City of Fort Lauderdale

City Hall 100 North Andrews Avenue Fort Lauderdale, FL 33301 www.fortlauderdale.gov



Meeting Minutes

Wednesday, August 30, 2017

12:00 PM

Infrastructure

City Commission Conference Room

CITY COMMISSION WORKSHOP

FORT LAUDERDALE CITY COMMISSION

JOHN P. "JACK" SEILER Mayor - Commissioner BRUCE G. ROBERTS Vice Mayor - Commissioner - District I DEAN J. TRANTALIS - Commissioner - District II ROBERT L. McKINZIE - Commissioner - District III ROMNEY ROGERS - Commissioner - District IV

> LEE R. FELDMAN, City Manager JOHN HERBST, City Auditor JEFFREY A. MODARELLI, City Clerk CYNTHIA A. EVERETT, City Attorney

ROLL CALL

Present 5 - Vice Mayor Bruce G. Roberts, Commissioner Dean J. Trantalis, Commissioner Robert L. McKinzie, Commissioner Romney Rogers, and Mayor John P. "Jack" Seiler

QUORUM ESTABLISHED

Infrastructure Task Force Members Present: David Orshefsky, Ed Kwoka, Keith Cobb, Marilyn Mammano, Ralph Zeltman, Norman Ostrau, Roosevelt Walters, Fred Stresau, Leo Hansen

Also Present: City Manager Lee R. Feldman, City Auditor John Herbst, City Clerk Jeffrey A. Modarelli, City Attorney Cynthia A. Everett

No e-comments were submitted for this meeting.

CALL TO ORDER

Vice Mayor Roberts called the Commission's Joint Workshop with the Infrastructure Task Force to order at 12:06 p.m.

OLD/NEW BUSINESS

<u>17-1077</u> Infrastructure Presentation - Paul Berg, Public Works Director

Vice Mayor Roberts recognized Director of Public Works Paul Berg. Mr. Berg announced the Public Works Department Staff in attendance and available to answer questions, including Keith Landry, Assistant Public Works Director - Engineering Administration, Dr. Nancy Gassman, Assistant Public Works Director - Sustainability Operations, Talal Abi-Karam, Assistant Public Works Director - Utilities, Susan LeSage Business Manager Public Works.

Mr. Berg noted the topics in the Public Works presentation would include water, wastewater and stormwater related to the City's Infrastructure Strategic Plan. The goal is to be proactive rather than reactive, planning for future growth, continued development and following a Master Plan process. Mr. Berg gave a status update on water, wastewater and stormwater elements of the Master Plan. He discussed core standards both state and national Environmental Protection Agencies have requested the City to operate under known as an Effective Utility Management Model. Mr. Berg confirmed a forthcoming formal written Asset Management Program for all utility services and infrastructure programs. It will include an inventory, assessment and evaluation of the entire system. He acknowledged the lack of a complete inventory of all locations and maps for above and below ground infrastructure services. The Asset Management Program will address mandated issues in the recent Consent Order issued by the State of Florida Department of Environmental Protection (DEP). Mr. Berg continued the PowerPoint presentation that included details of annual revenues, funding, operating expenses, and debt service for Public Works' projects.

In response to Commissioner Trantalis's inquiry, Mr. Berg explained the financial impacts of recent emergency public works expenditures and the consensus on advancing the Consent Order's 2020 projects to 2018. City Manager Feldman explained financial aspects of the presentation relating to the Return on Investment (ROI) from the Waste Water Utility Fund. Mr. Berg discussed the ROI for 2017 and 2018.

Mayor Seiler arrived at 12:21 p.m.

In response to Commissioner Trantalis's question, Mr. Berg explained funding of projects due to emergency repairs in FY 2017. Mr. Berg confirmed the need to restore those funds. He continued the presentation, discussing budgeted items and system revenue to maintain existing infrastructure.

In response to Commissioner Rogers' question, Mr. Berg explained the drop in revenue from 2017 to 2018, confirming the cost of treatment was less than anticipated and is a one-time exception. He stated this will be a projected amount each year based on best estimates.

The Strategic Master Plan identified \$1,200,000,000 in necessary improvements over the next 20 years. Mr. Berg discussed and reviewed the essential water and wastewater investments in five-year blocks as illustrated in the slide presentation, explaining portions qualify as capital expenses. Items in the Consent Order are estimated to cost \$117,000,000. Mr. Berg also discussed projects and associated costs.

