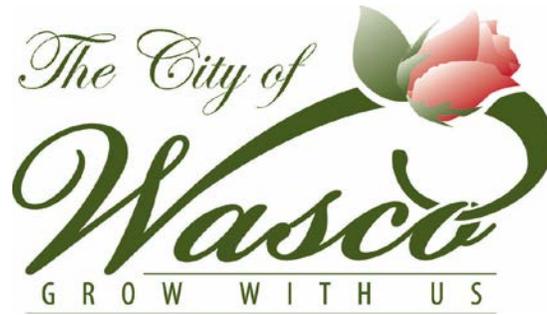


# Exhibit A



## **WATER RATE STUDY**

OCTOBER 28, 2015

*Prepared by:*

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## SUMMARY OF PROPOSED RATES

This study provides recommendations for water rate increases based on operating costs, planned capital improvements, existing infrastructure replacement and financial projections developed with substantial input from City of Wasco staff and feedback from City Council members in earlier workshop sessions. This page provides a summary of the proposed rates resulting from that input and feedback.

### ESTIMATED WATER BILLS

Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>	Usage (CF)	Usage (Gal.)	City of Wasco Estimated Water Bill <i>Proposed</i>
Single Family Residential	\$ 28.25	2,500	\$ 3.98	2,500	18,701	\$ 28.25
				2,600	19,449	\$ 32.23
				2,700	20,197	\$ 36.21
				2,800	20,945	\$ 40.19
				2,900	21,693	\$ 44.17
				3,000	22,442	\$ 48.15
				3,100	23,190	\$ 52.13
				3,200	23,938	\$ 56.11
				3,300	24,686	\$ 60.09
				3,400	25,434	\$ 64.07
3,500	26,182	\$ 68.05				

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)  
 Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF  
 Operating Cost per 100 CF = \$ 1.13  
 Replacement/Capital Cost per 100 CF = \$ 2.85

ESTIMATED WATER BILL						
Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>	Usage (CF)	Usage (Gal.)	Estimated Water Bill Proposed
Multi-Family Residential 2 Units	\$ 33.90	3,000	\$ 3.98	3,000	22,442	\$ 33.90
				3,500	26,182	\$ 53.80
				4,000	29,922	\$ 73.70
				4,500	33,662	\$ 93.60
				5,000	37,403	\$ 113.50
Multi-Family Residential 3-4 Units	\$ 50.85	4,500	\$ 3.98	4,500	33,662	\$ 50.85
				5,000	37,403	\$ 70.75
				5,500	41,143	\$ 90.65
				6,000	44,883	\$ 110.55
				6,500	48,623	\$ 130.45
				7,000	52,364	\$ 150.35
Multi-Family Residential 5-8 Units	\$ 79.10	7,000	\$ 3.98	7,000	52,364	\$ 79.10
				8,000	59,844	\$ 118.90
				9,000	67,325	\$ 158.70
				10,000	74,805	\$ 198.50
				12,000	89,766	\$ 278.10
Multi-Family Residential 9-20 Units	\$ 135.60	12,000	\$ 3.98	12,000	89,766	\$ 135.60
				15,000	112,208	\$ 255.00
				18,000	134,649	\$ 374.40
				20,000	149,610	\$ 454.00
Multi-Family Residential 21-40 Units	\$ 339.00	30,000	\$ 3.98	30,000	224,415	\$ 339.00
				32,000	239,376	\$ 418.60
				34,000	254,337	\$ 498.20
				40,000	299,220	\$ 737.00
Multi-Family Residential 41+ Units	\$ 339.00	30,000	\$ 3.98	30,000	224,415	\$ 339.00
				32,000	239,376	\$ 418.60
				34,000	254,337	\$ 498.20
				40,000	299,220	\$ 737.00

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)  
 Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF  
 Operating Cost per 100 CF = \$ 1.13  
 Replacement/Capital Cost per 100 CF = 2.85

Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>	Usage (CF)	Usage (Gal.)	Estimated Water Bill <i>Proposed</i>
Commercial	\$ 22.60	2,000	\$ 3.98	2,000	14,961	\$ 22.60
				2,500	18,701	\$ 42.50
				3,000	22,442	\$ 62.40
				3,500	26,182	\$ 82.30
				4,000	29,922	\$ 102.20
General	\$ 33.90	3,000	\$ 3.98	3,000	22,442	\$ 33.90
				3,500	26,182	\$ 53.80
				4,000	29,922	\$ 73.70
				4,500	33,662	\$ 93.60
				5,000	37,403	\$ 113.50
				6,000	44,883	\$ 153.30
Industrial	\$ 135.60	12,000	\$ 3.98	12,000	89,766	\$ 135.60
				15,000	112,208	\$ 255.00
				18,000	134,649	\$ 374.40
				24,000	179,532	\$ 613.20
				30,000	224,415	\$ 852.00
				40,000	299,220	\$1,250.00
Institutional	\$ 135.60	12,000	\$ 3.98	12,000	89,766	\$ 135.60
				15,000	112,208	\$ 255.00
				18,000	134,649	\$ 374.40
				20,000	149,610	\$ 454.00
				24,000	179,532	\$ 613.20
				30,000	224,415	\$ 852.00
Irrigation	\$ 90.40	8,000	\$ 3.98	8,000	59,844	\$ 90.40
				10,000	74,805	\$ 170.00
				15,000	112,208	\$ 369.00
				18,000	134,649	\$ 488.40
				20,000	149,610	\$ 568.00
				24,000	179,532	\$ 727.20

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)

Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF

Operating Cost per 100 CF = \$ 1.13

Replacement/Capital Cost per 100 CF = \$ 2.85

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## **BACKGROUND AND OBJECTIVES**

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The City of Wasco provides water service to approximately 4,560 customers within a 9.0 square-mile service area. The City's customer base is predominantly single family residential with some commercial and industrial customers. The City serves a population of approximately 21,200 residents<sup>1</sup>. The water utilities are accounted for as self-supporting enterprise funds with revenues derived primarily from utility service charges. The goal is for these funds to generate adequate revenue to support the operating and capital needs.

In February 2015, the City Engineer was directed to develop a City utility rate study for the water enterprise funds. Prior to this study, the water rates were studied in 2012. The basic objectives of this study include:

- Conduct an analysis of water rates and finances.
- Develop cash flow projections incorporating reasonable estimates of future operating expenses.
- Coordinate construction and financing of capital improvement projects with the City's five year capital improvement plan and the City of Wasco Water Master Plan.
- Determine the annual revenue requirement.
- Evaluate water rate structure
- Recommend rate adjustments to support the long-term financial health of the water enterprise funds.

This report presents key findings and recommendations of our study. The recommendations were developed with substantial input from the City Manager's office, Public Works, Finance Department and Planning Department.

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<sup>1</sup> California State Department of Finance, Demographic Research Unit, Reports E-5, 2015

# WATER RATE STUDY

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## Water System and Supply

The existing water system consists of nine wells (No. 2, 5, 6, 7, 8, 9, 10, 11, and 12) and a distribution system. Two wells, Well No. 6 and No. 9, are currently inactive due to high concentration of nitrates in these wells. A third well, Well No. 2, is located at the lower most elevation zone within the distribution system and is equipped with a 200 horsepower pump. Due to its location and size of pump, Well No. 2 is currently only operated to supply water to the Valley Rose Subdivision as it would over pressurize the local distribution system if maintained under constant operation. The wells range in depth from 700 feet to 1,000 feet and range in capacity from 650 gallons per minute (GPM) to 1700 GPM during normal operation. The system has two pressure zones whereby the dividing line is along Magnolia Avenue pressure zone division. Only four wells are equipped with variable frequency drives and backup generators, (Well Nos. 7, 9, 10, and 12). Of these, the emergency generator located at Well No. 7 is out of compliance with the San Joaquin Air Resources Board and will need to be replaced. Additional variable frequency drives and emergency generators will need to be installed at Well No. 5 and 11 and a variable frequency drive at Well No. 8. Start and stop system pressure for each well varies depending on the seasonal demand throughout the system. However, wells are typically operated in such a way to maintain a pressure of 50 pounds per square inch (psi) throughout the distribution system.

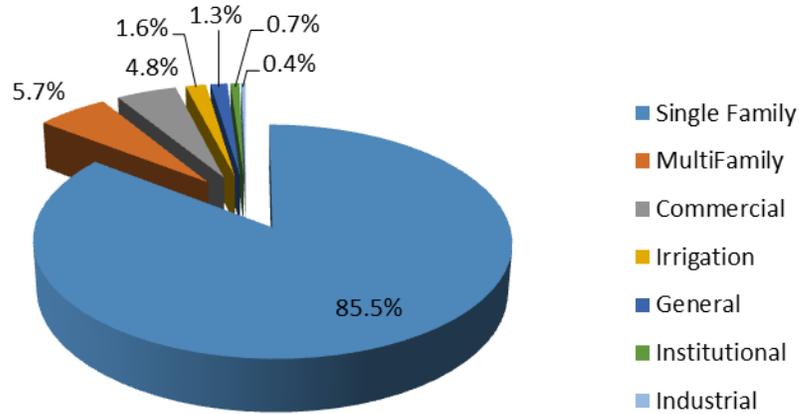
The distribution system is comprised of pipes ranging in size from 4 to 12 inches in diameter. Pipe materials include steel, asbestos cement, cast iron and PVC. The pipe length distribution is of approximately 93,947 linear feet of 4-inch, 94,068 linear feet of 6-inch, 79,871 linear feet of 8-inch, and 48,660 linear feet of 12-inch. Newer distribution lines are constructed with PVC pipe while most of the older lines are generally cast iron.

