



City of Prescott

Water and Wastewater

Rate and Impact Fee Study

Council Workshop

April 1, 2008

economists.com



Presentation Format



- ◆ Background on Economists.com
- ◆ Initial Rate Issues
- ◆ Rate Comparison
- ◆ Volume and Account Forecast
- ◆ Capital Improvement Plan
- ◆ Total Revenue Requirement
- ◆ Base Scenario Rate Forecast
- ◆ Impact Fees
- ◆ Notes on Rate Proposal
- ◆ Next Steps



Background on Economists.com



- ◆ Economic and financial consulting firm with offices in Dallas and Portland
- ◆ Extensive municipal consulting experience in Texas and Southwest
- ◆ Prepare WIFA annual residential rate survey for Arizona
- ◆ All staff are **senior-level professionals** with decades of water/wastewater ratemaking experience

Arizona Experience

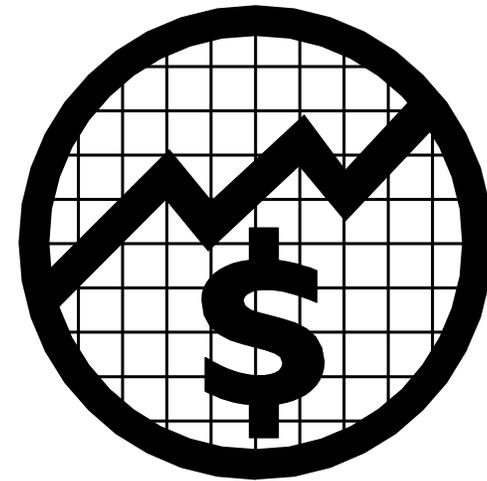
Avondale
Bisbee
Camp Verde
Chino Valley
Clarkdale
Coolidge
Cottonwood
Douglas
Eagar
Florence
Holbrook
Marana
Patagonia
Prescott
Quartzsite
Queen Creek
Safford
San Luis
Somerton
Springerville
Tombstone
Wellton
Willcox
Yuma
WIFA

Introduction

Why are Water/Wastewater Rates Increasing in Arizona and Nationwide?



- ◆ Inflation
- ◆ General increases in the cost of doing business
- ◆ Environmental and other regulations (e.g., arsenic treatment)
- ◆ Most critical input: **Capital Improvement Plans** needed to repair and expand water and wastewater systems



Initial Rate Findings



- ◆ Wastewater rates and alternate water resource fees are not recovering costs
- ◆ Current wastewater rate structure is complex and difficult to understand/administer
- ◆ Rates charged to County and Chino Valley water customers do not exceed City's costs to serve
- ◆ Top water rate block is very high – further increases on this block may be difficult
- ◆ Increasing impact fees will reduce but not eliminate the need for rate increases

City of Prescott Current Water Rate Structure



Current Water Rates * (Effective 7/1/2007)

Monthly Fixed Charges

Meter Size	Amount
5/8"	\$ 6.60
3/4"	7.05
1"	7.95
1 1/2"	10.20
2"	12.90
3"	19.20
4"	28.20
6"	50.70
8"	77.70

Rate per 1,000 gallons

Single Family		Multi-Family (Per Unit)		Non-Residential *	
First 3,000	\$ 2.86	First 1,700	\$ 2.30	Block 1	\$ 2.61
Next 7,000	4.30	Next 3,300	3.46	Block 2	3.92
Next 10,000	6.45	Next 5,000	5.19	Block 3	5.88
Over 20,000	12.90	Over 10,000	10.39	Block 4	11.76

Alternate Water Resource Fee: \$0.36 per 1,000 Gallons

NOTES:

- 1) Rates for Customers in the Town of Chino Valley - Add 30% to the above rates
 - 2) Rates for Customers Outside City Limits - Add 39% to the above rates
- * Blocks vary based on meter size

