

Utility Fund

Proposed Budget 2019-20

Workshop

Presented by: Charles F. Dodge

August 21, 2019

Utility Fund

- During the summer, Capital for the Utility Fund was reduced by approximately \$3.0 million and a few projects moved forward to FY2020-21.
- The impact would **reduce the Water & Sewer rates by 5.06%**. This rate reduction would be comprised of forgoing a CPI increase of 3.24% as well as an additional 1.82% below current year rates.
- The monthly bill for a single family residence using the minimum 3,000 gallons will decrease by \$0.75 per month or \$9.00 for the year.
- The revised minimum monthly rate proposed is \$40.63 compared to the current rate of \$41.38. The revised rate would be \$0.55 per month higher than the rate we had 2 years ago in FY2017-18.
- Water and Sewer revenues will decrease by \$3.1 million as a result of this rate reduction.

Utility Fund

- Approximately 73% of Utility Fund Budget is comprised of operating expenses. This includes but is not limited to contractual services; operating chemicals; repairs and maintenance to operate the system.
- Approximately 21% of the Utility Budget is for Capital Expenses, to replace aging infrastructure; and
- The remaining 6% is for personnel and debt service expenses.

Utility Fund

FIVE-YEAR CAPITAL IMPROVEMENT PLAN COMPARISON

	<u>FY2018-19</u>	<u>FY2019-20</u>	<u>FY2020-21</u>	<u>FY2021-22</u>	<u>FY2022-23</u>	<u>FY2023-24</u>
FY2018-19 CIP	\$ 11,585,000	\$ 20,426,400	\$ 23,199,000	\$ 22,017,000	\$ 21,117,000	-
FY2019-20 CIP	-	15,511,000	19,803,733	18,758,000	18,030,000	17,232,000
CHANGE		(4,915,400)	(3,395,267)	(3,259,000)	(3,087,000)	

Utility Capital Budget Highlights FY 2019-2020



Div. 6010 – Utilities Admin Services

62000 – Buildings

Description: Health Park Building 67 (Polk Building) Conversion

Location: 8200 South Palm Drive

Justification: Reconstruction of the abandoned Polk Building to create new space needed for:

- ✓ Customer Service including 50% more space, additional sit-down window tellers and payment drive-through.
- ✓ Secondary Emergency Operations Center (EOC).
- ✓ Additional space for utility support staff.
- ✓ Additional space for engineering support staff.
- ✓ New accommodations for City-wide GIS staff.

Proposed Capital Budget = \$1,410,000 **Funding Source =** General Revenue*



Utility Capital Budget Highlights FY 2019-2020



Div. 6021 – Sewer Collection

62000 - Buildings

Description: Equipment Storage Facilities (50% cost sharing with 6032).

Location: City-wide as needed.

Justification: New construction of a metal covering (canopy) for Utilities and Public Services in order to protect and extend the useful life of City owned generators and heavy equipment.

Proposed Capital Budget = \$540,000 Funding Source = General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6021 – Sewer Collection

63065 – Force Main

Description: Future Undetermined Force Main Replacements.

Location: As needed-where needed.

Justification: Ongoing repairs or modifications needed due to poor sewage Force Main performance.

Proposed Capital Budget = \$100,000 **Funding Source =** General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6021 – Sewer Collection: 812 Lift Station

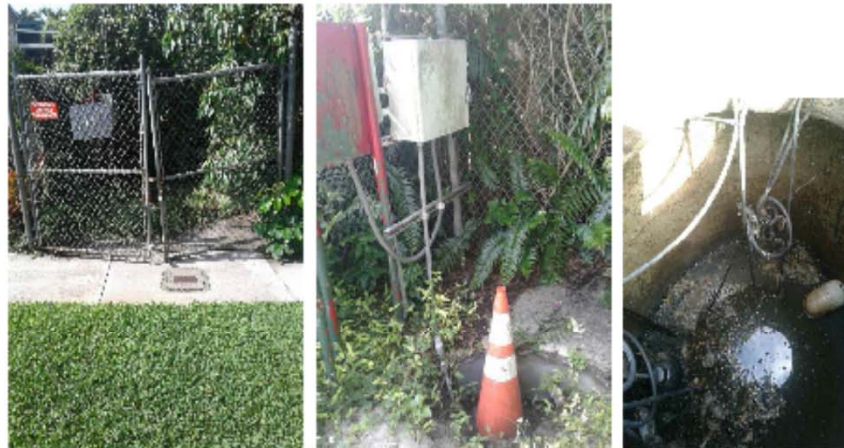
63122 – Lift Station

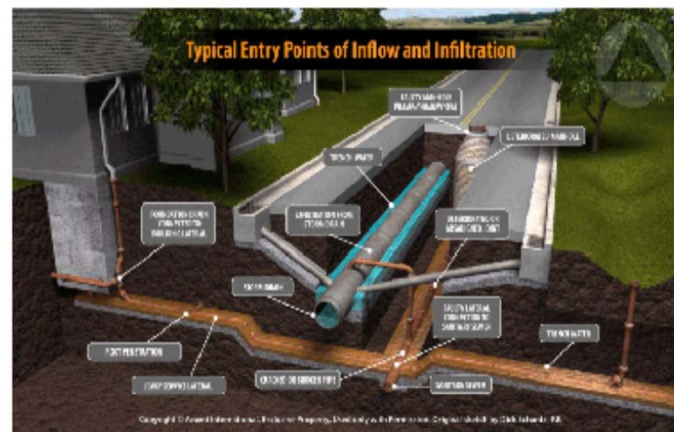
Description: Lift Station Upgrade/Improvements/Purchase

Location: City-wide as needed.

