## **Nassau County**





## FY 2015 Utility Rate Study County Commission Workshop March 16, 2016

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## **Executive Summary**

#### **Multi-Year Financial Management Plan**

- Status quo will not address cost requirements of the system (capital needs)
  - Fund balances exhausted and in technical default by FY 2022
- ▶ 5.0% rate indexing adj. needed vs. 2.5% (similar to industry trends)

#### **Rate Structure Evaluation**

- Current rate structure generally compares well to local practices
  - Minor adjustments to first tier, monthly charge for water, and commercial usage rate

#### **Impact Fee/Capital Charge Updates**

- ▶ Impact fee decrease of about \$1,500 per unit for water & sewer combined
- Eliminate AFPI charges dating back to prior utility owner (private utility)

#### Updated miscellaneous fees and charges

- Fire protection charges, deposits, installation charges, premise visit, etc.
  - In some cases, changes are substantial given lack of recent update



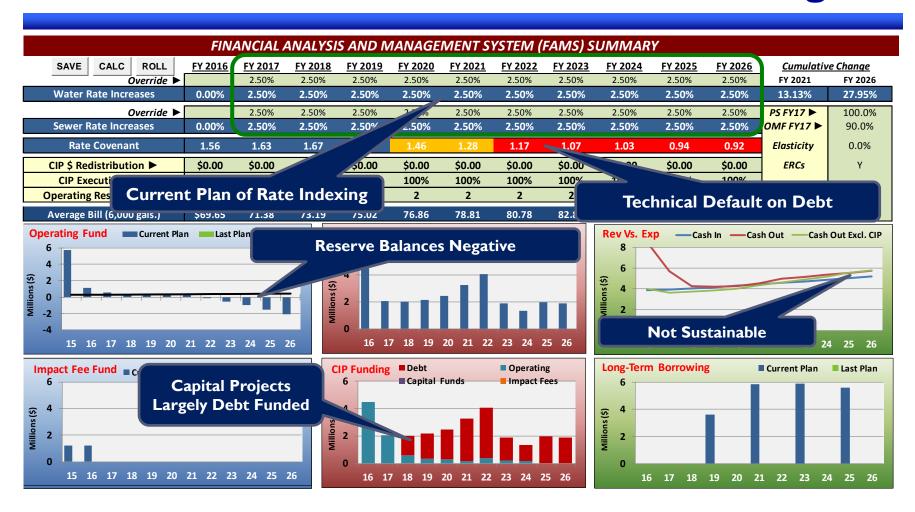


# FINANCIAL MANAGEMENT PLAN

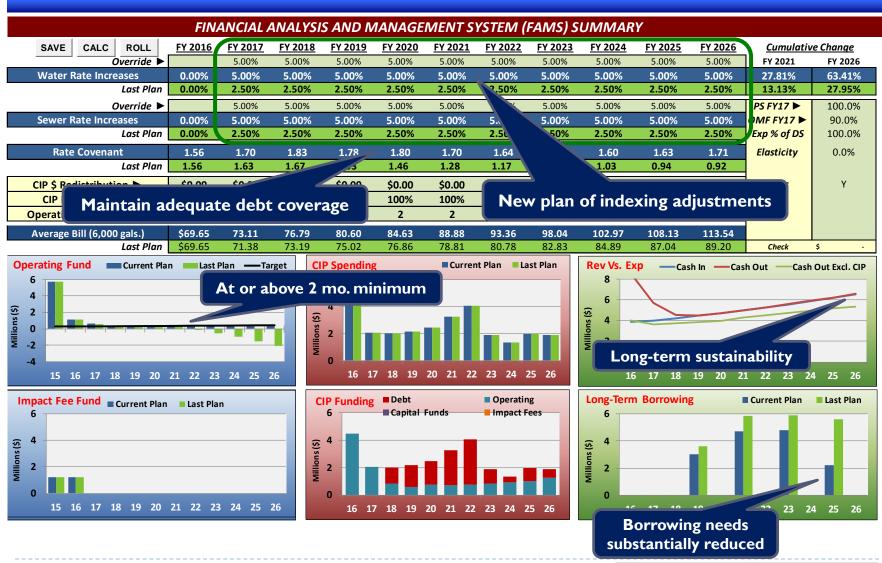
# Financial Management Plan: Source Data & Key Assumptions