City of Prescott Current Wastewater Rate Structure



Wastewater Rates Effective 1991

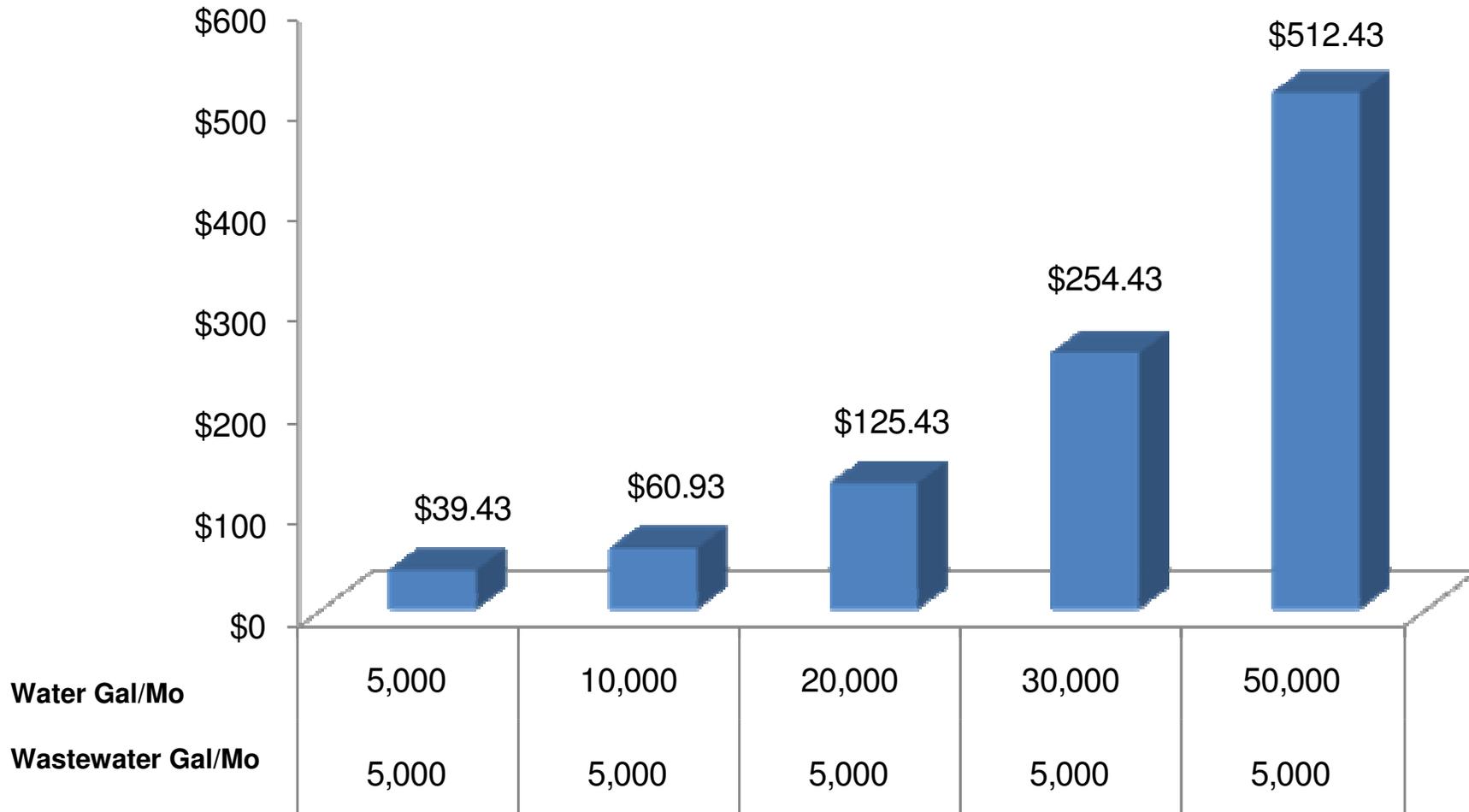
Service Charge - Fixed Rate

All Meters \$ 7.00

Classification	Per 1000 Gallons
Average Residential	\$ 1.73
Auto Steam Cleaning	8.43
Bakery, Wholesale	5.93
Bar w/o Dining Facilities	1.89
Car Wash	1.12
Dept/Retail Stores	1.58
Hospital/Convalescent	1.77
Hotel w/Dining Facilities	4.18
Hotel w/o Dining Facilities	2.04
Laundry, Industrial	5.01

Classification	Per 1000 Gallons
Laundromat	\$ 1.45
Laundry, Commercial	2.90
Markets w/Garbage Disposal	5.84
Mortuaries	5.84
Professional Offices	1.29
Repair Shops/Service Stations	2.07
Restaurants	6.28
Schools and Colleges	1.35
Soft Water Services	0.76
Septage Haulers	100.00
Grease Disposal	270.00

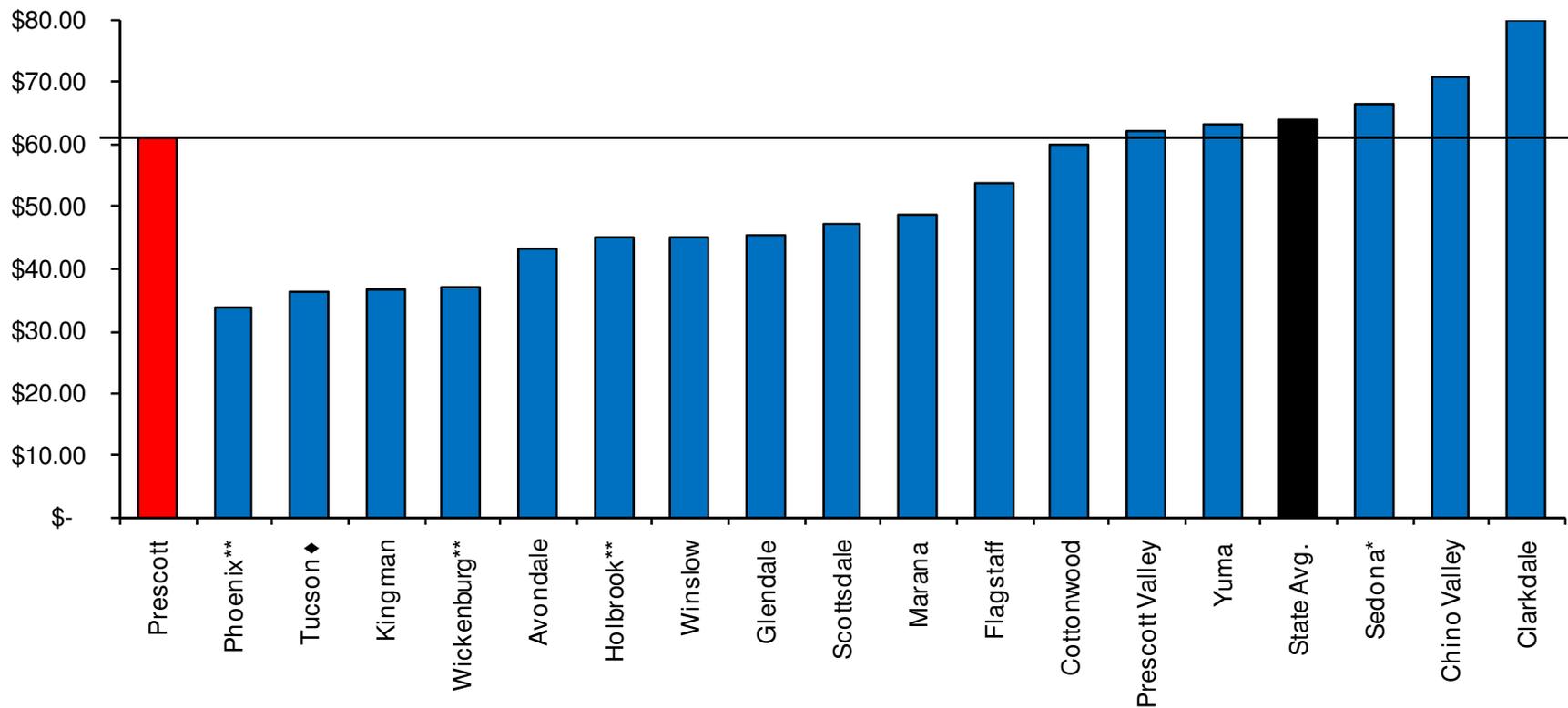
Current Residential Water + Wastewater Charges at Various Usage Levels



Note: to facilitate comparison with other Arizona communities, alternate water resource fee is not included

