

Water and Wastewater FY17 Operating Budget FY17-21 Capital Program

Capital Program

Program Elements

- System Reliability/Quality
- Septic Tank Elimination
- Regulatory Mandates

System Reliability/Quality

Facility replacements/improvements along with water treatment improvements support reliable service goals for our customers.

- Reduce sewer backups
- Reduce water and sewer main breaks
- Reduce system-wide boil water events



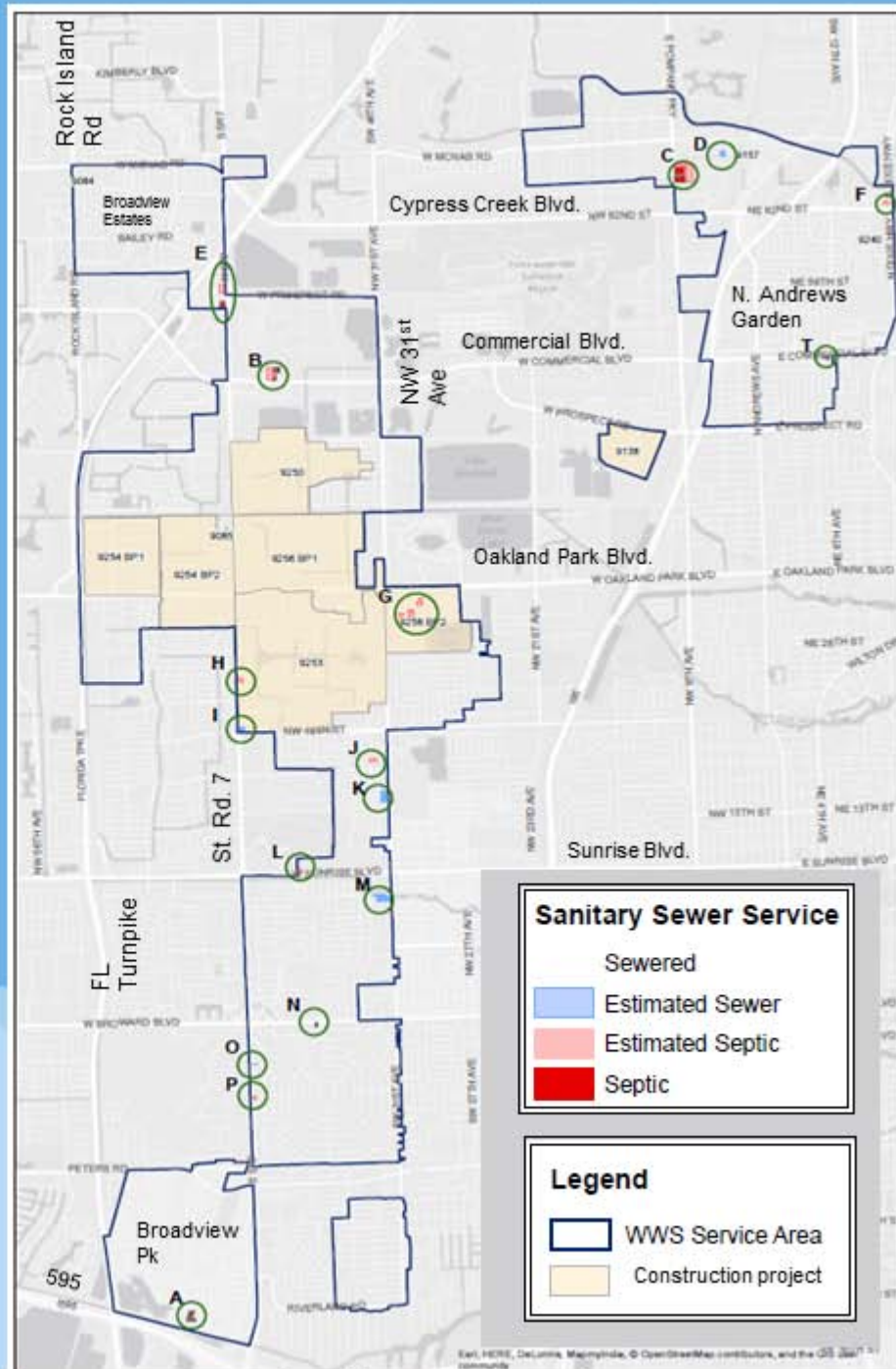
Septic Tank Elimination

- Over 15,750 septic tanks eliminated since 2001. 250 eliminated in FY15 in the Dania Beach area of Service District 3A.
- Approximately 2,950 remain (5.0% of our customers). Most eliminated by 2020.
- Prioritization is based on availability of sewer service in close proximity to target areas.

