



Water & Sewer Fund and CIP

Proposed FY 2016 Rates

May 7, 2015



Outline

- Rate Objectives & Strategies
- Capital Improvement Program
- Customer Consumption
- Proposed Rates
- Capital Facility Fee Increases



Rate Setting Objectives

- Sustainability
 - Address increasing operating costs
 - Fund long-term capital needs
- Conservation
 - Continue tiered rate approach to promote conservation
 - Cost-Based
 - Recognize impacts of year-round irrigation schedule
- Affordability
 - Fairness and Equity



Multi-Year Rate Strategy

- Cover increasing operating and regulatory costs via moderate sustainable rate increases
- Provide funding for CIP implementation
- Structure future borrowing to smooth impact of rate increases and align with cash spending on capital projects
- Raise rates sufficiently to cover future debt service covenants on large revenue bond issues
- Prudent use of reserves
- Reward conservation efforts by maintaining lower rates for water efficient customers
- Water efficiency/restrictions and economy will continue to keep demand relatively flat



Capital Improvement Program



Proposed Capital Funding

(Appropriations in \$Million)

	FY 16	FY 17	FY 18	FY 19	FY 20	Total
Water Projects	\$56.2	\$29.7	\$10.0	\$2.6	\$86.1	\$184.7
Sewer Projects	\$14.0	\$156.6	\$32.8	\$28.6	\$50.6	\$282.4
Required CIP Funding	\$70.2	\$186.2	\$42.8	\$31.2	\$136.7	\$467.1



CIP – Water Projects

Project	FY 2015-16 millions
Jordan Lake Water Treatment Plant	\$2.25
Future Supply/Source Water Protection	\$2.14
Water Distribution System Rehabilitation	\$9.26
Water Facilities Rehabilitation	\$2.10
Water Residuals	\$39.00
Water Regulatory Improvements	\$1.50
Total Water	\$56.25



CIP – Wastewater Projects

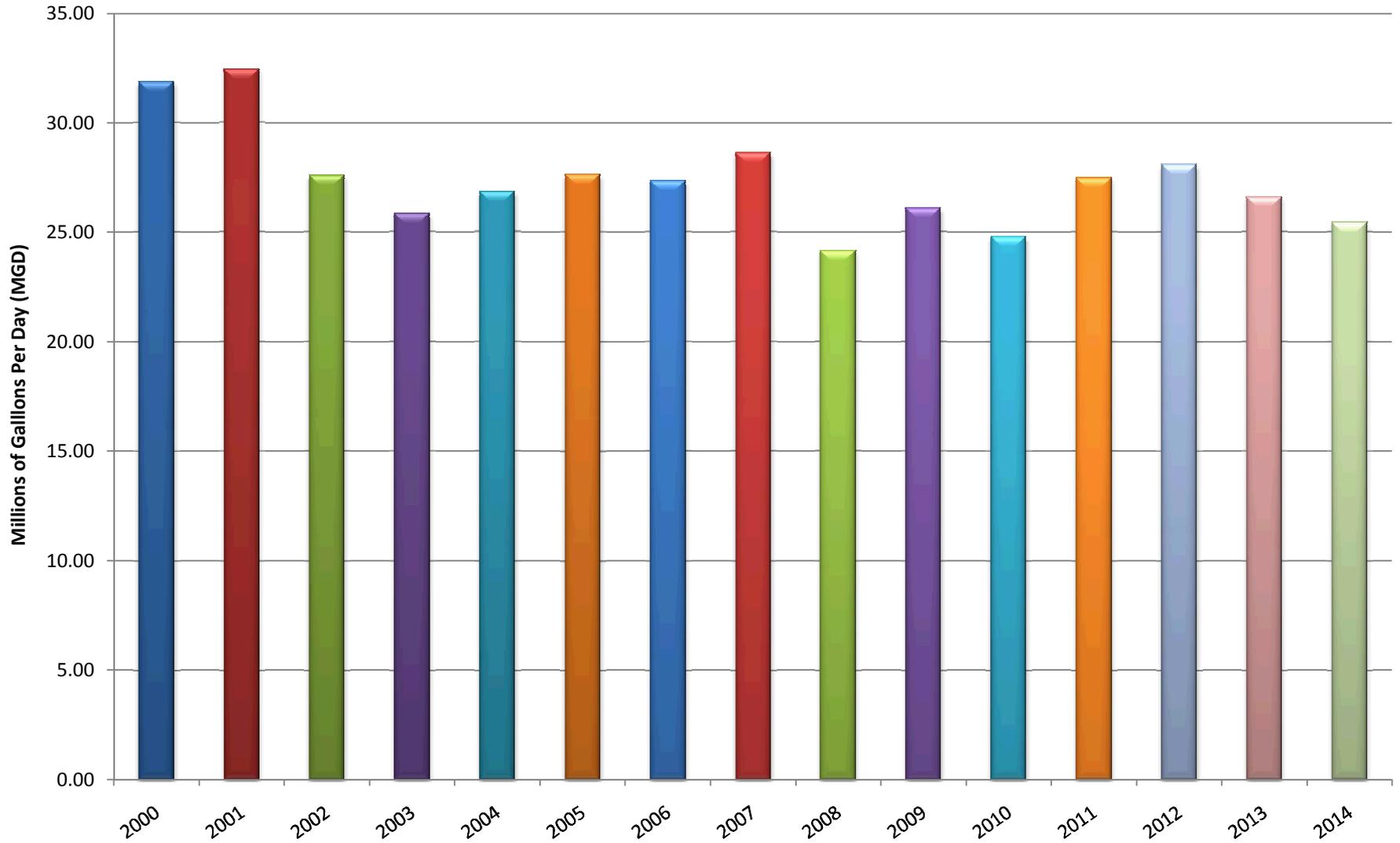
Project	FY 2015-16 millions
Enhanced Nutrient Removal	\$3.50
Sewer Collection System Rehabilitation	\$4.50
Southeast Regional Lift Station	\$4.70
Orange Co. Eno Economic District Development	\$1.25
Sewer Extensions & Improvements (DPW)	\$1.00
Total Wastewater	\$13.95