The City of Wasco received \$4.1 million from the Federal Government, through the American Recovery and Reinvestment Act (ARRA) in late 2009. The ARRA funds were used to install water meters on every residential, multi-family and commercial business within the City. Construction on this ARRA project was completed in February 2011.

The existing water system is well operated and maintained. The City has construction plans that are 90% complete for future water storage tanks. These additional tanks will provide redundancy if one or more of the wells were to go offline.

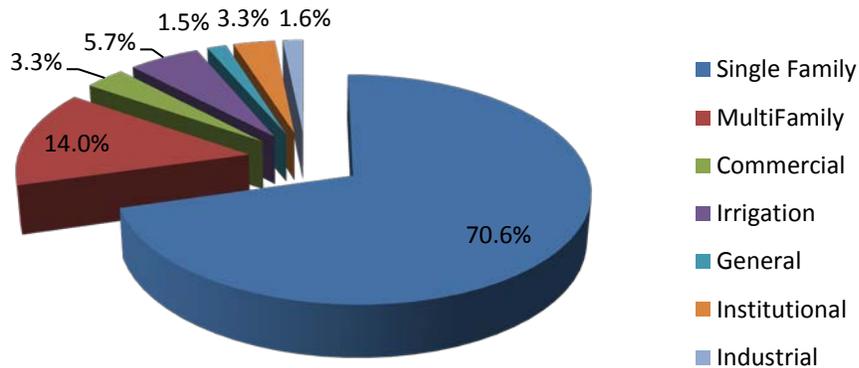
## Water Customers

The City currently provides water service to approximately 4,560 predominantly residential connections. Single family residential services account for 85.5% of the water customers. Figure 1 provides a breakdown of water customers by usage class.



**Figure 1. Water Customers by Customer Class**

Single family residential services accounted for 70.6% of the water consumption. Figure 2 provides a breakdown of water usage by customer class. In fiscal year 2014/15, average monthly water consumption for a single family residence was 1,831 cubic feet.



**Figure 2. Water Customers by Usage**

## Current Water Rates

The City currently uses a fixed rate and a metered water rate structure for billing its customers. The majority of the residential customers within the City are charged a fixed fee based on lot frontage size. These rates are presented in Table 1. Commercial, industrial, multi-family and a portion of residential users are billed based on water consumption through a minimum charge or base fee, and a four-tier schedule based on the amount of water consumed. These rates are presented in Table 2. The consumption rates are a declining tier rate structure, with lower rates for each succeeding tier of usage. As such, no substantial incentive to conserve water is present. Additionally, the current rate structure does not allow for a discount to senior citizens within the community.

<b>Table 1. Current Water Flat Rate Structure</b>	
Single Family 1 - 50 FT Frontage	\$ 28.81
Single Family 51 – 75 FT Frontage	\$ 31.80
Single Family 76 – 100 FT Frontage	\$ 33.55

<b>Table 2. Current Water Metered Rate</b>	
Current Metered Base Rate	\$ 22.39
Tier 1: For first 500 cubic feet	\$ 2.07
Tier 2: For next 1,500 cubic feet	\$ 1.23
Tier 3: For next 2,000 cubic feet	\$ 1.17
Tier 4: For all amounts in excess of 4,000 cubic feet	\$ 0.99

Note: Consumption allocation based on 100 cu. Ft. to equal one unit of water or 748 gallons of water. Additional water rate structures are identified in the Wasco Municipal Code Section 13.08.020.

The revenue from the current water rates is unable to cover capital improvements to the water system or equipment replacement costs. Such replacements and capital improvements are necessary as equipment ages and the community grows. Table 3 demonstrates the revenue projection for the Water Fund, if the existing water rates remain unchanged. With the current water rates, the Water Division Enterprise Fund would be \$3.44 million dollars in debt at the end of five years.

**Table 3. Projected Five-Year Forecast of Revenues and Expenditures with Existing Water Rates**

	<u>Year 0</u> <sup>a</sup>	<u>Year 1</u> <sup>b</sup>	<u>Year 2</u> <sup>c</sup>	<u>Year 3</u> <sup>c</sup>	<u>Year 4</u> <sup>c</sup>	<u>Year 5</u> <sup>c</sup>	<b>5 YEAR TOTALS</b>
<b>OPERATING REVENUE</b>	\$ 2,352,041	\$ 2,408,960	\$ 2,464,492	\$ 2,521,303	\$ 2,579,424	\$ 2,638,885	\$ 12,613,065
OPERATING EXPENDITURES							
Salary & Benefits <sup>d</sup>	673,278	832,471	932,368	1,044,252	1,169,562	1,309,910	\$ 7,308,397
Pumping Cost <sup>f</sup>	635,134	657,364	680,371	704,184	728,831	754,340	\$ 3,525,090
Administrative Cost <sup>d</sup>	487,219	511,580	537,159	564,017	592,218	621,829	\$ 2,826,802
Materials & Services <sup>f</sup>	96,815	101,656	106,739	112,075	117,679	123,563	\$ 561,712
RESERVE ACCOUNTS							
Equipment Replacement <sup>e</sup>	589,979	589,979	604,256	618,879	633,856	649,196	\$ 3,096,167
Capital Improvements <sup>e</sup>	<u>145,250</u>	<u>145,250</u>	<u>148,765</u>	<u>152,365</u>	<u>156,052</u>	<u>159,829</u>	<u>\$ 762,261</u>
<b>OPERATING EXPENDITURES</b>	2,627,675	2,838,300	3,009,658	3,195,774	3,398,199	3,618,666	\$ 16,060,597
<b>Net Operating Income</b>	\$ (275,634)	\$ (429,339)	\$ (545,167)	\$ (674,470)	\$ (818,775)	\$ (979,781)	\$ (3,447,532)

<sup>a</sup> Year 0 Revenue was determined by utilizing current fee structure.

<sup>b</sup> 2.42% CPI increase applied to total operating revenue since Year 0 calculations were based on 2014 data. CPI not applied to Year 1 Reserve Accounts since estimates are in 2015 dollars.

<sup>c</sup> 2.3052% population growth factor applied annually to Operating Revenue.

<sup>d</sup> From Finance Department, 12% increase applied annually to Salary and Benefits, 5% increase applied to Administrative Cost, and one employee added in Year 1.

<sup>e</sup> From Annual Equipment Replacement and Capital Improvement Cost Estimate, assumed 2.42% CPI annual increase.

<sup>f</sup> Annual increase of 3.5% applied to Pumping Costs for rising cost of electricity, 5% annual increase to Materials and Services.

Another scenario researched was to continue the increases the City Council enacted during the last water rate review period. At that time, the City Council increased water rates by 6% for 2012 and 2013 by City Council Resolution No. 2012-3835. If the 6% increase of water rates were to be continued, the Water Division Enterprise Fund would be \$1.34 million dollars in debt at the end of five years, as shown in Table 4. This is less debt accumulation than the case of leaving the existing water rates as they exist, however, this flat rate based system does not provide incentive for water conservation.

**Table 4. Projected Five-Year Forecast Assuming Council Enacts Annual 6% Water Rate Increase**

	<u>Year 0<sup>a</sup></u>	<u>Year 1<sup>b</sup></u>	<u>Year 2<sup>c</sup></u>	<u>Year 3<sup>c</sup></u>	<u>Year 4<sup>c</sup></u>	<u>Year 5<sup>c</sup></u>	<b>5 YEAR TOTALS</b>
<b>OPERATING REVENUE</b>	\$ 2,352,041	\$ 2,493,163	\$ 2,703,674	\$ 2,931,959	\$ 3,179,519	\$ 3,447,982	\$ 14,756,296
OPERATING EXPENDITURES							
Salary & Benefits <sup>d</sup>	673,278	832,471	932,368	1,044,252	1,169,562	1,309,910	\$ 7,308,397
Pumping Cost <sup>f</sup>	635,134	657,364	680,371	704,184	728,831	754,340	\$ 3,525,090
Administrative Cost <sup>d</sup>	487,219	511,580	537,159	564,017	592,218	621,829	\$ 2,826,802
Materials & Services <sup>f</sup>	96,815	101,656	106,739	112,075	117,679	123,563	\$ 561,712
RESERVE ACCOUNTS							
Equipment Replacement <sup>e</sup>	589,979	589,979	604,256	618,879	633,856	649,196	\$ 3,096,167
Capital Improvements <sup>e</sup>	<u>145,250</u>	<u>145,250</u>	<u>148,765</u>	<u>152,365</u>	<u>156,052</u>	<u>159,829</u>	<u>\$ 762,261</u>
<b>OPERATING EXPENDITURES</b>	<b>2,627,675</b>	<b>2,838,300</b>	<b>3,009,658</b>	<b>3,195,774</b>	<b>3,398,199</b>	<b>3,618,666</b>	<b>\$ 16,060,597</b>
<b>Net Operating Income</b>	<b>\$ (275,634)</b>	<b>\$ (345,137)</b>	<b>\$ (305,985)</b>	<b>\$ (263,815)</b>	<b>\$ (218,680)</b>	<b>\$ (170,684)</b>	<b>\$ (1,304,301)</b>

NOTE: In 2012, a 6% increase of water rates was enacted for 2012 and 2013 by City Council Resolution No. 2012-3835.

<sup>a</sup> Year 0 Revenue was determined by utilizing current fee structure.

<sup>b</sup> CPI not applied to Year 1 Reserve Accounts since estimates are in 2015 dollars.

<sup>c</sup> 2.3052% population growth factor applied annually.

