

# **TUCSON WATER**

**FY 2015**

## **Summary Cost of Service/Revenue Targets & Proposed Rate Schedules**

**March 12, 2014  
CWAC**



# THE WATER RATE STUDY PROCESS

## **Revenues and Revenue Requirements**

Is a Revenue increase needed?

*Revenues:* What are projected revenues under existing rates?

*Revenue Requirements:* How much cash is needed to operate, maintain and expand the Utility's systems?



## **Cost of Service Analysis**

Who should pay and how much?

*Cost of Service:* The Revenue Requirements as determined above LESS forecasted *non-water sales revenues* (system equity fee, meter installation fees, service charges, etc).

*Allocation:* The Cost of Service is allocated to Potable and Reclaimed Systems (direct and indirect allocations) and eventually to customer classes (number of service connections, volume of water used, and usage patterns).



## **Rate Design**

How will rates be structured?

How do we balance goals: 1) achieving revenue stability; 2) sending signals to conserve water via pricing; 3) limiting 'pocket book shock' for ratepayers.

# Cost of Service Principles: *Slicing the Revenue Pie*



Theoretical framework for cost of service analysis:

- Utility is to be self-supporting
- Utility incurs costs to provide service

Costs are dependent upon or driven by:

- The nature of the water product delivered to customers (***system functions and service characteristics***)
- The water usage/demand of customers (***usage characteristics***)
- The number of customers in each class

Cost of service analysis attempts to assign an appropriate share of costs to customer groups based on:

- The water product the group is receiving (potable/reclaimed)
  - The total amount/average daily amount of water the group uses
  - The water usage pattern of the group (constant versus peaking)
  - The number of customer connections and equivalent meters to the water system within each group
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## Tucson Water FY 2015 Customer Class Profile

Customer Class	Estimated Accounts/Services		Accounts/Services As % of Total		Estimated Usage (Ccf *)	Usage as % Of Total Usage	Estimated Revenues: At 7/13 Rates (\$1,000)	Revenue as % Of Total Revenue
	Accounts/Services	Estimated	Accounts/Services	Estimated				
Residential	205,147	205,147	89.4%	21,866,156	55.7%	87,954	59.8%	
<i>Single-family</i>	200,793			21,302,472		85,920		
<i>Duplex-triplex</i>	4,354			563,684		2,034		
Multifamily	5,598	5,598	2.4%	7,626,866	19.4%	22,963	15.6%	
<i>Multi-family</i>	5,442			7,186,021		21,919		
<i>Sub-Metered MHP</i>	156			440,845		1,044		
Commercial	14,298	14,298	6.2%	8,756,730	22.3%	30,821	21.0%	
Industrial	322	322	0.1%	631,572	1.6%	2,078	1.4%	
Construction Water	343	343	0.1%	375,820	1.0%	1,528	1.0%	
Fire Sprinkler Service	3,819	3,819	1.7%	0	0.0%	1,715	1.2%	
<b>Total Potable</b>	<b>229,527</b>	<b>229,527</b>	<b>100.0%</b>	<b>39,257,144</b>	<b>100.0%</b>	<b>147,059</b>	<b>100.0%</b>	
<b>Reclaimed</b>	<b>1,092</b>	<b>1,092</b>	<b>100.0%</b>	<b>6,040,554</b>	<b>100.0%</b>	<b>9,484</b>	<b>100.0%</b>	
<b>Total</b>	<b>230,619</b>	<b>230,619</b>		<b>45,297,698</b>		<b>156,543</b>		