Mr. Berg explained overlapping items listed in the Consent Order and planned Capital Improvement Projects (CIP) as noted on Slide 8. He explained what is required in the Consent Order and major projects in the Master Plan noted in CAM 17-0050 prepared by Staff. Further discussions ensued on funding all infrastructure needs and a \$332,000,000 bond issue, confirming the need to address the required timelines.

Mr. Berg discussed the need to have a single contractor to manage and oversee the design, implementation and construction management for items included in the Consent Order. This project should be administered in the same way as the 2011 Water Works Program.

Mr. Berg discussed the requirements of the Consent Order in the first nine months, i.e., assessments, and associated costs. He confirmed that DEP will want to review this evaluation and may result in additional priorities. He also commented on addressing other infrastructure needs not included in the Consent Order.

In response to Commissioner Trantalis's question, Mr. Berg confirmed new smart meters would cost approximately \$30,000,000. City Manager Feldman commented on the financing of smart meters, stating these would be funded by the growth in revenue they will generate. Discussions and observations continued on smart meters.

Mr. Berg discussed water issues, confirming the ability to fund demand through 2035 or an additional 35,000 residents. Mayor Seiler asked about the impact of the demands of office buildings and hotels. Mr. Berg commented on work to be done at Five Ash Water Treatment Plant (Five Ash), stating it is a water distribution issue rather than a water capacity issue. Waterlines need to be renewed and upsized. Discussions continued on the impacts and aspects of planning for population growth relating to infrastructure.

Mr. Berg explained the process involved with permit applications to address this issue. Discussions ensued on the consultants' reports, Reiss Engineering (Reiss). Mr. Berg confirmed data from this presentation relies upon the results of the Reiss Report only. City Manager Feldman commented on how water consumption is determined.

Vice Mayor Roberts noted the need to reevaluate the 20-year plan every five years. Mr. Berg discussed how evaluations and adjustments are made to address changing needs. Discussions continued on determining population growth.

Mr. Berg gave an overview of the proposed Water Utility recommendations as noted on slide 9. Comments and discussions ensued on timelines for recommendations. Mayor Seiler noted functionality should be the priority for the 2nd Avenue Water Tower. Mr. Berg stated should the bond issue be completed in January 2018, addressing the rehabilitation of Five Ash will be the number one priority.

City Manager Feldman stated the Peele Dixie Water Plant (Peele Dixie) would be emphasized as it is a better water source. Discussions ensued on area water sources, various water treatment requirements, recommendations from the South Florida Water Management District (SFWMD), and funding for additional future water treatment options versus building a new water treatment plant.

Commissioner Trantalis raised the feasibility of a desalination plant. Mayor Seiler noted that much of the technology in this area is being done outside of the United States. Mandates to use American vendors were acknowledged. Discussions ensued on this topic. Desalination currently is economically feasible only on a regional basis, not municipal basis. City Auditor Herbst commented on previous efforts to look at desalination on a regional basis. Further discussions ensued.

Dr. Nancy Gassman, Assistant Public Works Director - Sustainability Operations, commented on aspects of the City's 20-year Consumptive Use Permit for the Biscayne Aquifer issued by the SFWMD. The SFWMD will not allow additional water for development expansion and applies across the region. In the future, the City will get their water for development expansion from Peele Dixie.

Dr. Gassman also commented on the City's well fields being located far to the west and modeling done with Broward County and the U.S. Geological Service. Those well fields are not threatened by saltwater intrusion until 2050. Discussions ensued on issues related to the C51 Reservoir. The C51 Reservoir could be utilized as an alternative water source during drought situations. Further discussions and comments ensued on this topic.

City Auditor Herbst commented on a local desalinization company that operates in many areas of the Caribbean. Dr. Gassman discussed environmental concerns related to the disposal of the highly concentrated salt byproduct (a/k/a brine) used in the desalination process. Further discussions ensued on the costs of desalination in the Tampa area and Carlsbad, California. Keith Landry, Assistant Public Works Director -Engineering Administration, commented on this technology, stating it is something that needs to be looked at for the future. Israel is a leader in utilizing this technology. Mr. Landry noted desalination has a long lead time and is a ten-year decision. Mr. Berg confirmed the upgrading of both water treatment plants.