Septic Tank Elimination

Water/Sewer District 1

(Communities include Fort Lauderdale, Lauderdale, North Lauderdale, Oakland Park and MSD Broadview Park)



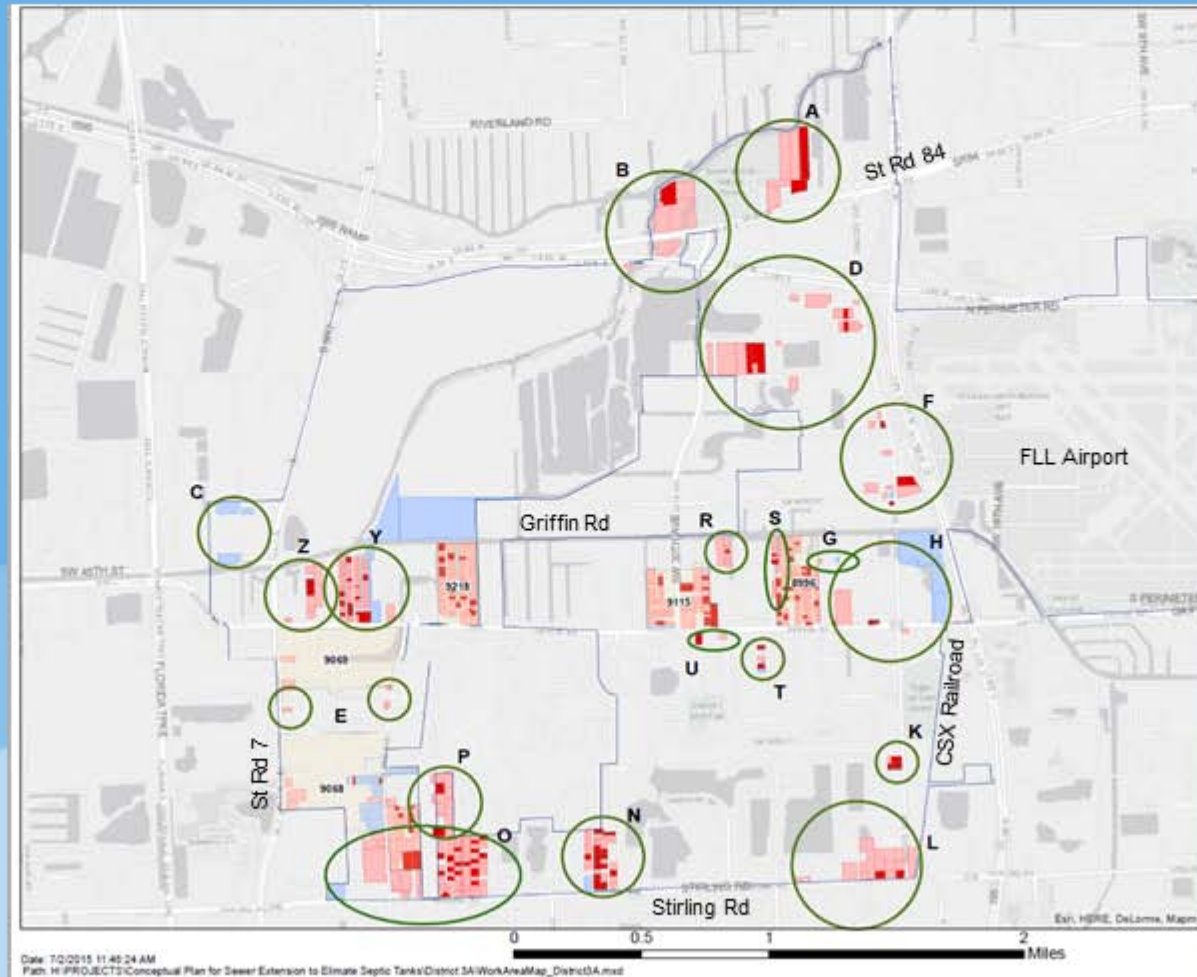
(Communities include Deerfield Beach and Pompano Beach)