Justification: Annual on-going sewage pump station and lift station replacements and rehabilitations throughout the City. Purchase of Lift Station pump assembly's per year as needed and conversions.

Proposed Capital Budget = \$1,326,000 Funding Source = General Revenue





Utility Capital Budget Highlights FY 2019-2020



Div. 6021 – Sewer Collection

64073 – Generator

Description: Stationary Generator and Switchgear

Location: Master 4 LS

Justification: Needed for Emergency Back-Up Power.

FY 2019-20 Proposed Capital Budget = \$250,000 Funding Source = General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6021 – Sewer Collection

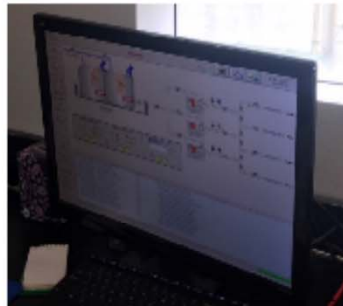
64400 – Other Equipment

Description: Other Equipment

Location: Lift Stations

Justification: Annual updating and maintenance of the SCADA monitoring system, replacement of pumps, generators tanks, as well as small equipment such as pumps, hoses, etc.

FY 2019-20 Proposed Capital Budget = \$310,000 Funding Source = General Revenue



Utility Capital Budget Highlights
FY 2019-2020



Div. 6022 – Sewer Treatment Plant

62000 – Buildings

Description: East Blower Building Rehabilitation

Location: Waste Water Treatment Plant

Justification: Any improvements, repairs or upgrades that might be needed to guarantee the continuous performance of the Wastewater Plant. Renovations due to age.

Proposed Capital Budget =	\$50,000	Funding Source	General Revenue
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Utility Capital Budget Highlights FY 2019-2020



Div. 6022 – Sewer Treatment

63000 – Improvement Other Than Building

Description: Improvements and upgrades to Sewer Treatment Plant (BCR building and system).

Location: Wastewater Treatment Plant

Justification: Modifications and or improvements to the Sewer Treatment Plant to assure an optimal performance.

Proposed Capital Budget = \$150,000

Funding Source = General Revenue



Utility Capital Budget Highlights
FY 2019-2020



Div. 6022 – Sewer Treatment Plant: 834 Plant Rehabilitation

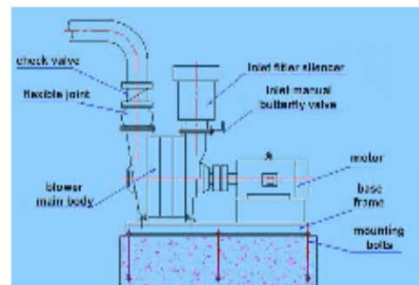
63183 – Sewer Treatment Plant Rehabilitation

Description: Rehabilitation of Waste Water Treatment Plant

Location: Wastewater Treatment Plant

Justification: Air Blowers function is to fulfill oxygen demands and maintain the treatment process. This item includes installation of stand-by air blowers for the east half of the Waste Water Treatment Plant as well as headworks equipment refurbishment.

Proposed Capital Budget = \$650,000 **Funding Source =** General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6022 – Sewer Treatment Plant

64400 – Other Equipment

Description: Waste Water Treatment Plant repair and capital maintenance items.

Location: Wastewater Treatment Plant

Justification: The Waste Water Treatment Plant is in need of replacement of the effluent pumping electrical equipment, SCADA upgrades and unforeseen WWTP equipment plus replacements and renovations.

Proposed Capital Budget = \$1,270,000 Funding Source = General Revenue



Utility Capital Budget Highlights
FY 2019-2020



Div. 6031 – Water Plants

63000 – Improvement Other Than Building

Description: Construct New Lime Feed System-Lime Sludge Storage Improvement Plan and Future Undetermined WTP Operational Rehabilitation.

Location: Water Plants

Justification: The Water Treatment Plant is in need of a new Lime Feed System as the existing system has reached its useful life and must be replaced. Modifications to the existing lime storage system is also needed.

Proposed Capital Budget = \$2,120,000 **Funding Source =** General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6031 – Water Plants

63250 – Water Well

Description: Rehabilitation of Raw Water Well # 6

Location: Water Plants

Justification: Well # 6 is located at the eastern well field and if its performance and capacity needs to be increased.

Proposed Capital Budget = \$150,000

Founding Source = General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6031 – Water Distribution

63993 – Other Equipment

Description: Improvements Other – Rehabilitation of Treatment Unit A with Launderers

Location: Water Plants

Justification: Treatment Unit A is in need of regularly scheduled rehabilitation including metal work, repairs and painting.

Proposed Capital Budget = \$1,180,000 Funding Source = General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6031 – Water Plants

64400 – Other Equipment

Description: Other Equipment needed at the Water Plant.

Location: Water Treatment Plant

Proposed Capital Budget = \$475,000 Funding Source = General Revenue

Justification: Our current SCADA system is outdated and is need of updating as it does not meet the needs of the Water Treatment Plant. We are recommending and requesting standardization on the same SCADA software for all three processes; Lift Stations Monitoring and Control, Water Treatment Plant and Waste Water Treatment Plant.