Water Usage/Consumption

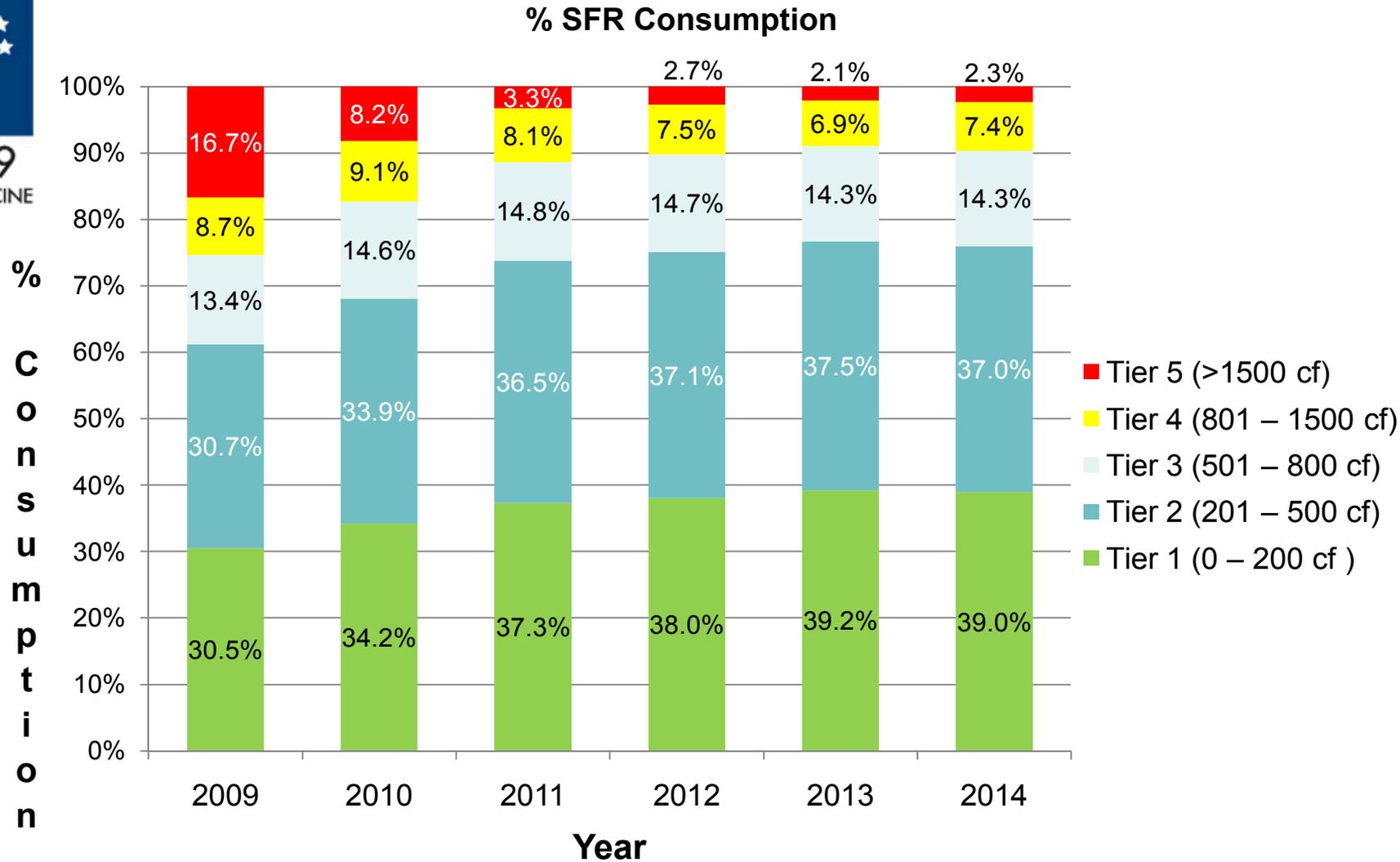
Average Daily Finished Water Produced

2000 - 2014





Trend - Percent of SFR Consumption by Tiers





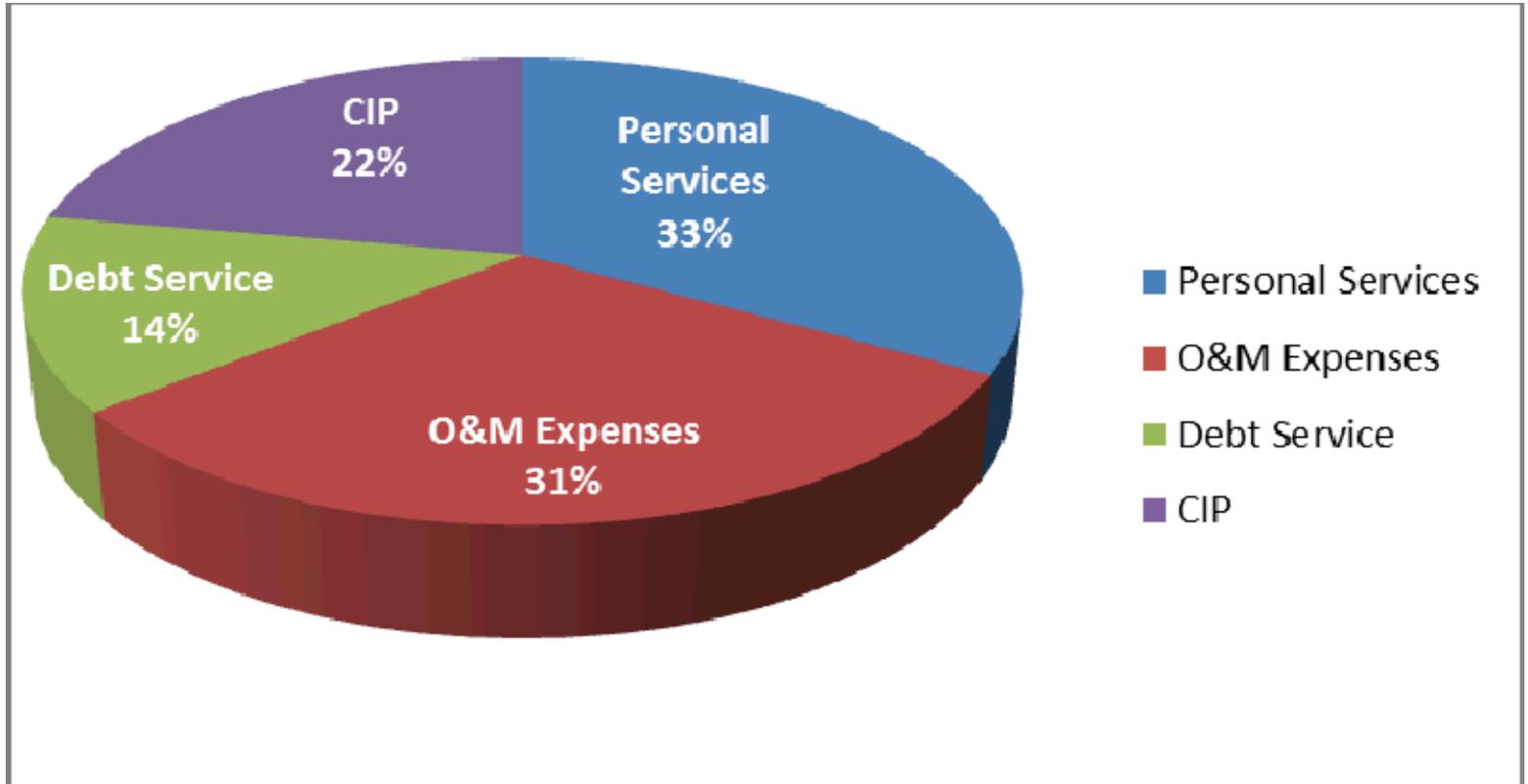
Revenues and Proposed Rates



Revenue Bond/Debt Strategy

- Spend down reserves over time to:
 - minimize revenue bond requirements
 - Maintain 180 days operating costs reserve - about \$31.5 M
- Interest-only “Line of Credit” borrowing to smooth out rate increases
- Fixed rate refinancing on periodic basis
- Use cash flow model instead of appropriation based
- Manage debt to the benefit of rate payers, not to maintain high bond ratings
- Strategy will still ensure reasonable interest rates
- Anticipate spending \$ 383.68 M from FY16 – FY19 as projects transition from design to construction

Major FY2016 Budget Components





FY16 Water & Sewer Rates - Proposed

- Increases to the water and sewer service charges
- Modest increase water consumption charges (all tiers)
- Sewer usage charge increase, uniform for all customers
- Continue penny per tier increase for watershed protection