- ▶ FY 2015 unaudited fund balances
- Revenues per 2015 actuals, adjusted by assumed rate increases and customer growth (with a 1% decrease in water usage per account)
- Operating expenses per FY 16 Budget, adjusted for:
  - Average annual cost inflation of approximately 3% per year
- ▶ 10-year project specific capital program per staff
- Use of impact fees for expansion portion of debt service
- Minimum fund balance reserve targets
  - Operating = 2 mos. of O&M expenses
  - ▶ Rate Stabilization = 10% of rate revenue
  - Contingency = 10% of operating expenses
  - Total reserves consistent with industry guidelines and rating agency criteria

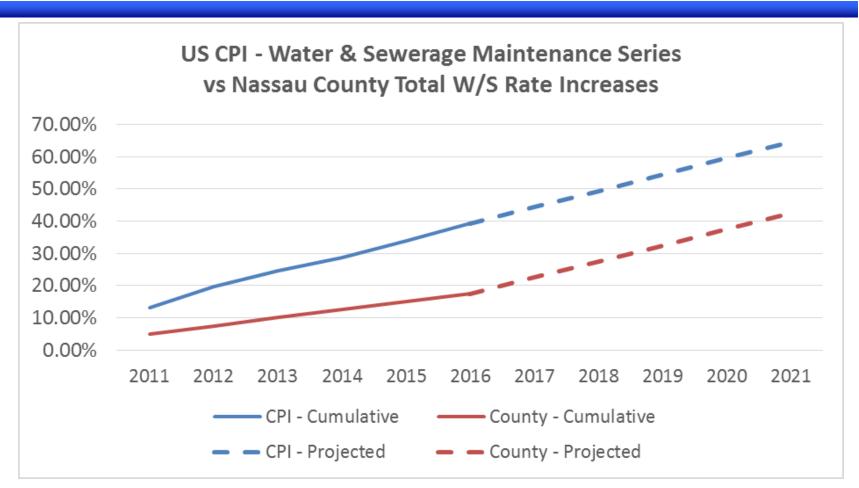
# Financial Management Plan Summary: Status Quo With 2.5% Rate Indexing



# Financial Management Plan Summary: With 5.0% Rate Indexing vs. 2.5%



## **Comparison to National Industry Trends**



- 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 (basis of current rate indexing plan)
- ▶ 10-year average annual increase = 5.7%; 20% higher than County adjustments

### **Comparison to Local Industry Trends**

(FY16 Combined Water & Sewer Bill at 6,000 Gallons per Month)



<u>LEGEND - Future Rate Increases (See next slide for details)</u>

No Increase indicates no near-term future increases planned at this time

Blanks indicate no information available relative to future fees



Indicates approved, planned, or expected increases

## Potential Water & Sewer Rate Increases (Per Research & Inquiries\*)

- Neptune Beach: Rate adjustments around FY 2008. Recently 3%. 2.5% increases beginning in FY 2017.
- Jacksonville Beach: Rate adjustments around FY 2011. Rates now indexed to US Water & Sewerage CPI; about 5% annually.
- **Fernandina Beach**: Greater of US CPI or 3% annual rate increases.
- **St. Mary's**: No rate increase since FY 2010. Future increases unknown
- **St. Augustine**: Future increases unknown.
- ▶ **St. Johns County (Main/Ponte Vedra)**: Indexed to US CPI; about 2% annually.
- **JEA**: No recent increases. Rate study to be performed this fall. Increases likely.
- ▶ Atlantic Beach: Rate adjustment around FY 2009. No increases planned.
- ▶ **Glynn County/Brunswick (JWSC)**: Facing significant rate pressure. Creating master plan to include plan of future rate increases.
- **Kingsland:** No rate increase since FY 2010. Future increases unknown.

