-	340,000
FY 20210947	2555 NE 11TH ST STORMWATER IMPROVEMENTS	-	-	-	-	-	**375,000**	-	375,000
FY 20210948	1435 SW 9TH STREET STORMWATER IMPROVEMENTS	-	-	-	-	-	**337,000**	-	337,000
FY 20210949	1200 SE 20 ST STORMWATER IMPROVEMENTS	-	-	-	-	-	**627,000**	-	627,000
FY 20210950	1343-1349 CHATEAU PARK DRIVE STORMWATER IMPROVEMENTS	-	-	-	-	-	**315,000**	-	315,000
FY 20210951	1161 SW 30 AVE STORMWATER IMPROVEMENTS	-	-	-	-	-	**445,000**	-	445,000
FY 20221018	POINSETTIA HEIGHTS NORTH SHORE NEIGHBORHOOD STORMWATER IM	-	-	-	-	-	-	**500,000**	500,000
FY 20221017	2420 AQUA VISTA BLVD STORMWATER IMPROVEMENTS	-	-	-	-	-	-	**363,182**	363,182
FY 20221016	IMPERIAL POINT NEIGHBORHOOD STORMWATER IMPROVEMENTS	-	-	-	-	-	-	**350,000**	350,000
FY 20221015	940 SW 8th STREET STORMWATER IMPROVEMENTS	-	-	-	-	-	-	**425,411**	425,411
FY 20221013	NW 57TH PLACE STORMWATER IMPROVEMENTS	-	-	-	-	-	-	**500,000**	500,000
FY 20221012	2175 NE 56 ST STORMWATER IMPROVEMENTS	-	-	-	-	-	-	**500,000**	500,000
FY 20221011	2060 RIVERLAND ROAD STORMWATER IMPROVEMENTS	-	-	-	-	-	-	**364,629**	364,629
FY 20221010	1410-1415 SW 24 COURT STORMWATER IMPROVEMENTS	-	-	-	-	-	-	**385,741**	385,741
	Stormwater Fund (470) Total	**10,945,447**	**9,469,170**	**3,796,924**	**3,781,913**	**4,024,250**	**4,068,000**	**3,988,963**	**30,605,497**
Stormwater Bond Construction Fund (473) *									
P12074	SOUTHEAST ISLES TIDAL AND STRMWTR IMPR	1,509,625	1,425,121	**42,430,000**	-	-	-	-	43,939,625
P11868	RIVER OAK STORMWATER ANALYSIS	37,580,682	34,283,344	-	-	-	-	-	37,580,682
P11842	EDGEWOOD STORMWATER IMPROVEMENTS	30,224,451	28,119,988	-	-	-	-	-	30,224,451
P11843	PROGRESSO STORMWATER IMPROVEMENTS	-	-	**26,990,000**	-	-	-	-	26,990,000
P11844	DURRS AREA STORMWATER IMPROVEMENTS	-	-	**20,890,000**	-	-	-	-	20,890,000
P11845	DORSEY RIVERBEND STORMWATER IMPROVEMENTS	-	-	**20,890,000**	-	-	-	-	20,890,000
P12082	VICTORIA PARK TIDAL & STRMWTR IMPROVMENT	-	-	**18,800,000**	-	-	-	-	18,800,000
	Stormwater Bond Construction Fund (473) Total*	**69,314,758**	**63,828,453**	**130,000,000**	**-**	**-**	**-**	**-**	**199,314,758**