<sup>d</sup> From Finance Department, 12% increase applied annually to Salary and Benefits, 5% increase applied to Administrative Cost, and one employee added in Year 1.

<sup>e</sup> From Annual Equipment Replacement and Capital Improvement Cost Estimate, assumed 2.42% CPI annual increase.

<sup>f</sup> Annual increase of 3.5% applied to Pumping Costs for rising cost of electricity, 5% annual increase to Materials and Services.

## Recommended Water Rates

In an effort to raise revenues to a level which will cover annual operating costs, equipment replacement costs, and capital projects identified in the City of Wasco Water Master Plan, it is recommended that a rate increase be implemented. The flat rate fee structure based on lot frontage size will be eliminated. The new proposed rate structure will be based on actual water usage obtained from monthly meter readings. Each category will have a monthly base volume of water usage in cubic feet and minimum service fee for that monthly base volume. Usage over the monthly base volume will be billed at the overage rate per 100 cubic feet beyond the base volume. A summary of the proposed rates is presented in Table 5.

**Table 5. Proposed Water Rates**

Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>
Single Family Residential	\$ 28.25	2,500	\$ 3.98
Multi-Family Residential, 2 Units	\$ 33.90	3,000	\$ 3.98
Multi-Family Residential, 3-4 Units	\$ 50.85	4,500	\$ 3.98
Multi-Family Residential, 5-8 Units	\$ 79.10	7,000	\$ 3.98
Multi-Family Residential, 9-20 Units	\$ 135.60	12,000	\$ 3.98
Multi-Family Residential, 21-40 Units	\$ 339.00	30,000	\$ 3.98
Multi-Family Residential, 41+ Units	\$ 339.00	30,000	\$ 3.98
Commercial	\$ 22.60	2,000	\$ 3.98
General	\$ 33.90	3,000	\$ 3.98
Industrial	\$ 135.60	12,000	\$ 3.98
Institutional	\$ 135.60	12,000	\$ 3.98
Irrigation	\$ 90.40	8,000	\$ 3.98

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)

Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF

Operating Cost per 100 CF = \$ 1.13

Replacement/Capital Cost per 100 CF = \$ 2.85

To determine the monthly base volume, the meter readings were gathered for all accounts for May 2014 through April 2015. Single Family Residential is one category, regardless of lot frontage size. Multifamily Residential accounts were separated by the number of units in the property. A threshold was found below which approximately 75% of users fell below on average. This 75% threshold was set as the monthly base volume. Table 6 demonstrates the determination of the monthly base volume for Single Family Residential. The tables showing the monthly base volume for all use categories are shown in Appendix B.

Table 6. Single Family Residential Monthly Base Volume

	<b>SINGLE FAMILY RESIDENTIAL</b>		
	<b>Monthly Base Volume 2500 CF</b>		
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	2343	1320	1831
<b>Meter Readings</b>	23096	23732	46828
<b>Users Below 1200 cf</b>	19.68%	55.36%	37.52%
<b>Users Below 1500 cf</b>	28.40%	68.60%	48.50%
<b>Users Below 2000 cf</b>	44.54%	82.33%	63.44%
<b>Users Below 2500 cf</b>	<b>60.30%</b>	<b>89.86%</b>	<b>75.08%</b>
<b>Users Below 2600 cf</b>	62.94%	90.94%	76.94%
<b>Users Below 2700 cf</b>	65.49%	91.79%	78.64%
<b>Users Below 3000 cf</b>	72.58%	93.97%	83.27%
<b>Users Below 3500 cf</b>	82.06%	96.25%	89.15%
<b>Users Below 4000 cf</b>	88.18%	97.52%	92.85%
<b>Users Below 4500 cf</b>	92.42%	98.39%	95.41%
<b>Users Below 5000 cf</b>	95.22%	99.02%	97.12%
<b>Users Below 5500 cf</b>	97.10%	99.35%	98.22%
<b>Users Below 6000 cf</b>	98.43%	99.64%	99.03%
<b>Users Below 6500 cf</b>	99.41%	99.82%	99.61%
<b>Users Below 7000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 8000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 9000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 10000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 12000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 15000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 18000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 20000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 24000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 26000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 30000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 40000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 50000 cf</b>	100.00%	100.00%	100.00%

Table 7 represents the annual overall volume of water used, volume of water below the baseline, and volume of water above the baseline.

**Table 7. Annual Overall Volume**

<b>Use Category</b>	<b>Monthly Base Volume</b>	<b>Total Meter Readings</b>	<b>Total Volume (cf)</b>	<b>Volume Below Baseline</b>	<b>Volume Above Baseline</b>
Single Family	2,500 cf	46,828	85,422,929	72,178,650	13,244,279
Multi Family 1-2 units	3,000 cf	1,760	4,928,328	3,455,919	1,472,409
Multi Family 3-4 units	4,500 cf	469	2,094,948	1,458,407	636,541
Multi Family 5-8 units	7,000 cf	144	1,014,540	668,293	346,247
Multi Family 9-20 units	12,000 cf	96	844,730	763,230	81,500
Multi Family 21-40 units	30,000 cf	120	2,532,178	2,359,970	172,208
Multi Family 41+ units	30,000 cf	196	4,330,069	3,682,916	647,153
Commercial	2,000 cf	2,632	3,942,631	2,412,811	1,529,820
General	3,000 cf	734	1,842,300	1,017,987	824,313
Industrial	12,000 cf	189	1,962,638	870,899	1,091,739
Institutional	12,000 cf	385	4,018,185	2,023,307	1,994,878
Irrigation	8,000 cf	891	6,872,813	3,126,846	3,745,967
<b>Total (CF)</b>			119,806,289	94,019,235	25,787,054
<b>Total (gal)</b>			896,210,945	703,310,887	192,900,057

## Operating Expenditures

Forecasted future expenditures are based on an analysis of historical costs over the last five years and evaluation of current economic conditions. Table 8 shows the annual operation and maintenance cost over the last 5 years. Table 9 shows that annual operation and maintenance cost spread over the water treatment volume. This calculation was used to establish the minimum service fee of \$1.13 per 100 cubic feet.

**Table 8. Annual Operating and Maintenance Costs**

ITEM	FISCAL YEAR ENDING				
	6/30/2010	6/30/2011	6/30/2012	6/30/2013	6/30/2014
Total Operating Expenses	\$ 1,935,479	\$1,870,679	\$ 2,010,119	\$2,167,134	\$ 2,235,737
Interest Expense		\$ -			
Debt Service to RDA	\$ 60,000	\$ 60,000	\$ -	\$ (37,102)	\$ -
Less: Depreciation	\$ (184,900)	\$ (190,286)	\$ (334,601)	\$ (345,086)	\$ (343,291)
<b>ANNUAL TOTALS</b>	<b>\$ 1,810,579</b>	<b>\$1,740,393</b>	<b>\$ 1,675,518</b>	<b>\$1,784,946</b>	<b>\$1,892,446</b>

**Table 9. Annual Treatment Volumes**

OPERATING YEAR ENDING	VOLUME (GALLONS)	VOLUME (100 CF)	ANNUAL COST	COST PER 1,000 GALLONS	COST PER 100 CF
6/30/2010	1,549,600,000	2,071,815	\$1,810,579	\$1.17	\$0.87
6/30/2011	1,478,100,000	1,976,220	\$1,740,393	\$1.18	\$0.88
6/30/2012	1,543,400,000	2,063,526	\$1,675,518	\$1.09	\$0.81
6/30/2013	1,461,910,000	1,954,574	\$1,784,946	\$1.22	\$0.91
6/30/2014	1,248,732,000	1,669,555	\$1,892,446	\$1.52	\$1.13
Cost per 100 CF from 2014 is most representative of current costs.					<b>\$1.13</b>

Table 10 shows the equipment replacement costs of all the primary capital items in the existing water system. Additionally, Table 11 presents the anticipated capital improvement costs included in City's capital improvement plan (CIP). This analysis accumulates all capital costs and amortizes them over the useful life of the asset. While actual capital replacement cost may actually vary from year to year, these capital replacement reserve funds will be used to replace equipment as it becomes inefficient or nonoperational. Table 12 shows the total annual cost for replacements and capital improvements distributed over the total volume of water over the baseline as shown in Table 7. This calculation established the rate of \$2.85 per 100 cubic feet for the volume of water used over the baseline volume. As in the past, staff will continue to seek alternative funding sources (grants, USDA grants/loans) in order to minimize the financial burden to the citizens of Wasco.