- Based on consumption, customers will see different percentage increases in actual bills
- Impacts single family residential customers with higher rates as consumption moves into higher tiers:
 - Targets elective water uses
 - Minimizes impact to lower use customers
- Continue to bill Commercial, Multi-Family Residential, Industrial and Institutional customers at Tier 3 rates
- Outside double rates continue



Proposed FY16 SFR Rate Structure

	FY 15 Rates	FY 16 Rates
<u>Monthly Water Rates</u>		
Service Charge	\$ 6.36	\$ 6.72
Volume Charge - Tiered Rates (per 100 cubic foot - ccf)		
Tier 1 (0 - 2 ccf)	\$ 1.77	\$ 1.82
Tier 2 (>2 - 5 ccf)	\$ 2.67	\$ 2.74
Tier 3 (>5 - 8 ccf)	\$ 2.92	\$ 3.00
Tier 4 (>8 - 15 ccf)	\$ 3.82	\$ 3.91
Tier 5 (>15 ccf)	\$ 5.72	\$ 5.86
<u>Monthly Sewer Rates (Non-Triangle Basin Customers)</u>		
Service Charge	\$ 7.26	\$ 7.49
Volume Charge (per ccf)	\$ 3.89	\$ 3.99



FY16 – Proposed 2.9% Rate Increase

- Cover:
 - Operating Budget
 - Pay for Performance
 - Pay-Go CIP Funding
 - Debt
 - Fleet Replacement Fund
- Maintain proper debt covenants
- Maintain operating reserves

