



Austin Water Utility

Joint Committee on AWU's Financial Plan

October 16, 2014

Agenda

- Background
- Goals
- Communication of rate increases to public
- Data Analysis – residential block consumption and revenue
- Rate option review
- Recommendations

Background

- Approved Budget 2015
 - \$30M decrease in total requirements from 2014
 - Significant reductions in transfers to general fund
 - Rates approved as recommended by JC
- Council discussion
 - Residential water rate discussion at adoption
 - Approved rates consistent with JC recommendations
 - Asked us to reconvene JC to discuss the rate options and provide any recommendations for possible change to approved rates

Background

- Bill Comparison Issue
 - Forecast and proposed budget bill impacts
 - Water & Wastewater Commission input
 - Media articles
 - Budget info pamphlet
- November Bill Stuffer
 - Joint Committee input

Joint Committee Goals

- Public communication of rate increase
- Committee question responses
- Data request review – consumption & revenue by residential rate block
- November bill stuffer review and input
- Rate option review
- Recommendations

Communication of Rate Increases to Public

Bill Insert Review

- October bill insert
- November bill insert
 - Rate increase
 - Bill comparison issue
 - Commission input

Committee Questions and Responses

Data Request

Historical Consumption & Revenue by Residential Rate Block

Analysis

- Consumption
 - Peak consumption in 2011 – extremely dry year
 - Block 4 and 5 have decreased by 60% and 68%, respectively since 2011
 - Blocks 2-5 are below 2010 significant wet year levels
- Revenue
 - Revenue includes volumetric rate increases
 - Blocks 1-2 revenue have increased since 2011
 - Blocks 3-5 revenue have decreased since 2011

Rate Design Options

Rate Design Option Summary

Option #1: Approved 2015 Rates

- Based on 2012 and 2014 JC recommendations

Option #2: CM Tovo Option

- Increase spread of volumetric rates

Option #3: AWU Alternative

- Higher tiered fee spread in 2015

Option #4: Higher Blocks 4-5

- Double rates in blocks 4 and 5

Option #5: Fixed Revenue at 22.5% and Higher Tiered Fee Spread

- 2016 JC recommendations

Option #6: Fixed Revenue at 22.5% only

- Increase to fixed revenue

Rate Design Options

Option #1: Approved 2015 Rates

Rate Design – Option #1

- Assumptions
 - Council Approved 2015 Water Rates
 - Based on Joint Committee 2012 and 2014 recommendations
 - Overall fixed revenue at 20%
 - Slight increase to the meter based minimum charge
 - Spread between blocks 1 and 5 for the tiered minimum fee and volume rates maintained

Option #1: Residential Rates

Meter Equivalent Minimum Charge

Meter Size	Existing Minimum Charge	Approved Option #1 Minimum Charge
5/8"	\$7.10	\$7.55
3/4"	\$11.00	\$13.00
1"	\$14.00	\$14.00
1 1/2"	\$23.00	\$23.00
2"	\$36.00	\$36.00
4"	\$114.00	\$118.00
6"	\$231.00	\$238.00
10"	\$946.00	\$1,036.00

Meter Minimum Charge

- Small change to the 5/8" meter minimum charge

Tiered Minimum Charge

- Maintain spread between blocks 1 and 5 to about \$10.50

Tiered Minimum Charge

Tier	Gallons	Existing	Approved Option #1
Tier 1	0 – 2,000	\$2.00	\$2.20
Tier 2	2,001 – 6,000	\$4.50	\$4.70
Tier 3	6,001 – 11,000	\$7.45	\$7.65
Tier 4	11,001 – 20,000	\$12.55	\$12.70
Tier 5	20,001 - over	\$12.55	\$12.70

Option #1: Residential Rates

Volumetric Rates (\$/1,000 Gals.)			
Block	Gallons	Existing	Approved Option #1
Tier 1	0 – 2,000	\$1.84	\$2.93
Tier 2	2,001 – 6,000	\$3.39	\$4.49
Tier 3	6,001 – 11,000	\$6.20	\$7.29
Tier 4	11,001 – 20,000	\$9.95	\$11.03
Tier 5	20,001 - over	\$12.84	\$13.93

Volumetric Rates

- Approximately \$1.09 increase to all blocks
- Maintain \$11.00 spread between blocks 1 and 5

Option #1: Residential Water Bill Impacts

<u>Monthly Usage Gallons 5/8" Meter</u>	<u>Existing Bills 2014</u>	<u>Approved Bills 2015</u>	<u>\$ Variance</u>	<u>% Variance</u>	<u>% of Average COS Rate</u>
0	\$ 9.10	\$ 9.75	\$ 0.65	7.1%	
1,000	11.09	12.87	1.78	16.1%	-16.7%
2,000	13.08	15.99	2.91	22.2%	-24.3%
5,000	26.20	32.53	6.33	24.2%	-20.1%
6,000	29.74	37.21	7.47	25.1%	-19.8%
7,000 Avg Cust. (1)	38.35	46.95	8.60	22.4%	-14.7%
9,000	51.74	62.60	10.86	21.0%	-5.8%
15,000	109.94	127.49	17.55	16.0%	20.7%
25,000	225.39	254.19	28.80	12.8%	56.4%
30,000	290.34	324.79	34.45	11.9%	70.1%
60,000	680.04	748.39	68.35	10.1%	106.9%

(1) Annualized monthly bills.

