

REQUEST FOR COUNCIL ACTION

Date: December 7, 2020
Item No.: 7.d

Department Approval



City Manager Approval



Item Description: Review the 2021 Utility Rate Adjustments

BACKGROUND

The City's utility or *enterprise* operations are funded primarily by user fees and are operated as separate, stand-alone functions. Over the past several months, city staff has been reviewing the City's utility operations to determine what customer rate adjustments are necessary for 2021. The City engaged Ehlers to perform a comprehensive utility rate study of the Water and Storm Drainage Funds based on the cash situations in these two funds.

Operational Review

Water Fund Operations

We engaged Ehlers to perform a utility study on this fund which was presented at the October 19th Council meeting. Ehlers presented two separate options. Both introduce new water usage tier rates for Residential, Commercial and Apartment properties. Both options realign who pays for water versus who uses water to provide more equity and the definition of fixed costs versus variable costs adheres to the industry standards. Option 2 provides for an average of capital costs to be included in the fixed costs, which is more in line with our current structure. Option 1 would put the average capital costs on the usage/variable side of the rates. Public Works Director, Finance Director and City Manager are supportive of Option 2 based on the inclusion of the capital costs in the fixed rate and the more moderated impact on the non-residential users. Option 2 provides reduced costs for residential users and reinforces conservation rates.

Storm Drainage Operations

The City provides for the management of storm water drainage to prevent flooding and pollution control, as well as the street sweeping program. The cash balance in this fund had been steadily declining so this fund was included in the utility rate study done by Ehlers. The study showed that the current rate structure is equitable and needs a steady increase of 4% for the next four years to build up some reserves to pay for the capital needs in this fund. After four years, the rate increases will level off to about 1% annually thereafter. Staff will continue to monitor this fund and the needed capital projects.

Sanitary Sewer Operations

The City maintains a sanitary sewer collection system to ensure the general public's health and general welfare. For 2021, the operational costs are expected to decrease by 2.84% mainly as a result of a decrease in the costs charged by the Metropolitan Council Environmental Services Division (MCES). While they have increased costs of treatment, the City's share of flow has decreased the overall cost to

the City of Roseville. The capital outlay that is factored into the rates is based on a 5 year average and that number has increased from \$958,000 to \$1,349,000 based on a correction in that formula linkage.

The Base rates require a 3.5% increase to cover the fixed costs which are operational and capital only. The usage rates require a modest 1.92% increase to cover the MCES total costs.

Recycling Operations

The recycling operation provides for the contracted curbside recycling pickup throughout the City and related administrative costs. The primary operating cost is the amounts paid to a contractor to pick up recycling materials. 2020 had significant increases as a result of higher contractor costs. The market for recycled materials is a global one, and it had declined significantly during the prior year. For 2021, which is the last year of our current contract, the City has budgeted a 3.74% increase in the contract costs. A customer rate increase from \$9 per quarter to \$9.36 (4%) has been proposed to accommodate the higher costs.

Recommended Rates for 2021

The following table provides a detailed breakdown of the proposed rates including the rate structure which depicts how the operating cost burden is distributed to various customer types. The table also shows the Water rate options from the Ehlers Utility Rate Study.

<u>Water Base Rate Category</u>	2020	2021	<u>Comments</u>	Ehlers Utility Rate Study	
	<u>Rate</u>	<u>Rate</u>		<u>Option 1</u>	<u>Option 2</u>
Single-Family Residential	\$ 62.10	\$ 63.34	Standard SF rate	18.88	34.57
Single-Family Residential: Low-Income Discount	40.35	41.17	Standard SF rate x 0.65	18.88	34.57
Non-SF Residential (5/8" Meter)	62.10	63.34	Standard SF rate	18.88	34.57
Non-SF Residential (1.0" Meter)	77.65	79.20	Standard SF rate x 1.25	47.20	86.43
Non-SF Residential (1.5" Meter)	124.00	126.48	Standard SF rate x 2.00	94.40	172.85
Non-SF Residential (2.0" Meter)	233.00	237.66	Standard SF rate x 3.75	151.04	276.56
Non-SF Residential (3.0" Meter)	465.80	475.12	Standard SF rate x 7.50	302.08	553.12
Non-SF Residential (3.0" Compound Meter)				330.40	604.98
Non-SF Residential (4.0" Meter)	931.65	950.28	Standard SF rate x 15.00	472.00	864.25
Non-SF Residential (4.0" Compound Meter)				566.40	1,037.10
Non-SF Residential (6.0" Meter)	1,758.00	1,900.62	Standard SF rate x 30.00	1,510.40	2,765.60
** Low Income Discount on sewer only					
<u>Water Usage Rate Category</u>	2020	2021	<u>Comments</u>	Ehlers Utility Rate Study	
	<u>Rate</u>	<u>Rate</u>		<u>Option 1</u>	<u>Option 2</u>
SF Residential: Up to 15,000 gals./qtr				3.90	3.18
SF Residential: 15,001 to 30,000 gals./qtr	\$ 2.30	\$ 3.45	Standard SF rate	4.88	3.98
SF Residential: Over 30,000 gals./qtr (winter rate)	2.55	3.80	Standard SF rate +10%	6.10	4.98
SF Residential: Over 30,000 gals./qtr (summer rate)	2.75	4.15	Standard SF rate +20%	6.10	4.98
Apartments: Up to 8,000 gals/unit/qtr			per unit basis	3.90	3.18
Apartments: 8,001- 15,000 gals/unit/qtr			per unit basis	4.88	3.98
Apartments: Over 15,000 gals./unit/qtr			per unit basis	6.10	4.98
Commercial: Up to 60,000 gals./qtr				3.90	3.18
Commercial: 60,001 to 400,000 gals./qtr				4.88	3.98
Commercial: Over 400,000 gals./qtr				6.10	4.98
Non-SF Residential (winter rate)	3.00	4.50	Standard SF rate +30%		
Non-SF Residential (summer rate)	3.20	4.84	Standard SF rate +40%		
Irrigation Water Usage				4.97	4.50
Rates are per 1,000 gallons					

<u>Sewer Base Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family Residential	\$ 40.25	\$ 41.66	Standard SF rate
Single-Family Residential: Low-Income Discount	26.15	27.08	Standard SF rate x 0.65
Multi-Family Residential (townhomes)	40.25	41.66	Standard SF rate x 1.00
Multi-Family Residential (apartments & condos)	28.25	29.24	Standard SF rate x 0.70
Non-SF Residential (5/8" Meter)	30.10	31.15	Standard SF rate x 0.75
Non-SF Residential (1.0" Meter)	60.25	62.36	Standard SF rate x 1.50
Non-SF Residential (1.5" Meter)	90.40	93.56	Standard SF rate x 2.25
Non-SF Residential (2.0" Meter)	140.90	145.83	Standard SF rate x 3.50
Non-SF Residential (3.0" Meter)	291.85	302.06	Standard SF rate x 7.25
Non-SF Residential (4.0" Meter)	583.70	604.13	Standard SF rate x 14.50
Non-SF Residential (6.0" Meter)	1,167.40	1,208.26	Standard SF rate x 29.00
Multi-family rate is per housing unit			
<u>Sewer Usage Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Residential	\$ 2.60	\$ 2.65	Standard rate
Non-Residential	6.00	6.12	Standard rate x 2.30
Rates are per 1,000 gallons			
<u>Stormwater Base Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family Residential & Duplex	\$ 14.25	\$ 14.54	Standard SF rate
Multi-Family & Churches	110.30	112.51	Standard SF rate x 7.75
Cemeteries & Golf Course	10.70	10.91	Standard SF rate x 0.75
Parks	33.20	33.86	Standard SF rate x 2.35
Schools & Community Centers	53.65	54.72	Standard SF rate x 3.75
Commercial & Industrial	220.50	224.91	Standard SF rate x 15.50
Rates for single-family are per housing unit; all others are per acre			
<u>Recycling Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family	\$ 9.00	\$ 9.30	Standard rate
Multi-Family	9.00	9.30	Standard rate

Based on Staff analysis and the Ehlers Utility Rate study, the estimated impact to a Single Family Home for all four utility funds is as follows:

Utility Rate Impact: Single Family Home <i>(Quarterly)</i>						
		Old Model			Ehlers	Ehlers
<u>Service</u>	<u>2020</u>	<u>2021</u>	<u>\$ Increase</u>		<u>Option 1</u>	<u>Option 2</u>
Water - base fee	62.10	63.34	1.24		18.88	34.57
Water - usage fee	27.60	41.40	13.80		46.80	38.16
Sanitary Sewer - base fee	40.25	41.66	1.41		41.66	41.66
Sanitary Sewer - usage fee	28.60	29.15	0.55		29.15	29.15
Storm Sewer	14.25	14.54	0.29		14.54	14.54
Recycling	9.00	9.36	0.36		9.36	9.36
Total per Quarter	\$ 181.80	\$ 199.45	\$ 17.65		\$ 160.39	\$ 167.44
Percentage Change			9.71%		-11.78%	-7.90%

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66 **POLICY OBJECTIVE**

67 An annual review of the City's utility rate structure is consistent with governmental best practices to
68 ensure that each utility operation is financially sound.

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70 **FINANCIAL IMPACTS**

71 See above.

72 **STAFF RECOMMENDATION**

73 Staff recommends the rate adjustments as shown in the report and recommends the Ehlers option 2 for
74 the Water Utility rates. The Public Works, Environment & Transportation Commission reviewed and
75 recommended the Ehlers option 2 for the water rates. The Finance Commission reviewed and
76 recommended the Ehlers option 1 for the water rates.

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78 **REQUESTED COUNCIL ACTION**

79 Motion to approve one of the 2 attached resolutions establishing the 2021 Utility Rates.

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Prepared by: Michelle Pietrick, Finance Director

Attachments: A: Resolution establishing the 2021 Utility Rates, using the Ehlers Water Model Option 1
B: Resolution establishing the 2021 Utility Rates, using the Ehlers Water Model Option 2
C: Utility rate discussion – November 9, 2020 council packet
D: Ehlers Utility Rate Presentation – October 19, 2020 council meeting

**EXTRACT OF MINUTES OF MEETING OF THE
CITY COUNCIL OF THE CITY OF ROSEVILLE**

* * * * *

Pursuant to due call and notice thereof, a regular meeting of the City Council of the City of Roseville, County of Ramsey, Minnesota was duly held on the 7th day of December, 2020 at 6:00 p.m.