Mr. Berg continued the presentation, addressing the George T.

Lohmeyer Wastewater Treatment Plant (Wastewater Plant) as it relates to the 20-year plan and incremental changes over the next five years. Discussions, comments and questions ensued on the information listed in the presentation.

Mr. Landry discussed upgrades to the Wastewater Plant regarding Infiltration and Inflow (I&I). Further discussions continued about I&I Programs and formulas used to determine savings as well as large customer usage (surrounding municipalities) using I&I Programs.

In response to Commissioner McKinzie's question, Talal Abi-Karam, Assistant Public Works Director - Utilities, discussed the City's 180 Lift Stations, their current condition and available mobile generators. Commissioner Trantalis commented that problems with wastewater are systemic and relate to breaking and aging pipes as noted in the Reiss Report. Further discussions continued on this topic.

Mr. Berg stated all recommendations in this presentation are based on the Master Plan prepared by Reiss.

Mr. Berg continued his review of the Water and Waste Water Community Investment Program priorities of the five-year plan and during the next 5-20 years. These are in both the Consent Order and Capital Improvement Program (CIP). The funding aspects of these priorities, the need for on ongoing maintenance, and expected failure rates were also discussed.

City Manager Feldman confirmed the need to issue a bond in early 2018 to move forward with infrastructure issues. Commissioner Rogers noted the need for expediency in issuing the bond. Vice Mayor Roberts commented on the need to fund ongoing maintenance. City Manager Feldman discussed initial savings in Operations and Maintenance based on new facilities that should be able to be shifted to maintenance needs. Vice Mayor Roberts discussed the need for a maintenance and replacement plan for new projects to ensure future generations do not experience issues similar to what the City is currently experiencing. Further comments ensued.

Mr. Berg continued the presentation, discussing the requirements of the Consent Order. Mr. Berg commented on modeling done to calculate usage and distribution, stating there is adequate water as projected in the Master Plan for the next 20 years. He noted the focus is currently on the components of the wastewater collection system.

Mr. Berg discussed aspects and needs of the stormwater system. Staff is in the process of preparing a Master Plan for the stormwater system, expounding on the Master Plan and funding. This is scheduled for completion in December 2017. A Request for Proposal (RFP) should be ready shortly thereafter. Funding will be required for Phase 2 of this Master Plan. There will be an Asset Management System for wastewater and stormwater management.

Mr. Berg reviewed the FY 2017 Stormwater Fund Analysis. In response to Vice Mayor Roberts' question, Mr. Berg confirmed the five-year CIP funding for Stormwater Utility is an item to be addressed by the Commission.

City Manager Feldman discussed the Stormwater Rate Structure which will be critical to funding those costs. Discussions ensued on the costs associated with the levels of service. Dr. Gassman responded to the question posed by Commissioner Roger regarding the level of service and the funding. Dr. Gassman stated they would not be able to achieve the ten-year level of service through the design core of all seven neighborhoods. The cost per resident for stormwater was discussed. Commissioner Trantalis commented the need for a Stormwater Master Plan to determine costs.

Dr. Gassman addressed Vice Mayor Roberts' question, explaining the reason for the year delay is due to the bonding process and the requirement going through the six-month Consultant Competitive Negotiation Act (CCNA) process after funding is in place. Dr. Gassman discussed the five-year timeline to complete the job.

City Manager Feldman said there are processes to speed up this timeline. He stated there is a need to resolve the stormwater rate structure. Further discussions ensued on the rate structure and environmental issues involved with stormwater. City Manager Feldman discussed areas of the City such as Dorsey River that have never had any stormwater infrastructure.

Discussions continued on Phase II. Dr. Gassman stated there are 16 adaptation action areas, including modeling and design of seven neighborhoods in the Master Plan. Forty CIP projects are currently targeted in those areas. Mr. Berg discussed Phase III which will be the construction of Phase II.

Mr. Berg reviewed the relationships among revenues, expenditures, and CIP Investments for the Stormwater Fund, funding and Phase I Stormwater CIP Projects. He also reviewed the FY 2017 Stormwater Fund Analysis.

