

# Water and Sewer FY 2015 Budget Work-Session

May 14, 2014



# Overview of Tonight's Meeting

- Fund Highlights for FY 15
- Proposed FY 15 Water Budget / Rate
- Proposed FY 15 Sewer Budget / Rate
- Rate Model Status
- Policy Discussion

# System Funding: Enterprise Funds

- Enterprise Funds Account for Operations That are Financed and Operated in a Manner Similar to Private Business
- Must have Fees and or Charges Sufficient Enough to Cover the Cost of Providing Goods and Services, Including Capital costs (i.e. Depreciation and Debt Service)
- Note: Property Taxes do not Subsidize the Water and Sewer Funds



# Enterprise Funds - Water



- Bellamy Reservoir
- Madbury Water Treatment Facility
- 9 Wells
- 5 Storage Tanks
- Two Pressure Zones
- 3.5 to 6.5 Million Gallons a Day
- 189 miles of pipe
- 972 Public Fire Hydrants
- 2,840 Valves
- 8,203 Meters/Customers
- Serve 5 Communities and portions of 3 others



# Enterprise Funds - Sewer

- 115 Miles of piping
- 20 pumping Stations
- 1,650 Manholes
- Two Wastewater Treatment Facilities
- 6,342 Customers





# Water and Sewer Position Summary Schedule

WATER



ENTERPRISE  
FUND  
REVENUES

23.35  
EMPLOYEES

SEWER



ENTERPRISE  
FUND  
REVENUES

26.95  
EMPLOYEES

Many Shared Positions between Water, Sewer, Highway and  
Parking/Transportation

# Water/Sewer Fund Challenges

- **Aging Infrastructure**
- **Regulatory Compliance**
- **Evolving technologies and level of system complexities, especially with treatment facilities - both water and sewer**
- **Major Capital Projects:**
  - **Peirce Island Wastewater Facility Upgrade**
  - **Water and Sewer Pipe Replacements**
  - **Hobbs Hill Water Tank Replacement**

Proposed FY 15

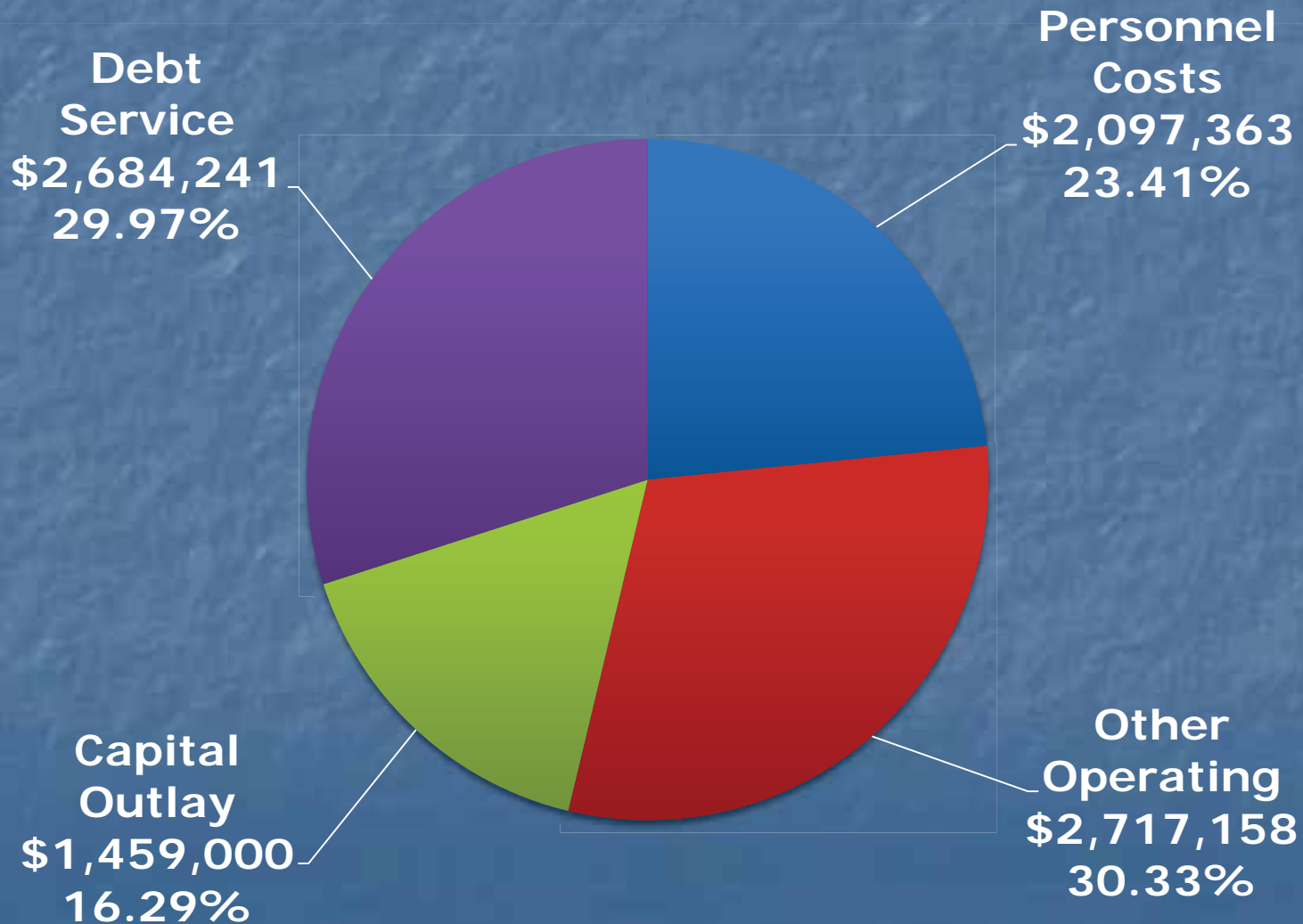
Water

Fund Budget



# Cash Requirements:

## FY 15 Water Fund \$8,957,763



# FY 15 Water Fund Budget

	Proposed Budget	% of Total Budget
Personnel Costs	\$2,097,363	23.4%
Chemicals	\$451,873	5.0%
Repairs	\$199,007	2.2%
Utilities	\$528,843	5.9%
Administrative Overhead	\$520,241	5.8%
Sludge/Grit Removal	\$214,160	2.4%
Prof Contracted Services	\$165,462	1.8%
Property Taxes	\$118,000	1.3%
Equipment	\$79,750	0.9%
Stock Materials	\$123,900	1.4%
Other Operating	\$315,922	3.5%
Interest on Debt	\$953,193	10.6%
Principal on Debt	\$1,731,049	19.3%
Capital Projects	\$1,339,000	14.9%
Rolling Stock	\$120,000	1.3%
<b><i>Total Budget</i></b>	<b>\$8,957,763</b>	<b>100.0%</b>

# Water Capital Outlay

<u>Project Name</u>	<u>Amount</u>
Annual Water Line Replacement	\$500,000
Water Meter Replacement	\$125,000
Well Stations Improvements	\$150,000
New Castle Water Line Improv.	\$40,000
Stage Two Disinfection By-Product Rule	\$424,000
Water Efficiency Measures	\$75,000
Water System Outreach	\$25,000
Rolling Stock	\$120,000
TOTAL	\$1,459,000



