AGENDA
LOVELAND CITY COUNCIL STUDY SESSION
TUESDAY, JULY 28, 2015
CITY COUNCIL CHAMBERS
500 EAST THIRD STREET
LOVELAND, COLORADO

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STUDY SESSION 6:30 P.M. - STUDY SESSION AGENDA

1. WATER & POWER (presenters: Jim Lees, 60 min)

2015 WATER/WASTEWATER COST OF SERVICE RATE STUDY RESULTS

This is an information only item. We have been working on a cost-of-service rate study for the Water and Wastewater Utilities since January. As part of this process, there have been three meetings with Loveland Utilities Commission (LUC) liaisons Gene Packer, Larry Roos, Dave Schneider and Gary Hausman, and we so appreciate their time and insights. In addition, information has been presented to the whole LUC at their June and July meetings. Our last cost-of-service rate study for Water and Wastewater was completed in 2012, so this year's study is in keeping with the new approach of updating our cost of service for each utility every three years instead of every five.

Staff will be looking to City Council for direction on two items: 1) rates for Water and Wastewater for 2016; and 2) 10-year rate tracks and borrowing alternatives for Water and Wastewater. For the 10-year rate track and borrowing alternatives, there are four scenarios that were developed for both Water and Wastewater. Then, at the July 14, 2015 City Council Study Session on upcoming capital projects at the Wastewater Treatment Plant, there was interest expressed in seeing another scenario for Wastewater, with a higher level of borrowing in 2016 and this created the ability to move some capital projects forward in the 10-Year CIP. That scenario is included in tonight's presentation. Jason Mumm and Jon Albertsen from Hawksley Consulting (a division of MWH Global) will join us to lead us through the discussion on these study topics. Also, a brief update on the work that has been done so far for an evaluation of our Water and Wastewater System Impact Fees (SIF) will be presented.

2. PUBLIC WORKS (presenters: Leah Browder and Dave Klockeman, 45 min)

CAPITAL TRANSPORTATION PROJECTS—PROCESS, PRIORITIZATION, CHALLENGES AND FUNDING

This is an information only item. This is an informational presentation to support City Council discussion regarding the City's long-range 2035 Transportation Plan, the process used to determine project priorities and current funding approaches.

ADJOURN

CITY OF LOVELAND
WATER & POWER DEPARTMENT
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AGENDA ITEM: **1**
MEETING DATE: 7/28/2015
TO: City Council
FROM: Steve Adams, Water and Power Director
Jim Lees, Utility Accounting Manager
Chris Matkins, Water Utilities Manager
Alan Krcmarik, Executive Fiscal Advisor
PRESENTER: Jim Lees, Utility Accounting Manager

TITLE:
2015 Water and Wastewater Cost-of-Service Rate Study Results

RECOMMENDED CITY COUNCIL ACTION:
The purpose of this item is to get direction from City Council on proposed rates for 2016 for both the Water and Wastewater Utilities and get direction on preferred 10-year rate track and borrowing alternatives for both the Water and Wastewater Utilities.

SUMMARY:
We have been working on a cost-of-service rate study for the Water and Wastewater Utilities since January. As part of this process, there have been three meetings with Loveland Utilities Commission (LUC) liaisons Gene Packer, Larry Roos, Dave Schneider and Gary Hausman, we appreciate their time and insights. In addition, information has been presented to the whole LUC at their June and July meetings.

Staff will be looking to City Council for direction on two items: 1) rates for Water and Wastewater for 2016; and 2) 10-year rate tracks and borrowing alternatives for Water and Wastewater. For the 10-year rate track and borrowing alternatives, there are four scenarios that were developed for both Water and Wastewater. Then, at the July 14, 2015 City Council Study Session on upcoming capital projects at the Wastewater Treatment Plant, there was interest expressed in seeing another scenario for Wastewater with a higher level of borrowing in 2016. This created the ability to move one large capital project forward in the 10-Year CIP. That scenario is included in the presentation. Jason Mumm and Jon Albertsen from Hawksley Consulting (a division of MWH Global) will join us to lead us through the discussion on these study topics. Also, a brief update on the work that has been done so far for an evaluation of our Water and Wastewater System Impact Fees (SIF) will be presented.

BUDGET IMPACT:
☒ Positive
☒ Negative
☐ Neutral or negligible

Both utilities will have their revenues increased as a result of implementing the proposed rate increases. Both utilities will see an increase in expenses as a result of funding the operating and maintenance expenses as well as the capital expenditures that are included for each utility in their 10-Year Financial Plans.

BACKGROUND:

PROPOSED WATER AND WASTEWATER RATES FOR 2016

WATER

The cost-of-service results showed that for 2016, the revenue requirement, or the amount that needs to be collected from our customers, is $13.2 million. This represents an overall average rate increase of 8.0%. The cost of service showed some cost shifting between the customer classes. The following table highlights some of the key proposed changes:

SUMMARY OF KEY CHANGES - WATER		
(all based on 3/4" meter size)	Existing	Proposed
	2015	2016
Single Family Residential:		
Base Charge (per month)	$12.40	$12.40
Consumption Charge (per 1,000 gallons)	$2.16	$2.53
Multi-Family Residential:		
Base Charge (per month)	$18.27	$18.27
Consumption Charge (per 1,000 gallons)	$1.98	$2.32
Commercial:		
Base Charge (per month)	$12.40	$12.40
Consumption Charge (per 1,000 gallons)	$2.17	$2.43
Irrigation:		
Base Charge (per month)	$12.40	$12.40
Consumption Charge (per 1,000 gallons)	$2.65	$3.02

If approved, these rate increases would result in the following average monthly changes by rate class:

AVERAGE CHANGE IN MONTHLY WATER BILL	**Overall Avg. Change**
Single-Family Residential	$2.85
Multi-Family Residential	$1.76
Commercial (3/4" tap)	$3.51
Irrigation (3/4" tap, avg. monthly change during irrigation season)	$17.76

WASTEWATER

The cost-of-service results showed that for 2016, the revenue requirement, or the amount that needs to be collected from our customers, is $10.5 million using the Baseline Scenario (more information on the Baseline Scenario later). This represents an overall average rate increase of 8.8%. The cost of service showed some cost shifting between the customer classes. The following table highlights some of the key proposed changes:

SUMMARY OF KEY CHANGES - WASTEWATER		
(all based on 3/4" meter size)	Existing	Proposed
	2015	2016
Single Family Residential:		
Base Charge (per month)	$10.12	$10.42
Consumption Charge (per 1,000 gallons)	$3.19	$3.44
Multi-Family Residential:		
Base Charge (per month)	$4.23	$2.85
Consumption Charge (per 1,000 gallons)	$3.19	$3.55
Commercial:		
Base Charge (per month)	$8.00	$10.42
Consumption Charge (per 1,000 gallons)	$3.21	$3.60
Extra Strength Surcharge:		
Biochemical Oxygen Demand (BOD)	$0.54	$0.54
Charge per pound (in Excess of Domestic Load)		
Total Suspended Solids (TSS)	$0.32	$0.35
Charge per pound (in Excess of Domestic Load)		

If approved, these rate increases would result in the following average monthly changes by rate class:

AVERAGE CHANGE IN MONTHLY WASTEWATER BILL	**Overall Avg. Change**
Single-Family Residential	$1.30
Multi-Family Residential (per dwelling unit)	($0.08)
Commercial (3/4" tap)	$7.22

10-YEAR RATE TRACKS AND BORROWING ALTERNATIVES

The attached staff report outlines various options for future rate tracks and borrowing scenarios to fund operations, maintenance and the Capital Improvement Program (CIP), the recommended scenarios for water and wastewater are listed below.

WATER

SCENARIO 1: Baseline – This scenario takes the rate track that was adopted by City Council March of 2013, and plugs in 3.5% rate increases per year for 2023-2025. It takes the current level

of borrowing of $23.2 million ($6 million internal loan from Power; $10 million external loan from Wells Fargo; $4 million internal loan from Raw Water; and $3.2 million external loan from NBH) and adds a $9.2 million loan in 2018 to address the increase in the projected construction cost for Chimney Hollow Reservoir.

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rate Track:	9.0%	9.0%	9.0%	9.0%	8.0%	8.0%	8.0%	3.5%	3.5%	3.5%

New Debt: $9.2 million in 2018

WASTEWATER

SCENARIO 4: Baseline, Digester in 2016 – This scenario takes the rate track from Scenario 1, and makes the following modifications:

1) Increases borrowing in 2016 from $6.0 million to $24.9 million
2) Eliminates the $20 million loan in 2020
3) Allows the major capital project for the construction of a new digester to move from 2020 to 2016

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rate Track:	8.8%	11.0%	11.0%	11.0%	7.0%	7.0%	7.0%	3.5%	3.5%	3.5%

New Debt: $24.9 million in 2016

STAFF AND LUC RECOMMENDATIONS

Water

Staff recommends the Baseline Scenario 1 for Water. The PAYGO Scenario 2 yields very high rate increases for the next three years for Water. The Low Rates, More Debt Scenario 3 would mean nearly $50 million of total debt for Water. The Low Rates, More Debt Scenario 3 also lead to by far the lowest fund balances at the end of the 10-year period. With Scenarios 2 and 3 eliminated, that leaves either the Baseline Scenario 1 or the Updated Baseline Scenario 1a. Although the Scenario 1a is appealing because of the lower rate tracks in comparison to Scenario 1, Scenario 1 will grow the revenues from sales more rapidly than Scenario 1a, yet will still stay with the rate tracks that City Council approved in conjunction with the 2012 rate study. Growing the revenues from sales more rapidly is important for three reasons:

1) It will position us to be able to annually invest an adequate amount in rehabilitation and replacement of infrastructure
2) It will allow the fund balance to grow and provide a healthier safety net in the event of emergencies or catastrophes
3) It would reduce or postpone the need to take on more debt in the years beyond 2025

For these reasons, Staff recommends the Baseline Scenario 1 for Water. At their July 15, 2015 meeting, the LUC unanimously recommended Baseline Scenario 1 for Water.

Wastewater

Staff recommends the Baseline, Digester in 2016 Scenario 4 for Wastewater. The PAYGO Scenario 2 yields very high rate increases for the next two years for Wastewater. The Low Rates, More Debt Scenario 3 would mean nearly $45 million of total debt for Wastewater and results in the lowest fund balances at the end of the 10-year period. With Scenarios 2 and 3 eliminated, that leaves either the Baseline Scenario 1, Updated Baseline Scenario 1a or Baseline, Digester Scenario 4. Although the Scenario 1a is appealing because of the lower rate tracks in comparison to Scenarios 1 and 4, Scenarios 1 and 4 will grow the revenues from sales more rapidly than Scenario 1a, yet will still stay with the rate tracks that City Council supported in conjunction with the 2012 rate study. The same three benefits spelled out for Water apply in Wastewater for the higher rate tracks of Scenarios 1 and 4 compared to Scenario 1a. So, it boils down to Scenario 1 vs. Scenario 4. Since both have the same rate track, and Scenario 4 adds the benefits of getting an important project done four years sooner with a $3.5 million lower price tag and has $1.1 million less borrowing over the 10-year timeframe, Staff sees Scenario 4 as the best choice.

For these reasons, Staff recommends the Baseline, Digester in 2016 Scenario 4 for Wastewater. At their July 15, 2015 meeting, the LUC unanimously recommended Baseline Scenario 4 for Wastewater.

IMPACT FEE UPDATE

Since an evaluation of the methodologies used to calculate the City's Capital Expansion Fees is underway, and final decisions have not yet been made regarding what methodology will be used, W&P will continue to use our current Equity Buy In approach for calculating our impact fees for at least 2016.

REVIEWED BY ACTING CITY MANAGER:

LIST OF ATTACHMENTS:

PowerPoint Slides
Staff Report on 2015 Cost-of-Service Rate Study

HAWKSLEY CONSULTING

City Council Study Session
Water & Wastewater Rate Options
Draft Results

City of Loveland

July 28, 2015

Agenda

1. Brief overview of how the rate study works
2. Water Fund findings and options
3. Wastewater Fund findings and options
4. Question/answer period

WHAT IS A RATE STUDY?

Revenue Requirement

Revenue Requirements — Compares the revenues of the utility to its expenses to determine the overall level of rate adjustment

Cost Allocation — Equitably allocates the revenue requirements between the various customer classes of service

Rate Design — Design rates for each class of service to meet the revenue needs of the utility, along with any other rate design goals and objectives

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Rate Options

WATER RESULTS

Water Rate Scenarios
Financial Plan 2016-2025 (in Millions)

	Total New Debt	Ending Balance in 2025	
Scenario 1: Baseline	$9.2	$25.7	Current approved rate track with planned debt
Scenario 1a: Updated Baseline	$9.2	$16.4	Planned debt with updated rates
Scenario 2: Pay-As-You-Go	$0	$33.0	No new debt, higher rate increases
Scenario 3: Lower Rates/ More Debt	$24.9	$7.1	More debt than planned, lower rates

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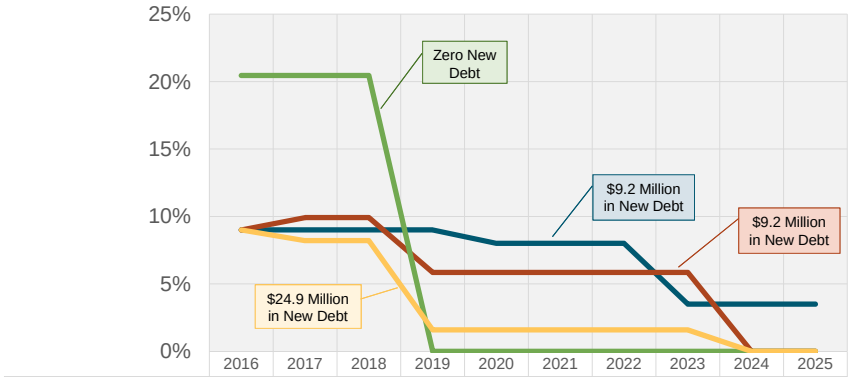
Expected Annual Water Revenue Increases

Scenarios produce different results based on the level of debt



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	9.0%	9.0%	9.0%	9.0%	8.0%	8.0%	8.0%	3.5%	3.5%	3.5%
Updated Baseline	9.0%	9.9%	9.9%	5.8%	5.8%	5.8%	5.8%	5.8%	0.0%	0.0%
Pay-As-You-Go	20.4%	20.4%	20.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Lower Rates/More Debt	9.0%	8.2%	8.2%	1.6%	1.6%	1.6%	1.6%	1.6%	0.0%	0.0%

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Cost of Service Comparison

Baseline, Updated Baseline, and Lower Rates/More Debt Scenarios

Class	Cost of Service	Expected Revenue at Existing Rates*	Difference	Difference %
Residential	$8,419,879	$7,832,835	$587,045	7.5%
Multi-Family	1,388,188	1,294,557	93,632	7.2%
Commercial	1,799,684	1,661,320	138,365	8.3%
Irrigation	1,467,802	1,305,721	162,082	12.4%
City Gov't	125,166	125,157	9	0%
Total	**$13,200,720**	**$12,219,588**	**$981,132**	**8.0%**

*Expected revenue includes our independent projection of normalized demand and growth in accounts by class between 2014 and 2016.