\*Ccf means 100 cubic feet; 100 cubic feet = 748 gallons

**TUCSON WATER  
FINANCIAL PLAN  
FY2014-FY2019  
CWAC Adopted 01-08-2014  
(\$1,000)**

LINE #	Fiscal Years Ending June 30:						
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	
1	<b>Projected Beginning Operating Working Capital</b>						
	\$23,471	\$28,698	\$24,400	\$25,200	\$26,089	\$28,566	
2	<b>Beginning Infrastructure Fund</b>						
	\$17,922	\$15,091	\$2,016	\$4,978	\$6,335	\$1,830	
	<b>PROJECTED REVENUES:</b>						
3	Water Sales (existing rates)						
	\$160,775	\$156,544	\$154,024	\$152,366	\$151,379	\$150,899	
4	Water Sales Increases from Rate Adjustments:						
	<i>FY 2015</i>	8.30%					
			\$12,993	\$12,784	\$12,646	\$12,564	
	<i>FY 2016</i>	8.30%					
			\$12,784	\$12,646	\$12,564	\$12,525	
	<i>FY 2017</i>	8.30%					
				\$12,646	\$12,564	\$12,525	
	<i>FY 2018</i>	8.30%					
					\$12,564	\$12,525	
	<i>FY 2019</i>	8.30%					
						\$12,525	
	<b>Total from Rate Adjustments</b>		\$12,993	\$25,568	\$37,939	\$50,258	\$62,623
5	<i>Water Sales (including Rate Adjustments)</i>						
	\$160,775	\$169,537	\$179,592	\$190,305	\$201,636	\$213,523	
6	Other Water Revenues/Sources						
	\$14,912	\$13,528	\$14,766	\$14,843	\$14,999	\$15,158	
6A	<i>System Equity Fee</i>						
	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,371	
6B	<i>CAP Water Resource Fee</i>						
	\$375	\$375	\$375	\$375	\$375	\$350	
7	<b>Total Revenues/Sources</b>						
	<b>\$178,562</b>	<b>\$185,940</b>	<b>\$197,233</b>	<b>\$208,023</b>	<b>\$219,511</b>	<b>\$231,401</b>	
	<b>PROJECTED REQUIREMENTS:</b>						
8	O & M Expense						
	\$88,058	\$94,676	\$98,013	\$101,730	\$105,455	\$109,188	
9	Utility Tax Embedded in Water Sales Revenues						
	\$4,187	\$4,402	\$4,651	\$4,918	\$5,200	\$5,497	
10	Debt Service						
	\$43,180	\$50,806	\$54,327	\$57,996	\$60,282	\$62,944	
11	Other Requirements						
	\$2,538	\$2,547	\$2,668	\$2,532	\$2,313	\$2,388	
12	In Lieu of Tax						
	\$1,600	\$0	\$0	\$0	\$0	\$0	
13	Low Income Program						
	\$525	\$525	\$525	\$525	\$525	\$525	
14	Transfer to Infrastructure Fund						
	\$5,919	\$1,925	\$2,962	\$1,357	\$13,295	\$9,986	
15	Capital from Water Revenues						
	\$17,751	\$25,780	\$23,614	\$28,304	\$20,089	\$28,315	
16	Administrative Service Charge(direct/indirect)						
	\$9,576	\$9,576	\$9,674	\$9,773	\$9,872	\$9,973	
17	<b>Total Requirements</b>						
	<b>\$173,335</b>	<b>\$190,237</b>	<b>\$196,434</b>	<b>\$207,134</b>	<b>\$217,033</b>	<b>\$228,817</b>	
18	<b>Projected Ending Operating Working Capital/Reserve</b>						
	<b>\$28,698</b>	<b>\$24,400</b>	<b>\$25,200</b>	<b>\$26,089</b>	<b>\$28,566</b>	<b>\$31,151</b>	
19	<i>Estimated Reserves As % of Sales Revenue</i>						
	17.8%	14.4%	14.0%	13.7%	14.2%	14.6%	
20	<i>Estimated Reserves as Days of O&amp;M</i>						
	105	85	85	85	90	95	
	<b>OTHER SIGNIFICANT DATA/PROJECTIONS:</b>						
21	<b>% Increases: Water Sales Rates/Revenue</b>						
	N/A	8.3%	8.3%	8.3%	8.3%	8.3%	
22	<b>Debt Service Coverage (All Debt)</b>						
	183.0%	160.0%	164.0%	165.0%	171.0%	176.0%	
22a	<b>Coverage: Senior Lien Debt</b>						
	216.0%	185.0%	187.0%	187.0%	191.0%	196.0%	
23	<b>Total Capital Improvement Program (CIP)</b>						
	\$67,382	\$79,289	\$61,966	\$74,309	\$62,311	\$54,504	
	<b>Debt Sales:</b>						
24	<b>Water System Revenue Obligations/Bonds</b>						
	\$37,964	\$38,415	\$42,944	\$33,055	\$18,882	\$19,283	
25	<b>WIFA Loan</b>						
	\$3,735	\$0	\$0	\$0	\$0	\$0	

### OPTION A / Scenario 3

FY 2014

**Scenario 3 : RECLAIMED WATER TO RECOVER APPROX:  
 POTABLE USERS RECOVER % OF RECLAIMED  
 No Class Over 10% Increase; No Rate Decrease; 2% Increase in Reclaimed Std. Rate**

74%  
26%

Reclaimed COS to be recovered from reclaimed rate payers \$9,764,943  
 Reclaimed Benefit to be Allocated **\$3,453,917**  
 Potable COS \$150,694,892  
 Potable difference in schools peaking costs to be allocated \$383,000  
 Fire Protection COS to be allocated \$5,240,000  
\$169,536,752

Customer Class	(1) FY 2014 % Potable COS, Less Pvt Hyd & Public FP	(2) Allocated COS (\$1,000)	(3) Equivalent Meter Allocation	(4) Allocate Fire Protection to Potable Classes (\$1,000)	(5) Allocate TUSD/ Ind Peaking Diff to Potable Classes (\$1,000)	(6) Allocate Reclaimed Benefit (\$1,000)	(7) Class Adjustments	(8) Adjusted COS (\$1,000)	(9) Revenue Under Existing Rates (\$1,000)	(10) Change in Revenue Target (\$1,000)	(11) % Revenue Increase Required
Residential	59.73%	90,009	65.79%	3,447	230	1,924	18	95,628	87,954	(7,674)	8.7%
Multifamily	15.79%	23,788	7.90%	414	60	671	5	24,938	22,963	(1,975)	8.6%
Commercial	21.05%	31,728	17.63%	924	81	770	6	33,510	30,821	(2,688)	8.7%
Industrial	1.41%	2,127	0.78%	41	5	56	0	2,229	2,078	(151)	7.3%
Construction Water	0.90%	1,358	1.26%	66	3	33	122	1,582	1,528	(54)	3.5%
Private Fire Protection:											
Fire Sprinkler Service	1.12%	1,685	6.64%	348	4		(152)	1,885	1,715	(171)	9.9%
Sub-Total Potable	100.00%	150,695	100.00%	5,240	383	3,454	0	159,772	147,059	(12,712)	8.6%
Potable Difference in schools peaking costs		383									
Potable Fire Protection (Hydrants)		5,240									
<b>Total Potable</b>		<b>156,318</b>						<b>159,772</b>	<b>147,059</b>	<b>(12,712)</b>	<b>8.6%</b>
<b>Reclaimed</b>		<b>13,219</b>				<b>(3,454)</b>		<b>9,765</b>	<b>9,484</b>	<b>(281)</b>	<b>3.0%</b>
<b>Utility Total</b>		<b>169,537</b>						<b>169,537</b>	<b>156,544</b>	<b>(12,993)</b>	<b>8.3%</b>

## OPTION B / Scenario 3b

FY2015

Scenario 3b : RECLAIMED WATER TO RECOVER APPROX:  
 POTABLE USERS RECOVER % OF RECLAIMED

7.4%  
26%

No Class Over 10% Increase; No Class Decrease; 2% Increase in Reclaimed Std. Rate; Increase in Fixed Charge

Reclaimed COS to be recovered from reclaimed rate payers \$9,803,251  
 Reclaimed Benefit to be Allocated \$3,456,609  
 Potable COS \$150,673,892  
 Potable difference in schools peaking costs to be allocated \$380,000  
 Fire Protection COS to be allocated \$5,223,000  
 \$169,536,752