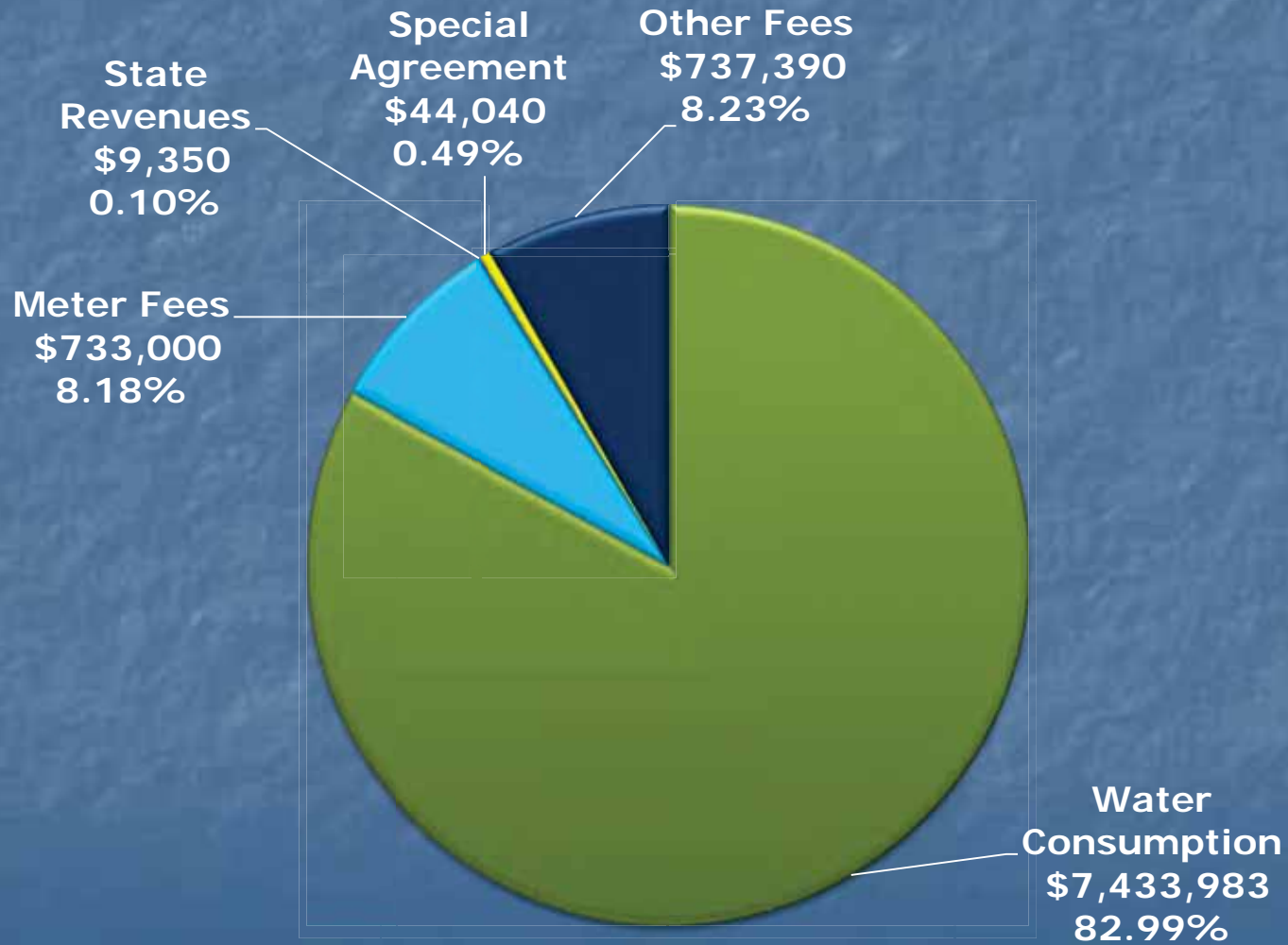
# FY 15 Water Bonded Projects

<u>Project Name</u>	<u>Amount</u>	<u>Funding Source</u>
Maplewood Avenue Waterline Replacement	\$3,300,000	Bond
Hobbs Hill Landing Water Tank Replacement	\$3,500,000	Bond
Water System Pressure & Storage Improvements	\$500,000	Bond
Total	\$7,300,000	

# Key FY15 Water Budget Changes

<b>Cash Requirements</b>	<b>FY15</b>	<b>FY14</b>	<b>\$ Change</b>	<b>% Change</b>
Operations and Maintenance	4,616,771	4,523,674	93,097	2.1%
Equipment & Minor Capital needs	79,750	126,000	(46,250)	(36.7%)
Interest on Debt	953,193	793,427	159,766	20.1%
Principal Debt	1,731,049	1,565,329	165,720	10.6%
Capital Projects	1,459,000	2,330,000	(871,000)	(37.4%)

# Total FY 15 Water Revenues





# FY15 Proposed Water Rate

**0% Rate Change from FY 14**

	FY 15 Proposed (per unit)
First Tier Rate (10 units or less per month)	
Capital Related rate, per unit billed	\$2.65
First 10 units billed per month	\$1.50
<b>Total First Tier Rate</b>	<b>\$4.15</b>
Second Tier Rate (over 10 units per month)	
Capital Related rate, per unit billed	\$2.65
Over 10 units billed per month	\$2.35
<b>Total Second Tier Rate</b>	<b>\$5.00</b>
Irrigation Meter Rate (all units billed)	
Capital Related rate, per unit billed	\$2.65
All units billed per month	\$2.35
<b>Total Irrigation Meter Rate</b>	<b>\$5.00</b>