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Cost of Service Comparison
Pay-As-You-Go Scenario

Class	Cost of Service	Expected Revenue at Existing Rates*	Difference	Difference %
Residential	$9,303,030	$7,832,835	$1,470,195	18.8%
Multi-Family	1,553,321	1,294,557	258,764	20.0%
Commercial	2,027,161	1,661,320	365,841	22.0%
Irrigation	1,646,482	1,305,721	340,762	26.1%
City Gov't	125,276	125,157	120	0.1%
Total	**$14,655,270**	**$12,219,588**	**$2,435,682**	**19.9%**

*Expected revenue includes our independent projection of normalized demand and growth in accounts by class between 2014 and 2016.

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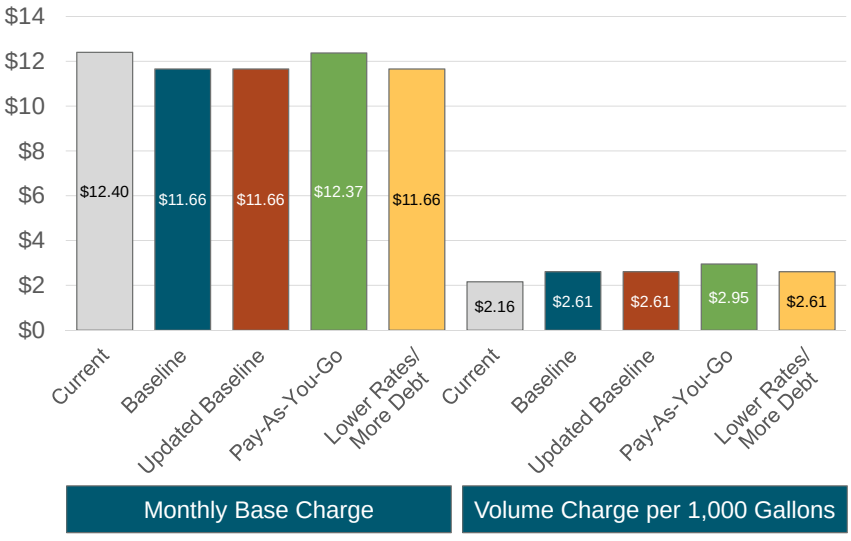
Cost of Service Results
Residential ¾" Customer



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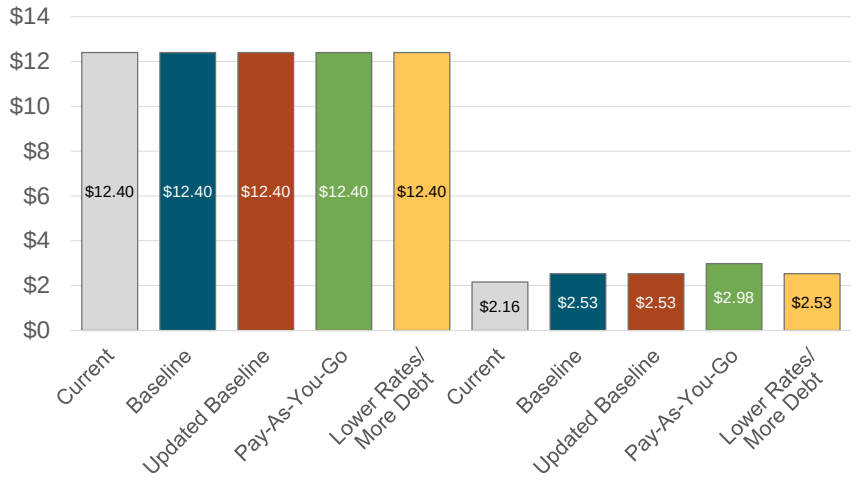
Proposed 2016 Water Rates
Residential ¾" Customer



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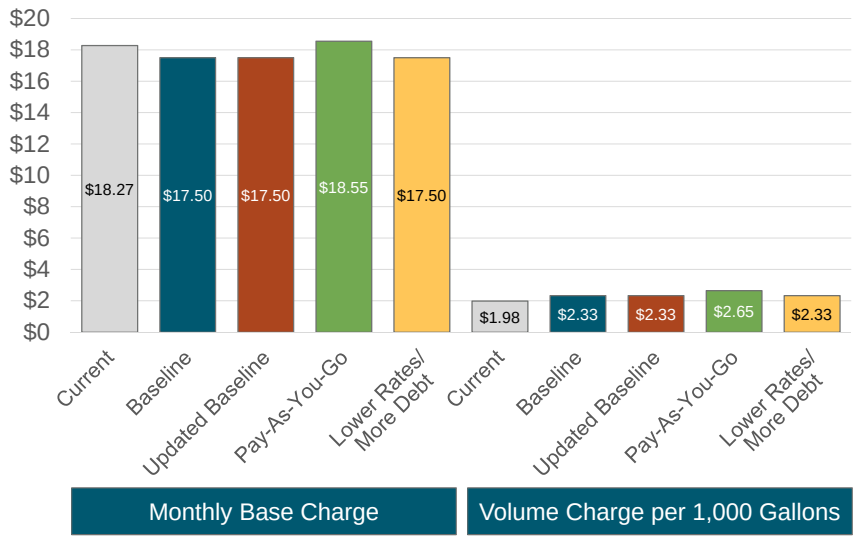
Cost of Service Results
Multi-Family ¾" Customer



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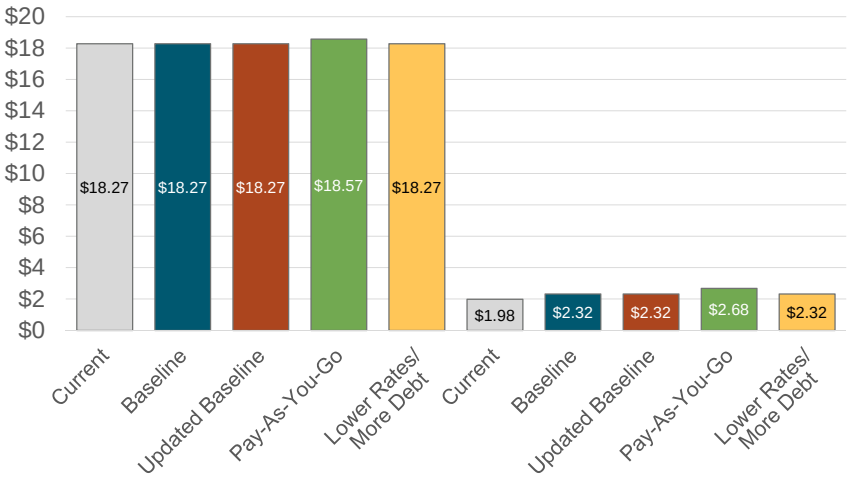
Proposed 2016 Water Rates
Multi-Family ¾" Customer



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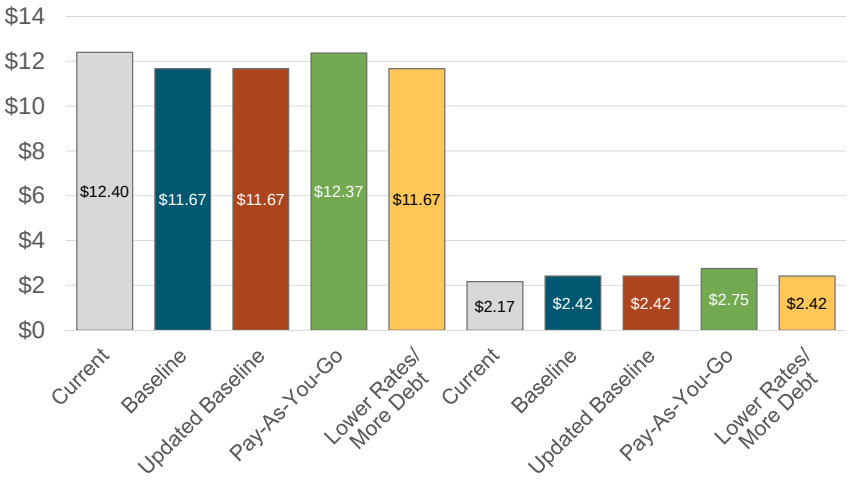
Cost of Service Results
Commercial ¾" Customer



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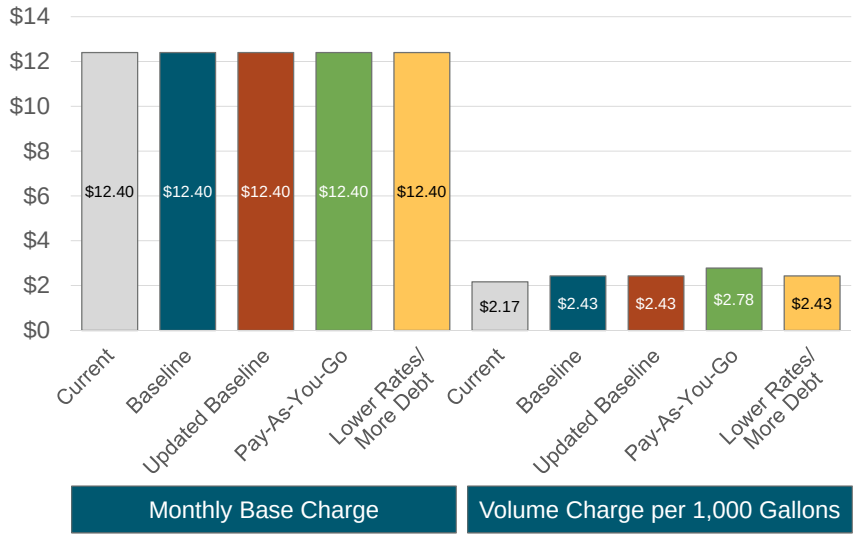
Proposed 2016 Water Rates
Commercial ¾" Customer



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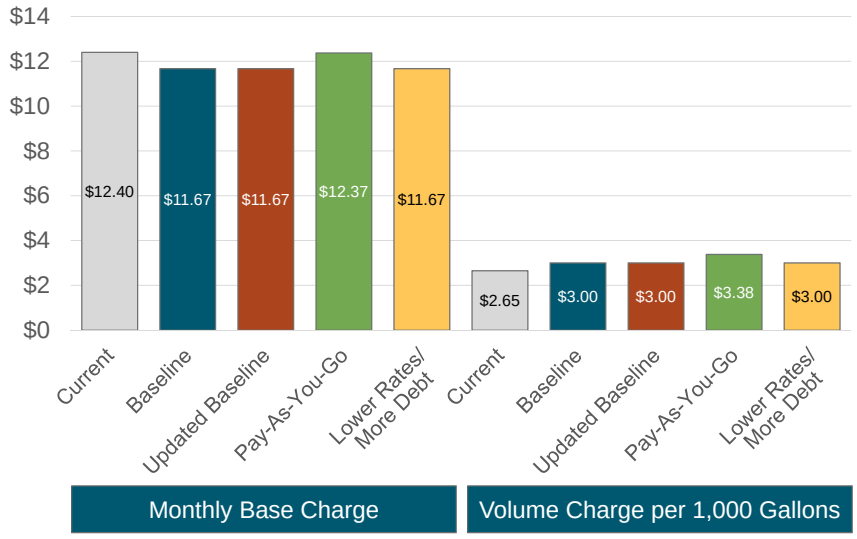
Cost of Service Results
Irrigation ¾" Customer



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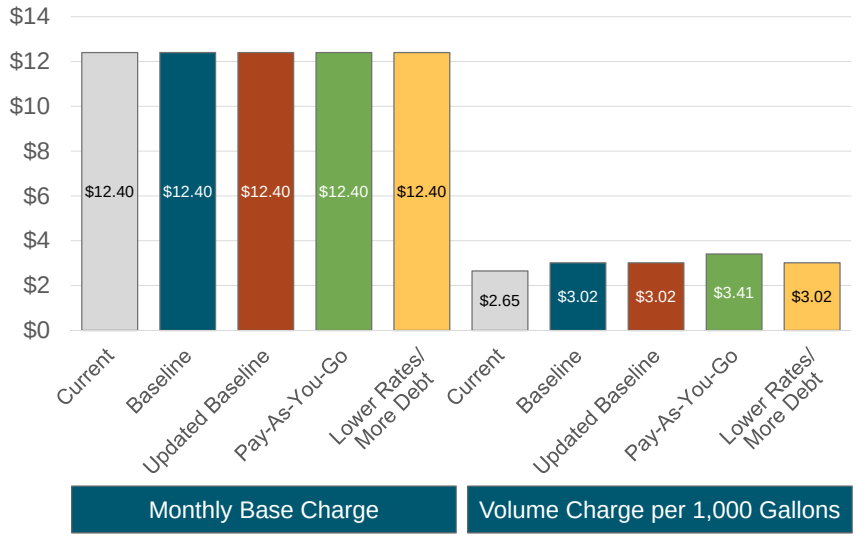
Proposed 2016 Water Rates
Irrigation ¾" Customer



