

Western Hills Water District

Water Rate Update

Town Hall Meeting
September 27, 2015

HF&H Consultants, LLC



Agenda

- Purpose of the meeting
- Study Process & Background
- Revenue Requirements
- Cost of Service Analysis
- Rate Adjustment Alternatives
- Bill Comparisons (current vs proposed rates)
- Summary
- Questions & Discussion

Purpose of the Meeting

- Inform rate payers of the current rate study
- Present preliminary analysis to facilitate brainstorming
 - Present a range of hypothetical examples
 - Incorporate industry standards
 - Focus on refinements that look forward
- Elicit input from rate payers
- Meeting duration – 90 minutes

Study Process

- Kickoff meeting – October 6, 2014
 - Preliminary analysis: Revenue requirements, cost of service analysis, rate design
- Town Hall meeting – May 20, 2015
 - Discuss preliminary analysis
 - Receive public input
 - Develop alternative rates based on public feedback
- 2nd Town Hall meeting – September 27, 2015
 - Discuss revised analysis
 - Receive public input
- Board Workshop
 - Present report
 - Board authorizes mailing notices to rate payers
- Protest Hearing
 - Board adopts rates if no majority protest

Background

- Ad Hoc Water Committee completed review of usage and cost data – February 2011
- District adopted water rate increases – June 2011

	FY 11-12	FY 12-13	FY 13-14	FY 14-15**
Treated – Residential				
Service charge	\$51.67	\$68.34	\$85.00	\$87.55
Usage charge \$/HCF*	\$1.25	\$1.25	\$1.25	\$1.29
Treated – Commercial				
Usage charge \$/HCF*	\$1.65	\$3.30	\$4.95	\$5.10
Raw Water				
Usage charge \$/AF*	\$1,075.00	\$1,275.00	\$1,475.00	\$1,519.25

- HCF = hundred cubic feet = 748 gallons, also referred to as CCF
- AF = 435.6 HCF
- ** 3% CPI increase over FY 13-14