**Table 10. Equipment Replacement Costs**

<b>EQUIPMENT</b>	<b>QUANTITY</b>	<b>UNITS</b>	<b>COST PER UNIT</b>	<b>TOTAL COST OF REPLACEMENT</b>	<b>USEFUL LIFE (YEARS)</b>	<b>ANNUAL COST</b>
Refurbish Production Wells	9	ea	\$ 500,000	\$ 4,500,000	30	\$ 150,000
4" water mains	93947	LF	\$ 26	\$ 2,442,622	40	\$ 61,066
6" water mains	94068	LF	\$ 31	\$ 2,916,108	40	\$ 72,903
8" water mains	79871	LF	\$ 35	\$ 2,795,485	40	\$ 69,887
12" water mains	48660	LF	\$ 48	\$ 2,335,680	40	\$ 58,392
Fire Hydrants	492	ea	\$ 1,380	\$ 678,960	40	\$ 16,974
Service Meters w/ AMR	4700	ea	\$ 300	\$ 1,410,000	15	\$ 94,000
4" Water Valves	790	ea	\$ 550	\$ 434,500	40	\$ 10,863
12" Water Valves	199	ea	\$ 2,190	\$ 435,810	40	\$ 10,895
Service trucks	5	ea	\$ 35,000	\$ 175,000	5	\$ 35,000
Backhoe	1	ea	\$ 100,000	\$ 100,000	15	\$ 6,667
Gate valve exerciser/vacuum	1	ea	\$ 50,000	\$ 50,000	15	\$ 3,333
<b>TOTAL REPLACEMENT COST</b>				<b>\$ 18,274,165</b>		<b>\$ 589,979</b>

**Table 11. Capital Improvement Plan Costs**

<b>EQUIPMENT</b>	<b>QUANTITY</b>	<b>UNITS</b>	<b>COST PER UNIT</b>	<b>TOTAL COST OF REPLACEMENT</b>	<b>USEFUL LIFE (YEARS)</b>	<b>ANNUAL COST</b>
Nitrate Removal filters	3	ea	\$ 215,000	\$ 645,000	20	\$ 32,250
Water storage tanks & booster stations	1	ea	\$ 3,200,000	\$ 3,200,000	40	\$ 80,000
Meter calibration building w/ test bench	1	ea	\$ 500,000	\$ 500,000	20	\$ 25,000
SCADA system	1	ea	\$ 120,000	\$ 120,000	15	\$ 8,000
<b>TOTAL CAPITAL COST</b>				<b>\$ 4,465,000</b>		<b>\$ 145,250</b>

**ANNUAL REPLACEMENT AND CAPITAL COST \$735,229**

**Table 12. Annual Overage Distribution**

Annual Cost Allotment	\$ 735,229
Annual Volume Over Baseline (Gallons)	192,900,057
Annual Volume Over Baseline (100 CF)	257,871
Annual Cost Per Volume (\$/1000 Gallons)	\$ 3.81
Annual Cost Per Volume (\$/100 CF)	<b>\$ 2.85</b>

## Estimated Water Bills

Tables 13, 14 and 15 demonstrate sample water bills in each category based on various amounts of water usage. For example, the current flat rate for 1-50 ft. lot frontage is \$28.81, for 51-75 ft. frontage is \$31.80, and for 76-100 ft. lot frontage is \$33.55, regardless of usage. Table 13 shows sample bill amounts for a single family residential home with the proposed rate at various amounts of water usage. The presented sample bill amounts in Table 13 covers various levels of water consumption for 75% to 90% of single family residences within the City. Data showed that 75% of single family residential users used 2500 CF or less water per month on average, and 90% of single family residential users on average consumed 3500 CF or less per month. Each of the sample bill amounts in Tables 13, 14 and 15 hold to demonstrating samples used by 75% to 90% of users in the corresponding category. The City has proposed to establish a senior discount rate that will reduce the water bill to qualified senior citizens by 30%. Seniors who qualify for this rate must verify eligibility through PG&E's Lifeline Program; seniors must apply annually for the rate reduction.

**Table 13. Sample Water Bill, Single Family Residential**

Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>	Usage (CF)	Usage (Gal.)	City of Wasco Estimated Water Bill <i>Proposed</i>
Single Family Residential	\$ 28.25	2,500	\$ 3.98	2,500	18,701	\$ 28.25
				2,600	19,449	\$ 32.23
				2,700	20,197	\$ 36.21
				2,800	20,945	\$ 40.19
				2,900	21,693	\$ 44.17
				3,000	22,442	\$ 48.15
				3,100	23,190	\$ 52.13
				3,200	23,938	\$ 56.11
				3,300	24,686	\$ 60.09
				3,400	25,434	\$ 64.07
3,500	26,182	\$ 68.05				

The current flat rate for 1-50 ft lot frontage is \$28.81, for 51-75 ft frontage is \$31.80, and for 76-100 ft lot frontage is \$33.55.

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)

Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF

Operating Cost per 100 CF = \$ 1.13

Replacement/Capital Cost per 100 CF = \$ 2.85

**Table 14. Sample Water Bill, Multi-Family**

Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>	Usage (CF)	Usage (Gal.)	Estimated Water Bill <i>Proposed</i>
Multi-Family Residential 2 Units	\$ 33.90	3,000	\$ 3.98	3,000	22,442	\$ 33.90
				3,500	26,182	\$ 53.80
				4,000	29,922	\$ 73.70
				4,500	33,662	\$ 93.60
				5,000	37,403	\$ 113.50
Multi-Family Residential 3-4 Units	\$ 50.85	4,500	\$ 3.98	4,500	33,662	\$ 50.85
				5,000	37,403	\$ 70.75
				5,500	41,143	\$ 90.65
				6,000	44,883	\$ 110.55
				6,500	48,623	\$ 130.45
				7,000	52,364	\$ 150.35
Multi-Family Residential 5-8 Units	\$ 79.10	7,000	\$ 3.98	7,000	52,364	\$ 79.10
				8,000	59,844	\$ 118.90
				9,000	67,325	\$ 158.70
				10,000	74,805	\$ 198.50
				12,000	89,766	\$ 278.10
Multi-Family Residential 9-20 Units	\$ 135.60	12,000	\$ 3.98	12,000	89,766	\$ 135.60
				15,000	112,208	\$ 255.00
				18,000	134,649	\$ 374.40
				20,000	149,610	\$ 454.00
Multi-Family Residential 21-40 Units	\$ 339.00	30,000	\$ 3.98	30,000	224,415	\$ 852.00
				32,000	239,376	\$ 931.60
				34,000	254,337	\$1,011.20
				40,000	299,220	\$1,250.00
Multi-Family Residential 41+ Units	\$ 339.00	30,000	\$ 3.98	30,000	224,415	\$ 852.00
				32,000	239,376	\$ 931.60
				34,000	254,337	\$1,011.20
				40,000	299,220	\$1,250.00

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)

Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF

Operating Cost per 100 CF = \$ 1.13

Replacement/Capital Cost per 100 CF = 2.85

**Table 15. Sample Water Bill, Non-Residential**

Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>	Usage (CF)	Usage (Gal.)	Estimated Water Bill <i>Proposed</i>
Commercial	\$ 22.60	2,000	\$ 3.98	2,000	14,961	\$ 22.60
				2,500	18,701	\$ 42.50
				3,000	22,442	\$ 62.40
				3,500	26,182	\$ 82.30
				4,000	29,922	\$ 102.20
General	\$ 33.90	3,000	\$ 3.98	3,000	22,442	\$ 33.90
				3,500	26,182	\$ 53.80
				4,000	29,922	\$ 73.70
				4,500	33,662	\$ 93.60
				5,000	37,403	\$ 113.50
				6,000	44,883	\$ 153.30
Industrial	\$ 135.60	12,000	\$ 3.98	12,000	89,766	\$ 135.60
				15,000	112,208	\$ 255.00
				18,000	134,649	\$ 374.40
				24,000	179,532	\$ 613.20
				30,000	224,415	\$ 852.00
				40,000	299,220	\$1,250.00
Institutional	\$ 135.60	12,000	\$ 3.98	12,000	89,766	\$ 135.60
				15,000	112,208	\$ 255.00
				18,000	134,649	\$ 374.40
				20,000	149,610	\$ 454.00
				24,000	179,532	\$ 613.20
				30,000	224,415	\$ 852.00
Irrigation	\$ 90.40	8,000	\$ 3.98	8,000	59,844	\$ 90.40
				10,000	74,805	\$ 170.00
				15,000	112,208	\$ 369.00
				18,000	134,649	\$ 488.40
				20,000	149,610	\$ 568.00
				24,000	179,532	\$ 727.20

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)

Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF

Operating Cost per 100 CF = \$ 1.13

Replacement/Capital Cost per 100 CF = \$ 2.85

## **Cash Flow Projections**

A five-year financial projection was developed using the proposed water rates to determine the financial validity of the proposed rate modification.

As presented in five-year forecast in Table 16, revenues generated by the proposed rate structure will not be sufficient to fully fund the yearly capital and replacement cost. By Year 5, the reserve account would be approximately \$90,000 short of fully funding the Reserve Accounts total of \$809,000 for that year. All projections are based on estimates and averages; deficits may be greater or smaller than estimated. Since the Water Enterprise fund must operate without profit, the estimated five-year deficit is considered manageable. A new analysis of the water rates should be prepared prior to the end of Year 5.

In order to account for changing costs, it is recommended that an inflation factor be applied annually to the water rates. For each year following the first year, the rate designated may be increased annually, without further notice of ballot, by an amount equal to the annual Consumer Price Index (CPI) for Los Angeles – Riverside – Orange County Area provided by the U.S. Department of Labor (Bureau of Labor Statistics); provided that the maximum increase shall not exceed the lesser of (i) the estimated cost to the City, or (ii) four percent (4%). The annual Consumer Price Index (CPI) will be calculated from the calendar year (January 1 – December 31) just prior to the fiscal year affected (July 1 – June 30). The benchmark CPI to be used in this calculation shall include all items of the index, including food and energy items.

## **Water Rate Survey**

A rate survey conducted of the nearby water provider jurisdictions shows that the City of Wasco, at the proposed rate structure, is less than the rates of the majority of the surrounding agencies. Table 17 presents reported rates from several jurisdictions.