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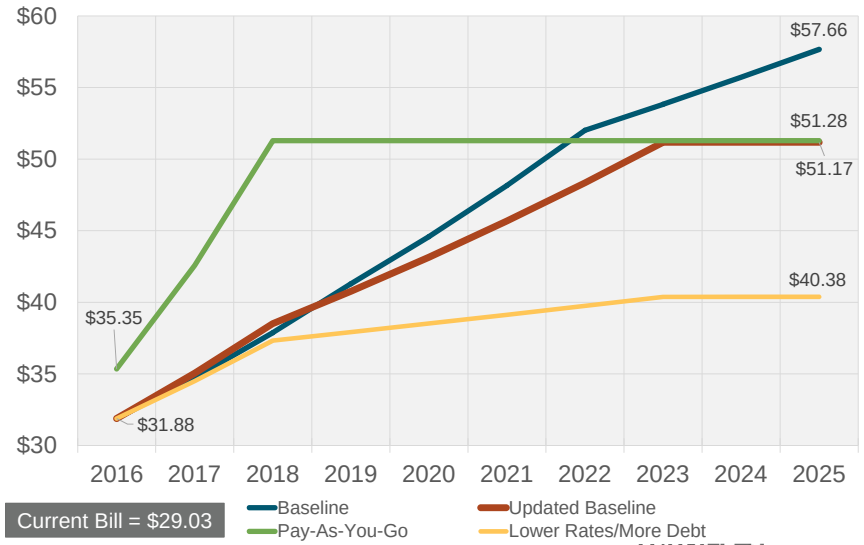
Projected Average Monthly Water Bills
Residential ¾" Customer - 7,700 Gallons



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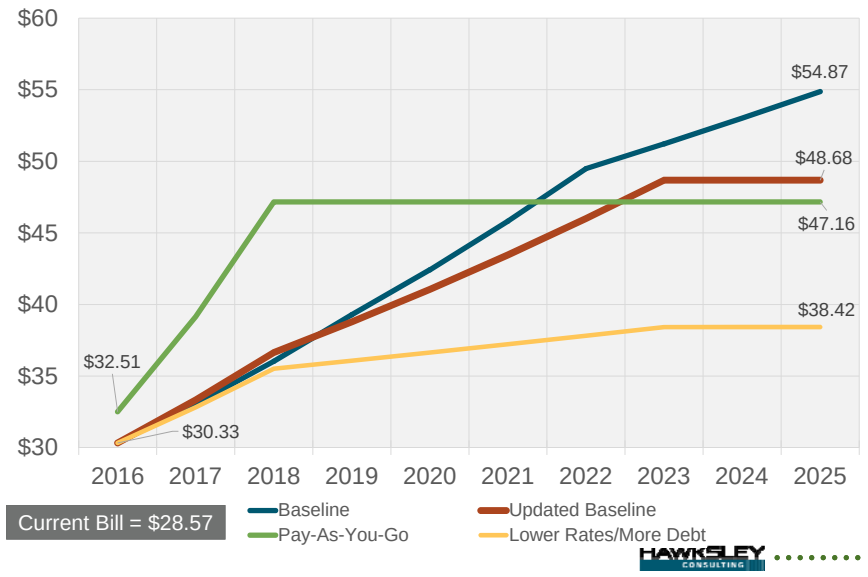
Projected Average Monthly Water Bills
Multi-Family ¾" Customer - 5,200 Gallons per Dwelling Unit



Current Bill = $28.57

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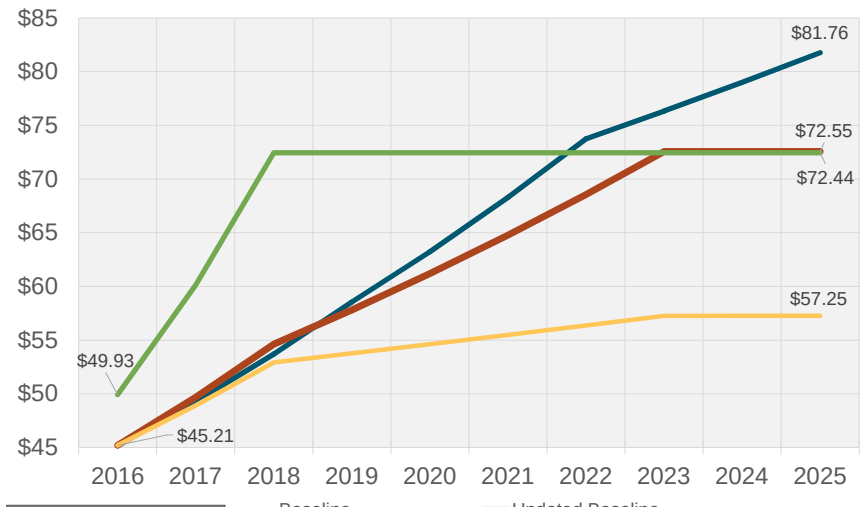
Projected Average Monthly Water Bills
Commercial ¾" Customer - 13,500 Gallons



Current Bill = $41.70

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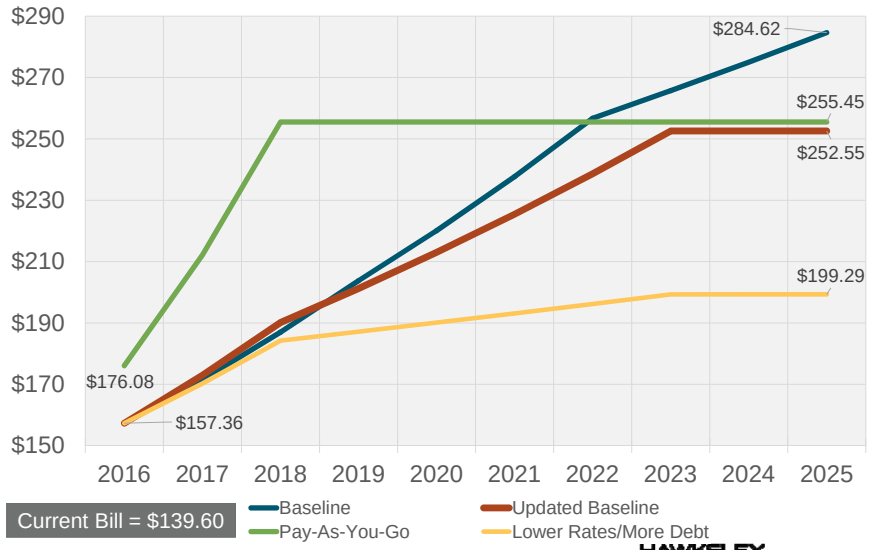
Projected Average Monthly Water Bills
Irrigation ¾" Customer - 48,000 Gallons



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Regional Monthly Water Bill Comparison
Residential ¾" Customer – 7,700 Gallons

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Rate Options

WASTEWATER RESULTS

Wastewater Rate Scenarios
Financial Plan 2016-2025 (in Millions)

	Total New Debt	Ending Balance in 2025	
Scenario 1: Baseline	$26.0	$26.7	Current approved rate track with planned debt
Scenario 1a: Updated Baseline	$26.0	$15.4	Planned debt with updated rates
Scenario 2: Pay-As-You-Go	$0	$20.9	No new debt, higher rate increases
Scenario 3: Lower Rates/ More Debt	$44.5	$4.6	More debt than planned, lower rates
Scenario 4: Baseline, Digester in 2016	$24.9	$14.2	More debt in 2016, complete projects faster

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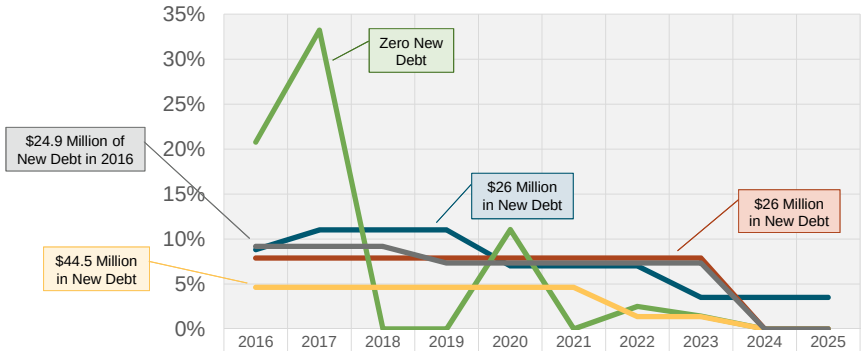
Expected Annual Wastewater Revenue Increases

Scenarios produce different results based on the level of debt



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	8.8%	11.0%	11.0%	11.0%	7.0%	7.0%	7.0%	3.5%	3.5%	3.5%
Updated Baseline	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	0.0%	0.0%
Pay-As-You-Go	20.8%	33.2%	0.0%	0.0%	11.0%	0.0%	2.5%	1.4%	0.0%	0.0%
Lower Rates/More Debt	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	1.4%	1.4%	0.0%	0.0%
Baseline, Digester in 2016	9.2%	9.2%	9.2%	7.3%	7.3%	7.3%	7.3%	7.3%	0.0%	0.0%

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Cost of Service Comparison

Baseline Scenario

Class	Cost of Service	Expected Revenue at Existing Rates*	Difference	Difference %
Residential	$6,839,802	$6,486,864	$352,938	5.4%
Multi-Family	1,449,419	1,137,982	311,438	27.4%
Commercial	1,642,712	1,482,964	159,748	10.8%
City Gov't	77,365	68,956	8,408	12.2%
Ex-Strength	458,269	441,599	16,670	3.8%
Total	**$10,467,568**	**$9,618,365**	**$849,203**	**8.8%**

*Expected revenue includes our independent projection of normalized demand and growth in accounts by class between 2014 and 2016.

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Cost of Service Comparison
Updated Baseline Scenario

Class	Cost of Service	Expected Revenue at Existing Rates*	Difference	Difference %
Residential	$6,811,339	$6,486,864	$324,475	5.0%
Multi-Family	1,444,111	1,137,982	306,129	26.9%
Commercial	1,636,199	1,482,964	153,235	10.3%
City Gov't	77,059	68,956	8,103	11.8%
Ex-Strength	458,278	441,599	16,679	3.8%
Total	**$10,426,986**	**$9,618,365**	**$808,621**	**8.4%**

*Expected revenue includes our independent projection of normalized demand and growth in accounts by class between 2014 and 2016.

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Cost of Service Comparison
Pay-As-You-Go Scenario

Class	Cost of Service	Expected Revenue at Existing Rates*	Difference	Difference %
Residential	$7,564,452	$6,486,864	$1,077,589	16.6%
Multi-Family	1,584,317	1,137,982	446,335	39.2%
Commercial	1,808,462	1,482,964	325,498	22.0%
City Gov't	85,149	68,956	16,193	23.5%
Ex-Strength	458,049	441,599	16,450	3.7%
Total	**$11,500,430**	**$9,618,365**	**$1,882,065**	**19.6%**

*Expected revenue includes our independent projection of normalized demand and growth in accounts by class between 2014 and 2016.

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Cost of Service Comparison
Lower Rates/More Debt Scenario

Class	Cost of Service	Expected Revenue at Existing Rates*	Difference	Difference %
Residential	$6,600,424	$6,486,864	$113,561	1.8%
Multi-Family	1,404,816	1,137,982	266,834	23.5%
Commercial	1,587,947	1,482,964	104,983	7.1%
City Gov't	74,793	68,956	5,836	8.5%
Ex-Strength	458,333	441,599	16,734	3.8%
Total	**$10,126,313**	**$9,618,365**	**$507,948**	**5.3%**

*Expected revenue includes our independent projection of normalized demand and growth in accounts by class between 2014 and 2016.

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Cost of Service Comparison
Baseline, Digester in 2016 Scenario

Class	Cost of Service	Expected Revenue at Existing Rates*	Difference	Difference %
Residential	$6,856,109	$6,486,864	$369,246	5.7%
Multi-Family	1,452,563	1,137,982	314,581	27.6%
Commercial	1,646,474	1,482,964	163,510	11.0%
City Gov't	77,542	68,956	8,585	12.5%
Ex-Strength	458,272	441,599	16,673	3.8%
Total	**$10,490,960**	**$9,618,365**	**$872,595**	**9.1%**

*Expected revenue includes our independent projection of normalized demand and growth in accounts by class between 2014 and 2016.

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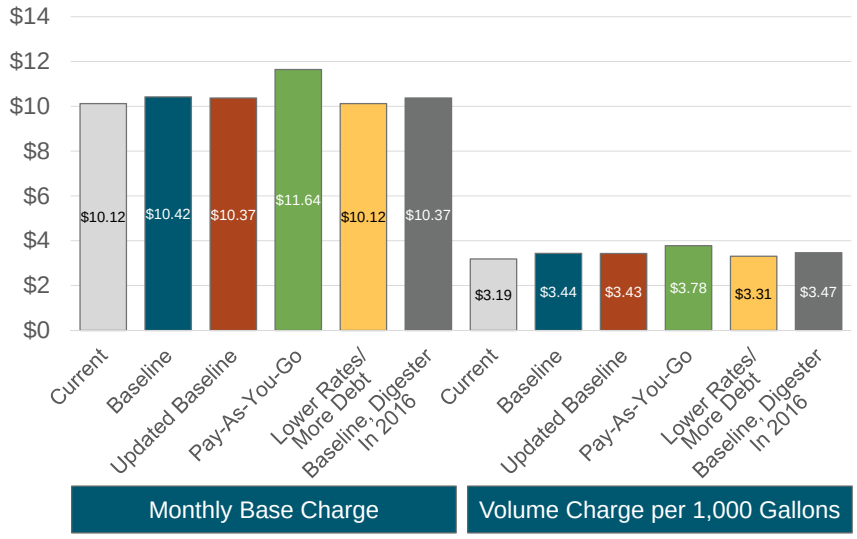
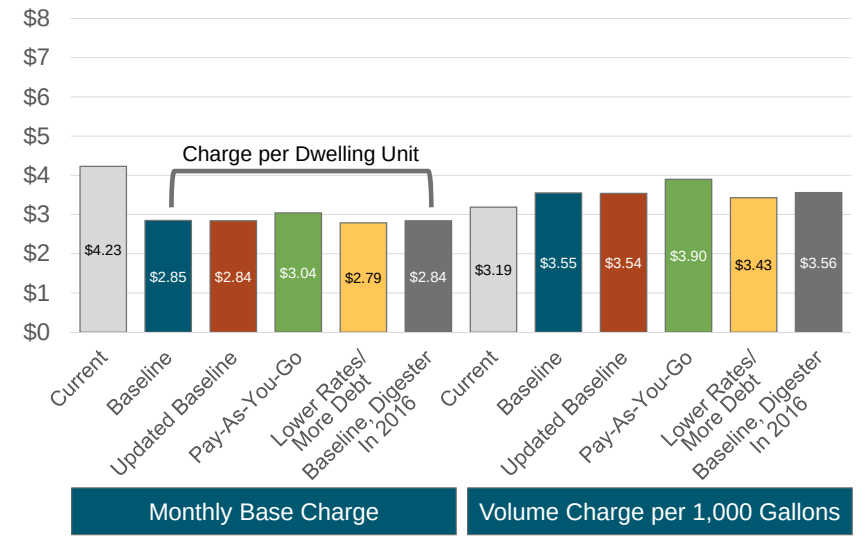
Proposed 2016 Wastewater Rates
Residential ¾" Customer