Option #1: Residential CAP Customers Water Bill Impacts

Monthly Usage Gallons 5/8" Meter	Existing Bills 2014	Approved Bills 2015	\$ Variance	% Variance	CAP Bill Discount
0	\$ -	\$ -	\$ -	0.0%	-100.0%
1,000	1.60	2.54	0.94	58.8%	-80.3%
2,000	3.20	5.08	1.88	58.8%	-68.2%
5,000	11.75	16.42	4.67	39.7%	-49.5%
6,000	14.60	20.20	5.60	38.4%	-45.7%
7,000 Avg Cust. (1)	18.37	24.59	6.22	33.9%	-47.6%
9,000	28.10	36.43	8.33	29.6%	-41.8%
15,000	69.50	83.37	13.87	20.0%	-34.6%
25,000	175.70	200.07	24.37	13.9%	-21.3%
30,000	241.40	271.62	30.22	12.5%	-16.4%
60,000	635.60	700.92	65.32	10.3%	-6.3%

(1) Annualized monthly bills.

Option #1: Fixed Revenue

Percentage fixed revenue by class

Class	Existing	Approved Option #1
Residential	27.0%	26.7%
Multifamily	17.3%	17.8%
Commercial	15.9%	16.8%
Large Volume	11.5%	11.6%
Wholesale	11.0%	11.1%
Overall	20.3%	20.4%

Option #1: Volatility Measure

- Volatility Measure: Description
 - Volatility measure compares the calculated revenue losses using the consumption reductions experienced in 2010 and using the existing rates versus the proposed option rates
 - Positive variance equals less volatility and lower potential revenue losses with proposed option rates
 - Negative variance equals more volatility and higher potential revenue losses with proposed option rates
- Base Option Results: Positive \$3.25 Million

Option #1

- Impacts / Benefits / Concerns
 - Consistent with Joint Committee recommendations
 - Significant bill impacts to average residential customer of \$8.60 or 22.4%
 - Significant bill impacts to 2,000 gallon residential customer of \$2.91 or 22.2%
 - Positive \$3.25 million volatility measure

Rate Design Options

Option #2: Council Member Tovo Option

Rate Design – Option #2

- Assumptions
 - Council Member Tovo request to increase rates at equal percentage by block instead of equal dollar
 - Overall fixed revenue at 20%
 - Spread between blocks 1 and 5 for the tiered minimum fee increased slightly to \$11.05
 - Spread between blocks 1 and 5 for the volumetric rates increased significantly to \$14.34

Option #2: Residential Rates

Meter Equivalent Minimum Charge

Meter Size	Existing Minimum Charge	Alternative Option #2 Minimum Charge
5/8"	\$7.10	\$7.55
3/4"	\$11.00	\$13.00
1"	\$14.00	\$14.00
1 1/2"	\$23.00	\$23.00
2"	\$36.00	\$36.00
4"	\$114.00	\$118.00
6"	\$231.00	\$238.00
10"	\$946.00	\$1,036.00

Meter Minimum Charge

- Small change to the 5/8" meter minimum charge

Tiered Minimum Charge

- Spread between blocks 1 and 5 to \$11.05

Tiered Minimum Charge

Tier	Gallons	Existing	Alternative Option #2
Tier 1	0 – 2,000	\$2.00	\$2.10
Tier 2	2,001 – 6,000	\$4.50	\$4.70
Tier 3	6,001 – 11,000	\$7.45	\$7.80
Tier 4	11,001 – 20,000	\$12.55	\$13.15
Tier 5	20,001 - over	\$12.55	\$13.15

Option #2: Residential Rates

Volumetric Rates (\$/1,000 Gals.)			
Block	Gallons	Existing	Alternative Option #2
Tier 1	0 – 2,000	\$1.84	\$2.25
Tier 2	2,001 – 6,000	\$3.39	\$4.20
Tier 3	6,001 – 11,000	\$6.20	\$7.65
Tier 4	11,001 – 20,000	\$9.95	\$12.91
Tier 5	20,001 - over	\$12.84	\$16.59

Volumetric Rates

- Approximately 22% to 29% increase to all blocks
- Spread between blocks 1 and 5 increased to \$14.34



Option #2: Residential Water Bill Impacts

Monthly Usage Gallons 5/8" Meter	Existing Bills 2014	Option #2 Bills 2015	\$ Variance	% Variance	% of Average COS Rate
0	\$ 9.10	\$ 9.65	\$ 0.55	6.0%	
1,000	11.09	12.09	1.00	9.0%	-21.6%
2,000	13.08	14.53	1.45	11.1%	-31.5%
5,000	26.20	30.30	4.10	15.6%	-26.3%
6,000	29.74	34.69	4.95	16.6%	-26.0%
7,000 Avg Cust. (1)	38.35	45.00	6.65	17.3%	-19.3%
9,000	51.74	61.31	9.57	18.5%	-9.0%
15,000	109.94	134.74	24.80	22.6%	25.5%
25,000	225.39	284.14	58.75	26.1%	72.1%
30,000	290.34	368.04	77.70	26.8%	89.7%
60,000	680.04	871.44	191.40	28.1%	137.3%

(1) Annualized monthly bills.

