

$v * tr = r$

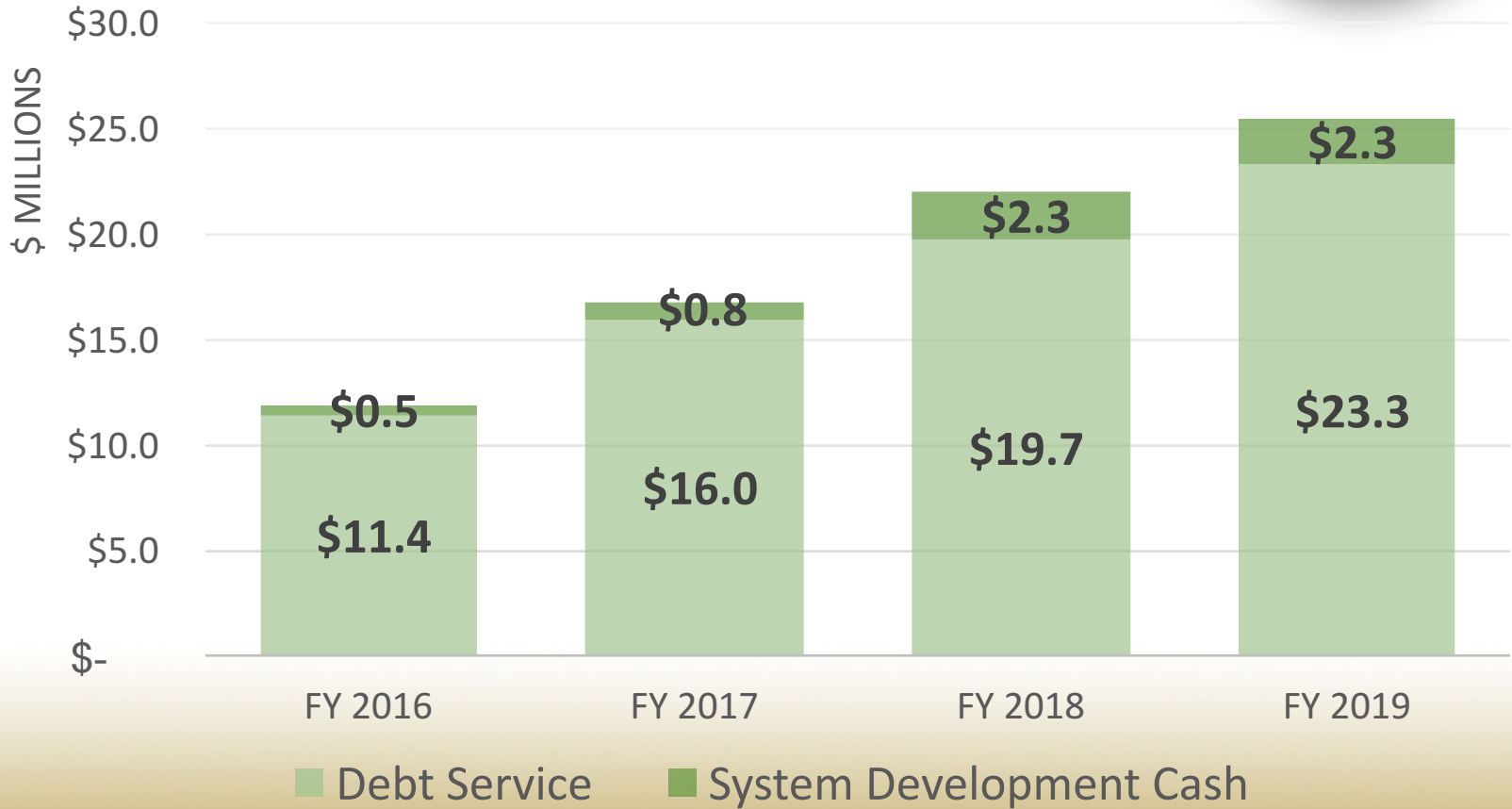


# Non-Development Usage and Service Fees

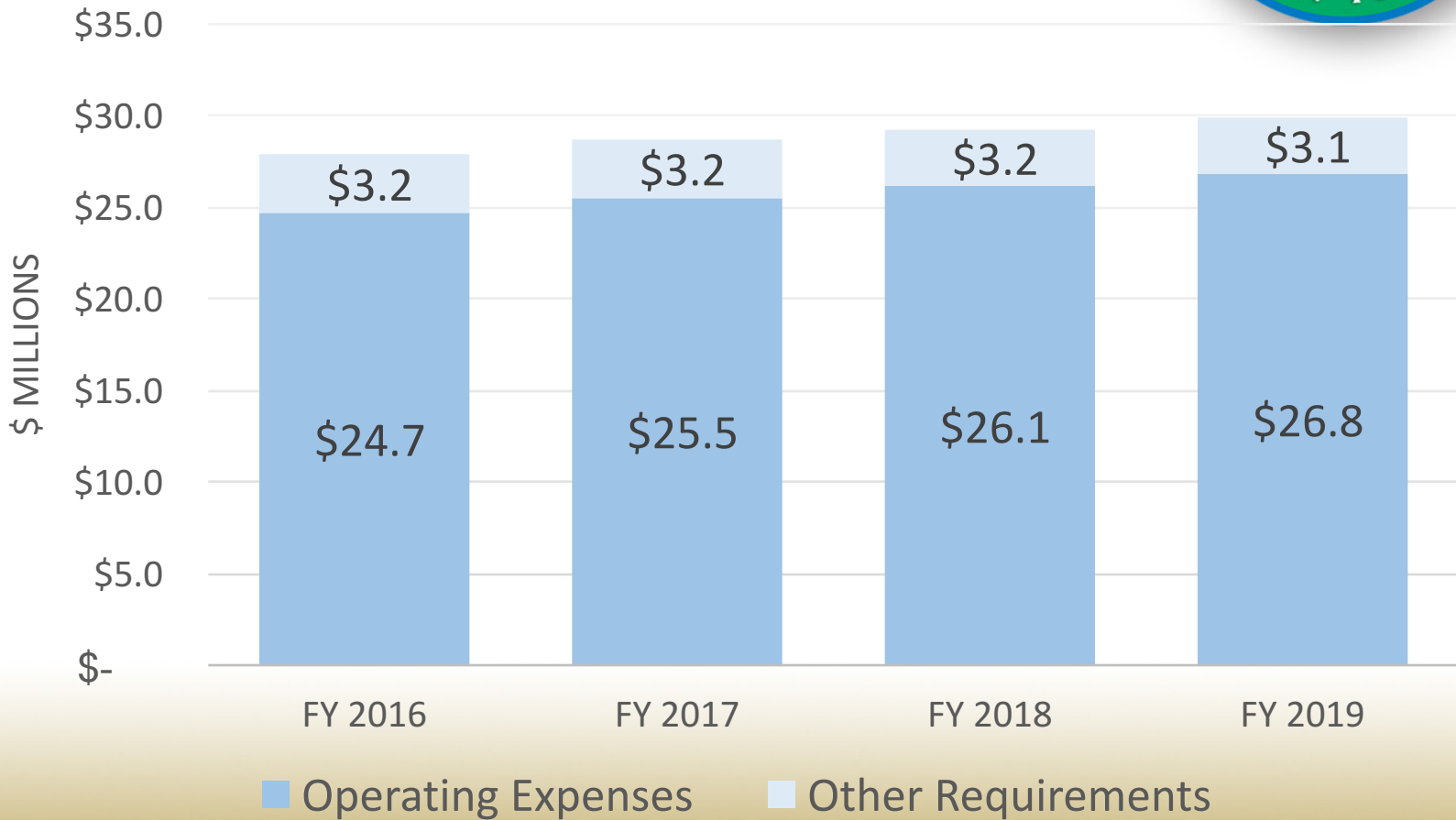




# Annual Capital Costs



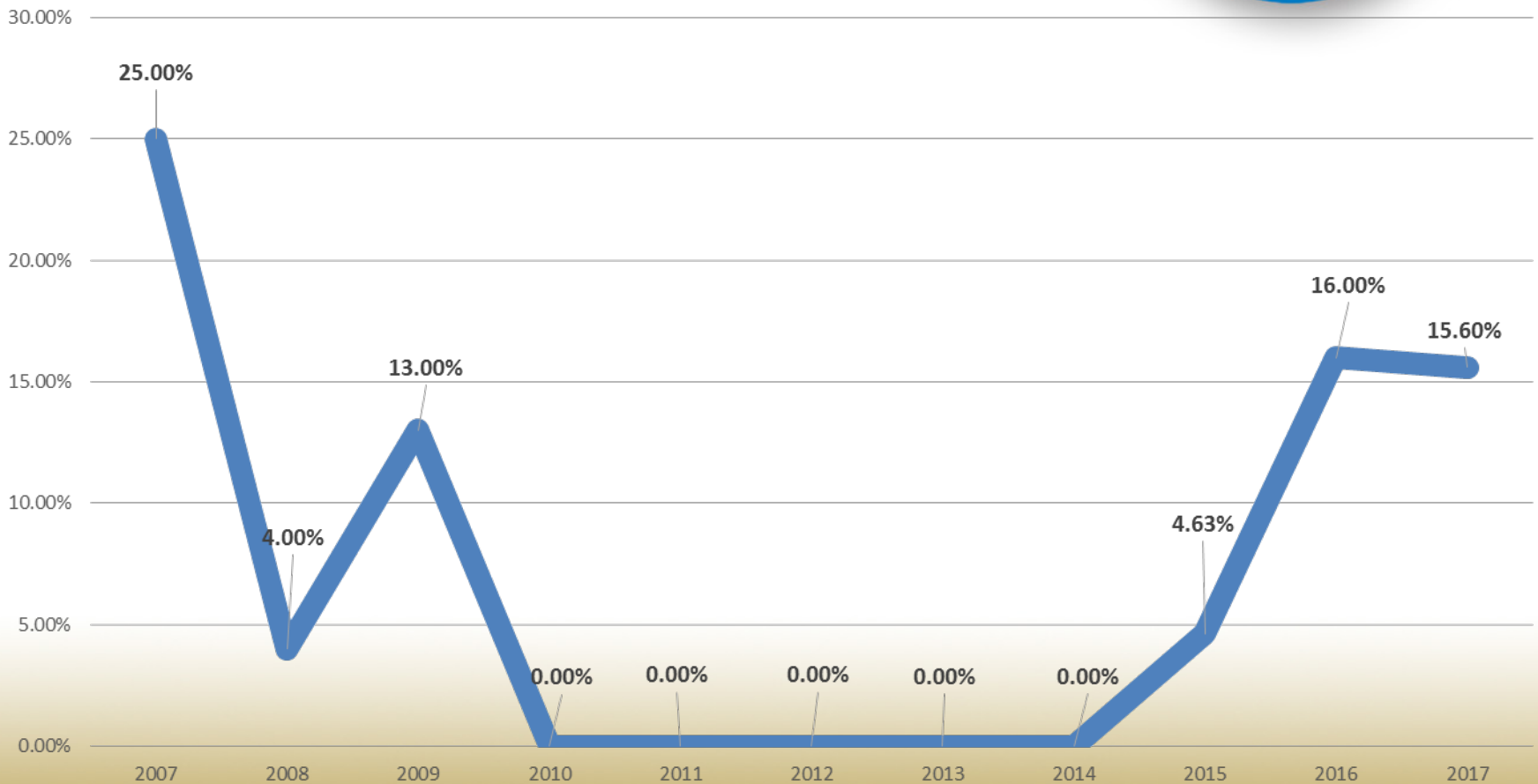
# ANNUAL OPERATING AND MAINTENANCE COSTS



# Historical Revenue Rate Adjustments



Revenue Increase





# Forecast of Revenue Adjustments

	Projected	Proposed	Forecasted	
	FY 2016	FY 2017	FY 2018	FY 2019
<b>Revenues</b>	\$ 39,023,800	\$ 44,810,025	\$ 54,198,351	\$ 58,609,662
<b>Expenditures</b>	39,733,421	45,392,022	51,300,737	55,491,543
Revenues Over (Under) Expenditures	(709,621)	(581,997)	2,897,614	3,118,119
<b>Beginning Cash Equivalents</b>	15,624,805	14,915,184	14,106,447	17,009,111
Reserve for Debt Service	2,623,222	2,688,411	4,160,119	6,034,664
<b>Ending Cash Equivalents</b>	\$ 12,291,962	\$ 11,644,776	\$ 12,843,942	\$ 14,092,566
Bond Coverage - 1.4	1.59	1.65	2.18	1.72
Cash Reserve Ratio - 25%	31%	26%	25%	25%
Number of Connections				
% Revenue Increase Needed	16.0%	15.6%	19.1%	6.5%
Revenue Bonds to be Issued	\$ -	\$ 38,093,000	\$ 40,842,000	\$ 110,880,000