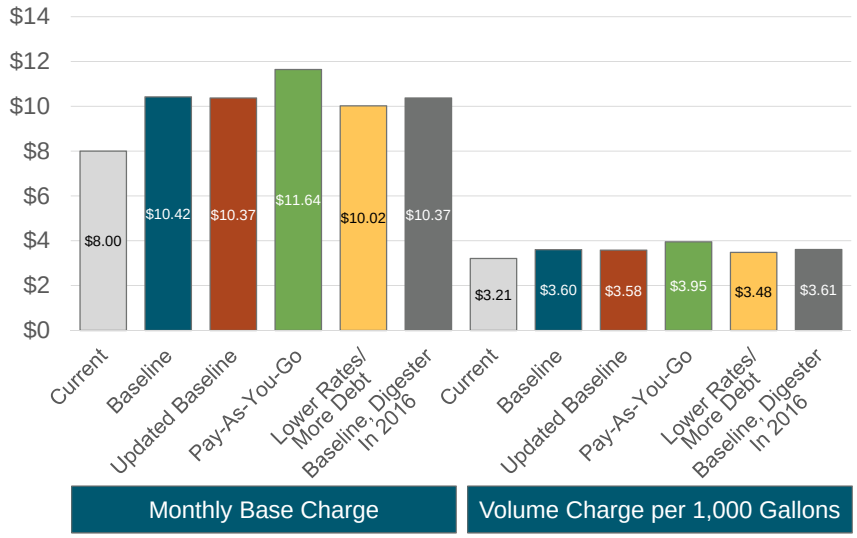
HAWKSLEY CONSULTING 31

Proposed 2016 Wastewater Rates
Multi-Family ¾" Customer



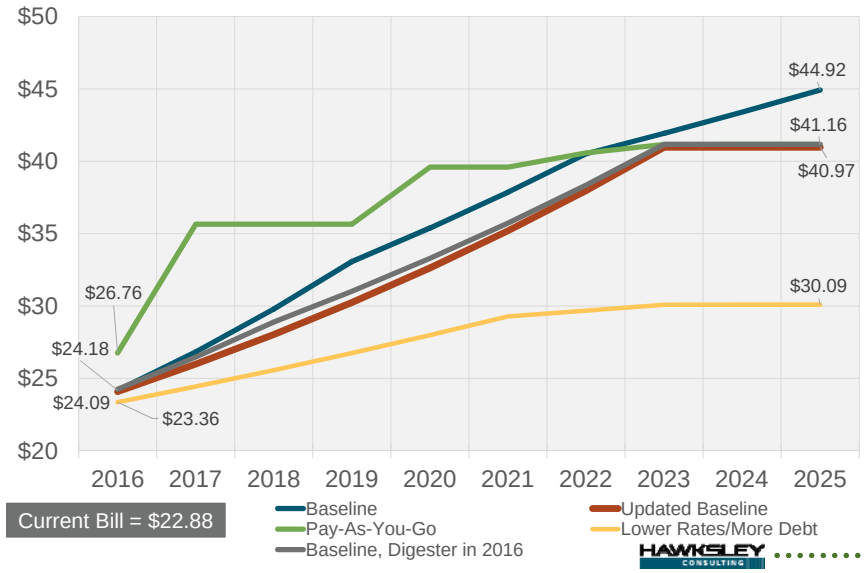
HAWKSLEY CONSULTING 32

Proposed 2016 Wastewater Rates
Commercial ¾" Customer



HAWKSLEY CONSULTING 33

Projected Average Monthly Wastewater Bills
Residential Customer – WQA 4,000 Gallons



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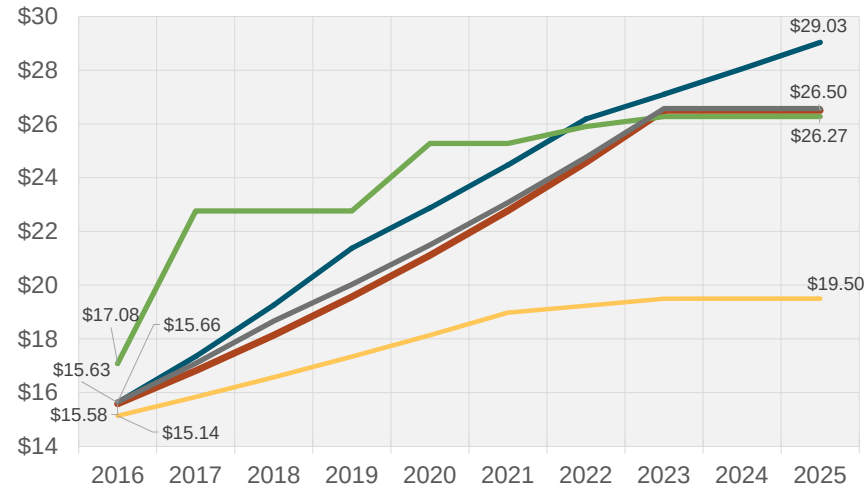
Projected Average Monthly Wastewater Bills
Multi-Family (per Dwelling Unit) – WQA 3,600 Gallons



Current Bill = $15.71

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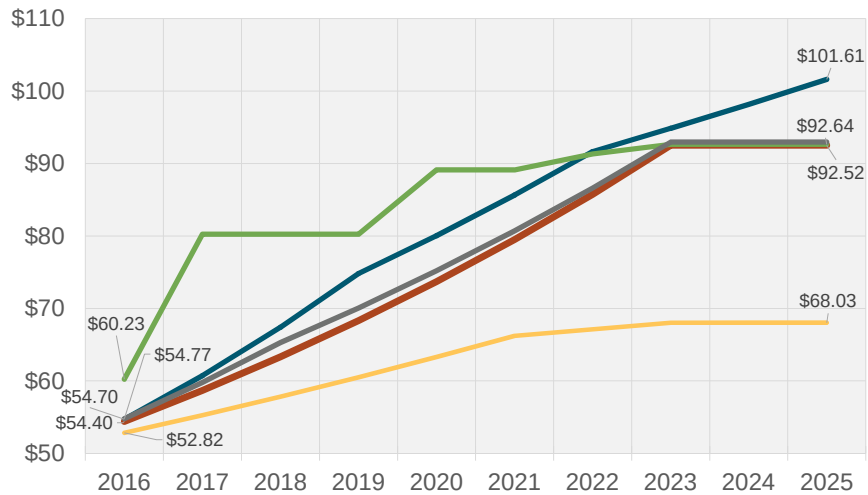
Projected Average Monthly Wastewater Bills
Commercial ¾" Customer – WQA 12,300 Gallons



Current Bill = $47.48

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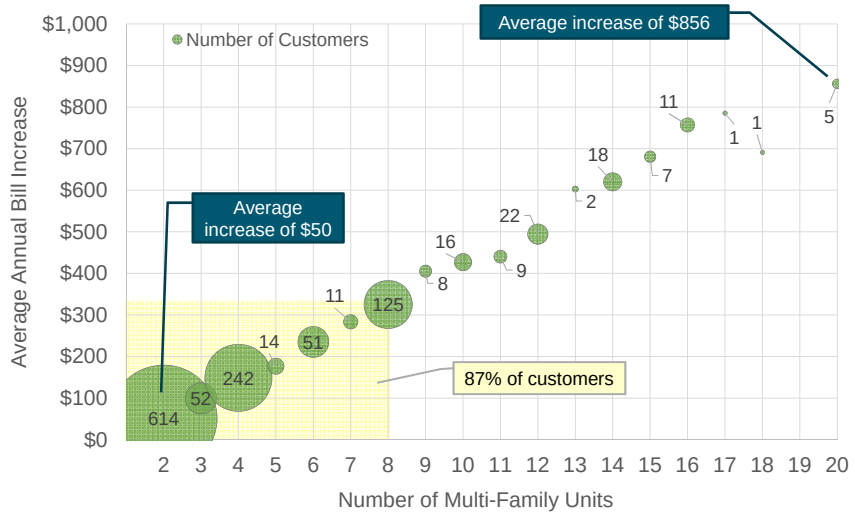
Change In Annual Multi-Family Bills



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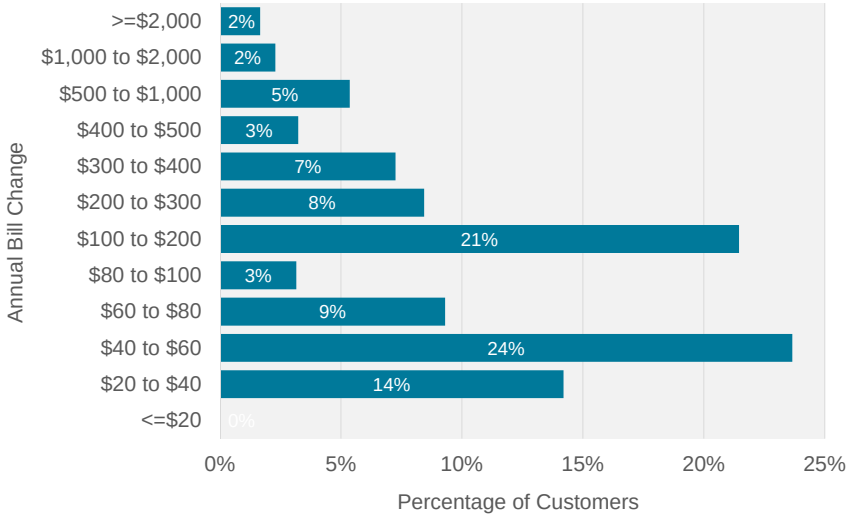
Change In Annual Multi-Family Bills



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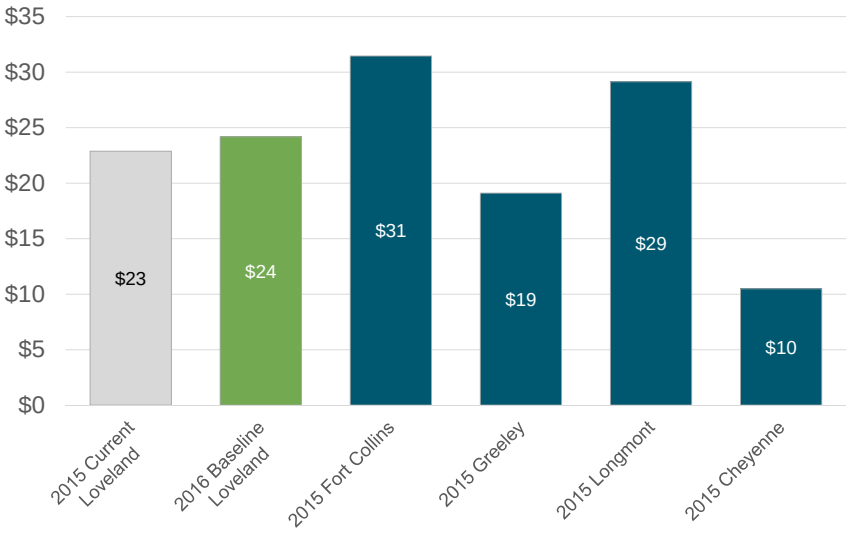
Regional Monthly Wastewater Bill Comparison
Residential Customer – WQA 4,000 Gallons



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Unaccounted-For Flows and Loads

	BOD	TSS
Domestic Flow	75%	59%
Extra-Strength Surcharge	8%	10%
Total Accounted Loadings	**83%**	**69%**
Unaccounted Flow	**17%**	**31%**
Unaccounted Pounds	*957,006*	*1,751,640*
Unaccounted Dollars	*$434,321*	*$432,416*
2015 Normal Strengths (mg/l)	276.0	207.0
2016 Normal Strength (mg/l)	276.0	207.0

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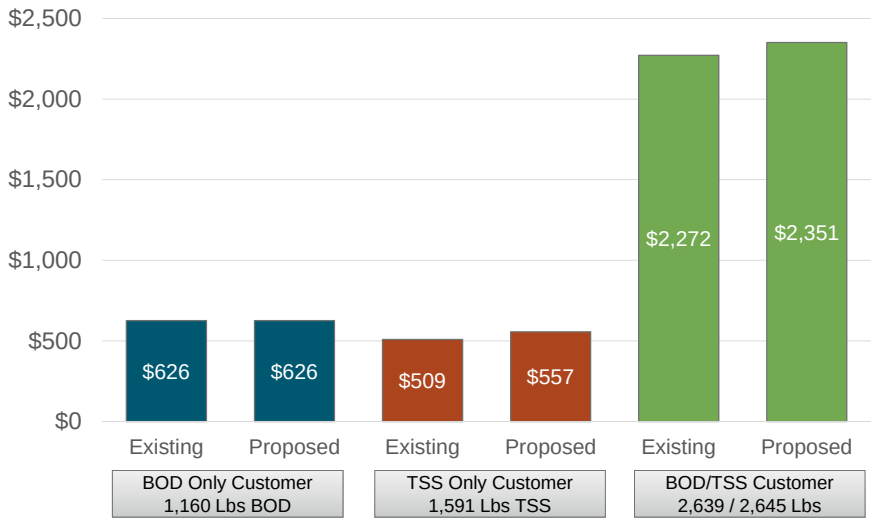
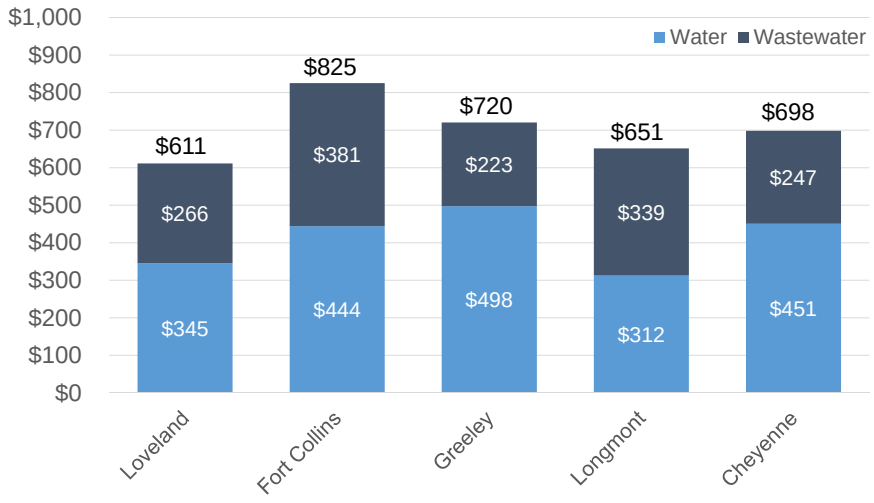
Extra-Strength Rates

	BOD	TSS
Existing Rate ($/LB)	$0.54	$0.32
Proposed Rate ($/LB)	$0.54	$0.35

Extra-strength Surcharge Annual Bill Impact



Annual Operating Revenue per Residential Customer



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Impact Fees

As part of our scope, we are evaluating the current methodology for SIFs and looking at different potential methods of calculation. This effort is still continuing with staff.