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Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
Water & Sewer Master Plan 2017 Fund (495)									
P11589	FIVEASH WTP DISINFECTION IMPROVEMENTS	16,362,440	16,113,799	-	-	-	-	-	16,362,440
P12391	BERMUDA RIVIERA SML WTRMN IMPROVEMENTS	562,350	147,186	-	-	-	-	-	562,350
P11901	VICTORIA PK STH SM WATERMAINS IMPROVEMNT	20,329	1	-	-	-	-	-	20,329
P12404	EXCAVATE & DISPOSE OF DRY LIME SLUDGE	371,027	371,027	-	-	-	-	-	371,027
P12399	FIVEASH WTP PCCP REPLACEMENT	(3,132)	(3,132)	-	-	-	-	-	(3,132)
P11563	VICTORIA PARK SEWER BASIN A-19 REHAB	178,618	49,130	-	-	-	-	-	178,618
P10850	VICTORIA PARK A NORTH-SMALL WATERMAINS	18,167	-	-	-	-	-	-	18,167
P12388	NE 13TH ST 24" FORCE MAIN REPLACEMENT	2,693,267	-	-	~~3,313,560~~	-	-	-	2,693,267
P11566	RIO VISTA SEWER BASIN D-43 REHAB	977,299	695,064	-	-	-	-	-	977,299
P12390	16" FM ALONG LAS OLAS BLVD PHASE 2	105,501	94,481	-	-	-	-	-	105,501
P12389	18" FM RPL ACROSS NEW RVR FRM 9TH/ BIRCH	1,680,277	1	-	-	-	-	-	1,680,277
P12415	PUMP STATION A-7 UPGRADE	1,930,647	193,682	-	-	-	-	-	1,930,647
P12055	BASIN A-18 SANITARY SWR COLL SYSTM REHAB	484,992	336,677	-	-	-	-	-	484,992
P10814	CENTRAL NEW RIVER W/MAIN RIVER CROSSING	1,494,854	772,329	-	-	-	-	-	1,494,854
P12049	FLAGLER HEIGHTS SWR BASIN A-21 LATERALS	674,143	252,927	-	-	-	-	-	674,143
P12180	CROISSANT PARK SMALL WATER MAINS	237,407	237,407	-	-	-	-	-	237,407
P12414	GRAVITY PIPE IMPV TO DWNTWN COL SYSTM	2,955,098	2,372,327	-	-	-	-	-	2,955,098
P12375	PROG MGMT OF CONSENT ORDER PROJECTS	63,725	-	-	-	-	-	-	63,725
P12352	S MIDDLE RIVER FORCE MAIN RIVER CROSSING	1	1	-	-	-	-	-	1
P11080	PORT CONDO SMALL WATER MAIN IMPROVEMENTS	507,171	449,289	-	-	-	-	-	507,171
P12184	DAVIE BLVD 18" WM ABAN I-95 TO SW 9 AVE	1,777,808	1,722,204	-	-	-	-	-	1,777,808
P12413	FM FROM PUMP STN D-35 TO D-36 UPSIZE	110,446	44,476	-	-	-	-	-	110,446
P12133	PUMP STN A-13 REDIRECTION E OF FEDERAL	1	1	-	-	-	-	-	1
P12395	PEELE DIXIE ELECTRICAL STUDIES	164,772	138,939	-	-	-	-	-	164,772
P12400	PROSPECT WELLFIELD ELC STUDIES & TESTING	183,832	183,832	-	-	-	-	-	183,832