Customer Class	(1) FY2015 % Potable COS, Less Pvt Hyd & Public FP	(2) Allocated COS (\$1,000)	(3) Equivalent Meter Allocation	(4) Allocate Fire Protection to Potable Classes (\$1,000)	(5) Allocate TUSD/ Ind Peaking Diff to Potable Classes (\$1,000)	(6) Allocate Reclaimed Benefit (\$1,000)	(7) Class Adjustments	(8) Adjusted COS (\$1,000)	(9) Revenue Under Existing Rates (\$1,000)	(10) Change in Revenue Target (\$1,000)	(11) % Revenue Increase Required
Residential	59.86%	90,198	65.79%	3,436	228	1,925	86	95,874	87,954	(7,919)	9.0%
Multifamily	15.64%	23,564	7.90%	413	59	672	23	24,730	22,963	(1,766)	7.7%
Commercial	20.99%	31,624	17.63%	921	80	771	30	33,426	30,821	(2,605)	8.5%
Industrial	1.40%	2,109	0.78%	41	5	56	2	2,212	2,078	(135)	6.5%
Construction Water	0.91%	1,365	1.26%	66	3	33	140	1,607	1,528	(79)	5.1%
Private Fire Protection: Fire Sprinkler Service	1.20%	1,814	6.64%	347	5			1,885	1,715	(170)	9.9%
Sub-Total Potable	100.00%	150,674	100.00%	5,223	380	3,457	0	159,734	147,059	(12,674)	8.6%
Potable Difference in schools peaking costs		380									
Potable Fire Protection (Hydrants)		5,223									
<b>Total Potable</b>		<b>156,277</b>						<b>159,734</b>	<b>147,059</b>	<b>(12,674)</b>	<b>8.6%</b>
<b>Reclaimed</b>		<b>13,260</b>				<b>(3,457)</b>		<b>9,803</b>	<b>9,484</b>	<b>(319)</b>	<b>3.4%</b>
<b>Utility Total</b>		<b>169,537</b>						<b>169,537</b>	<b>156,544</b>	<b>(12,993)</b>	<b>8.3%</b>

**FY 2015**  
**Rate Schedule**  
**CWAC**  
**Finance Sub-Committee**  
*Option A(scenario 3)*



**Tucson Water**  
**OPTION A / Scenario 3**  
**Comparison of Existing Rates and Proposed Rates**  
FY2015

Customer Class	Existing	Proposed	Dollar Change	Existing	Proposed	Dollar Change	Existing	Proposed	Dollar Change
<b>Service Charge</b>	<i>Potable</i>			<i>Reclaimed</i>			<i>Fire Sprinkler</i>		
<b>Meter Size</b>									
5/8"	\$9.68	\$10.50	\$0.82	\$7.74	\$8.39	\$0.65	na	na	na
3/4"	\$12.84	\$13.89	\$1.05	na	na	na	na	na	na
1"	\$19.18	\$20.68	\$1.50	\$14.33	\$15.39	\$1.06	na	na	na
1.5"	\$35.02	\$37.64	\$2.61	\$25.33	\$27.07	\$1.74	na	na	na
2"	\$54.03	\$57.99	\$3.96	\$38.52	\$41.07	\$2.55	\$9.20	\$10.14	\$0.94
2.5"	\$79.37	\$85.12	\$5.74	\$56.11	\$59.75	\$3.64	na	na	na
3"	\$104.72	\$112.25	\$7.53	\$73.70	\$78.42	\$4.72	\$15.05	\$16.57	\$1.52
4"	\$177.59	\$190.26	\$12.67	\$124.28	\$132.12	\$7.84	\$23.25	\$25.56	\$2.31
6"	\$360.07	\$385.62	\$25.55	\$250.93	\$266.58	\$15.66	\$44.34	\$48.69	\$4.35
8"	\$541.92	\$580.29	\$38.38	\$377.14	\$400.58	\$23.44	\$65.43	\$71.82	\$6.39
10"	\$827.05	\$885.54	\$58.49	\$575.04	\$610.69	\$35.65	\$98.81	\$108.45	\$9.64
12"	\$1,365.63	\$1,462.11	\$96.49	\$948.84	\$1,007.55	\$58.72	\$160.90	\$176.55	\$15.65
<b>Usage Charge (Per Ccf)</b>									
<b>Residential (Single Family) Block Rates</b>									
1-10 Ccf	\$1.29	\$1.45	\$0.16						
11-15 Ccf	\$2.68	\$3.02	\$0.34						
16-30 Ccf	\$6.87	\$6.96	\$0.09						
Over 30 Ccf	\$11.04	\$11.20	\$0.16						
<b>Residential (Duplex-Triplex) Block Rates</b>									
1-15 Ccf	\$1.29	\$1.45	\$0.16						
16-20 Ccf	\$2.68	\$3.02	\$0.34						
21-35 Ccf	\$6.87	\$6.96	\$0.09						
Over 35 Ccf	\$11.04	\$11.20	\$0.16						
<b>Other Classes: Base Rates</b>									
Multifamily *	\$2.27	\$2.43	\$0.16						
Mobile Home Parks w/sub-meters *	\$1.72	\$1.84	\$0.12						
Commercial	\$2.22	\$2.40	\$0.18						
Industrial	\$2.01	\$2.15	\$0.14						
Construction *	\$2.70	\$2.70	\$0.00						
<b>Tier Rates (Summer Only: May - Oct)**</b>									
Tier 1	\$1.00	\$1.00	\$0.00						
Tier 2	\$0.27	\$0.27	\$0.00						
<b>Reclaimed Std Usage Rate * Per Acre-Foot</b>				\$1.83	\$1.87	\$0.04			
<b>Reclaimed Contract Usage Rate *</b>				\$797	\$815	\$18.00			
<b>CAP Charge ***</b>	\$0.48	\$0.56	\$0.08	\$1.64	\$1.75	\$0.11			
<b>Conservation Charge</b>	\$0.07	\$0.07	\$0.00						

\* Uniform rate year-round; not subject to summer tier rates

\*\*Applicable for Commercial and Industrial classes only.