<sup>\*</sup> As of November 5, 2015



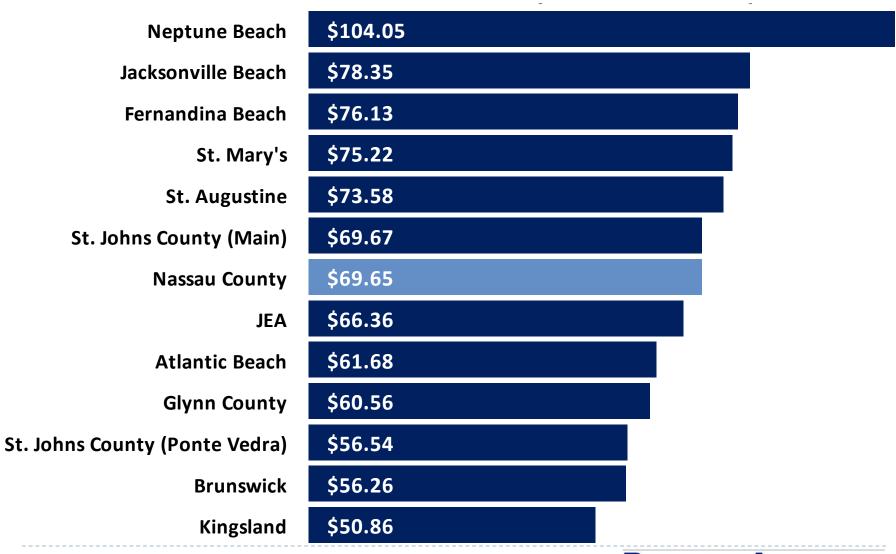


# RATE STRUCTURE EVALUATION

## FY 2016 Residential Water & Sewer Bill "Low User" - 3,000 Gallons



## FY 2016 Residential Water & Sewer Bill "Average User" - 6,000 Gallons



## FY 2016 Residential Water & Sewer Bill "Large User" - 15,000 Gallons



### **Local Water Rate Structures**

### Residential Usage Blocks (\$ per thousand gallons)



### **Local Sewer Rate Structures**

### Residential Usage (\$ per thousand gallons)



### **Local Rate Structures**

### Residential Fixed Charges (5/8" Meter)

	Water Bi	ill Details	Sewer Bill Details		
Entity	Fixed	Fixed Fixed %		Fixed %	
Neptune Beach	\$12.14	40.57%	\$20.24	27.30%	
Fernandina Beach	\$11.96	51.87%	\$35.09	66.12%	
St. Mary's	\$20.45	54.37%	\$20.45	54.37%	
Jacksonville Beach	\$10.82	34.79%	\$11.88	25.15%	
St. Johns County (Main)	\$12.08	38.64%	\$13.27	34.55%	
Nassau County	\$7.07	49.65%	\$18.99	34.27%	
JEA	\$12.60	61.76%	\$14.10	30.68%	
St. Augustine	\$17.30	54.47%	\$23.64	56.53%	
St. Johns County (Ponte Vedra)	\$12.85	58.97%	\$18.01	51.83%	
Glynn County	\$7.02	45.61%	\$12.29	27.21%	
Atlantic Beach	\$8.97	46.36%	\$20.46	48.33%	
Kingsland	\$12.65	49.74%	\$12.65	49.74%	
Brunswick	\$7.20	46.24%	\$7.51	18.46%	
Average	\$11.78	48.7%	\$17.58	40.3%	

## Recommended Rate Structure Modifications

- Increase amount of use in first tier from 3,000 to 5,000 gal
- Increase water fixed monthly charge
  - Bring closer to average of comparable local utilities
  - No increase to sewer fixed monthly charge (already comparable to average)
- Raise residential sewer cap to 10,000 gallons

#### **Typical Residential Usage Profile**

Description	Value	
People per Household	2.62	Source: 2010 Census Data Nassau Coun
Large Family - People per Household	5.24	
Typical Indoor Use (Gallons per Capita per Day)	65	Source: EPA
Typical Large Family Essential Domestic Use (Tgal/month)	10,360	

- Would capture use of larger families returning to sewer system
- Update commercial usage rate to reflect current cost of service
- New rate structure includes 5% rate increase for FY 2017