**Table 16. Revenue Projections with Proposed Water Rate**

	<u>Year 0<sup>a</sup></u>	<u>Year 1<sup>b</sup></u>	<u>Year 2<sup>c</sup></u>	<u>Year 3<sup>c</sup></u>	<u>Year 4<sup>c</sup></u>	<u>Year 5<sup>c</sup></u>	<b>5 YEAR TOTALS</b>
<b>OPERATING REVENUE</b>							
Single Family Residential	\$ 1,873,253						
Multi-Family (2 units)	\$ 119,468						
Multi-Family (3-4 units)	\$ 49,472						
Multi-Family (5-8 units)	\$ 25,245						
Multi-Family (9-20 units)	\$ 16,309						
Multi-Family (21-40 units)	\$ 47,585						
Multi-Family (41+ units)	\$ 92,306						
Commercial	\$ 121,647						
General	\$ 58,088						
Industrial	\$ 69,170						
Institutional	\$ 131,774						
Irrigation	\$ 230,039						
<b>TOTAL OPERATING REVENUE</b>	<b>\$ 2,834,356</b>	<b>\$ 2,902,947</b>	<b>\$ 3,041,737</b>	<b>\$ 3,187,162</b>	<b>\$ 3,339,539</b>	<b>\$ 3,499,202</b>	<b>\$ 15,970,588</b>
<b>OPERATING EXPENDITURES</b>							
Salary & Benefits <sup>d</sup>	673,278	832,471	932,368	1,044,252	1,169,562	1,309,910	\$ 7,308,397
Pumping Cost <sup>f</sup>	635,134	657,364	680,371	704,184	728,831	754,340	\$ 3,525,090
Administrative Cost <sup>d</sup>	487,219	511,580	537,159	564,017	592,218	621,829	\$ 2,826,802
Materials & Services <sup>f</sup>	96,815	101,656	106,739	112,075	117,679	123,563	\$ 561,712
<b>RESERVE ACCOUNTS</b>							
Equipment Replacement <sup>e</sup>	589,979	589,979	604,257	618,880	633,857	649,196	\$ 3,096,168
Capital Improvements <sup>e</sup>	<u>145,250</u>	<u>145,250</u>	<u>148,765</u>	<u>152,365</u>	<u>156,052</u>	<u>159,829</u>	<u>\$ 762,261</u>
<b>TOTAL OPERATING EXPENDITURES</b>	<b>2,627,675</b>	<b>2,838,300</b>	<b>3,009,658</b>	<b>3,195,774</b>	<b>3,398,199</b>	<b>3,618,666</b>	<b>\$ 16,060,597</b>
<b>Net Operating Income</b>	<b>\$ 206,681</b>	<b>\$ 64,647</b>	<b>\$ 32,078</b>	<b>\$ (8,612)</b>	<b>\$ (58,660)</b>	<b>\$ (119,464)</b>	<b>\$ (90,010)</b>

<sup>a</sup> Year 0 Revenue was determined by applying the proposed fee structure to the actual usage for FY 2014-15.

<sup>b</sup> 2.42% CPI increase applied to total operating revenue since Year 0 calculations were based on 2014 data. CPI not applied to Year 1 Reserve Accounts since estimates are in 2015 dollars

<sup>c</sup> 2.3052% growth factor applied annually for Years 2-5, which was the growth rate used by Caltrans and Kern Council of Governments for the City of Wasco. Additionally a 2.42% CPI increase based on the 15 year average of the Los Angeles-Riverside-Orange County Consumer Price Index for all items.

<sup>d</sup> From Finance Department, 12% increase applied annually to Salary and Benefits, 5% increase applied to Administrative Cost, and one employee added in Year 1.

<sup>e</sup> Reserve Account information from Tables 9 and 10 also with a 2.42% CPI inflation factor applied annually.

<sup>f</sup> Based on current pumping costs, it is estimated to increase 3.5% annually with the rising cost of electricity, and 5% annual increase to Materials and Services.

**Table 17. Survey of Community Water Rates**

Use Category	Minimum Service Fee <sup>1</sup>	Monthly Base Volume (CF) <sup>2</sup>	Rate Per 100 CF Beyond Base Volume <sup>3</sup>	Usage (CF)	City of Wasco Water Bill Proposed	Cal Water 7/2015	City of Delano 4/2013	Arvin Comm. Srvcs. District 2/2011	Vaughn Water 4/2013	City of Tehachapi 1/2015	City of Shafter 1/2010	City of McFarland 7/2014	City of Tulare 1/2015	City of Hanford
Single Family Residential	\$28.25	2,500	\$ 3.98	2,500	\$28.25	\$58.46	\$57.31	\$42.25	\$35.95	\$33.37	\$32.94	\$30.97	\$26.86	\$23.39
				2,600	\$32.23	\$60.28	\$60.01	\$43.50	\$36.19	\$34.34	\$33.52	\$32.30	\$27.65	\$24.08
				2,700	\$36.21	\$62.10	\$62.71	\$44.75	\$36.43	\$36.42	\$34.10	\$33.63	\$28.44	\$24.77
				2,800	\$40.19	\$63.92	\$62.71	\$46.00	\$36.67	\$36.42	\$34.10	\$34.96	\$28.44	\$25.46
				2,900	\$44.17	\$65.74	\$65.41	\$47.25	\$36.91	\$38.50	\$34.68	\$36.29	\$29.23	\$26.15
				3,000	\$48.15	\$67.55	\$68.11	\$48.50	\$37.15	\$40.58	\$35.26	\$37.62	\$30.02	\$26.84
				3,100	\$52.13	\$69.37	\$70.81	\$49.75	\$37.39	\$42.66	\$35.84	\$38.95	\$30.81	\$27.53
				3,200	\$56.11	\$71.19	\$70.81	\$51.00	\$37.63	\$42.66	\$35.84	\$40.28	\$30.81	\$28.22
				3,300	\$60.09	\$73.01	\$73.51	\$52.25	\$37.87	\$44.74	\$36.42	\$41.61	\$31.60	\$28.91
				3,400	\$64.07	\$74.83	\$76.21	\$53.50	\$38.11	\$46.82	\$37.00	\$42.94	\$32.40	\$29.60
				3,500	\$68.05	\$76.95	\$78.91	\$54.75	\$38.35	\$48.90	\$37.58	\$44.27	\$33.19	\$30.29

The current flat rate for 1-50 ft lot frontage is \$28.81, for 51-75 ft frontage is \$31.80, and for 76-100 ft lot frontage is \$33.55.

<sup>1</sup> Minimum Service Fee = (Monthly Base Volume / 100) x (Operating Cost per 100 CF)

Operating Cost per 100 CF = \$ 1.13

<sup>2</sup> Monthly Base Volume was determined as the baseline below which fell 75% of usage.

<sup>3</sup> Rate Beyond Base Volume = Operating Cost per 100 CF + Replacement/Capital Cost per 100 CF

Operating Cost per 100 CF = \$ 1.13

Replacement/Capital Cost per 100 CF = \$ 2.85

# CONCLUSIONS AND RECOMMENDATIONS

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## Conclusions

This report summarizes the cost-of-service analysis and recommendations for a five-year service rate adjustment plan for the City's water operations. The recommended cost-of-service rates are those considered at this time to be the most equitable to the City while minimizing the financial impact of increases to the customers. If applicable rate adjustment procedures and requirements set forth by the State's passage of Proposition 218 are adhered to by the City, the first rate adjustment can be effective by approximately February 1, 2016.

If approved by the City Council, customers will be switched to a metered rate water billing plan.

## Recommendations

The primary recommendations of this report are as follows:

➤ **Adopt Five-Year Service Rate Plan for the Water Division**

Adopt the five-year rate plan to take effect as soon as February 1, 2016 and last through January 31, 2021

➤ **Reevaluate Rate Structure Annually**

Even if the multi-year rate plan outlined in this study is implemented, the City's Water Enterprise is facing increased regulation, escalating operational costs and other factors that should warrant a minimum of annual monitoring of the Enterprise's long-term financial outlook.

## PROPOSITION 218

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Proposition 218, the “Right to Vote on Taxes Act”, was approved by California voters in November 1996 and is codified as Articles XIIC and XIID of the California Constitution. Proposition 218 establishes requirements for imposing or increasing property related taxes, assessments, fees and charges. In July 2007, the California Supreme Court essentially confirmed that Proposition 218 applies to water and rates.

The City Engineer recommends the City follow the procedural requirements of Proposition 218 for all future water rate increases. These requirements include:

- The City must mail a notice of proposed rate increases to all affected property owners or utility rate payers. The notice must also specify the date/time/location of a public rate hearing at which the proposed rates will be adopted, and other related information.
- The City must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
- At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners or utility rate payers submit written protests against the proposed rate increases, the increases cannot be adopted.

Charges for water are exempt from the additional voting requirements of Proposition 218 provided the charges do not exceed the cost of providing service and are adopted pursuant to procedural requirements of Proposition 218.

Proposition 218 also has substantive requirements. This rate study meets these substantive requirements due to the following:

- As shown in the cash flow analysis in this report, the revenue derived from the water over the next five years does not exceed the funds required to cover the projected water system operational and capital costs.
- Revenues from the water rates and charges are used exclusively to fund water operational and capital costs.

- Water rates and charges are only levied on customers that actually use the water service or for which the service is immediately available.

A sample Proposition 218 notice to be mailed to City property owners is attached in Appendix A.

### **Additional Comments from City Engineer**

The City Engineer met with the City Manager, City Finance Director, Deputy Director of Public Works, Water Division Superintendent, Planning Director and received input from City Council members at two open session workshops. The group provided valuable insight and feedback.

The City Engineer also believes that public outreach is very important. To inform rate payers about the proposed water rate increase, the City Engineer recommends putting information inserts in with water bills, in local newspapers, and on the City website. Additionally, it would be very helpful to water customers to have staff available prior to the Proposition 218 hearing to help customers calculate their bills with the proposed rate increases.