*1 unit = 748 gallons of water*

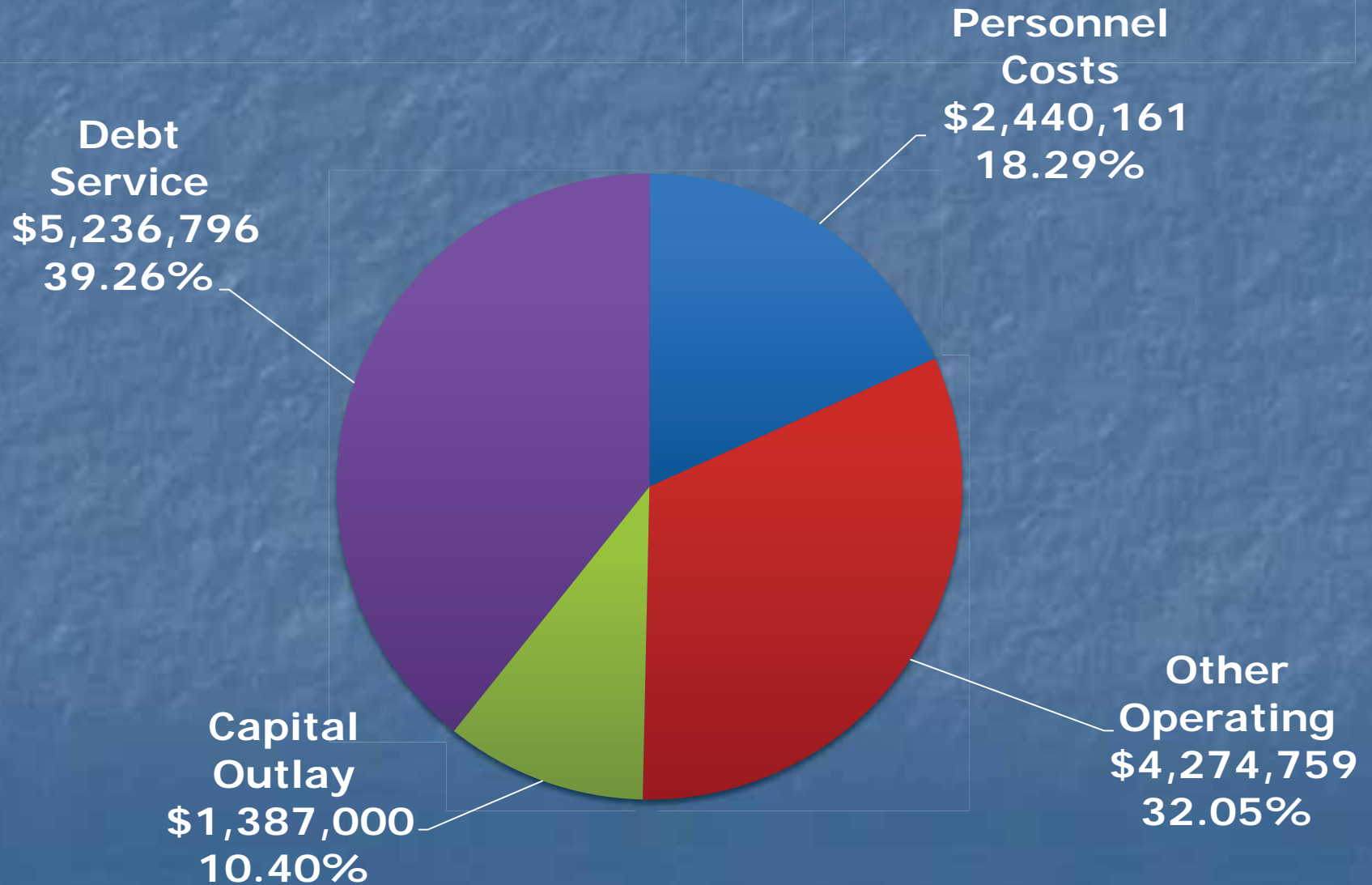
Proposed FY 15

Sewer

Fund Budget

# Cash Requirements:

## FY 15 Sewer Fund - \$13,338,716





# FY 15 Sewer Fund Budget

	Proposed Budget	% of Total Budget
Personnel Costs	\$2,440,161	18.3%
Chemicals	\$970,028	7.3%
Repairs & Maintenance	\$459,925	3.4%
Utilities	\$860,602	6.5%
Administrative Overhead	\$520,241	3.9%
Sludge/Grit Removal	\$332,750	2.5%
Prof Contracted Services	\$274,409	2.1%
Permits Expenses/Legal Fees	\$240,000	1.8%
Equipment	\$209,500	1.6%
Stock Material	\$50,750	0.4%
Other Operating	\$356,554	2.7%
Interest on Debt	\$1,670,997	12.5%
Principal on Debt	\$3,565,799	26.7%
Capital Projects	\$1,200,000	9.0%
Rolling Stock	\$187,000	1.4%
<b><i>Total Budget</i></b>	<b>\$13,338,716</b>	<b>100.0%</b>

# Sewer Capital Outlay

<u>Project Name</u>	<u>Amount</u>
Water Meter Replacement	\$125,000
Water Efficiency Measures	\$75,000
Annual Sewer line Replacment	\$500,000
Maplewood Ave Sewer Line Replacement	\$500,000
TOTAL	\$1,200,000

# FY 15 Sewer Bonded Projects

<u>Project Name</u>	<u>Amount</u>	<u>Funding Source</u>
Fleet Street Utilities Upgrade	\$500,000	Bond
Pease WWTP Upgrades	\$1,000,000	Bond
Lafayette Rd Pumping Station Upgrades	\$500,000	Bond
Total	\$2,000,000	

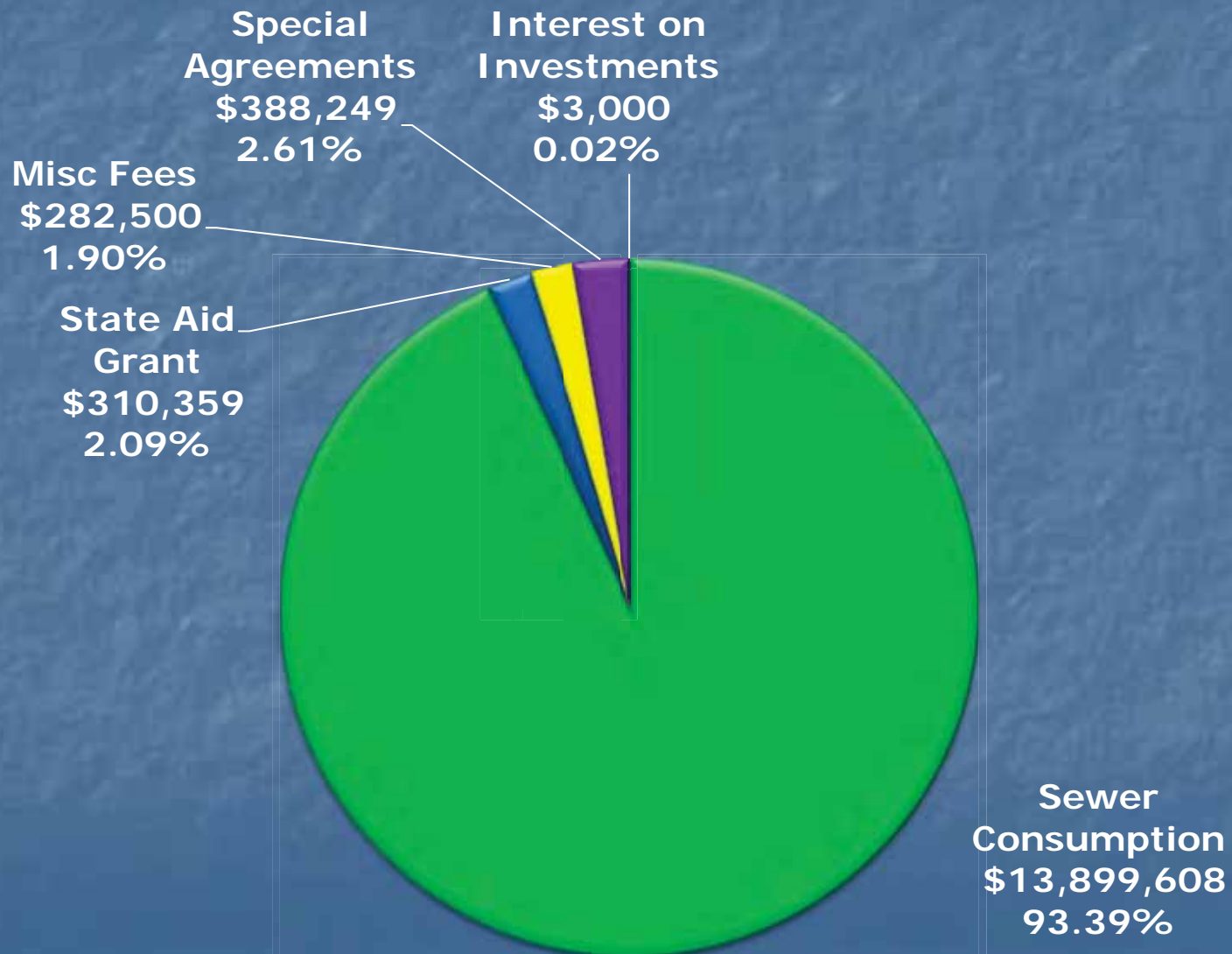
Note: The next Peirce Island Wastewater Treatment Facility Upgrade Bond is anticipated in FY16 when construction begins.