For 2016, the current method of calculating SIFs will remain the same.

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QUESTIONS?

CITY OF LOVELAND
WATER & POWER DEPARTMENT
200 North Wilson • Loveland, Colorado 80537
(970) 962-3000 • FAX (970) 962-3400 • TDD (970) 962-2620

2015 Water and Wastewater Cost-of-Service Rate Study

Staff Report for City Council Study Session – July 28, 2015

PROPOSED WATER AND WASTEWATER RATES FOR 2016

WATER

The cost-of-service results showed that for 2016, the revenue requirement, or the amount that needs to be collected from our customers, is $13.2 million. This represents an overall average rate increase of 8.0%. The cost of service showed some cost shifting between the customer classes. The following table highlights some of the key proposed changes:

SUMMARY OF KEY CHANGES		
(all based on 3/4" meter size)		Proposed
	2015	2016
WATER		
Single Family Residential:		
Base Charge (per month)	$12.40	$12.40
Consumption Charge (per 1,000 gallons)	$2.16	$2.53
Multi-Family Residential:		
Base Charge (per month)	$18.27	$18.27
Consumption Charge (per 1,000 gallons)	$1.98	$2.32
Commercial:		
Base Charge (per month)	$12.40	$12.40
Consumption Charge (per 1,000 gallons)	$2.17	$2.43
Irrigation:		
Base Charge (per month)	$12.40	$12.40
Consumption Charge (per 1,000 gallons)	$2.65	$3.02

These changes in the base and consumption charges for Water would generate the following average increases by rate class:

RATE CLASS:	% Increase
Residential	7.50%
Multi-Family	7.20%
Commercial	8.30%
Irrigation	12.40%

If approved, these rate increases would result in the following average monthly changes by rate class:

AVERAGE CHANGE IN MONTHLY WATER BILL	Overall Avg. Change
Single-Family Residential	$2.85
Multi-Family Residential	$1.76
Commercial (3/4" tap)	$3.51
Irrigation (3/4" tap, avg. monthly change during irrigation season)	$17.76

City Wholesale Water Rate

The background on this rate is that back in the late 1990's, the General Fund was struggling financially, and the City Manager reached out to the Water & Power Director to ask about how the utilities might be able to help address the General Fund struggles. The solution that was reached was to charge the General Fund entities that paid utility bills (e.g. Police, Fire, Civic Center) a discounted rate on their water and electric billings. This approach has stayed in place ever since, and is referred to as the City Wholesale Rate. The current rate that is being charged for City Wholesale Water is $1.61 / 1,000 gallons. The calculation done by Hawksley for a wholesale water rate indicated that the rate for 2016 should be $1.39 / 1,000 gallons. Staff's recommendation is to stay with the $1.61 / 1,000 gallons that is currently in place rather than take a step backwards. There was some sentiment from the LUC to be moving in the direction of having the City accounts be charged full cost-of-service rates, so this matter will be revisited as rates continue to be adjusted.

WASTEWATER

The cost-of-service results showed that for 2016, the revenue requirement, or the amount that needs to be collected from our customers, is $10.5 million using the Baseline Scenario (more information on the Baseline Scenario later). This represents an overall average rate increase of 8.8%. The cost of service showed some cost shifting between the customer classes. The following table highlights some of the key proposed changes:

SUMMARY OF KEY CHANGES		
(all based on 3/4" meter size)		Proposed
	2015	2016
WASTEWATER		
Single Family Residential:		
Base Charge (per month)	$10.12	$10.42
Consumption Charge (per 1,000 gallons)	$3.19	$3.44
Multi-Family Residential:		
Base Charge (per month)	$4.23	$2.85
Consumption Charge (per 1,000 gallons)	$3.19	$3.55
Commercial:		
Base Charge (per month)	$8.00	$10.42
Consumption Charge (per 1,000 gallons)	$3.21	$3.60
Extra Strength Surcharge:		
Biochemical Oxygen Demand (BOD)	$0.54	$0.54
Charge per pound (in Excess of Domestic Load)		
Total Suspended Solids (TSS)	$0.32	$0.35
Charge per pound (in Excess of Domestic Load)		

These changes in the base and consumption charges for Wastewater would generate the following average increases by rate class:

RATE CLASS:	**% Increase**
Residential	5.40%
Multi-Family	27.40%
Commercial	10.80%
Extra Strength Surcharge	3.80%

If approved, these rate increases would result in the following average monthly changes by rate class:

AVERAGE CHANGE IN MONTHLY WASTEWATER BILL	**Overall Avg. Change**
Single-Family Residential	$1.30
Multi-Family Residential (per dwelling unit)	($0.08)
Commercial (3/4" tap)	$7.22

Wastewater Multi-Family Accounts

Through some analysis and discussion that took place through this study, an error was discovered with regard to how Wastewater Multi-Family accounts have been billed. The way the monthly base charge has been calculated is based on the assumption that billing for the Multi-Family class would be done on a **per-dwelling-unit basis**. The actual practice has been that the billing for the Multi-Family class has been done on a **per-meter basis**. What this means is that the owners of multi-family complexes have been paying too little for the base charge component of their wastewater bill. As an example, for an 8-plex, the owner should have been paying 8 X $4.23 (the current Multi-Family monthly base charge), or $33.84 per month for the base charge, but has actually been paying $4.23 per month. This error has resulted in an under collection of revenue for the Multi-Family class of around $300,000 annually.

The discussion at this June's LUC meeting on how to address this topic was lengthy, and ultimately, the consensus opinion was to make a complete correction of the error in 2016, if possible. A major question was whether the City's billing system had the capability to bill on a per-dwelling-unit basis, as this was clearly the preferred option of the LUC. The answer is yes, so the rates and revenue requirements that are proposed for 2016 are based on billing on a per-unit basis and on a full correction of the error. Although the impact on an owner of a multi-family complex might be significant (with the 2016 proposed rates, the owner of an 8-plex will see about a $19 / month increase in the base charge), the LUC's perspective was that this increase would likely be passed on to tenants, and would be about a $3 / month impact to them. As a note of interest, 87% of our multi-family customers are 8 units or less.

High Strength Surcharge

An important finding that has come out of this study is that there are some significant unaccounted-for solids in Wastewater. In simplified terms, if you take the solids that are generated by all of our customers from normal, domestic strength loads and add the solids that are generated by our High Strength Surcharge customers, this total is far less than the volume of solids that are actually coming into the WWTP. There are about 2.7 million pounds of solids that are unaccounted for, which translates to nearly $870,000 of costs that exist, but can't be attributed to a specific customer class. Hawksley has looked at a number of approaches for allocating this $870,000 to the various customer classes, and has settled on an approach that allocates an appropriate share of the costs across all of the classes. These unaccounted-for loads are clearly an item that Staff will be investigating.

Wastewater Borrowing Options for 2016

For the proposed Wastewater capital improvements, it is estimated that $6 million of construction proceeds will be required through external financing sources. The cost to complete external financing include bond counsel, financial advisor services, potential bond ratings, and other miscellaneous charges are estimated not to exceed $200,000.

$6.2 Million External Loan for 20 Years. City staff has identified three external funding options:

A. A loan from a bank to the City of Loveland Wastewater Utility Enterprise;
B. A loan from the Colorado Water Resources and Power Development Authority ("CWRPDA" or the "Authority") to the Wastewater Utility Enterprise; and
C. Issuance of Wastewater revenue bonds by the City of Loveland through its Wastewater Utility Enterprise

Each of the techniques is described briefly below.

A. Loan from a Bank

In 2013 and 2015, the Water Utility completed direct loans from banks to provide construction proceeds for the water treatment plant expansion. Staff has recently contacted regional, state, and national banks to determine feasibility of a direct bank loan for the proposed Wastewater projects could be done in a similar manner. Several banks have indicated interest in preparing a financing option for the City to consider. Staff would conduct an open competitive process to determine the how interested the banks are. Based on the bank's review of the Utility's financial position and projections, a bank could provide a loan to fund the project. Banks may elect to perform their own credit assessment risk and not to require a formal rating from Standard & Poor's, Moody's, or Fitch.

With the transactions completed for the Water Utility, some banks expressed an inability extend credit for the anticipated 20-year payback period, but were interested in a loan 15 years and shorter. Others indicated that 20 years is feasible but may require higher interest rates. For both the 2013 and 2015 Water loans, the successful banks did deliver a full 20 year term loan at very competitive rates.

Current interest rates are still very favorable, but interest rates are expected to rise by the time the loan would be completed in 2016. Demand for banks to invest in tax-exempt debt is currently very strong.

For purposes of discussion, the assumed interest rate on a 20-year bank loan is 4.75%. A level debt service payment on $6.2 million would be approximately $490,000 per year.

The advantages of a Loan from a Bank include: a) relatively simple loan and debt service documents; b) quick loan terms determination .; c) competitive interest rates d) financing benefits local or Colorado banks e) potential greater flexibility in setting the rate, prepayment options, and re-financing terms if interest rates decrease. The Bank loan option works best with amounts $10 million and lower. A term of 10 years is the ideal length, however, the City has achieved terms of 20 years.

B. Loan from the Colorado Water Resources and Power Development Authority (the Authority).

The State of Colorado offers financing programs for wastewater utility projects. Staff have been investigating one program with the Authority and the Colorado Department of Public Health and Environment.

Under this program, the Authority issues bonds that provide loans for the Wastewater Utility. The Authority would issue to bonds. The Authority has a triple-A credit rating (the highest available) and the rates on the bonds would be lower than if the City Wastewater Utility issued its own bonds. The Authority's program also uses federal dollars to reduce interest rates approximately 30%.

The use of federal money requires prevailing wages on the funded projects, increasing construction costs. Based on a 2011 study, the State Department of Transportation concluded that the prevailing wage requirement did not add significant costs to projects. Staff is evaluating whether this program offers the lowest net cost to the City.

The Authority groups financing needs of several communities into one bond issuance to save on administrative costs. In discussions with the Authority, their financial staff believes the Authority's board may allow the City of Loveland Wastewater Utility to proceed on the first round schedule. The advantage would be that we would be able to proceed through the financing process early in 2016, with funding proceeds available in the July-August timeframe in 2016. With a relatively small transaction, the $6.2 million, it is likely that other utilities could be combined with Loveland. This could restrict the level of tailoring of the financing to meet Loveland's specific needs.

This borrowing technique is fairly complex, requires the longest amount of time to complete, and requires the highest administrative/reporting/overhead requirements of all borrowing options. The Wastewater Utility would work closely with the Authority to accomplish all of the requirements and may have to coordinate with other jurisdictions in the process. For comparative purposes, this option is assumed to have an interest rate of 4.25% on a 20-year term. This would result in annual payments of approximately $467,000 per year.

C. City Wastewater Utility Bond Issuance

This option proposes that the City Wastewater Utility Enterprise would issue $6.2 million of enterprise revenue bonds to fund $6 million of improvements. The process to issue bonds could be completed in two to three months assuming that authorizations from the Loveland Utility Commission and Loveland City Council are obtained in a brisk fashion. The City and its Wastewater Utility have strong financial positions and have detailed long-term financial plans in place. The Wastewater Utility Enterprise would obtain a credit rating from at least one of the three major credit rating agencies. This is a very detailed process and requires assistance of the City's bond counsel and an external financial advisor. The Loveland Wastewater Utility is

likely to be rated in a strong single-A or low double-A category. Interest rates are likely to be higher than the CWRPDA option discussed in Option B. They are likely to be similar to the bank loan option discussed in Option A. So, for the sake of discussion, the annual debt service payment would be approximately $490,000 on a 20-year term. If the term were to be extended to 30 years, the interest rate would be higher (4.95%), but the annual debt service payment would be lower, approximately $401,000.

For a $6 million bond issue, staff has estimated $200,000 of issuance costs. The bond issue would also require a debt service reserve account to be funded. This can be done from the issuance of bonds or from other available Wastewater utility funds. Interest earned on money held in the debt service reserve reduces carrying costs over the term of the bond issue.

The advantage of this approach is that the Wastewater Utility bond issue would be designed solely for its own use. Interest rates on the bonds are not likely to be as low as the Authority financing approach. At the time of issuance, the call features on the bonds would have to be determined, allowing the bonds to be called prior to the final 20 year maturity. Typical call features are at the tenth year with no premium for call. Shorter call terms would require a premium payment to the bondholder.

A Wastewater utility revenue bond process could be completed more quickly that the Authority approach, and would require a considerable amount of staff time. A Wastewater utility bond issue would require an extensive set of legal documents.

Staff is actively pursuing the three options to determine how to best meet objectives at the lowest overall cost.

10-YEAR RATE TRACKS AND BORROWING ALTERNATIVES

When the last cost-of-service rate study for Water and Wastewater was conducted in 2012, the City Council was presented with several options for rate tracks and borrowing alternatives for both utilities. We will show what was ultimately supported for each utility below, discuss significant changes that have taken place since that study, and look at four scenarios for Water and five for Wastewater that have come out of this year's updated cost-of-service study.