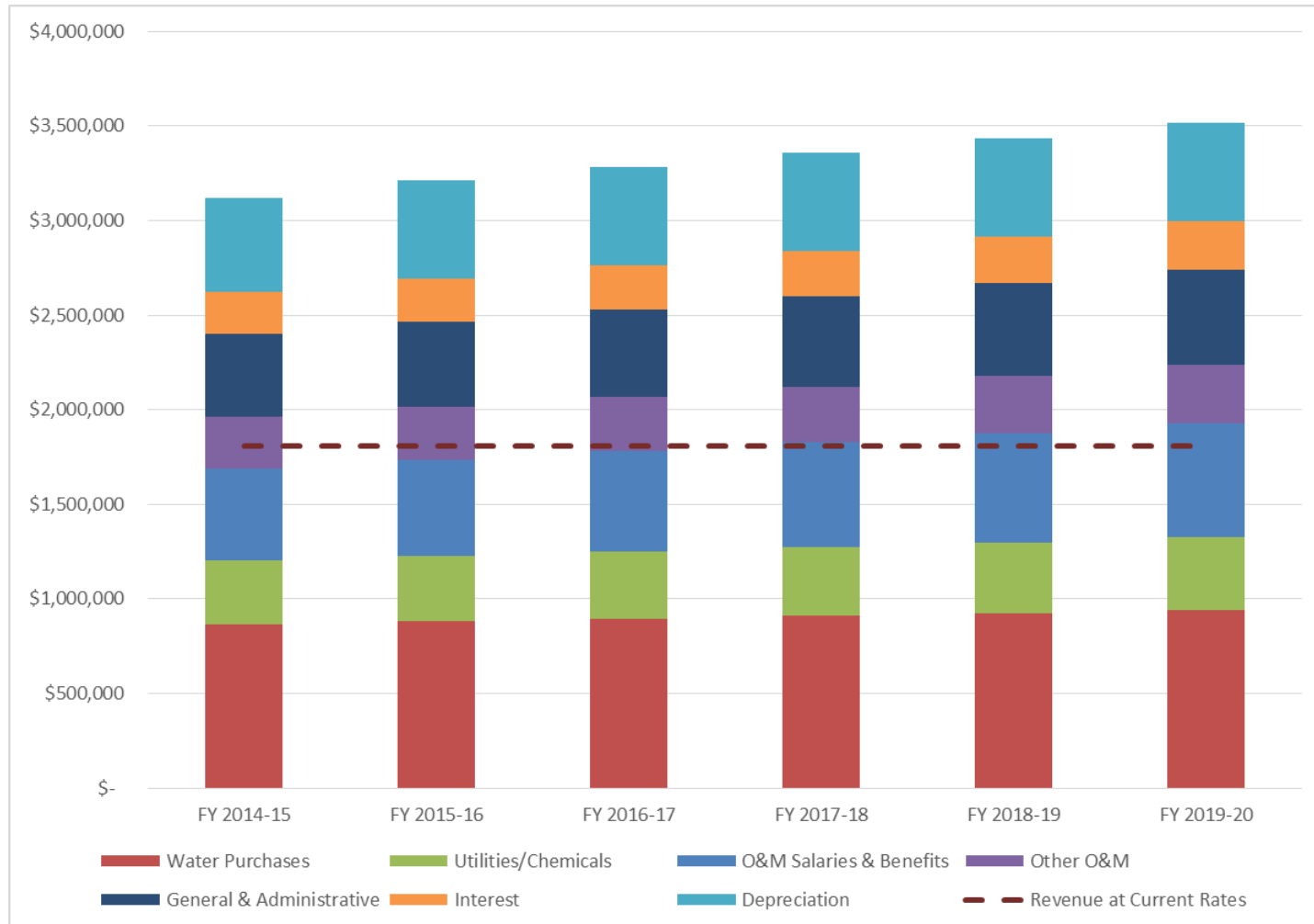
Current Rate Structure

Rate Structure	Service Charge		Usage Charge	
	Per Month	% of Revenue	Per ccf/mo.	% of Revenue
Treated Water				
Residential	\$87.55	80%	\$1.29	20%
HOA	\$0.00	0%	\$5.10	100%
Non-residential	\$0.00	0%	\$5.10	100%
Combined		76%		24%
Raw Water	\$0.00	0%	\$3.49	100%
			= \$1,519.25/AF	

Observations:

- Industry standard: revenue from service charges should be ~30%.
- Industry standard: all services should pay service charges.
- Industry standard: service charges should be proportionate to size of connection.
- Current rates do not allow for contributions to operating or capital reserves
- **Current revenue < cost of service.**

Projected Revenue Requirements



Cost of Service Analysis

- Total Revenue Requirement allocated to customers classes based on their proportionate share of costs.
- For example:
 - Water treatment costs allocated to residential and non-residential customer classes based on their percentage share of water used
 - Raw water customers are not allocated any water treatment costs
 - Pump station costs are allocated based on each customer classes share of water used (including raw water customers)

Cost of Service Allocation Summary

Customer Class	FY2015-16 Cost of Service	Estimated Revenue at Current Rates	Revenue Surplus/(Shortfall)	
			\$	% of Current Rev
Treated Water				
Residential	\$1,503,209	\$579,245	(\$923,964)	160%
Non-Residential	\$294,478	\$26,221	(\$268,257)	1023%
	\$1,797,687	\$605,466	(\$1,192,221)	197%
Raw Water	\$1,415,355	\$1,202,113	(\$213,242)	18%
Total	\$3,213,042	\$1,807,579	(\$1,405,463)	78%

Current annual shortfall covered by Developer

Breakout of Residential \$924k Revenue Shortfall

Customer Class	Allocate Resi COS		FY2015-16 Cost of Service	Estimated Revenue at Current Rates	Revenue Surplus/(Shortfall)	
	# of Customers	% of Customers			\$	% of Current Rev
Treated Water Cost of Service - Residential			\$1,503,209			
Current Residents	437	54.6%	\$820,752	\$579,245	(\$241,507)	41.7%
Residential Growth	363	45.4%	\$682,457	\$0	(\$682,457)	
	800		\$1,503,209	\$579,245	(\$923,964)	159.5%



Bridging the \$240k Gap

- Alternatives include:
 - Timing of revenue increases
 - Immediate or over 3-year period
 - Reserve contributions over next 5 years
 - 45-day (six week) operating reserve
 - 5-year annual average for capital projects
 - \$46,000 annually for operations and capital
 - Capital reserves for existing infrastructure only; not for growth-related capital expenses