Mr. Berg summarized the presentation discussing what will be necessary to address infrastructure requirements. The projects and significant investments/expenses over the next five years based on infrastructure master plans include:

- Water and Wastewater Bond (\$200M \$332M)
- Storm Water Bond (\$148M \$200M)
- · Additional operational funding for CMOM in both programs
- · Focus on Strategic Plans and Master Plans
- Implementation of Asset Management System and CMOM allow proactive lifecycle management of assets within the next 18 months
- Master Plans to balance aging infrastructure and maintenance needs to ensure long-term reliability at a reasonable cost

Infrastructure Task Force Member Ralph Zeltman asked if the City is aware there are issues relating to raw water wells not being used by the water treatment plants. These wells are being polluted, stating gravity sewer mains are allowing groundwater intrusion to flow into the wastewater treatment plants. Sand intrusion is also negatively impacting the system.

In response to Commissioner Trantalis, Mr. Zeltman expounded on this issue, describing what has been occurring. Mr. Zeltman discussed the need to replace the gravity sewer mains in order to stop groundwater and sand from entering the system. He also described the impact on lift stations and force main failures. Mr. Zeltman discussed what actions need to be taken to remedy this problem.

City Manager Feldman stated he recognized Mr. Zeltman's concerns and they will be addressed with an aggressive I&I program as previously outlined, expounding on this issue. Mr. Zeltman noted addressing this issue solves two issues, the wastewater system and not allowing saltwater intrusion into the water supply. Further discussions ensued on this topic.

In response to Mayor Seiler's question, Mr. Zeltman gave his recommendations on how to address this problem. Mayor Seiler asked

if there is a plan to prioritize this problem. Mr. Berg discussed the work done over the last several years, what is currently being done, and plans for the future. He expounded on aspects of the infiltration issue that need to be determined and assessed. Vice Mayor Roberts stated this issue needs to be made a high priority.

Mr. Landry discussed how Staff would remedy this problem. Mayor Seiler asked about issues relating to diversion, questioning if this will impact stormwater. City Manager Feldman stated this occurs below ground, expounding on this point. There was a consensus this needs to be a priority.

Chair Marilyn Mammano made several observations, noting the Task Force has been in a learning phase. The Task Force has set a Special Meeting on September 18, 2017 to digest the information in this presentation and to decide on the appropriate direction.

Chair Mammano noted the broad mandate of the Commission. After their upcoming meeting, the Task Force would like another Joint Workshop with the Commission to exchange points of view and come to a mutual consensus on priorities and how to proceed.

Mayor Seiler concurred, stating all necessary Staff and relevant information will be provided to the Task Force at their September 18, 2017 meeting. He requested the Task Force give a list of all documents needed and Staff who should attend. Mayor Seiler recommended the Commission and the Task Force meet during the first week of October for a Joint Infrastructure Task Force Meeting with the Commission. He discussed deadlines and the desire to get things expedited, noting meetings and discussions with the Budget Advisory Board and discussions relating to infrastructure.

Task Force Member Leo Hansen discussed the point raised earlier by Commissioner Trantalis, commenting on the importance of future water needs and the need to focus on desalinization as an alternative. Further discussions and comments ensued on the short, medium, and long-term needs of the City.

Vice Mayor Roberts commented on the Consent Order. Discussions ensued on this topic. Chair Mammano acknowledged the positive approach taken by the City regarding the Consent Order.

Mayor Seiler discussed meetings in July 2017, during the summer break, with Assistant City Manager Chris Lagerbloom and the Florida Secretary of the Department of Environmental Protection to address issues in the

Consent Order. Mayor Seiler confirmed the meeting went well.

City Manager Feldman discussed timelines and the need for the Task Force to meet to discuss financial aspects of this issue. Mayor Seiler confirmed the Task Force Joint Meeting with the Commission would be the second half of October 2017, following the Task Force's regular monthly meeting.

Mayor Seiler recognized Mary Fertig, 501 Poinciana Drive, who addressed the Commission, thanking them for the work to reach this point. Ms. Fertig commented on the cost of the stormwater plan noted during meetings in 2014. She noted the City does not have the luxury of time, the need for all involved to be well informed and to work together with mutual respect.

Mayor Seiler recognized Charles King, 105 N. Victoria Park Road, who discussed the funds removed from the water and sewer system over the past nine years. He requested underground water and sewer problems be addressed.