The following members were present: and , and the following were absent:

Member introduced the following resolution and moved its adoption:

RESOLUTION

RESOLUTION ESTABLISHING THE 2021 UTILITY RATES

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Roseville, Minnesota, the water, sanitary sewer, storm drainage, and recycling rates are established for 2021 as follows:

Water Base Rate Category	2020 Rate	2021 Rate	Comments	Ehlers Option 1
Single-Family Residential	\$ 62.10	\$ 63.34	Standard SF rate	18.88
Single-Family Residential: Low-Income Discount	40.35	41.17	Standard SF rate x 0.65	18.88
Non-SF Residential (5/8" Meter)	62.10	63.34	Standard SF rate	18.88
Non-SF Residential (1.0" Meter)	77.65	79.20	Standard SF rate x 1.25	47.20
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Non-SF Residential (4.0" Compound Meter)				566.40
Non-SF Residential (6.0" Meter)	1,758.00	1,900.62	Standard SF rate x 30.00	1,510.40
** Low Income Discount on sewer only				
Water Usage Rate Category	2020 Rate	2021 Rate	Comments	Ehlers Utilit Option 1
SF Residential: Up to 15,000 gals./qtr				3.90
SF Residential: 15,001 to 30,000 gals./qtr	\$ 2.30	\$ 3.45	Standard SF rate	4.88
SF Residential: Over 30,000 gals./qtr (winter rate)	2.55	3.80	Standard SF rate +10%	6.10
SF Residential: Over 30,000 gals./qtr (summer rate)	2.75	4.15	Standard SF rate +20%	6.10
Apartments: Up to 8,000 gals/unit/qtr			per unit basis	3.90
Apartments: 8,001- 15,000 gals/unit/qtr			per unit basis	4.88
Apartments: Over 15,000 gals./unit/qtr			per unit basis	6.10
Commercial: Up to 60,0000 gals./qtr				3.90
Commercial: 60,001 to 400,0000 gals./qtr				4.88
Commercial: Over 400,000 gals./qtr				6.10
Non-SF Residential (winter rate)	3.00	4.50	Standard SF rate +30%	
Non-SF Residential (summer rate)	3.20	4.84	Standard SF rate +40%	
Irrigation Water Usage				4.97
Rates are per 1,000 gallons				

<u>Sewer Base Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family Residential	\$ 40.25	\$ 41.66	Standard SF rate
Single-Family Residential: Low-Income Discount	26.15	27.08	Standard SF rate x 0.65
Multi-Family Residential (townhomes)	40.25	41.66	Standard SF rate x 1.00
Multi-Family Residential (apartments & condos)	28.25	29.24	Standard SF rate x 0.70
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Multi-family rate is per housing unit			
<u>Sewer Usage Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Residential	\$ 2.60	\$ 2.65	Standard rate
Non-Residential	6.00	6.12	Standard rate x 2.30
Rates are per 1,000 gallons			
<u>Stormwater Base Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family Residential & Duplex	\$ 14.25	\$ 14.54	Standard SF rate
Multi-Family & Churches	110.30	112.51	Standard SF rate x 7.75
Cemeteries & Golf Course	10.70	10.91	Standard SF rate x 0.75
Parks	33.20	33.86	Standard SF rate x 2.35
Schools & Community Centers	53.65	54.72	Standard SF rate x 3.75
Commercial & Industrial	220.50	224.91	Standard SF rate x 15.50
Rates for single-family are per housing unit; all others are per acre			
<u>Recycling Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family	\$ 9.00	\$ 9.30	Standard rate
Multi-Family	9.00	9.30	Standard rate
<u>Meter Security Deposit</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
5/8" Meter	\$ 190.00	\$ 190.00	Based on approx. meter cost
3/4" Meter	215.00	215.00	Based on approx. meter cost
1.0" Meter	240.00	240.00	Based on approx. meter cost
1.5" Meter	440.00	440.00	Based on approx. meter cost
2.0" Meter (Disc)	535.00	535.00	Based on approx. meter cost
2.0" Meter (Compound)	1,340.00	1,340.00	Based on approx. meter cost
3.0" Meter	1,910.00	1,910.00	Based on approx. meter cost
6.0" Meter	5,430.00	5,430.00	Based on approx. meter cost

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The motion for the adoption of the foregoing resolution was duly seconded by member _____ and upon a vote being taken thereon, the following voted in favor thereof: _____ and _____, and the following voted against the same:

WHEREUPON, said resolution was declared duly passed and adopted.

State of Minnesota)
) SS
County of Ramsey)

•

119 I, undersigned, being the duly qualified City Manager of the City of Roseville, County of Ramsey, State
120 of Minnesota, do hereby certify that I have carefully compared the attached and foregoing extract of
121 minutes of a regular meeting of said City Council held on the 7th of December, 2020 with the original
122 thereof on file in my office.

123

124 WITNESS MY HAND officially as such Manager this 7th day of December, 2020.

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128 Patrick Trudgeon
129 City Manager

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Single-Family Residential: Low-Income Discount	40.35	41.17	Standard SF rate x 0.65	34.57
Non-SF Residential (5/8" Meter)	62.10	63.34	Standard SF rate	34.57
Non-SF Residential (1.0" Meter)	77.65	79.20	Standard SF rate x 1.25	86.43
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** Low Income Discount on sewer only				
<u>Water Usage Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>	<u>Option 2</u>
SF Residential: Up to 15,000 gals./qtr				3.18
SF Residential: 15,001 to 30,000 gals./qtr	\$ 2.30	\$ 3.45	Standard SF rate	3.98
SF Residential: Over 30,000 gals./qtr (winter rate)	2.55	3.80	Standard SF rate +10%	4.98
SF Residential: Over 30,000 gals./qtr (summer rate)	2.75	4.15	Standard SF rate +20%	4.98
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Commercial: 60,001 to 400,000 gals./qtr				3.98
Commercial: Over 400,000 gals./qtr				4.98
Non-SF Residential (winter rate)	3.00	4.50	Standard SF rate +30%	
Non-SF Residential (summer rate)	3.20	4.84	Standard SF rate +40%	
Irrigation Water Usage				4.50
Rates are per 1,000 gallons				

<u>Sewer Base Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family Residential	\$ 40.25	\$ 41.66	Standard SF rate
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Multi-family rate is per housing unit			
<u>Sewer Usage Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Residential	\$ 2.60	\$ 2.65	Standard rate
Non-Residential	6.00	6.12	Standard rate x 2.30
Rates are per 1,000 gallons			
<u>Stormwater Base Rate Category</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
Single-Family Residential & Duplex	\$ 14.25	\$ 14.54	Standard SF rate
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<u>Meter Security Deposit</u>	<u>2020 Rate</u>	<u>2021 Rate</u>	<u>Comments</u>
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State of Minnesota)
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County of Ramsey)

•

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172 of Minnesota, do hereby certify that I have carefully compared the attached and foregoing extract of
173 minutes of a regular meeting of said City Council held on the 7th of December, 2020 with the original
174 thereof on file in my office.

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176 WITNESS MY HAND officially as such Manager this 7th day of December, 2020.

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Patrick Trudgeon
City Manager

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ROSEVILLE
REQUEST FOR COUNCIL ACTION

Date: November 9, 2020

Item No.: 7.c

Department Approval



City Manager Approval



Item Description: Review the 2021 Utility Rate Adjustments

BACKGROUND

Unlike many city services that are supported by property taxes, our utility or *enterprise* operations are funded primarily by user fees and are operated as separate, stand-alone functions. Over the past several months, city staff has been reviewing the City's utility operations to determine what customer rate adjustments are necessary for 2021. The City engaged Ehlers to perform a comprehensive utility rate study of the Water and Storm Drainage Funds based on the cash situations in these two funds.

Operational Review

Water Fund Operations

At December 31, 2019, the Water Fund had to internally borrow \$1,234,554 from other funds to eliminate the cash deficit. This fund has had a steadily declining cash balance for the past four years. Staff identified that the rate setting formula was changed in 2014 which unfortunately has an error when converting the water purchased from St. Paul from cubic feet to the Roseville system which is billed in gallon units. In addition, the capital projects done for the water system have exceed the averages used in the formula. We engaged Ehlers to perform a utility study on this fund which was presented at the October 19th Council meeting.

Ehlers presented two separate options, both introduce new water usage tier rates for Residential, Commercial and Apartment properties. Both options realign who pays for water versus who uses water to provide more equity and the definition of fixed costs versus variable costs adheres to the industry standards. Option 2 provides for an average of capital costs to be included in the fixed costs, which is more in line with our current structure. Option 1 would put the average capital costs on the usage/variable side of the rates.

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Sanitary Sewer Operations

The City maintains a sanitary sewer collection system to ensure the general public's health and general welfare. For 2021, the operational costs are expected to decrease by 2.84% mainly as a result of a decrease in the costs charged by the Metropolitan Council Environmental Services Division (MCES). While they have increased costs of treatment, the City's share of flow has decreased the overall cost to the City of Roseville. The capital outlay that is factored into the rates is based on a 5 year average and that number has increased from \$958,000 to \$1,349,000 based on a correction in that formula linkage.

The Base rates require a 3.5% increase to cover the fixed costs which are operational and capital only. The usage rates require a modest 1.92% increase to cover the MCES total costs. See Attachment B for the rate analysis.

Recycling Operations

The recycling operation provides for the contracted curbside recycling pickup throughout the City and related administrative costs. The primary operating cost is the amounts paid to a contractor to pick up recycling materials. 2020 had significant increases as a result of higher contractor costs. The market for recycled materials is a global one, and it had declined significantly during the prior year. For 2021, which is the last year of our current contract, the City has budgeted a 3.74% increase in the contract costs. A customer rate increase from \$9 per quarter to \$9.36 (4%) has been proposed to accommodate the higher costs. See Attachment B for the rate analysis.

Recommended Rates for 2021

The following table provides a detailed breakdown of the proposed rates including the rate structure which depicts how the operating cost burden is distributed to various customer types. The table also shows the Water rate options from the Ehlers Utility Rate Study.