Option #2: Residential CAP Customers Water Bill Impacts

<u>Monthly Usage Gallons 5/8" Meter</u>	<u>Existing Bills 2014</u>	<u>Option #2 Bills 2015</u>	<u>\$ Variance</u>	<u>% Variance</u>	<u>CAP Bill Discount</u>
0	\$ -	\$ -	\$ -	0.0%	-100.0%
1,000	1.60	2.54	0.94	58.8%	-79.0%
2,000	3.20	5.08	1.88	58.8%	-65.0%
5,000	11.75	16.42	4.67	39.7%	-45.8%
6,000	14.60	20.20	5.60	38.4%	-41.8%
7,000 Avg Cust. (1)	18.37	24.59	6.22	33.9%	-45.4%
9,000	28.10	36.43	8.33	29.6%	-40.6%
15,000	69.50	83.37	13.87	20.0%	-38.1%
25,000	175.70	213.37	37.67	21.4%	-24.9%
30,000	241.40	298.22	56.82	23.5%	-19.0%
60,000	635.60	807.32	171.72	27.0%	-7.4%

(1) Annualized monthly bills.

Option #2: Fixed Revenue

Percentage fixed revenue by class

Class	Existing	Alternative Option #2
Residential	27.0%	26.5%
Multifamily	17.3%	17.8%
Commercial	15.9%	16.8%
Large Volume	11.5%	11.4%
Wholesale	11.0%	11.1%
Overall	20.3%	20.4%

Option #2: Volatility Measure

- Volatility Measure: Description
 - Volatility measure compares the calculated revenue losses using the consumption reductions experienced in 2010 and using the existing rates versus the proposed option rates
 - Positive variance equals less volatility and lower potential revenue losses with proposed option rates
 - Negative variance equals more volatility and higher potential revenue losses with proposed option rates
- Base Option Results: Positive \$4.01 Million

Option #2

- Impacts / Benefits / Concerns
 - Not consistent with Joint Committee recommendations from 2012 and 2014
 - Reduced bill impacts to 2,000 gallon customer to \$1.45 or 11.1%
 - Reduced bill impacts to average residential customer of \$6.65 or 17.3%
 - Multiple years of using percentage increase in all blocks will result in a much higher spread in volume block rates and more volatility
 - \$4.01 million decrease in volatility for 2015

Rate Design Options

Option #3: Austin Water Alternative
Higher Tiered Fee Spread

Rate Design – Option #3

- Assumptions
 - Consistent with Joint Committee recommendations for future changes in tiered minimum charge
 - Overall fixed revenue at 20% in 2015
 - No increase to the meter based minimum charge for 5/8” meters
 - Spread between blocks 1 and 5 for the tiered minimum fee increased from \$10.50 to \$22.70, with reductions to blocks 1-3 and increases to 4-5
 - Spread between blocks 1 and 5 for the volume rates maintained at \$11.00

Option #3: Residential Rates

Meter Equivalent Minimum Charge

Meter Size	Existing Minimum Charge	Alternative Option #3 Minimum Charge
5/8"	\$7.10	\$7.10
3/4"	\$11.00	\$13.00
1"	\$14.00	\$14.00
1 1/2"	\$23.00	\$23.00
2"	\$36.00	\$36.00
4"	\$114.00	\$118.00
6"	\$231.00	\$238.00
10"	\$946.00	\$1,036.00

Meter Minimum Charge

- No change to the 5/8" meter minimum charge

Tiered Minimum Charge

- Spread between blocks 1 and 5 increase to \$22.70

Tiered Minimum Charge

Tier	Gallons	Existing	Alternative Option #3
Tier 1	0 – 2,000	\$2.00	\$1.05
Tier 2	2,001 – 6,000	\$4.50	\$3.00
Tier 3	6,001 – 11,000	\$7.45	\$7.60
Tier 4	11,001 – 20,000	\$12.55	\$23.75
Tier 5	20,001 - over	\$12.55	\$23.75

Option #3: Residential Rates

Volumetric Rates (\$/1,000 Gals.)			
Block	Gallons	Existing	Alternative Option #3
Tier 1	0 – 2,000	\$1.84	\$2.93
Tier 2	2,001 – 6,000	\$3.39	\$4.49
Tier 3	6,001 – 11,000	\$6.20	\$7.29
Tier 4	11,001 – 20,000	\$9.95	\$11.03
Tier 5	20,001 - over	\$12.84	\$13.93

Volumetric Rates

- Approximately \$1.09 increase to all blocks
- Maintain \$11.00 spread between blocks 1 and 5

Option #3: Residential Water Bill Impacts

<u>Monthly Usage Gallons 5/8" Meter</u>	<u>Existing Bills 2014</u>	<u>Option #3 Bills 2015</u>	<u>\$ Variance</u>	<u>% Variance</u>	<u>% of Average COS Rate</u>
0	\$ 9.10	\$ 8.15	\$ (0.95)	-10.4%	
1,000	11.09	11.27	0.18	1.6%	-18.6%
2,000	13.08	14.39	1.31	10.0%	-26.3%
5,000	26.20	30.38	4.18	16.0%	-21.2%
6,000	29.74	35.06	5.32	17.9%	-20.8%
7,000 Avg Cust. (1)	38.35	45.76	7.41	19.3%	-16.1%
9,000	51.74	62.10	10.36	20.0%	-5.8%
15,000	109.94	138.09	28.15	25.6%	18.8%
25,000	225.39	264.79	39.40	17.5%	52.9%
30,000	290.34	335.39	45.05	15.5%	66.4%
60,000	680.04	758.99	78.95	11.6%	103.9%

(1) Annualized monthly bills.