The water treatment plant is in need of a new effluent flowmeter to measure treated water going to the storage tanks. A new effluent flowmeter will allow a water balance to be performed and a more accurate water calculation to be performed. Additionally, new flow meters for the well water coming into the Water Treatment Plant. This will allow a more balanced and accurate water loss calculation to be performed.



This category also accents for future undetermined pump and equipment replacements at the Water Treatment Plant.

Utility Capital Budget Highlights FY 2019-2020



Div. 6032 – Water Distribution

62000 Buildings

Description: Equipment Storage Facilities (50% cost sharing with 6021).

Location:

Justification: New construction of a metal covering (canopy) for Utilities and Public Services in order to protect and extend the useful life of City owned generators and heavy equipment.

Proposed Capital Budget = \$540,000 Funding Source = General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6032 – Water Distribution

63062 – Fire Hydrants

Description: Replacement Hydrant Program.

Location: Utilities

Justification: New fire hydrants for improved fire protection and for replacement of damaged hydrants and those which have reached their useful life.

Proposed Capital Budget = \$25,000 Funding Source = General Revenue



Utility Capital Budget Highlights
FY 2019-2020



Div. 6032 – Water Distribution

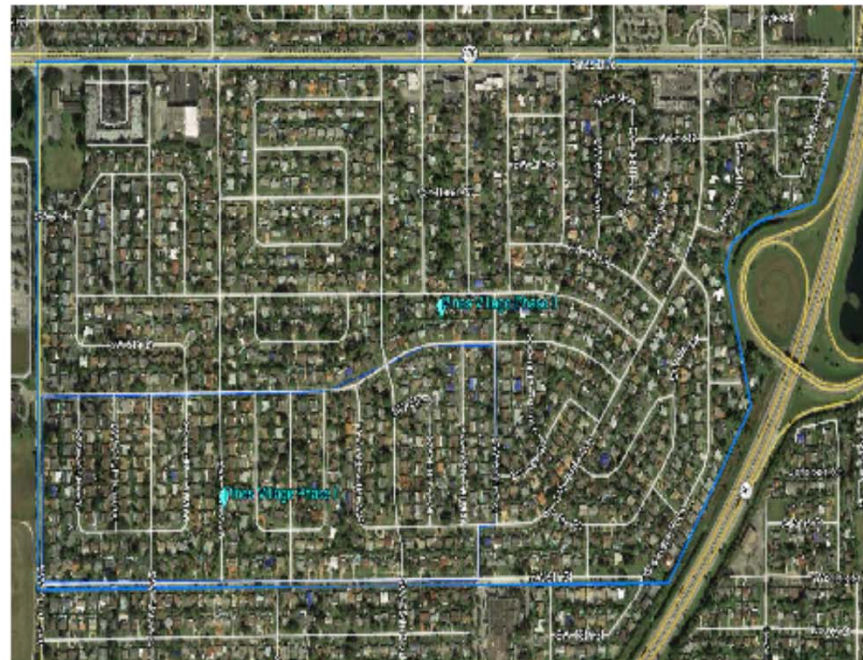
63233 Water Main

Description: Water Main Improvements at Pines Village Phase 2a.

Location: Pines Village Phase 2a

Justification: Known as the southwest section, this neighborhood lies between Pines Blvd, SW 9th St, Turnpike and SW 72nd Ave. The water main pipes in this neighborhood require replacement due to their age, frequent breaks and customer service complaints due to poor service. Water meters are often located in the rear yards with inadequate piping and should be relocated to the front yards on new, larger water mains.

Proposed Capital Budget = \$3,000,000 **Funding Source =** General Revenue



Utility Capital Budget Highlights FY 2019-2020



Div. 6032 – Water Distribution

63233 Water Main

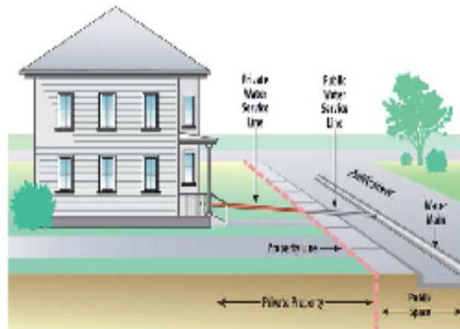
Description: Future Undetermined Water Main Replacement

Location: City Wide

Justification: Water Main improvements are needed to upgrade infrastructure with new water mains and connections to decrease interruption of service. Specific areas of improvement will be identified.

Proposed Capital Budget = \$250,000

Funding Source = General Revenue



Utility Capital Budget Highlights
FY 2019-2020



Div. 6032 – Water Distribution

64400 – Other Equipment

Description: Equipment for Utilities Department use.

Location: Throughout City Utility System

Justification: Purchase of equipment needed for the Utilities Department. Tools and equipment need for lift station crews.