P12456	SEWER BASIN D-40 REHAB	159,273	79,495	-	-	-	-	-	159,273
P12402	PEELE DIXIE WELLFIELD ELC STUD & TESTING	114,116	93,768	-	-	-	-	-	114,116
P12396	PEELE DIXIE SURGE PROTECTION UPGRADES	76,458	62,383	-	-	-	-	-	76,458
P12202	LIFT STATN D-11 FLOW ANALYSIS & REDESIGN	31,412	11,162	-	-	-	-	-	31,412
P12463	CORAL SHORES SML WATERMAIN IMPROVEMENTS	1,105,926	-	-	-	-	-	-	1,105,926
FY 20150190	BAY COLONY SMALL WATER MAIN IMPROVEMENTS	-	-	-	**2,198,727**	-	-	-	2,198,727
FY 20150191	LAUDERGATE ISLES SMALL WATER MAIN IMPROVEMENTS	-	-	-	**931,662**	-	-	-	931,662
P12570	36TH STREET FORCE MAIN IMPROVEMENT	309,875	309,875	-	-	-	-	-	309,875
P11465	17TH STREET CAUSEWAY - LARGE WATER MAIN REPLACEMENT	-	-	-	**5,205,708**	-	-		5,205,708
P12609	BASIN D-36 SANITARY SEWER COLLECTION SYSTEM REHAB	-	-	-	**2,336,463**	-	-	-	2,336,463
P12628	INTERLOCAL AGREEMENT WITH POMPANO BEACH	299,455	-	-	-	-	-	-	299,455
P11664	BASIN B-6 SANITARY SEWER SYSTEM REHAB	-	-	-	**5,963,888**	-	-	-	5,963,888
P11864	BERMUDA RIVERA SEWER BASIN B-2	-	-	-	**4,102,806**	-	-	-	4,102,806
P11991	DOWNTOWN SEWER BASIN PS A-7 REHABILITION	2,000,000	2,000,000	-	~~4,864,984~~	-	-	-	2,000,000
P12397	WELL REHABILITATION	-	-	-	1,179,200	-	-	-	1,179,200
P12398	FIVEASH WTP GST AND CLEARWELL UPGRADES	-	-	-	850,000	-	-	-	850,000
P12405	UTILITIES WIDE AREA NETWORK SCADA IMPROVEMENTS	-	-	-	**11,522,294**	-	-	-	11,522,294
P12408	FORCE MAIN (FROM PUMP STATION A-54 TO A-10) UPSIZE	-	-	-	**1,962,484**	-	-	-	1,962,484
P12462	CORAL RIDGE SMALL WATERMAIN IMPROVEMENTS	-	-	-	~~3,800,685~~	-	-	-	-
FY 20150175	TWIN LAKES (NW) WATERMAIN	-	-	-	**630,530**	-	-	-	630,530
FY 20150212	VICTORIA PARK A-17 BASIN PUMP STATION REHAB	-	-	-	**6,635,002**	-	-	-	6,635,002
FY 20150214	LAS OLAS ISLED D37 BASIN REHAB	-	-	-	**7,013,252**	-	-	-	7,013,252
FY 20190730	SEWER BASIN E-6 GRAVITY LINING	-	-	-	**4,274,682**	-	-	-	4,274,682
FY 20190731	A-32, B-16, E-6, AND E-7 PUMPING STATION REPLACEMENT	-	-	-	**461,904**	-	-	-	461,904
FY 20190753	SMALL WATER MAIN REPLACEMENT - SW 18 ST & SW 18 CT	-	-	-	**361,144**	-	-	-	361,144