\*\*\* Assessed to potable customers only.

	<b>Volume Rates w/CAP Charge</b>		
<b>Usage Charge (Per Ccf)</b>			
<b>Residential (Single Family) Block Rates</b>			
1-10 Ccf	\$1.77	\$2.01	\$0.24
11-15 Ccf	\$3.16	\$3.58	\$0.42
16-30 Ccf	\$7.35	\$7.52	\$0.17
Over 30 Ccf	\$11.52	\$11.76	\$0.24
<b>Residential (Duplex-Triplex) Block Rates</b>			
1-15 Ccf	\$1.77	\$2.01	\$0.24
16-20 Ccf	\$3.16	\$3.58	\$0.42
21-35 Ccf	\$7.35	\$7.52	\$0.17
Over 35 Ccf	\$11.52	\$11.76	\$0.24
<b>Other Classes: Base Rates</b>			
Multifamily *	\$2.75	\$2.99	\$0.24
Mobile Home Parks w/sub-meters *	\$2.20	\$2.40	\$0.20
Commercial	\$2.70	\$2.96	\$0.26
Industrial	\$2.49	\$2.71	\$0.22
Construction *	\$3.18	\$3.26	\$0.08

OPTION A

Scenario 3

Sample Bills -- Single-Family								
Consumption (Ccf)		Current Monthly Bill	Proposed Monthly Water Bill	Dollar Difference	Current Conservation Charge	Proposed Conservation Charge	Proposed Total Utility Monthly Bill	Total Bill Dollar Difference
0		\$9.68	\$10.50	\$0.82	\$0.00	\$0.00	\$10.50	\$0.82
1		\$11.45	\$12.51	\$1.06	\$0.07	\$0.07	\$12.58	\$1.06
2		\$13.22	\$14.52	\$1.30	\$0.14	\$0.14	\$14.66	\$1.30
3		\$14.99	\$16.53	\$1.54	\$0.21	\$0.21	\$16.74	\$1.54
4		\$16.76	\$18.54	\$1.78	\$0.28	\$0.28	\$18.82	\$1.78
5		\$18.53	\$20.55	\$2.02	\$0.35	\$0.35	\$20.90	\$2.02
6		\$20.30	\$22.56	\$2.26	\$0.42	\$0.42	\$22.98	\$2.26
7		\$22.07	\$24.57	\$2.50	\$0.49	\$0.49	\$25.06	\$2.50
8		\$23.84	\$26.58	\$2.74	\$0.56	\$0.56	\$27.14	\$2.74
9		\$25.61	\$28.59	\$2.98	\$0.63	\$0.63	\$29.22	\$2.98
10		\$27.38	\$30.60	\$3.22	\$0.70	\$0.70	\$31.30	\$3.22
11		\$30.54	\$34.18	\$3.64	\$0.77	\$0.77	\$34.95	\$3.64
12		\$33.70	\$37.76	\$4.06	\$0.84	\$0.84	\$38.60	\$4.06
13		\$36.86	\$41.34	\$4.48	\$0.91	\$0.91	\$42.25	\$4.48
14		\$40.02	\$44.92	\$4.90	\$0.98	\$0.98	\$45.90	\$4.90
15		\$43.18	\$48.50	\$5.32	\$1.05	\$1.05	\$49.55	\$5.32
16		\$50.53	\$56.02	\$5.49	\$1.12	\$1.12	\$57.14	\$5.49
17		\$57.88	\$63.54	\$5.66	\$1.19	\$1.19	\$64.73	\$5.66
18		\$65.23	\$71.06	\$5.83	\$1.26	\$1.26	\$72.32	\$5.83
19		\$72.58	\$78.58	\$6.00	\$1.33	\$1.33	\$79.91	\$6.00
20		\$79.93	\$86.10	\$6.17	\$1.40	\$1.40	\$87.50	\$6.17
21		\$87.28	\$93.62	\$6.34	\$1.47	\$1.47	\$95.09	\$6.34
22		\$94.63	\$101.14	\$6.51	\$1.54	\$1.54	\$102.68	\$6.51
23		\$101.98	\$108.66	\$6.68	\$1.61	\$1.61	\$110.27	\$6.68
24		\$109.33	\$116.18	\$6.85	\$1.68	\$1.68	\$117.86	\$6.85
25		\$116.68	\$123.70	\$7.02	\$1.75	\$1.75	\$125.45	\$7.02
26		\$124.03	\$131.22	\$7.19	\$1.82	\$1.82	\$133.04	\$7.19
27		\$131.38	\$138.74	\$7.36	\$1.89	\$1.89	\$140.63	\$7.36
28		\$138.73	\$146.26	\$7.53	\$1.96	\$1.96	\$148.22	\$7.53
29		\$146.08	\$153.78	\$7.70	\$2.03	\$2.03	\$155.81	\$7.70
30		\$153.43	\$161.30	\$7.87	\$2.10	\$2.10	\$163.40	\$7.87
31		\$164.95	\$173.06	\$8.11	\$2.17	\$2.17	\$175.23	\$8.11
32		\$176.47	\$184.82	\$8.35	\$2.24	\$2.24	\$187.06	\$8.35
33		\$187.99	\$196.58	\$8.59	\$2.31	\$2.31	\$198.89	\$8.59
34		\$199.51	\$208.34	\$8.83	\$2.38	\$2.38	\$210.72	\$8.83
35		\$211.03	\$220.10	\$9.07	\$2.45	\$2.45	\$222.55	\$9.07
36		\$222.55	\$231.86	\$9.31	\$2.52	\$2.52	\$234.38	\$9.31
37		\$234.07	\$243.62	\$9.55	\$2.59	\$2.59	\$246.21	\$9.55
38		\$245.59	\$255.38	\$9.79	\$2.66	\$2.66	\$258.04	\$9.79
39		\$257.11	\$267.14	\$10.03	\$2.73	\$2.73	\$269.87	\$10.03
40		\$268.63	\$278.90	\$10.27	\$2.80	\$2.80	\$281.70	\$10.27
41		\$280.15	\$290.66	\$10.51	\$2.87	\$2.87	\$293.53	\$10.51
42		\$291.67	\$302.42	\$10.75	\$2.94	\$2.94	\$305.36	\$10.75
43		\$303.19	\$314.18	\$10.99	\$3.01	\$3.01	\$317.19	\$10.99
44		\$314.71	\$325.94	\$11.23	\$3.08	\$3.08	\$329.02	\$11.23
45		\$326.23	\$337.70	\$11.47	\$3.15	\$3.15	\$340.85	\$11.47
46		\$337.75	\$349.46	\$11.71	\$3.22	\$3.22	\$352.68	\$11.71
47		\$349.27	\$361.22	\$11.95	\$3.29	\$3.29	\$364.51	\$11.95
48		\$360.79	\$372.98	\$12.19	\$3.36	\$3.36	\$376.34	\$12.19
49		\$372.31	\$384.74	\$12.43	\$3.43	\$3.43	\$388.17	\$12.43
50		\$383.83	\$396.50	\$12.67	\$3.50	\$3.50	\$400.00	\$12.67
51		\$395.35	\$408.26	\$12.91	\$3.57	\$3.57	\$411.83	\$12.91
52		\$406.87	\$420.02	\$13.15	\$3.64	\$3.64	\$423.66	\$13.15
53		\$418.39	\$431.78	\$13.39	\$3.71	\$3.71	\$435.49	\$13.39
54		\$429.91	\$443.54	\$13.63	\$3.78	\$3.78	\$447.32	\$13.63
55		\$441.43	\$455.30	\$13.87	\$3.85	\$3.85	\$459.15	\$13.87
56		\$452.95	\$467.06	\$14.11	\$3.92	\$3.92	\$470.98	\$14.11
57		\$464.47	\$478.82	\$14.35	\$3.99	\$3.99	\$482.81	\$14.35
58		\$475.99	\$490.58	\$14.59	\$4.06	\$4.06	\$494.64	\$14.59
59		\$487.51	\$502.34	\$14.83	\$4.13	\$4.13	\$506.47	\$14.83
60		\$499.03	\$514.10	\$15.07	\$4.20	\$4.20	\$518.30	\$15.07