Septic Tank Elimination

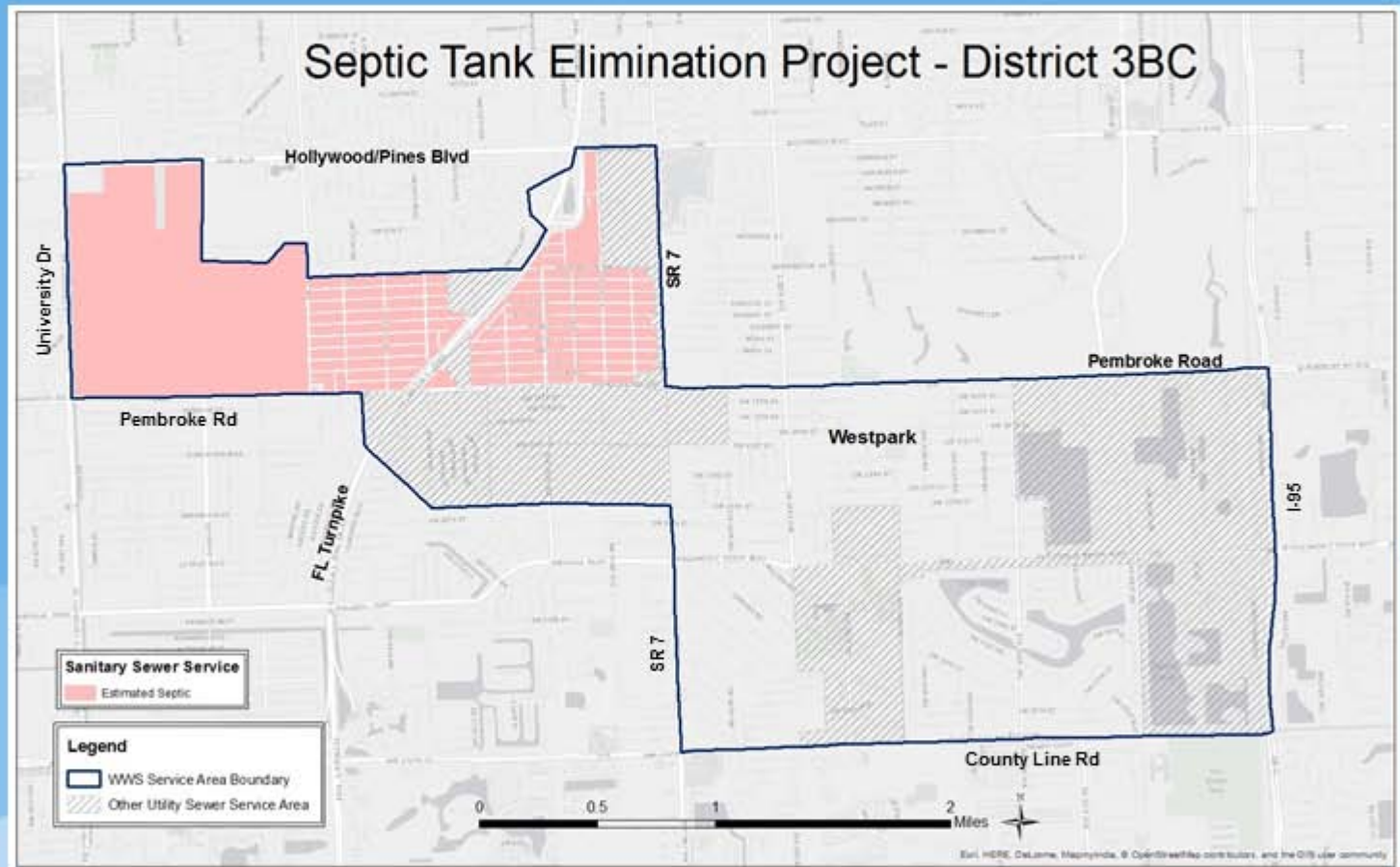
Water/Sewer District 3A

(Communities include Dania Beach, Hollywood and a small portion of Davie)



Septic Tank Elimination Water/Sewer District 3BC

(Communities include Hollywood, Miramar, Pembroke Pines, Pembroke Park and Westpark)



Regulatory Mandate #1

2006 Water Availability Rule

- Limits Biscayne Aquifer withdrawals to April 2006 historical withdrawals.
- Creates stranded (excess) treatment capacity of 19 MGD.
- Requires us to seek alternative water supplies to meet future demands.
- The preferred source of alternative water supply has been identified.