City of Fort Lauderdale

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Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
FY 20190754	SMALL WATER MAIN REPLACEMENT - SW 31ST AVENUE	-	-	-	**3,858,449**	-	-	-	3,858,449
FY 20150222	MIDDLE RIVER TERRACE A-27 SEWER SYSTEM REHAB	-	-	-	**6,080,255**	-	-	-	6,080,255
FY 20190716	FIVEASH WTP FILTERS REHABILITATION	-	-	-	~~**2,000,000**~~	-	-	-	-
FY 20190745	LAS OLAS PUMP STATION REHAB	-	-	-	**6,615,132**	-	-	-	6,615,132
FY 20190748	SMALL WATER MAIN REPLACEMENT - NE 51ST STREET	-	-	-	**7,334,504**	-	-	-	7,334,504
FY 20200838	RIVERLAND ROAD WATERMAINS	-	-	-	**4,846,842**	-	-	-	4,846,842
FY 20210965	BAYVIEW DRIVE 16-INCE FORCE MAIN REPLACEMENT/REHAB	-	-		**6,768,500**	-	-	-	6,768,500
FY 20210967	BASIN A-22 SANITARY SEWER COLLECTION SYSTEM REHAB	-	-	-	**4,583,816**	-	-	-	4,583,816
P12611	BASIN A-29 SANITARY SEWER COLLECTION SYSTEM REHAB	-	-	-	**4,433,898**	-	-	-	4,433,898
P12485	FIVEASH WTP FILTERS REHABILIATION	3,666,773	3,600,000	-	-	-	-	-	3,666,773
FY 20211001	REPUMP B TO GEORGE ENGLISH PARK 42" REHABILIATION	-	-	-	**29,631,345**	-	-	-	29,631,345
FY 20221044	PUMP STATION BASIN C2 SEWER GRAVITY REPLACEMENT	-	-		**10,000,000**	-	-	-	10,000,000
FY20221019	PUMP STATION A-7 REDUNDANT FORCEMAIN	-	-	-	**2,000,000**	-	-	-	2,000,000
FY20221024	NORTH ANDREWS FEC RAILWAY WATERMAIN REPLACEMENT	-	-	-	**380,366**	-	-	-	380,366
P12410	PUMP STATIONS C-1 & C-2 REPLACEMENT	611,126	611,126	-	-	-	-	-	611,126
P12412	PUMP STATIONS A-16 UPGRADE	2,989,734	2,989,734	-	-	-	-	-	2,989,734
P12618	DOLPHIN ISLES B-14 SEWER BASIN REHAB	361,694	361,694	-	**3,770,314**	-	-	-	4,132,008
P12619	BAYVIEW DR 16" FM TO PUMP STATION B-14	2,562,692	2,399,984	-	-	-	-	-	2,562,692
P12608	TRIPLEX PUMPING STATION REHABILITATION	-	-	-	**12,939,536**	-	-	-	12,939,536
P12411	FORCE MAIN (B-1 DISCHARGE) IMPROVEMENTS	-	-	-	**3,000,000**	-	-	-	3,000,000
P12620	LAS OLAS MARINA PUMP STATION D-31	2,500,000	2,500,000	-	-	-	-	-	2,500,000
	Water & Sewer Master Plan 2017 Fund (495) Total	**50,339,574**	**39,190,869**	**-**	**161,872,703**	**-**	**-**	**-**	**212,212,277**
Water & Sewer Regional Master Plan 2017 Fund (496)									
P12384	NE 38TH ST 42" FM & NE 19TH AV 24" FM	10,685,218	9,884,361	-	-	-	-	-	10,685,218