Water/Wastewater Residential Rate Comparison

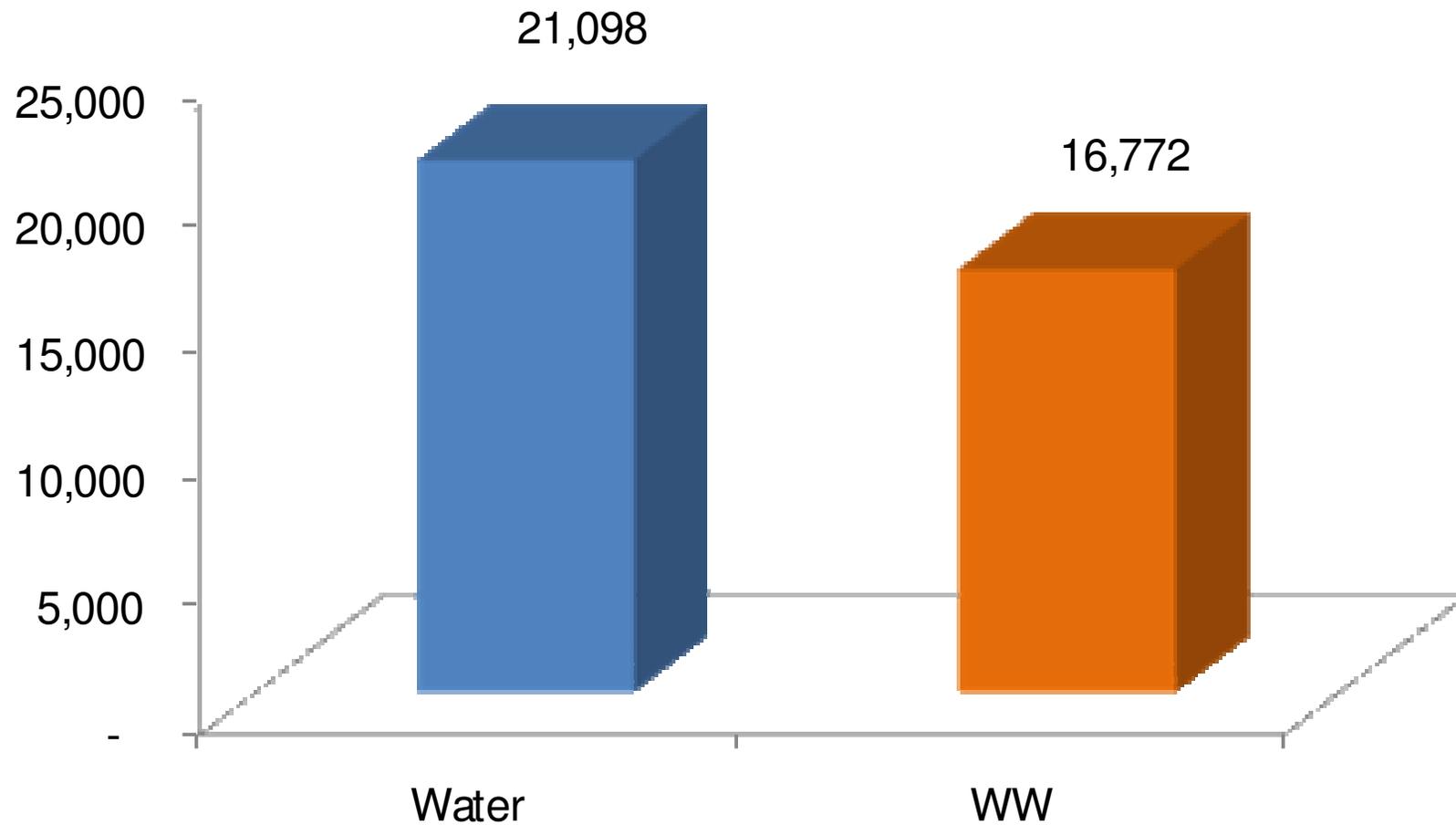
Water = 10,000 gal/mo; WW = 5,000 gal/mo



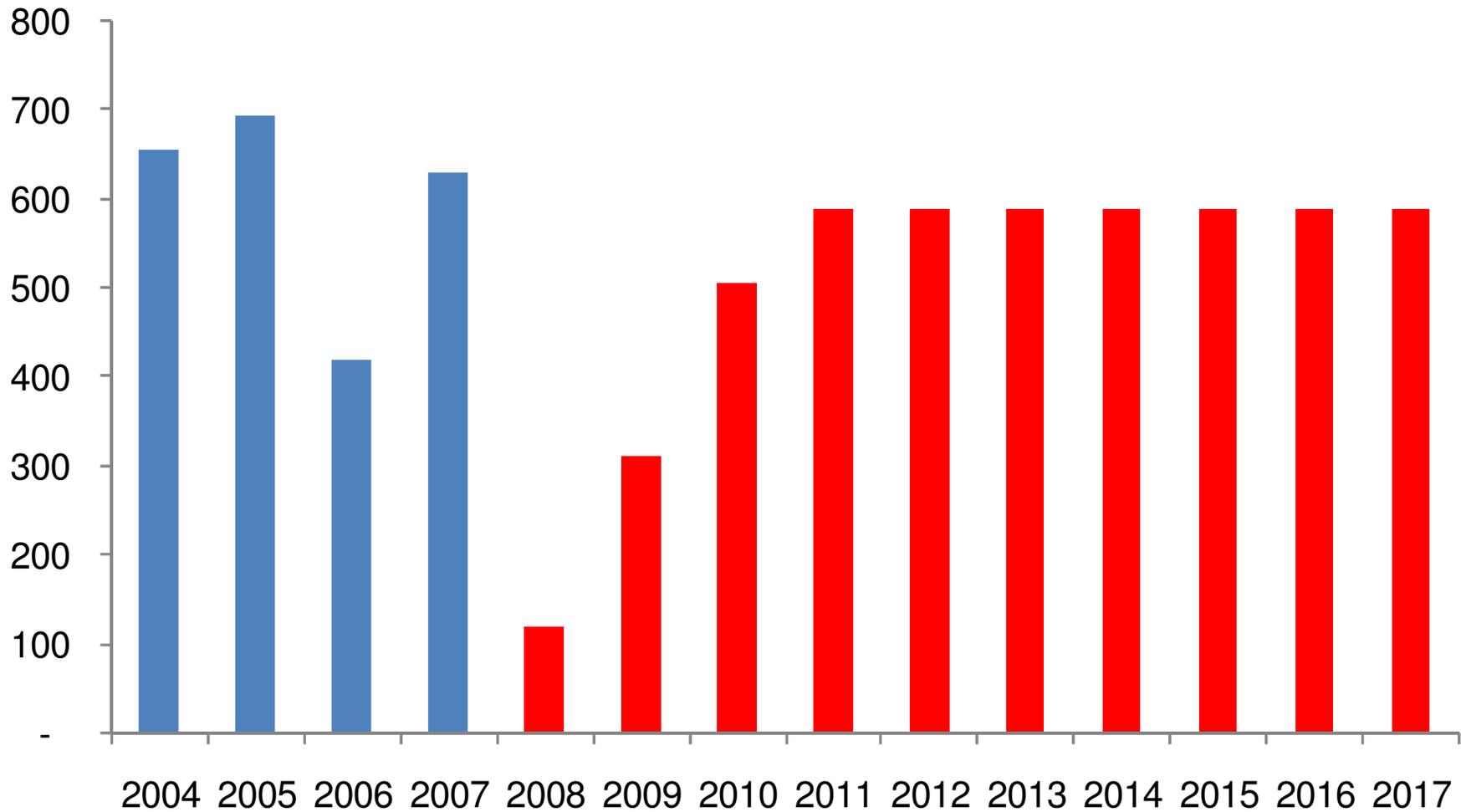
Source:
WIFA 2007 survey

*Operated by the AZ Water Company ** Winter Rates
♦ Operated by Pima County WW Mgt Dept.