OPTION A

Scenario 3

Sample Bills -- Single-Family								
Consumption (Ccf)		Current Monthly Bill	Proposed Monthly Water Bill	Dollar Difference	Current Conservation Charge	Proposed Conservation Charge	Proposed Total Utility Monthly Bill	Total Bill Dollar Difference
61		\$510.55	\$525.86	\$15.31	\$4.27	\$4.27	\$530.13	\$15.31
62		\$522.07	\$537.62	\$15.55	\$4.34	\$4.34	\$541.96	\$15.55
63		\$533.59	\$549.38	\$15.79	\$4.41	\$4.41	\$553.79	\$15.79
64		\$545.11	\$561.14	\$16.03	\$4.48	\$4.48	\$565.62	\$16.03
65		\$556.63	\$572.90	\$16.27	\$4.55	\$4.55	\$577.45	\$16.27
66		\$568.15	\$584.66	\$16.51	\$4.62	\$4.62	\$589.28	\$16.51
67		\$579.67	\$596.42	\$16.75	\$4.69	\$4.69	\$601.11	\$16.75
68		\$591.19	\$608.18	\$16.99	\$4.76	\$4.76	\$612.94	\$16.99
69		\$602.71	\$619.94	\$17.23	\$4.83	\$4.83	\$624.77	\$17.23
70		\$614.23	\$631.70	\$17.47	\$4.90	\$4.90	\$636.60	\$17.47