Option #3: Residential CAP Customers Water Bill Impacts

Monthly Usage Gallons 5/8" Meter	Existing Bills 2014	Option #3 Bills 2015	\$ Variance	% Variance	CAP Bill Discount
0	\$ -	\$ -	\$ -	0.0%	-100.0%
1,000	1.60	2.54	0.94	58.8%	-77.5%
2,000	3.20	5.08	1.88	58.8%	-64.7%
5,000	11.75	16.42	4.67	39.7%	-46.0%
6,000	14.60	20.20	5.60	38.4%	-42.4%
7,000 Avg Cust. (1)	18.37	24.59	6.22	33.9%	-46.3%
9,000	28.10	36.43	8.33	29.6%	-41.3%
15,000	69.50	83.37	13.87	20.0%	-39.6%
25,000	175.70	200.07	24.37	13.9%	-24.4%
30,000	241.40	271.62	30.22	12.5%	-19.0%
60,000	635.60	700.92	65.32	10.3%	-7.7%

(1) Annualized monthly bills.

Option #3: Fixed Revenue

Percentage fixed revenue by class

Class	Existing	Alternative Option #3
Residential	27.0%	26.7%
Multifamily	17.3%	17.8%
Commercial	15.9%	16.8%
Large Volume	11.5%	11.5%
Wholesale	11.0%	11.1%
Overall	20.3%	20.4%

Option #3: Volatility Measure

- Volatility Measure: Description
 - Volatility measure compares the calculated revenue losses using the consumption reductions experienced in 2010 and using the existing rates versus the proposed option rates
 - Positive variance equals less volatility and lower potential revenue losses with proposed option rates
 - Negative variance equals more volatility and higher potential revenue losses with proposed option rates
- Base Option Results: Positive \$ 2.63 Million

Option #3

- Impacts / Benefits / Concerns
 - Lower bill impacts for low volume users with higher bill impacts for higher users as compared to approved rates
 - Reduced bill impacts to average residential customer of \$7.41 or 19.3% as compared to \$8.60 and 22.4% in the approved rates
 - Reduced bill impacts for low users of 2,000 gallons of \$1.31 or 10.0% as compared to \$2.91 or 22.2% in the approved rates
 - \$2.63 million decrease in volatility

Rate Design Options

Option #4: Higher Blocks 4 & 5

Rate Design – Option #4

- Assumptions
 - Significant increases in blocks 4 and 5 volume rates
 - Revenue requirements recovered in blocks 1 through 3 of the tiered fixed fee and volume rates
 - Overall fixed revenue at 20%
 - Slight increase to the meter based minimum charge
 - Spread between blocks 1 and 5 for the tiered minimum fee increased to \$20.95 and volume rates increased to \$23.50

Option #4: Residential Rates

Meter Equivalent Minimum Charge

Meter Size	Existing Minimum Charge	Alternative Option #4 Minimum Charge
5/8"	\$7.10	\$7.55
3/4"	\$11.00	\$13.00
1"	\$14.00	\$14.00
1 1/2"	\$23.00	\$23.00
2"	\$36.00	\$36.00
4"	\$114.00	\$118.00
6"	\$231.00	\$238.00
10"	\$946.00	\$1,036.00

Meter Minimum Charge

- Small change to the 5/8" meter minimum charge

Tiered Minimum Charge

- Spread between blocks 1 and 5 to about \$20.95

Tiered Minimum Charge

Tier	Gallons	Existing	Alternative Option #4
Tier 1	0 – 2,000	\$2.00	\$2.80
Tier 2	2,001 – 6,000	\$4.50	\$6.35
Tier 3	6,001 – 11,000	\$7.45	\$10.55
Tier 4	11,001 – 20,000	\$12.55	\$23.75
Tier 5	20,001 - over	\$12.55	\$23.75

Option #4: Residential Rates

Volumetric Rates (\$/1,000 Gals.)			
Block	Gallons	Existing	Alternative Option #4
Tier 1	0 – 2,000	\$1.84	\$3.50
Tier 2	2,001 – 6,000	\$3.39	\$6.60
Tier 3	6,001 – 11,000	\$6.20	\$12.36
Tier 4	11,001 – 20,000	\$9.95	\$22.00
Tier 5	20,001 - over	\$12.84	\$27.00

Volumetric Rates

- Approximately 90% to 99% increase to blocks 1 through 3
- \$23.50 spread between blocks 1 and 5
- Approximately 110% to 121% increase in blocks 4 and 5
- All revenue requirements collected from blocks 1 through 3

Option #4: Residential Water Bill Impacts

Monthly Usage Gallons 5/8" Meter	Existing Bills 2014	Option #4 Bills 2015	\$ Variance	% Variance	% of Average COS Rate
0	\$ 9.10	\$ 10.35	\$ 1.25	13.7%	
1,000	11.09	14.04	2.95	26.6%	-12.7%
2,000	13.08	17.73	4.65	35.6%	-18.8%
5,000	26.20	41.65	15.45	59.0%	-2.2%
6,000	29.74	48.44	18.70	62.9%	0.2%
7,000 Avg Cust. (1)	38.35	64.55	26.20	68.3%	10.8%
9,000	51.74	90.29	38.55	74.5%	29.4%
15,000	109.94	217.35	107.41	97.7%	132.1%
25,000	225.39	464.25	238.86	106.0%	207.4%
30,000	290.34	600.20	309.86	106.7%	234.0%
60,000	680.04	1,415.90	735.86	108.2%	302.4%

(1) Annualized monthly bills.