Proposed Capital Budget = \$55,000

Funding Source = General Revenue



City of Pembroke Pines, FL

Utility Revenue Sufficiency Analysis

August 21, 2019





Agenda

1. Introduction
2. Background & Objectives
3. Financial Planning Process
4. Key Assumptions
5. Results
6. National Trends
7. Local Cost Comparison



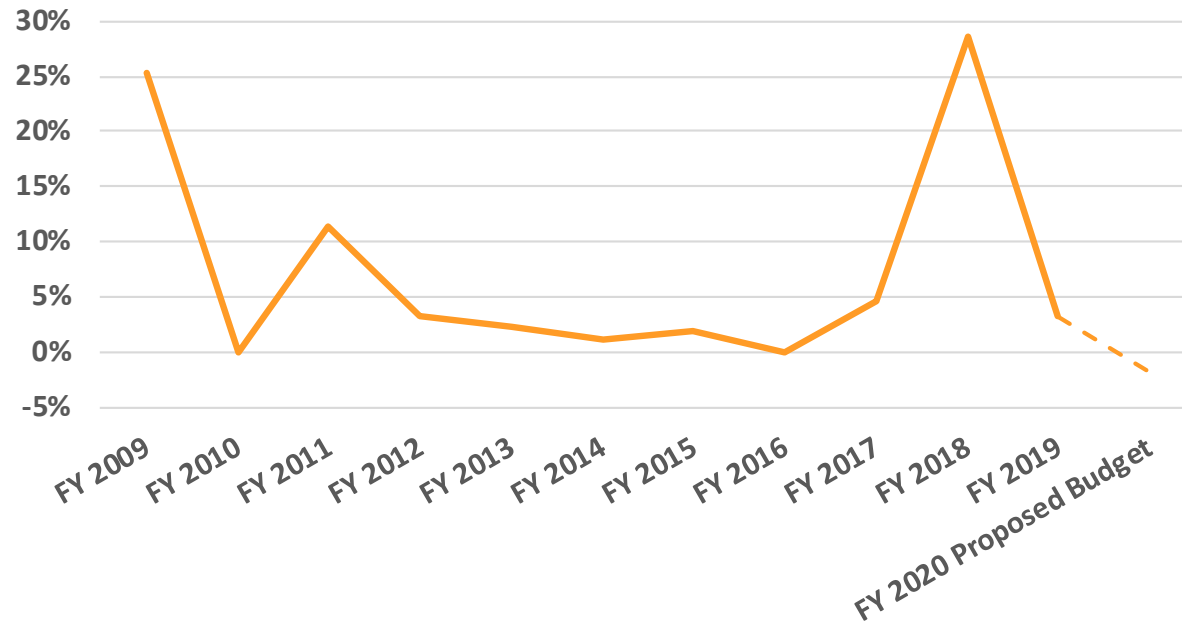
Introduction

- Our Financial Services team provides financial forecasting & rate services to local governments
 - 30+ professionals with over 300 years of experience
 - Dynamic interactive modeling tools to help decision support processes
- Industry leaders in water resources
- Performed revenue sufficiency analysis for City in 2018
- Recent rate studies performed:
 - Fort Lauderdale, Coral Springs, Fort Myers, Cape Coral, Naples, Venice, Lake Worth Beach, Palm Bay, Cocoa, St. Petersburg, and others

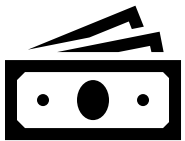


Background & Objectives

- Historical water & wastewater rate adjustments

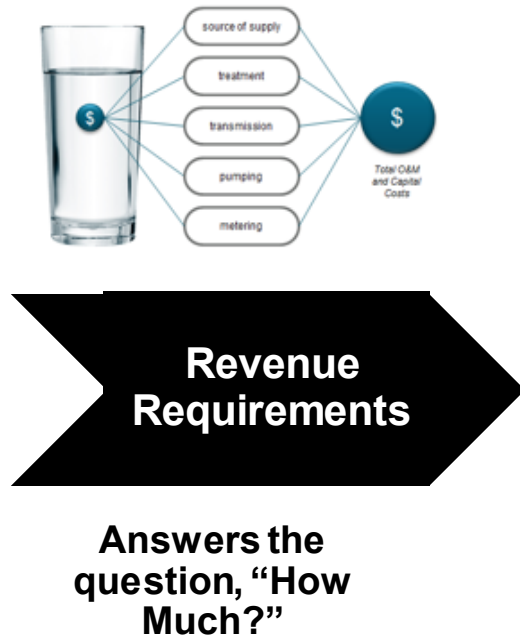


- Performed revenue sufficiency analysis in 2018
- Study objectives
 - Update multi-year financial management plan
 - Perform local cost comparison for the typical residence



Revenue Sufficiency is Forward Looking

“Your most important work is always ahead of you, never behind you.”
-Stephen Covey



Revenue requirements = full costs of providing service

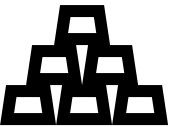
Capital improvements = most significant driver

Reserves & financial policies are integral component

Key Performance Indicators & Best Practices

Indicative of
financially
strong
system per
rating
agency
criteria

- Maintain Sufficient Reserve Balances
 - Operating Reserve: 9 months of O&M expenses (approx. \$39M in FY 2020)
- Maintain Sufficient Debt Service Coverage
 - Target: net revenues 2.0X annual debt service
- Balance Capital Needs & Customer Affordability
 - Fund CIP while minimizing increases to customer's bills
- Proactive financial management & rate planning





Key Assumptions/Drivers

FY 2020

Proposed Operating
and Capital Budget

0.8%

Projected Annual Growth in
Water & Wastewater Accounts

\$98 M

5-year CIP

3.4%

Annual Average
Operating Cost Increases

3.0%

Annual Capital
Program Cost
Inflation

\$40 M

New Water Plant (FY
2025 – 2028)

Financial Management Plan: Scenarios

“What-if”....

