

WATER UTILITY RATES STUDY

INTRODUCTION AND BACKGROUND

As the EARIP is getting closer to reaching a final draft of the Habitat Conservation Plan (HCP), one large issue that remains unresolved is funding for the HCP projects. While several different revenue sources are being examined, finding an internal funding mechanism seems to be an appealing option since it limits the dependence of the plan on other entities (such as the legislature or temporary agency grants). Since the largest expenditure of the HCP comes from the SAWS ASR trade off program, finding ways for SAWS and other local utilities to fund from within would help secure a large portion of the funding and thus help ensure the success of the EARIP.

For this report, rate data was collected from water utilities in four utilities in Texas as well as four utilities in other US cities. Within Texas, the water rates charged by the City of San Marcos, New Braunfels Utility (NBU), Bexar Metropolitan Water District (Bexar Met) and SAWS, in the city of San Antonio, were examined. Nationally, they are compared to Las Vegas, Nevada and Atlanta, Georgia, both of which have had to adapt to conservation needs. Also Phoenix, Arizona and San Diego, California which have a similar population to San Antonio. Their national population ranks are 6th, 8th and 7th respectively.

The data collected included the price per gallon for residential metered water on a 5/8" pipe for in-city residents for the eight subject utilities. This scale was selected because SAWS claims that 90% of its customer base uses the 5/8" meter. It also included any flat rate charges that a water utility charged in addition to tiered water rates. The San Antonio and Bexar Met gallon price includes both the service fee for water and the water supply fee for every gallon consumed. This is represented as one cumulative number including both of those elements. Similarly, the gallon costs for Phoenix include an environmental usage charge which is applied to every gallon consumed similar to the way the Water Supply Fee is used in San Antonio. Wastewater rates were not considered for any of the seven cities.

SAWS frequently uses a monthly average rate of consumption of 7,788 gallons of water per household per month in their studies. Since this is the standard rate used for SAWS, it was also the base for this study. SAWS formally used a monthly rate of \$44.38 per month in their studies which includes the service availability charge, the water supply charge, water supply fee, Aquifer Management fees (EAA fee), TCEQ fee, storm water fee, and the sewage supply charge for 6,178 gallons. For this study, the service availability charge, water supply charge, and the water supply fee were the only fees assessed. This is comparable to the data considered with other utilities which includes all similar charges for those utilities.

Looking at this data, it was possible to identify averages across the seven cities for their water rates based on different tiers and flat rates. All eight of the utilities used a tier system providing for different rates per gallon of water depending on the quantity used by respective customers and other factors. While seven of the utilities based their rate structure on the amount of water consumed increasing per unit cost as greater amounts were used, Phoenix based their system on months of the year and the likelihood of drought during those months, charging more during times when water sources are likely to be threatened by dry weather. SAWS also has a seasonal rate which increases the cost per gallon in the second, third, and fourth tiers. Weighted averages have been used to account for seasonal changes in water rates.

LOCAL EDWARDS AQUIFER UTILITIES

Comparing rates between San Marcos, New Braunfels, Bexar Met, and San Antonio, three distinct rate structures can be identified. Each of these utilities starts with a monthly flat rate fee. San Marcos begins with a flat rate called the minimum charge for the first 2,000 gallons that every consumer is responsible for paying. This fee is \$18.98. SAWS calls its flat rate charge the monthly service availability charge and it has the lowest cost at \$6.91. NBU uses a basic customer charge as its flat rate costing \$10.35 per month. Bexar Met uses a capacity reservation fee that costs \$7.93 monthly. In San Marcos, after the initial cost of \$18.98 for the 2,000 gallons, the cost increases per gallon over three additional increments. The highest increment is 25,000 gallons and up. NBU and SAWS both have an increasing rate structure with four levels. NBU charges all use between 1 and 7,500 gallons under its initial rate

increment, and SAWS includes only consumption up to 5,985 gallons in the first increment. Bexar Met uses a five-tier system, but since the cost per gallon is the same for the second and third tiers, Bexar Met is analyzed as a four-tier system. SAWS also has a seasonal rate which charges the same for the first tier but from May to September the rate increases at subsequent tiers. At tier 2 the rate increases from \$0.002807 per gallon to \$0.002932—an increase of \$0.000116 per gallon. At tier 3 the increase is \$0.000275 per gallons and at tier 4 \$0.001169 per gallon. For the average SAWS consumer using 7,788 gallons of water a month, the seasonal rate only increases the monthly bill for water by \$0.21. SAWS is the only local utility which has specially designated seasonal rates.