<u>Water Base Rate Category</u>	2020	2021	<u>Comments</u>	<u>Ehlers Utility Rate Study</u>	
	<u>Rate</u>	<u>Rate</u>		<u>Option 1</u>	<u>Option 2</u>
Single-Family Residential	\$ 62.10	\$ 63.34	Standard SF rate	18.88	34.57
Single-Family Residential: Low-Income Discount	40.35	41.17	Standard SF rate x 0.65	18.88	34.57
Non-SF Residential (5/8" Meter)	62.10	63.34	Standard SF rate	18.88	34.57
Non-SF Residential (1.0" Meter)	77.65	79.20	Standard SF rate x 1.25	47.20	86.43
Non-SF Residential (1.5" Meter)	124.00	126.48	Standard SF rate x 2.00	94.40	172.85
Non-SF Residential (2.0" Meter)	233.00	237.66	Standard SF rate x 3.75	151.04	276.56
Non-SF Residential (3.0" Meter)	465.80	475.12	Standard SF rate x 7.50	302.08	553.12
Non-SF Residential (3.0" Compound Meter)				330.40	604.98
Non-SF Residential (4.0" Meter)	931.65	950.28	Standard SF rate x 15.00	472.00	864.25
Non-SF Residential (4.0" Compound Meter)				566.40	1,037.10
Non-SF Residential (6.0" Meter)	1,758.00	1,900.62	Standard SF rate x 30.00	1,510.40	2,765.60
** Low Income Discount on sewer only					

<u>Water Usage Rate Category</u>	<u>2020</u>	<u>2021</u>	<u>Comments</u>	<u>Ehlers Utility Rate Study</u>	
	<u>Rate</u>	<u>Rate</u>		<u>Option 1</u>	<u>Option 2</u>
SF Residential: Up to 15,000 gals./qtr				3.90	3.18
SF Residential: 15,001 to 30,000 gals./qtr	\$ 2.30	\$ 3.45	Standard SF rate	4.88	3.98
SF Residential: Over 30,000 gals./qtr (winter rate)	2.55	3.80	Standard SF rate +10%	6.10	4.98
SF Residential: Over 30,000 gals./qtr (summer rate)	2.75	4.15	Standard SF rate +20%	6.10	4.98
Apartments: Up to 8,000 gals/unit/qtr			per unit basis	3.90	3.18
Apartments: 8,001- 15,000 gals/unit/qtr			per unit basis	4.88	3.98
Apartments: Over 15,000 gals./unit/qtr			per unit basis	6.10	4.98
Commercial: Up to 60,000 gals./qtr				3.90	3.18
Commercial: 60,001 to 400,000 gals./qtr				4.88	3.98
Commercial: Over 400,000 gals./qtr				6.10	4.98
Non-SF Residential (winter rate)	3.00	4.50	Standard SF rate +30%		
Non-SF Residential (summer rate)	3.20	4.84	Standard SF rate +40%		
Irrigation Water Usage				4.97	4.50
Rates are per 1,000 gallons					
<u>Sewer Base Rate Category</u>	<u>2020</u>	<u>2021</u>	<u>Comments</u>		
	<u>Rate</u>	<u>Rate</u>			
Single-Family Residential	\$ 40.25	\$ 41.66	Standard SF rate		
Single-Family Residential: Low-Income Discount	26.15	27.08	Standard SF rate x 0.65		
Multi-Family Residential (townhomes)	40.25	41.66	Standard SF rate x 1.00		
Multi-Family Residential (apartments & condos)	28.25	29.24	Standard SF rate x 0.70		
Non-SF Residential (5/8" Meter)	30.10	31.15	Standard SF rate x 0.75		
Non-SF Residential (1.0" Meter)	60.25	62.36	Standard SF rate x 1.50		
Non-SF Residential (1.5" Meter)	90.40	93.56	Standard SF rate x 2.25		
Non-SF Residential (2.0" Meter)	140.90	145.83	Standard SF rate x 3.50		
Non-SF Residential (3.0" Meter)	291.85	302.06	Standard SF rate x 7.25		
Non-SF Residential (4.0" Meter)	583.70	604.13	Standard SF rate x 14.50		
Non-SF Residential (6.0" Meter)	1,167.40	1,208.26	Standard SF rate x 29.00		
Multi-family rate is per housing unit					
<u>Sewer Usage Rate Category</u>	<u>2020</u>	<u>2021</u>	<u>Comments</u>		
	<u>Rate</u>	<u>Rate</u>			
Residential	\$ 2.60	\$ 2.65	Standard rate		
Non-Residential	6.00	6.12	Standard rate x 2.30		
Rates are per 1,000 gallons					
<u>Stormwater Base Rate Category</u>	<u>2020</u>	<u>2021</u>	<u>Comments</u>		
	<u>Rate</u>	<u>Rate</u>			
Single-Family Residential & Duplex	\$ 14.25	\$ 14.54	Standard SF rate	2021 rates agree with Ehlers	
Multi-Family & Churches	110.30	112.51	Standard SF rate x 7.75		
Cemeteries & Golf Course	10.70	10.91	Standard SF rate x 0.75		
Parks	33.20	33.86	Standard SF rate x 2.35		
Schools & Community Centers	53.65	54.72	Standard SF rate x 3.75		
Commercial & Industrial	220.50	224.91	Standard SF rate x 15.50		
Rates for single-family are per housing unit; all others are per acre					
<u>Recycling Rate Category</u>	<u>2020</u>	<u>2021</u>	<u>Comments</u>		
	<u>Rate</u>	<u>Rate</u>			
Single-Family	\$ 9.00	\$ 9.30	Standard rate		
Multi-Family	9.00	9.30	Standard rate		

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Based on Staff analysis and the Ehlers Utility Rate study, the estimated impact to a Single Family

Home for all four utility funds is as follows:

Utility Rate Impact: Single Family Home <i>(Quarterly)</i>					
		Old Model		Ehlers	Ehlers
<u>Service</u>	<u>2020</u>	<u>2021</u>	<u>\$ Increase</u>	<u>Option 1</u>	<u>Option 2</u>
Water - base fee	62.10	63.34	1.24	18.88	34.57
Water - usage fee	27.60	41.40	13.80	46.80	38.16
Sanitary Sewer - base fee	40.25	41.66	1.41	41.66	41.66
Sanitary Sewer - usage fee	28.60	29.15	0.55	29.15	29.15
Storm Sewer	14.25	14.54	0.29	14.54	14.54
Recycling	9.00	9.36	0.36	9.36	9.36
Total per Quarter	\$ 181.80	\$ 199.45	\$ 17.65	\$ 160.39	\$ 167.44
Percentage Change			9.71%	-11.78%	-7.90%

POLICY OBJECTIVE

An annual review of the City's utility rate structure is consistent with governmental best practices to ensure that each utility operation is financially sound.

FINANCIAL IMPACTS

See above.

STAFF RECOMMENDATION

Staff recommends the rate adjustments as shown in the report and recommends the Ehlers option 2 for the Water Utility rates. The Public Works, Environment & Transportation Commission reviewed and recommended the Ehlers option 2 for the water rates. The Finance Commission will review the utility rates on November 10th.

Staff recommends the City Council adopt one of the two proposed utility rate models for the Water Fund.

REQUESTED COUNCIL ACTION

The material in this report is provided for information only at this point. Final consideration of the utility rates will occur at the December 7 City Council meeting. However, the City Council should provide direction to staff on what water rate option (Ehlers Option 1 or Ehlers Option 2) staff should bring forward for final consideration at that meeting.

Prepared by: Michelle Pietrick, Finance Director

Attachments: A: 2021 Rate Calculation Worksheets for Utility Funds

Fixed Costs Analysis 2020 Budget

Water Fund Fixed Costs

	Description	Amount	Totals
1	Personnel Expenses		
2	Salaries & Benefits	\$ 698,280	\$ 698,280
3	Other Operating Expenses		
4	Office Supplies	200	
5	Telephone	5,000	
6	Postage	8,000	
7	Printing	100	
8	Insurance	55,000	
9	Contract Maintenance	56,800	
10	Memberships & Subscriptions	2,300	127,400
11	Operating Transfers Out		
12	Admin Charge to General Fund	385,000	385,000
13	Less: Wholesale Portion per Cost of Service Analysis		
14	City of Arden Hills	(127,295)	(127,295)
15	TOTAL FIXED AND METER COSTS - WATER FUND		\$ 1,083,385
16	Capital Improvement Costs		
17	5-Year Average Costs	900,000	900,000
18	TOTAL FIXED COSTS INCLUDING CAPITAL - WATER FUND		\$ 1,983,385

Fixed Charge Options					
Existing Charges		2020 Quarterly Rate	Number of Units/Meters	Annual Revenue	% of Fixed Costs
1	Fixed Rate				
2	5/8 inch & 3/4 inch	62.10	9,608	2,386,627	
3	1 inch	77.65	248	77,029	
4	1.5 inch	124.00	198	98,208	
5	2.0 inch	233.00	143	133,276	
6	3.0 inch	465.80	56	104,339	
7	4.0 inch	931.65	1	3,727	
8	6.0 inch	1,758.00	4	28,128	261.3%

Note: Accounts with multiple meters may only be charged for 1 meter

Option #1: 100% of Fixed Costs in Fixed Charges					
RATE STRUCTURE OPTIONS		Number of Meters	Max Flow (gpm)	Equivalent Ratio	Quarterly Charge
1	Fixed Rate				
2	5/8 inch & 3/4 inch	9,624	20	1.0	\$ 18.88
3	1.0 inch	301	50	2.5	47.20
4	1.5 inch	273	100	5.0	94.40
5	2.0 inch	120	160	8.0	151.04
6	2.0 inch - Compound	43	160	8.0	151.04
7	3.0 inch	20	320	16.0	302.08
8	3.0 inch - Compound	36	350	17.5	330.40
9	4.0 inch	-	500	25.0	472.00
10	4.0 inch - Compound	1	600	30.0	566.40
11	6.0 inch	4	1,600	80.0	1,510.40
12	TOTALS	10,422			\$ 1,083,372
13	100% TOTAL FIXED AND METER COSTS - WATER FUND				\$ 1,083,385

Option #2: Fixed Rates Include Capital Costs					
RATE STRUCTURE OPTIONS		Number of Meters	Max Flow (gpm)	Equivalent Ratio	Quarterly Charge
1	Fixed Rate				
2	5/8 inch & 3/4 inch	9,624	20	1.0	\$ 34.57
3	1.0 inch	301	50	2.5	86.43
4	1.5 inch	273	100	5.0	172.85
5	2.0 inch	120	160	8.0	276.56
6	2.0 inch - Compound	43	160	8.0	276.56
7	3.0 inch	20	320	16.0	553.12
8	3.0 inch - Compound	36	350	17.5	604.98
9	4.0 inch	-	500	25.0	864.25
10	4.0 inch - Compound	1	600	30.0	1,037.10
11	6.0 inch	4	1,600	80.0	2,765.60
12	TOTALS	10,422			\$ 1,983,702
13	TOTAL FIXED COSTS INCLUDING CAPITAL - WATER FUND				\$ 1,983,385