**FY 2015**  
**Rate Schedule**  
**CWAC**  
**Finance Sub-Committee**  
*Option B (scenario 3b)*



**Tucson Water**  
**OPTION B / Scenario 3b**  
**Comparison of Existing Rates and Proposed Rates**  
 FY2015

Customer Class	Dollar Increase			Dollar Increase			Dollar Increase		
	Existing	Proposed	Dollar Increase	Existing	Proposed	Dollar Increase	Existing	Proposed	Dollar Increase
<b>Service Charge</b>	<b>Potable</b>			<b>Reclaimed</b>			<b>Fire Sprinkler</b>		
<b>Meter Size</b>									
5/8"	\$9.68	\$11.00	\$1.32	\$7.74	\$8.89	\$1.15	na	na	na
3/4"	\$12.84	\$14.64	\$1.79	na	na	na	na	na	na
1"	\$19.18	\$21.91	\$2.73	\$14.33	\$16.64	\$2.30	na	na	na
1.5"	\$35.02	\$40.10	\$5.08	\$25.33	\$29.55	\$4.23	na	na	na
2"	\$54.03	\$61.93	\$7.90	\$38.52	\$45.05	\$6.53	\$9.20	\$10.15	\$0.95
2.5"	\$79.37	\$91.04	\$11.67	\$56.11	\$65.72	\$9.61	na	na	na
3"	\$104.72	\$120.15	\$15.43	\$73.70	\$86.39	\$12.69	\$15.05	\$16.58	\$1.53
4"	\$177.59	\$203.83	\$26.25	\$124.28	\$145.81	\$21.53	\$23.25	\$25.58	\$2.33
6"	\$360.07	\$413.40	\$53.33	\$250.93	\$294.61	\$43.68	\$44.34	\$48.72	\$4.38
8"	\$541.92	\$622.25	\$80.33	\$377.14	\$442.90	\$65.76	\$65.43	\$71.86	\$6.43
10"	\$827.05	\$949.70	\$122.66	\$575.04	\$675.40	\$100.37	\$98.81	\$108.50	\$9.69
12"	\$1,365.63	\$1,568.23	\$202.60	\$948.84	\$1,114.58	\$165.74	\$160.90	\$176.65	\$15.75
<b>Usage Charge (Per Ccf)</b>									
<b>Residential (Single Family) Block Rates</b>									
1-10 Ccf	\$1.29	\$1.38	\$0.09						
11-15 Ccf	\$2.68	\$3.00	\$0.32						
16-30 Ccf	\$6.87	\$7.00	\$0.13						
Over 30 Ccf	\$11.04	\$11.25	\$0.21						
<b>Residential (Duplex-Triplex) Block Rates</b>									
1-15 Ccf	\$1.29	\$1.38	\$0.09						
16-20 Ccf	\$2.68	\$3.00	\$0.32						
21-35 Ccf	\$6.87	\$7.00	\$0.13						
Over 35 Ccf	\$11.04	\$11.25	\$0.21						
<b>Other Classes: Base Rates</b>									
Multifamily *	\$2.27	\$2.38	\$0.11						
Mobile Home Parks w/sub-meters *	\$1.72	\$1.80	\$0.08						
Commercial	\$2.22	\$2.35	\$0.13						
Industrial	\$2.01	\$2.09	\$0.08						
Construction *	\$2.70	\$2.70	\$0.00						
<b>Tier Rates (Summer Only: May - Oct)**</b>									
Tier 1	\$1.00	\$1.00	\$0.00						
Tier 2	\$0.27	\$0.27	\$0.00						
<b>Reclaimed Std Usage Rate * Per Acre-Foot</b>				\$1.83	\$1.87	\$0.04			
				\$797	\$815	\$18.00			
<b>Reclaimed Contract Usage Rate * CAP Charge ***</b>	\$0.48	\$0.56	\$0.08	\$1.64	\$1.75	\$0.11			
<b>Conservation Charge</b>	\$0.07	\$0.07	\$0.00						

\* Uniform rate year-round; not subject to summer tier rates

\*\*Applicable for Commercial and Industrial classes only.

\*\*\* Assessed to potable customers only.

	Volume Rates w/CAP Charge		
<b>Usage Charge (Per Ccf)</b>			
<b>Residential (Single Family) Block Rates</b>			
1-10 Ccf	\$1.77	\$1.94	\$0.17
11-15 Ccf	\$3.16	\$3.56	\$0.40
16-30 Ccf	\$7.35	\$7.56	\$0.21
Over 30 Ccf	\$11.52	\$11.81	\$0.29
<b>Residential (Duplex-Triplex) Block Rates</b>			
1-15 Ccf	\$1.77	\$1.94	\$0.17
16-20 Ccf	\$3.16	\$3.56	\$0.40
21-35 Ccf	\$7.35	\$7.56	\$0.21
Over 35 Ccf	\$11.52	\$11.81	\$0.29
<b>Other Classes: Base Rates</b>			
Multifamily *	\$2.75	\$2.94	\$0.19
Mobile Home Parks w/sub-meters *	\$2.20	\$2.36	\$0.16
Commercial	\$2.70	\$2.91	\$0.21
Industrial	\$2.49	\$2.65	\$0.16
Construction *	\$3.18	\$3.26	\$0.08