No rate increases?

Recommended plan?



Scenario: No Increases

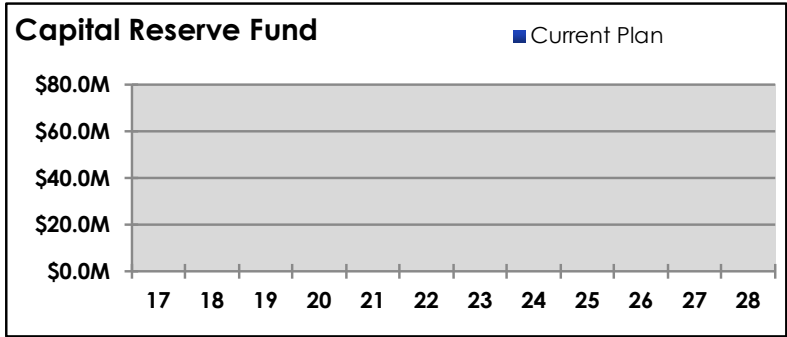
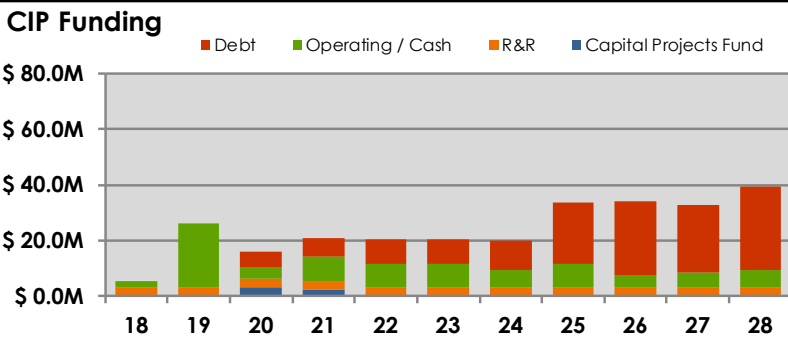
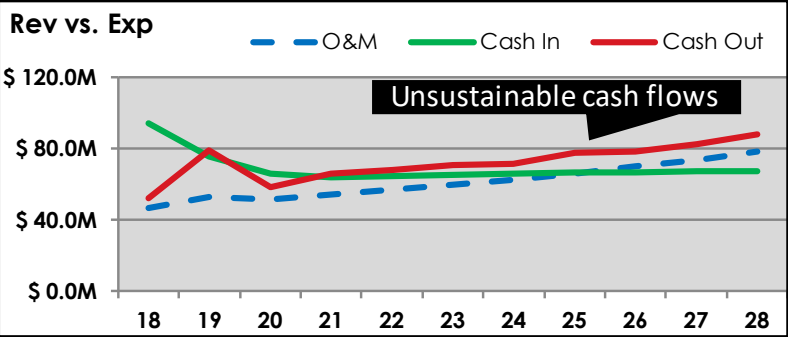
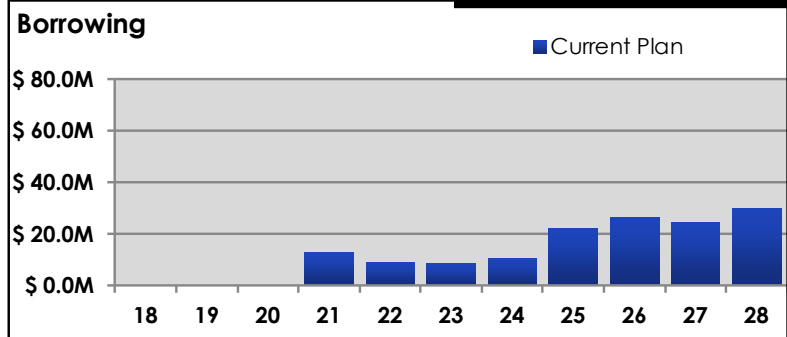
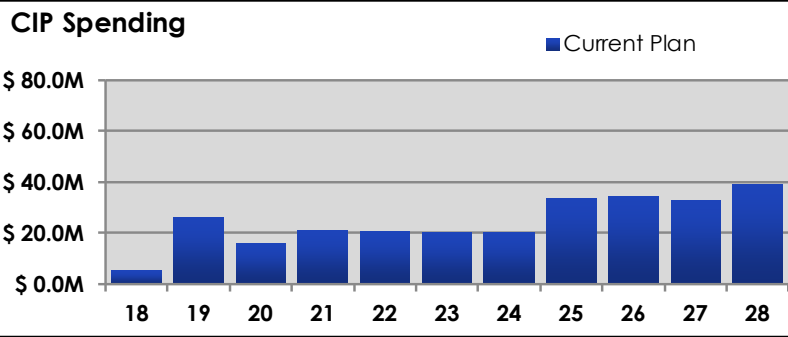
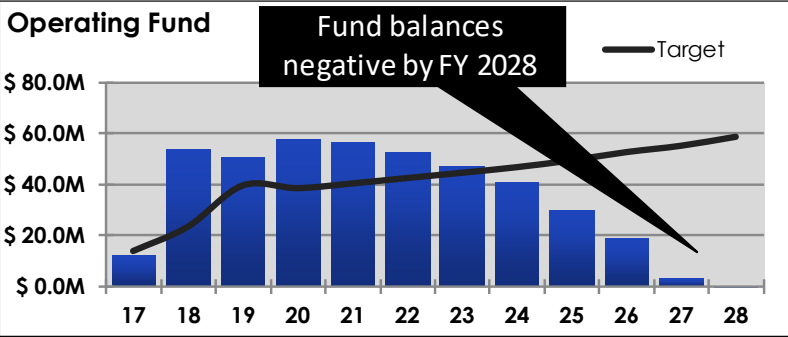
CALC
SAVE