## APPENDIX A - PROPOSITION 218 NOTICE

### Proposition 218 Notification NOTICE TO PROPERTY OWNERS OF PUBLIC HEARING ON PROPOSED WATER SERVICE RATE ADJUSTMENT

Hearing Date & Time: January 5, 2016 at 6:00 pm or as soon thereafter as possible  
Hearing Location: City of Wasco, Council Chambers  
746 E. Street, Wasco, CA 93280

The public hearing will cover the proposed rate adjustment for water service. This Notice has been sent to all property owners within the City of Wasco where the City provides water service. If adopted, the proposed rate adjustment will become effective for bills issued on or after February 1, 2016 and for bills issued on or after January 1, 2017, 2018, 2019, and 2020.

This Notice of Public Hearing provides information regarding the proposed rate adjustments to property owners within the City of Wasco where the City provides water service pursuant to the requirements of California Constitution Article XIII D Section 6 (commonly referred to as Proposition 218). The proposed rate adjustments will be presented to the City Council for adoption on January 5, 2016, at 6:00 p.m. in the City of Wasco Council Chambers. This Notice also provides information on how rates are calculated, the reasons for the required rate adjustments, how customers can receive more information on the effect of the proposed rate adjustments on their water bill and how to file a protest against the proposed rate adjustments.

The City recently completed a comprehensive rate study of the revenues and expenditures for the water enterprise funds to ensure sufficient revenues are collected to effectively provide for the short and long-term water service needs of the community. Revenues received from water charges are restricted solely for its enterprise funds.

**Reason For The Rate Increase** - The proposed rates were designed to fairly and equitably recover the cost of providing water services from all customer classes. The City has experienced a significant increase in operational costs, such as electricity for wells, fuel for vehicles and chemical costs all have increased since the last rate adjustment. In addition, there are the ever increasing requirements from the State of California adding, yet additional costs to the City's operations. Though at times the new requirements seem onerous, they are all ultimately intended to protect the health and safety for our customers.

#### *HOW WATER RATES ARE CALCULATED:*

**Water Rate Strategy** –The rate study conducted includes water rate applied to all customers based on usage obtain from monthly meter readings.

**Water Rate Reduction for Seniors** – The City has proposed to establish a senior discount rate that will reduce the water bill to qualified senior citizens by 30%. Seniors who qualify for this rate must verify eligibility through PG&E's Lifeline Program; seniors must apply annually for the rate reduction.

#### **Concerns, Please Contact Us For More Information:**

If you have questions or comments about the proposed water rate adjustments or wish to protest, you may: **Address the City Council:** Attend the Public Hearing on January 5, 2016 **Telephone:** (661) 758-7215 **Write:** 746 E. Street, Wasco, CA 93280.

Protests against the proposed rate adjustments must be submitted in writing, identify the property by street address or Kern County Assessor's Parcel Number, the owner(s) of the property, and includes the signature(s) of the property owner(s). **If written protest against the proposed adjustments in the fees for water service are filed at or prior to the hearing by a majority of the property owners, the City Council will not approve the rate adjustments.**

*Owners of multiple properties may submit one protest for each property owned.*

## APPENDIX B - MONTHLY BASE VOLUME TABLES

<b>MULTI FAMILY RESIDENTIAL</b>			
<b>2 UNITS</b>			
<b>Monthly Base Volume 3000 CF</b>			
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	3369	2225	2797
<b>Meter Readings</b>	873	887	1760
<b>Users Below 1200 cf</b>	15.46%	34.72%	25.09%
<b>Users Below 1500 cf</b>	21.99%	48.37%	35.18%
<b>Users Below 2000 cf</b>	33.10%	64.94%	49.02%
<b>Users Below 2500 cf</b>	46.39%	76.66%	61.53%
<b>Users Below 2600 cf</b>	48.68%	78.35%	63.52%
<b>Users Below 2700 cf</b>	51.09%	79.71%	65.40%
<b>Users Below 3000 cf</b>	<b>59.22%</b>	<b>84.33%</b>	<b>71.78%</b>
<b>Users Below 3500 cf</b>	69.76%	89.85%	79.81%
<b>Users Below 4000 cf</b>	76.40%	93.24%	84.82%
<b>Users Below 4500 cf</b>	83.05%	94.70%	88.87%
<b>Users Below 5000 cf</b>	87.06%	95.49%	91.27%
<b>Users Below 5500 cf</b>	89.69%	95.83%	92.76%
<b>Users Below 6000 cf</b>	91.18%	96.17%	93.67%
<b>Users Below 6500 cf</b>	92.10%	96.39%	94.24%
<b>Users Below 7000 cf</b>	93.13%	96.39%	94.76%
<b>Users Below 8000 cf</b>	94.96%	96.84%	95.90%
<b>Users Below 9000 cf</b>	95.88%	97.18%	96.53%
<b>Users Below 10000 cf</b>	96.45%	97.52%	96.98%
<b>Users Below 12000 cf</b>	97.14%	98.31%	97.72%
<b>Users Below 15000 cf</b>	98.40%	98.76%	98.58%
<b>Users Below 18000 cf</b>	98.85%	99.21%	99.03%
<b>Users Below 20000 cf</b>	99.08%	99.32%	99.20%
<b>Users Below 24000 cf</b>	99.08%	99.32%	99.20%
<b>Users Below 26000 cf</b>	99.08%	99.32%	99.20%
<b>Users Below 30000 cf</b>	99.31%	99.32%	99.32%
<b>Users Below 40000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 50000 cf</b>	100.00%	100.00%	100.00%

<b>MULTI FAMILY RESIDENTIAL</b>			
<b>3-4 UNITS</b>			
<b>Monthly Base Volume 4500 CF</b>			
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	5246	3691	4468
<b>Meter Readings</b>	234	235	469
<b>Users Below 1200 cf</b>	4.27%	14.89%	9.58%
<b>Users Below 1500 cf</b>	9.83%	22.55%	16.19%
<b>Users Below 2000 cf</b>	17.52%	31.06%	24.29%
<b>Users Below 2500 cf</b>	25.64%	40.00%	32.82%
<b>Users Below 2600 cf</b>	27.78%	42.13%	34.95%
<b>Users Below 2700 cf</b>	29.49%	44.26%	36.87%
<b>Users Below 3000 cf</b>	34.62%	51.91%	43.27%
<b>Users Below 3500 cf</b>	43.16%	67.23%	55.20%
<b>Users Below 4000 cf</b>	50.43%	75.74%	63.09%
<b>Users Below 4500 cf</b>	<b>59.83%</b>	<b>81.28%</b>	<b>70.55%</b>
<b>Users Below 5000 cf</b>	68.80%	88.51%	78.66%
<b>Users Below 5500 cf</b>	73.50%	90.21%	81.86%
<b>Users Below 6000 cf</b>	79.06%	90.64%	84.85%
<b>Users Below 6500 cf</b>	82.91%	91.06%	86.98%
<b>Users Below 7000 cf</b>	86.32%	91.91%	89.12%
<b>Users Below 8000 cf</b>	90.17%	91.91%	91.04%
<b>Users Below 9000 cf</b>	91.03%	92.34%	91.68%
<b>Users Below 10000 cf</b>	91.45%	93.19%	92.32%
<b>Users Below 12000 cf</b>	92.74%	94.04%	93.39%
<b>Users Below 15000 cf</b>	94.02%	96.17%	95.09%
<b>Users Below 18000 cf</b>	94.44%	97.87%	96.16%
<b>Users Below 20000 cf</b>	95.30%	98.72%	97.01%
<b>Users Below 24000 cf</b>	98.72%	100.00%	99.36%
<b>Users Below 26000 cf</b>	98.72%	100.00%	99.36%
<b>Users Below 30000 cf</b>	99.57%	100.00%	99.79%
<b>Users Below 40000 cf</b>	99.57%	100.00%	99.79%
<b>Users Below 50000 cf</b>	99.57%	100.00%	99.79%

<b>MULTI FAMILY RESIDENTIAL</b>			
<b>5-8 UNITS</b>			
<b>Monthly Base Volume 7000 CF</b>			
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	8097	3691	5894
<b>Meter Readings</b>	72	72	144
<b>Users Below 1200 cf</b>	9.72%	15.28%	12.50%
<b>Users Below 1500 cf</b>	9.72%	15.28%	12.50%
<b>Users Below 2000 cf</b>	9.72%	16.67%	13.19%
<b>Users Below 2500 cf</b>	9.72%	20.83%	15.28%
<b>Users Below 2600 cf</b>	9.72%	20.83%	15.28%
<b>Users Below 2700 cf</b>	9.72%	22.22%	15.97%
<b>Users Below 3000 cf</b>	12.50%	26.39%	19.44%
<b>Users Below 3500 cf</b>	18.06%	33.33%	25.69%
<b>Users Below 4000 cf</b>	27.78%	40.28%	34.03%
<b>Users Below 4500 cf</b>	34.72%	48.61%	41.67%
<b>Users Below 5000 cf</b>	44.44%	55.56%	50.00%
<b>Users Below 5500 cf</b>	54.17%	70.83%	62.50%
<b>Users Below 6000 cf</b>	55.56%	73.61%	64.58%
<b>Users Below 6500 cf</b>	61.11%	77.78%	69.44%
<b>Users Below 7000 cf</b>	<b>63.89%</b>	<b>80.56%</b>	<b>72.22%</b>
<b>Users Below 8000 cf</b>	70.83%	84.72%	77.78%
<b>Users Below 9000 cf</b>	76.39%	84.72%	80.56%
<b>Users Below 10000 cf</b>	80.56%	88.89%	84.72%
<b>Users Below 12000 cf</b>	83.33%	93.06%	88.19%
<b>Users Below 15000 cf</b>	86.11%	93.06%	89.58%
<b>Users Below 18000 cf</b>	86.11%	93.06%	89.58%
<b>Users Below 20000 cf</b>	86.11%	93.06%	89.58%
<b>Users Below 24000 cf</b>	91.67%	93.06%	92.36%
<b>Users Below 26000 cf</b>	95.83%	93.06%	94.44%
<b>Users Below 30000 cf</b>	98.61%	98.61%	98.61%
<b>Users Below 40000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 50000 cf</b>	100.00%	100.00%	100.00%