Bridging the \$240k Gap

- Alternatives include:
 - Developer continues to contribute revenue so that current residents are not covering the costs of future customers
 - Rate restructuring that shifts revenue from the fixed service charge to the usage charges
 - Reduce fixed revenue from 80% to 40%
 - Increase usage revenue from 20% to 60%
 - Improves balance between rate payer equity and revenue stability

Summary of Rate Increase Alternatives

	A. Immediate Rate Increase	B. 3 Annual Rate Increases	Increased Revenue By Year 3
Alt. 1 – No Reserve Contribution	41.7%	14.0% per year	\$242,000
Incremental Increase For Reserves	8.0%	2.0% per year	\$46,000
Alt. 2 – With Reserve Contribution	49.7%	16.0% per year	\$288,000



Alternatives 1A and 1B – No Contribution to Reserves

1	Revenue Shortfall Calculation	
2	FY2015-16 Cost of Service (COS) - Water	\$3,213,042
3	Less: Commercial & Raw Water Customer COS	<u>(\$1,709,833)</u>
4	FY2015-16 Residential Customer COS	\$1,503,209
5	Less: Growth/Developer Cost Allocation: 45.4%	<u>(\$682,457)</u>
6	FY2015-16 Current Residents' COS: 54.6%	\$820,752
7		
8		
9	Current Residential Revenue at Current Rates	\$579,245
10	Less: Current Residents' COS	<u>(\$820,752)</u>
11	Current Residents' Surplus/(Shortfall)	<u>(\$241,507)</u>
12	Rate Increase Needed (one-time increase)	41.7%
13	3-year Phase-in (per year)	14.0%
14		
15	Contribution to Reserves (over 3yr-period)	none
16		
17	<u>Annual</u> Developer/Growth Contribution <u>WITH</u> Rate Increase	\$682,457
18	<u>Additional</u> Developer Contribution	
19	if 3-year Phase-in is selected	\$246,827