A copy of the Public Works Department Infrastructure PowerPoint presentation is attached to these minutes.

ADJOURNMENT

Mayor Seiler adjourned the City Commission Infrastructure Workshop at 2:03 p.m.



Fort Lauderdale Infrastructure Workshop



CITY OF FORT LAUDERDALE

PUBLIC WORKS DEPARTMENT

August 30, 2017

Agenda

- Infrastructure Goals and Objectives
- Water Program
- Wastewater Program
- Stormwater Program





Infrastructure Goals and Objectives



- **OBJECTIVE 1:** Proactively maintain our water, wastewater, road and bridge infrastructure
- **OBJECTIVE 2:** Reduce flooding and adapt to sea level rise





Infrastructure Management

Focus

- Improving the reliability and resilience of our infrastructure
- Systematic modernization and replacement of critical systems and components
- Planning for the future to provide for anticipated growth and development

Management Approach

- Program level master plans to prioritize long-term requirements
- Operating based on the Effective Utility Management (EUM) model
- Instituting an Asset Management Program
- Adopting a Capacity, Management, Operation, & Maintenance Program (CMOM)



Comprehensive Utilities Strategic Master Plan (CUSMP)

Utility Wide Planning to Identify Prioritized Needs

- Treatment Facility Evaluation and Capacity Forecast
 - Water Treatment Facilities
 - Wastewater Treatment Facilities
- Wastewater Collection & Transmission System Evaluation
 - Redundancy and Reliability
- Use Technology Efficiently
- Incorporate Sustainability
- Capital Improvement and Rehabilitation & Repair Projects
- Asset Management



Water and Wastewater Fund



Central Region/Wastewater Fund

Relationship Among Revenues, Expenditures, and CIP Investments





Water and Wastewater Investments

CIP (FY18-22) 144 projects, \$223.4M 454 fund - 47 projects, \$68.1M 451 fund – 97 projects, \$155.3M

CONSENT ORDER \$117.5M

(if approved) 5 Lift Stations 6 Sewage Basin Rehab (I&I) 11 Force Main Rehab Force Main Condition Assessment Asset Management Program CMOM Program

> HIGH PRIORITY NEEDS 81 projects, \$257M Fiveash Reliability Upgrade Water Meter ESCO Force Main Rehabs Plant & Wellfield R&R

OTHER WANTS 65 projects, \$39.8M Central Region/Wastewater (Fund 451) and Water and Wastewater Master Plan (Fund 454)



Water Utility

<u>Overview</u>

- Fiveash Regional Water Treatment Plant (70 MGD)
- Peele-Dixie Water Treatment Plant (12 MGD)
- Poinciana Park and NW 2nd AVE water tanks
- Sufficient water supply to meet demand through year 2035
- Provides for an additional 5.5 MGD daily demand beyond projections (30,000 additional people within 20 year forecast)

Recommendations

- Rehabilitation vs Replacement options for Fiveash WTP
- Rehabilitation of prioritized pipelines on a yearly basis
- Construct second interconnect with the City of Tamarac to provide redundancy
- Proceed with restoration of the 2nd Ave Water Tower
- Capacity-related improvements at the Peele-Dixie WTP
- Prioritize CIP investments at the Fiveash WTP to mitigate single point-of-failure risks



Fiveash Water Treatment Plant



Wastewater Utility

<u>Overview</u>

- George T. Lohmeyer Wastewater Treatment Plant (56.6 MGD permitted capacity)
- Current average annual daily treatment is 38.6 MGD
- Up to 21 MGD of daily treatment is attributed to Infiltration and Inflow (I&I)

Recommendations

- Continue I&I program to reduce flows by 25%
- Emergency generators at high risk lift stations
- Force Main rehabilitation/replacement program, prioritizing high risk wastewater pipes
- Air release valve maintenance program
- Physical inspection of force main transmission systems
- Expand effluent disposal capacity





Water and Wastewater Community Investment Program

	FY2018	FY2019	FY2020	FY2021	FY2022
Fund	Proposed	Proposed	Proposed	Proposed	Proposed
Water / Wastewater	\$10,554,481	\$16,971,960	\$ 19,986,244	\$ 21,322,620	\$ 20,659,175
Central Region	\$ 9,396,382	\$ 9,516,674	\$ 9,808,821	\$ 9,598,145	\$ 9,429,401
TOTAL	\$19,950,863	\$26,488,634	\$ 29,795,065	\$ 30,920,765	\$ 30,088,576