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Pembroke Pines, FL



	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2024
Rate Increase incl. CPI		3.20%	-1.82%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.37%
Senior-Lien DSC	14.62	11.26	14.45	7.26	4.22	2.84	1.86	1.04	0.50	0.18	-0.08	Unable to meet debt service requirements



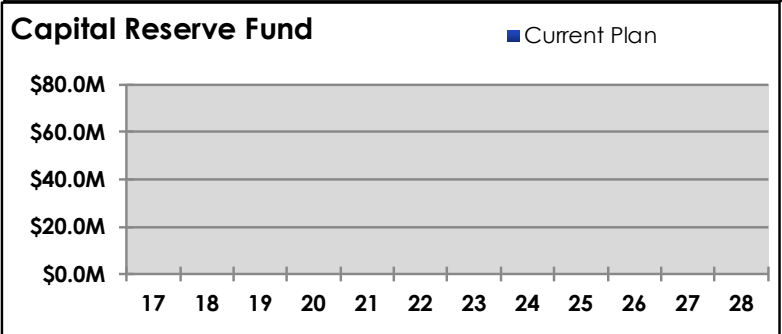
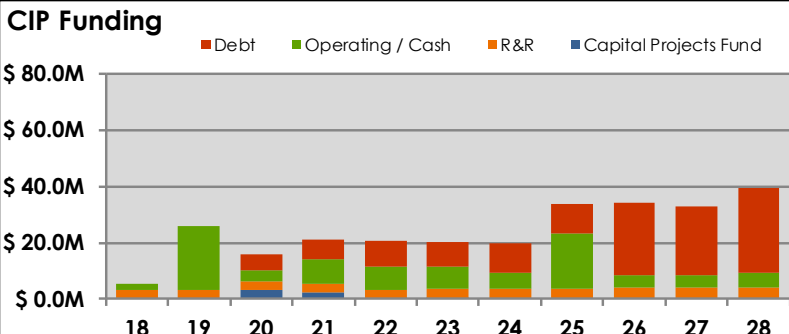
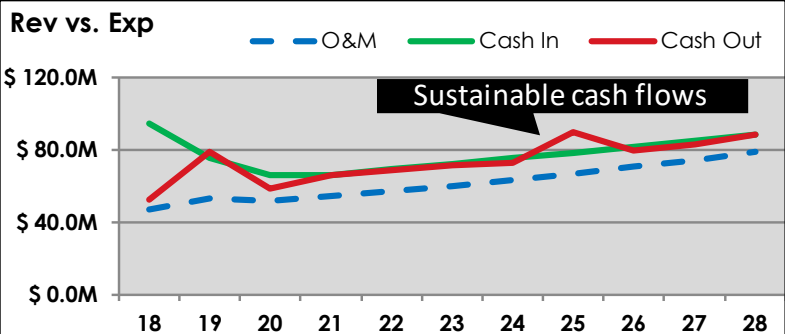
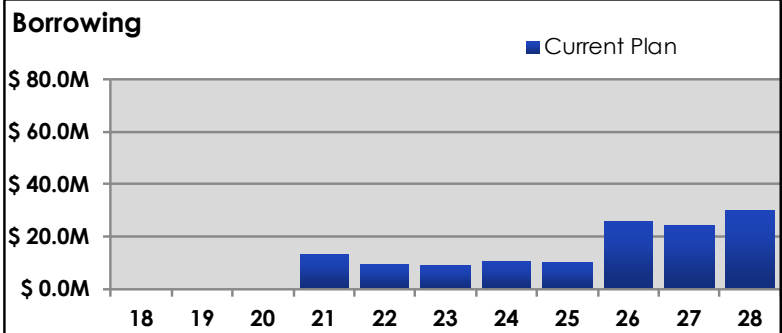
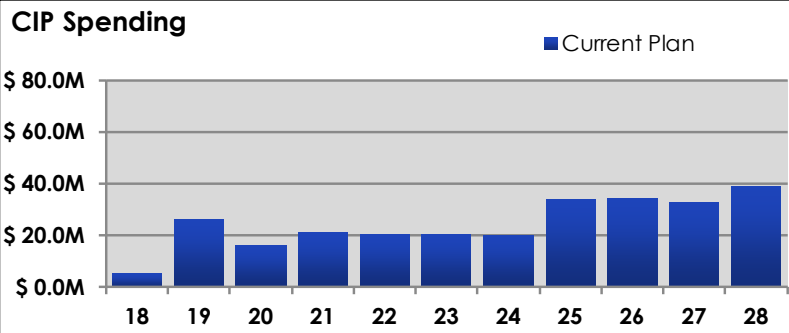
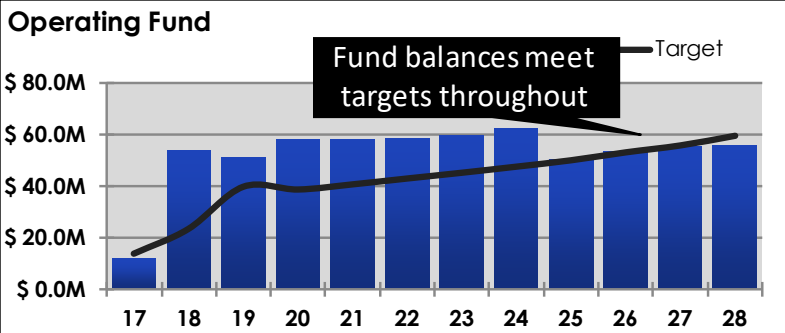
Scenario: Recommended – 3.75% per year Beginning in FY 2021