Alternative Water Supply C-51 Reservoir

- Supported by utilities within Palm Beach and Broward County along with SFWMD and Lake Worth Drainage District.
- Would capture and store storm runoff that normally flows to the ocean.
- Water would recharge Biscayne Aquifer through network of canals.
- Allows County to utilize some of the stranded treatment capacity.
- Staff has completed review and provided comments for the allocation and maintenance agreements.
- Groundwater modelling has been completed for the South and North Regional Wellfields and the 2A Wellfield.

Regulatory Mandate #2

2008 Ocean Outfall Legislation

- State's ocean outfall elimination legislation amended in 2013.
- After 2025, up to 5% of total annual treated wastewater flow may be disposed of through ocean outfall – satisfies peak-flow needs.
- Requires 60% of historical ocean outfall flow to go to reuse (22 MGD). This does not include the 4 MGD that is currently used by the County. Projections of future demands are:
 - 15 MGD Palm Beach
 - 2 MGD North Springs Improvement District
 - 4 MGD Pompano Beach
 - 2 MGD Coconut Creek

Reuse Successes

- Agreement with Palm Beach County approved by both parties.
- Agreement to sell reclaimed water to Coconut Creek approved by both parties.
- Selection of design consultant to provide up to 3 MGD to North Springs Improvement District is underway.
- Agreement to purchase reclaimed water from Pompano Beach to serve Pompano Highlands approved by Pompano Beach and was recently brought to Board of County Commissioners. Retail rates for reuse water recommended at \$0.70 per 1,000 gallons.

RECOMMENDED FY17-FY21 CAPITAL PROGRAM

Water Treatment and Distribution	94 M
Wastewater Collection	124 M
Wastewater Transmission	20 M
Wastewater Treatment	103 M
Misc. Projects	14 M
Ocean Outfall Compliance	<u>51 M</u>
Total	\$ 406 M

RECOMMENDED FY17-FY21 CAPITAL PROGRAM

	2017	2018	2019	2020	2021	Total
Total Capital Budget	\$168,680,940	\$86,902,920	\$115,126,030	\$24,067,560	\$11,249,580	\$406,027,030

Debt Service

Per the Rating Agencies:

“the system's good, stable coverage levels, healthy liquidity, diverse customer base, **strong financial management**, and manageable debt burden, which will decline as no new debt is expected until 2019”
– Moody's

“the upgrade reflects the utility's trend of strong, and likely sustainable, financial performance,” and that the outlook “reflects our expectation that county management will continue to manage the system's financial position to produce strong coverage and liquidity.” - S&P

“Modest projected annual rate increases are expected to improve financial margins and increase free cash flow (FCF) for capital spending before new debt is issued in fiscal 2019. The projected rate increases are not expected to diminish the system's solid rate-raising flexibility.” - Fitch