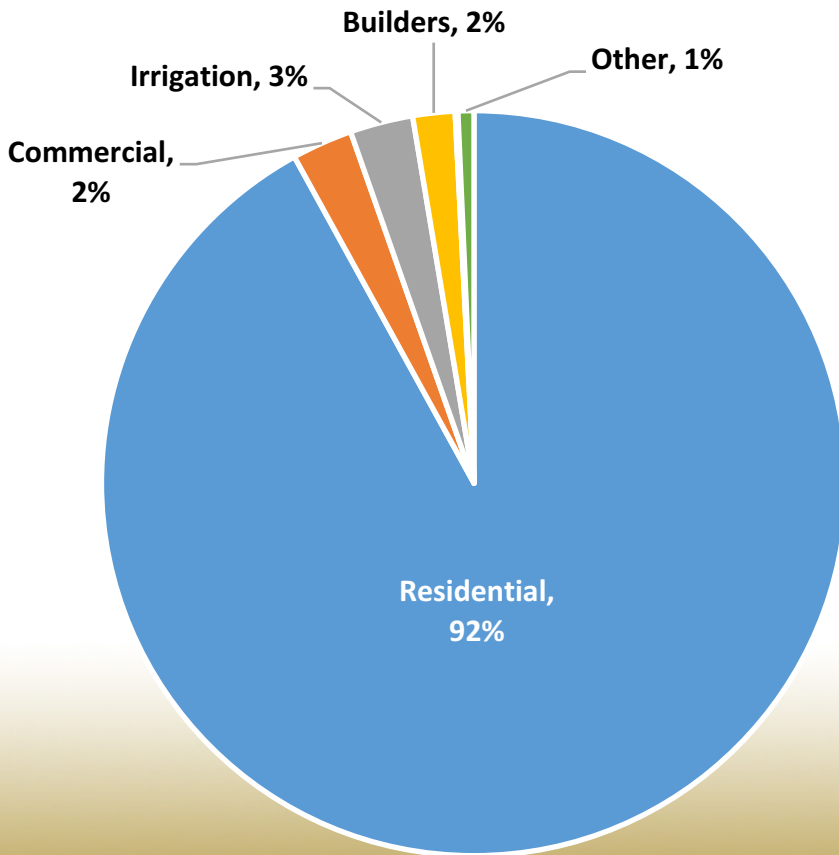
Total Revenue increase – does **not** correspond to same rate increase