# Key FY15 Sewer Budget Changes

<b>Cash Requirements</b>	<b>FY15</b>	<b>FY14</b>	<b>\$ Change</b>	<b>% Change</b>
Operations and Maintenance	6,265,420	6,277,029	(11,609)	(0.2%)
Interest on Debt	1,670,997	1,609,074	61,923	3.8%
Principal Debt	3,565,799	2,915,799	650,000	22.3%
Capital Projects	1,200,000	936,000	264,000	28.2%

# Total FY 15 Sewer Revenues



# FY15 Proposed Sewer Rate

**5% Rate Change from FY 14**

	FY 15 Proposed (per unit)
First Tier Rate (10 units or less per month)	
Capital Related rate, per unit billed	\$5.71
First 10 units billed per month	\$5.50
<b>Total First Tier Rate</b>	<b>\$11.21</b>
Second Tier Rate (over 10 units per month)	
Capital Related rate, per unit billed	\$5.71
Over 10 units billed per month	\$6.63
<b>Total Second Tier Rate</b>	<b>\$12.34</b>

*1 unit = 748 gallons of water*



# Water and Sewer Rate Model



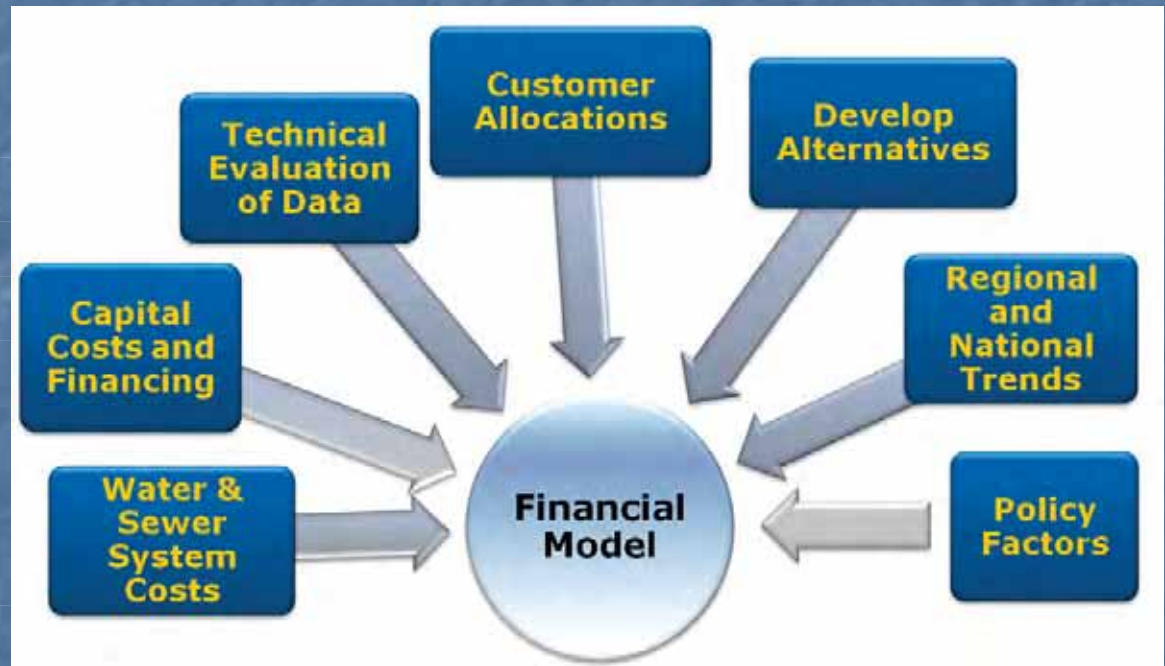
MUNICIPAL & FINANCIAL SERVICES GROUP

— 911-A Commerce Road, Annapolis, MD 21401 P: 410.266.9101 F: 410.266.5545 —

# Rate Model Study

The rate model serves as the key tool to assist in long-term planning, allowing:

- Prudent financial planning which results in predictable rate increases
- Funding of significant capital projects
- Proactive management of the systems which results in lowest rates over time

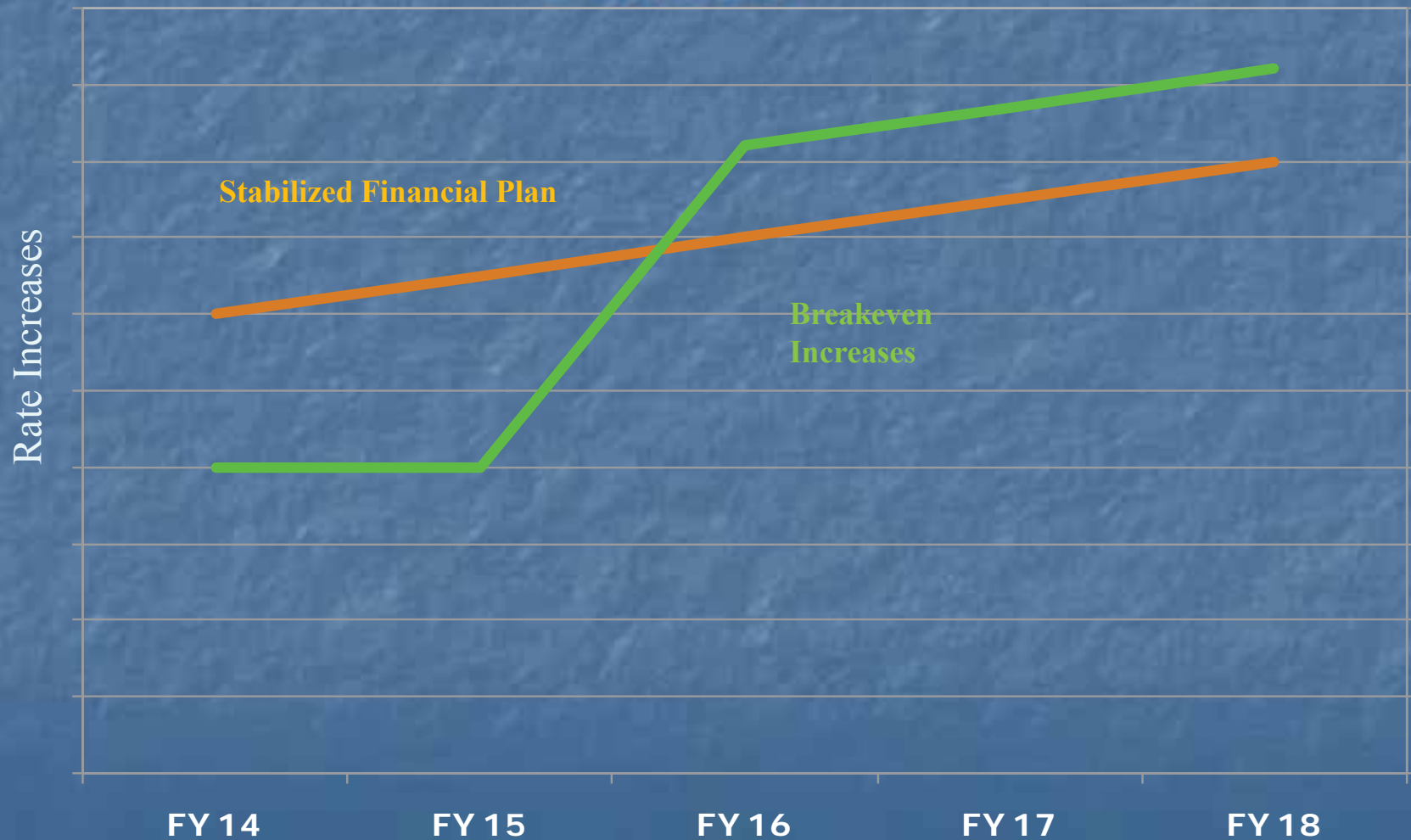


# Rate Study Highlights

- November 2012 - Rate Study Kickoff
- February 2013 - City Council Work Session
- March 2013 - Public Input Session Rate Study
- April 2013 - City Council Work Session Water and Sewer Budget
- March 2014 - Public Input Session Rate Study