**OPTION B**

**Scenario 3B**

**Sample Bills -- Single-Family**

Consumption (Ccf)		Current Monthly Bill	Proposed Monthly Water Bill	Dollar Difference	Current Conservation Charge	Proposed Conservation Charge	Proposed Total Utility Monthly Bill	Total Bill Dollar Difference
0		\$9.68	\$11.00	\$1.32	\$0.00	\$0.00	\$11.00	\$1.32
1		\$11.45	\$12.94	\$1.49	\$0.07	\$0.07	\$13.01	\$1.49
2		\$13.22	\$14.88	\$1.66	\$0.14	\$0.14	\$15.02	\$1.66
3		\$14.99	\$16.82	\$1.83	\$0.21	\$0.21	\$17.03	\$1.83
4		\$16.76	\$18.76	\$2.00	\$0.28	\$0.28	\$19.04	\$2.00
5		\$18.53	\$20.70	\$2.17	\$0.35	\$0.35	\$21.05	\$2.17
6		\$20.30	\$22.64	\$2.34	\$0.42	\$0.42	\$23.06	\$2.34
7		\$22.07	\$24.58	\$2.51	\$0.49	\$0.49	\$25.07	\$2.51
8		\$23.84	\$26.52	\$2.68	\$0.56	\$0.56	\$27.08	\$2.68
9		<b>\$25.61</b>	<b>\$28.46</b>	<b>\$2.85</b>	<b>\$0.63</b>	<b>\$0.63</b>	<b>\$29.09</b>	<b>\$2.85</b>
10		<b>\$27.38</b>	<b>\$30.40</b>	<b>\$3.02</b>	<b>\$0.70</b>	<b>\$0.70</b>	<b>\$31.10</b>	<b>\$3.02</b>
11		<b>\$30.54</b>	<b>\$33.96</b>	<b>\$3.42</b>	<b>\$0.77</b>	<b>\$0.77</b>	<b>\$34.73</b>	<b>\$3.42</b>
12		\$33.70	\$37.52	\$3.82	\$0.84	\$0.84	\$38.36	\$3.82
13		\$36.86	\$41.08	\$4.22	\$0.91	\$0.91	\$41.99	\$4.22
14		\$40.02	\$44.64	\$4.62	\$0.98	\$0.98	\$45.62	\$4.62
15		\$43.18	\$48.20	\$5.02	\$1.05	\$1.05	\$49.25	\$5.02
16		\$50.53	\$55.76	\$5.23	\$1.12	\$1.12	\$56.88	\$5.23
17		\$57.88	\$63.32	\$5.44	\$1.19	\$1.19	\$64.51	\$5.44
18		\$65.23	\$70.88	\$5.65	\$1.26	\$1.26	\$72.14	\$5.65
19		\$72.58	\$78.44	\$5.86	\$1.33	\$1.33	\$79.77	\$5.86
20		\$79.93	\$86.00	\$6.07	\$1.40	\$1.40	\$87.40	\$6.07
21		\$87.28	\$93.56	\$6.28	\$1.47	\$1.47	\$95.03	\$6.28
22		\$94.63	\$101.12	\$6.49	\$1.54	\$1.54	\$102.66	\$6.49
23		\$101.98	\$108.68	\$6.70	\$1.61	\$1.61	\$110.29	\$6.70
24		\$109.33	\$116.24	\$6.91	\$1.68	\$1.68	\$117.92	\$6.91
25		\$116.68	\$123.80	\$7.12	\$1.75	\$1.75	\$125.55	\$7.12
26		\$124.03	\$131.36	\$7.33	\$1.82	\$1.82	\$133.18	\$7.33
27		\$131.38	\$138.92	\$7.54	\$1.89	\$1.89	\$140.81	\$7.54
28		\$138.73	\$146.48	\$7.75	\$1.96	\$1.96	\$148.44	\$7.75
29		\$146.08	\$154.04	\$7.96	\$2.03	\$2.03	\$156.07	\$7.96
30		\$153.43	\$161.60	\$8.17	\$2.10	\$2.10	\$163.70	\$8.17
31		\$164.95	\$173.41	\$8.46	\$2.17	\$2.17	\$175.58	\$8.46
32		\$176.47	\$185.22	\$8.75	\$2.24	\$2.24	\$187.46	\$8.75
33		\$187.99	\$197.03	\$9.04	\$2.31	\$2.31	\$199.34	\$9.04
34		\$199.51	\$208.84	\$9.33	\$2.38	\$2.38	\$211.22	\$9.33
35		\$211.03	\$220.65	\$9.62	\$2.45	\$2.45	\$223.10	\$9.62
36		\$222.55	\$232.46	\$9.91	\$2.52	\$2.52	\$234.98	\$9.91
37		\$234.07	\$244.27	\$10.20	\$2.59	\$2.59	\$246.86	\$10.20
38		\$245.59	\$256.08	\$10.49	\$2.66	\$2.66	\$258.74	\$10.49
39		\$257.11	\$267.89	\$10.78	\$2.73	\$2.73	\$270.62	\$10.78
40		\$268.63	\$279.70	\$11.07	\$2.80	\$2.80	\$282.50	\$11.07
41		\$280.15	\$291.51	\$11.36	\$2.87	\$2.87	\$294.38	\$11.36
42		\$291.67	\$303.32	\$11.65	\$2.94	\$2.94	\$306.26	\$11.65
43		\$303.19	\$315.13	\$11.94	\$3.01	\$3.01	\$318.14	\$11.94
44		\$314.71	\$326.94	\$12.23	\$3.08	\$3.08	\$330.02	\$12.23
45		\$326.23	\$338.75	\$12.52	\$3.15	\$3.15	\$341.90	\$12.52
46		\$337.75	\$350.56	\$12.81	\$3.22	\$3.22	\$353.78	\$12.81
47		\$349.27	\$362.37	\$13.10	\$3.29	\$3.29	\$365.66	\$13.10
48		\$360.79	\$374.18	\$13.39	\$3.36	\$3.36	\$377.54	\$13.39
49		\$372.31	\$385.99	\$13.68	\$3.43	\$3.43	\$389.42	\$13.68
50		\$383.83	\$397.80	\$13.97	\$3.50	\$3.50	\$401.30	\$13.97
51		\$395.35	\$409.61	\$14.26	\$3.57	\$3.57	\$413.18	\$14.26
52		\$406.87	\$421.42	\$14.55	\$3.64	\$3.64	\$425.06	\$14.55
53		\$418.39	\$433.23	\$14.84	\$3.71	\$3.71	\$436.94	\$14.84
54		\$429.91	\$445.04	\$15.13	\$3.78	\$3.78	\$448.82	\$15.13
55		\$441.43	\$456.85	\$15.42	\$3.85	\$3.85	\$460.70	\$15.42
56		\$452.95	\$468.66	\$15.71	\$3.92	\$3.92	\$472.58	\$15.71
57		\$464.47	\$480.47	\$16.00	\$3.99	\$3.99	\$484.46	\$16.00
58		\$475.99	\$492.28	\$16.29	\$4.06	\$4.06	\$496.34	\$16.29
59		\$487.51	\$504.09	\$16.58	\$4.13	\$4.13	\$508.22	\$16.58
60		\$499.03	\$515.90	\$16.87	\$4.20	\$4.20	\$520.10	\$16.87

**OPTION B**

**Scenario 3B**

<b>Sample Bills -- Single-Family</b>								
<b>Consumption (Ccf)</b>		<b>Current Monthly Bill</b>	<b>Proposed Monthly Water Bill</b>	<b>Dollar Difference</b>	<b>Current Conservation Charge</b>	<b>Proposed Conservation Charge</b>	<b>Proposed Total Utility Monthly Bill</b>	<b>Total Bill Dollar Difference</b>
61		\$510.55	\$527.71	\$17.16	\$4.27	\$4.27	\$531.98	\$17.16
62		\$522.07	\$539.52	\$17.45	\$4.34	\$4.34	\$543.86	\$17.45
63		\$533.59	\$551.33	\$17.74	\$4.41	\$4.41	\$555.74	\$17.74
64		\$545.11	\$563.14	\$18.03	\$4.48	\$4.48	\$567.62	\$18.03
65		\$556.63	\$574.95	\$18.32	\$4.55	\$4.55	\$579.50	\$18.32
66		\$568.15	\$586.76	\$18.61	\$4.62	\$4.62	\$591.38	\$18.61
67		\$579.67	\$598.57	\$18.90	\$4.69	\$4.69	\$603.26	\$18.90
68		\$591.19	\$610.38	\$19.19	\$4.76	\$4.76	\$615.14	\$19.19
69		\$602.71	\$622.19	\$19.48	\$4.83	\$4.83	\$627.02	\$19.48
70		\$614.23	\$634.00	\$19.77	\$4.90	\$4.90	\$638.90	\$19.77