NATIONAL WATER UTILITIES VS. LOCAL

Also considered for this report were water rates charged in certain non-Edwards cities across the country. The reviewers examined Las Vegas, Nevada, and Atlanta, Georgia, since both cities have dealt with water conservation issues in the past. San Diego, California, and Phoenix, Arizona, were also considered because of their comparable population sizes to that of San Antonio. Representing San Antonio, SAWS rates are used in comparison to the other US cities. Of the five utilities, SAWS and Las Vegas each had a rate increment with four tiers based on consumption while Atlanta and San Diego only used three tiers. Phoenix used an entirely different system with three different rate levels based on months of the year instead of increased consumption.

Of the five utilities, SAWS and Las Vegas represent the lowest cost by a fairly significant amount. For 7,788 gallons of water San Antonio would charge \$23.58 while the cost in Las Vegas would be slightly lower at \$21.66. Atlanta represents the highest cost at \$57.63, which is close to San Diego at \$56.94. Phoenix ranges from \$34.13 to 47.99 depending on what seasonal period is in effect. Another method of analysis involves considering average rates for San Marcos, NBU, Bexar Met, SAWS, Las Vegas, Atlanta, San Diego and Phoenix. At the first tier, the average rate across the eight suppliers is \$0.0037658. The outliers are Las Vegas with the lowest cost at \$0.00116 per gallon and San Diego with the highest at \$0.0048288 per gallon. For the second rate level, the average is \$0.0039842 with Las Vegas again being the lowest with \$0.00208 and Atlanta being the highest with \$0.00713904. At the third rate level, the average is \$0.0049741. The lowest is New Braunfels at \$0.002512 and the highest is again Atlanta at \$0.00823529 per

gallon. Rate level four, where applicable averages \$0.0060112 with the lowest being New Braunfels with \$0.003014 and the highest Bexar Met with \$0.00814 per gallon. The average flat rate across all of the cities is \$10.58 with the highest being San Marcos at \$18.98 and the lowest Phoenix at \$4.36.

If considering consumption for 7,788 gallons in each of the cities, the average cost is \$38.73 with Las Vegas being the least expensive at \$21.66 and Atlanta being the highest at \$57.63. Las Vegas, SAWS and NBU are all under \$30 per month, while San Marcos, Atlanta, and San Diego are all over \$50 a month.

CONCLUSIONS

Locally NBU, Bexar Met and SAWS charge significantly less than San Marcos for increased water consumption. The three cities average approximately \$33.52 a month for a 7,788 gallon user. Currently, San Marcos charges \$30.05 more than SAWS a month and \$28.52 more a month than NBU (based on 7,788 gallons of consumption). SAWS, Bexar Met and NBU could both realistically raise their rates at each level to be more comparable to San Marcos. NBU could even consider adding a rate similar to the Water Supply Fee used by Bexar Met and SAWS to help supplement the cost of the HCP.

For SAWS specifically, when compared to other cities in the nation with similar populations water rates are extremely low. It would not be unreasonable for SAWS to raise its prices so that water costs for San Antonio users are comparable to the costs of water users across the country in similar urban areas.

While consumers may be hesitant about rate increases, the evidence strongly supports that SAWS and NBU can both afford to charge a bit more to help support the HCP. When SAWS implemented their Water Supply Fee, they did so in progression to lessen the impact on consumers. Similarly, Atlanta is a good example since they recently revamped their rate structure over six years allowing them to almost double rates without putting an immediate burden on consumers. NBU, Bexar Met and SAWS could easily implement a price increase over a few years that would put these utilities closer to the local and national averages for water pricing, as well as provide substantial funding for the HCP.

SAWS RATES ON 5/8 INCH INSIDE CITY LMIITS.

rate 1	rate 2	rate 3	rate 4	flat rate	total 1	total 2	total 3	total 4	Total Cost
5985	1803	0	0	6.91	5.488245	2.392581	0	0	14.79083
					WSF	WSF	WSF	WSF	Total wsf
					6.122655	2.66844	0	0	8.791095
TOTAL COST									23.58192

SAWS RATES (SEASONAL: 5-1 to 9-30) ON 5/8 INCH INSIDE CITY LMIITS.

rate 1	rate 2	rate 3	rate 4	flat rate	total 1	total 2	total 3	total 4	Total Cost
5985	1803	0	0	6.91	5.488245	2.601729	0	0	14.99997
					WSF	WSF	WSF	WSF	Total wsf
					6.122655	2.66844	0	0	8.791095
TOTAL COST									23.79107

SAN MARCOS RATES 5/8 INCH INSIDE CITY LIMITS.

rate 1	rate 2	rate 3	flat rate	total 1	total 2	total 3
7788	0	0	18.98	34.6566	0	0
TOTAL COST						53.6366

NEW BRAUNFELS ON 5/8 INSIDE CITY LIMITS.