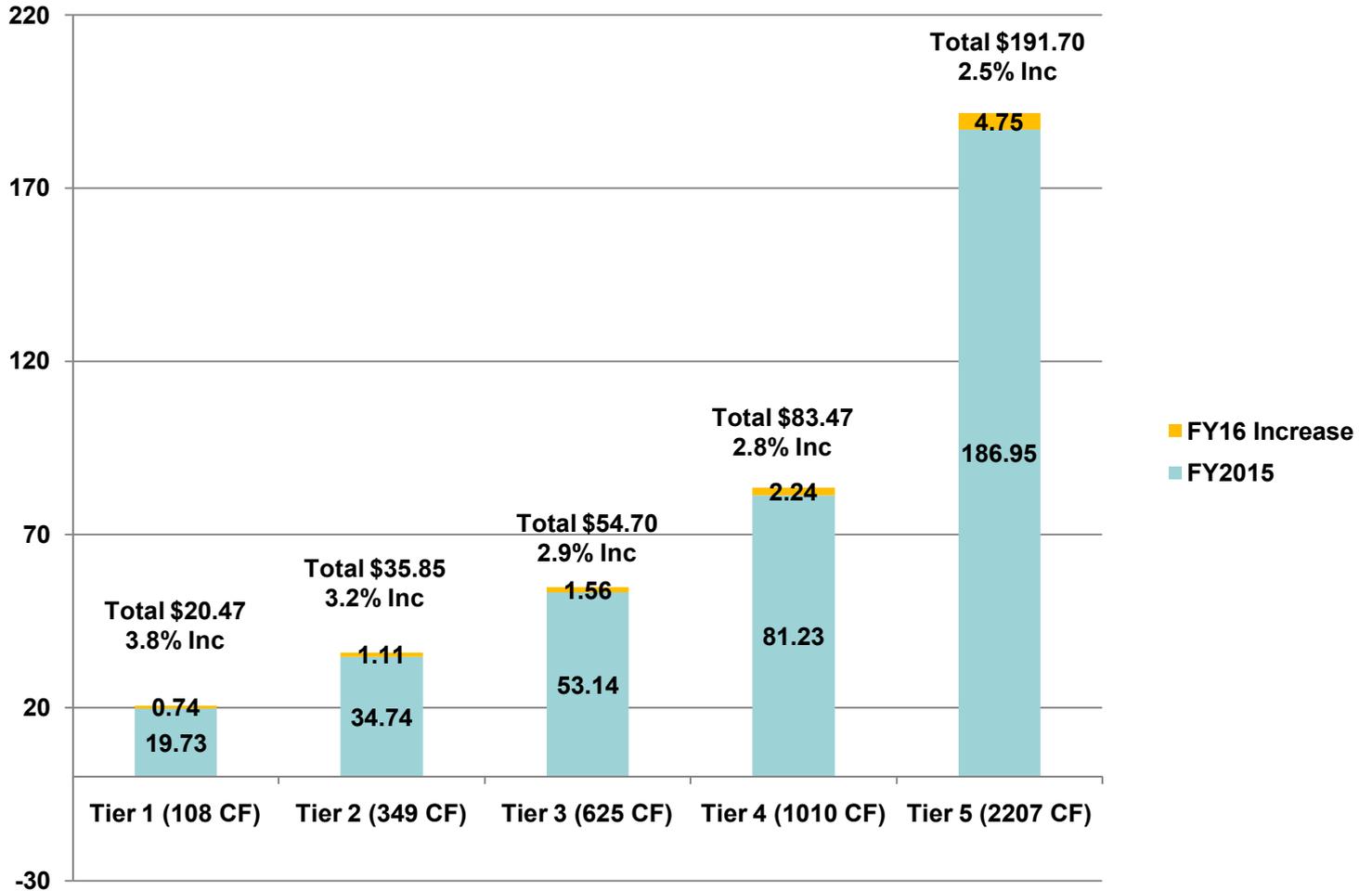


Comparison of Monthly Average Residential Inside Water & Sewer Bill FY15 vs. FY16

	Min % Change in Tier	Avg. Customer % Change in Tier	Max % Change in Tier
Tier 1 (0-200 cf)	4.33%	3.76%	3.49%
\$ Increase	\$0.59	\$0.74	\$0.87
<i>Volume used (cf)</i>	<i>0</i>	<i>108</i>	<i>200</i>
Tier 2 (201-500 cf)	3.49%	3.19%	3.03%
\$ Increase	\$0.87	\$1.11	\$1.35
<i>Volume used (cf)</i>	<i>201</i>	<i>349</i>	<i>500</i>
Tier 3 (501-800 cf)	3.02%	2.94%	2.86%
\$ Increase	\$1.35	\$1.56	\$1.86
<i>Volume used (cf)</i>	<i>501</i>	<i>625</i>	<i>800</i>
Tier 4 (801-1500 cf)	2.86%	2.75%	2.62%
\$ Increase	\$1.86	\$2.24	\$3.12
<i>Volume used (cf)</i>	<i>801</i>	<i>1010</i>	<i>1500</i>
Tier 5 (>1500 cf)	2.62%	2.54%	∞
\$ Increase	\$3.12	\$4.75	∞
<i>Volume used (cf)</i>	<i>1501</i>	<i>2207</i>	∞