Alternatives 2A and 2B – With Contributions to Reserves

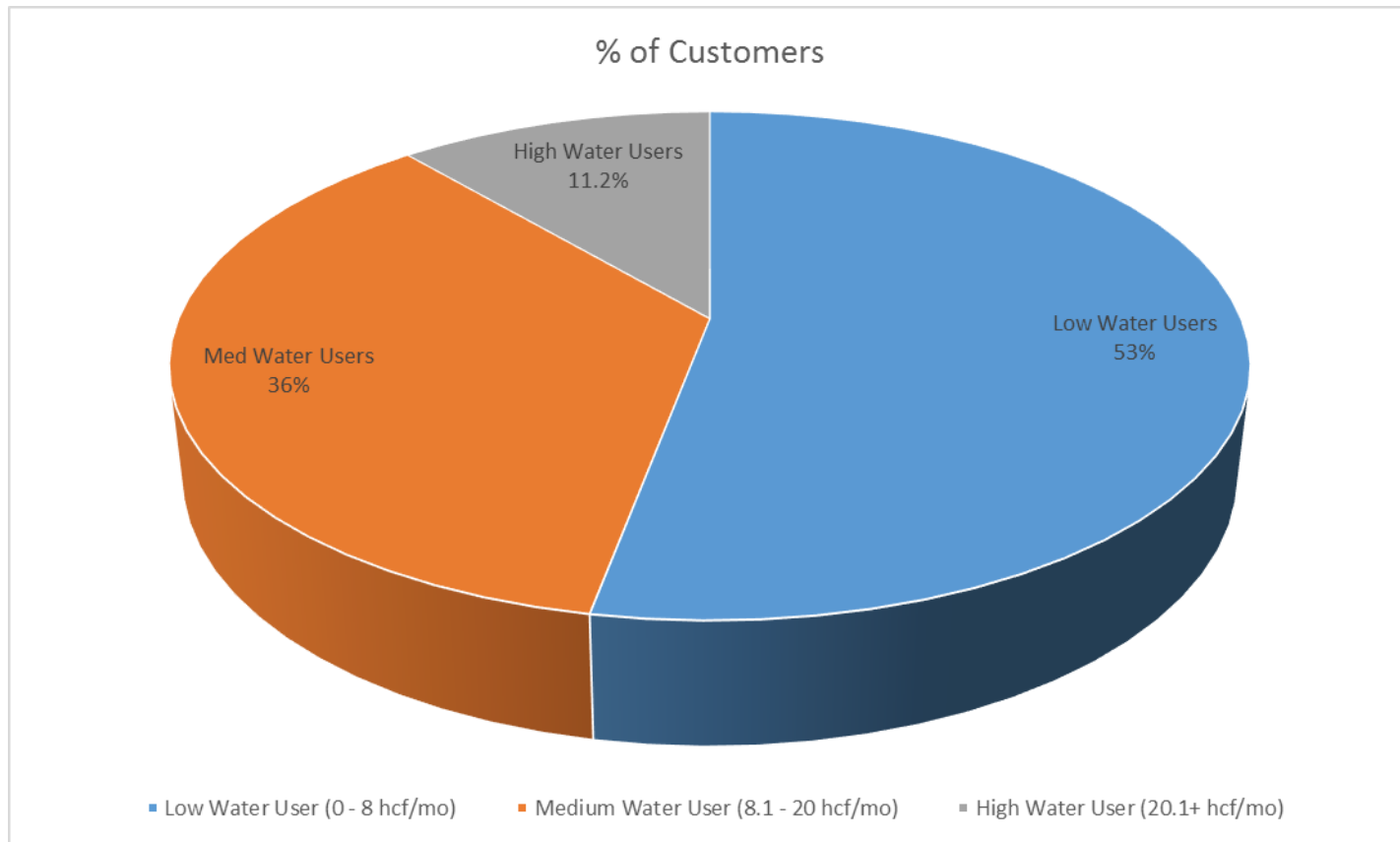
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2	FY2015-16 Cost of Service (COS) - Water	\$3,213,042
3	Less: Commercial & Raw Water Customer COS	<u>(\$1,709,833)</u>
4	FY2015-16 Residential Customer COS	\$1,503,209
5	Less: Growth/Developer Cost Allocation: 45.4%	<u>(\$682,457)</u>
6	FY2015-16 Current Residents' COS: 54.6%	\$820,752
7	Plus: Operating Reserve Contribution	\$17,315
8	Plus: Capital Reserve Contribution	\$29,199
9	Adj. FY2015-16 Current Residents' COS	\$867,266
10		
11		
12	Current Residential Revenue at Current Rates	\$579,245
13	Less: Current Residents' COS	<u>(\$867,266)</u>
14	Current Residents' Surplus/(Shortfall)	<u>(\$288,021)</u>
15	Rate Increase Needed	49.7%
16	3-year Phase-in (per year)	16.0%
17		
18	Contribution to Reserves (over 3yr-period)	\$139,541
19		
20	Annual Developer Contribution (no phase-in)	\$682,457
21	Additional Developer Contribution	
22	if 3-year Phase-in is selected	\$301,146

**\$46k annual
contribution
to reserves**

Rate Structure Changes

- Fixed charge is reduced from \$87.55 to \$62.00 per month in all alternatives in year 1 and is unchanged for all three years
- Usage rate increases
 - Two alternatives
 1. Immediate increase in year 1 with inflationary increases in years 2 and 3
 2. Gradual annual increases over three years
 - By year 3, usage rates are the same
- Funding reserves adds \$0.69/hcf to the usage rates

Customer Summary



Alternative 1A - Rates and Sample Bills

- No contribution to reserves
- Reduced fixed service charge in first year
- Immediate usage rate increase