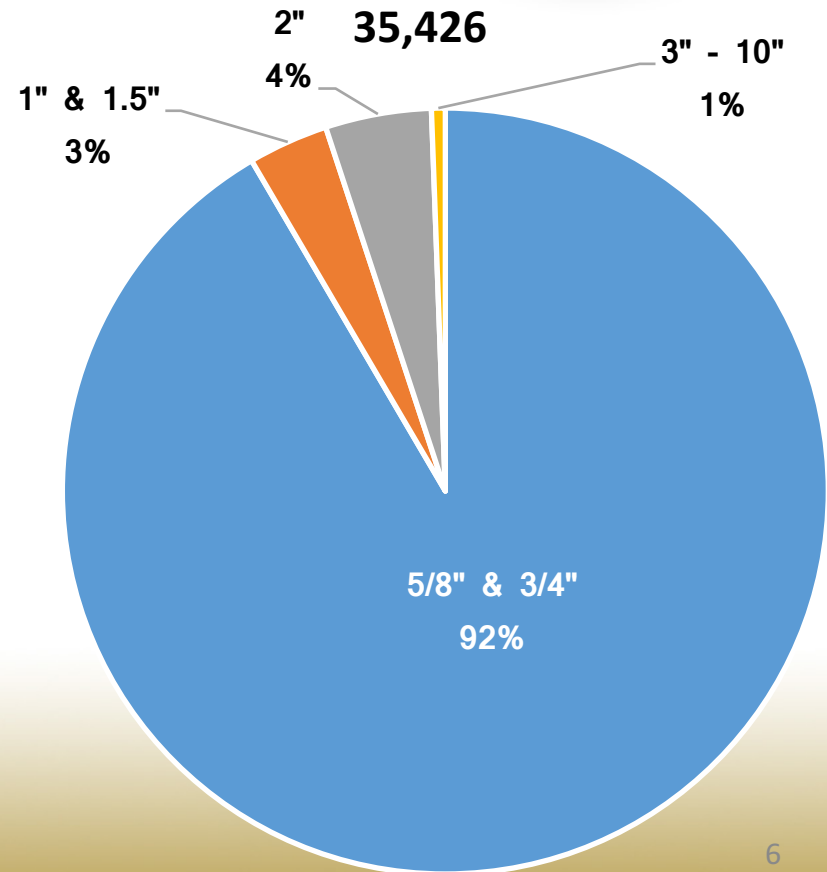


# Water-Sewer Customer Profile

**Customer Accounts – 35,426**



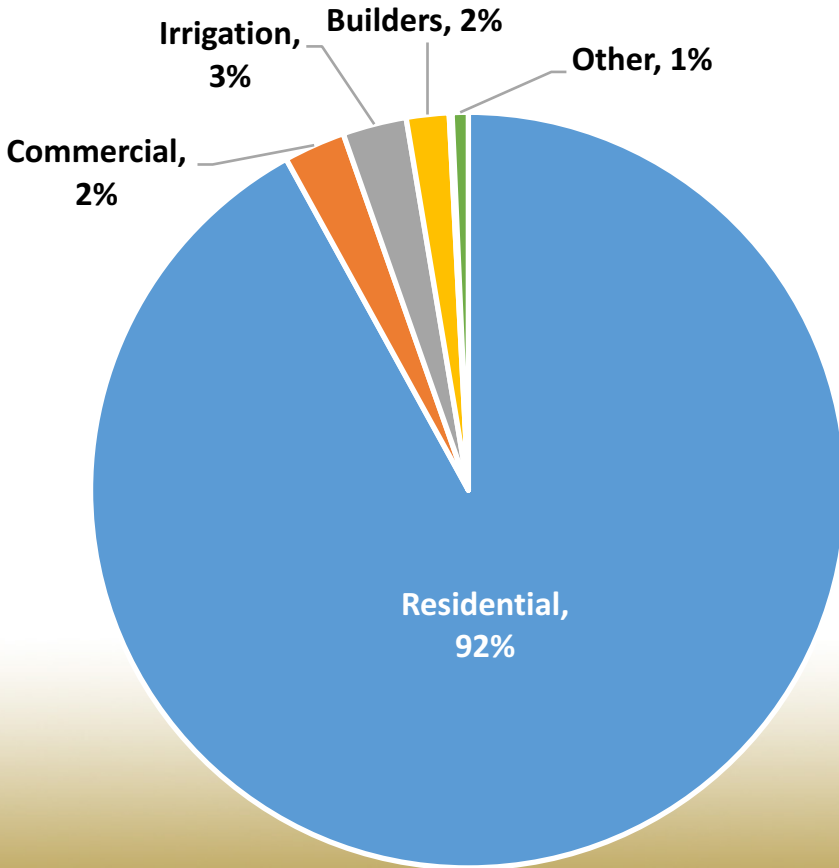
**Customer Accounts by Meter Size – 35,426**



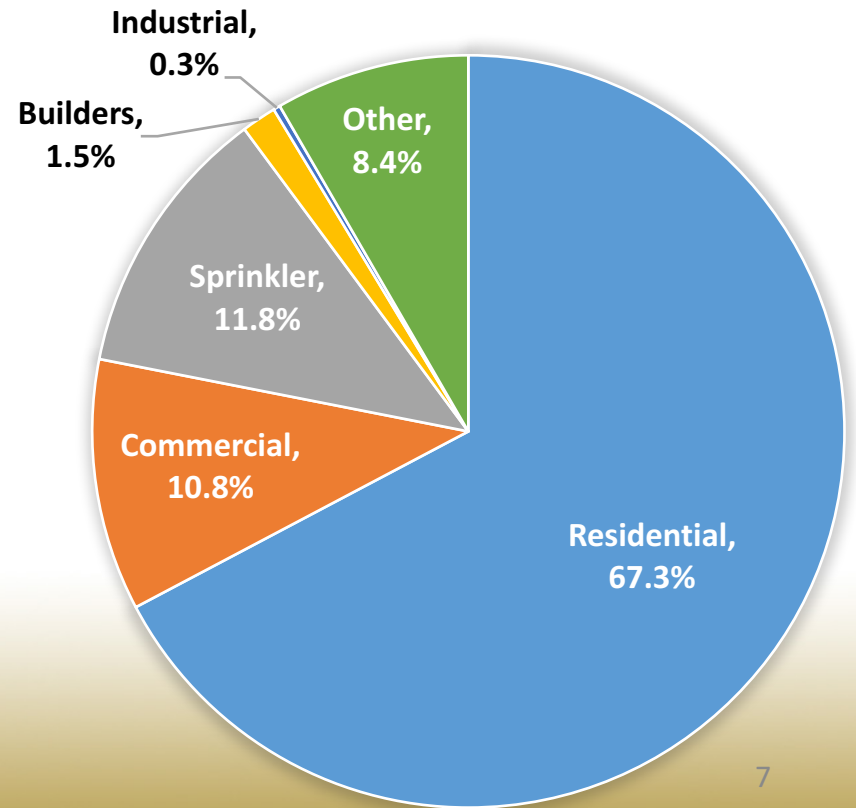


# Water-Sewer Customer Profile

**Customer Accounts – 35,426**



**CONSUMPTION OCT 2015 - JUN 2016  
2.7 BILLION GALLONS BILLED**





# Old vs New Rate Structures

To achieve the required total revenue...