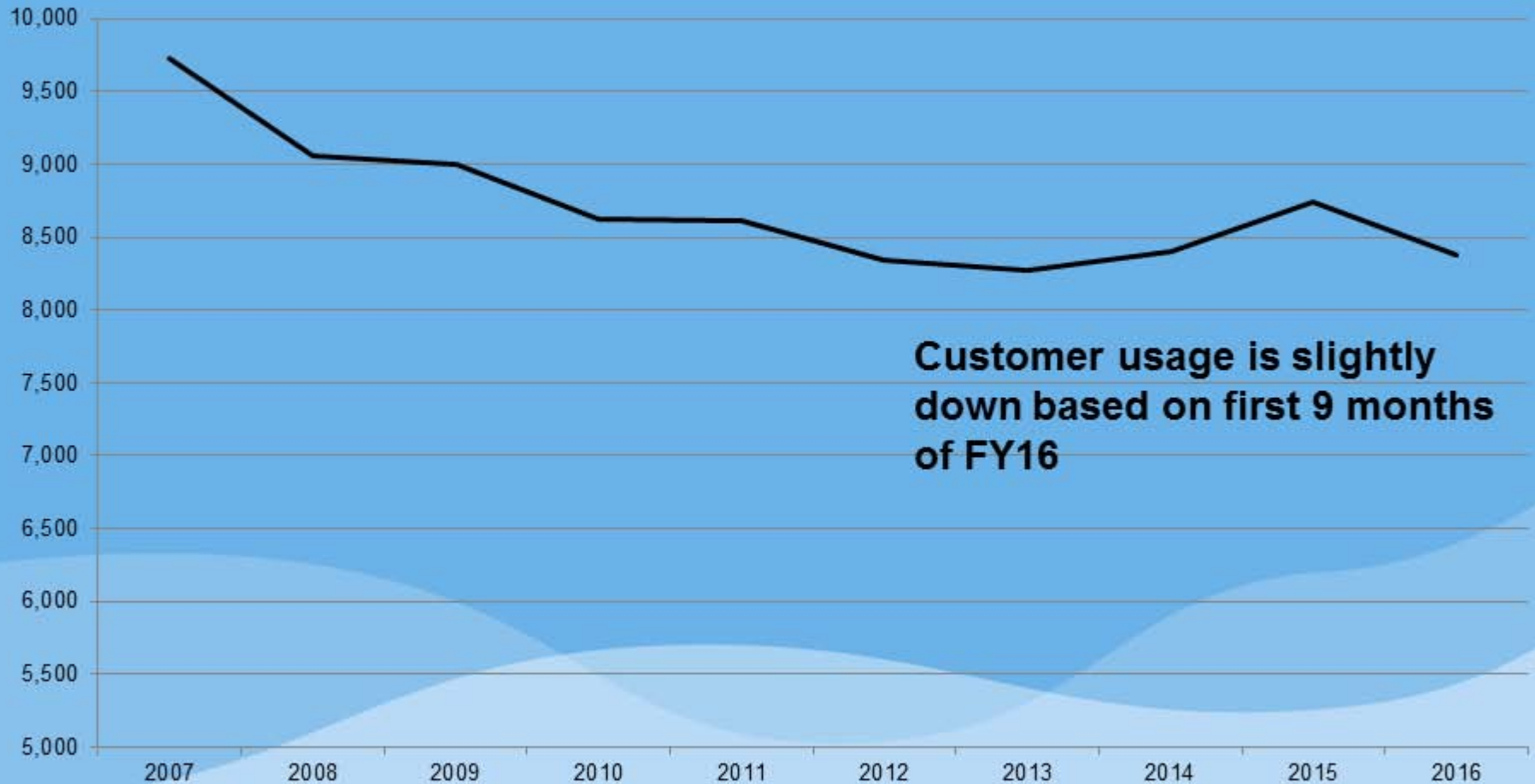
- Reduction in debt service payments of \$1.5M due to 2015 refunding of 2005 and 2009 Bonds.
- Upgraded Ratings from Moody's (Aa1) and Standard and Poor's (AA+).
- Future bond sales \$125 million in 2019.

Operating Budget

Budget Factors – Water Usage

- 2015 rainfall was 7.3” below historic annual levels. This resulted in higher than normal consumption due to enhanced irrigation demand.
- Through June 2016, rainfall is almost 2” above historic annual averages. This surplus of rain has resulted in a reduction of 4.3% in water demand.
- Decrease in idle accounts is increasing active customer base by 0.7%.
- Conservation programs continue to reduce user demand.

Annual Retail Water Usage (million gallons)