P12387	EFFLUENT MAIN REHABILITATION	8,113,945	8,113,651	**(5,000,000)**	**5,744,077**	-	-	-	8,858,022
P12383	NE 25TH AVE FORCE MAIN REPLACEMENT	4,463,088	3,911,556	**(9,000,000)**	**9,000,000**	-	-	-	4,463,088
P12375	PROG MGMT OF CONSENT ORDER PROJECTS	8,959	-	-	-	-	-	-	8,959
P11465	17TH STREET CAUSEWAY - LARGE WATER MAIN REPLACEMENT	-	-	-	~~**781,814**~~	-	-	-	-
P12566	REDUNDANT SEWER FM NORTH TO GTL WWTP	1,507,692	(34)	-	-	-	-	-	1,507,692
P12567	REDUNDANT SEWER FM SOUTH TO GTL WWTP	8,829,570	2,255,955	-	-	-	-	-	8,829,570
P12176	GTL MOTOR CONTROL CENTERS REHABILITATION	-	-	-	~~**963,756**~~	-	-	-	-
P12467	RGNL B RE-PUMP VARIABLE FREQ DRIVE (VFD)	-	-	-	730,052	-	-	-	730,052
P12468	GTL CHLORINE SCRUBBER	-	-	-	-	-	-	-	-
FY 20210962	REHABILITATION OR REPLACEMENT OF 48 to 54-INCH	-	-	-	**22,580,867**	-	-	-	22,580,867
P12251	CLARIFIER PIPE REPLACEMENT	-	-	-	~~**3,708,000**~~	-	-	-	-
P12255	GTL EXTERIOR PAINTING	-	-	-	-	-	-	-	-
P12529	EFFLUENT PUMPS STANDBY GENERATOR & ADMIN BLDG IMPROVEMEN	-	-	**14,000,000**	-	-	-	-	14,000,000
FY 20170518	GTL SLUDGE TRANSFER PUMPS & SEAL WATER SYSTEM	-	-	-	72,301	-	-	-	72,301
	Water & Sewer Regional Master Plan 2017 Fund (496) Total	**33,608,472**	**24,165,489**	**-**	**38,127,297**	**-**	**-**	**-**	**71,735,769**
Water Meter Replacement Fund (497)									
FY 20150219	ADVANCED METERING INFRASTRUCTURE IMPLEMENTATION	-	-	**30,000,000**	-	-	-	-	30,000,000
	Water Meter Replacement Fund (497) Total	**-**	**-**	**30,000,000**	**-**	**-**	**-**	**-**	**30,000,000**
Central Services Operations Fund (581)									
P12305	ACCESS CONTROL UPGRADE - CITYWIDE	564,861	534,272	-	-	-	-	-	564,861
P11937	ENTERPRISE RESOURCE PLANNING (ERP)	2,591,167	2,408,162	-	-	-	-	-	2,591,167
P12123	EOC DATA ROOM AT FIRE STATION 53	79,509	-	-	-	-	-	-	79,509
P12207	CITY HALL DATA CENTER A/C & FIRE SUPPRES	17,141	17,141	-	-	-	-	-	17,141
P12235	LAND & ASSET MANAGEMENT SYSTEM PROJECT	1,753	1,753	-	-	-	-	-	1,753
	Central Services Operations Fund (581) Total	**3,254,431**	**2,961,328**	**-**	**-**	**-**	**-**	**-**	**3,254,431**
Vehicle Rental Operations Fund (583)									
P12103	ENVIRONMENTAL SUSTAINABLE MAN SYST	505,332	482,815	-	-	-	-	-	505,332
P12363	GTL WWTP FUEL ISLAND IMPROVEMENTS	135,657	135,657	-	-	-	-	-	135,657