Option #4: Residential CAP Customers Water Bill Impacts

Monthly Usage Gallons 5/8" Meter	Existing Bills 2014	Option #4 Bills 2015	\$ Variance	% Variance	CAP Bill Discount
0	\$ -	\$ -	\$ -	0.0%	-100.0%
1,000	1.60	3.88	2.28	142.5%	-72.4%
2,000	3.20	7.76	4.56	142.5%	-56.2%
5,000	11.75	23.90	12.15	103.4%	-42.6%
6,000	14.60	29.28	14.68	100.5%	-39.6%
7,000 Avg Cust. (1)	18.37	37.33	18.96	103.2%	-42.2%
9,000	28.10	55.47	27.37	97.4%	-38.6%
15,000	69.50	127.25	57.75	83.1%	-41.5%
25,000	175.70	278.05	102.35	58.3%	-40.1%
30,000	241.40	360.95	119.55	49.5%	-39.9%
60,000	635.60	858.35	222.75	35.0%	-39.4%

(1) Annualized monthly bills.

Option #4: Fixed Revenue

Percentage fixed revenue by class

Class	Existing	Alternative Option #4
Residential	27.0%	26.0%
Multifamily	17.3%	17.8%
Commercial	15.9%	16.8%
Large Volume	11.5%	11.6%
Wholesale	11.0%	11.1%
Overall	20.3%	20.2%

Option #4: Volatility Measure

- Volatility Measure: Description
 - Volatility measure compares the calculated revenue losses using the consumption reductions experienced in 2010 and using the existing rates versus the proposed option rates
 - Positive variance equals less volatility and lower potential revenue losses with proposed option rates
 - Negative variance equals more volatility and higher potential revenue losses with proposed option rates
- Base Option Results: Negative \$2.31 Million

Option #4

- Impacts / Benefits / Concerns
 - Significant bill impacts for all customers due to the recovery of all requirements from blocks 1-3
 - Significant bill impacts to average residential customer of \$26.20 or 68.3%
 - Higher bill impacts for lower volume users when compared to approved rate option
 - \$2.31 million increase in volatility

Rate Design Options

Option #5: Fixed Revenue at 22.5%
Higher Tiered Fee Spread

Rate Design – Option #5

- Assumptions

- Increase overall fixed revenue to 22.5% as recommended in 2016
- Increase spread between blocks 1 and 5 for the tiered minimum fee increased to \$20.75 as recommended in 2016
- Slight increase to the meter based minimum charge
- Maintain spread between blocks 1 and 5 for the volume rates at \$11.00

Option #5: Residential Rates

Meter Equivalent Minimum Charge

Meter Size	Existing Minimum Charge	Alternative Option #5 Minimum Charge
5/8"	\$7.10	\$7.55
3/4"	\$11.00	\$13.00
1"	\$14.00	\$14.00
1 1/2"	\$23.00	\$23.00
2"	\$36.00	\$36.00
4"	\$114.00	\$118.00
6"	\$231.00	\$238.00
10"	\$946.00	\$1,036.00

Meter Minimum Charge

- Small change to the 5/8" meter minimum charge

Tiered Minimum Charge

- Increase spread between blocks 1 and 5 to about \$20.75

Tiered Minimum Charge

Tier	Gallons	Existing	Alternative Option #5
Tier 1	0 – 2,000	\$2.00	\$2.00
Tier 2	2,001 – 6,000	\$4.50	\$4.50
Tier 3	6,001 – 11,000	\$7.45	\$7.65
Tier 4	11,001 – 20,000	\$12.55	\$22.75
Tier 5	20,001 - over	\$12.55	\$22.75

Option #5: Residential Rates

Volumetric Rates (\$/1,000 Gals.)			
Block	Gallons	Existing	Alternative Option #5
Tier 1	0 – 2,000	\$1.84	\$2.80
Tier 2	2,001 – 6,000	\$3.39	\$4.32
Tier 3	6,001 – 11,000	\$6.20	\$7.05
Tier 4	11,001 – 20,000	\$9.95	\$10.75
Tier 5	20,001 - over	\$12.84	\$13.80

Volumetric Rates

- Approximately \$0.96 increase to all blocks
- Maintain \$11.00 spread between blocks 1 and 5

Option #5: Residential Water Bill Impacts

Monthly Usage Gallons 5/8" Meter	Existing Bills 2014	Option #5 Bills 2015	\$ Variance	% Variance	% of Average COS Rate
0	\$ 9.10	\$ 9.55	\$ 0.45	4.9%	
1,000	11.09	12.54	1.45	13.1%	-16.9%
2,000	13.08	15.53	2.45	18.7%	-24.7%
5,000	26.20	31.56	5.36	20.5%	-20.6%
6,000	29.74	36.07	6.33	21.3%	-20.3%
7,000 Avg Cust. (1)	38.35	45.67	7.32	19.1%	-15.4%
9,000	51.74	60.94	9.20	17.8%	-6.3%
15,000	109.94	134.28	24.34	22.1%	18.4%
25,000	225.39	258.93	33.54	14.9%	53.4%
30,000	290.34	328.88	38.54	13.3%	67.4%
60,000	680.04	748.58	68.54	10.1%	106.4%

(1) Annualized monthly bills.