City of Roseville

Storm Sewer Rate Analysis

2021

Total Costs

	2021
Personnel Services	\$ 463,065
Supplies & Maintenance	88,340
Other Charges	822,800
Less Depreciation	(480,000)
Capital Outlay	1,168,700
Total	\$ 2,062,905

** Switched to 5-Year CIP amortization in 2019 to better approximate actual cash flow needs
= Amount to recover from rates

	# of Customers	# of Lots / Acreage	Current Rates		Proposed Rates	
			Base Fee	Base Fee Revenue	Base Fee	Base Fee Revenue
Single Family & Duplex	9,741	9,741	14.25	\$ 138,809	14.54	\$ 141,634
Multi-Family & Churches	n/a	429	110.30	47,319	112.51	48,267
Cemeteries & Golf Course (a)	n/a	9	10.70	96	10.91	98
Parks (b)	n/a	1	33.20	33	33.86	34
Schools & Comm. Centers (c)	n/a	176	53.65	9,442	54.72	9,631
Commercial & Industrial	n/a	1,418	220.50	312,669	224.91	318,922
		11,774		508,369		\$ 518,586

Total Annual Revenue \$2,033,475

Total Costs to Recoup 2,062,905 12/31/19 Cash Balance = \$0
Revenue over (under) Costs 11,439 (loaned %)

Total Annual Revenue 2,074,344
Amount Needed for Operations (894,205)
Amount Available for Capital \$ 1,180,139

City of Roseville
Sanitary Sewer Rate Analysis
2021

Total Fixed Costs

	2021
Personnel Services	\$ 508,830
Supplies & Maintenance	44,700
Other Charges (net of sewer treatment)	1,052,210
Less Depreciation	(456,000)
Capital Outlay	1,349,000

Total \$ 2,498,740 ** Switched to 5-Year CIP amortization in 2019 to better approximate actual cash flow needs-in 2019 Cmiller had this linked to the Non-MSA CIP sheet = Amount to recover from BASE rates

	# of Customers	Avg. Usage (a)	Current		Proposed		Current		Proposed	
			Base Fee	Revenue	Base Fee	% Increase (decrease)	Base Fee	Revenue	Fee per 1,000 gals.	Usage Fee Revenue
Single-Family Residential	9,469	11	40.25	381,127	41.66	3.50%	394,479	270,813	2.65	276,021
Residential - Apts & Condos: Accts. (b)	212	232.32						128,057	2.65	130,549
Residential - Apts & Condos: Units (b)	6,616		28.25	186,902	29.24	3.50%	193,452			
Non-residential										
5/8" Meter or 3/4" Meter	116	17.12	30.10	3,492	31.15	3.49%	3,613	11,916	6.12	12,174
1.0" Meter	177	67.28	60.25	10,664	62.36	3.50%	11,038	71,453	6.12	72,842
1.5" Meter	112	131.96	90.40	10,125	93.56	3.50%	10,479	88,674	6.12	90,477
2.0" Meter	96	220.11	140.90	13,526	145.83	3.50%	14,000	126,783	6.12	129,309
3.0" Meter	34	299.26	291.85	9,923	302.06	3.50%	10,270	61,049	6.12	62,209
4.0" Meter	1	496.75	583.70	584	604.13	3.50%	604	2,981	6.12	3,040
6.0" Meter	-	-	1,167.40	-	1,208.26	3.50%	-	-	-	-
	16,833			616,343			637,934	761,724		776,682
			Total Annual Revenue	2,465,372			2,551,736	3,046,898		3,106,608

(a) Usage is in 1,000's of gals. SF Res. usage is based on average WINTER usage

(b) Total UB Accounts = 189, total units for base revenue calculation = 5,976

** Multi-Family & Condo are charged a single property base fee plus a separate fee for each housing unit.

Total Variable Costs

Total Wastewater Treatment Cost

2,982,790

** based on Met Council email dated 8/4/2020

Total Costs to Recoup

Revenue over (under) Costs

2,498,740

52,996

Total Annual Revenue

Amount Needed for Operations

Amount Available for Capital

(1,149,740)

1,401,996

Total Costs to Recoup

Revenue over (under) Costs

2,982,790

123,818

12/31/19

Total Costs

	2021
Personnel Services	\$ 41,785
Supplies & Maintenance	-
Other Charges: Miscellaneous	24,760
Contractor Costs: Curbside	571,313
Contractor Costs: Parks	5,233
Contractor Costs: Park Pathways	7,371
Contractor Costs: Clean-Up Day	10,000
Contractor Costs: Shredding Day	5,000
Total	\$ 665,462
	= Amount to recover from rates
	\$ 598,917 = Total Contractor Costs

	# of Customers (Units)	Current Rates		Proposed Rates	
		Base Fee	Revenue	Base Fee	% Increase (decrease)
Single Family	9,420	9.00	84,780	9.36	4.00%
Multi family	6,331	9.00	56,979	9.36	4.00%
Opt-Ins	20	9.00	180	9.36	4.00%
Applewood Service	1	60.00	60	60.00	0.00%
Revenue Sharing from Contractor (quarterly)			-		-
Ramsey Co. SCORE Grant (quarterly)			21,875		21,875
			163,874		169,552
Total Quarterly Revenue			655,496		678,206

Total Costs to Recoup 665,462
Revenue over (under) Costs 12,744



City of Roseville

Utility Rate Study

October 19, 2020



Overview

What are enterprise funds and fixed costs

Purpose & Approach of the Study

Findings

Water and Storm Drainage

- Goals & Assumptions
- Capital Projects
- Wholesale Water Customer
- Rate Structures
- Projections

Impact Analysis



Utility funds

They are enterprise funds

1. Should pay for
 - Capital outlays
 - Operations
 - Replacement reserves
 - Debt
2. Should have sufficient cash for operations and debt
3. Have a minimum of:
 - 6 months of operating expenses including depreciation
 - Following year's bond/debt payments, if any
 - Funding for capital equipment
 - Flexibility to accommodate unforeseen repairs



Fixed Costs

What are they?

- Staff
- Equipment/vehicles
- Supplies
- Cost to send out the bills
- Meters for resale and meter repair/maintenance (water fund only)

Why important?

- Need to make sure these costs are covered by base charges and not subject to usage of the system



Purpose of the Study

Review the current rate structure for all funds

1. Water Fund

- Usage tiers promote conservation (Water Only)
- Base charges cover fixed costs
- Build and maintain appropriate fund balances
- Balance cash and bonding to pay for capital projects

2. Storm Drainage Fund

- Build and maintain appropriate fund balance
- Pay cash for future capital projects



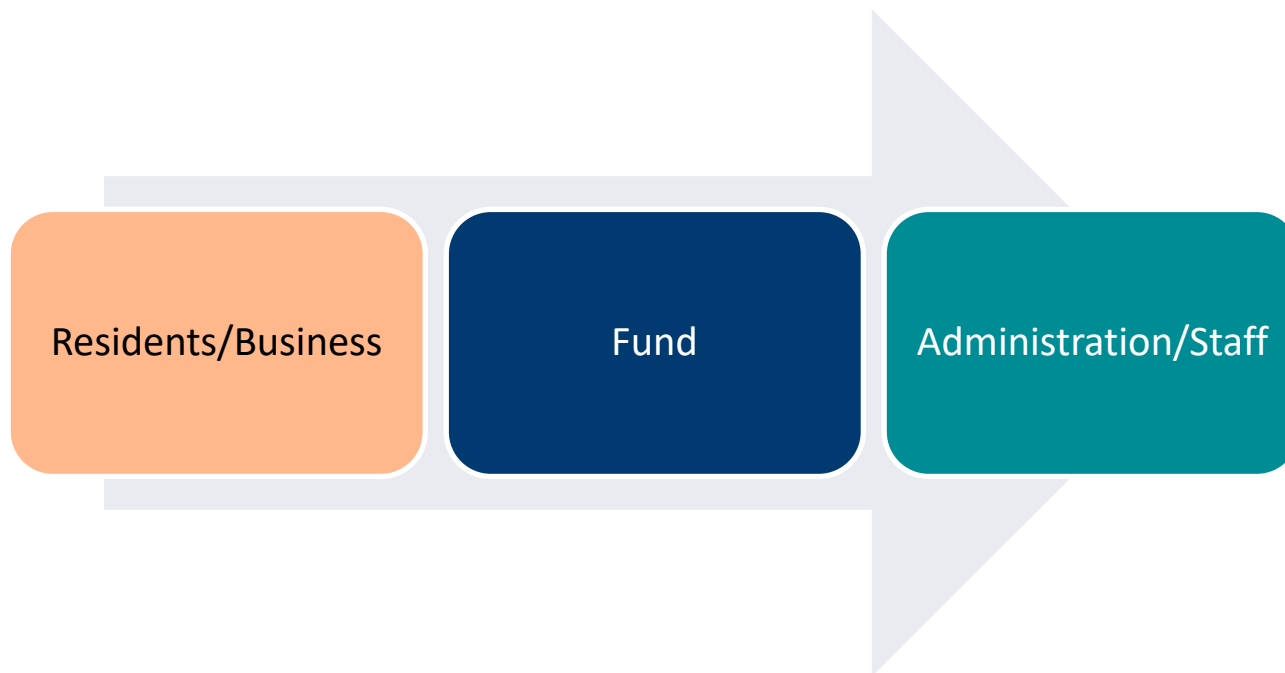
Purpose of the Study

Parameters

1. Assure funds pay for
 - Capital outlay
 - Operations
 - Annual debt service, if applicable
2. Provide sufficient cash reserves for
 - Six months of operating expenses (including depreciation)
 - Next years' annual debt service (if applicable)
3. Review existing contract with City of Arden Hills for wholesale water service



Approach to Study – Impact Analysis





Findings

1. Cash balances need rebuilding
2. Base / meter charge is higher than needs to be
 - Should just cover fixed costs to match industry standards
 - Shift non fixed costs to usage rates
3. Residential customers pay for more than they use
4. Cost of service analysis for Arden Hills requires increase in next contract
5. Majority of capital needs can be paid with cash
6. Will provide Council two (2) options to select from



Impact Analysis - Residential

Based on Quartile system

- **25%** Quartile = bottom ¼ of usage
- **50%** Quartile = midpoint of usage
- **75%** Quartile = top ¼ of usage