## **Customer Impacts: Single-Family Residential Users**

Residential 5/8" Meter Water & Sewer Bill Calculations							Across-1	The-Board	Increase	
Residential 5/6 Wieter Water & Sewer Bill Calculations							ACI 055-	пе-воаги	iliciease	
Monthly		% of		Current	Proposed					
Use (Gal)	# of Bills	Bills	Agg. %	FY 16	FY 17	\$ Chg	% Chg	FY 2017	\$ Chg	% Chg.
0	4,404	15.2%	15.2%	\$26.06	\$28.03	\$1.97	7.6%	\$27.36	\$1.30	5.0%
1,000	3,392	11.7%	26.8%	\$32.87	\$34.20	\$1.33	4.0%	\$34.51	\$1.64	5.0%
2,000	3,352	11.5%	38.4%	\$39.68	\$40.37	\$0.69	1.7%	\$41.67	\$1.99	5.0%
3,000	2,918	10.0%	48.4%	\$46.49	\$46.54	\$0.05	0.1%	\$48.81	\$2.32	5.0%
4,000	2,243	7.7%	56.1%	\$54.21	\$52.71	-\$1.50	-2.8%	\$56.92	\$2.71	5.0%
5,000	1,613	5.5%	61.7%	\$61.93	\$58.88	-\$3.05	-4.9%	\$65.03	\$3.10	5.0%
6,000	1,186	4.1%	65.7%	\$69.65	\$65.50	-\$4.15	-6.0%	\$73.13	\$3.48	5.0%
7,000	919	3.2%	68.9%	\$71.30	\$72.12	\$0.82	1.2%	\$74.86	\$3.56	5.0%
8,000	741	2.5%	71.4%	\$72.95	\$78.74	\$5.79	7.9%	\$76.60	\$3.65	5.0%
9,000	606	2.1%	73.5%	\$74.60	\$85.36	\$10.76	14.4%	\$78.33	\$3.73	5.0%
10,000	565	1.9%	75.5%	\$76.25	\$91.98	\$15.73	20.6%	\$80.06	\$3.81	5.0%
15,000	430	1.5%	83.7%	\$90.10	\$102.63	\$12.53	13.9%	\$94.60	\$4.50	5.0%
20,000	308	1.1%	89.8%	\$103.95	\$113.28	\$9.33	9.0%	\$109.15	\$5.20	5.0%
30,000	117	0.4%	95.9%	\$149.75	\$156.88	\$7.13	4.8%	\$157.24	\$7.49	5.0%
40,000	51	0.2%	98.1%	\$216.15	\$226.68	\$10.53	4.9%	\$226.96	\$10.81	5.0%
50,000	26	0.1%	99.1%	\$282.55	\$296.48	\$13.93	4.9%	\$296.68	\$14.13	5.0%
100,000	1	0.0%	100.0%	\$614.55	\$645.48	\$30.93	5.0%	\$645.28	\$30.73	5.0%

<sup>1 -</sup> Approximately 29,114 of the FY 2015 utility bills reviewed were 5/8" residential metered accounts, representing approximately 91.0% of the Utillity's residential accounts and approximately 74.7% of all water accounts.

# **Customer Impacts: Sample of Commercial Users**

Monthly Water & Sewer Calculations - Various Commercial Users							
	% of						
Meter	Commercial	<b>Typical Mtly</b>	Current	Proposed			
Size	Customers	Usage (Gal)	FY 16	FY 17	\$ Chg	% Chg	
5/8"	36.4%						
Large Use	r	60,000	\$489.26	\$492.43	\$3.17	0.6%	
Average U	Jser	24,000	\$211.34	\$213.79	\$2.45	1.2%	
Low Volu	me User	10,000	\$103.26	\$105.43	\$2.17	2.1%	
1"	20.5%						
Large Use	r	118,000	\$973.16	\$983.40	\$10.24	1.1%	
Average U	Jser	48,000	\$432.76	\$441.60	\$8.84	2.0%	
Low Volu	me User	20,000	\$216.60	\$224.88	\$8.28	3.8%	
1.5"	11.1%						
Average U	Jser	65,000	\$624.18	\$643.25	\$19.07	3.1%	
2"	14.1%						
Average U	Jser	80,000	\$812.20	\$843.44	\$31.24	3.8%	
3"	6.3%						
Average U	Jser	45,000	\$734.62	\$796.78	\$62.16	8.5%	
4"	4.7%						
Average U	Jser	100,000	\$1,375.87	\$1,474.75	\$98.88	7.2%	
6"	0.4%						
Average U	Jser	2,372,000	\$8,925.75	\$9,141.50	\$215.75	2.4%	

