

Water & Sewer Utility Fund Revenue Sufficiency Analysis

Andrew J. Burnham
Vice President, Stantec

David W. Porter, P.E.
City of Clearwater

City Council ~ July 31, 2017



Financial Planning & Rate-Setting History

- **City's practice - Adopt multi-year rate plans for water, irrigation, sewer and reclaimed
 - **Current plan - 3.75% per year thru FY 2021****
- **City conducts annual or bi-annual revenue sufficiency studies for utility enterprise funds
 - **Interactive model and decision support****

Overview of the Process

INPUTS

- ✓ **Historical Financial Data**
- ✓ **Customer & Demand Forecast**
- ✓ **Capital & Operating Plans**
- ✓ **Policy Considerations**
- ✓ **Regulatory Requirements**

Interactive Modeling Process with FAMS-XL®



OUTPUTS

- **Revenue & Operating Cost Projections**
- **Capital Funding Plan**
- **Reserves, Debt Coverage Ratios, KPIs**
- **Rate Adjustment Requirements**
- **Customer Impacts**

FINANCIAL MASTER PLAN



Key Financial Performance Objectives

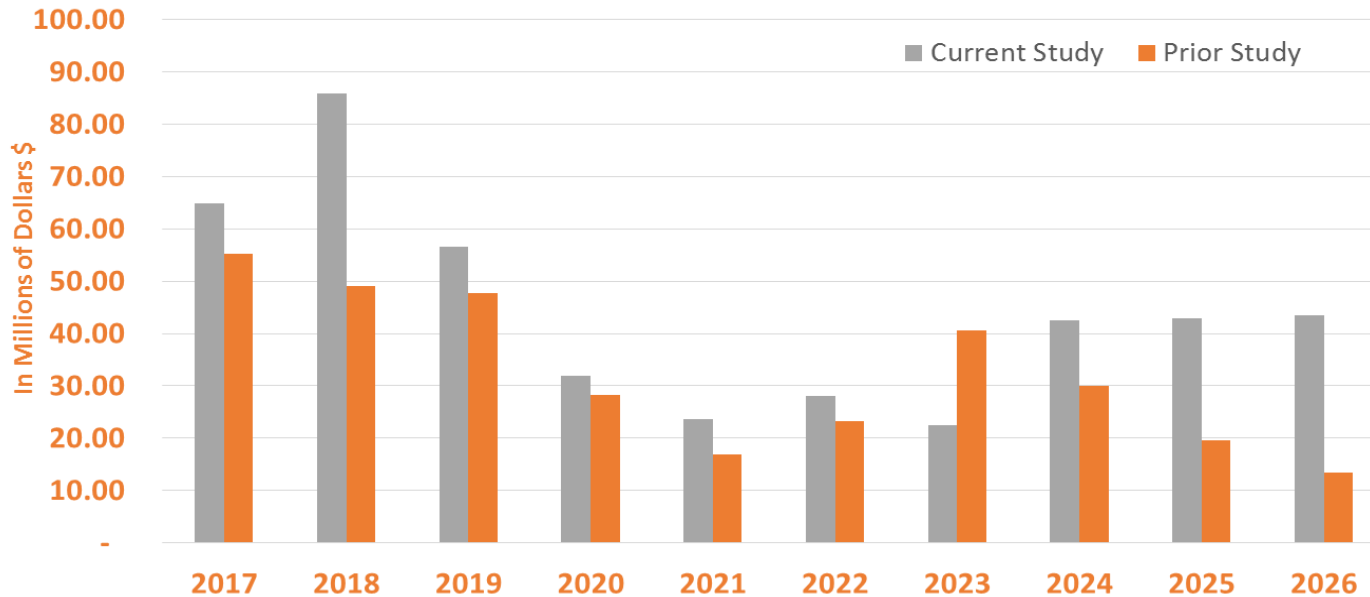
- **Balanced Funding of Infrastructure**
 - **Target: 50/50 mix of debt vs. cash funding**
 - **Action: Requires increase in annual cash funding of CIP of \$1M/yr**
- **Maintaining Sufficient Operating Reserves**
 - **Target: 6 months of operating and maintenance expenses**
 - **Indicative of strong systems per rating agencies and industry organizations**

Key Performance Objectives Cont'd

- **Maintaining Sufficient Debt Service Coverage**
 - **What it is: Net income / annual principal and interest expenses**
 - **Goal: Net revenues 2 x greater than annual debt service (min. target of at least 1.5 x)**
 - **Indicative of financially strong utility per rating agencies' published criteria**