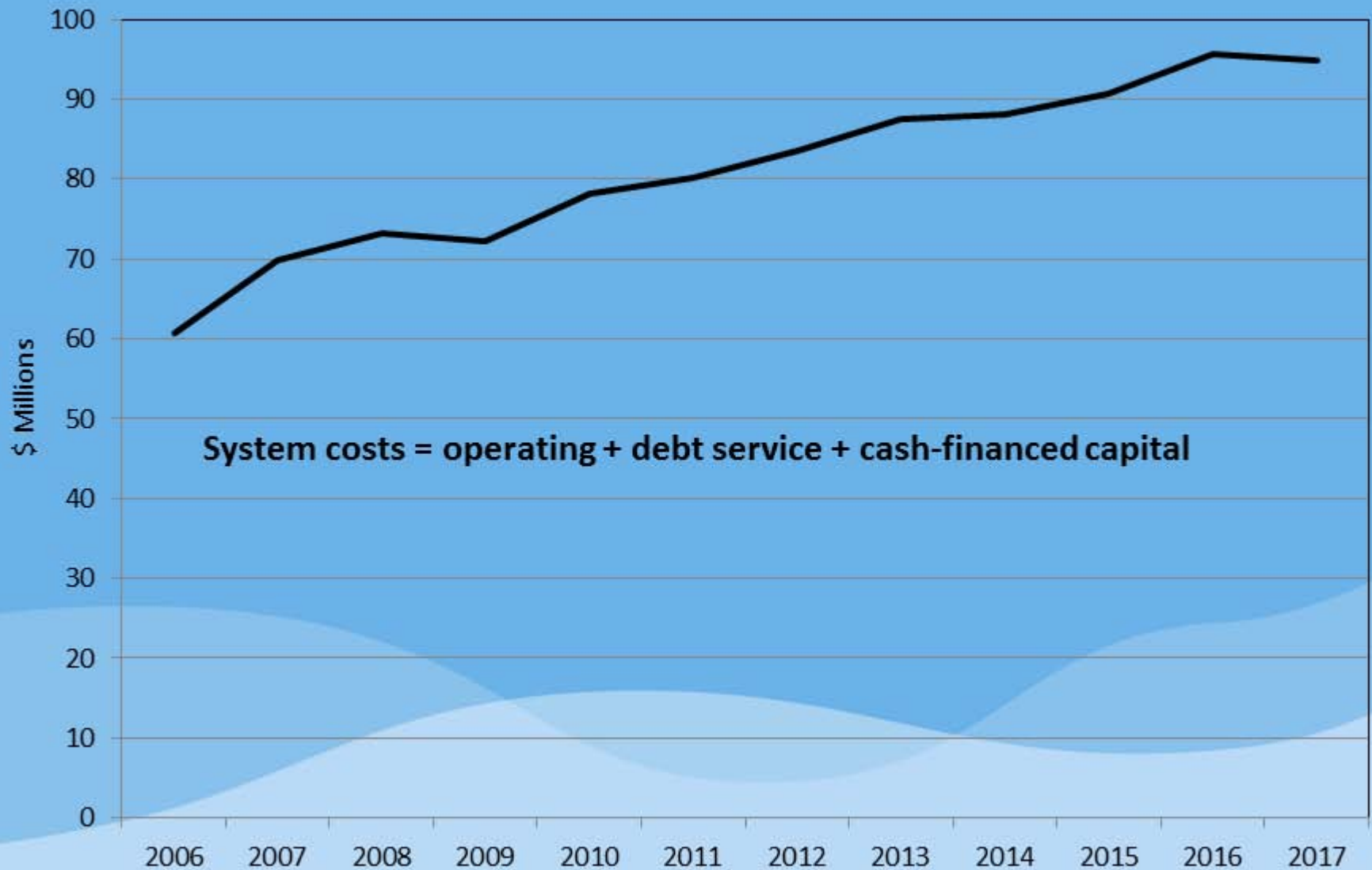


Budget Factors – System Costs

1. Non-personnel operating costs have increased.
2. Personnel costs have remained flat.
3. Re-investment in operating capital costs has increased.
4. Cash-financed capital has decreased.
5. Debt service costs remain level.

➡ Total system costs have slightly decreased.

Annual System Costs



Retail Rates

- Very competitive among local utilities.
- Conservation based: Rewards customers with the lowest consumption with the lowest rates.

WATER AND SEWER FLOWS/ CAPACITIES IN BROWARD COUNTY

Utility	WWTP Capacity (MGD)	WWTP Flow (MGD)	Produces Reuse	WTP Capacity (MGD)	Customers	WTP Flow (MGD)	Notes
Broward County WWS	95	67	Yes	56.00	56,600	20	BC also purchases 6.79 MGD water from Hollywood
Fort Lauderdale	56	35	No	90.00	57,800	40	
Sunrise	30	28	Yes	51.50	57,400	24	Only one of three WWTP produce reuse
Hollywood	56	38	Yes	59.50	40,200	22	
Pompano Beach			Yes	50.00	18,100	14	Broward WWTP
Pembroke Pines	10	7	No	18.00	49,100	13	
Miramar	13	9	Yes	17.45	33,000	13	
Plantation	19	11	Yes	24.00	28,600	10	
Deerfield Beach			No	23.60	13,800	10	Broward WWTP
Margate	10	8	No	13.50	16,600	7	
Lauderhill			No	16.00	11,100	6	Broward WWTP
Coral Springs			No	16.00	13,000	6	Broward WWTP
Tamarac			No	16.00	20,300	6	Broward WWTP
Hallandale Beach			No	16.00	7,000	6	Hollywood WWTP
C SID	8	5	No	7.20	9,900	4	
Davie	5	1	Yes	10.00	9,400	4	
NSID			No	6.80	12,500	4	Broward WWTP
Cooper City	3	1	Yes	7.00	10,200	3	
North Lauderdale			No	7.50	8,300	3	Broward WWTP
Dania Beach			No	5.00	4,800	2	Hollywood WWTP
Hillsboro			No	2.25	200	1	WW service by BC
Royal Utility			No	1.00	1,400	0	Broward WWTP
Parkland			No	0.58	800	0	Broward WWTP
Wilton Manors			No		4,200	--	Water and WW Fort Lauderdale
Oakland Park			No		8,700	--	Water from Fort Lauderdale and WWTP from Fort Lauderdale and BC
Coconut Creek			No		11,300	--	Broward WWTP and Broward wholesale water.