rate 1	rate 2	rate 3	rate 4	flat rate	total 1	total 2	total 3	total 4
7500	288	0	0	10.35	14.1375	0.633312	0	0
TOTAL COST								25.12081

LAS VEGAS NEVADA ON 5/8 INSIDE CITY LIMITS.

rate 1	rate 2	rate 3	rate 4	flat rate	total 1	total 2	total 3	total 4		
5000	2788			10.06	5.8	5.79904	0	0		
									TOTAL COST	21.65904

ATLANTA GEORGIA ON 5/8 INSIDE CITY LIMITS

rate 1	rate 2	rate 3	flat rate	total 1	total 2	total 3		
2244	2243	3299	6.71	7.740005	16.01287	27.16822		
							TOTAL COST	57.63109

SAN DIEGO CALIFORNIA ON 5/8 INSIDE CITY LIMITS

rate 1	rate 2	rate 3	flat rate	total 1	total 2	total 3		
7788			19.33	37.60732	0	0		
							TOTAL COST	56.93732

PHOENIX ARIZONA ON 5/8 INSIDE CITY LIMITS

dec-mar	apr, may, oct, nov	jun-sep	flat rate	total 1	total 2	total 3		
7788	7788	7788	4.36	29.77765	35.08767	43.62526		
							TOTAL COST 1	34.13765
							TOTAL COST 2	39.44767
							TOTAL COST 3	47.98526

BEXAR MET SAN ANTONIO TEXAS 5/8 INSIDE CITY LIMITS

rate 1	rate 2	rate 3	rate 4	rate 5	flat rate	total 1	total 2	total 3	total 4	total 5
5000	2788				7.93	13.65	9.11676	0	0	0
									TOTAL COST	30.69676
									AVERAGE COST	38.73428

Rate Comparisons Across 8 US Water Utilities
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City	Rate Levels	Interval and cost of Rate Level 1	Interval and Cost of Rate Level 2	Interval and Cost of Rate Level 3	Interval and cost of Rate Level 4	Flat Rate
San Antonio, TX	4, by consumption	First 5,985 gallons	Next 6,732 gallons	Next 4,488 gallons	17,205 gallons and up	\$6.91
		\$0.000917 \$0.00194*	\$0.001327 \$0.002807*	\$0.001871 \$0.003958*	\$0.003277 \$0.00693*	
	Seasonal**	\$0.000917 \$0.00194*	\$0.001443 \$0.002923*	\$0.002146 \$0.004233	\$0.004446 \$0.008099	
Bexar Met, San Antonio,	5, by consumption (but level 2)	First 5,000 gallons	Next 4,999 gallons	Next 6,999 gallons	17,000 gallons and up	\$7.93

TX	and 3 cost the same)	\$0.00089 \$0.00273*	\$0.00143 \$0.00327*	\$0.00395 \$0.00579*	\$0.0063 \$0.00814*	
San Marcos, TX	4, by consumption	First 2,000 gallons	Next 7,999 gallons	Next 14,999 gallons	25,000 gallons and up	\$18.98
		\$0.00949	\$0.00445	\$0.00557	\$0.00618	
New Braunfels, TX	4, by consumption	First 7,500 gallons	Next 7,499 gallons	Next 9,999 gallons	25,000 gallons and up	\$10.35
		\$0.001885	\$0.002199	\$0.002512	\$0.003014	
Las Vegas, NV	4, by consumption	First 5,000 gallons	Next 4,999 gallons	Next 9,999 gallons	20,001 gallons and up	\$10.06
		\$0.00116	\$0.00208	\$0.00309	\$0.00458	
Atlanta, GA	3, by consumption	First 2,244 gallons	Next 2,244 gallons	4,488 gallons and up	N/A	\$6.71
		\$0.0034492	\$0.00713904	\$0.00823529	N/A	
San Diego, CA	3, by consumption	First 10,472 gallons	Next 10,472 gallons	20,944 gallons and up	N/A	\$19.33
		\$0.0048288	\$0.00523663	\$0.00587968	N/A	
Phoenix, AZ	3, by month	Dec, Jan, Feb, March	April, May, Oct, Nov	Jun, July, Aug, Sept	N/A	\$4.36
		\$0.00382358	\$0.00450535	\$0.0056016	N/A	
AVERAGES***		\$0.0037658	\$0.0039842	\$0.0049741	\$0.0060112	\$10.58

Costs are per gallon.

*Includes the standard rate and the water supply fee rate per gallon.

**The SAWS Seasonal rate increase is applied from May 1st to Sept. 30th.

***Calculated with weighted averages for SAWS and Phoenix, AZ to account for seasonal rate changes.