Key Issue: Increase in Capital Plan

Capital Projects by Projection Year Per RSA



Past Studies	Total CIP
2016	\$324.2M
2017	442.6M
Increase	\$118.4M

Notable Project Increases:

- \$34M – Sanitary sewer upgrades/improvements
- \$28M – Marshall street upgrades/improvements
- \$21M – Water system upgrades/improvements and reverse osmosis #3

Snapshot of Financial Management Plan:

No change to rate plan

FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

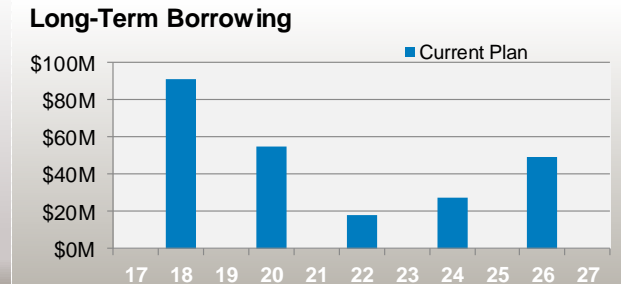
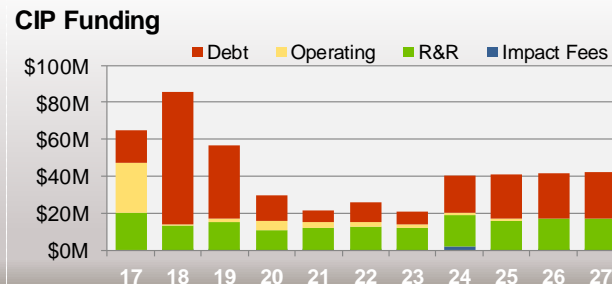
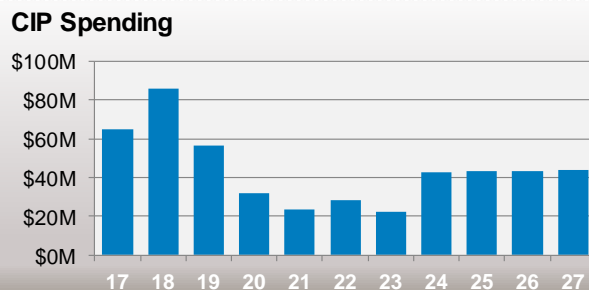
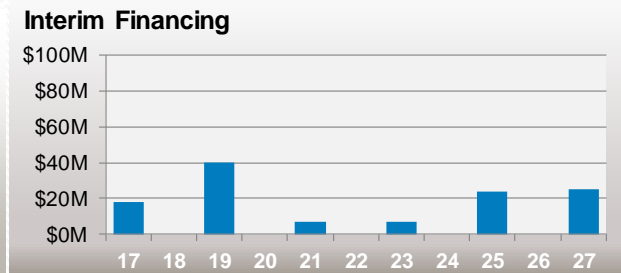
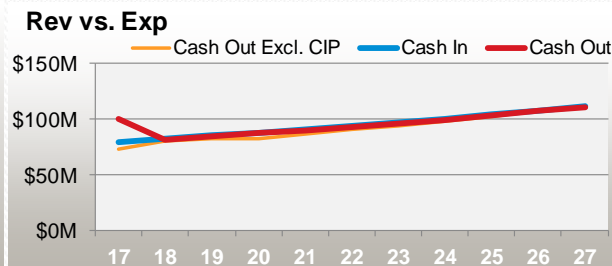
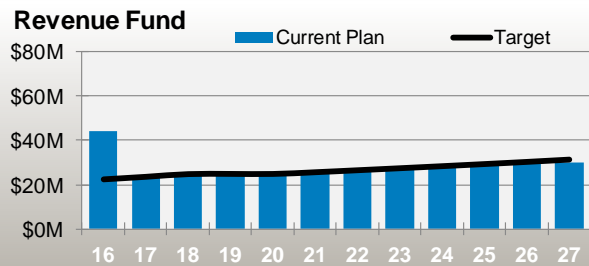


ROLL CALC SAVE

Clearwater

FY 2017 FY 2018 FY 2019 FY 2020 **FY 2021** FY 2022 FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 Cumulative Change
FY 2022 FY 2027

Water, Sewer & Reclaimed Rate Plan	0.00%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	20.19%	44.44%
Senior DSC	2.25	1.90	1.90	2.17	2.12	2.09	2.13	2.06	2.09	1.94	1.95		
CIP Execution %	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Oper Reserve Mos	6	6	6	6	6	6	6	6	6	6	6		
Avg Bill (3,000 gal)	\$47.91	\$49.71	\$51.57	\$53.50	\$55.50	\$57.59	\$59.75	\$61.99	\$64.32	\$66.73	\$69.23		