WATER

From the 2012 study, City Council ultimately adopted a Water Financing Program that included the following key components:

1) A series of rate increases from 2013 through 2022 that went as follows:
   2013 – 2014: 13% per year
   2015 – 2019: 9% per year
   2020 – 2022: 8% per year
2) A $10 million external loan

3) A $6 million internal loan
4) A $750,000 annual contribution for eight years from the General Fund to the Water Utility Fund to pay for the principal portion of the internal loan
5) The elimination of a portion of Water Sales being transferred annually to the Raw Water Utility, starting in 2018

Since the Water Financing Program was adopted by City Council in March of 2013, the following key changes have taken place in the Water Utility:

1) The Flood of 2013 – this has created challenges with unanticipated expenses and slowness of reimbursement from FEMA and the State
2) Construction of the Water Treatment Plant Expansion Project came in nearly $4.7 million higher than the most recent estimate we received prior to bids being opened. The combination of the impact of the Flood of 2013 and the increase in construction cost led City Council to approve another $3 million in external borrowing (fulfilled via a loan from NBH) and $13 million in internal borrowing from the Raw Water Utility, which was appropriated as a contingency.
3) A significant increase in the estimated construction cost of the Water Utility's portion of the Chimney Hollow Reservoir Project. Staff recently received an update from the Municipal Subdistrict of the Northern Colorado Water Conservancy District, and the estimate, in 2018 dollars (when construction is anticipated to begin), went from $23.6 million to $33.0 million.
4) Instead of eliminating the transfer of a portion of Water Sales to the Raw Water Utility, Staff is proposing cutting the percentage back from the current 9.1% to 3% in 2016, and maintaining the 3% level from 2016 forward.

With these items being the most significant changes since the last rate study, here are the four rate increase and borrowing scenarios for consideration over the next ten years. Each one of these scenarios provides enough revenue to cover the debt service on all of the loans as well as funding the CIP over the next ten years.

SCENARIO 1: Baseline – This scenario takes the rate track that was adopted by City Council as part of the Water Financing Plan in March of 2013, and plugs in 3.5% rate increases per year for 2023-2025. It takes the current level of borrowing of $23.2 million ($6 million internal loan from Power; $10 million external loan from Wells Fargo; $4 million internal loan from Raw Water; and $3.2 million external loan from NBH) and adds a $9.2 million loan in 2018 to address the increase in the projected construction cost for Chimney Hollow Reservoir. This rate track provides enough revenue to cover the debt service on all of these loans as well as funding the Capital Improvement Program (CIP) over the next ten years. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 1	9.0%	9.0%	9.0%	9.0%	8.0%	8.0%	8.0%	3.5%	3.5%	3.5%

NEW DEBT: $9.2 million in 2018

Borrowing Alternatives: By 2018, it is expected that borrowing rates will have risen. The terms of the estimated financing is described for each option.

Bank Loan: 20 years at 4.95%, level debt service equals $735,110; Debt service coverage at 125% would be $918,890.

Colorado Water Resources & Power Development Authority: 20 years at 4.45%, level debt service equals $704, 200; annual debt service coverage (125%) would be $880,250.

Water Enterprise Revenue Bonds: 20 years at 4.95%, level debt service equals $735,100; Debt service coverage at 125% would be $918,890. Extending the term to 30 years at 5.45% would decrease the level debt service to $629,520 with annual debt service coverage of $786,900.

The pros and cons of Scenario 1 are:

PROS:

A) This is the rate track the City Council adopted in March of 2013, and in spite of the Flood of 2013 and significant cost increases for the WTP Expansion and Chimney Hollow, this same rate track (with 3.5% rate increases plugged in for the outer three years) will adequately fund both the debt service and CIP needs over the next ten years
B) This scenario will generate a significantly higher fund balance ($25.7 million vs. $16.4 million) at the end of 2025 in comparison to Scenario 1a This could reduce or eliminate the need for more borrowing beyond this 10-year window
C) Additional borrowing promotes intergenerational equity, where the customers over time who are benefiting from the assets that are constructed are also paying for them in contrast to Pay-As-You-Go, where current customers are paying for assets that benefit customers many years from now
D) The life of the asset will outlast the life of the loan

CONS:

A) More debt taken on
B) This rate track incorporates higher rate increases than Scenario 1a, yet Scenario 1a adequately funds both the debt service and CIP needs over the next ten years, as well

SCENARIO 1a: Updated Baseline – This scenario takes the same borrowing level as Scenario 1 ($9.2 million of new borrowing in 2018), but throws out the constraint of staying within the parameters of the rate track that was adopted by Council as part of the Water Financing Plan in March of 2013. It seeks out a rate track that is lower than the Council-adopted rate track, but still meets all of the debt service requirements and 10-Year CIP needs. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 1a	9.0%	9.9%	9.9%	5.8%	5.8%	5.8%	5.8%	5.8%	0.0%	0.0%

NEW DEBT: $9.2 million

Borrowing Alternatives: By 2018, it is expected that borrowing rates will have risen. The terms of the estimated financing is described for each option.

Bank Loan: 20 years at 4.95%, level debt service equals $735,110; Debt service coverage at 125% would be $918,890.

Colorado Water Resources & Power Development Authority: 20 years at 4.45%, level debt service equals $704, 200; annual debt service coverage (125%) would be $880,250.

Water Enterprise Revenue Bonds: 20 years at 4.95%, level debt service equals $735,100; Debt service coverage at 125% would be $918,890.

Extending the term to 30 years at 5.45% would decrease the level debt service to $629,520 with annual debt service coverage of $786,900.

The pros and cons of Scenario 1a are:

PROS:

A) A lower rate track than Scenario 1
B) Promotes intergenerational equity
C) The life of the asset will outlast the life of the loan

CONS:

D) More debt taken on
E) Generates a significantly lower fund balance ($16.4 million vs. $25.7 million) at the end of 2025 in comparison to Scenario 1

SCENARIO 2: Pay-As-You-Go (PAYGO) – Rates would be set at a level where no new debt financing would be taken on to supplement what is already in place. This rate track also provides enough revenue to cover the debt service on the existing loans as well as funding the Capital Improvement Program (CIP) over the next ten years. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 2	20.4%	20.4%	20.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

NEW DEBT: $0

The pros and cons of Scenario 2 are:

PROS:

A) No new debt
B) Generates the largest fund balance at the end of ten years. This could reduce or eliminate the need for more borrowing beyond this 10-year window

CONS:

A) Three consecutive years of very high rate increases starting in 2016
B) Does not promote intergenerational equity

SCENARIO 3: Low Rates, More Borrowing – The goal of this scenario is to keep rates low by utilizing a higher level of borrowing. This scenario, in spite of having significantly more borrowing than the other three scenarios, does include a rate track that meets all debt service requirements throughout the 10 years. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 3	9.0%	8.2%	8.2%	1.6%	1.6%	1.6%	1.6%	1.6%	0.0%	0.0%

NEW DEBT: $24.9 million 2016

Borrowing Alternatives: The terms of the estimated financing is described for each option.

Bank Loan: 20 years at 4.75%, level debt service equals $1,955,910; Debt service coverage at 125% would be $2,444,890.

Colorado Water Resources & Power Development Authority: 20 years at 4.25%, level debt service equals $1,872,980; annual debt service coverage (125%) would be $2,341,220.

Water Enterprise Revenue Bonds: 20 years at 4.75%, level debt service equals $1,955,901; Debt service coverage at 125% would be $2,444,890. Extending the term to 30 years at 4.95% would increase the level debt service to $1,989,580 with annual debt service coverage of $2,486,980.

The pros and cons of Scenario 3 are:

PROS:

A) Lowest rate track
B) Promotes highest level of intergenerational equity
C) The life of the asset will outlast the life of the loan

CONS:

A) Highest level of debt
B) Generates the lowest fund balance ($7.1 million) at the end of ten years of the four scenarios

WASTEWATER

From the 2012 rate study, City Council supported (although didn't pass a resolution, as was done in Water) a series of rate increases from 2013 through 2022 that went as follows:

2013 – 2018: 11% per year
2020 – 2022: 7% per year

The 2012 cost-of-service results indicated that the Commercial class should have rates reduced by 17%, but City Council gave direction to freeze the Commercial rates until this 2015 rate study. This 2015 cost-of-service study shows that rates for the Commercial class should be increased by 10.8% in the Baseline scenario. Also worth noting is that the 10-Year Financial Projection that was supported in the last rate study did not include any debt for Wastewater.

Since the 2012 rate study, the following key changes have taken place in the Wastewater Utility:

1) New wastewater discharge permit requirements from the State are driving a need to invest in the Wastewater Treatment Plant (WWTP). Coincidentally, the WWTP organic loading is nearing state-required expansion levels, so we are also increasing the organic treatment capacity of the plant 20 to 30% at a very small incremental cost increase. Aging infrastructure is also driving reinvestment in our anaerobic digester next year, and will likely require another significant new anaerobic digester project in five years to meet capacity needs and state regulatory requirements for treatment redundancy. The 10-Year CIP in the current study has $29.4 million more of projects loaded than the 10-Year CIP from the 2012 study. This activity at the WWTP is overwhelmingly the primary driver for the increase in capital activity. An overview of the WWTP projects was presented to the LUC at the June 17, 2015 meeting and was presented to City Council at the July 14, 2015 Study Session.
2) The Flood of 2013 – this has created challenges with unanticipated expenses and slowness of reimbursement from FEMA and the State.

With these items being the most significant changes since the last rate study, here are the five rate increase and borrowing scenarios for consideration over the next ten years. Each one of these scenarios provides enough revenue to cover the debt service on all of the loans as well as funding the CIP over the next ten years.

SCENARIO 1: Baseline – This scenario takes the rate track that was supported by City Council during the review of the 2012 study results, and plugs in 3.5% rate increases per year for 2023-2025. It incorporates a $6.0 million loan in 2016 and a $20.0 million loan in 2020 to help fund

the capital projects at the WWTP. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 1	8.8%	11.0%	11.0%	11.0%	7.0%	7.0%	7.0%	3.5%	3.5%	3.5%

NEW DEBT: $26.0 million

Borrowing Alternatives: The terms of the estimated financing is described for each option.

Bank Loan: 1st $6 million in 2016 for 20 years at 4.75%, level debt service equals $471,310; Debt service coverage at 125% would be $589,130.

Additional $20 million in 2020 for 20 years at 5.45%, level debt service equals $1,666,660; Debt service coverage would be $2,083,320.

Combined debt service would be $2,137,970 and debt service coverage would be $2,672,470.

Colorado Water Resources & Power Development Authority: 1st $6 million in 2016 for 20 years at 4.25%, level debt service equals $451,320; annual debt service coverage (125%) would be $564,150.

Additional $20 million in 2020 for 20 years at 4.95%, level debt service equals $1,598,060; Debt service coverage would be $1,997,570.

Combined debt service would be $2,049,380 and debt service coverage would be $2,561,725

Water Enterprise Revenue Bonds: 1st $6 million in 2016 for 20 years at 4.75%, level debt service equals $471,310; Debt service coverage at 125% would be $589,130.

Additional $20 million in 2020 for 20 years at 5.45%, level debt service equals $1,666,660; Debt service coverage would be $2,083,320.

Combined debt service would be $2,137,970 and debt service coverage would be $2,672,470. Extending the term for the 1st $6 million to 30 years at 4.95% would decrease the level debt service to $388,090 with annual debt service coverage of $485,110.

Additional $20 million in 2020 for 30 years at 5.85%, level debt service equals $1,429,740; Debt service coverage would be $1,787,170.

Combined debt service would be $1,817,830; the combined debt service coverage would be $2,272,280.

The pros and cons of Scenario 1 are:

PROS:

A) This is the rate track the City Council supported from the 2012 rate study, and in spite of adding $29.4 million of capital in comparison to the CIP from three years ago, this same rate track (with 3.5% rate increases plugged in for the outer three years) will adequately fund both the debt service and CIP needs over the next ten years
B) This scenario will generate a fund balance of $26.7 million at the end of 2025, which is the most of the four scenarios. This could reduce or eliminate the need for more borrowing beyond this 10-year window
C) Promotes intergenerational equity
D) The life of the asset will outlast the life of the loan

CONS:

A) Debt taken on
B) This rate track incorporates higher rate increases than Scenario 1a, yet Scenario 1a adequately funds both the debt service and CIP needs over the next ten years, as well

SCENARIO 1a: Updated Baseline – This scenario takes the same borrowing level as Scenario 1 (slightly different timing, with $6 million in 2016, $10 million in 2019 and $10 million in 2020), but throws out the constraint of staying within the parameters of the rate track that was supported by Council from the 2012 rate study. It seeks out a rate track that is lower than the Council-supported rate track, but still meets all of the debt service requirements and 10-Year CIP needs. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 1a	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	0.0%	0.0%

NEW DEBT: $26.0 1st $6 million in 2016, 2nd $10 million in 2019 and Final $10 million in 2020

Borrowing Alternatives: The terms of the estimated financing is described for each option.

Bank Loan: 1st $6 million in 2016 for 20 years at 4.75%, level debt service equals $471,310; Debt service coverage at 125% would be $589,130.

Additional $10 million in 2019 for 20 years at 5.15%, level debt service equals $812,670; Debt service coverage would be $1,015,830.

Final $10 million in 2020 for 20 years at 5.45%, level debt service equals $833,330; Debt service coverage would be $1,041,670.

Combined debt service would be $2,117,310 and debt service coverage would be $2,646,630.

Colorado Water Resources & Power Development Authority: 1st $6 million in 2016 for 20 years at 4.25%, level debt service equals $451,320; annual debt service coverage (125%) would be $564,150.

Additional $10 million in 2019 for 20 years at 4.65%, level debt service equals $778,790; Debt service coverage would be $973,490.

Final $10 million in 2020 for 20 years at 4.95%, level debt service equals $799,030; Debt service coverage would be $988,790.

Combined debt service would be $2,049,380 and debt service coverage would be $2,561,725

Water Enterprise Revenue Bonds: 1st $6 million in 2016 for 20 years at 4.75%, level debt service equals $471,310; Debt service coverage at 125% would be $589,130.

Additional $10 million in 2019 for 20 years at 5.15%, level debt service equals $812,670; Debt service coverage would be $1,015,830.

Final $10 million in 2020 for 20 years at 5.45%, level debt service equals $833,330; Debt service coverage would be $1,041,670.

Combined debt service would be $2,117,310; the combined debt service coverage would be $2,646,640.

Extending the term for the 1st $6 million to 30 years at 4.95% would decrease the level debt service to $388,090 with annual debt service coverage of $485,110.

Additional $10 million in 2019 for 30 years at 5.65%, level debt service equals $699,500; Debt service coverage would be $874,370.

Final $10 million in 2020 for 30 years at 5.85%, level debt service equals $714,870; Debt service coverage would be $893,590.

Combined debt service would be $1,802,460; the combined debt service coverage would be $2,253,070.