<b>MULTI FAMILY RESIDENTIAL</b>			
<b>9-20 UNITS</b>			
<b>Monthly Base Volume 12000 CF</b>			
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	10115	7484	8799
<b>Meter Readings</b>	48	48	96
<b>Users Below 1200 cf</b>	0.00%	0.00%	0.00%
<b>Users Below 1500 cf</b>	0.00%	0.00%	0.00%
<b>Users Below 2000 cf</b>	10.42%	0.00%	5.21%
<b>Users Below 2500 cf</b>	10.42%	4.17%	7.29%
<b>Users Below 2600 cf</b>	10.42%	4.17%	7.29%
<b>Users Below 2700 cf</b>	12.50%	6.25%	9.38%
<b>Users Below 3000 cf</b>	12.50%	12.50%	12.50%
<b>Users Below 3500 cf</b>	12.50%	12.50%	12.50%
<b>Users Below 4000 cf</b>	12.50%	14.58%	13.54%
<b>Users Below 4500 cf</b>	12.50%	16.67%	14.58%
<b>Users Below 5000 cf</b>	12.50%	16.67%	14.58%
<b>Users Below 5500 cf</b>	16.67%	25.00%	20.83%
<b>Users Below 6000 cf</b>	22.92%	41.67%	32.29%
<b>Users Below 6500 cf</b>	29.17%	47.92%	38.54%
<b>Users Below 7000 cf</b>	33.33%	52.08%	42.71%
<b>Users Below 8000 cf</b>	39.58%	64.58%	52.08%
<b>Users Below 9000 cf</b>	47.92%	72.92%	60.42%
<b>Users Below 10000 cf</b>	58.33%	79.17%	68.75%
<b>Users Below 12000 cf</b>	64.58%	83.33%	73.96%
<b>Users Below 15000 cf</b>	75.00%	97.92%	86.46%
<b>Users Below 18000 cf</b>	91.67%	100.00%	95.83%
<b>Users Below 20000 cf</b>	97.92%	100.00%	98.96%
<b>Users Below 24000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 26000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 30000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 40000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 50000 cf</b>	100.00%	100.00%	100.00%

<b>MULTI FAMILY RESIDENTIAL</b>			
<b>21-40 UNITS</b>			
<b>Monthly Base Volume 30000 CF</b>			
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	24702	17501	21101
<b>Meter Readings</b>	60	60	120
<b>Users Below 1200 cf</b>	0.00%	3.33%	1.67%
<b>Users Below 1500 cf</b>	0.00%	5.00%	2.50%
<b>Users Below 2000 cf</b>	0.00%	5.00%	2.50%
<b>Users Below 2500 cf</b>	0.00%	5.00%	2.50%
<b>Users Below 2600 cf</b>	0.00%	5.00%	2.50%
<b>Users Below 2700 cf</b>	0.00%	5.00%	2.50%
<b>Users Below 3000 cf</b>	0.00%	8.33%	4.17%
<b>Users Below 3500 cf</b>	1.67%	10.00%	5.83%
<b>Users Below 4000 cf</b>	1.67%	15.00%	8.33%
<b>Users Below 4500 cf</b>	8.33%	15.00%	11.67%
<b>Users Below 5000 cf</b>	10.00%	18.33%	14.17%
<b>Users Below 5500 cf</b>	10.00%	21.67%	15.83%
<b>Users Below 6000 cf</b>	10.00%	21.67%	15.83%
<b>Users Below 6500 cf</b>	10.00%	21.67%	15.83%
<b>Users Below 7000 cf</b>	10.00%	26.67%	18.33%
<b>Users Below 8000 cf</b>	10.00%	28.33%	19.17%
<b>Users Below 9000 cf</b>	13.33%	30.00%	21.67%
<b>Users Below 10000 cf</b>	13.33%	31.67%	22.50%
<b>Users Below 12000 cf</b>	15.00%	36.67%	25.83%
<b>Users Below 15000 cf</b>	16.67%	43.33%	30.00%
<b>Users Below 18000 cf</b>	30.00%	48.33%	39.17%
<b>Users Below 20000 cf</b>	36.67%	53.33%	45.00%
<b>Users Below 24000 cf</b>	50.00%	65.00%	57.50%
<b>Users Below 26000 cf</b>	53.33%	75.00%	64.17%
<b>Users Below 30000 cf</b>	63.33%	86.67%	75.00%
<b>Users Below 40000 cf</b>	91.67%	98.33%	95.00%
<b>Users Below 50000 cf</b>	100.00%	100.00%	100.00%

<b>MULTI FAMILY RESIDENTIAL</b>			
<b>41+ UNITS</b>			
<b>Monthly Base Volume 30000 CF</b>			
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	23871	20550	22211
<b>Meter Readings</b>	91	105	196
<b>Users Below 1200 cf</b>	15.38%	20.00%	17.69%
<b>Users Below 1500 cf</b>	3.81%	22.86%	13.34%
<b>Users Below 2000 cf</b>	15.38%	24.76%	20.07%
<b>Users Below 2500 cf</b>	15.38%	27.62%	21.50%
<b>Users Below 2600 cf</b>	15.38%	27.62%	21.50%
<b>Users Below 2700 cf</b>	15.38%	27.62%	21.50%
<b>Users Below 3000 cf</b>	15.38%	28.57%	21.98%
<b>Users Below 3500 cf</b>	15.38%	29.52%	22.45%
<b>Users Below 4000 cf</b>	16.48%	29.52%	23.00%
<b>Users Below 4500 cf</b>	16.48%	31.43%	23.96%
<b>Users Below 5000 cf</b>	16.48%	31.43%	23.96%
<b>Users Below 5500 cf</b>	18.68%	32.38%	25.53%
<b>Users Below 6000 cf</b>	18.68%	32.38%	25.53%
<b>Users Below 6500 cf</b>	18.68%	32.38%	25.53%
<b>Users Below 7000 cf</b>	18.68%	32.38%	25.53%
<b>Users Below 8000 cf</b>	18.68%	33.33%	26.01%
<b>Users Below 9000 cf</b>	19.78%	34.29%	27.03%
<b>Users Below 10000 cf</b>	20.88%	35.24%	28.06%
<b>Users Below 12000 cf</b>	23.08%	36.19%	29.63%
<b>Users Below 15000 cf</b>	23.08%	37.14%	30.11%
<b>Users Below 18000 cf</b>	27.47%	40.00%	33.74%
<b>Users Below 20000 cf</b>	34.07%	43.81%	38.94%
<b>Users Below 24000 cf</b>	51.65%	58.10%	54.87%
<b>Users Below 26000 cf</b>	58.24%	63.81%	61.03%
<b>Users Below 30000 cf</b>	<b>70.33%</b>	<b>69.52%</b>	<b>69.93%</b>
<b>Users Below 40000 cf</b>	82.42%	86.67%	84.54%
<b>Users Below 50000 cf</b>	97.80%	95.24%	96.52%

	<b>COMMERCIAL</b>		
	<b>Monthly Base Volume 2000 CF</b>		
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	1680	1322	1501
<b>Meter Readings</b>	1295	1337	2632
<b>Users Below 1200 cf</b>	60.23%	68.96%	64.60%
<b>Users Below 1500 cf</b>	66.10%	73.22%	69.66%
<b>Users Below 2000 cf</b>	<b>71.81%</b>	<b>77.41%</b>	<b>74.61%</b>
<b>Users Below 2500 cf</b>	77.14%	82.57%	79.86%
<b>Users Below 2600 cf</b>	77.76%	83.25%	80.50%
<b>Users Below 2700 cf</b>	78.53%	83.92%	81.23%
<b>Users Below 3000 cf</b>	81.00%	85.64%	83.32%
<b>Users Below 3500 cf</b>	84.25%	89.08%	86.66%
<b>Users Below 4000 cf</b>	87.49%	90.88%	89.18%
<b>Users Below 4500 cf</b>	89.50%	92.00%	90.75%
<b>Users Below 5000 cf</b>	91.43%	93.72%	92.57%
<b>Users Below 5500 cf</b>	92.74%	95.29%	94.01%
<b>Users Below 6000 cf</b>	93.82%	96.26%	95.04%
<b>Users Below 6500 cf</b>	94.67%	97.08%	95.88%
<b>Users Below 7000 cf</b>	95.37%	97.91%	96.64%
<b>Users Below 8000 cf</b>	97.14%	98.43%	97.79%
<b>Users Below 9000 cf</b>	98.61%	99.03%	98.82%
<b>Users Below 10000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 12000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 15000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 18000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 20000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 24000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 26000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 30000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 40000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 50000 cf</b>	100.00%	100.00%	100.00%