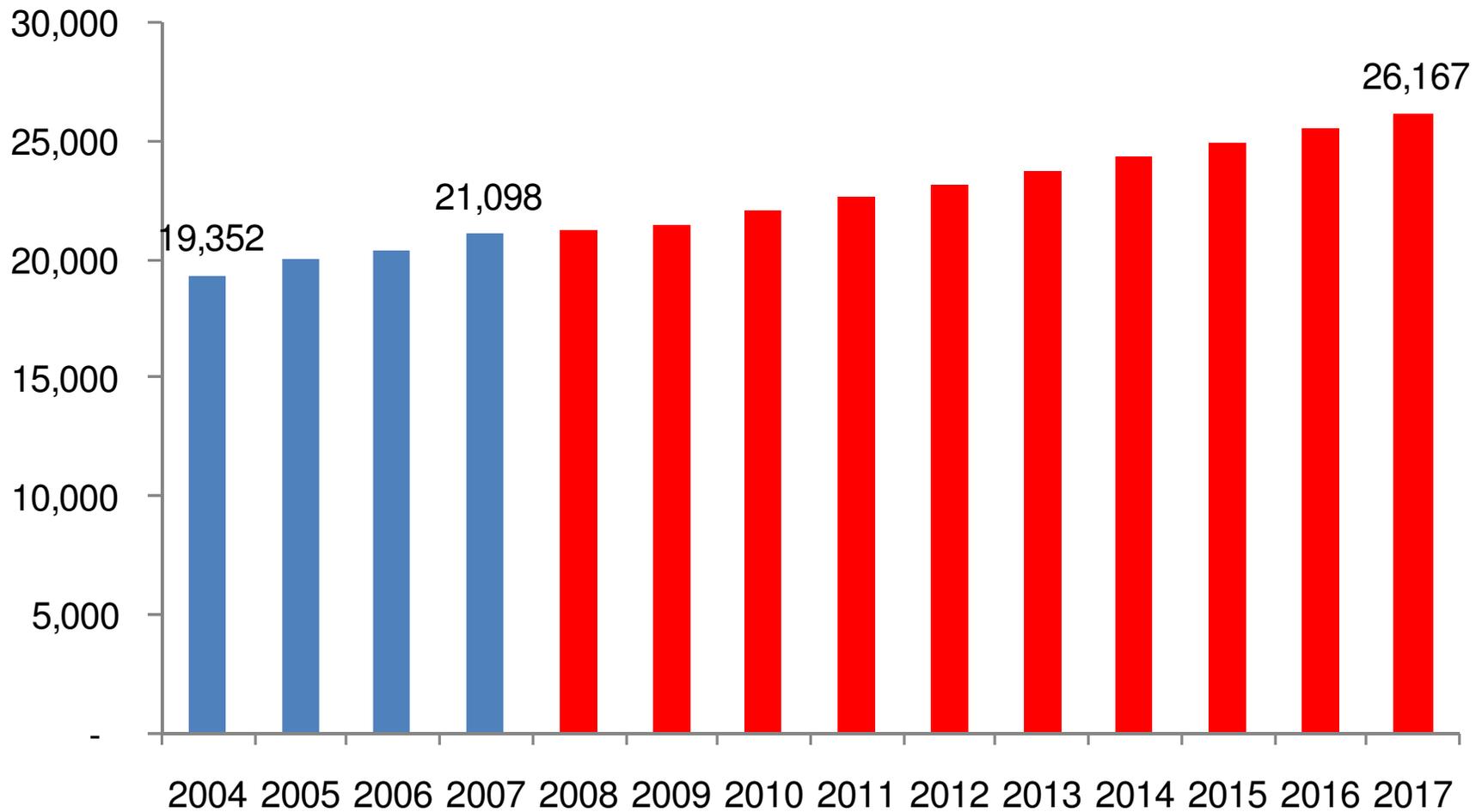
City of Prescott Current Water and Wastewater Accounts



Historical and Forecast Annual New Water Accounts



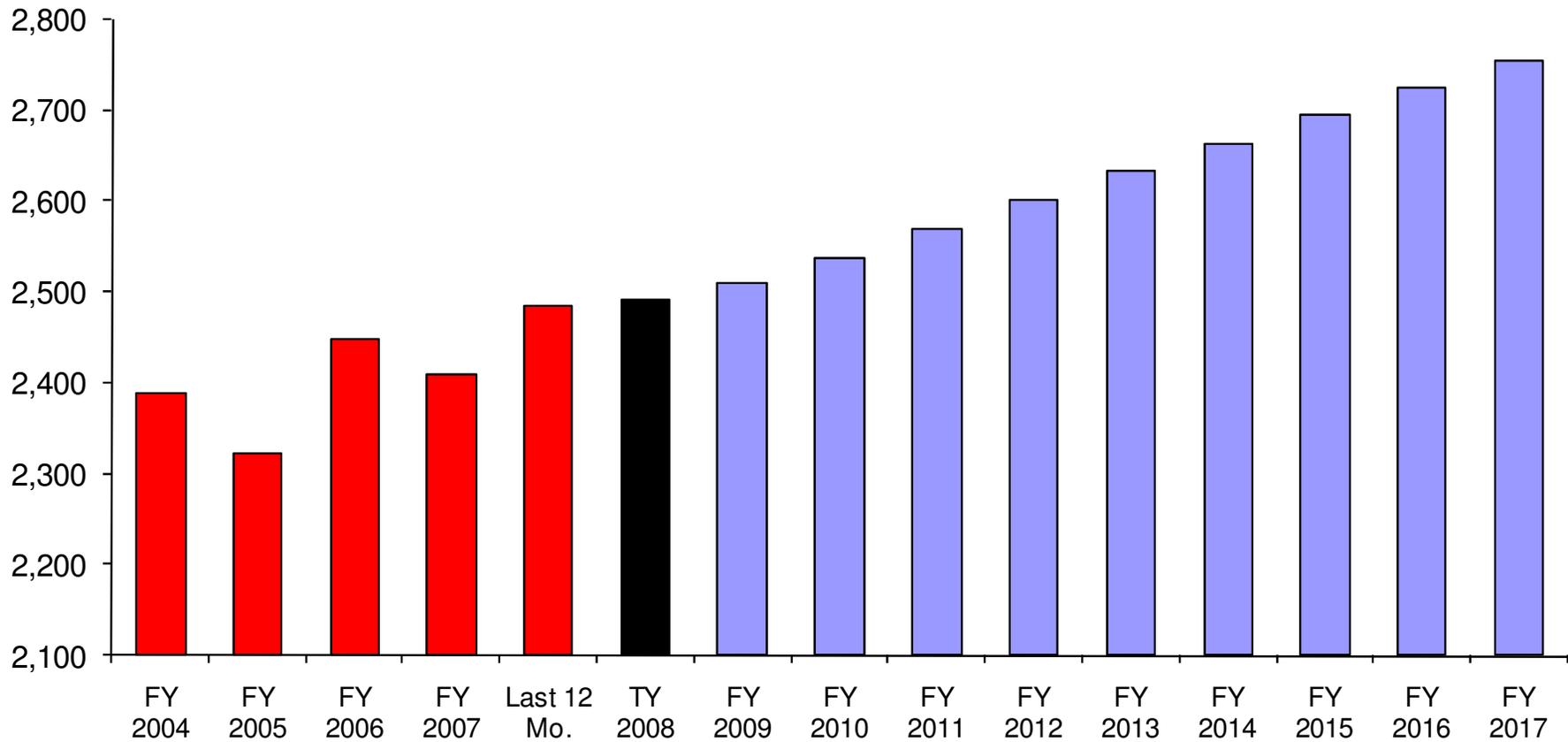
Historical and Forecast Total Water Accounts