**FY 2015 Sample Monthly Bills: Other Customer Classes**  
**(Usage in Ccf based on actual FY 2013 average use per service)**

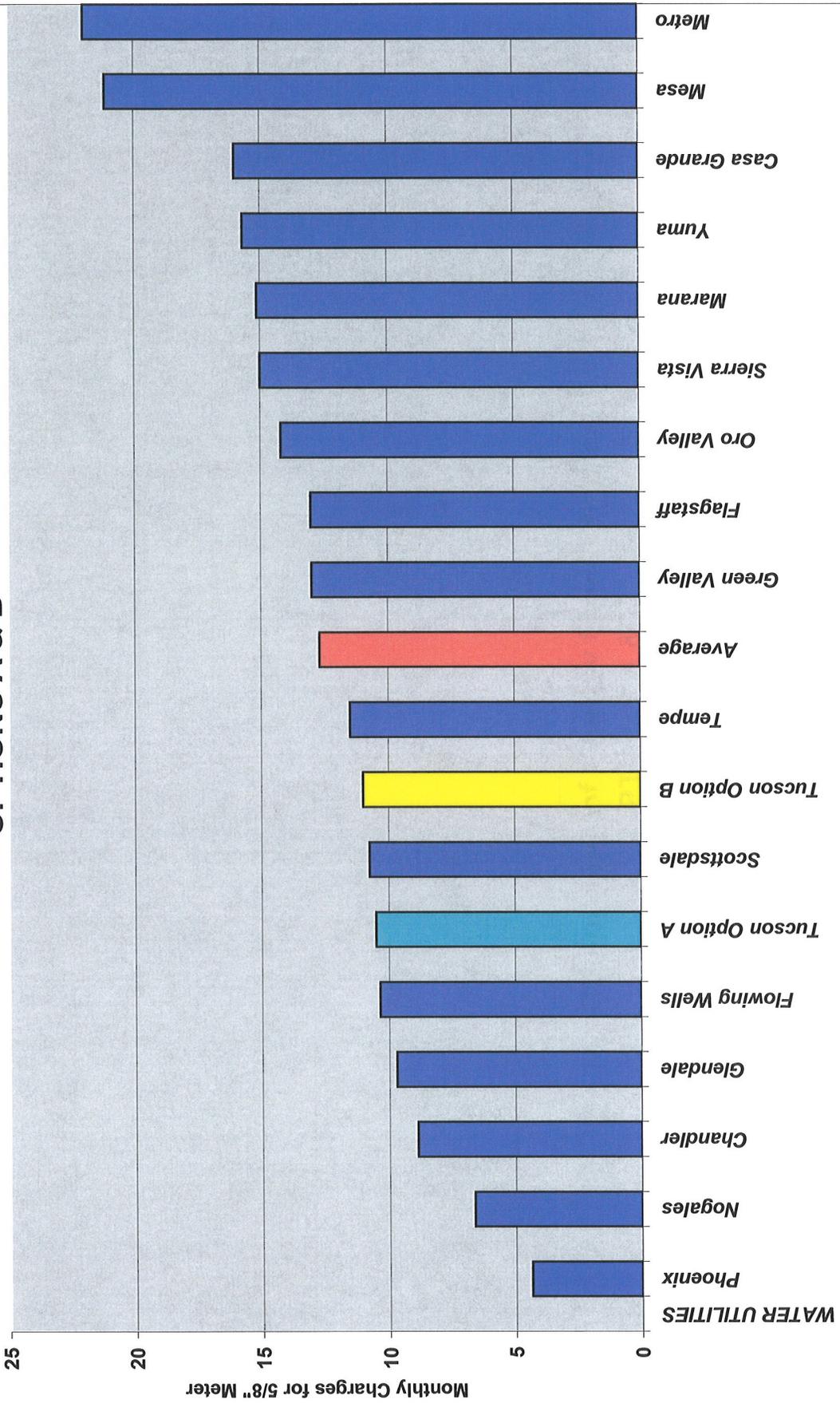
**Option B**

		MONTHLY AVERAGE BILLS																		
		Existing Rates					Proposed - Existing Blocks													
		Water Bill	CAP Charge	Total Utility Bill	Water Bill	CAP Charge	Total Utility Bill	Water Bill	CAP Charge	Total Utility Bill	Difference									
<b>scenario 3B</b>																				
	<b>Class</b>	<b>Typical Meter Size</b>	<b>Summer Usage</b>	<b>Winter Usage</b>																
	<b>Potable</b>																			
	Multifamily	2"	125	107	\$ 325.94	\$ 55.78	\$ 381.72	\$ 346.63	\$ 65.08	\$ 411.71	\$ 29.99									
	Mobile Home Parks w/sub-meters	2"	272	228	\$ 501.14	\$ 119.90	\$ 621.04	\$ 529.02	\$ 139.88	\$ 668.90	\$ 47.86									
	Commercial	2"	62	45	\$ 192.81	\$ 25.51	\$ 218.32	\$ 210.27	\$ 29.75	\$ 240.02	\$ 21.70									
	Industrial	2"	242	116	\$ 498.60	\$ 85.87	\$ 584.47	\$ 520.81	\$ 100.18	\$ 620.99	\$ 36.52									
	Construction Water	2.5"	60	45	\$ 224.86	\$ 25.21	\$ 250.07	\$ 230.61	\$ 29.41	\$ 260.02	\$ 9.95									
	Fire Sprinkler Service (unmetered - 4" conr	na	na	na	\$ 23.25	na	\$ 23.25	\$ 25.58	na	\$ 25.58	\$ 2.33									

**FY 2015  
Rate Schedule  
CWAC  
Comparative Data**



**Comparison of Monthly Fixed Charges  
OPTIONS A & B**



**Average Single Family Monthly Water Bill Comparison  
based on average annual bill**