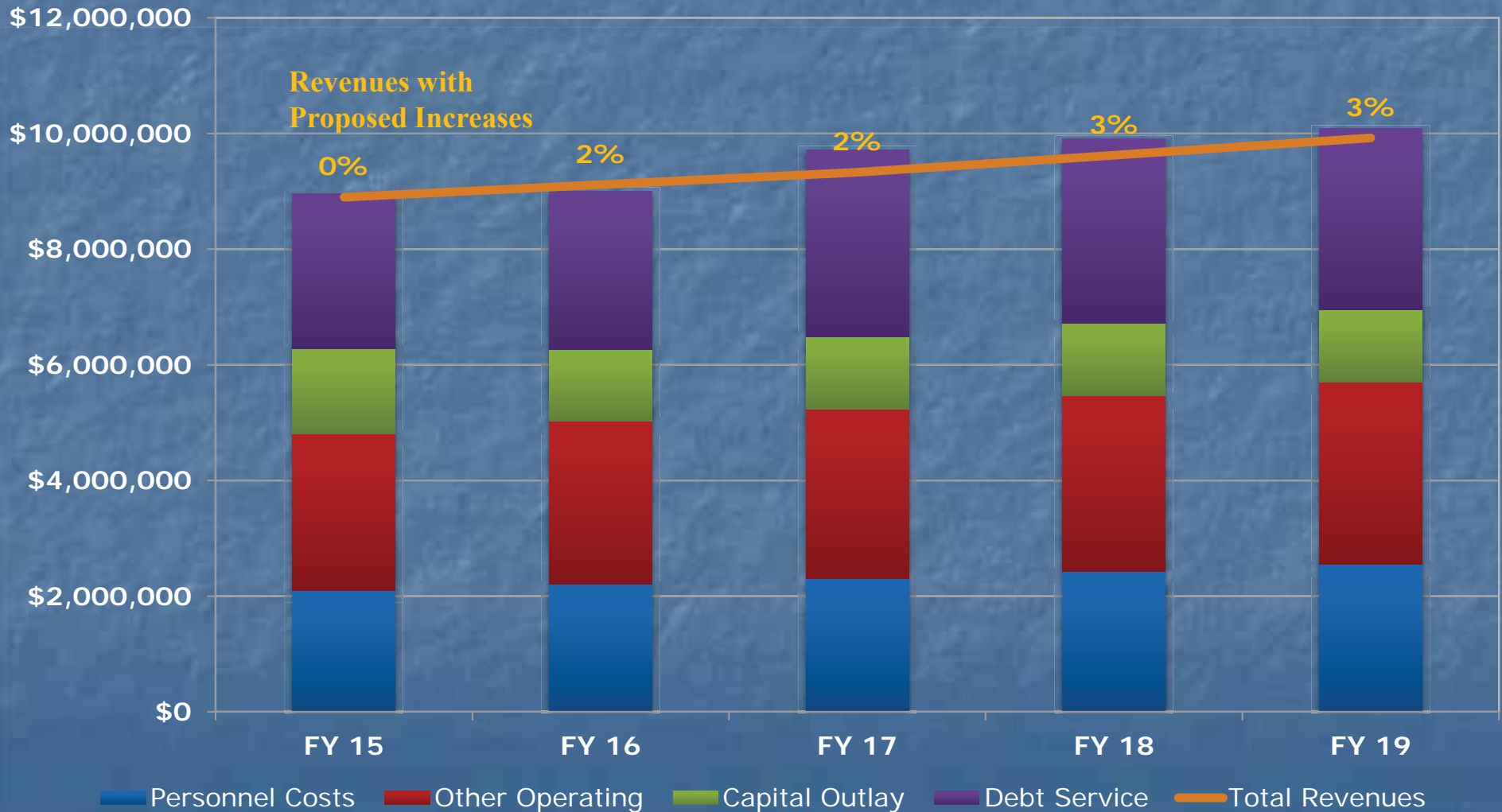


# Approaches to Adjusting Rates



# Water Fund

## Model for Rate Stabilization Approach



# FY15 Proposed Water Rate

**No Rate Change from FY 14**

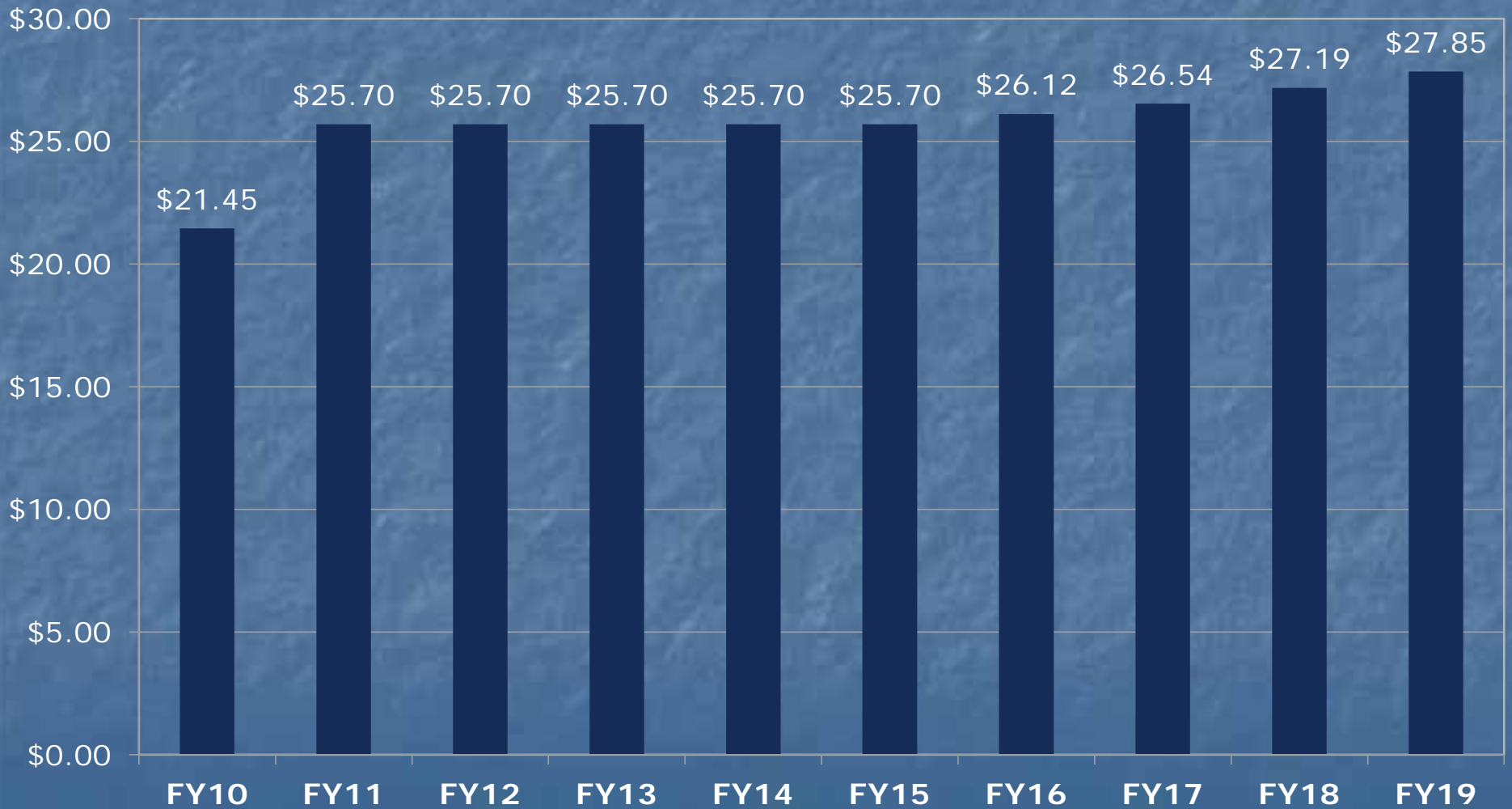
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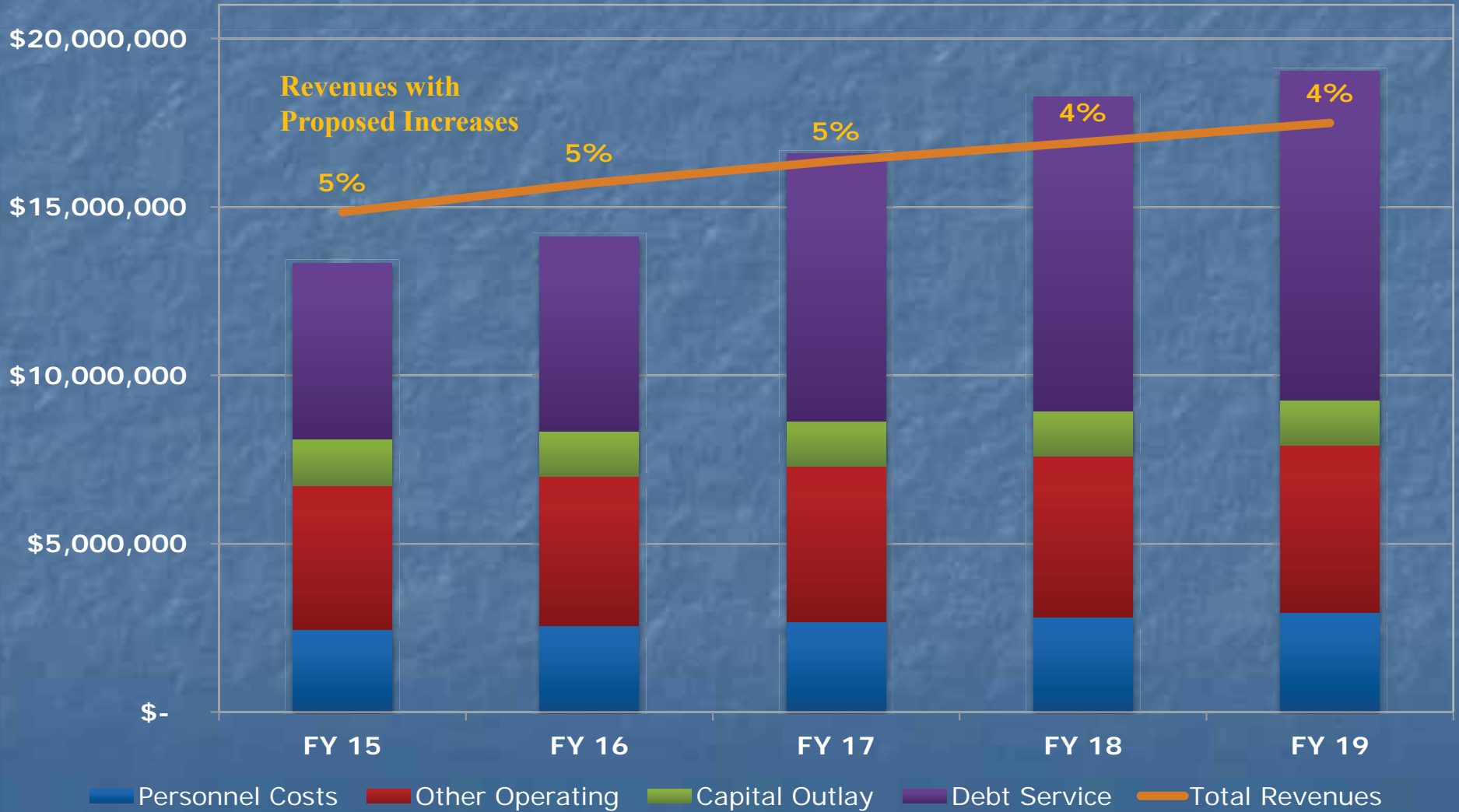