Historical and Forecast Water Consumption



Million Gallons

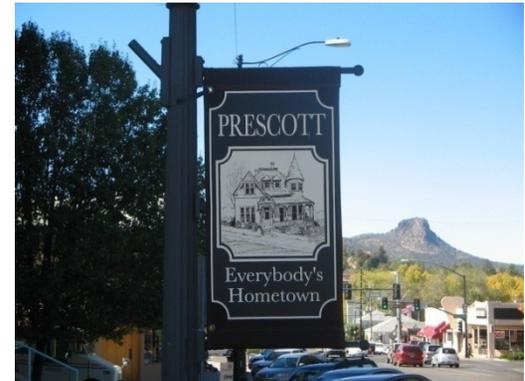


10 Year Forecast

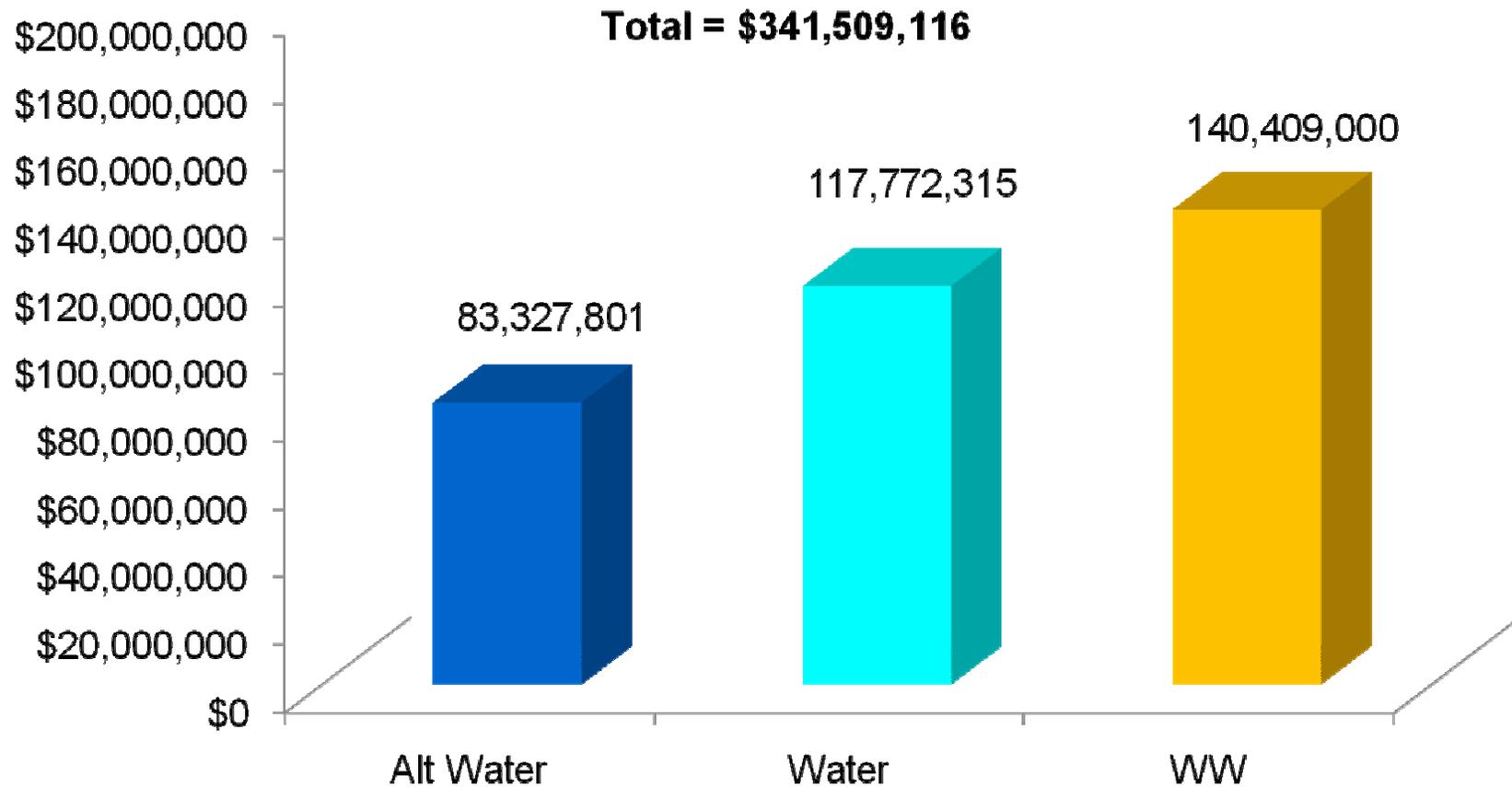
Scenario 1 BASE -- Primary Assumptions



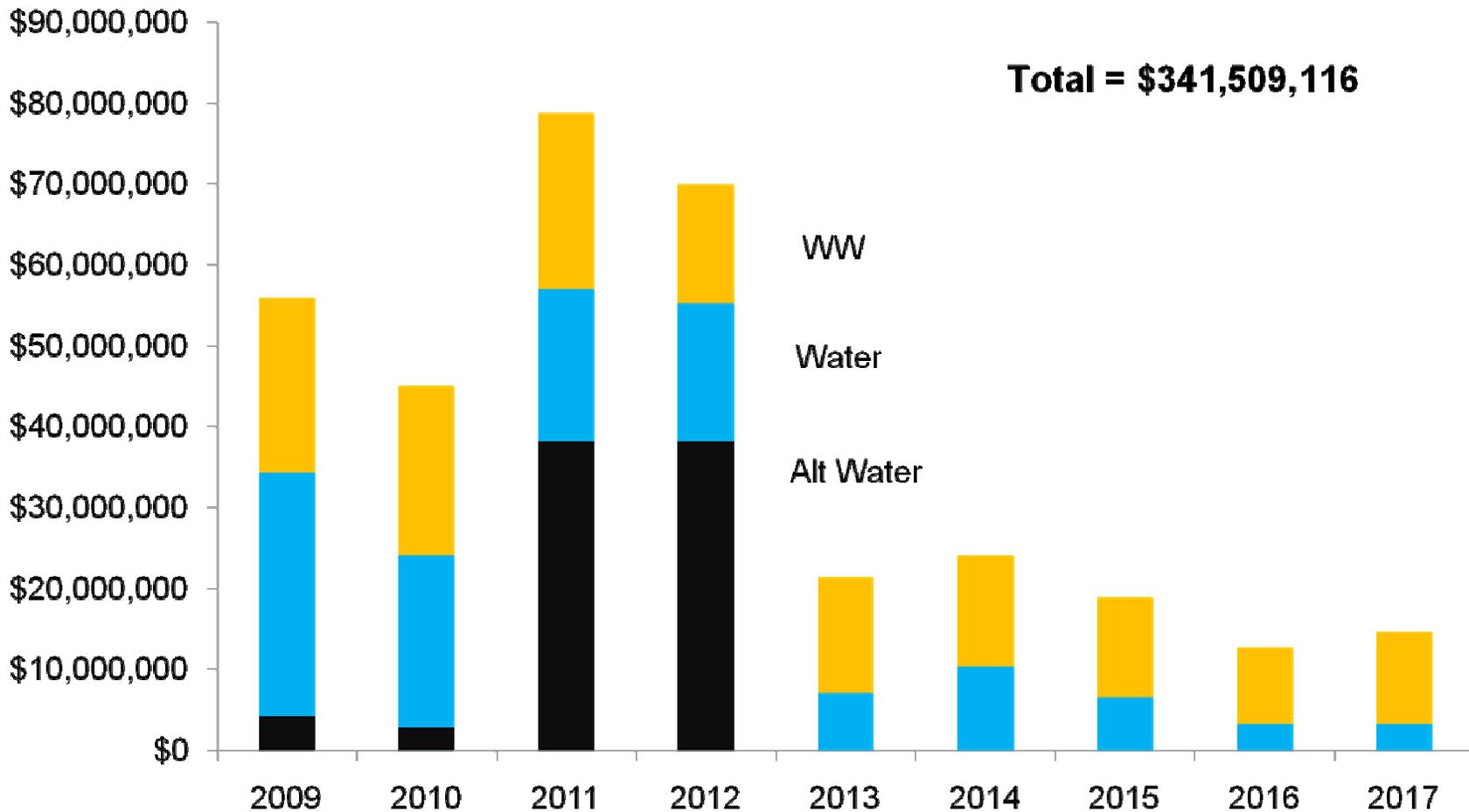
- ◆ Limited need for new operational, technical and administrative personnel during the forecast period
- ◆ Most operating expenses increase 3.0% per year; certain expenses increase at higher rates
- ◆ Assumes City implements updated impact fees
- ◆ Biggest factor affecting future cost of service: **CAPITAL IMPROVEMENT PLAN**