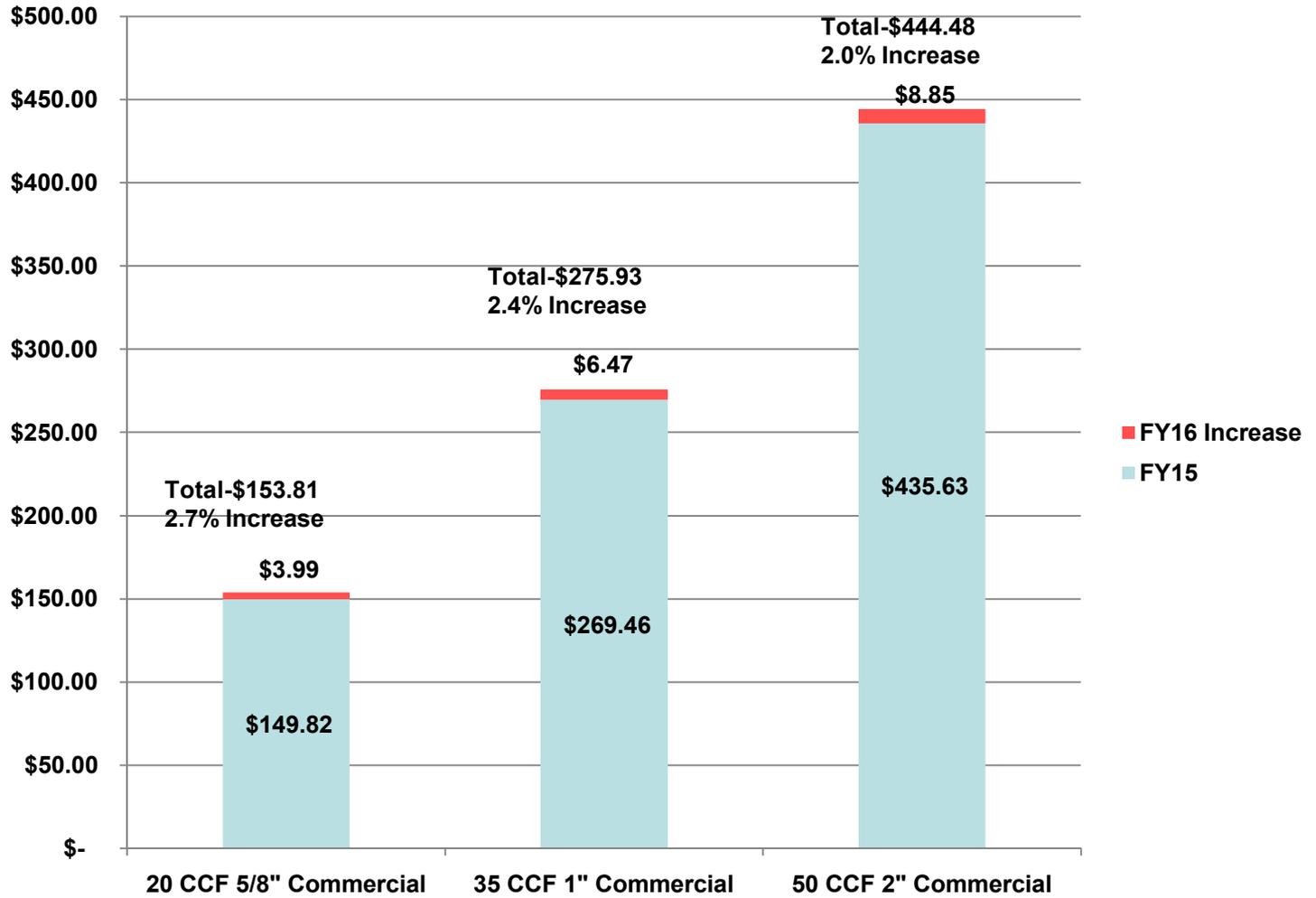


Comparison of Monthly Average Residential Inside Water & Sewer Bill FY15 vs. FY16





Comparison in Monthly Commercial Inside Bill FY15 vs. FY16





Changes to Sewer Rate Structure for Customers Served by County WWTP

Agreement between City and County:

- New sewer service charge and sewer usage rates for customers served by County wastewater plant
- Reflects costs established Durham County per County operating costs
- Service charges differ depending upon whether the sewer lines are owned and maintained by the County or by the City
- City reimburses the County for sewer usage at the County's established rate



Proposed FY16 Sewer Rates Triangle Basin Customers (County WWTP)

Located in/out of City Limits	Owner of Sewer Lines	Monthly Service Fee	Usage Charge/CCF***
Inside	City	\$7.49	\$4.05*
Outside	City	\$14.98	\$8.10**
Inside	County	\$3.90	\$4.05*
Outside	County	\$3.90	\$4.05*