# Projected Average Water Bills

(Monthly Bill - 5 units)



# Sewer Fund

## Model for Rate Stabilization Approach



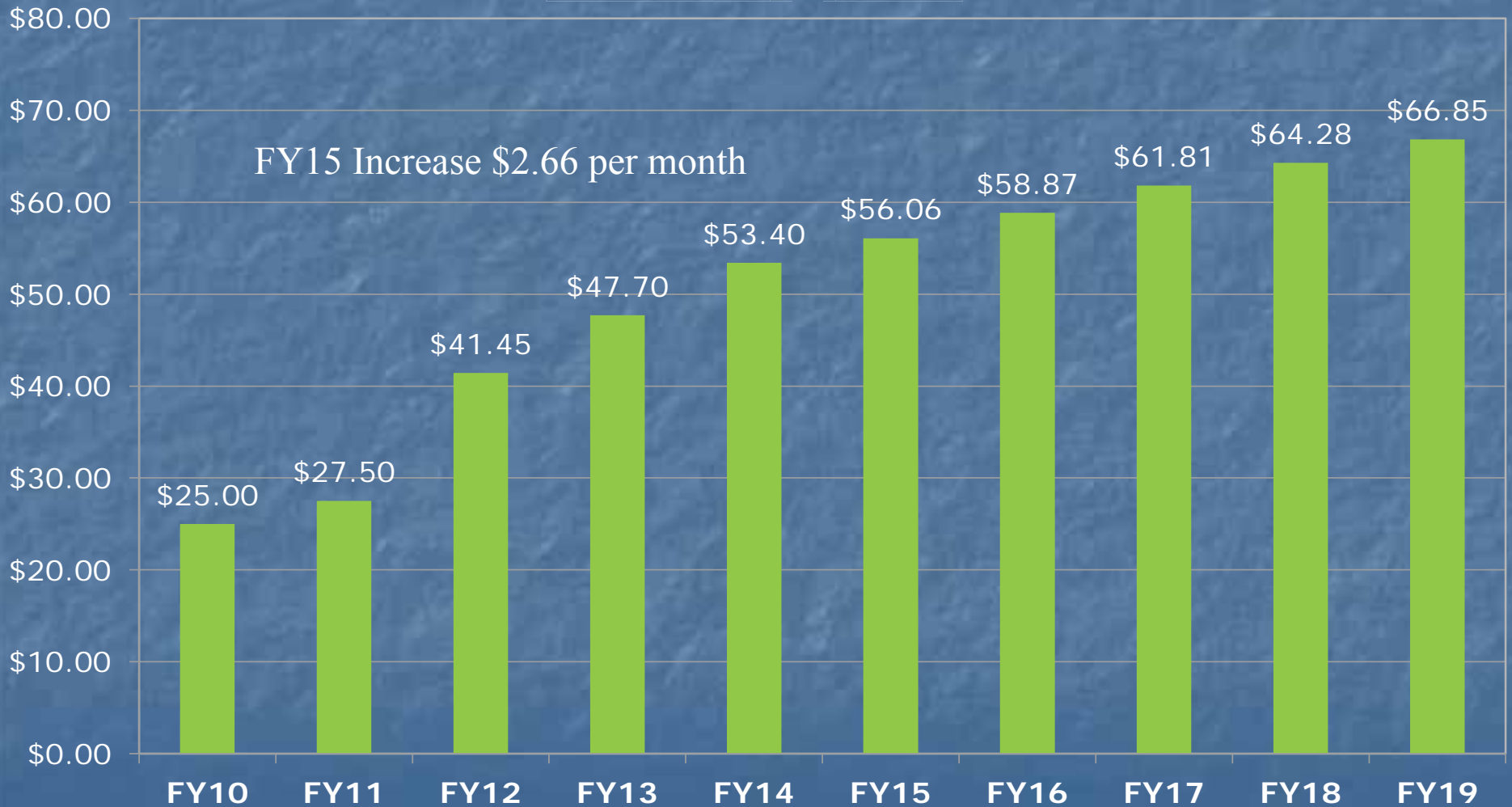
# FY15 Proposed Sewer Rate

	FY 15 Proposed (per unit)
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<b>Total Second Tier Rate</b>	<b>\$12.34</b>