	A	B	C	D	E
1	Alternative 1A: No Phase-in				
2	Rates	Current	FY2015-16	FY2016-17	FY2017-18
3	Fixed Charge (\$/Month)	\$87.55	\$62.00	\$62.00	\$62.00
4	Usage Chareg (\$/hcf)	\$1.29	\$6.73	\$6.99	\$7.26
5	Usage Charge (\$/gal)	\$0.00172	\$0.00897	\$0.00932	\$0.00968
6					
7	Sample Bill Impacts (monthly)	Current	FY2015-16	FY2016-17	FY2017-18
8	Low Water User - 4,500 gal./mo.				
9	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
10	Usage Charge	\$7.74	\$40.38	\$41.94	\$43.56
11	Total Monthly Water Bill	\$95.29	\$102.38	\$103.94	\$105.56
12	\$ incr		\$7.09	\$1.56	\$1.62
13	% incr		7.4%	1.5%	1.6%
14					
15	Med. Water User - 9,750 gal./mo.				
16	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
17	Usage Charge	\$16.77	\$87.49	\$90.87	\$94.38
18	Total Monthly Water Bill	\$104.32	\$149.49	\$152.87	\$156.38
19	\$ incr		\$45.17	\$3.38	\$3.51
20	% incr		43.3%	2.3%	2.3%
21					
22	High Water User - 22,500 gal./mo.				
23	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
24	Usage Charge	\$38.70	\$201.90	\$209.70	\$217.80
25	Total Monthly Water Bill	\$126.25	\$263.90	\$271.70	\$279.80
26	\$ incr		\$137.65	\$7.80	\$8.10
27	% incr		109.0%	3.0%	3.0%
28					

Alternative 1A - Rates and Sample Bills

- First Year Bill Impacts
- CPI increases thereafter

Range of Usage (monthly)		Est. # of Customers	% of bills	Cumulative % of bills	Bill Impact (monthly)			
hcf/mo	gallons per month				\$ Impact		% Impact	
0 to 4	0 to 3,000	94	21.6%	21.6%	(\$3.79) to (\$25.01)	-4.1%	to	-28.5%
4.1 to 8	3,001 to 6,000	137	31.4%	53.0%	(\$3.25) to \$17.97	-3.5%	to	18.4%
8.1 to 12	6,001 to 9,000	80	18.3%	71.3%	\$18.51 to \$39.73	18.9%	to	38.6%
12.1 to 20	9,001 to 15,000	76	17.5%	88.8%	\$40.82 to \$81.62	39.5%	to	72.3%
20.1 to 30	15,001 to 22,500	28	6.5%	95.3%	\$84.34 to \$134.39	74.2%	to	107.1%
30.1 to 40	22,501 to 30,000	12	2.7%	97.9%	\$138.19 to \$181.71	109.3%	to	132.9%
40.1 to 60	30,001 to 45,000	9	2.1%	100.0%	\$231.22 to \$286.71	155.8%	to	177.4%
		437	100.0%					

Alternative 1B - Rates and Sample Bills

- No contribution to reserves
- Reduced fixed service charge in first year
- Usage rate increase phased in over 3 years

	A	B	C	D	E
1	Alternative 1B: 3-Year Phase-in				
2	Rates	Current	FY2015-16	FY2016-17	FY2017-18
3	Fixed Charge (\$/Month)	\$87.55	\$62.00	\$62.00	\$62.00
4	Usage Charge (\$/hcf)	\$1.29	\$4.46	\$5.77	\$7.26
5	Usage Charge (\$/gal)	\$0.00172	\$0.00595	\$0.00769	\$0.00968
6					
7	Sample Bill Impacts (monthly)	Current	FY2015-16	FY2016-17	FY2017-18
8	Low Water User - 4,500 gal./mo.				
9	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
10	Usage Charge	\$7.74	\$26.76	\$34.62	\$43.56
11	Total Monthly Water Bill	\$95.29	\$88.76	\$96.62	\$105.56
12	\$ incr		(\$6.53)	\$7.86	\$8.94
13	% incr		-6.9%	8.9%	9.3%
14					
15	Med. Water User - 9,750 gal./mo.				
16	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
17	Usage Charge	\$16.77	\$57.98	\$75.01	\$94.38
18	Total Monthly Water Bill	\$104.32	\$119.98	\$137.01	\$156.38
19	\$ incr		\$15.66	\$17.03	\$19.37
20	% incr		15.0%	14.2%	14.1%
21					
22	High Water User - 22,500 gal./mo.				
23	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
24	Usage Charge	\$38.70	\$133.80	\$173.10	\$217.80
25	Total Monthly Water Bill	\$126.25	\$195.80	\$235.10	\$279.80
26	\$ incr		\$69.55	\$39.30	\$44.70
27	% incr		55.1%	20.1%	19.0%
28					