2015 Rate Survey

Current
Broward
County
Rate



Comparative Rate Survey as of 12/31/2015 (Based On Usage Of 5,000 Gallons Per Month)			
Utility	Water	Sewer	Total
Davie	36.82	68.66	105.48
Wilton Manors	56.76	46.61	103.37
Sunrise ¹ (outside City)	46.08	56.3	102.38
Dania Beach	35.00	58.82	93.82
Oakland Park**	45.81	43.53	89.34
Sunrise ¹ (inside City)	36.87	45.03	81.90
Hollywood	26.93	54.27	81.20
North Lauderdale**	30.75	44.99	75.74
Parkland**	24.31	51.42	75.73
Margate ¹ (outside City)	35.55	36.18	71.73
Fort Lauderdale ¹ (outside City)	26.74	44.79	71.53
Average Water & Sewer for Broward Utilities	30.23	39.84	70.07
Coconut Creek**	39.08	30.00	69.08
Cooper City	26.47	40.16	66.63
NSID**	36.09	30.28	66.37
Miramar	29.03	37.02	66.05
Tamarac**	21.80	42.75	64.55
Pompano Beach ¹ (outside City)**	30.10	32.18	62.28
Broward County WWS	25.07	36.82	61.89
Coral Springs**	20.58	39.18	59.76
Hallandale Beach	24.36	34.76	59.12
Plantation	21.29	36.95	58.24
Royal Utility**	26.68	31.24	57.92
Margate ¹ (inside City)	28.45	28.94	57.39
Fort Lauderdale ¹ (inside City)	21.39	35.83	57.22
Lauderhill**	20.15	35.31	55.46
Deerfield Beach**	28.25	24.53	52.78
CSID	25.01	25.01	50.02
Pompano Beach ¹ (inside City)**	24.08	25.76	49.84
Pembroke Pines	23.07	26.71	49.78

¹ These providers charge a 25% surcharge for supplying customers outside their municipal limits.

Note: (Broward County does not apply any surcharges to their customers)

** Wholesale wastewater customer of Broward County.

Recommended FY17 Retail Rates

		Proposed	Current	% Δ	% Δ	% Δ	\$ Inc.
Rate Impacts	1,000 gals	Total	Total	Water	Sewer	Total	Total
Water/Sewer Customers							
Residential 5/8 inch	0	\$34.70	\$33.66	3.02%	3.15%	3.08%	\$1.04
Residential 5/8 inch	3	50.81	49.29	2.94%	3.17%	3.08%	\$1.52
Residential 5/8 inch	5	63.81	61.89	2.98%	3.18%	3.10%	\$1.92
Residential 5/8 inch	10	110.71	107.39	2.98%	3.19%	3.09%	\$3.32
Residential 5/8 inch	20	222.35	215.71	2.99%	3.20%	3.08%	\$6.64
Residential 1 inch	25	326.10	316.35	3.00%	3.19%	3.08%	\$9.75
Commercial 5/8 inch	8	107.91	104.67	3.02%	3.18%	3.10%	\$3.24
Commercial 1 inch	19	277.94	269.58	3.01%	3.18%	3.10%	\$8.36
Commercial 1.5 inch	41	615.16	596.66	3.01%	3.19%	3.10%	\$18.50
Commercial 2 inch	109	1,577.03	1,529.59	3.01%	3.19%	3.10%	\$47.44
Water only							
Irrigation 5/8 inch	13	\$106.95	\$103.85	2.99%		2.99%	\$3.10
Irrigation 1 inch	28	216.62	210.34	2.99%		2.99%	\$6.28
Irrigation 1.5 inch	72	555.94	539.81	2.99%		2.99%	\$16.13
Irrigation 2 inch	160	1,211.91	1,176.78	2.99%		2.99%	\$35.13
Resale to Coconut Creek	48,748	\$178,569.51	\$173,589.48	2.87%		2.87%	\$4,980.03