City of Fort Lauderdale

Proposed FY 2022 - FY 2026 Community Investment Plan

Project #	Project Title	Unspent Balance as of May 7, 2021	Available Balance as of May 7, 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	TOTALS
P12579	LIGHT DUTY CAR WASH REPLACEMENT	23,981	6,244	-	-	-	-	-	23,981
P12432	FIRE STATION 53 FUEL ISLAND IMPROVEMENTS	18,601	18,601	-	-	-	-	-	18,601
	Vehicle Rental Operations Fund (583) Total	**683,571**	**643,317**	**-**	**-**	**-**	**-**		**683,571**
Cemetery System Fund (430)/Cemetery Perpetual Care Fund (627)									
FY20221074	MAUSOLEUMS-LAUDERDALE MEMORIAL GARDENS CEMETERY	-	-	**1,561,584**	-	-	-	-	1,561,584
FY20221075	MAUSOLEUMS-SUNSET MEMORIAL GARDENS CEMETERY	-	-	**709,745**	-	-	-	-	709,745
P12307	IRRIGATION UPGRADES SUNSET MEMORIAL GARD	625,000	-	-	-	-	-	-	625,000
	Cemetery System (430)/Cemetery Perpetual Care Fund (627) Total	**625,000**	**-**	**2,271,329**	**-**	**-**	**-**	**-**	**2,896,329**
Arts and Science District Garage Fund (643)									
P12091	CITY WAYFINDING & INFO SIGNAGE	87,931	87,931	-	-	-	-	-	87,931
	Arts and Science District Garage Fund (643) Total	**87,931**	**87,931**	**-**	**-**	**-**	**-**	**-**	**87,931**
Florida Department of Transportation (FDOT) Fund (778)									
P12474	MID-FIELD TAXIWAY EXTENS AND RUN-UP AREA	-	-	~~**946,200**~~	**946,200**	-	-	-	946,200
P12521	RUNWAY 27 AND 13-31 BYPASS TAXIWAYS	-	-	**885,000**	-	-	-	-	885,000
P12522	RUNWAY 13 RUN-UP AREA	-	-	-	~~**52,070**~~	-	-	-	-
P12539	TAXIWAY GOLF PAVEMENT REHAB	-	-	412,000	-	-	-	-	412,000
P12540	RUNWAY 27 BY-PASS TAXIWAYS	-	-	108,650	-	-	-	**15,000**	123,650
P12612	RUNWAY 9 TAXIWAY INTERSECTION IMPROVEMENTS	-	-	~~**15,500**~~	~~**130,000**~~	-	-	-	-
FY 20200884	TAXIWAYS B & Q REALIGNMENT	-	-	-	**1,633,600**	-	-	-	1,633,600
FY 20200886	RUNWAY 13-31 PAVEMENT SEALING	-	-	-	371,200	-	-	-	371,200
FY 20210989	TAXIWAY L&P EXTENSION & RUN-UP AREA	-	-	-	-	**12,500**	**193,200**	-	205,700
FY 20210990	RUNWAY 9-27 PAVEMENT REHABILITATION PROJECT	-	-	-	**21,000**	**258,000**	~~**258,000**~~	-	279,000
FY 20221079	RUNWAY 9 RUN-UP RELOCATION & SOUTH END TAXIWAYS	-	-	**251,830**	**-**	-	-	-	251,830
FY 20210991	RUNWAY 9 WESTERN EXTENSION & PARALLEL TW EXTENSION	-	-	-	-	40,300	586,200	-	626,500
FY 20221095	ENVIRONMENTAL ASSESSMENT FOR RUNWAY 9 EXTENSION	-	-		**400,000**	-	-	-	400,000
FY20221053	SHADY BANKS & TARPON RIVER IMPROVEMENTS	-	-	-	**1,926,369**	-	-	-	1,926,369
	Florida Department of Transportation (FDOT) Fund (778) Total *	**-**	**-**	**1,657,480**	**5,298,369**	**310,800**	**779,400**	**15,000**	**8,061,049**
Federal Aviation (FAA) Grant Fund (779)									
P12522	RUNWAY 13 RUN-UP AREA	-	-	-	~~**937,260**~~	-	-	-	-
P12540	RUNWAY 27 BY-PASS TAXIWAYS	-	-	1,955,700	-	-	-	**270,000**	2,225,700
P12612	RUNWAY 9 TAXIWAY INTERSECTION IMPROVEMENTS	-	-	~~**279,000**~~	~~**2,340,000**~~	-	-	-	-
FY 20221079	RUNWAY 9 RUN-UP RELOCATION & SOUTH END TAXIWAYS	-	-	4,532,942	-	-	-	-	4,532,942
FY 20210989	TAXIWAY L&P EXTENSION & RUN-UP AREA	-	-	-	-	**225,000**	**3,477,000**	-	3,702,000
FY 20210990	RUNWAY 9-27 PAVEMENT REHABILITATION PROJECT	-	-	-	**378,000**	**4,648,860**	~~**4,648,860**~~	-	5,026,860
FY 20210991	RUNWAY 9 WESTERN EXTENSION & PARALLEL TW EXTENSION	-	-	-	-	725,400	11,313,300	-	12,038,700
	Federal Aviation (FAA) Grant Fund (779) Total *	**-**	**-**	**6,488,642**	**378,000**	**5,599,260**	**14,790,300**	**270,000**	**27,526,202**
	GRAND TOTAL	**571,227,807**	**473,065,555**	**244,369,308**	**298,756,921**	**96,522,624**	**112,255,810**	**43,561,846**	**1,366,694,316**

*Detailed tracking of the changes since the Adopted FY 2022 - FY 2026 Community Investment Plan using **bold** and ~~strikethrough~~.*