*1 unit = 748 gallons of water*

# Projected Average Sewer Bills

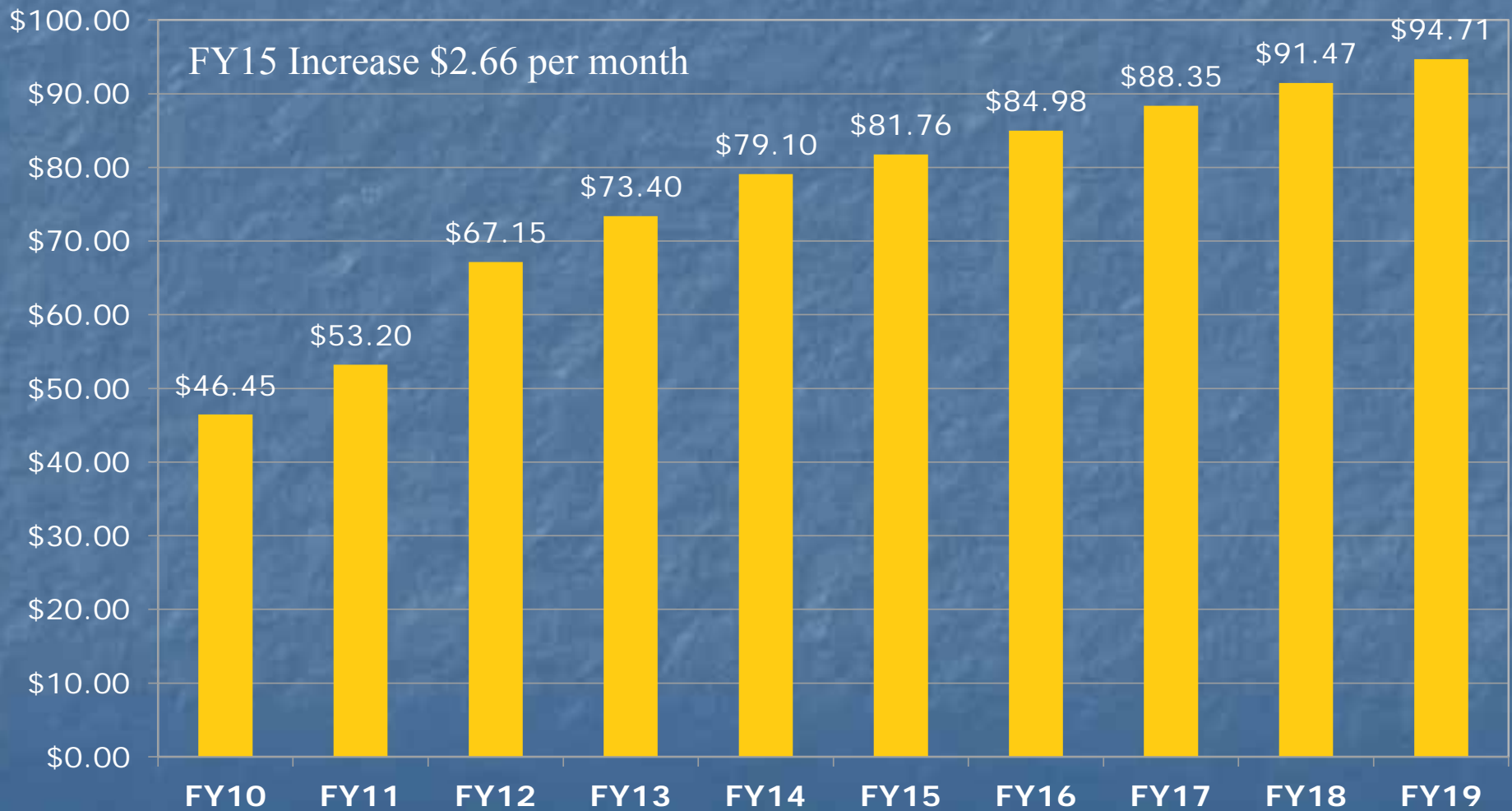
(Monthly Bill - 5 units)





# Projected Average Combined Bills

(Monthly Bill - 5 units)



# Policy Discussion

# Policy Issue Summary

<b>Policy Consideration</b>	<b>Discussion</b>
<b>#1 – Third Tier</b>	<b>City Council decision during budget process</b>
<b>#2 - Irrigation Meter Availability and Tier</b>	<b>Do not expand irrigation availability</b>
<b>#3 - Multi-Family Condo Billing</b>	<b>Maintain existing policy, change building code – require individual metering</b>

# Additional Tiers

Should additional tiers be added to the current water and sewer rate structure?

Current Rate Tiers	FY 15 Water Rate Structure	FY 15 Sewer Rate Structure
Tier 1: 0 – 10 Units*	\$4.15 per Unit	\$11.21 per Unit
Tier 2: Over 10 Units*	\$5.00 per Unit	\$12.34 per Unit
Irrigation: All Usage	\$5.00 per Unit	n/a

*\*1 unit equals 100 cubic feet or 748 gallons*

*Note: Sewer Rate Structure incorrectly listed FY13 rates during Public Input Session. This has been updated to reflect FY14 rate*



# Additional Tiers – Option 1 (3 Tiers)

	Water Rate Structure		Sewer Rate Structure	
	Current 2-Tiered Rates	3-Tiered Rates	Current 2-Tiered Rates	3-Tiered Rates
Tier 1: 0 – 3 Units*	\$4.15 per Unit	\$3.75	\$11.21 per Unit	\$9.29
Tier 2: 3 – 10 Units		\$4.15		\$11.76
Tier 3: Over 10 Units	\$5.00 per Unit	\$5.09	\$12.34 per Unit	\$12.66
Irrigation: All Usage	\$5.00 per Unit	\$5.09	n/a	n/a

*\*3 units - typical use for single individual*

# Additional Tiers – Option 2 (4 Tiers)

	Water Rate Structure		Sewer Rate Structure	
	Current 2-Tiered Rates	4-Tiered Rates	Current 2-Tiered Rates	4 -Tiered Rates
Tier 1: 0 – 3 Units*	\$4.15 per Unit	\$3.07 per Unit	\$11.21 per Unit	\$7.61 per Unit
Tier 2: 3 – 10 Units		\$4.14 per Unit		\$9.56 per Unit
Tier 3: 10 – 100 Units	\$5.00 per Unit	\$5.03 per Unit	\$12.34 per Unit	\$11.51 per Unit
Tier 4: Over 100 Units		\$5.34 per Unit		\$14.83 per Unit
Irrigation: All Usage	\$5.00 per Unit	\$5.34 per Unit	n/a	n/a