Take Away

1. Tier 1 of new rate structure (**15,000** gallons) is **75%** Quartile = **85%** of winter usage ★
2. **Both Options** show decreases to residential accounts
3. **Option #1** will see higher decreases
4. 2021 includes current annual inflationary rate increases

Quartile
Sample 2019 Usage
Meter Size

RESIDENTIAL ACCOUNTS		
Low	Median	High ★
25% Quartile	50% Quartile	75% Quartile
6,000	10,000	15,000
5/8"	5/8"	5/8"

Option 1 \$ Incr/(Decr)	\$ (37.45)	\$ (31.53)	\$ (24.13)
Option 2 \$ Incr/(Decr)	\$ (26.08)	\$ (23.04)	\$ (19.24)
Due to New Rate Structure			



Impact Analysis – Apt / Commercial

Based on Quartile system

- **25%** Quartile = bottom ¼ of usage
- **50%** Quartile = midpoint of usage
- **75%** Quartile = top ¼ of usage

Take Away

1. **Both Options** show decreases to most commercial accounts
2. **High commercial** will see increase
3. **100% Quartile** will see significant increase

Quartile
Sample 2019 Usage
Meter Size

OTHER ACCOUNTS				
High Apartment (Per Unit)	Low Commercial	Median Commercial	High Commercial	Very High Commercial
75% Quartile	25% Quartile	50% Quartile	75% Quartile	100% Quartile
11,000	13,000	45,000	138,000	13,843,000
1.5"	5/8"	1.0"	2.0"	1.0" & 6.0" each

Option 1 \$ Incr/(Decr)	\$ 5.32	\$ (39.31)	\$ (10.03)	\$ 57.35	\$ 35,166.02
Option 2 \$ Incr/(Decr)	\$ (0.69)	\$ (32.98)	\$ (3.20)	\$ 69.47	\$ 22,645.92
Due to New Rate Structure					



Goals

Rate Structure Design

1. Equity / Fairness
 - Evaluate who is using system and when
2. Sufficient Revenues
 - Pay for future operating and capital
3. Fixed Rate covers fixed costs
4. Promote Conservation
5. Ease of Administration
6. Understood by Rate Payers



Assumptions

1. Utilized 12 months of usage data
 - August 2019 – July 2020
2. Future Projections
 - **3%** on Expenses
 - **2%** on Other Revenues
3. Capital Needs
 - **\$28.2** million over **10** years
 - Costs inflated **2.5%** / year



Capital Projects & Equipment – Next 10 Years

Fund	Vehicles	Equipment	Buildings	Improvements	Total
Water	\$ 294,216	\$ 627,365	\$ 237,795	\$ 12,162,438	\$ 13,321,814
Storm	\$ 1,080,011	\$ 1,182,164	\$ -	\$ 12,639,025	\$ 14,901,199
TOTAL	\$ 1,374,227	\$ 1,809,529	\$ 237,795	\$ 24,801,462	\$ 28,223,013



Capital Projects – Next 10 Years

Proposed Bonding

Year	Water Fund	Storm Drainage Fund
2020	\$ 2,500,000	\$ -
2021	-	-
2022	-	-
2023	-	-
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
TOTALS	\$ 2,500,000	\$ -



Wholesale Water Customer

Agreement with City of Arden Hills

1. Most recent agreement dated 8/14/2006 through 12/31/2024
2. Max daily usage
 - None
3. Rate Calculation
 - Average cost charged to Roseville by St. Paul
 - Includes administrative, repair & maintenance, and depreciation expenses
 - Capital costs paid for separately

Definition: A wholesale customer is a purchasing utility who is buying water services from a separate owner utility for the purpose of reselling such water to the purchasing utility's retail or other customers.



Wholesale Water Customer

Allocate operating costs of water system

1. Estimate and allocate water demand
 - Reserved capacity and actual capacity used
2. Determine applicable wholesale costs
 - Water supply & treatment (**not applicable here**)
 - Transmission lines
 - Distance and elevation
 - Peaking factors – comparing average day usage to max day usage
 - Customer accounting and service costs
 - Administration and overhead



Wholesale Water Customer

Cost Allocation per American Water Works Association

Follows "Cash-Needs" Approach

2020 Water Budget:

1. Total operating cost of **\$6.2m**
2. Applicable total wholesale cost is **\$5.9m**
3. Arden Hills portion is **\$1.2m**
4. Per contract, **2019** billed was **\$972,000**; difference of **(\$257,216)**

Take Away

1. Existing contract does not cover costs
2. Have good data for negotiating next contract

COST DISTRIBUTION TO CUSTOMER CLASSES						
Item	Base	Extra Capacity Maximum Day	Customer Costs		Total Cost of Service	
			Meters	Bills		
Unit Cost of Service						
Wholesale Portion of O&M	\$ 2.6136	\$ 329.2381	\$ 5.4436	\$ 3.0032		
Retail Services						
Units of Service	1,119,090	4,770	10,454	41,696		
Allocated Costs of Service	\$ 2,924,854	\$ 1,570,302	\$ 56,907	\$ 125,221	\$ 4,677,284	
Wholesale Services						
Units of Service	302,030	1,337	3	4		
Allocated Costs of Service	\$ 789,387	\$ 440,217	\$ 16	\$ 12	\$ 1,229,632	

3

2

ANNUAL WATER USAGE CHARGES & PAYMENTS PER AGREEMENT				
	Quarterly Amount	Annual Amount	Cost of Service Amount	Difference
1st Quarter 2019	\$ 190,779			
2nd Quarter 2019	232,835			
3rd Quarter 2019	290,412			
4th Quarter 2019	258,390	\$ 972,416	\$ 1,229,632	\$ (257,216)

4



Water Fund – Current Rate Structure

Take Away

1. Fixed Rate
 - Appears high
2. Consumption Charges
 - Residential is a combination of tiers and seasonal rates; can be confusing
 - No separate rate structure for apartments or irrigation accounts
3. Tiers
 - **30,000** gallon is too high
4. Conservation Rates
 - **Residential:** Difference between tiers is only **10%** for winter and **20%** for summer
 - **Commercial:** Difference for seasonal only **6%**

WATER FUND

Current Quarterly Rate Structure

Existing 2020
Rate

FIXED RATE

1	5/8 inch & 3/4 inch	\$	62.10
2	1 Inch		77.65
3	1.5 Inch		124.00
4	2.0 Inch		233.00
5	3.0 Inch		465.80
6	4.0 Inch		931.65
7	6.0 Inch		1,758.00

CONSUMPTION CHARGES

Current Tiers (1,000 gal.)

8	Residential	0 to 30	\$	2.30
9	Winter Rate	- Over 30		2.55
10	Summer Rate	Over 30		2.75
11	Commercial - Winter Rate	0 to 999,999	\$	3.00
12	Commercial - Summer Rate	0 to 999,999		3.20



Water Fund – Fixed Costs

2020 Budgeted Fixed Costs* = **\$1.08 Million**

*Fixed Costs

1. Personnel Expenses
2. Operating Expenses
 1. Office supplies
 2. Telephone
 3. Insurance
 4. Contract maintenance
 5. Printing/mailling
3. Administrative Overhead
4. Excludes operating costs paid by Arden Hills
5. Excludes capital

	Existing Charges	2020 Quarterly	Number of Units/Meters	Annual Revenue	Grand Total	% of Fixed Costs
1	Fixed Rate					
2	5/8 inch & 3/4 inch	62.10	9,608	2,386,627		
3	1 Inch	77.65	248	77,029		
4	1.5 Inch	124.00	198	98,208		
5	2.0 Inch	233.00	143	133,276		
6	3.0 Inch	465.80	56	104,339		
7	4.0 Inch	931.65	1	3,727		
8	6.0 Inch	1,758.00	4	28,128	\$ 2,831,334	261.3%

Note: Accounts with multiple meters may only be charged for 1 meter

Take Away

1. Fixed Rate - Currently pays for **260%** of actual costs



Water Fund – Fixed Costs Option #1

2020 Budgeted Fixed Costs* = **\$1.08 Million**

Option #1: 100% of Fixed Costs in Fixed Charges					
RATE STRUCTURE OPTIONS	Number of Meters	Max Flow (gpm)	Equivalent Ratio	Quarterly Charge	Annual Revenues
Fixed Rate					
5/8 inch & 3/4 inch	9,624	20	1.0	\$ 18.88	\$ 726,804
1.0 Inch	301	50	2.5	47.20	56,829
1.5 Inch	273	100	5.0	94.40	103,085
2.0 Inch	120	160	8.0	151.04	72,499
2.0 Inch - Compound	43	160	8.0	151.04	25,979
3.0 Inch	20	320	16.0	302.08	24,166
3.0 Inch - Compound	36	350	17.5	330.40	47,578
4.0 Inch	-	500	25.0	472.00	-
4.0 Inch - Compound	1	600	30.0	566.40	2,266
6.0 Inch	4	1,600	80.0	1,510.40	24,166
TOTALS	10,422				\$ 1,083,372
100% TOTAL FIXED AND METER COSTS - WATER FUND					\$ 1,083,385

Take Away

1. Meter Charge
 - Based on Max Flow (gpm)
2. Recommended Rate
 - means everyone pays for fixed cost of system, regardless of usage
3. All Meters Charged
 - Even if more than 1 per account

**Note: Fixed costs attributed to retail portion of the system only. Excludes Capital.*



Water Fund – Fixed Costs Option #2

2020 Budgeted Fixed Costs* = **\$1.98 Million**

Option #2: Fixed Rates Include Capital Costs					
RATE STRUCTURE OPTIONS	Number of Meters	Max Flow (gpm)	Equivalent Ratio	Quarterly Charge	Annual Revenues
Fixed Rate					
5/8 inch & 3/4 inch	9,624	20	1.0	\$ 34.57	\$ 1,330,807
1.0 Inch	301	50	2.5	86.43	104,062
1.5 Inch	273	100	5.0	172.85	188,752
2.0 Inch	120	160	8.0	276.56	132,749
2.0 Inch - Compound	43	160	8.0	276.56	47,568
3.0 Inch	20	320	16.0	553.12	44,250
3.0 Inch - Compound	36	350	17.5	604.98	87,117
4.0 Inch	-	500	25.0	864.25	-
4.0 Inch - Compound	1	600	30.0	1,037.10	4,148
6.0 Inch	4	1,600	80.0	2,765.60	44,250
TOTALS	10,422				\$ 1,983,702
TOTAL FIXED COSTS INCLUDING CAPITAL - WATER FUND					\$ 1,983,385

Take Away

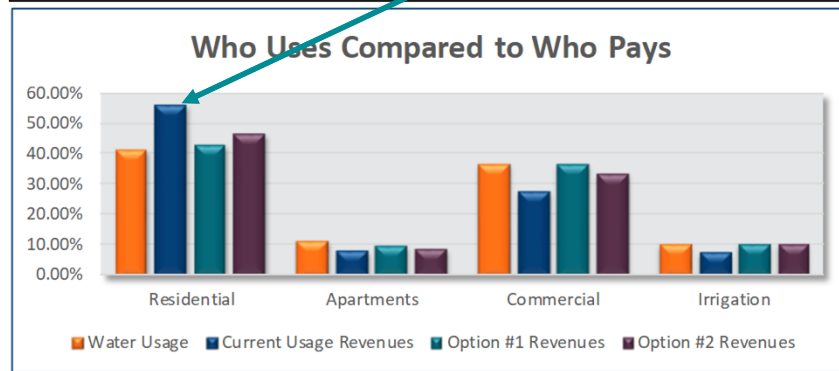
- Capital Projects
 - Same as Option #1 except it includes **5-year average** of **\$900,000** for capital

*Note: Fixed costs attributed to retail portion of the system only. Includes Capital.