## Old Rate Structure

- Single amount for base rate for all residential and commercial meters
- Base rates not tied to meter capacity
- Not reflective of larger meter impacts on system capacity
- Multi-family base rate is 91% of 5/8" meter base rate

## New Rate Structure

- Base rates calculated on volumetric capacity of the meter
- Revises cost allocation to base charge
- More prevalent industry practice; AWWA capacity factors



# Options



## **Option 1 – Consensus from Raftelis presentation on 8/29/2016**

- Scenarios - SCW1 & SCWW1
- Revised cost allocation to base charge and transition to base charge scaled up by meter size
- Multi-family base rate for water is 91% of 5/8” meter base rate

## **Option 2 – Similar to option 1**

- revised the multiplier to make 5/8” and 3/4” meters equal, then scaled up for larger meters
- Held water base rate for 5/8” and 3/4” meters to 2016 rate (\$13.78)
- Increased the multi-family base rate for water to equal the 5/8” and 3/4” rate

## **Additional Option Considered - Not Shown**

- Hold constant a 6,000 gallon residential customer to \$64.87
- Model results were skewed. In order to force the above rate, all sewer costs moved to base costs resulting in some bills increasing significantly and others decreasing significantly, instead of a shared increase.
- Difficult to justify to rate payers



# Water Base Charges

	FY 2016	Ratio	Option 1	Ratio	Option 2	# Meters
Inside City						
Single Unit						
5/8"	\$ 13.78	1.00	\$ 12.63	1.00	\$ 13.78	32,808
3/4"	13.78	1.50	18.95	1.00	13.78	42
1"	13.78	2.50	31.58	1.67	22.97	1,218
1 1/2"	13.78	5.00	63.16	3.33	45.93	93
2"	13.78	8.00	101.06	5.33	73.49	1,159
3"	13.78	15.00	189.48	10.00	137.80	59
4"	13.78	25.00	315.80	16.67	229.67	27
6"	13.78	50.00	631.60	33.33	459.33	15
8"	13.78	80.00	1,010.56	53.33	734.93	3
10"	13.78	115.00	1,452.68	76.67	1,056.47	2
Multi-Unit						
Per Unit	12.52		11.48		13.78	

A typical resident has a 5/8" meter

Ratio between meter sizes is based on AWWA standards.



# Water Volumetric Charges

	FY 2016	Option 1	Option 2
<b>Inside City Residential</b>		Depends on	Depends on
0-2000 gallons	\$ 13.78	Meter Size	Meter Size
2001-6000 gallons	3.48	3.57	3.55
6001-15000 gallons	4.35	4.46	4.44
15,001-25,000 gallons	5.22	5.36	5.33
25001+ gallons	6.96	7.14	7.11
<b>Commercial</b>		Depends on	Depends on
0-2000 gallons	\$ 13.78	Meter Size	Meter Size
2000+ gallons	4.35	4.46	4.44
<b>Multi-Unit (per unit)</b>			
0-2000 gallons	\$ 12.52	11.48	13.78
2000+ gallons	4.35	4.46	4.44
<b>Landscape</b>		Depends on	Depends on
0-2000 gallons	\$ 13.78	Meter Size	Meter Size
2000+ gallons	5.22	5.36	5.33



# Waste Water Base Charges

	FY 2016	Ratio	Option 1	Ratio	Option 2	# Meters
<b>Inside City</b>						
<b>Single Unit</b>						
5/8"	\$ 17.44	<b>1</b>	\$ 19.60	<b>1.00</b>	\$ 20.86	32,808
3/4"	17.44	<b>1.5</b>	29.39	<b>1.00</b>	20.86	42
1"	17.44	<b>2.5</b>	48.99	<b>1.67</b>	34.77	1,218
1 1/2"	17.44	<b>5</b>	97.98	<b>3.33</b>	69.53	93
2"	17.44	<b>8</b>	156.76	<b>5.33</b>	111.25	1,159
3"	17.44	<b>15</b>	293.93	<b>10.00</b>	208.60	59
4"	17.44	<b>25</b>	489.88	<b>16.67</b>	347.66	27
6"	17.44	<b>50</b>	979.75	<b>33.33</b>	695.32	15
8"	17.44	<b>80</b>	1,567.61	<b>53.33</b>	1,112.51	3
10"	17.44	<b>115</b>	2,253.44	<b>76.67</b>	1,599.23	2
<b>Multi-Unit</b>						
Per Unit	17.44		19.60		20.86	

A typical resident has a 5/8" meter

Ratio between meter sizes is based on AWWA standards.