City of Prescott DRAFT Unfunded Capital Improvement Plan FY 2009 – FY 2017



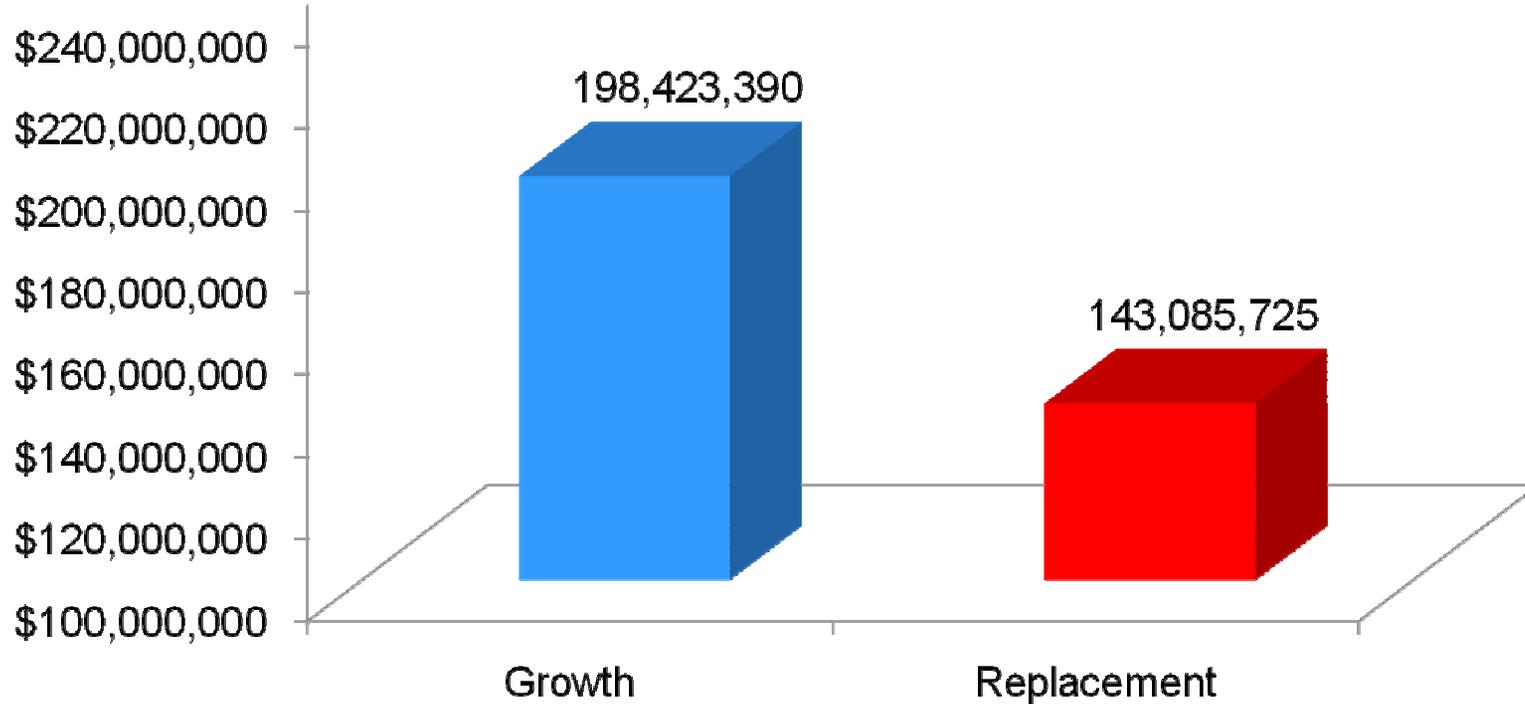
City of Prescott DRAFT Unfunded Capital Improvement Plan



DRAFT Unfunded Capital Improvement Plan Growth vs. Replacement



Total = \$341,509,116



Debt Issues Required to Fund DRAFT CIP Scenario 1 -- BASE



	Alt Water Resource	Water	Wastewater	Total
2009	\$ 2,000,000	\$ 17,000,000	\$ 21,000,000	\$ 40,000,000
2010	-	14,000,000	18,000,000	32,000,000
2011	35,000,000	10,000,000	19,000,000	64,000,000
2012	34,000,000	8,000,000	12,000,000	54,000,000
2013	-	-	11,000,000	11,000,000
2014	-	-	10,000,000	10,000,000
2015	-	-	9,000,000	9,000,000
2016	-	-	6,000,000	6,000,000
2017	-	-	7,000,000	7,000,000
TOTAL	71,000,000	49,000,000	113,000,000	233,000,000