Water Fund – Who Uses vs Who Pays

WATER FUND				
Customer Type	Water Usage	Percent of		
		Current Usage Revenues	Option #1 Revenues	Option #2 Revenues
Residential	41.47%	56.26%	43.02%	46.83%
Apartments	11.50%	8.45%	9.74%	8.97%
Commercial	36.59%	27.67%	36.81%	33.77%
Irrigation	10.44%	7.63%	10.43%	10.43%

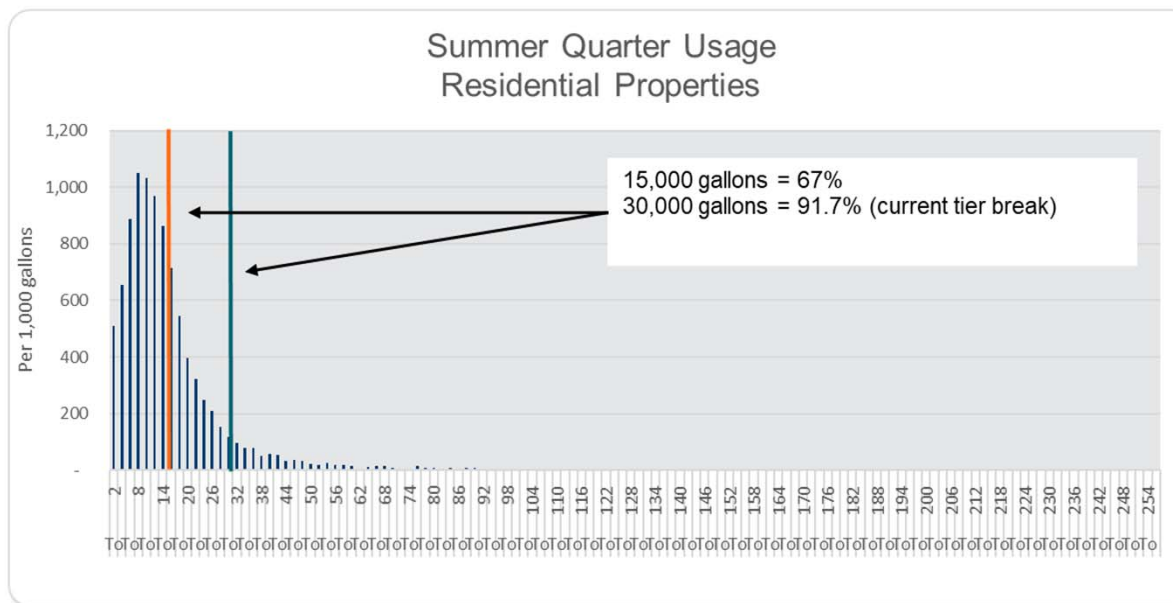


Take Away

1. Residential Customers
 - Use **41%** of system, but pay for **56%**
2. Other Customers
 - Use **59%** of system but pay for **44%**
3. Both Options
 - Provide solutions to correct disparity
 - **Option 1** (teal) closer to usage for all categories
 - **Option 2** (purple) residential pays for more than they use



Residential Water Usage

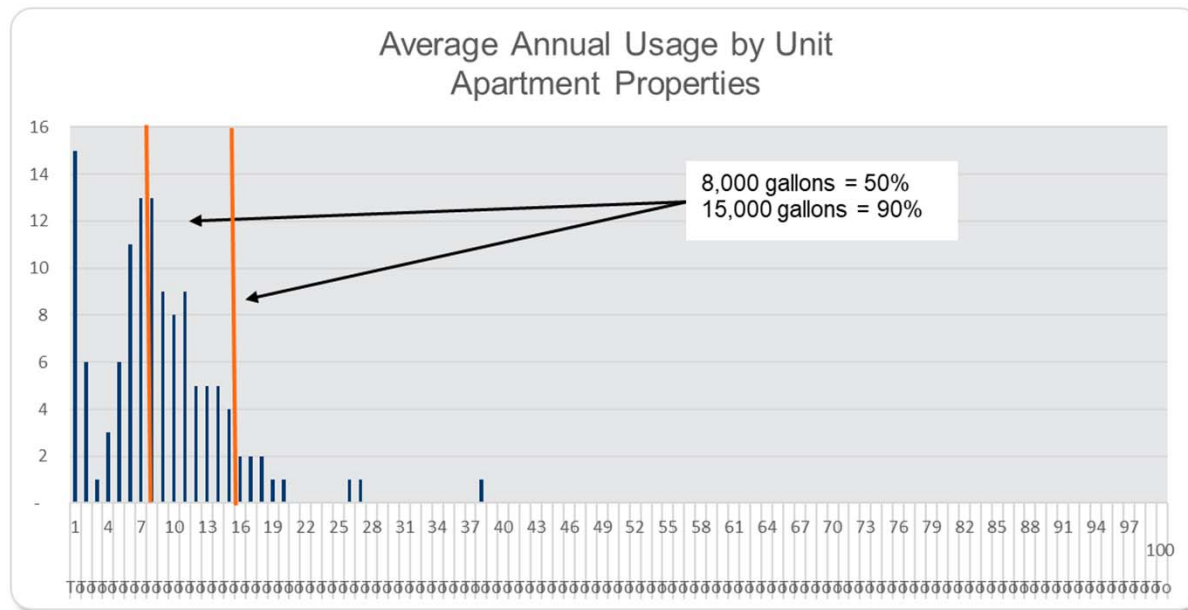


Take Away

1. Eliminate Seasonal
2. 3-Tiered Rate Structure
 - 1st Tier - **67%** of summer usage
 - 2nd Tier – **92%** of summer usage
 - 3rd Tier - Over **92%**
3. Promotes conservation while allowing for essential usage in 1st tier
 - 1st Tier – **85%** of winter usage



Apartment Water Usage



Take Away:

1. Separate Rate Structure

- 1st Tier - **50%** of usage
- 2nd Tier - **90%** of usage
- 3rd Tier - Over **90%**

2. Tiers on a per-unit basis

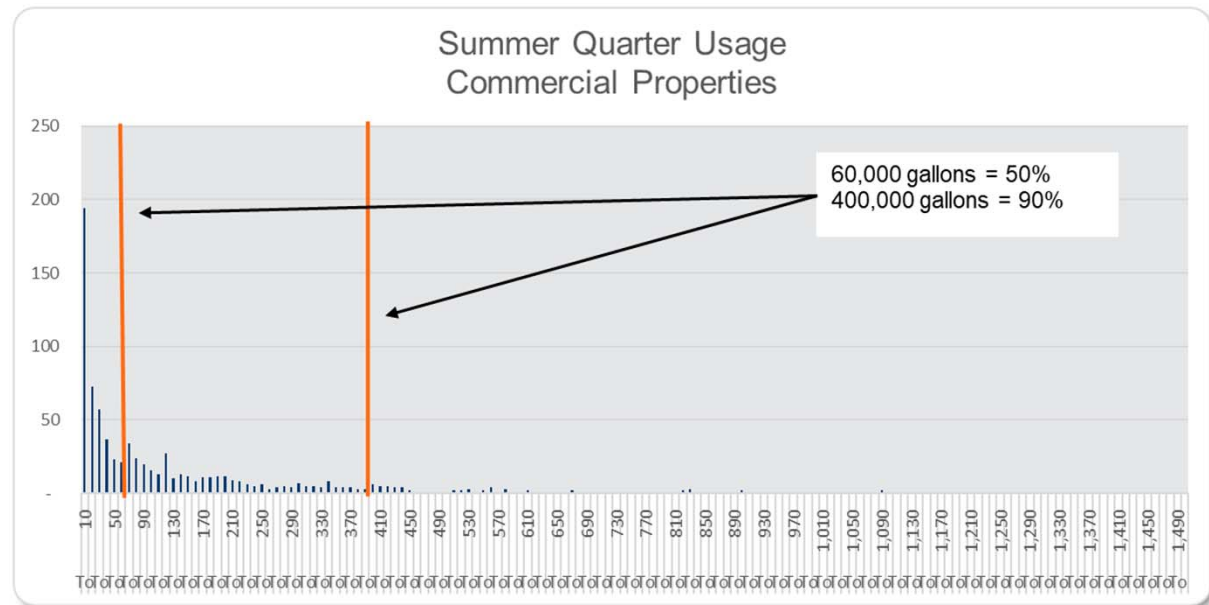
- **Example:** 4-unit bldg.
would have 1st tier = 8,000
x 4 = 32,000 gallons



Commercial Water Usage

Take Away:

1. Eliminate Seasonal
2. 3-Tiered Rate Structure
 - 1st Tier - **50%** of usage
 - 2nd Tier – **90%** of usage
 - 3rd Tier - Over **90%**
3. Promote conservation
 - Allows small business to stay in 1st tier