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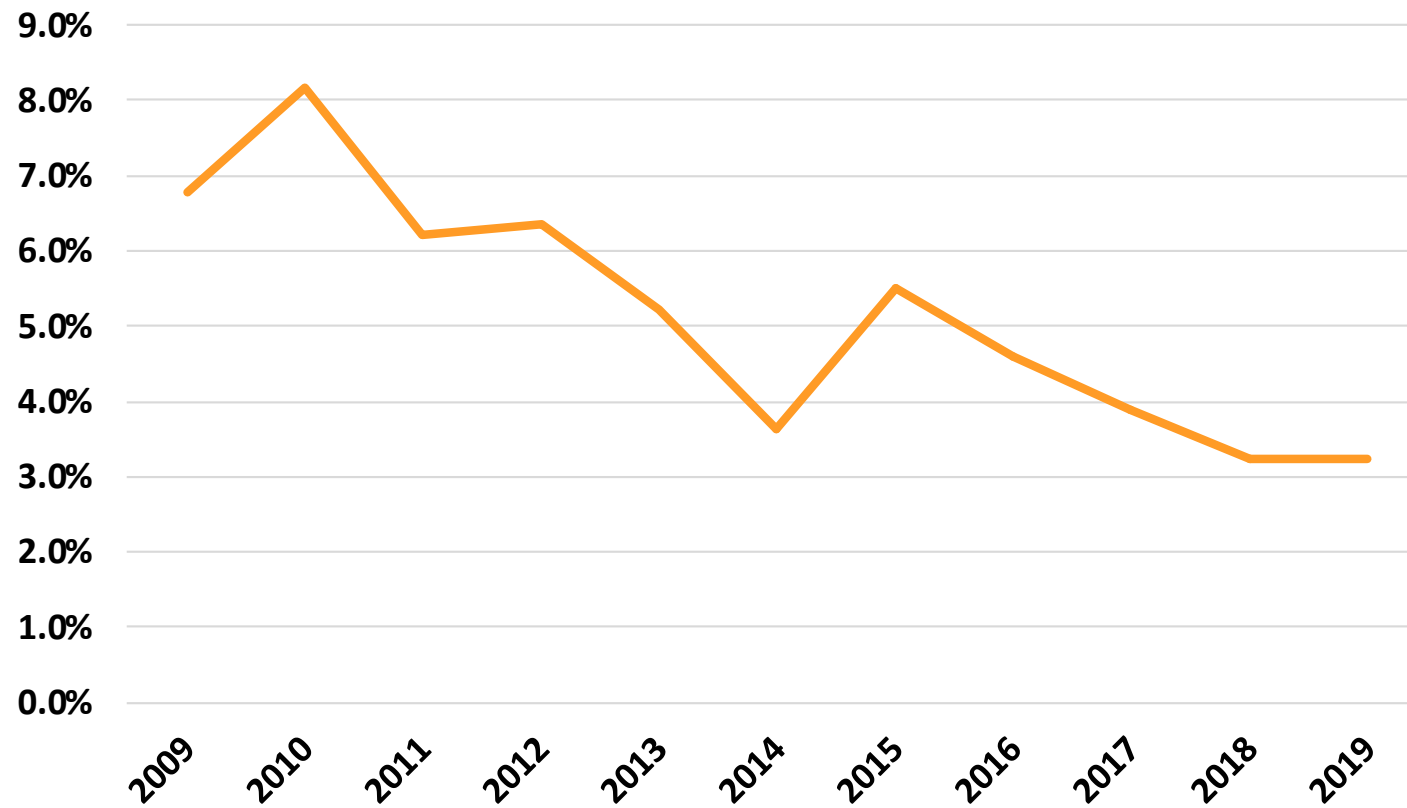
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2024
Rate Increase incl. CPI		3.20%	-1.82%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	17.46%
Senior-Lien DSC	14.62	11.26	14.45	8.48	5.88	4.84	4.06	3.51	2.78	2.52	2.00	Debt service targets met