The pros and cons of Scenario 1a are:

PROS:

A) A lower rate track than Scenario 1
B) Promotes intergenerational equity
C) The life of the asset will outlast the life of the loan

CONS:

A) Debt taken on
B) Generates a significantly lower fund balance ($15.4 million vs. $26.7 million) at the end of 2025 in comparison to Scenario 1

SCENARIO 2: Pay-As-You-Go (PAYGO) – Rates would be set at a level where no new debt financing would be taken on to supplement what is already in place. This rate track also provides enough revenue to cover the debt service on the existing loans as well as funding the Capital Improvement Program (CIP) over the next ten years. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 2	20.8%	33.2%	0.0%	0.0%	11.0%	0.0%	2.5%	1.4%	0.0%	0.0%

NEW DEBT: $0

The pros and cons of Scenario 2 are:

PROS:

A) No debt
B) Generates a significant fund balance ($20.9 million) at the end of 2025

CONS:

C) Two consecutive years of very high rate increases starting in 2016
D) Does not promote intergenerational equity

SCENARIO 3: Low Rates, More Borrowing – The goal of this scenario is to keep rates low by utilizing a higher level of borrowing. This scenario, in spite of having significantly more borrowing than the other three scenarios, does include a rate track that meets all debt service requirements throughout the 10 years. The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 3	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	1.4%	1.4%	0.0%	0.0%

NEW DEBT: $44.5 million

Borrowing Alternatives: The terms of the estimated financing is described for each option.

Bank Loan: 20 years at 4.75%, level debt service equals $3,495,500; Debt service coverage at 125% would be $4,369,370.

Colorado Water Resources & Power Development Authority: 20 years at 4.25%, level debt service equals $1,905,940; annual debt service coverage (125%) would be $2,382,420.

Water Enterprise Revenue Bonds: 20 years at 4.75%, level debt service equals $3,181,160; Debt service coverage at 125% would be $3,976,450.

Extending the term to 30 years at 4.95% would decrease the level debt service to $2,878,320 with annual debt service coverage of $3,597,890.

The pros and cons of Scenario 3 are:

PROS:

A) Lowest rate track
B) Promotes highest level of intergenerational equity
C) The life of the asset will outlast the life of the loan

CONS:

A) Highest level of debt
B) Generates the lowest fund balance ($4.6 million) at the end of ten years

These four scenarios were developed as the core options for City Council's consideration. Then, at the July 14, 2015 Study Session, there was interest expressed from Council in a scenario where there would be more borrowing in 2016, and that would allow Staff to complete a capital project or projects sooner in the 10-Year CIP, if it made sense to do so. This earlier borrowing was viewed as a means of saving on interest expense in comparison to borrowing four years later, where interest rates are expected to be higher. It also was looked at as a means to save on capital project costs, which are projected to escalate faster than general inflation. Staff was able to find a large capital project, which is the construction of Digester #3, that would be a candidate to advance from starting construction in 2020 to starting in 2016. Moving the Digester #3 up to 2016 will provide significant benefits to the utility. Particularly, the existing digester system is approaching its design capacity and does not provide the required storage volume to meet redundancy requirements outlined in the revised CDPHE design criteria. This redundancy is needed in order to take one of the two tanks down for maintenance and still meet permit regulation (operational flexibility), and to provide reserve storage for times when inclement weather prevents sludge hauling (i.e., we are unable to haul sludge if the fields are too wet or covered by snow). Also, if Digester #3 is constructed in 2016, it could be constructed together (but just before) the planned renovation of the existing digesters. This will greatly simplify the renovation project and will likely reduce the project cost since sludge would be directed to Digester #3 during the renovation rather than being continuously hauled off site. Combining these projects will also result in cost savings due to economies of scale.

SCENARIO 4: Baseline, Digester in 2016 – This scenario takes the rate track from Scenario 1, and makes the following modifications:

1) Increases borrowing in 2016 from $6.0 million to $24.9 million
2) Eliminates the $20 million loan in 2020

3) Allows the major capital project for the construction of a new digester to move from 2020 to 2016

The rate track and new borrowing can be summarized as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SCENARIO 4	8.8%	11.0%	11.0%	11.0%	7.0%	7.0%	7.0%	3.5%	3.5%	3.5%

NEW DEBT: $24.9 million in 2016

Borrowing Alternatives: The terms of the estimated financing is described for each option.

Bank Loan: 20 years at 4.75%, level debt service equals $1,955,910; Debt service coverage at 125% would be $2,444,890.

Colorado Water Resources & Power Development Authority: 20 years at 4.45%, level debt service equals $1,872,980; annual debt service coverage (125%) would be $2,341,220.

Water Enterprise Revenue Bonds: 20 years at 4.75%, level debt service equals $1,955,901; Debt service coverage at 125% would be $2,444,890. Extending the term to 30 years at 4.95% would increase the level debt service to $1,989,580 with annual debt service coverage of $2,486,980.

The pros and cons of Scenario 4 are:

PROS:

A) Allows the important digester construction project to be completed four years sooner than was projected with previously assumed financing constraints
B) Will save $3.5 million in projected construction costs in comparison to doing the project four years later and will reduce total borrowing by $1.1 million
C) This scenario will generate a fund balance of $14.2 million at the end of 2025, which is the most of the five scenarios. This could reduce or eliminate the need for more borrowing beyond this 10-year window
D) Promotes intergenerational equity
E) The life of the asset will outlast the life of the loan

CONS:

A) More debt taken on sooner (in 2016) than the other scenarios

At the July 15, 2015 City Council Study Session, Council also expressed interest in exploring another scenario for Wastewater, which is to use internal loans to meet the borrowing needs instead of loans from an outside source. W&P Staff has explored many scenarios for this option

with Finance Staff and the Executive Fiscal Advisor, and there are two primary concerns with trying to put together a $24.9 million internal loan. The concerns are as follows:

1) Availability of Funds – Although the City now has in excess of $200 million between all funds. In looking at the 10-Year Financial Projections and incorporating the 10-Year CIPs that City Council reviewed at their June 9, 2015 Study Session, fund balances are projected to be drawn down significantly over the next ten years, so projected fund availability is tight. In addition, the City is anticipating to be responsible for about $10 million of costs associated with the Downtown South Catalyst Project, and that $10 million is not taken into account in the 10-Year CIPs that City Council saw in June. So, if $24.9 million needs to be generated from fund balance(s), and will not be fully paid back for eight years (the longest term that other utility internal loans have gone for), then some funds would have to delay or eliminate capital projects from their 10-Year CIPs in order to make $24.9 million of funds available. The first places that are typically looked at for internal loans are the Raw Water Fund and the Power Fund, and neither of those two can afford to have $24.9 million drawn from their balances and then paid back over eight years.
2) Impact on the Wastewater Rate Track – In Scenario 4, the borrowing assumptions are $24.9 million for 20 years. For internal borrowing, shortening the payback period on the loan from 20 years to 8 years would more than double the annual debt service payments (from $1.6 million to $3.6 million). This substantial increase in annual debt service would have such an impact on fund balance that it would be necessary to do dramatic back-to-back rate increases in 2017 and 2018 (projected to be more than 20% per year) in order to keep the fund balance within the 15% of Operating Expenses parameter for those two years.

For these reasons, Staff recommends not pursuing internal borrowing as the loan tool to meet the $24.9 million borrowing needs that Wastewater has in 2016.

STAFF AND LUC RECOMMENDATIONS

Water

Staff recommends the Baseline Scenario 1 for Water. The PAYGO Scenario 2 yields very high rate increases for the next three years for Water. The Low Rates, More Debt Scenario 3 would mean nearly $50 million of total debt for Water. The Low Rates, More Debt Scenario 3 also lead to by far the lowest fund balances at the end of the 10-year period. With Scenarios 2 and 3 eliminated, that leaves either the Baseline Scenario 1 or the Updated Baseline Scenario 1a. Although the Scenario 1a is appealing because of the lower rate tracks in comparison to Scenario 1, Scenario 1 will grow the revenues from sales more rapidly than Scenario 1a, yet will still stay with the rate tracks that City Council approved in conjunction with the 2012 rate study. Growing the revenues from sales more rapidly is important for three reasons:

1) It will position us to be able to annually invest an adequate amount in rehabilitation and replacement of infrastructure

2) It will allow the fund balance to grow and provide a healthier safety net in the event of emergencies or catastrophes
3) It would reduce or postpone the need to take on more debt in the years beyond 2025

For these reasons, Staff recommends the Baseline Scenario 1 for Water. At their July 15, 2015 meeting, the LUC unanimously recommended Baseline Scenario 1 for Water.

Wastewater

Staff recommends the Baseline, Digester in 2016 Scenario 4 for Wastewater. The PAYGO Scenario 2 yields very high rate increases for the next two years for Wastewater. The Low Rates, More Debt Scenario 3 would mean nearly $45 million of total debt for Wastewater. The Low Rates, More Debt Scenario 3 also lead to by far the lowest fund balances at the end of the 10-year period. With Scenarios 2 and 3 eliminated, that leaves either the Baseline Scenario 1, Updated Baseline Scenario 1a or Baseline, Digester Scenario 4. Although the Scenario 1a is appealing because of the lower rate tracks in comparison to Scenarios 1 and 4, Scenarios 1 and 4 will grow the revenues from sales more rapidly than Scenario 1a, yet will still stay with the rate tracks that City Council supported in conjunction with the 2012 rate study. The same three benefits spelled out for Water apply in Wastewater for the higher rate tracks of Scenarios 1 and 4 compared to Scenario 1a. So, it boils down to Scenario 1 vs. Scenario 4. Since both have the same rate track, and Scenario 4 adds the benefits of getting an important project done four years sooner with a $3.5 million lower price tag and has $1.1 million less borrowing over the 10-year timeframe, Staff sees Scenario 4 as the best choice.
For these reasons, Staff recommends the Baseline, Digester in 2016 Scenario 4 for Wastewater. At their July 15, 2015 meeting, the LUC unanimously recommended Baseline Scenario 4 for Wastewater.

IMPACT FEE UPDATE

Part of the scope of the rate study was to have Hawksley Consulting do an evaluation of our Water and Wastewater System Impact Fees (SIF), including a review of our current methodology and an analysis of what using different methodologies would generate as far as SIF revenue. Since an evaluation of the methodologies used to calculate the City's Capital Expansion Fees is underway, and final decisions have not yet been made regarding what methodology will be used, W&P will continue to use our current Equity Buy In approach for calculating our impact fees for at least 2016. Staff will continue to work with Hawksley to explore whether a different methodology might be more advantageous for revenue generation, and, at the same time, remain fair, equitable and defensible.

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AGENDA ITEM: **2**
MEETING DATE: 7/28/2015
TO: City Council
FROM: Leah Browder, Public Works Director
PRESENTERS: Leah Browder, Public Works Director
Dave Klockeman, PE, City Engineer

TITLE:
Capital Transportation Projects—Process, Prioritization, Challenges and Funding

RECOMMENDED CITY COUNCIL ACTION:
This is an information only item.

OPTIONS:
1. Adopt the action as recommended.
2. Deny the action.
3. Adopt a modified action.
4. Refer back to staff for further development and consideration.
   Please note, modifying project priorities or schedules will require staff review of the full transportation capital program to identify potential associated impacts and revisions.

SUMMARY:
This is an informational presentation to support City Council discussion regarding the City's long-range 2035 Transportation Plan, the process used to determine project priorities and current funding approaches.

BUDGET IMPACT:
☐ Positive
☐ Negative
☒ Neutral or negligible
This item provides information to support City Council discussion regarding capital transportation project planning, prioritization and funding.

BACKGROUND:
During discussions regarding the North Boise Avenue Extension Project; the proposed 2016 Capital Program; and the Public Works Strategic Plan, the City Council expressed an interest in having a study session to review the 2035 Transportation Plan and associated capital projects. Particular focus areas raised by Councilors included current priority projects with the potential to

revise priorities and a desire to reconsider funding options. An additional area of interest is east-west connectivity.

REVIEWED BY CITY MANAGER:

LIST OF ATTACHMENTS:

1. PowerPoint Presentation
2. Staff Memo

Capital Transportation Projects

Process, Prioritization, Challenges and Funding

JULY 28, 2015 CITY COUNCIL STUDY SESSION

LEAH BROWDER, PUBLIC WORKS DIRECTOR
DAVID KLOCKEMAN, PE, CITY ENGINEER

Agenda

- Overview & Context
- 2035 Transportation Plan
  - Process
  - Project Prioritization
  - Funding
- 2016 to 2025 Capital Program
  - Geographic Challenges & East-West Connectivity
- Discussion

Overview & Context

- 115 identified project needs by 2035
  - Extensive technical analysis + public process + citizen requests
  - Continually evolving but respectful of inclusive process
- Funding plans for 8 major projects in 10-year capital plan
  - Phased funding approach provides maximum flexibility
- Annual funding for 10 minor project categories

2035 Transportation Plan
Process

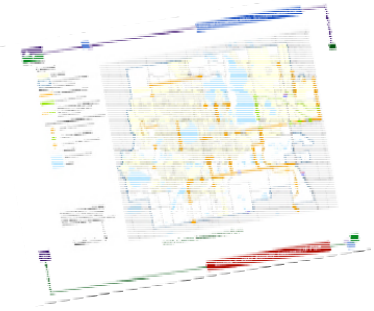
- Extensive Public Input, Document Review & Modeling
  - Transportation Advisory Board
- Ensure local and regional integration
- Adopted by City Council in December 2012
- Purpose:
  - "provide a document that guides transportation decision making toward a future desirable to the community of Loveland."
  - looks at all modes of transportation
    - bike, pedestrian, transit and vehicular
  - includes vision, policies, strategies & recommendations

2035 Transportation Plan
Process

- Modeling process creates a variety of project scenarios to meet 2035 goals
- Potential projects identified
- Estimated costs determined
- Funding pools for projects developed
- Fiscally constrained plan created
  - Long-Range Plans often have too many projects and not enough funding
  - Reasonable estimate of projects necessary to provide a transportation system that adhere to our policies and meet our needs in consideration of our estimated available funding by 2035

2035 Transportation Plan
Project Prioritization Criteria

System Continuity/Congestion Mitigation	20%
Safety Enhancement	25%
Multi-modal Enhancement	5%
Environmental Impact	10%
Implementability	15%
Economic Impact	20%
Regional Significance	5%
TOTAL	100%



2035 Transportation Plan

Funding Sources

- Five primary funding sources:
  - Capital Expansion Fees for Streets ($130 million)
  - Collector Street Equivalents ($44 million)
  - Other: Primarily Federal and State Grants administered through the North Front Range MPO ($38 million)
  - Centerra Metro District Funds ($219 million)
  - General Fund ($34 million)
- Each Project reviewed to determine source(s) of funding
- Cannot proceed unless all funding sources are in place