Forecast Revenue Requirement Scenario 1 -- BASE



	2008	2009	2010	2011	2012	2013
ALT WATER RESOURCE/ WATER						
<i>Operating/Cap Outlays</i>	\$ 8,671,801	\$ 9,214,916	\$ 9,720,163	\$ 10,389,237	\$ 11,146,863	\$ 11,782,111
<i>Debt Service -- Current</i>	1,243,627	1,294,576	1,241,681	1,042,053	1,043,601	1,042,951
<i>Debt Service -- Future</i>	-	-	1,306,968	2,269,998	5,365,449	8,254,537
Total Cost of Service	9,915,428	10,509,492	12,268,812	13,701,288	17,555,913	21,079,599
WASTEWATER						
<i>Operating/Cap Outlays</i>	4,853,017	5,331,149	5,648,148	6,155,193	6,793,610	7,221,296
<i>Debt Service -- Current</i>	1,365,390	815,437	783,996	661,782	664,646	663,735
<i>Debt Service -- Future</i>	-	-	1,444,544	2,682,725	3,989,693	4,815,147
Total Cost of Service	6,218,407	6,146,586	7,876,688	9,499,699	11,447,949	12,700,178
CASH BASIS TOTAL						
Cost of Service	16,133,835	16,656,077	20,145,500	23,200,987	29,003,862	33,779,777

Primary Goals of Multi-Year Water and Wastewater Rate Plan



1. Minimize impact on ratepayers through justified annual rate adjustments
2. Ensure that All Water Resource, Water and Wastewater rates each pay their respective cost of service
3. Restructure and simplify non-residential wastewater rates (first significant adjustment since 1991)
4. Continue to encourage water conservation
5. Use impact fees to fund growth-related capital costs
6. Fully fund Capital Improvement Plan

Notes on Rate Scenario 1



- ◆ Rates have been forecast for a 10 year period, FY 2008 – FY 2017
- ◆ It is common for growing cities to frequently re-evaluate rates as development patterns, CIP, and other circumstances change
- ◆ The following options are available for rate planning:
 - ❖ Implement 2008 adjustment and re-evaluate before 2009
 - ❖ Implement 2008 and 2009 adjustments and re-evaluate before 2010
 - ❖ Implement 2008 – 2012 adjustments and re-evaluate periodically (typically every two years)

Preliminary Water Rate Plan Scenario 1 -- BASE



		Current	Apr-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-17
WATER Rate								
Base Charge	5/8"	\$ 6.60	\$ 6.60	\$ 6.60	\$ 6.60	\$ 6.60	6.93	\$ 8.51
	3/4"	7.05	7.05	7.05	7.05	7.05	7.40	9.09
	1"	7.95	7.95	7.95	7.95	7.95	8.35	10.25
	1 1/2"	10.20	10.20	10.20	10.20	10.20	10.71	13.16
Residential Inside								
-	3,000	2.86	2.86	2.86	2.86	2.86	3.00	3.69
3,001	10,000	4.30	4.30	4.30	4.30	4.30	4.52	5.55
10,001	20,000	6.45	6.45	6.45	6.45	6.45	6.77	8.32
20,001	Above	12.90	12.90	12.90	12.90	12.90	13.55	16.64
Multi-Family Inside								
-	1,700	2.30	2.30	2.30	2.30	2.30	2.42	2.97
1,701	5,000	3.46	3.46	3.46	3.46	3.46	3.63	4.46
5,001	10,000	5.19	5.19	5.19	5.19	5.19	5.45	6.69
10,001	Above	10.39	10.39	10.39	10.39	10.39	10.91	13.40
Non-Res Inside								
	Block 1	2.61	2.61	2.61	2.61	2.61	2.74	3.37
	Block 2	3.92	3.92	3.92	3.92	3.92	4.12	5.06
	Block 3	5.88	5.88	5.88	5.88	5.88	6.17	7.58
	Block 4	11.76	11.76	11.76	11.76	11.76	12.35	15.17
Alternate Water Source Fee		\$ 0.36	\$ 0.40	\$ 0.45	\$ 0.65	\$ 0.80	1.30	\$ 1.70

Preliminary Wastewater Rate Plan Scenario 1 -- BASE



		SCENARIO: Alt #1 -- "BASE"						
		Current	Apr-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-17
Wastewater Rate								
WW1	Residential							
	Base Charge	7.00	9.50	10.45	12.54	15.05	18.06	22.71
	Volume Charge	1.73	2.05	2.26	2.71	3.25	3.90	4.90
	Uniform Non-Residential							
	Base Charge	na	11.50	12.65	15.18	17.84	21.40	26.92
	Volume Charge	na	2.95	3.25	3.89	4.58	5.49	6.90

NOTE: Rates for classes above the recommended uniform rate would be frozen at current levels until they reach parity with uniform rate

Residential Monthly Charges Scenario 1 -- BASE



Mthly Gallons		Current	Apr-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-17
Water	WW							
5,000	5,000	\$ 41.23	\$ 45.53	\$ 47.76	\$ 53.10	\$ 59.06	\$ 69.01	\$ 86.38
	Increase		4.30	2.23	5.35	5.96	9.95	
10,000	5,000	64.53	69.03	71.51	77.85	84.56	98.08	122.61
	Increase		4.50	2.47	6.35	6.71	13.52	
50,000	5,000	530.43	536.53	541.01	555.35	568.06	624.16	772.94
	Increase		6.10	4.48	14.35	12.71	56.10	

NOTE: This scenario includes the alternate water resource fee

Non-Residential Wastewater Monthly Charges Scenario 1 -- BASE



		Avg Mthly Gallons	Current	Apr-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-17
WW2	Bar w/o Dining Facilities	20,000	\$ 44.80	\$ 70.50	\$ 77.55	\$ 93.06	\$ 109.35	\$ 131.21	\$ 165.02
WW3	Car Wash	150,000	175.00	454.00	499.40	599.28	704.15	844.98	1,062.65
WW4	Dept/Retail Stores	15,000	30.70	55.75	61.33	73.59	86.47	103.76	130.49
WW5	Hospital/Convalescent	210,000	378.70	631.00	694.10	832.92	978.68	1,174.42	1,476.94
WW6	Hotel w Dining Facilities	150,000	634.00	638.50	639.65	642.18	704.15	844.98	1,062.65
WW7	Hotel w/o Dining Facilities	90,000	190.60	277.00	304.70	365.64	429.63	515.55	648.36
WW8	Laundry, Industrial	30,000	157.30	161.80	162.95	165.48	168.14	186.12	234.06
WW9	Laundromat	60,000	94.00	188.50	207.35	248.82	292.36	350.84	441.21
WW10	Laundry, Commercial	290,000	848.00	867.00	953.70	1,144.44	1,344.72	1,613.66	2,029.34
WW11	Markets w Garbage Disposal	80,000	474.20	478.70	479.85	482.38	485.04	488.60	579.31
WW12	Mortuaries	10,000	65.40	69.90	71.05	73.58	76.24	79.80	95.97
WW13	Professional Offices	10,000	19.90	41.00	45.10	54.12	63.59	76.31	95.97
WW14	Repair Shops/Service Stations	20,000	48.40	70.50	77.55	93.06	109.35	131.21	165.02
WW15	Restaurants	60,000	383.80	388.30	389.45	391.98	394.64	398.20	441.21
WW16	Schools and Colleges	70,000	101.50	218.00	239.80	287.76	338.12	405.74	510.26

Water Impact Fees Scenario 1 -- BASE



	AWWA Meter Ratio	Water Impact Fee	
		CURRENT Fee	New Fee
5/8" x 3/4"	1.00	\$ 5,132	\$ 6,209
1"	2.50	8,571	15,522
1 1/2"	5.00	17,091	31,044
2"	8.00	27,356	49,671