Change for Average WWS Residential Customer



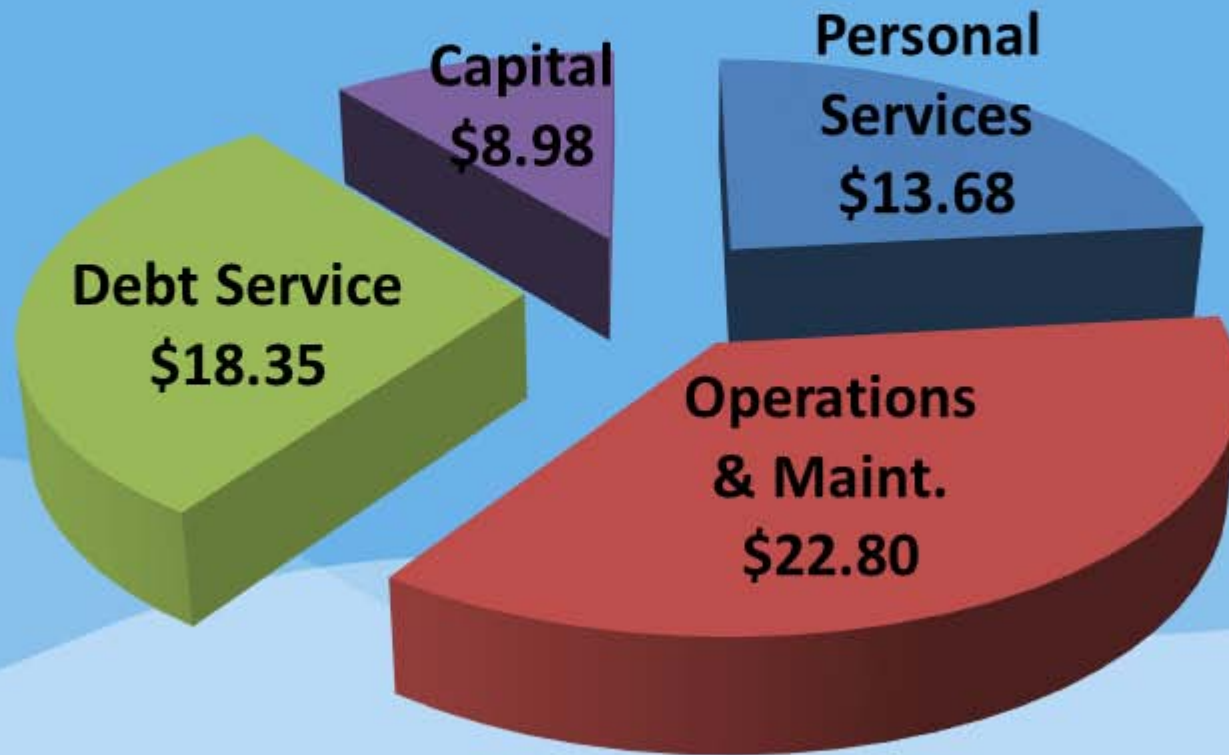
**5,000 gallons
per month**



5/8"

**\$1.92 per
month**

Breakdown of Proposed Average Customer Bill of \$63.81



Wholesale Rates

Per contract, regional wholesale users only pay actual operating costs.

- Wholesale wastewater:
 - Operating costs are slightly up but debt service remains level.
 - Flows have increased slightly.
 - Wholesale wastewater rates increase by 1¢ per 1,000 gals (5¢ per month for average residential user).
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- Wholesale raw water:
 - Operating costs slightly decreased.
 - Flows have decreased.
 - Wholesale water rates increase by 0.7¢ per 1,000 gals (3.5¢ per month for average residential user).

In Summary

- The County continues to provide cost-effective and competitive rates to our customers while proactively continuing to re-invest in our infrastructure.
- Manageable rate increases are forecast to fund future operating, capital and debt costs.