Across the Board Increase								
FY 2016	\$ Chg	% Chg						
\$513.72	\$24.46	5.0%						
\$221.91	\$10.57	5.0%						
\$108.42	\$5.16	5.0%						
\$1,021.82	\$48.66	5.0%						
\$454.40	\$21.64	5.0%						
\$227.43	\$10.83	5.0%						
\$655.39	\$31.21	5.0%						
\$852.81	\$40.61	5.0%						
\$771.35	\$36.73	5.0%						
\$1,444.66	\$68.79	5.0%						
\$9,372.04	\$446.29	5.0%						





# IMPACT FEES AND MISCELLANEOUS CHARGES

### **Updated Impact Fees**

▶ Basis: reconstruction cost new less depreciation of existing assets

Fee per Unit	Water Impact	Sewer Impact	Total	Water AFPI	Sewer AFPI	Total
Current	\$1,602	\$2,531	\$4,133	\$660	\$1,102	\$1,762
Update	\$1,105	\$1,548	\$2,653	\$0	\$0	\$0
\$ Change	(\$497)	(\$983)	(\$1,480)	(\$660)	(\$1,102)	(\$1,762)
% Change	-31%	-39%	-36%	-100%	-100%	-100%

- ▶ Takeaway: Depreciation has exceeded the level of reinvestment. As planned reinvestment occurs, unit cost will increase over time
- Recommendations:
  - Adopt updated fees to maximize cost recovery from growth
  - Maximize benefit of impact fees and apply to expansion portion of debt service
  - ▶ Eliminate AFPI fees carried over from private utility (not used by public utilities)

# Miscellaneous Fees & Charges: Fire Protection Charges

- What they are: fees for non-metered dedicated fire protection lines used for private fire suppression systems
  - Not many of them − Less than 30 connections
- Calculated in accordance with AWWA Manual M-I
- Charges should be increased for larger connections per cost of service (due to lack of recent updates)
  - ▶ Going forward could be adjusted by rate indexing adjustments

Size of Connection & Monthly Charges	Cost	of Service	Current	\$ Change	% Change
2"	\$	4.00	\$ 5.09	\$ (1.09)	-21.4%
3"	\$	11.62	\$ 10.23	\$ 1.39	13.6%
4"	\$	24.77	\$ 15.97	\$ 8.80	55.1%
6"	\$	71.96	\$ 31.93	\$ 40.03	125.4%
8"	\$	153.34	\$ 51.08	\$ 102.26	200.2%
10"	\$	275.76	\$ 73.41	\$ 202.35	275.6%

# Miscellaneous Fees & Charges: Water & Sewer Deposits

- Intent: Cover exposure in terms of lost revenue for service prior to shut-off (2 months)
- Basis: 2 times the monthly bill for average/typical use by customer class for various meter sizes
- Summary of Results:
  - Decrease in water deposits for most new residential customers
  - Increase in water deposits for most new commercial customers
  - Increase in sewer deposits for most new residential and commercial customers
  - Typical new residential customer with water and sewer: Deposit will increase by \$20 from \$125 to \$145

## Miscellaneous Fees & Charges: Various Fees

- ▶ Small portion of annual revenue (less than 1%)
- Charges associated with the provision of specific services to individual customers
  - Ex: plan review, premise visit, meter tests, etc.
- Provided cost of service templates to County staff
  - For use in updating the existing fees and to calculate new ones
- Summary of Results:
  - Many fees do not reflect current cost of service due to lack of recent updates

### **Conclusions & Recommendations**

#### **Multi-Year Financial Management Plan**

- Status quo will not address cost requirements of the system (capital needs)
- 5.0% rate indexing adjustment is needed (similar to industry trends)
- Update analysis in 2-3 years (account for changes & verify capital needs)

#### **Rate Structure Evaluation**

- Current rate structure generally compares well to local practices
- Adjustments to first tier, monthly charge (water) & commercial rate
- Enhance affordability for low volume and average residential users and conformance with local practices

#### Impact Fee/Capital Charge Updates

▶ Update impact fees (\$1,500 combined reduction) & eliminate AFPI charges

### Update miscellaneous fees and charges to reflect current costs

## **Discussion & Next Steps**



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