National Industry Trend

National Industry
Trend

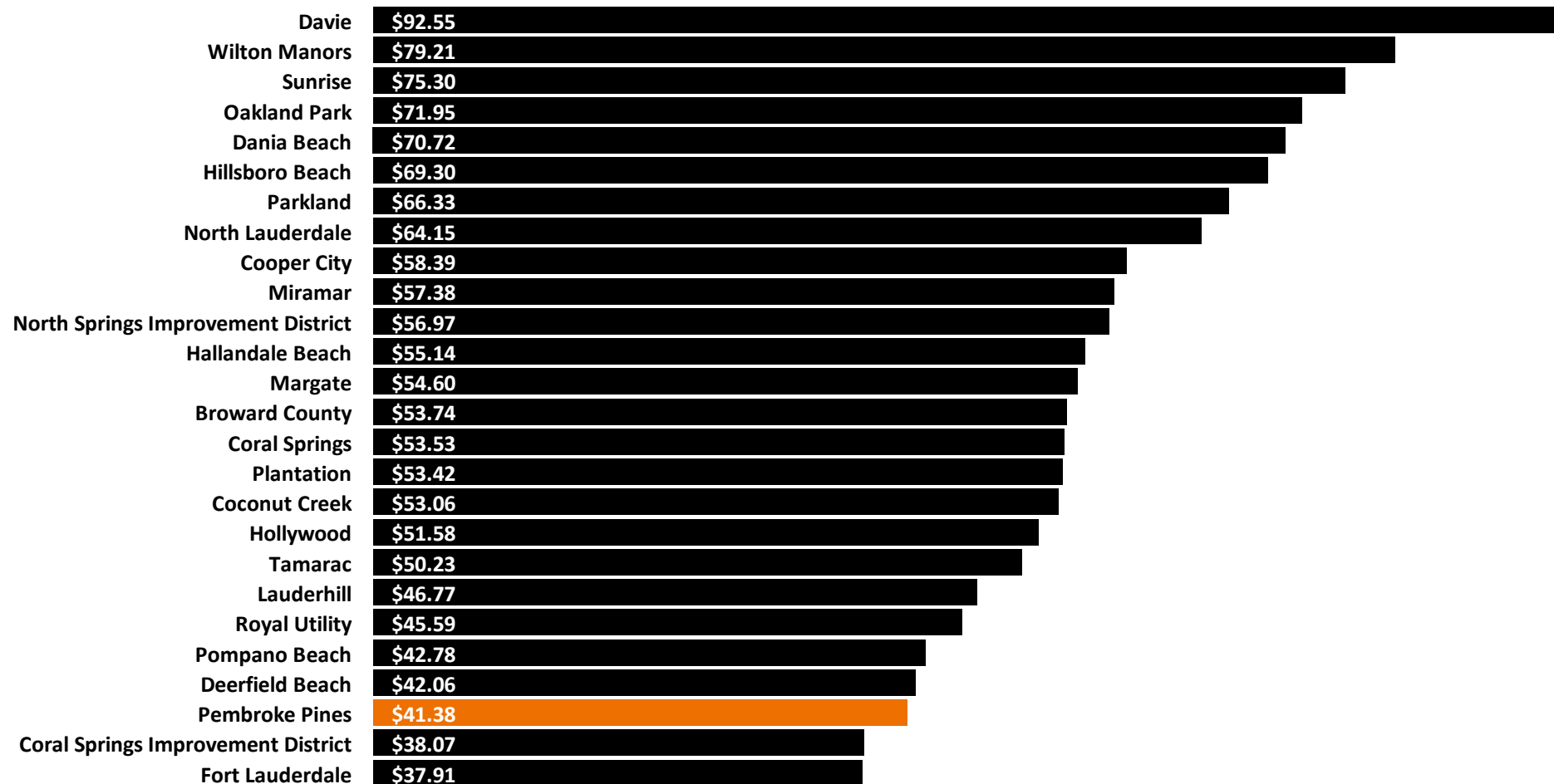
US CPI - Water & Sewerage Maintenance Series



- Measures the national average change in the cost of water & sewer service to households
- 10 – year average increase = approx. 5.0%

FY 2019 Residential Monthly Water/Wastewater Bill Comparison @ 3,000 Gallons

Combined Water & Sewer Bill Survey @ 3,000 Gallons Per Month - FY 2019



Conclusions & Recommendations

Recap



- Existing rates/revenues do not meet projected long-term financial obligations
- Current rates show favorable bills for the typical residential customer compared to neighboring systems
- Recommendations:
 - Consider annual rate indexing plan of 3.75% beg. in FY 2021
 - Multi-year approved rate plan or annual indexing demonstrates focus on long-term planning & best management practices to stakeholders
 - Annually evaluate & adjust rate plan as necessary for changes in capital spending, growth, etc...



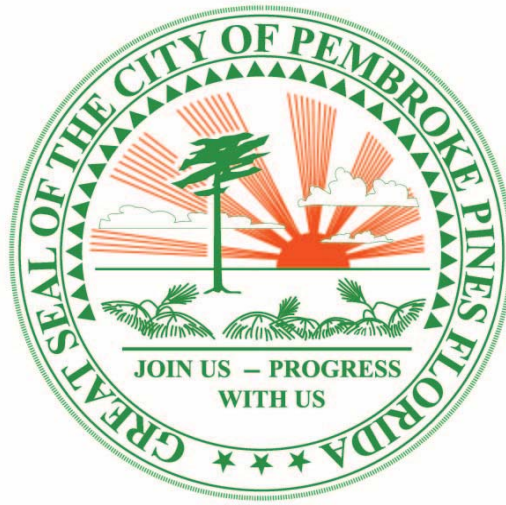
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Managing Consultant

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Thank You!

Questions/Comments



Presented by: Charles F. Dodge

August 21, 2019