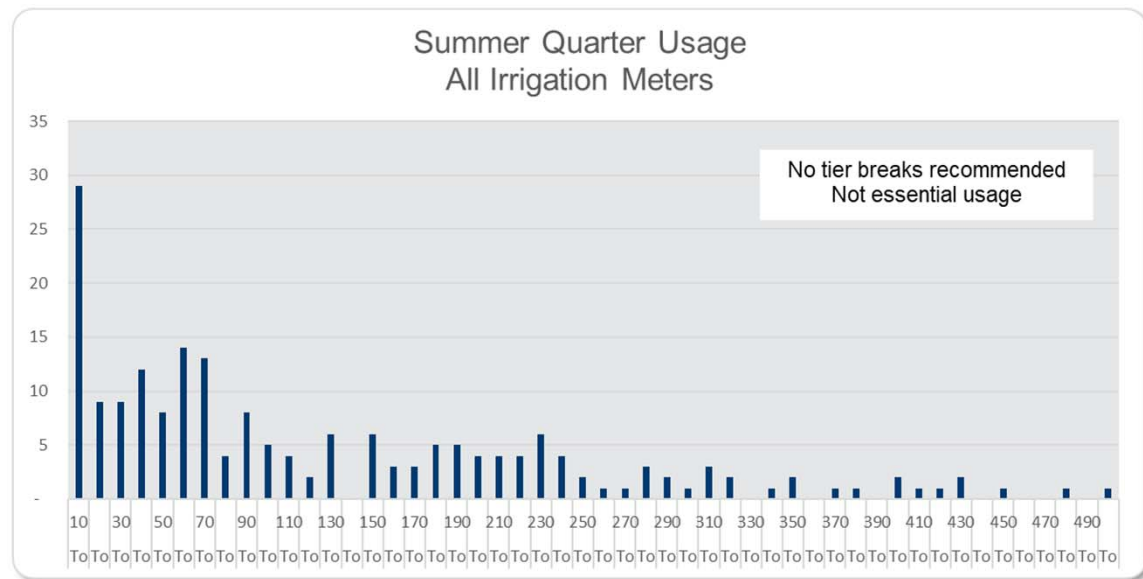




Irrigation Water Usage

Take Away

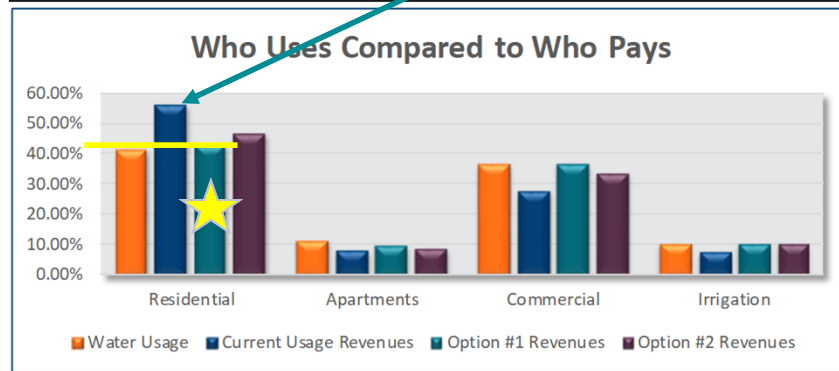
1. No Tiers recommended
 - Usage not considered essential
2. Promotes conservation
 - By billing at higher rate





Water Fund – Who Uses vs Who Pays

WATER FUND				
Customer Type	Water Usage	Percent of		
		Current Usage Revenues	Option #1 Revenues	Option #2 Revenues
Residential	41.47%	56.26%	43.02%	46.83%
Apartments	11.50%	8.45%	9.74%	8.97%
Commercial	36.59%	27.67%	36.81%	33.77%
Irrigation	10.44%	7.63%	10.43%	10.43%



Take Away

1. Residential Customers
 - Use **41%** of system, but pay for **56%**
2. Other Customers
 - Use **59%** of system but pay for **44%**
3. Both Options
 - Provide solutions to correct disparity
 - **Option 1** (teal) closer to usage for all categories
 - **Option 2** (purple) residential pays for more than they use



Current vs. Proposed Water Rates Option #1

Current Quarterly Rate Structure

Existing 2020
Rate

FIXED RATE

1	5/8 inch & 3/4 inch	\$ 62.10
2	1 Inch	77.65
3	1.5 Inch	124.00
4	2.0 Inch	233.00
5	3.0 Inch	465.80
6	4.0 Inch	931.65
7	6.0 Inch	1,758.00

CONSUMPTION CHARGES

Current Tiers (1,000 gal.)

8	Residential	0 to 30	\$ 2.30
9	Winter Rate	- Over 30	2.55
10	Summer Rate	Over 30	2.75
11	Commercial - Winter Rate	0 to 999,999	\$ 3.00
12	Commercial - Summer Rate	0 to 999,999	3.20

Take Away

1. **3 Tiers** have been tailored to actual usage patterns
2. **New structures** for apartments and irrigation

OPTION #1 (Recommended): Fixed Rates Cover 100% of Fixed Costs

Fixed Rate

1	5/8 inch & 3/4 inch	\$ 18.88
2	1.0 Inch	47.20
3	1.5 Inch	94.40
4	2.0 Inch	151.04
5	2.0 Inch - Compound	151.04
6	3.0 Inch	302.08
7	3.0 Inch - Compound	330.40
8	4.0 Inch	472.00
9	4.0 Inch - Compound	566.40
10	6.0 Inch	1,510.40

Consumption Charge

Proposed Tiers (1,000 gal.)

11	RESIDENTIAL	- to 15	\$ 3.90
12		15 to 30	25% 4.88
13		Over 30	25% 6.10
14	APARTMENTS (Per Unit Basis)	- to 8	\$ 3.90
15		8 to 15	25% 4.88
16		Over 15	25% 6.10
17	COMMERCIAL	- to 60	\$ 3.90
18		60 to 400	25% 4.88
19		Over 400	25% 6.10
20	IRRIGATION	- to 999,999	\$ 4.97

1



Proposed Water Rates: Comparing Options

OPTION #1 (Recommended): Fixed Rates Cover 100% of Fixed Costs

Fixed Rate		Proposed Rates	
1	5/8 inch & 3/4 inch	\$	18.88
2	1.0 Inch		47.20
3	1.5 Inch		94.40
4	2.0 Inch		151.04
5	2.0 Inch - Compound		151.04
6	3.0 Inch		302.08
7	3.0 Inch - Compound		330.40
8	4.0 Inch		472.00
9	4.0 Inch - Compound		566.40
10	6.0 Inch		1,510.40

Consumption Charge		Proposed Tiers (1,000 gal.)	
11	RESIDENTIAL	- to 15	\$ 3.90
12		15 to 30	25% 4.88
13		Over 30	25% 6.10
14	APARTMENTS	- to 8	\$ 3.90
15	(Per Unit Basis)	8 to 15	25% 4.88
16		Over 15	25% 6.10
17	COMMERCIAL	- to 60	\$ 3.90
18		60 to 400	25% 4.88
19		Over 400	25% 6.10
20	IRRIGATION	- to 999,999	\$ 4.97

OPTION #2: Fixed Rates Include Capital Costs

Fixed Rate		Proposed Rates	
1	5/8 inch & 3/4 inch	\$	34.57
2	1.0 Inch		86.43
3	1.5 Inch		172.85
4	2.0 Inch		276.56
5	2.0 Inch - Compound		276.56
6	3.0 Inch		553.12
7	3.0 Inch - Compound		604.98
8	4.0 Inch		864.25
9	4.0 Inch - Compound		1,037.10
10	6.0 Inch		2,765.60

Consumption Charge		Proposed Rates	
11	RESIDENTIAL	\$	3.18
12		25%	3.98
13		25%	4.98
14	APARTMENTS	\$	3.18
15	(Per Unit Basis)	25%	3.98
16		25%	4.98
17	COMMERCIAL	\$	3.18
18		25%	3.98
19		25%	4.98
20	IRRIGATION	\$	4.50

Take Away

- Both options have same proposed tier breaks
- Both options generate same annual revenues
- Option 2** has higher Fixed Rates and lower Consumption Charges
- Residential pays **more** for water than it uses in **Option 2** than in **Option 1**



Storm Drainage Fund

Quarterly billing

STORM DRAINAGE FUND				
Current <u>Quarterly</u> Rate Structure		Existing 2020 Rate	Proposed 2021 Rate	Total R.E.U.'s
1	All Users - Per R.E.U.	\$ 14.25	\$ 14.54	9,741
2	Commercial / Industrial	220.50	224.91	1,418
3	Multi-Family / Churches	110.30	112.51	429
4	Schools / Community Centers	53.65	54.72	176
5	Parks	33.20	33.86	1
6	Cemetaries / Golf Courses	10.70	10.91	9
7	TOTAL PROJECTED ANNUAL REVENUES			\$ 2,074,049

Take Away

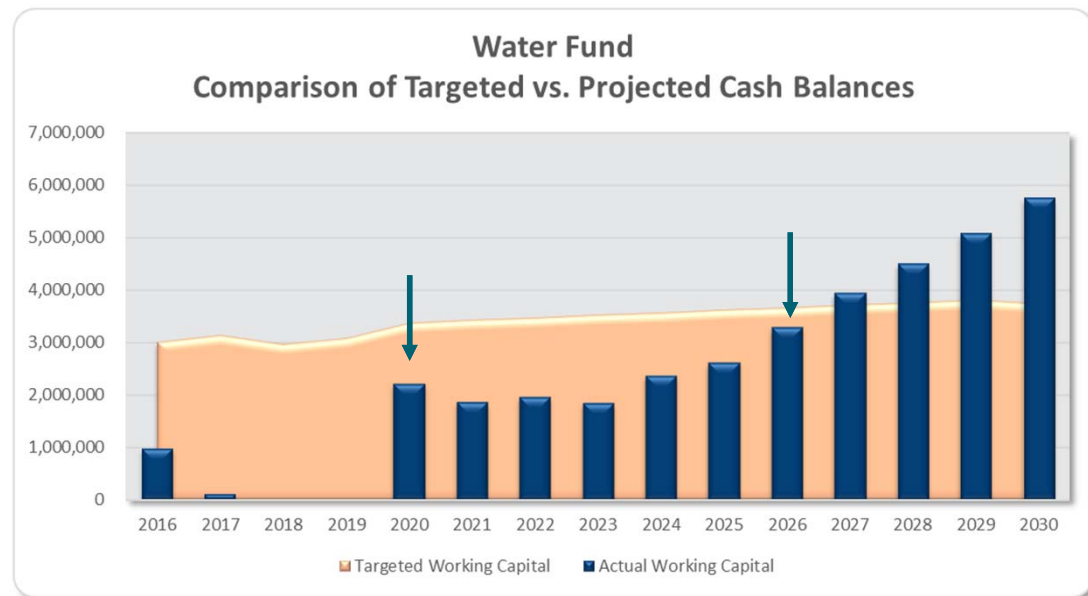
1. No recommended changes to existing rate structure
2. Rate increases recommended build reserves and keep pace with inflation