Snapshot of Financial Management Plan: Adjusted rate plan to meet key targets

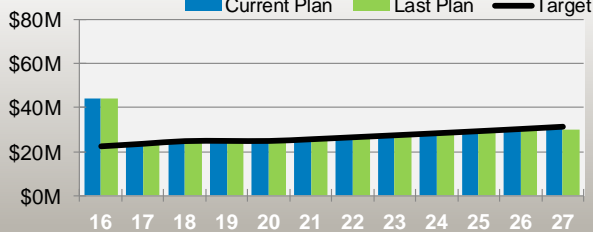
FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY


[ROLL](#)
[CALC](#)
[SAVE](#)

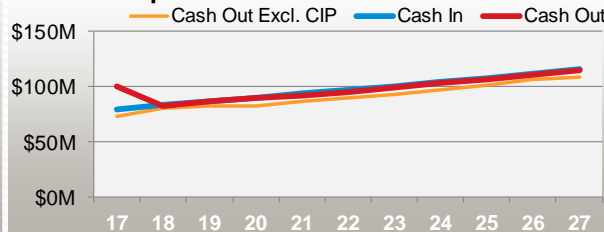
Clearwater

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Cumulative Change FY 2022 FY 2027
Water, Sewer & Reclaimed Rate Plan	0.00%	6.25%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	24.31% 51.19%
Last Plan	0.00%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	20.19% 44.44%
Senior DSC	2.25	2.00	2.01	2.33	2.30	2.31	2.38	2.35	2.41	2.28	2.31	
Last Plan	2.25	1.90	1.90	2.17	2.12	2.09	2.13	2.06	2.09	1.94	1.95	
CIP Execution %	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Oper Reserve Mos	6	6	6	6	6	6	6	6	6	6	6	
Avg Bill (3,000 gal)	\$47.91	\$50.90	\$52.94	\$55.06	\$57.27	\$59.56	\$61.94	\$64.42	\$66.99	\$69.67	\$72.45	