# Waste Water Volumetric Charges



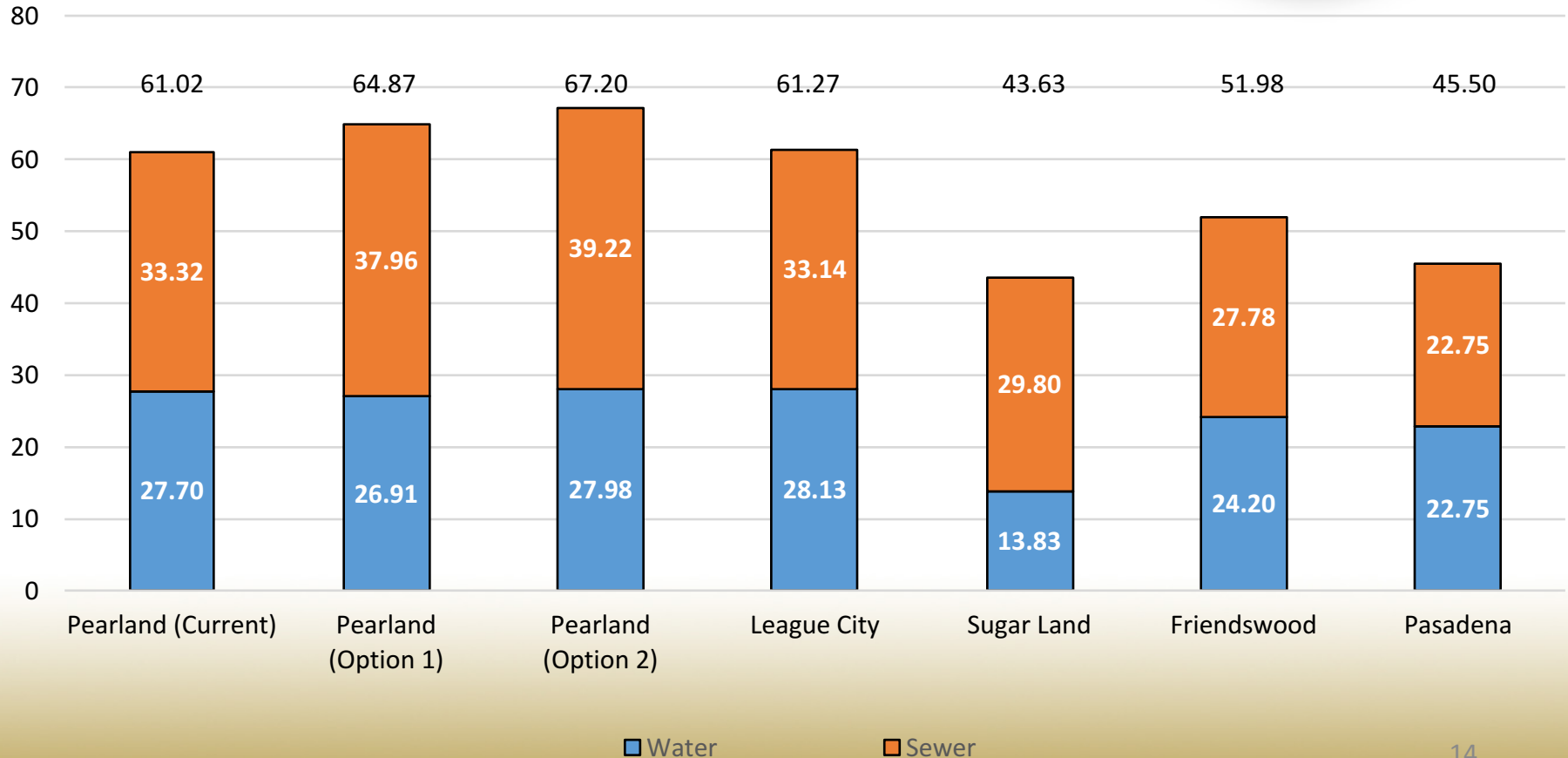
	FY 2016	Option 1	Option 2
<b>Inside City</b>			
<b>Residential</b>			
0-2000 gallons	\$ 17.44	Depends on Meter Size	Depends on Meter Size
2001+ gallons	3.97	4.59	4.59
<b>Commercial</b>			
0-2000 gallons	\$ 17.44	Depends on Meter Size	Depends on Meter Size
2000+ gallons	3.97	4.59	4.59
<b>Multi-Unit (per unit)</b>			
0-2000 gallons	\$ 17.44	\$ 19.60	\$ 20.86
2000+ gallons	3.97	4.59	4.59