Examples: Rite Aid, Dollar General, Taco Bell, Omni Family Health, etc

	<b>GENERAL</b>		
	<b>Monthly Base Volume 3000 CF</b>		
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	3269	1755	2512
<b>Meter Readings</b>	366	368	734
<b>Users Below 1200 cf</b>	48.09%	63.86%	55.97%
<b>Users Below 1500 cf</b>	52.46%	65.76%	59.11%
<b>Users Below 2000 cf</b>	56.83%	70.92%	63.88%
<b>Users Below 2500 cf</b>	61.75%	76.36%	69.05%
<b>Users Below 2600 cf</b>	62.57%	76.90%	69.74%
<b>Users Below 2700 cf</b>	63.66%	77.72%	70.69%
<b>Users Below 3000 cf</b>	<b>66.67%</b>	<b>79.08%</b>	<b>72.87%</b>
<b>Users Below 3500 cf</b>	71.04%	81.52%	76.28%
<b>Users Below 4000 cf</b>	74.59%	84.51%	79.55%
<b>Users Below 4500 cf</b>	76.78%	88.32%	82.55%
<b>Users Below 5000 cf</b>	78.42%	91.03%	84.72%
<b>Users Below 5500 cf</b>	80.33%	92.93%	86.63%
<b>Users Below 6000 cf</b>	83.88%	94.84%	89.36%
<b>Users Below 6500 cf</b>	86.34%	95.92%	91.13%
<b>Users Below 7000 cf</b>	88.80%	97.01%	92.90%
<b>Users Below 8000 cf</b>	90.44%	97.01%	93.72%
<b>Users Below 9000 cf</b>	91.80%	97.83%	94.81%
<b>Users Below 10000 cf</b>	92.62%	98.37%	95.50%
<b>Users Below 12000 cf</b>	94.54%	98.91%	96.72%
<b>Users Below 15000 cf</b>	96.45%	99.18%	97.82%
<b>Users Below 18000 cf</b>	97.54%	99.46%	98.50%
<b>Users Below 20000 cf</b>	98.09%	99.46%	98.77%
<b>Users Below 24000 cf</b>	98.91%	100.00%	99.45%
<b>Users Below 26000 cf</b>	99.18%	100.00%	99.59%
<b>Users Below 30000 cf</b>	99.45%	100.00%	99.73%
<b>Users Below 40000 cf</b>	100.00%	100.00%	100.00%
<b>Users Below 50000 cf</b>	100.00%	100.00%	100.00%

Examples: Churches, Kern County Fire Dept., Mosquito Abatement, etc.

	<b>INDUSTRIAL</b>		
	<b>Monthly Base Volume 12000 CF</b>		
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	10254	10505	10380
<b>Meter Readings</b>	91	98	189
<b>Users Below 1200 cf</b>	39.56%	41.84%	40.70%
<b>Users Below 1500 cf</b>	49.45%	46.94%	48.19%
<b>Users Below 2000 cf</b>	54.95%	54.08%	54.51%
<b>Users Below 2500 cf</b>	56.04%	54.08%	55.06%
<b>Users Below 2600 cf</b>	56.04%	54.08%	55.06%
<b>Users Below 2700 cf</b>	56.04%	54.08%	55.06%
<b>Users Below 3000 cf</b>	56.04%	55.10%	55.57%
<b>Users Below 3500 cf</b>	56.04%	57.14%	56.59%
<b>Users Below 4000 cf</b>	61.54%	62.24%	61.89%
<b>Users Below 4500 cf</b>	65.93%	64.29%	65.11%
<b>Users Below 5000 cf</b>	68.13%	64.29%	66.21%
<b>Users Below 5500 cf</b>	69.23%	64.29%	66.76%
<b>Users Below 6000 cf</b>	70.33%	66.33%	68.33%
<b>Users Below 6500 cf</b>	71.43%	67.35%	69.39%
<b>Users Below 7000 cf</b>	71.43%	67.35%	69.39%
<b>Users Below 8000 cf</b>	71.43%	68.37%	69.90%
<b>Users Below 9000 cf</b>	71.43%	69.39%	70.41%
<b>Users Below 10000 cf</b>	71.43%	69.39%	70.41%
<b>Users Below 12000 cf</b>	<b>73.63%</b>	<b>71.43%</b>	<b>72.53%</b>
<b>Users Below 15000 cf</b>	79.12%	74.49%	76.81%
<b>Users Below 18000 cf</b>	81.32%	79.59%	80.46%
<b>Users Below 20000 cf</b>	83.52%	81.63%	82.57%
<b>Users Below 24000 cf</b>	84.62%	82.65%	83.63%
<b>Users Below 26000 cf</b>	85.71%	83.67%	84.69%
<b>Users Below 30000 cf</b>	86.81%	85.71%	86.26%
<b>Users Below 40000 cf</b>	91.21%	91.84%	91.52%
<b>Users Below 50000 cf</b>	95.60%	97.96%	96.78%

Examples: Certis, Sunnygem, Savage, etc.

	<b>INSTITUTIONAL</b>		
	<b>Monthly Base Volume 12000 CF</b>		
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	15041	6089	10565
<b>Meter Readings</b>	187	198	385
<b>Users Below 1200 cf</b>	17.65%	38.89%	28.27%
<b>Users Below 1500 cf</b>	24.60%	44.44%	34.52%
<b>Users Below 2000 cf</b>	27.27%	52.02%	39.65%
<b>Users Below 2500 cf</b>	31.02%	58.08%	44.55%
<b>Users Below 2600 cf</b>	32.62%	59.09%	45.86%
<b>Users Below 2700 cf</b>	32.62%	59.60%	46.11%
<b>Users Below 3000 cf</b>	34.22%	62.63%	48.43%
<b>Users Below 3500 cf</b>	37.43%	66.16%	51.80%
<b>Users Below 4000 cf</b>	38.50%	68.69%	53.59%
<b>Users Below 4500 cf</b>	40.11%	71.72%	55.91%
<b>Users Below 5000 cf</b>	42.78%	73.74%	58.26%
<b>Users Below 5500 cf</b>	44.92%	74.24%	59.58%
<b>Users Below 6000 cf</b>	46.52%	77.27%	61.90%
<b>Users Below 6500 cf</b>	49.73%	77.78%	63.76%
<b>Users Below 7000 cf</b>	51.34%	78.28%	64.81%
<b>Users Below 8000 cf</b>	54.01%	80.30%	67.16%
<b>Users Below 9000 cf</b>	55.61%	81.82%	68.72%
<b>Users Below 10000 cf</b>	57.22%	83.33%	70.28%
<b>Users Below 12000 cf</b>	<b>60.43%</b>	<b>85.86%</b>	<b>73.14%</b>
<b>Users Below 15000 cf</b>	66.31%	87.88%	77.09%
<b>Users Below 18000 cf</b>	72.73%	89.90%	81.31%
<b>Users Below 20000 cf</b>	74.33%	90.91%	82.62%
<b>Users Below 24000 cf</b>	79.14%	94.95%	87.05%
<b>Users Below 26000 cf</b>	82.35%	94.95%	88.65%
<b>Users Below 30000 cf</b>	84.49%	95.45%	89.97%
<b>Users Below 40000 cf</b>	89.84%	97.47%	93.66%
<b>Users Below 50000 cf</b>	91.98%	97.47%	94.73%

Examples: schools

	<b>IRRIGATION</b>		
	<b>Monthly Base Volume 8000 CF</b>		
	<b>MAY-OCT</b>	<b>NOV - APRIL</b>	<b>ANNUAL</b>
<b>Monthly Mean Usage (cf)</b>	11015	4449	7732
<b>Meter Readings</b>	443	448	891
<b>Users Below 1200 cf</b>	21.67%	56.25%	38.96%
<b>Users Below 1500 cf</b>	25.06%	58.26%	41.66%
<b>Users Below 2000 cf</b>	28.67%	61.83%	45.25%
<b>Users Below 2500 cf</b>	34.09%	65.63%	49.86%
<b>Users Below 2600 cf</b>	35.44%	66.29%	50.87%
<b>Users Below 2700 cf</b>	35.89%	67.19%	51.54%
<b>Users Below 3000 cf</b>	37.92%	69.42%	53.67%
<b>Users Below 3500 cf</b>	41.99%	71.21%	56.60%
<b>Users Below 4000 cf</b>	46.28%	72.77%	59.52%
<b>Users Below 4500 cf</b>	49.44%	74.78%	62.11%
<b>Users Below 5000 cf</b>	51.47%	76.34%	63.90%
<b>Users Below 5500 cf</b>	53.72%	78.13%	65.92%
<b>Users Below 6000 cf</b>	56.21%	78.35%	67.28%
<b>Users Below 6500 cf</b>	59.82%	79.69%	69.75%
<b>Users Below 7000 cf</b>	61.85%	81.47%	71.66%
<b>Users Below 8000 cf</b>	<b>67.04%</b>	<b>83.26%</b>	<b>75.15%</b>
<b>Users Below 9000 cf</b>	68.85%	84.82%	76.84%
<b>Users Below 10000 cf</b>	70.20%	85.94%	78.07%
<b>Users Below 12000 cf</b>	73.59%	88.39%	80.99%
<b>Users Below 15000 cf</b>	76.98%	91.07%	84.02%
<b>Users Below 18000 cf</b>	81.26%	93.30%	87.28%
<b>Users Below 20000 cf</b>	82.84%	94.42%	88.63%
<b>Users Below 24000 cf</b>	85.55%	95.76%	90.66%
<b>Users Below 26000 cf</b>	87.13%	96.43%	91.78%
<b>Users Below 30000 cf</b>	89.39%	97.54%	93.47%
<b>Users Below 40000 cf</b>	91.65%	98.21%	94.93%
<b>Users Below 50000 cf</b>	95.94%	99.11%	97.52%

Examples: Irrigation for Parks & Rec., City, apartments, schools, etc.