Typical Projects Funded within 5 Year CIP

- Small Water Main improvement projects
- Fiveash WTP & Peele Dixie Renewal & Replacement
- NW Second Avenue Tank Restoration
- Rehabilitation of PCCP Pipe and Cryogenic Plant at GTL
- 5 Sewage Lift Station Rehabilitation projects
- 6 Sewage Basin I&I reduction projects
- 4 Wastewater Force Main rehabilitation/replacement projects



Water and Wastewater Community Investment Program

Priorities To Be Funded Next 5 Years

- Fiveash Reliability Upgrade Project
- ESCO Water Meter Replacement
- Clarifier Pipe Replacement
- Las Olas (D37), Middle River Terrace (A-27), Coral Ridge (B-11) Basin Rehab
- Victoria Park and Croissant Park Water Main Improvements

Priorities To Be Funded Years 5 - 20

- Reduce I&I in 18 Wastewater Basins
 - A11, A12, A22, A23, A27, A29, A31, A33 C1, C2
 - B4, B8, B10, B11, B14, B23
- Fiveash replacement or rehabilitation
- Force Main Rehabilitation Projects
- Wastewater Lift Station Projects



• E3, E6

Water Treatment Plant Capacity

Permitted Capacity : 82 MGD (Fiveash – 70 MGD, Peele Dixie 12 MGD) Annual Average Daily Demand: 41.4 MGD





GTL Wastewater Treatment Plant Capacity

Permitted Capacity : 56.6 MGD Average Annual Daily Treatment : 38.6 MGD



FY 2017 Water & Wastewater Revenue Sufficiency Analysis



CITY OF FORT LAUDERDALE

* Slide is placeholder. Model outputs will be modified in real time during meeting based on different scenarios

PUBLIC WORKS DEPARTMENT

Stormwater Utility

<u>Overview</u>

- 4 pump stations
- 6 drainage wells
- 128 tidal valves
- 1,213 manholes

Issues / Challenges

- 4.41 miles seawalls (35 locations)
- Sea level rise impacts
- Funding for Phase II Master Plan projects
- Increased funding for maintenance

Opportunities

- Stormwater Master Plan for citywide planning and design
- Acquisition of an Asset Management System
- Utility fee increase

- 1,039 outfalls
- 8,903 catch basins
- 184 miles of storm pipe



Stormwater Utility

<u>CIP</u>

FIVE YEAR CIP TOTAL	\$174,377,200
FY2022	\$3,717,485
FY2021	\$1,971,000
FY2020	\$582 <i>,</i> 538
FY2019 (revenue bond)	\$148,200,000
FY2019	\$3,335,290
FY2018 (Proposed)	\$2,945,796
PREVIOUS FY	\$13,625,091

Stormwater Master Plan (FY 2014- FY2024)

- Phase I 37 CIP Projects
- <u>Phase II</u> Modeling & Design of 7 Neighborhoods
 - Dec 2017 completion
- <u>Phase III</u> Construction of Phase II projects





Stormwater Fund

Relationship Among Revenues, Expenditures, and CIP Investments





Stormwater Utility

STORMWATER PHASE 1 CIP PROJECTS						
STATUS	# PROJECTS					
Complete	21					
In Construction	5					
In Design	3					
Subtotal	29					
In Planning						
FY 2018 funded	4					
FY 2019 funded	4					
Total	37					