- ◆ Impact fees for meter sizes over 2" to be calculated individually according to a demand analysis
- ◆ Water Resource Development Fee amount unchanged; \$4,709 Fee Per Dwelling Unit to be applied regardless of metering type (master or individual)

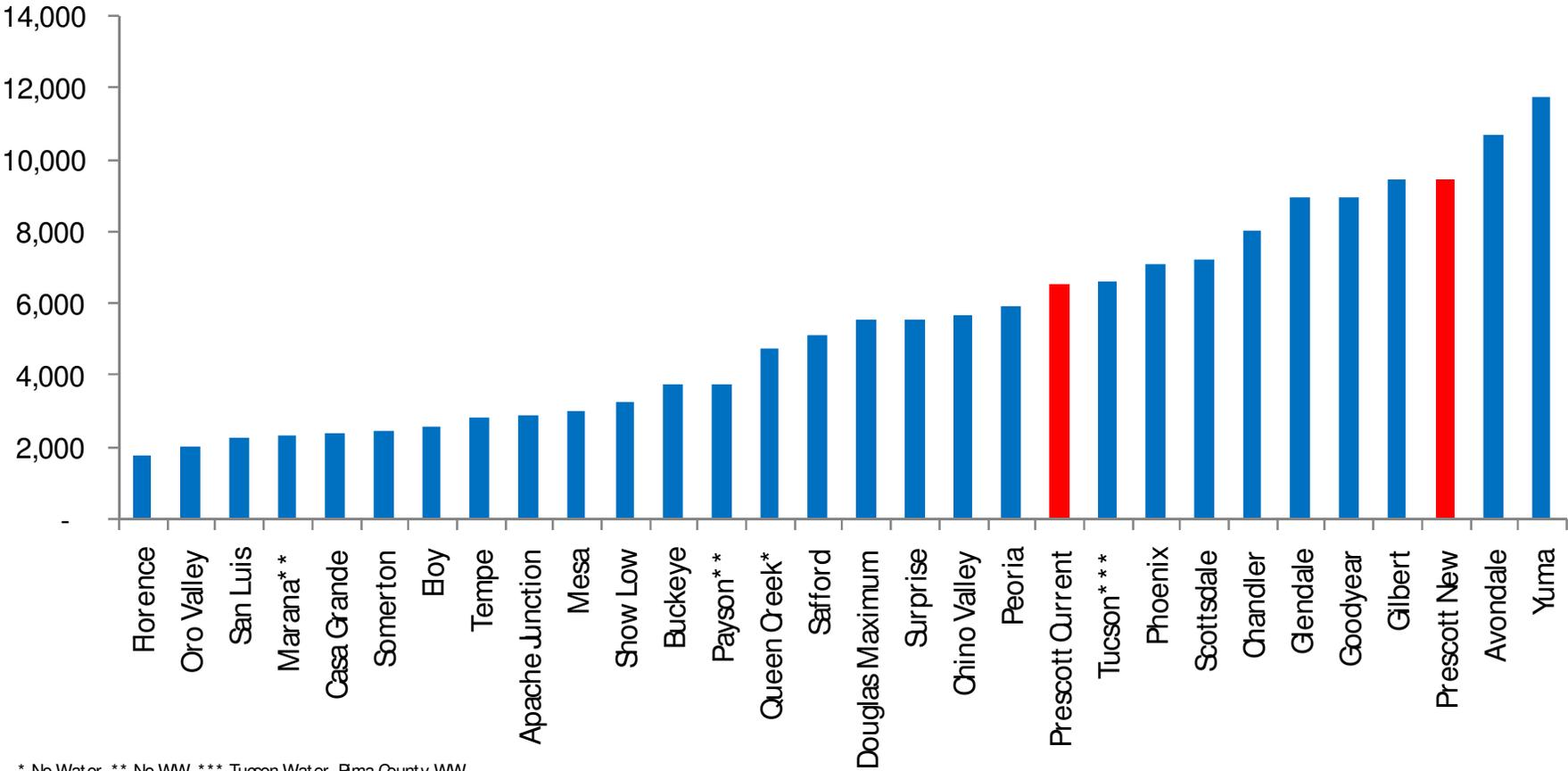
Wastewater Impact Fees Scenario 1 -- BASE



Water Meter Size	AWWA Meter Ratio	CURRENT Fee	New Fee
5/8" -- 3/4"	1.00	**	\$ 3,273
1"	2.50	**	8,183
1 1/2"	5.00	**	16,367
2"	8.00	**	26,187

- ◆ Wastewater impact fees for new connections with water meter sizes over 2" to be set calculated individually according to a demand analysis
- ◆ ** Current "Buy-In" Fee based on fixture units which vary by customer will no longer be in effect

Water and Wastewater Impact Fee Comparison



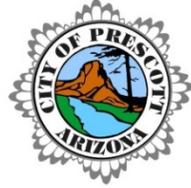
* No Water ** No WW *** Tucson Water, Pima County WW

NOTE: water resource fees excluded due to insufficient data from other cities

Other Rate Issues



- ◆ **Unsewered Areas** – deletion of projects for these areas from the CIP would reduce the new wastewater impact fees somewhat, but would not significantly affect the wastewater rate structure
- ◆ **Big Chino Project** – reflected in Alternate Water Resource Fee; rescheduling this project will affect that fee
- ◆ **Growth** -- higher than forecast growth may allow the City to scale back future scheduled rate adjustments
- ◆ **Impact Fees** – if lower impact fees are adopted, then rates will have to be higher to finance the capital improvement plan debt



Residential Monthly Charges – 10,000 W; 5,000 WW Scenario 1A – Base; No Change in Impact Fees

	Current	Apr-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-17
Alt 1 -- New Impact Fees	\$ 64.53	\$ 69.03	\$ 71.51	\$ 77.85	\$ 84.56	\$ 98.08	\$ 122.61
Alt 1A -- Keep Current Impact Fees	64.53	69.03	71.51	78.94	88.13	102.03	127.50
Difference (\$ per Month)	-	-	-	1.09	3.57	3.94	4.89

Rate Design

Potential Alternative Rate Scenarios



- ◆ Rate blocks could be tightened down to encourage additional conservation
- ◆ Monthly charges by meter size could be increased
- ◆ Fold Alternate Water Resource Fee into water volume rate
- ◆ Keep in mind: any alternative will involve readjustments of rates, impacting the various customer classes differently

Presentation Summary



- ◆ Current water and wastewater rates compare favorably to averages within Arizona
- ◆ Rate and Impact Fee adjustments are required to:
 - ❖ Fund current and future operating expenses
 - ❖ Pay for the large CIP, much of which is to catch-up on existing system rehabilitation and capacity deficiencies
 - ❖ Ensure water and wastewater costs of service are being funded
 - ❖ Ensure growth pays its own costs
- ◆ A long-term rate plan minimizing rate adjustment fluctuations while continuing to encourage conservation would be prudent