Water Fund - Projections

Take Away

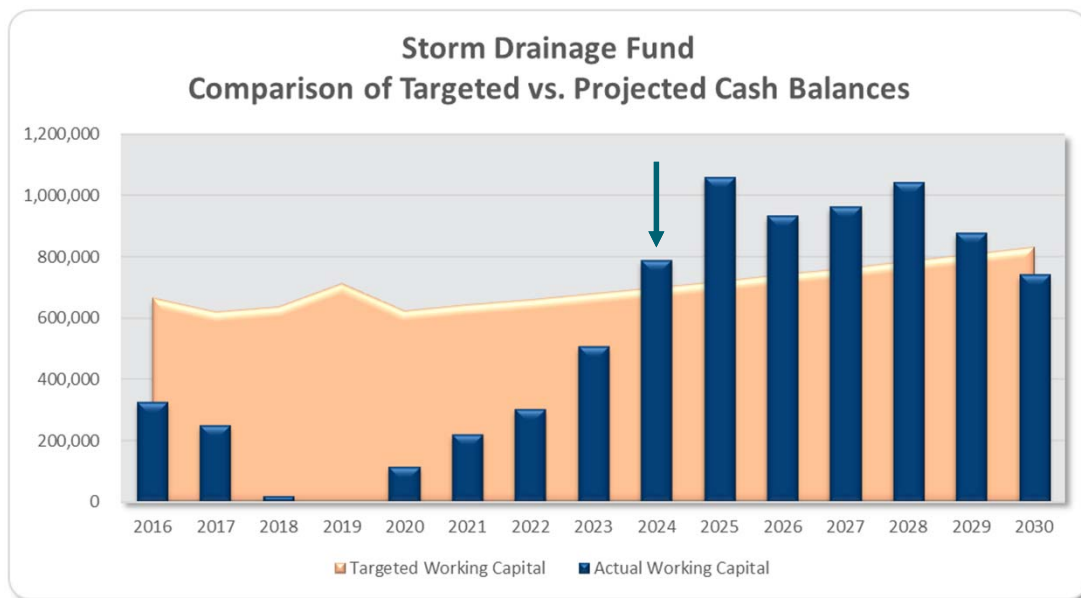
1. Cash balance should be close to or exceed target by **2026/2027**
2. **One-time** bond issue in **2020** to pay for capital over next three years.



Target working capital = 6 months of operating expenses, including depreciation + next year's debt service



Storm Drainage Fund - Projections



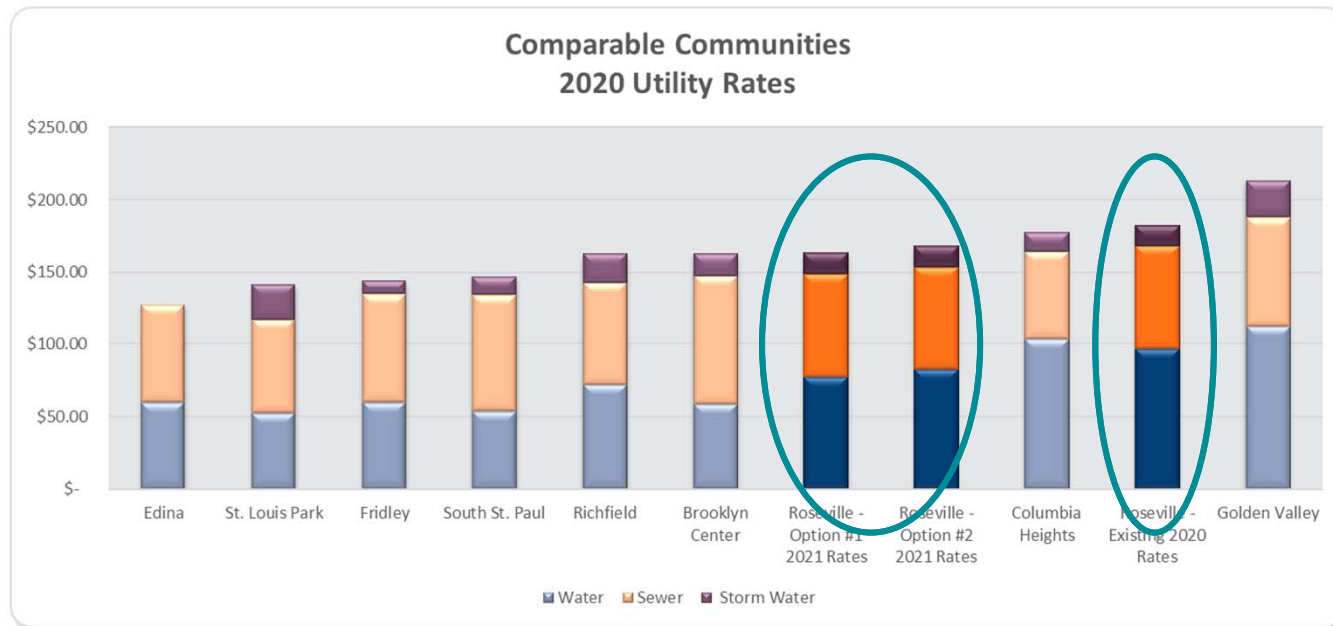
Take Away

1. Cash balance should exceed target by **2024**
2. No bonding recommended

Target working capital = 6 months of operating expenses, including depreciation + next year's debt service (if applicable)



Comparable Communities



Take Away

Roseville proposed rates comparable to surrounding communities



Impact Analysis - Residential

Based on Quartile system

- **25%** Quartile = bottom ¼ of usage
- **50%** Quartile = midpoint of usage
- **75%** Quartile = top ¼ of usage

Take Away

1. **Both Options** show decreases to most residential accounts
2. **Option #1** will see more significant decreases
3. 2021 includes current annual inflationary rate increases

	RESIDENTIAL ACCOUNTS		
	Low	Median	High
	25% Quartile	50% Quartile	75% Quartile
Sample 2019 Usage	6,000	10,000	15,000
Meter Size	5/8"	5/8"	5/8"
2021 Rates with Existing Structure			
Total Water	\$ 79.73	\$ 89.41	\$ 101.95
Total Storm Water	14.54	14.54	14.54
Total Water & Storm	\$ 94.27	\$ 103.95	\$ 116.05
2021 Option #1 (Recommended): Fixed Rate Cover 100% of Fixed Costs			
Total Water	\$ 42.28	\$ 57.88	\$ 77.38
Total Storm Water	14.54	14.54	14.54
Total Water & Storm	\$ 56.82	\$ 72.42	\$ 91.92
\$ Increase/(Decrease)	\$ (33.33)	\$ (26.93)	\$ (18.93)
2021 Option #2: Fixed Rate Includes Capital Costs			
Total Water	\$ 53.65	\$ 66.37	\$ 82.27
Total Storm Water	\$ 14.54	\$ 14.54	\$ 14.54
Total Water & Storm	\$ 68.19	\$ 80.91	\$ 96.81
\$ Increase/(Decrease)	\$ (21.96)	\$ (18.44)	\$ (14.04)
Option 1 \$ Incr/(Decr)	\$ (37.45)	\$ (31.53)	\$ (24.13)
Option 2 \$ Incr/(Decr)	\$ (26.08)	\$ (23.04)	\$ (19.24)
Due to New Rate Structure			



Impact Analysis - Other

Based on Quartile system

- **50%** Quartile = midpoint of usage
- **75%** Quartile = top ¼ of usage
- **100%** Quartile = highest user

Take Away

1. **Both Options** show decreases to most commercial accounts and apartments
2. High industrial and irrigation accounts can expect increases
3. **High Industrial and irrigation** will see increase
4. **100% Quartile (very high commercial)** will see significant increase

OTHER ACCOUNTS					
	High Apartment (Per Unit)	Low Commercial	Median Commercial	High Commercial	Very High Commercial
Quartile	75% Quartile	25% Quartile	50% Quartile	75% Quartile	100% Quartile
Sample 2019 Usage	11,000	13,000	45,000	138,000	13,843,000
Meter Size	1.5"	5/8"	1.0"	2.0"	1.0" & 6.0" each
2021 Rates with Existing Structure					
Total Water	\$ 43.47	\$ 108.89	\$ 232.73	\$ 708.33	\$ 50,204.28
Total Storm Water	17.44	197.92	393.43	1,362.95	5,180.60
Total Water & Storm	\$ 60.91	\$ 306.81	\$ 626.16	\$ 2,071.28	\$ 55,384.88
2021 Option #1 (Recommended): Fixed Rate Cover 100% of Fixed Costs					
Total Water	\$ 48.79	\$ 69.58	\$ 222.70	\$ 765.68	\$ 85,370.30
Total Storm Water	17.44	197.92	393.43	1,362.95	5,180.60
Total Water & Storm	\$ 66.23	\$ 267.50	\$ 616.13	\$ 2,128.63	\$ 90,550.90
\$ Increase/(Decrease)	\$ 7.73	\$ (30.24)	\$ 8.76	\$ 117.80	\$ 37,658.28
2021 Option #2: Fixed Rate Includes Capital Costs					
Total Water	\$ 42.78	\$ 75.91	\$ 229.53	\$ 777.80	\$ 72,850.20
Total Storm Water	\$ 17.44	\$ 197.92	\$ 393.43	\$ 1,362.95	\$ 5,180.60
Total Water & Storm	\$ 60.22	\$ 273.83	\$ 622.96	\$ 2,140.75	\$ 78,030.80
\$ Increase/(Decrease)	\$ 1.72	\$ (23.91)	\$ 15.59	\$ 129.92	\$ 25,138.18
Option 1 \$ Incr/(Decr)	\$ 5.32	\$ (39.31)	\$ (10.03)	\$ 57.35	\$ 35,166.02
Option 2 \$ Incr/(Decr)	\$ (0.69)	\$ (32.98)	\$ (3.20)	\$ 69.47	\$ 22,645.92
Due to New Rate Structure					



Conclusion

1. New structure:

- Promotes conservation
- Balances between who uses and who pays for the system
- Balances between retail and wholesale water users
- Balances between fixed and variable costs of the system

2. Rate increases necessary

- Cover inflation
- Build reserves
- Pay for future debt service, as applicable

3. Still competitive

4. Funds will be healthy soon

- City has long term plan to build fund balances and pay for future capital