Option #5: Residential CAP Customers Water Bill Impacts

<u>Monthly Usage Gallons 5/8" Meter</u>	<u>Existing Bills 2014</u>	<u>Option #5 Bills 2015</u>	<u>\$ Variance</u>	<u>% Variance</u>	<u>CAP Bill Discount</u>
0	\$ -	\$ -	\$ -	0.0%	-100.0%
1,000	1.60	2.54	0.94	58.8%	-79.7%
2,000	3.20	5.08	1.88	58.8%	-67.3%
5,000	11.75	16.42	4.67	39.7%	-48.0%
6,000	14.60	20.20	5.60	38.4%	-44.0%
7,000 Avg Cust. (1)	18.37	24.59	6.22	33.9%	-46.2%
9,000	28.10	36.43	8.33	29.6%	-40.2%
15,000	69.50	83.37	13.87	20.0%	-37.9%
25,000	175.70	199.42	23.72	13.5%	-23.0%
30,000	241.40	270.32	28.92	12.0%	-17.8%
60,000	635.60	695.72	60.12	9.5%	-7.1%

(1) Annualized monthly bills.

Option #5: Fixed Revenue

Percentage fixed revenue by class

Class	Existing	Alternative Option #5
Residential	27.0%	28.8%
Multifamily	17.3%	20.3%
Commercial	15.9%	19.3%
Large Volume	11.5%	14.0%
Wholesale	11.0%	11.1%
Overall	20.3%	22.7%

Option #5: Volatility Measure

- Volatility Measure: Description
 - Volatility measure compares the calculated revenue losses using the consumption reductions experienced in 2010 and using the existing rates versus the proposed option rates
 - Positive variance equals less volatility and lower potential revenue losses with proposed option rates
 - Negative variance equals more volatility and higher potential revenue losses with proposed option rates
- Base Option Results: Positive \$3.87 Million

Option #5

- Impacts / Benefits / Concerns
 - Increasing the tiered minimum charge fee while increasing the overall fixed revenue to 22.5% will reduce bill impacts
 - Bill impact to average residential customer of \$7.32 or 19.1% compared to Option #1 impact of \$8.60 and 22.4%
 - Higher bill impacts for higher volume users when compared to Option #1
 - \$3.87 million decrease in volatility

Rate Design Options

Option #6: Fixed Revenue at 22.5%

Rate Design – Option #6

- Assumptions
 - Increase overall fixed revenue to 22.5% as recommended in 2016
 - Keep tiered fixed fee spread at current levels
 - Slight increase to the meter based minimum charge
 - Maintain spread between blocks 1 and 5 for the volume rates at \$11.00

Option #6: Residential Rates

Meter Equivalent Minimum Charge

Meter Size	Existing Minimum Charge	Alternative Option #6 Minimum Charge
5/8"	\$7.10	\$7.55
3/4"	\$11.00	\$13.00
1"	\$14.00	\$14.00
1 1/2"	\$23.00	\$23.00
2"	\$36.00	\$36.00
4"	\$114.00	\$118.00
6"	\$231.00	\$238.00
10"	\$946.00	\$1,036.00

Meter Minimum Charge

- Small change to the 5/8" meter minimum charge

Tiered Minimum Charge

- Keep spread between blocks 1 and 5 to \$11.00
- Additional fixed revenue recovered through tiered minimum charge

Tiered Minimum Charge

Tier	Gallons	Existing	Alternative Option #6
Tier 1	0 – 2,000	\$2.00	\$2.60
Tier 2	2,001 – 6,000	\$4.50	\$5.45
Tier 3	6,001 – 11,000	\$7.45	\$9.10
Tier 4	11,001 – 20,000	\$12.55	\$13.60
Tier 5	20,001 - over	\$12.55	\$13.60

Option #6: Residential Rates

Volumetric Rates (\$/1,000 Gals.)			
Block	Gallons	Existing	Alternative Option #6
Tier 1	0 – 2,000	\$1.84	\$2.80
Tier 2	2,001 – 6,000	\$3.39	\$4.33
Tier 3	6,001 – 11,000	\$6.20	\$7.25
Tier 4	11,001 – 20,000	\$9.95	\$11.00
Tier 5	20,001 - over	\$12.84	\$13.80

Volumetric Rates

- Approximately \$0.96 increase to all blocks
- Maintain \$11.00 spread between blocks 1 and 5

Option #6: Residential Water Bill Impacts

<u>Monthly Usage Gallons 5/8" Meter</u>	<u>Existing Bills 2014</u>	<u>Option #6 Bills 2015</u>	<u>\$ Variance</u>	<u>% Variance</u>	<u>% of Average COS Rate</u>
0	\$ 9.10	\$ 10.15	\$ 1.05	11.5%	
1,000	11.09	13.14	2.05	18.5%	-16.5%
2,000	13.08	16.13	3.05	23.3%	-24.4%
5,000	26.20	32.54	6.34	24.2%	-20.6%
6,000	29.74	37.06	7.32	24.6%	-20.4%
7,000 Avg Cust. (1)	38.35	47.19	8.84	23.1%	-15.4%
9,000	51.74	63.03	11.29	21.8%	-5.9%
15,000	109.94	127.17	17.23	15.7%	21.1%
25,000	225.39	253.07	27.68	12.3%	57.2%
30,000	290.34	323.02	32.68	11.3%	71.0%
60,000	680.04	742.72	62.68	9.2%	108.2%

(1) Annualized monthly bills.