# Water-Sewer Rate Comparison Local Cities



Residential – 6,000 gallons Water/Sewer





# Water-Sewer Revenue Increase

## Residential Impact Comparisons - Monthly

	FY 2016	Option 1	Increase	Option 2	Increase
2,000 Gallons	\$ 31.22	\$ 32.23	\$ 1.01	\$ 34.64	\$ 3.42
6,000 Gallons	61.02	64.87	\$ 3.85	67.20	\$ 6.18
10,000 Gallons (8 cap)	86.36	91.89	\$ 5.53	94.14	\$ 7.78
15,000 Gallons (10 cap)	123.99	132.55	\$ 8.56	134.70	\$ 10.71

### Irrigation

1" Meter (32,600 gallons)	173.51	195.60	\$ 22.09	186.07	\$ 12.56
1" Meter (61,467 gallons)	324.20	350.32	\$ 26.12	339.93	\$ 15.73
2" Meter (19,558 gallons)	105.43	195.17	\$ 89.74	167.07	\$ 61.64
2" Meter (160,200 gallons)	839.58	949.01	\$ 109.43	916.70	\$ 77.12

Residential comparisons calculated using 5/8" meter for option 1 and 5/8" and 3/4" meters for option 2.

Cap refers to sewer cap for a residential homeowner (winter quarter average).



# Water-Sewer Revenue Increase

## Commercial Monthly Impact Comparisons

	Gallons	FY 2016	Option 1	Increase	Option 2	Increase
Hotel 1 (2" meter)	97,442	\$ 825.30	\$ 1,121.57	\$ 296.27	\$ 1,046.58	\$ 221.28
Hotel 2 (3" meter)	186,333	1,564.87	2,151.63	586.76	2,010.93	446.06
Hotel 3 (4" meter)	517,583	4,320.87	5,468.71	1,147.84	5,233.04	912.17
Office Building (2" meter)	53,092	456.31	720.20	263.89	646.10	189.79
Small Comm Bldg (5/8" meter)	358	31.22	32.23	1.01	34.64	3.42
Apartment 1 (152 units)	40,033	4,553.92	4,724.16	170.24	5,265.28	711.36
Apartment 2 (392 units)	853,133	12,319.51	12,809.01	489.50	14,203.15	1,883.64
Industrial (6" meter)	90,542	767.89	2,412.66	1,644.77	1,954.18	1,186.29
Hospital (10" meter)	505,492	3,706.12	8,262.72	4,556.60	7,202.23	3,496.11
High School (6" meter)	469,725	1,426.69	3,129.26	1,702.57	2,669.21	1,242.52
Elementary School (3" meter)	85,483	725.80	1,238.93	513.13	1,100.25	374.45
Restaurant (4" meter)	262,117	2,195.39	3,159.74	964.35	2,926.19	730.80
Fast Food (4" meter)	59,350	508.37	1,324.70	816.33	1,095.20	586.83

Apartments are calculated on the multi unit base rate multiplied by the number of apartment units plus a volumetric charge at the commercial rate.



# Water-Sewer Revenue Increase

## Commercial Monthly Impact Comparisons

	Gallons	Unit	Option 1	Increase	Increase/ Unit	Option 2	Increase	Increase/ Unit
Hotel 1 (2" meter)	97,442	Bed/Night	\$ 1,121.57	\$ 296.27	\$ 0.33	\$ 1,046.58	\$ 221.28	\$ 0.25
Hotel 2 (3" meter)	186,333	@ 65%	2,151.63	586.76	\$ 0.33	2,010.93	446.06	\$ 0.25
Hotel 3 (4" meter)	517,583	Occupancy	5,468.71	1,147.84	\$ 0.42	5,233.04	912.17	\$ 0.34
Office Building (2" meter)	53,092	SF/Month	720.20	263.89	\$ 0.0033	646.10	189.79	\$ 0.0024
Apartment 1 (152 units)	40,033	Unit/Month	4,724.16	170.24	\$ 1.12	5,265.28	711.36	\$ 4.68
Apartment 2 (392 units)	853,133	Unit/Month	12,809.01	489.50	\$ 1.25	14,203.15	1,883.64	\$ 4.81

Does not include irrigation meters



**v \* tr = r**



# Non-Development Usage and Service Fees Questions?