2035 Transportation Plan

Funding By Category

• City Streets	$106,893,000
• State Highways	$ 63,719,000
• Other Projects*	$ 75,167,000
• Centerra Metro District	$218,644,630
TOTAL	$464,423,630

*Other Projects include: Pedestrian and Bicycle; Signal System Connect; Intersection and Signal Improvements; US 34/US 287 Intersection Improvements; Bridge Replacements; and Professional Services for Transportation Planning

2035 Transportation Plan

Projects – Prioritized with Costs

2016-2025 Capital Program

Geographic Challenges & East-West Connectivity

- Reservoirs & Lakes
- Railroads
- Practicalities
  - $2,500/linear foot compared to $41,600/linear foot
    - If even possible
- East-West Connectivity Projects

2016-2025 Capital Program

Transportation Plan Projects

10-Year total	**$22.8M**	
•Annual Ongoing Projects*	$ 7.9M	Annual
•Development Reimbursement Projects	$ 3.2M	Annual
•Large Capital Projects		Next Phase
• Taft Avenue Phase II – Big Barnes Ditch	$ 1.3M	2016/2017
• Eisenhower (US 34) – Denver to Boyd Lake	$ 3.5M	2018
• Madison Avenue – Silver Leaf to 37th	$ 2.9M	2023
• 37th Street – US 287 to Lincoln	$ 2.5M	2019
• Companion Stormwater Project for Dry Creek	$ 1.7M	2019
• 29th & Beech	$ 0.6M	2016
• Boise Avenue	$ 0.5M	2025
• Byrd Drive	$ 0.5M	2016

** Includes roadway projects, such as bike lane striping as well as funding for unanticipated ROW purchase opportunities and for funding opportunities that require local match*

2016-2025 Capital Program

Funding Sources

•Honors requirement to fund projects from existing revenue and fund balances

•Street Capital Expansion Fees*	$16,977,600
•General Fund	$ 5,843,400
TOTAL	$22,821,000

37th Street moved up to 2019. Moving it up further would have resulted in negative Street CEF Reserve Fund Balance.

* Street CEF Fund Reserve reduced to $400,000 in 2019 to advance 37th Street Project. Recovers in 2020 and 2021 through reduced expenses.

Note: Per direction from Budget, additional TABOR Reserve not used as funding was available from existing sources over time.

Capital Transportation Projects

Process, Prioritization, Challenges and Funding

Discussion

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Memorandum

To: Bill Cahill, City Manager

From: Leah Browder, Public Works Director
David Klockeman, PE, City Engineer

Date: July 21, 2015

Re: July 28, 2015 City Council Study Session
Capital Transportation Projects—Process, Prioritization, Challenges and Funding

Summary:
Over the last few months, the City Council has expressed a desire to more closely examine the selection process and funding for the City's capital transportation projects. This memo is intended to support discussion at the upcoming July 28, 2015 City Council Study Session. It provides a summary of the City's long-range Transportation Plan, as well as the processes used to determine project priorities and develop project funding plans.

Background and Current Approach:
The City of Loveland is projected to experience continued substantial growth and change. Critical to supporting anticipated growth and ensuring functionality is the development and implementation of a well-balanced transportation system properly maintained over time. In order to ensure maximum system mobility, all modes—bike, pedestrian, transit and motorized vehicles (card and trucks) are considered and included in the planning process and in final proposed transportation plans.

Based on extensive technical analysis and public input, the City's 2035 Transportation Plan (adopted in 2012) is in place to provide a baseline and guidance for future improvements over a 20-year planning horizon. Approximately every five years, the Transportation Plan is reviewed and revised to include the latest available information, technical analysis, growth patterns and public input in order to provide a document that guides transportation decision making toward a future that is desirable to the community.

The Transportation Plan looks carefully at the specifics of how Loveland is projected to grow by 2035, including growth projections for all adjoining entities through a specially developed travel model that includes projected traffic volumes on individual streets. This model is developed through intense coordination between Public Works, Community and Strategic Planning and the City's regional partners through the North Front Range Metropolitan Planning Organization.

Key outcomes of this effort include identification of projects to address traffic forecasts AND programming of those projects given anticipated funding types and amounts. These projects primarily include roadway widening, new roadway segments, additional turn lanes, and intersection control (traffic signals, roundabouts, etc.) enhancements.

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On the issue of transportation project funding, Loveland is no different than any other growing city in that there are many more capital needs than there is funding available. The Transportation Plan is intended to be structured for maximum flexibility--providing a menu of priority projects, appropriating annual contributions toward an ultimate estimated project cost, ready to move forward quickly or undergo revision should unexpected funding opportunities arise, growth projections differ from reality, projected funding types change or fail to materialize, and/or unanticipated issues arise.

It is also important to note that project prioritization is based on carefully considered selection criteria to support objective, transparent prioritization recommendations. This is intended to ensure fairness across neighborhoods and support our citizens in understanding why one project might be selected over another. Because priorities change, and each project scoring exercise represents a snapshot in time, the prioritization list is reviewed and revised as necessary every two years to keep the project prioritization list as current as possible.

Currently applied criteria and weighting is as follows:

System Continuity/Congestion Mitigation	20%
Safety Enhancement	25%
Multi-modal Enhancement	5%
Environmental Impact	10%
Implementability	15%
Economic Impact	20%
Regional Significance	5%
TOTAL	100%

The projects included in the 2035 Transportation Plan consist of Major (significant) and Minor projects. In addition, all projects are structured in logical phases so that they can be better balanced with projections regarding type and amount of anticipated future funding. This approach also supports phased construction of large projects so that roadway users might experience gradual improvement over time rather than waiting longer periods of time for ultimate improvements to be constructed.

Transportation Street Network Description:

The roadway network is designed to connect local streets to collector streets to arterial streets. Each roadway classification has its own purpose in the system, primarily related to the amount of traffic it carries. The roadway classifications are determined based on the long-term traffic projections. The classifications also determine the number and spacing of access points. Some roads change classification depending where you are at on them. For example, Madison Avenue is a Major Arterial from US 34 to 29th Street, but is a Minor arterial north and south of that section.

In Loveland, the arterials are on the one-mile grid, the collectors are on a half-mile grid and connect to the arterials, and the local streets (whether residential, commercial or industrial) serve individual

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properties and connect into the collector system. The classification of the street also determines the amount of direct access allowed, with arterials being the most restrictive.

The classification of the street determines who is responsible for its construction and funding Based on adopted policies, development is responsible for constructing local and collector streets, including those within and adjacent to their developments. In addition, as part of the Adequate City Facilities (ACF) requirements, all development must be connected to the nearest arterial by a 34' paved roadway. As part of the review and approval process, each proposed development is required to analyze and propose the roadway network necessary to serve their development. It is generally required that the street system be designed to ensure that a development's projected traffic has less than a 10 percent impact on existing conditions. Due to this requirement, only arterial streets are included in the 2035 Transportation Plan.
Geographic Challenges: Loveland has geographic challenges that create unique circumstances when considering east-west connectivity. Reservoirs and lakes do not allow for the extension of roadways. For example, Boyd Lake Road runs from 71st Street to US 31, a distance of four miles with no ability to continue major roadways across (i.e. 57th Street, 43rd Street, 37th Street and 29th Street).

Also a challenge to east-west connections are three existing Railroad Companies (BNSF, Union Pacific, and Great Western). A specific example of this is the gap from 37th to 57th Streets and from 1st Street to SW 14th Street.

Our geographic constraints are addressed primarily through planning and access management along the existing key corridors, as well as strategically timed and coordinated widening improvements and connections. These strategic coordinations must be reviewed carefully when new project ideas or accelerations are raised as revisions to the adopted Transportation Plan can cause the need to modify other, related improvements.

Funding and geographic constraints are strongly linked. While it may be possible to construct bridges or causeways over geographic impediments, significant cost implications make these possibilities impractical. For instance, the cost for a four-lane arterial street are approximately $2,500 per linear foot while bridge construction can cost $41,600 per linear foot.

Transportation Capital Program and Project Funding Overview:
Funding sources presented in the 2035 Transportation Plan include only: Capital Expansion Fees for Streets (Street CEF's); Collector Street Equivalents; Other (Primarily Federal and State Grants); Centerra Metro District Funds (for improvements identified in the Master Finance Agreement); and General Fund. Project funding and construction plans may be modified if additional grants are secured; and/or additional funding is recommended by the City Manager's Office and approved by the City Council (e.g. TABOR, Project Reserve, etc.).

To maintain an accurate financial plan, the Transportation Plan not only presents funding formulas for City-constructed projects, but also reimbursement schedules for projects constructed as part of specific developments eligible for reimbursement under the City's policies. The City's projects include construction of roadway improvements, as well as traffic signal additions and interconnections, bike

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facilities, sidewalk additions, and other on-going efforts identified in the City's 2035 Transportation Plan, including planning studies. Also included is annual funding set aside to allow for matching opportunities that might become available through grants or other outside sources.

Impact of Funding Challenges: The 2035 Transportation Plan includes a list of projects necessary to be completed by 2035, based on analysis of growth projections, in order to meet transportation goals. Funding is limited and contingent on sources. Many projects are contingent on growth. Therefore, the improvements tend to lag behind the need as all of the funding is collected before the project is constructed.

Project funding sources included in the 2035 Transportation Plan are as follows:

	2012	**2015 (2012 Dollars Updated to 2015)**
City of Loveland	$ 34,099,009	$ 36,775,780
Capital Expansion Fees (Streets)	$129,886,011	$140,082,060
Collector Street Equivalent	$ 44,009,280	$ 47,464,010
CDOT Funds	$ 37,784,700	$ 40,750,800
Centerra Metro District Funding	$218,644,630	$235,808,230
TOTAL	$464,644,630	$500,880,880

2035 Transportation Plan Projects:

There are 24 City Street Projects, 13 State Highway Projects, and 6 other priority projects included in the 2035 Transportation Plan. When phasing and individual intersections are identified, these projects can be further broken down into 115 individual projects.

City roadways include (Total Cost of $115,284,100 in 2015 dollars):
29th Street – Cascade to Wilson
37th Street – US 287 to Lincoln and Seven Lakes Drive to Boise Avenue
57th Street – Wilson to Monroe
Boise Avenue – SH 402 to 4th Street SE and Mount Columbia to 37th Street
Boyd Lake Avenue – SH 60 to US 34
Byrd Drive – Crossroads to Earhart
Cascade Avenue – 22nd Street to 35th Street
Centerra Parkway – Crossroads to 0.5 miles south
5th Street – Sculptor to Boyd Lake Avenue
LCR 3 – US 34 to Crossroads
LCR 9E (Sculptor) – SH 402 to Corvus
Madison – Silverleaf to 37th Street
Taft Avenue – 28th Street SW to 14th Street SW and Arkins Branch to 28th Street

State Highways include (Total Cost of $68,720,940 in 2015 dollars):

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SH 402 – St. Louis to I-25
US 287 – SH 402 to 6th Street
US 34 – Garfield to Monroe and Denver Avenue to LCR 3

Also included in the Transportation Plan are 40 individual intersection projects, pedestrian and bicycle facility projects, Traffic Signal system inter-connect projects, the US 34/US 287 Intersection project, bridge replacement projects, and Professional Services for Transportation Planning (Total Cost of $81,067,610 in 2015 dollars).

The final projects are those included in the Centerra Master Finance Agreement (MFA). The Total remaining projects have a cost of $235,808,230 in 2015 dollars. (Note: The completion of these projects is dependent on actual overall development within the area during the terms of the MFA.)

Top Projects – 2015 Project Prioritization and Budget Appropriation:

Project	Projected Next Phase Construction Date	Estimated Total Project Cost (2015 $'s)	2016 – 2025 CIP
Eisenhower and Taft – Intersection Improvements		$1,779,525	
US 34 – Denver Avenue to Boyd Lake Avenue	2018	$10,224,589	$3,500,000
US 34 – Boyd Lake Avenue to Rocky Mountain Avenue		$8,380,457	
US 34 – Rocky Mountain Avenue to I-25		$2,516,822	
Taft Avenue – Arkins Branch to US 34		$10,896,950	$1,280,000
57th and Taft – Intersection Improvements	2016/2017	$1,590,788	
5th Street – Sculptor Drive to Boyd Lake Avenue		$1,059,664	
US 34 – I-25 to Centerra Parkway		$3,358,018	
Madison Avenue Silverleaf Drive to 29th Street	2023	$3,795,979	$2,140,000
57th Street – Taft Avenue to US 287		$8,859,778	
TOTALS		**$52,462,570**	**$6,920,000**
Other Projects in 2016 – 2025 CIP			
Annual Ongoing Projects*			$ 7,860,000
Development Reimbursement Projects			$ 3,191,000
37th Street – US 287 to Lincoln**	2019		$ 2,500,000
Madison Avenue – 29th to 37th			$ 800,000
Byrd Drive – Crossroads to Earhart	2016		$ 500,000
Boise Avenue – Mt. Columbia to 37th Street	2016		$ 500,000
29th and Beech Court Intersection	2016		$ 550,000
Subtotal			**$15,901,000**

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TOTAL 2106 – 2025 CIP			**$22,821,000**
**Roadway projects such as bike lane striping; unanticipated ROW purchase opportunities; local match fund.*			
***Requires companion stormwater project for Dry Creek, estimated cost $1.7m to be funded through Stormwater Enterprise Fund.*			

Conclusion:

The City's Transportation Plan provides the baseline and guidance for 20 years of transportation system capital project planning and funding. It is an intricate inter-weave of technical analysis; public input; and the proper application of restricted funding sources, balanced with timing and related required projects. While structured to provide as much flexibility as possible, the Transportation Plan seeks to ensure annual appropriations of appropriate monies into each priority project so that all make progress toward phased project construction and completion. Modifying project priorities or schedules requires review of the full program to ensure that existing related projects are revised as necessary and to identify other needs that may need to be addressed as a result of changes.

We look forward to City Council's current thoughts on project priorities and the opportunity to update project prioritization criteria to reflect any changes in policy.

If you have any questions or comments, please do not hesitate to contact Dave Klockeman by phone at (970) 962-2514 or email at dave.klockeman@cityofloveland.org or Leah Browder at 970-962-2520 or at leah.browder@cityofloveland.org. Thank you.