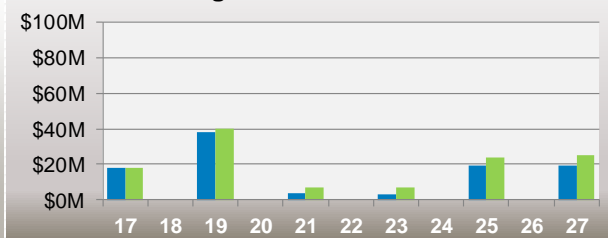
Revenue Fund



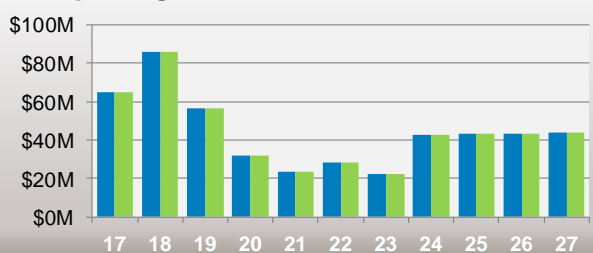
Rev vs. Exp



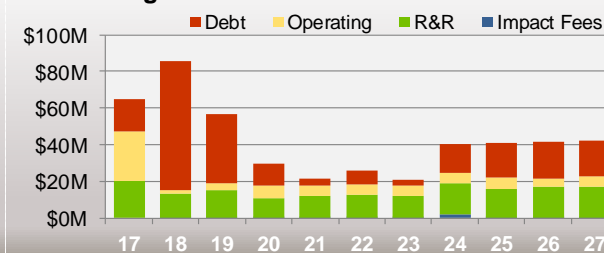
Interim Financing



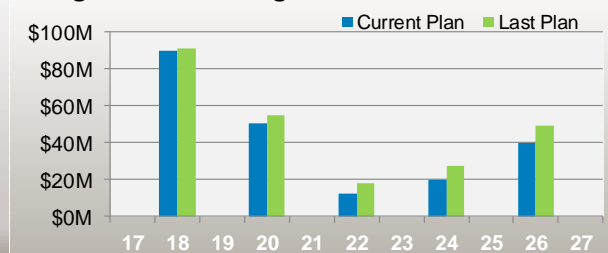
CIP Spending



CIP Funding



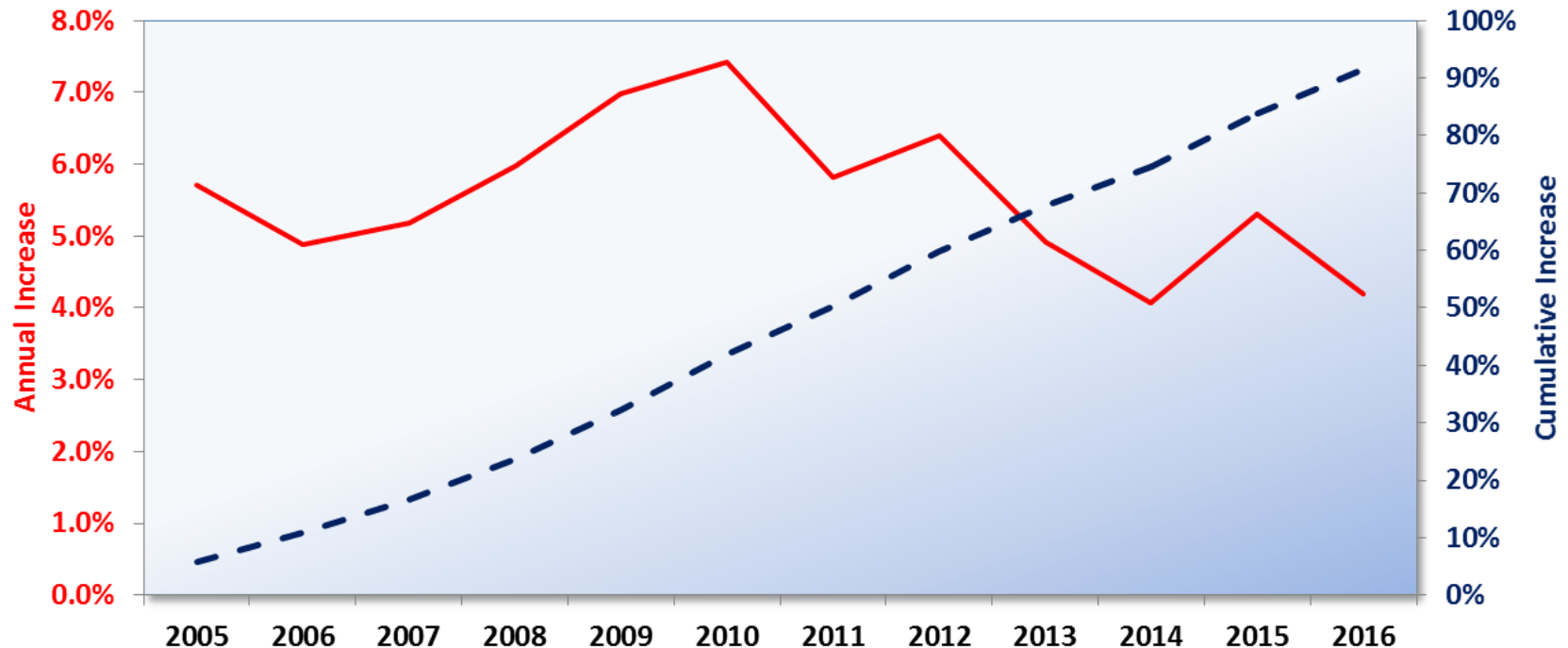
Long-Term Borrowing



Comparison to National Trends

US CPI - Water & Sewerage Maintenance Series

— Annual Increase
- - - CPI Cumulative % Increase



- ▶ Measures the national average change in the cost of water and sewer service to households
- ▶ Much more specific and relevant to utilities than overall CPI; 10-year avg. annual increase = 5.7%

FY 2017 Residential Bill Comparison

Combined Water & Sewer Bill Survey at 3,000 Gallons per Month



Projected FY 2018 Bill Comparison

(Based upon current available information; actual rates may vary)

Combined Water & Sewer Bill Survey at 3,000 Gallons per Month



No data available on potential for Oldsmar & Gulfport

Summary of Results & Recommendations

- Due to increase in capital plan, current rate plan does not meet key financial targets
- 5-yr plan of water, sewer, irrigation, and reclaimed water rate increases (FY18–FY22):
 - FY 2018: 6.25%
 - FY 2019 – FY 2022: 4.00%
 - Achieves key financial objectives
 - Comparable to national and local trends
- Perform annual revenue sufficiency studies
 - Modify rate plan as needed (up or down)

Water & Sewer Utility Fund Revenue Sufficiency Analysis

Andrew J. Burnham
Vice President, Stantec

David W. Porter, P.E.
City of Clearwater

City Council ~ July 31, 2017