Option #6: Residential CAP Customers Water Bill Impacts

Monthly Usage Gallons 5/8" Meter	Existing Bills 2014	Option #6 Bills 2015	\$ Variance	% Variance	CAP Bill Discount
0	\$ -	\$ -	\$ -	0.0%	-100.0%
1,000	1.60	2.54	0.94	58.8%	-80.7%
2,000	3.20	5.08	1.88	58.8%	-68.5%
5,000	11.75	16.42	4.67	39.7%	-49.5%
6,000	14.60	20.20	5.60	38.4%	-45.5%
7,000 Avg Cust. (1)	18.37	24.59	6.22	33.9%	-47.9%
9,000	28.10	36.43	8.33	29.6%	-42.2%
15,000	69.50	83.37	13.87	20.0%	-34.4%
25,000	175.70	199.42	23.72	13.5%	-21.2%
30,000	241.40	270.32	28.92	12.0%	-16.3%
60,000	635.60	695.72	60.12	9.5%	-6.3%

(1) Annualized monthly bills.

Option #6: Fixed Revenue

Percentage fixed revenue by class

Class	Existing	Alternative Option #6
Residential	27.0%	28.1%
Multifamily	17.3%	20.3%
Commercial	15.9%	19.3%
Large Volume	11.5%	14.0%
Wholesale	11.0%	11.1%
Overall	20.3%	22.4%

Option #6: Volatility Measure

- Volatility Measure: Description
 - Volatility measure compares the calculated revenue losses using the consumption reductions experienced in 2010 and using the existing rates versus the proposed option rates
 - Positive variance equals less volatility and lower potential revenue losses with proposed option rates
 - Negative variance equals more volatility and higher potential revenue losses with proposed option rates
- Base Option Results: Positive \$4.01 Million

Option #6

- Impacts / Benefits / Concerns
 - Increasing the overall fixed revenue to 22.5% will increase bill impacts by less than 1% for average customer as compared to the approved rates in Option #1
 - Bill impact to average residential customer of \$8.84 or 23.1% compared to Option #1 impact of \$8.60 and 22.4%
 - Lower volume customers see slightly higher percentage impact
 - \$4.01 million decrease in volatility

Rate Option Analysis

Rate Option Analysis

Option #1 versus Option #2 – Tovo Option

Monthly Usage Gallons 5/8" Meter	Option #1 Bill Impacts		Option #2 Bill Impacts		Opt #1 vs. #2 Variances	
	\$ Variance	% Variance	\$ Variance	% Variance	\$ Variance	% Variance
0	\$ 0.65	7.1%	\$ 0.55	6.0%	\$ (0.10)	-1.1%
1,000	1.78	16.1%	1.00	9.0%	(0.78)	-7.1%
2,000	2.91	22.2%	1.45	11.1%	(1.46)	-11.1%
5,000	6.33	24.2%	4.10	15.6%	(2.23)	-8.6%
6,000	7.47	25.1%	4.95	16.6%	(2.52)	-8.5%
7,000 Avg Cust. (1)	8.60	22.4%	6.65	17.3%	(1.95)	-5.1%
9,000	10.86	21.0%	9.57	18.5%	(1.29)	-2.5%
15,000	17.55	16.0%	24.80	22.6%	7.25	6.6%
25,000	28.80	12.8%	58.75	26.1%	29.95	13.3%
30,000	34.45	11.9%	77.70	26.8%	43.25	14.9%
60,000	68.35	10.1%	191.40	28.1%	123.05	18.0%

(1) Annualized monthly bills.

Rate Option Analysis

Option #1 versus Option #3–AWU Alternative

Monthly Usage Gallons 5/8" Meter	Option #1 Bill Impacts		Option #3 Bill Impacts		Opt #1 vs. #3 Variances	
	\$ Variance	% Variance	\$ Variance	% Variance	\$ Variance	% Variance
0	\$ 0.65	7.1%	\$ (0.95)	-10.4%	\$ (1.60)	-17.5%
1,000	1.78	16.1%	0.18	1.6%	(1.60)	-14.5%
2,000	2.91	22.2%	1.31	10.0%	(1.60)	-12.2%
5,000	6.33	24.2%	4.18	16.0%	(2.15)	-8.2%
6,000	7.47	25.1%	5.32	17.9%	(2.15)	-7.2%
7,000 Avg Cust. (1)	8.60	22.4%	7.41	19.3%	(1.19)	-3.1%
9,000	10.86	21.0%	10.36	20.0%	(0.50)	-1.0%
15,000	17.55	16.0%	28.15	25.6%	10.60	9.6%
25,000	28.80	12.8%	39.40	17.5%	10.60	4.7%
30,000	34.45	11.9%	45.05	15.5%	10.60	3.6%
60,000	68.35	10.1%	78.95	11.6%	10.60	1.5%

(1) Annualized monthly bills.