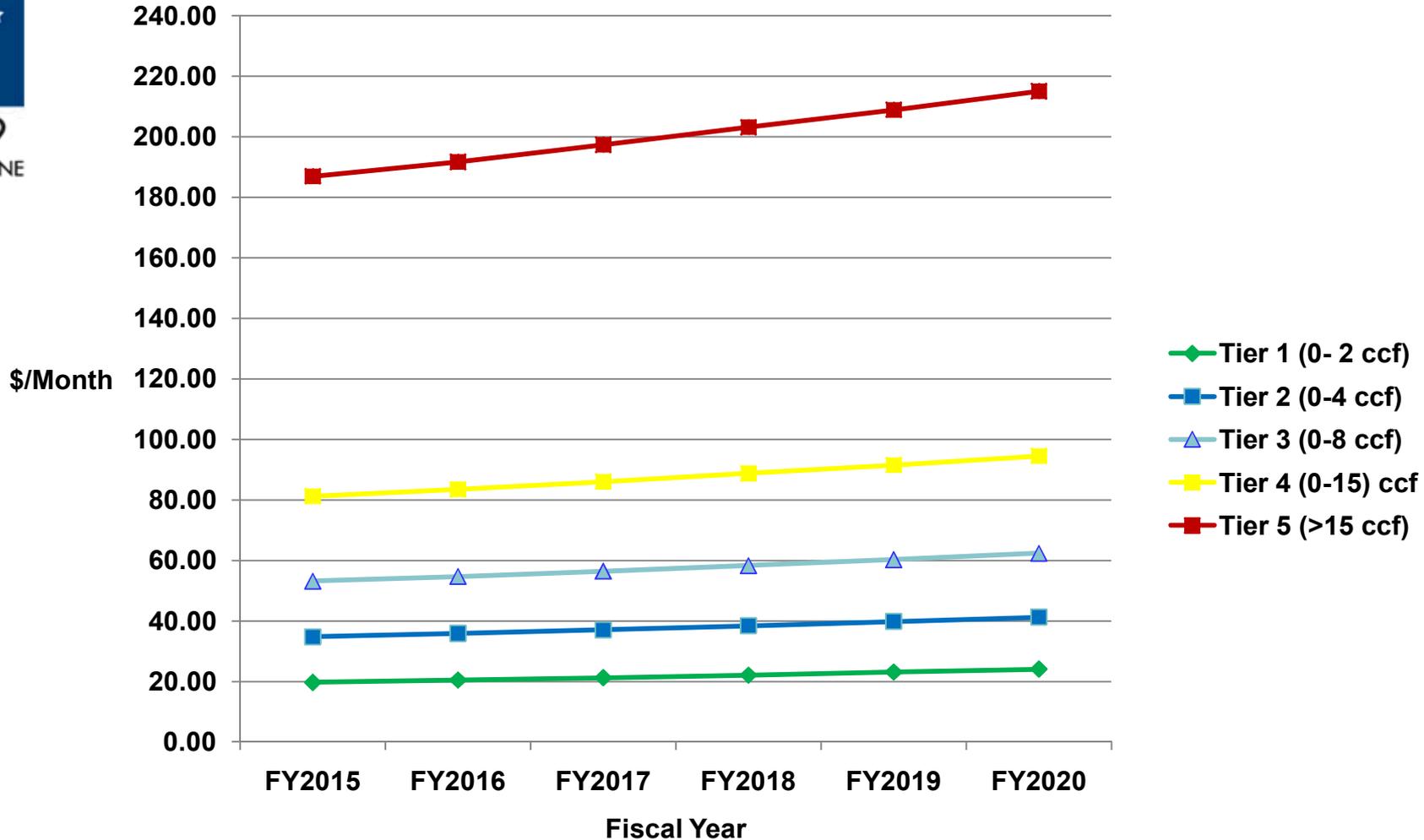
* Will be equal current County rates

** Will be double current County rates

***Proposed rates to be approved by County in June 2015



Projected Average SFR Monthly Cost per Tier





Projected Average Rate Increases

	FY 16	FY 17	FY 18	FY 19	FY 20
Proposed Rate	2.9 %	3.1 %	3.3 %	3.4%	3.4%

- FY 16 rates include overall 3.3% increase in water and 2.7% sewer
- % increase will have to rise; associated with CIP spending
- Impact of Jordan Lake projects



Durham