FY 2017 Stormwater Fund Analysis

	FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY																
	SAVE	CALC	ROLL	1	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	<u>Cumulativ</u>	e Change
		J	I	Override ►		25.00%	30.00%	23.08%	18.75%	15.79%	13.64%	12.00%	10.71%	9.68%	8.82%	FY 2022	FY 2027
	Sto	ormwater	Rate Incr	eases	0.00%	25.00%	30.00%	23.08%	18.75%	15.79%	13.64%	12.00%	10.71%	9.68%	8.82%	175.00%	362.50%
				Last Plan	0.00%	25.00%	30.00%	23.08%	18.75%	15.79%	13.64%	12.00%	10.71%	9.68%	8.82%	175.00%	362.50%
		Rate (Covenant				6.87	3.67	2.68	2.24	1.99	1.82	1.70	1.61	1.53	PS FY18 ►	100.0%
				Last Plan			6.87	3.67	2.68	2.24	1.99	1.82	1.70	1.61	1.53	OMV FY18 ►	95.0%
		ID Ś Rodi	stribution		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
		CIP Exec	ution %		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
	0	perating F	Reserve N	10 🕨	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
	RESIDENTI	AL LOTS/PARC	ELS	Per Unit	\$8.00	\$10.00	\$13.00	\$16.00	\$19.00	\$22.00	\$25.00	\$28.00	\$31.00	\$34.00	\$37.00		
	UNIMI	PROVED LAND		Per Acre	\$80.64	\$100.80	\$131.04	\$161.28	\$191.52	\$221.76	\$252.00	\$282.24	\$312.48	\$342.72	\$372.96		
	COMMERC	IAL LOTS/PAR	CELS	Per Acre	\$25.56	\$31.95	\$41.54	\$51.12	\$60.71	\$70.29	\$79.88	\$89.46	\$99.05	\$108.63	\$118.22		
Ор	erating I	Fund		Current Plan 🛛	Last Plan		t C	IP Spending		Curren	t Plan 🔳 La:	st Plan	Rev Vs. Ex	p —Cas	h In —Cas	h Out — Cash	Out Excl. CIP
Millions (\$)	20 15 10 5 0	5 17 1	.8 19	20 21 22	n n 23 24 2	n in 1 25 26 27	Aillione (¢)	80 60 240 20 0 17 18	3 19 20	21 22 23	24 25 2	6 27	60 (\$) suojiii 20 0 17	18 19	20 21 22	2 23 24 29	5 26 27
CIF	Fund			Current Plan		ast Plan		CIP Funding	-	Debt	Operating	g	Long-Term	Borrowing		Current Plan	Last Plan







CITY OF FORT LAUDERDALE

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Summary

- Significant investments/expenses over the next 5 years based on infrastructure master plans
 - Water and Wastewater Bond (\$200M \$332M)
 - Stormwater Bond (\$148M \$200M)
 - Additional operational funding for CMOM in both programs
- Focus on Strategic Plans and Master Plans
- Implementation of Asset Management System and CMOM allow proactive lifecycle management of assets
- Master Plans balance aging infrastructure and maintenance needs to ensure long term reliability at a reasonable cost for our Neighbors



BACKUP



Water and Wastewater Fund

	FY2015	FY2016	FY2017	FY2018
Operating Budget	Actual	Actual	Amended	Proposed
Revenues	\$ 109,937,709	\$ 110,365,815	\$ 117,686,538	\$ 120,943,102
Total Expenditures	\$ 105,897,009	\$ 107,695,680	\$ 117,686,539	\$ 120,943,102
% Expenditures for				
Debt Service	27.2%	23.9%	23.3%	\$22.2%
CIP Budget				
Community				
Investment Program				
Expenditure	\$18,455,114	\$ 18,853,761	\$ 15,989,575	\$ 10,554,481





Central Region/Wastewater Fund

	FY2015	FY2016	FY2017	FY2018
Operating Budget	Actual	Actual	Amended	Proposed
Revenues	\$ 24,368,086	\$ 24,932,228	\$ 27,674,571	\$ 26,679,285
Total Expenditures	\$ 19,643,764	\$ 18,194,786	\$ 27,674,571	\$ 26,679,285
% Expenditures for				
Debt Service	9.5%	9.4%	6.3%	6.5%
CIP Budget				
Community				
Investment Program				
Expenditure	\$6,227,268	\$ 7,461,113	\$ 7,845,537	\$ 8,011,850





Stormwater Fund

	FY2015	FY2016	FY2017	FY2018
	Actual	Actual	Amended	Proposed
Revenues	\$ 6,436,153	\$ 9,725,833	\$ 15,794,369	\$ 14,805,327
Expenditures	\$ 7,934,006	\$ 8,955,312	\$ 15,794,369	\$ 14,805,327
Community				
Investment Program	\$ 2,115,887	\$ 5,154,699	\$ 6,523,597	\$ 2,945,796