Alternatives 2A - Rates and Sample Bills

- With contribution to reserves
- Reduced fixed monthly charge in first year
- Immediate usage rate increase

	A	B	C	D	E
1	Alternative 2A: No Phase-in w/ Contribution to Reserves				
2	Rates	Current	FY2015-16	FY2016-17	FY2017-18
3	Fixed Charge (\$/Month)	\$87.55	\$62.00	\$62.00	\$62.00
4	Usage Chareg (\$/hcf)	\$1.29	\$7.39	\$7.65	\$7.92
5	Usage Charge (\$/gal)	\$0.00172	\$0.00985	\$0.01020	\$0.01056
6					
7	Sample Bill Impacts (monthly)	Current	FY2015-16	FY2016-17	FY2017-18
8	Low Water User - 4,500 gal./mo.				
9	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
10	Usage Charge	\$7.74	\$44.34	\$45.90	\$47.52
11	Total Monthly Water Bill	\$95.29	\$106.34	\$107.90	\$109.52
12	\$ incr		\$11.05	\$1.56	\$1.62
13	% incr		11.6%	1.5%	1.5%
14					
15	Med. Water User - 9,750 gal./mo.				
16	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
17	Usage Charge	\$16.77	\$96.07	\$99.45	\$102.96
18	Total Monthly Water Bill	\$104.32	\$158.07	\$161.45	\$164.96
19	\$ incr		\$53.75	\$3.38	\$3.51
20	% incr		51.5%	2.1%	2.2%
21					
22	High Water User - 22,500 gal./mo.				
23	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
24	Usage Charge	\$38.70	\$221.70	\$229.50	\$237.60
25	Total Monthly Water Bill	\$126.25	\$283.70	\$291.50	\$299.60
26	\$ incr		\$157.45	\$7.80	\$8.10
27	% incr		124.7%	2.7%	2.8%
28					

Alternatives 2B – Rates and Sample Bills

- With contribution to reserves
- Reduced fixed monthly charge in first year
- Usage rate increases phased in over 3 years

	A	B	C	D	E
1	Alternative 2B: 3-Year Phase-in w/Contribution to Reserves				
2	Rates	Current	FY2015-16	FY2016-17	FY2017-18
3	Fixed Charge (\$/Month)	\$87.55	\$62.00	\$62.00	\$62.00
4	Usage Chareg (\$/hcf)	\$1.29	\$4.63	\$6.15	\$7.92
5	Usage Charge (\$/gal)	\$0.00172	\$0.00617	\$0.00820	\$0.01056
6					
7	Sample Bill Impacts (monthly)	Current	FY2015-16	FY2016-17	FY2017-18
8	Low Water User - 4,500 gal./mo.				
9	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
10	Usage Charge	\$7.74	\$27.78	\$36.90	\$47.52
11	Total Monthly Water Bill	\$95.29	\$89.78	\$98.90	\$109.52
12	\$ incr		(\$5.51)	\$9.12	\$10.62
13	% incr		-5.8%	10.2%	10.7%
14					
15	Med. Water User - 9,750 gal./mo.				
16	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
17	Usage Charge	\$16.77	\$60.19	\$79.95	\$102.96
18	Total Monthly Water Bill	\$104.32	\$122.19	\$141.95	\$164.96
19	\$ incr		\$17.87	\$19.76	\$23.01
20	% incr		17.1%	16.2%	16.2%
21					
22	High Water User - 22,500 gal./mo.				
23	Fixed Charge	\$87.55	\$62.00	\$62.00	\$62.00
24	Usage Charge	\$38.70	\$138.90	\$184.50	\$237.60
25	Total Monthly Water Bill	\$126.25	\$200.90	\$246.50	\$299.60
26	\$ incr		\$74.65	\$45.60	\$53.10
27	% incr		59.1%	22.7%	21.5%
28					

Summary

- Current rate revenue is less than the cost of service.
- Current rate structure does not reflect industry standards.
 - Service and usage charges could be aligned closer to cost structure
- Rate structure modifications can be gradually made in conjunction with rate increases.
- Proposed rates will be developed that reflect input from rate payers and staff.
 - Presentation to Board will provide next opportunity for public input

QUESTIONS & DISCUSSION

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