**Grant funds, Proposed Stormwater Revenue Bonds and Water Meter Replacement Bonds will not be appropriated until*

Building Inspection Report & Condition of City-owned Buildings

Building Services Division

Building Safety Reports

John T. Travers, Building Official
jtravers@fortlauderdale.gov
(954) 828-5913
Department of Sustainable Development
Building Services Division

Building Safety Inspection Program

Miami-Dade County and Broward County have incorporated a program to require 3rd party inspections by Architects or Engineers when certain buildings reach their 40th anniversary of Certificate of Occupancy (CO). And subsequent inspection reports are required each 10 years thereafter.

Department of Sustainable Development

Building Safety Inspection Program

In Broward County, in Section 110.15 of the FBC, the program is titled "Building Safety Inspection Program". In Miami-Dade County it is known as the "40-year Building Recertification Program". Both programs require the structural integrity and electrical systems of a qualifying building to have an inspection performed to determine deficiencies and mitigation.

Building Safety Inspection Program

The dates for the notification come from the Broward County Property Appraiser's Office, based on the CO date on record. A county wide list is submitted to the Broward County Board of Rules and Appeals. BORA staff divides the data base into a spreadsheet for each of the 31 municipalities, and distributes that list to the municipality each June, identifying all buildings that are approaching the 40th anniversary of CO (and 10-year intervals thereafter).

Building Safety Inspection Program

The list contains all buildings in the BCPA system. Each municipality must then eliminate the structures that do not have to participate in the program, such as Federal and State buildings, Schools under the jurisdiction of the Broward School Board, buildings constructed on Indian Reservations, 1 and 2 family homes and minor structures 3,500 square feet or less.

Building Safety Inspection Program

The municipality then notifies the principal owner or management company of the requirement to hire a qualified architect or engineer to perform the inspection. The owner has 90 days to present the results of the inspection to the municipality, and 180 days to present a mitigation process if deficiencies are noted. *Notifying the most current owner or Association Manager is often a real challenge for the municipalities.*

Building Safety Inspection Program

It should be noted that these Safety Inspection Reports are only reviewed by the Building Official or a designated representative. We do not "approve" the report. They are filed in our system. If there are corrections necessary, permits must be obtained for the corrective actions and a Code Enforcement case is opened when these actions are not performed within a proper time. An extension may be granted by the Building Official for the completion of the corrections, if appropriate.

Building Safety Inspection Program

Using the City of Fort Lauderdale as an example, we receive between 300-350 addresses each June, from BORA. We must then eliminate the buildings that do not have to participate in the program (mentioned in an earlier slide) and notify the proper owners/managers of the requirement to hire a competent architect or engineer to perform the inspection.

Building Safety Inspection Program

This is an ongoing process all year long, after the June notification. Often, we must open Code Enforcement cases when owners do not follow the mandates of the program. Cases are scheduled before a Special Magistrate, like other C. E. cases that we must prepare.

Building Safety Inspection Program

The collapse of the Champlain Tower in Surfside has suddenly brought all aspects of the Building Safety Inspection Program into the spotlight. It should be noted that in Florida, only Miami-Dade County and Broward County have such a program in place.

Building Safety Inspection Program

I am a member of the BORA structural subcommittee and we have had discussions on possible changes to the current program, but we feel that the best approach at this time is to let the experts investigate the collapse and determine the cause, before we move forward with changes to our program, if necessary. This will be a collaborative effort by both counties.

In Summary:

The Building Services Division has participated in the Building Safety Inspection Program since 2006, when it was introduced in Broward County as a section in the Florida Building Code, Broward Edition. The building collapse in Miami-Dade County has certainly raised awareness of building integrity throughout the nation. We will continue to keep public safety and efficient public service as the keystones of our performance.

Building Services Division

Building Safety Reports

Thank you for your time

John T. Travers

jtravers@fortlauderdale.gov

(954) 828-5913

Department of Sustainable Development