Rate Option Analysis

Option #1 versus Option #4

Monthly Usage Gallons 5/8" Meter	Option #1 Bill Impacts		Option #4 Bill Impacts		Opt #1 vs. #4 Variances	
	\$ Variance	% Variance	\$ Variance	% Variance	\$ Variance	% Variance
0	\$ 0.65	7.1%	\$ 1.25	13.7%	\$ 0.60	6.6%
1,000	1.78	16.1%	2.95	26.6%	1.17	10.5%
2,000	2.91	22.2%	4.65	35.6%	1.74	13.4%
5,000	6.33	24.2%	15.45	59.0%	9.12	34.8%
6,000	7.47	25.1%	18.70	62.9%	11.23	37.8%
7,000 Avg Cust. (1)	8.60	22.4%	26.20	68.3%	17.60	45.9%
9,000	10.86	21.0%	38.55	74.5%	27.69	53.5%
15,000	17.55	16.0%	107.41	97.7%	89.86	81.7%
25,000	28.80	12.8%	238.86	106.0%	210.06	93.2%
30,000	34.45	11.9%	309.86	106.7%	275.41	94.8%
60,000	68.35	10.1%	735.86	108.2%	667.51	98.1%

(1) Annualized monthly bills.

Rate Option Analysis

Option #1 versus Option #5

Monthly Usage Gallons 5/8" Meter	Option #1 Bill Impacts		Option #5 Bill Impacts		Opt #1 vs. #5 Variances	
	\$ Variance	% Variance	\$ Variance	% Variance	\$ Variance	% Variance
0	\$ 0.65	7.1%	\$0.45	4.9%	\$ (0.20)	-2.2%
1,000	1.78	16.1%	1.45	13.1%	(0.33)	-3.0%
2,000	2.91	22.2%	2.45	18.7%	(0.46)	-3.5%
5,000	6.33	24.2%	5.36	20.5%	(0.97)	-3.7%
6,000	7.47	25.1%	6.33	21.3%	(1.14)	-3.8%
7,000 Avg Cust. (1)	8.60	22.4%	7.32	19.1%	(1.28)	-3.3%
9,000	10.86	21.0%	9.20	17.8%	(1.66)	-3.2%
15,000	17.55	16.0%	24.34	22.1%	6.79	6.1%
25,000	28.80	12.8%	33.54	14.9%	4.74	2.1%
30,000	34.45	11.9%	38.54	13.3%	4.09	1.4%
60,000	68.35	10.1%	68.54	10.1%	0.19	0.0%

(1) Annualized monthly bills.

Rate Option Analysis

Option #1 versus Option #6

Monthly Usage Gallons 5/8" Meter	Option #1 Bill Impacts		Option #6 Bill Impacts		Opt #1 vs. #6 Variances	
	\$ Variance	% Variance	\$ Variance	% Variance	\$ Variance	% Variance
0	\$ 0.65	7.1%	\$ 1.05	11.5%	\$ 0.40	4.4%
1,000	1.78	16.1%	2.05	18.5%	0.27	2.4%
2,000	2.91	22.2%	3.05	23.3%	0.14	1.1%
5,000	6.33	24.2%	6.34	24.2%	0.01	0.0%
6,000	7.47	25.1%	7.32	24.6%	(0.15)	-0.5%
7,000 Avg Cust. (1)	8.60	22.4%	8.84	23.1%	0.24	0.7%
9,000	10.86	21.0%	11.29	21.8%	0.43	0.8%
15,000	17.55	16.0%	17.23	15.7%	(0.32)	-0.3%
25,000	28.80	12.8%	27.68	12.3%	(1.12)	-0.5%
30,000	34.45	11.9%	32.68	11.3%	(1.77)	-0.6%
60,000	68.35	10.1%	62.68	9.2%	(5.67)	-0.9%

(1) Annualized monthly bills.

Rate Option Analysis

- **Option 1:** reflects JC recommendations in 2012 and 2014
- **Option 2:** while reducing low volume users bill impacts for 2015, this option creates future additional volatility that the JC recommendations have tried to address
- **Option 3:** increases tiered fee spread in 2015 which reduces lower volume users bill impacts achieving similar results to Option 2 without the volatility increase
- **Option 4:** significantly increases bills for high users, increases volatility and forces recovery of revenue from blocks 1-3

Rate Option Analysis

- **Option 5:** JC recommendations for 2016 which increases fixed revenue to 22.5% and increases spread of tiered minimum charge providing a 3.0% to 3.8% reduction to bill impacts of 2015 compared to approved rates
- **Option 6:** increase in fixed revenue to 22.5% only without an increase in tiered fee spread, which provides a 0.0% to 2.4% bill impact for low volume users to show what would happen in 2016 if we adopted an early increase in the tiered fee spread as in Option 3 for 2015 and then increased only the fixed revenue in 2016. The bill impact would be on top of any proposed rate increase for 2016.

Decision Analysis

- **Decision:** Should a different rate option be implemented instead of the approved Option #1?
- **Decision:** Should the volume rate spread be increased in 2015 to reduce bill impacts for lower use customers?
- **Decision:** Should the tiered fee spread be increased in 2015 to reduce the bill impacts for lower use customers?
- **Decision:** Should rates for block 4-5 be doubled to increase bill impacts for higher users?

Meeting Schedule

Possible Dates (if needed)

Tuesday, October 21st

Thursday, October 23rd

Wednesday, October 29th

Thursday, October 30th

Discussion and Questions?