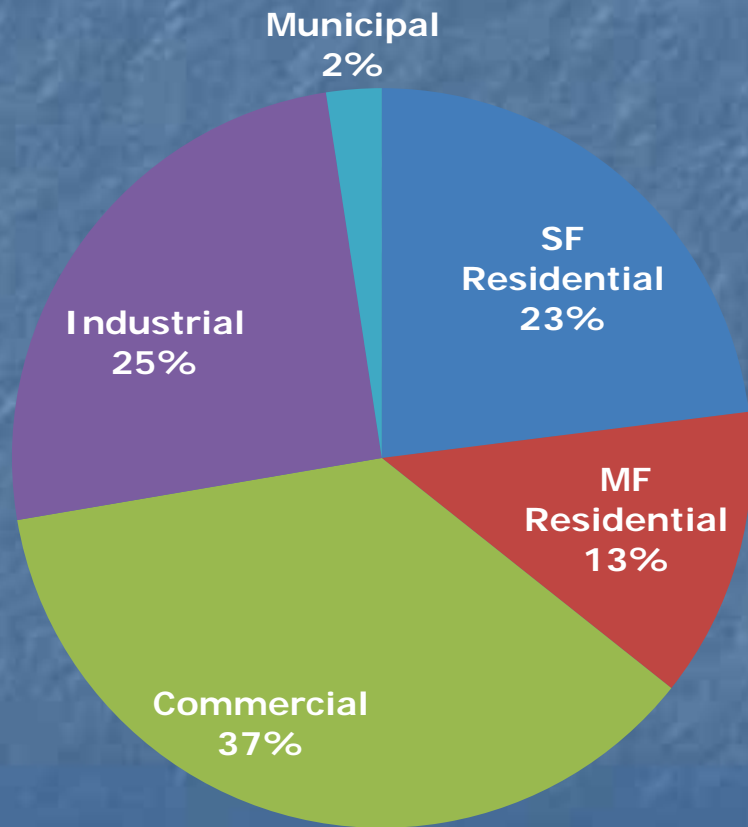
*\*3 units - typical use for single individual*

# Customer Demographics in Tiers

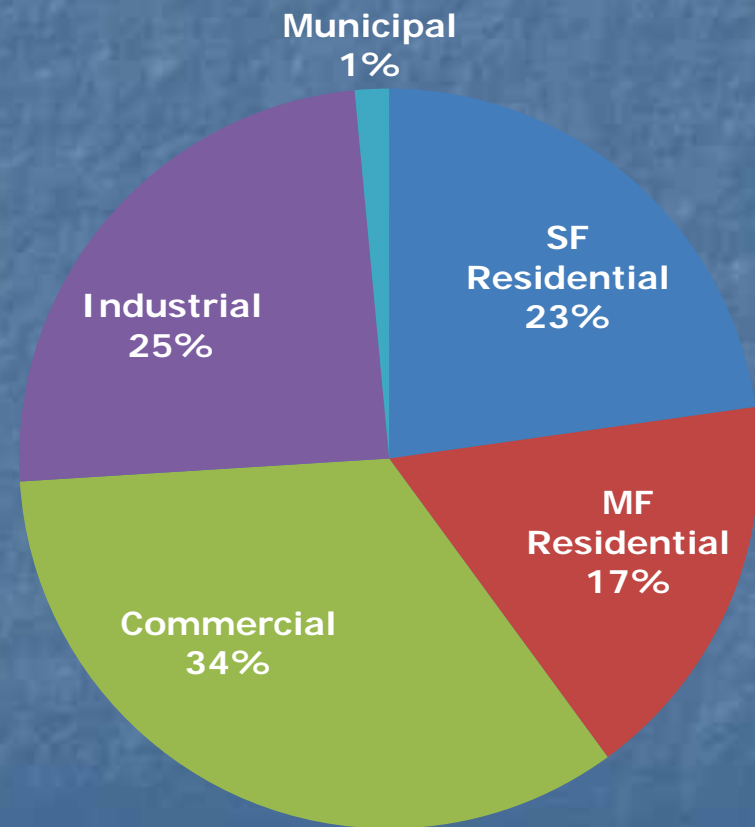
Current 2-Tiered Rates	% of Customers	3-Tiered Rates	% of Customers	4-Tiered Rates	% of Customers
Tier 1: 0 – 10 Units	<b>81.85%</b>	Tier 1: 0 – 3 Units	<b>29.59%</b>	Tier 1: 0 – 3 Units	<b>29.59%</b>
		Tier 2: 3 – 10 Units	<b>52.26%</b>	Tier 2: 3 – 10 Units	<b>52.26%</b>
Tier 2: Over 10 Units	<b>18.15%</b>	Tier 3: Over 10 Units	<b>18.15%</b>	Tier 3: 10 – 100 Units	<b>16.02%</b>
				Tier 4: Over 100 Units	<b>2.13%</b>

# Customer Demographics

## Water Revenue Breakdown



## Sewer Revenue Breakdown



~ 60% of revenues is generated by 13% of customers (Industrial and Commercial)



# Sample Customer Impacts

Customer	Annual Combined Bill at Current 2-Tier Rates	Annual Combined Bill at 3-Tier Rates	Annual Combined Bill at 4-Tier Rates
Average SFR Customer 5/8" Meter – 5 Units/Month	\$981	\$911 (\$70 Decrease)	\$783 (\$208 Decrease)
Small SFR Customer 5/8" Meter – 3 Units/Month	\$612	\$529 (\$83 Decrease)	\$444 (\$168 Decrease)
Large MFR Customer 2" Meter – 603 Units/Month	\$125,406	\$128,260 \$2,855 Increase	\$141,297 \$15,891 Increase
Large Industrial Customers 6" Meter – 3,345 Units/Month	\$697,233	\$713,474 \$16,241 Increase	\$806,241 \$109,007 Increase

SFR – Single Family Residential

MFR – Multi Family Residential

# Large Residential Complexes

<b>Customer</b>	<b>Annual Combined Bill at Current 2-Tier Rates</b>	<b>Annual Combined Bill at 3-Tier Rates</b>	<b>Annual Combined Bill at 4-Tier Rates</b>
<b>Ports Housing Authority 140 Court St/Feaster 230 Units/Month</b>	<b>\$55,644</b>	<b>\$56,866 \$1,221 Increase</b>	<b>\$59,442 \$3,798 Increase</b>
<b>Ports Housing Authority 245 Middle St / Margeson Apts 278 Units/Month</b>	<b>\$67,279</b>	<b>\$68,737 \$1,457 Increase</b>	<b>\$72,976 \$5,696 Increase</b>
<b>Ports Housing Authority Gosling Meadow Apts 629 Units/Month</b>	<b>\$152,523</b>	<b>\$156,035 \$3,512 Increase</b>	<b>\$172,132 \$19,609 Increase</b>
<b>Mark Wentworth Home 346 Pleasant St 184 Units/Month</b>	<b>\$44,495</b>	<b>\$45,452 \$958 Increase</b>	<b>\$46,473 \$1,978 Increase</b>

# Additional Tiers Observations

- **Adding one or two tiers to the current rate structure results in slightly reduced water and sewer bills for the vast majority of Portsmouth customers.**
- **The reduction in revenue from a significant number of users would be made up for by large volume water and sewer customers.**
- **As a result there would be a significant shift in costs to larger volume users.**



# Additional Tiers Recommendation

- We recommend that the City maintain its current rate structure for a number of reasons:
  - The shift of costs to large volume users in the City is significant and will impact:
    - Businesses (potentially losing employer and tax revenues)
    - Large multi-family complexes (often low income and/or elderly)
  - There is a limited cost of service basis to shift costs to larger users.
    - Large users already pay significantly towards funding the systems.
    - In most instances large volume users have limited discretionary water use (water is essential for operations)



# Discussion