Rates Comparison | Financial Benchmarks | Characteristics | Links | Edit Data or Add Utility

Select residential bill and monthly consumption amount

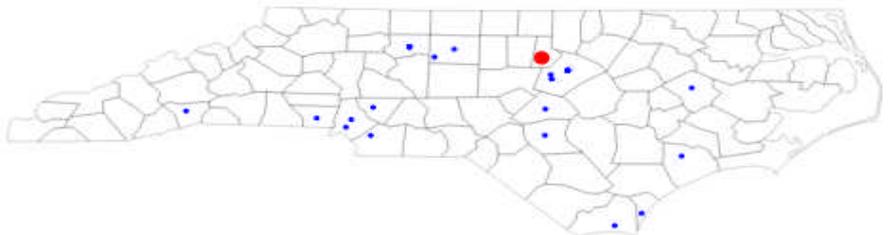
- Water Bill
- Sewer Bill
- Water + Sewer Bill



Monthly Water & Sewer Bill: \$56.09

Select comparison group: Similar Number Of Accounts

Comparing to utilities also with more than 25,000 accounts

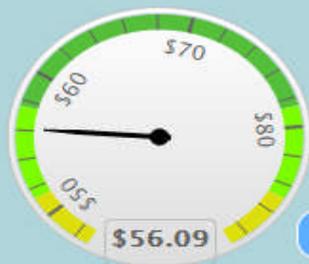


31 rate structures compared



Bill Comparison

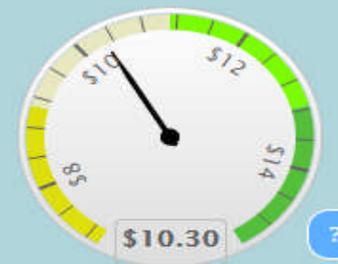
Water & Sewer Bill at
5,000 gallons
Median: \$68.05



Min \$42.39 Max \$110.46

Conservation Signal

Water & Sewer Price/1,000
Gallons, after 10,000 Gallons
Median: \$10.25



Min \$1.43 Max \$16.53

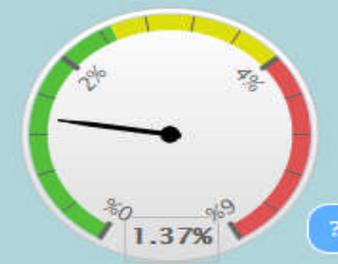
Cost Recovery

Operating
Ratio Incl. Deprec. 2014



Affordability

Water & Sewer Bills as % MHI





Durham

Rates Comparison

Financial Benchmarks

Characteristics

Links

Edit Data or Add Utility

Select residential bill and monthly consumption amount

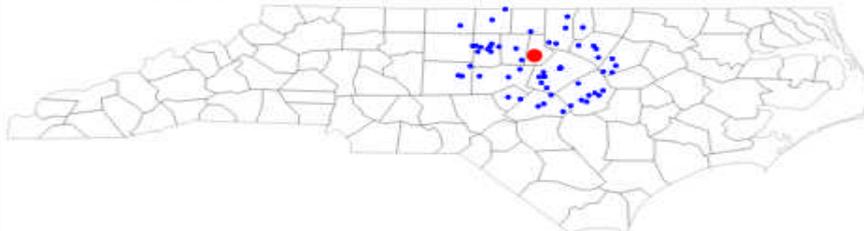
- Water Bill
 Sewer Bill
 Water + Sewer Bill



Monthly Water & Sewer Bill: \$56.09

Select comparison group: Within 50 miles distance

Comparing to all utilities within 50 miles of your utility

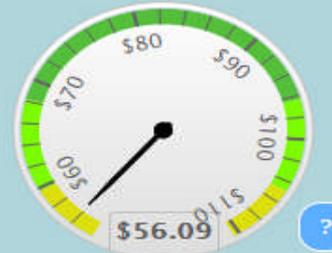


62 rate structures compared

Effects of raising rates by: 0%

Bill Comparison

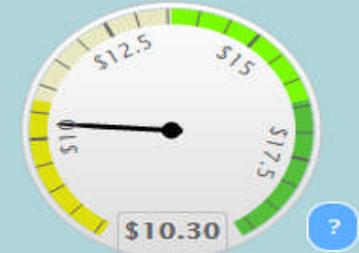
Water & Sewer Bill at
5,000 gallons
Median: \$69.95



Min \$41.45 Max \$190.20

Conservation Signal

Water & Sewer Price/1,000
Gallons, after 10,000 Gallons
Median: \$11.37



Min \$1.43 Max \$32.04

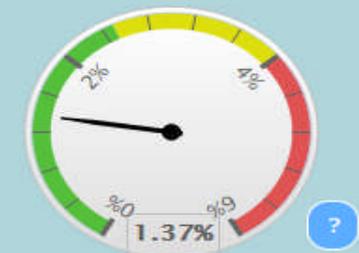
Cost Recovery

Operating
Ratio Incl. Deprec. 2014



Affordability

Water & Sewer Bills as % MHI





Monthly Water & Sewer Bill Comparison*

	FY 2015 Average Bill	FY 2016 projected Average Bill	Proposed FY 2016 increase
Durham	\$ 47.00	\$ 48.41	2.9%
Winston Salem	\$ 39.40	\$ 42.15	7% overall revenue
Greensboro	\$ 33.42	\$ 33.42	TBD
Raleigh	\$ 48.14	\$ 50.27	6% volumetric only
Charlotte	\$ 42.65	\$ 42.65	Pending
Fayetteville PWC	\$ 44.70	\$ 47.46	5% or 6.2% for avg. customer
CFPUA/Wilmington	\$ 60.38	\$ 60.38	0%
Cary	\$ 58.90	\$ 58.90	TBD
OWASA	\$ 70.66	\$ 70.66	0%
Average	\$ 49.47	\$ 50.17	

* 4000 gallons (5.35 CCF) monthly usage (water & sewer service) – Tier 3.



Capital Facilities Fee (CFF)

- Charged for new meter installations
- CFF pays only for new expansion projects
- Modest increases proposed for FY 2016 to reflect 2.9% increase in costs
 - 5/8" - 2" size meters only



Questions