



REGULAR MEETING AGENDA

CALL TO ORDER

BOARD SERVICE RECOGNITION – Jennifer Gramling

NEW EMPLOYEE INTRODUCTIONS

Joe Bernosky, Director
Leslie Moening, Civil Engineer II
Matt Sadar, Electric Metering Supervisor
Dave Sehrt, Electric Distribution Designer
William Ullom, Electric Distribution Designer

APPROVAL OF MINUTES – 6/21/2017

CITIZENS REPORT (*See procedural instructions on the following page.)

CONSENT AGENDA

INFORMATIONAL ITEMS

1. Financial Report Update – Jim Lees
2. Pole Attachment Rate Calculation – Jim Lees
3. Water Supply Update – Kim Frick

REGULAR AGENDA

4. 2018 Budget Review for Water, Wastewater and Power – Jim Lees

STAFF REPORTS

5. Community Solar Program Update: Survey Results and Preliminary Cost Estimates – Lindsey Bashline & Paul Davis

COMMISSION & COUNCIL REPORTS

DIRECTOR'S REPORT

ADJOURN

*** Citizens Report Procedures**

Anyone in the audience may address the LUC on any topic relevant to the commission. If the topic is a Consent Agenda item, please ask for that item to be removed from the Consent Agenda; pulled items will be heard at the beginning of the Regular Agenda. If the topic is a Regular Agenda item, members of the public will be given an opportunity to speak to the item during the Regular Agenda portion of the meeting before the LUC acts upon it. If the topic is a Staff Report item, members of the public should address the LUC during this portion of the meeting; no public comment is accepted during the Staff Report portion of the meeting.

Anyone making comment during any portion of tonight's meeting should identify himself or herself and be recognized by the LUC chairman. Please do not interrupt other speakers. Side conversations should be moved outside the Service Center Board Room. Please limit comments to no more than three minutes.

Notice of Non-Discrimination

The City of Loveland is committed to providing an equal opportunity for services, programs and activities and does not discriminate on the basis of disability, race, age, color, national origin, religion, sexual orientation or gender. For more information on non-discrimination or for translation assistance, please contact the City's Title VI Coordinator at TitleSix@cityofloveland.org or 970-962-2372. The City will make reasonable accommodations for citizens in accordance with the Americans with Disabilities Act (ADA). For more information on ADA or accommodations, please contact the City's ADA Coordinator at adacoordinator@cityofloveland.org or 970-962-3319.

Notificación en Contra de la Discriminación

"La Ciudad de Loveland está comprometida a proporcionar igualdad de oportunidades para los servicios, programas y actividades y no discriminar en base a discapacidad, raza, edad, color, origen nacional, religión, orientación sexual o género. Para más información sobre la no discriminación o para asistencia en traducción, favor contacte al Coordinador Título VI de la Ciudad al TitleSix@cityofloveland.org o al 970-962-2372. La Ciudad realizará las acomodaciones razonables para los ciudadanos de acuerdo con la Ley de Discapacidades para americanos (ADA). Para más información sobre ADA o acomodaciones, favor contacte al Coordinador de ADA de la Ciudad en adacoordinator@cityofloveland.org o al 970-962-3319".

Commission Members Present: Dan Herlihey (Vice Chair), Dave Kavanagh, David Schneider, Gary Hausman (Chair), Gene Packer, Larry Roos (left at 6:45 during Item 8), John Butler, Randy Williams, Sean Cronin

Commission Members Absent: Alternate Board Member Stephanie Fancher-English

Council Liaison Absent: Troy Krenning

City Staff Members Present: Bob Miller, Brian Gandy, Brieana Reed-Harmel, Christine Schraeder, Courtney Whittet, Garth Silvernale, Gretchen Stanford, John Beckstrom, Kim O'Field, Lindsey Bashline, Larry Howard, Roger Berg, Tim Bohling, Cree Goodwin, Chris Geisting, Craig Weinland, Steve Johnson, Tom Greene, Tanner Randall, Steve Adams

Guest Attendance: Bruce Croissant, Jason Frisbie, Brad Decker, Andy Butcher, Mike O'Brien, Pat Connors, Dan Hodges, Ronita Blok, Jim Blok, Deb Stucklen

CALL TO ORDER: Gary Hausman called the meeting to order at 4:02 pm.

Gary announced that a new Director of Water & Power has been appointed, Joe Bernosky. Gretchen Stanford thanked the Loveland Utilities Commission for the opportunity to lead for the last 10 months.

Chris Geisting was introduced as the new Water Treatment Plant Manager.

APPROVAL OF MINUTES: Hausman asked for a motion to approve the minutes of the March 8, 2017 meeting.

Motion: Dave Schneider made the motion.

Second: John Butler seconded the motion. The minutes were approved unanimously.

CITIZEN REPORTS: Bruce Croissant attended the meeting to discuss the electric rate setting for self-generating customers. Croissant expressed his opinion out the method used by Loveland Water and Power (LWP) to calculate billing. He felt that the only way to benefit was to be a 100% generator and that those customers just augmenting their electricity with solar are not being compensated fairly.

Dave Kavanagh commented that part of the fees for all customers is infrastructure costs, these fees will remain the same for a regular customers and self-generating customers.

Jason Frisbie, CEO of Platte River Power Authority (PRPA), mentioned that their has to be a backup 100% of the time, this incurs costs the same as a regular customer. Also, that the solar panels are at peak production during the middle of the day, but the solar panel capacity drops off during peak demand in the evening 5-8pm. This means that solar panels do not help with peak demand.

Larry Roos felt that the rate was fair when based on the growth of self-generating customers as opposed to the handful of individuals currently using solar to self-generate power.

John Beckstrom, Utility Finance/Rate Analyst, gave a presentation detailing the 2017 rate structure for self-generating customers.

Jim Blok, a citizen guest, would like to see renewable energy incentivized not penalized. Dave Schneider stated that while the members of the commission are also in favor of renewable energy, in the current state of our system residents still need to be tied to the electric grid. There is a cost to provide residents with electric service. Dave Schneider replied that the commission has a great deal of concern about responsibility to the environment, but they also have a responsibility to the citizens of Loveland. Gary Hausman thanked Mr. Croissant for his comments and stated the meeting needed to move forward to the next agenda item.

CONSENT AGENDA

Item #2 pulled by Gene Packer and moved to the Regular Agenda.

Item #1: PVC Conduit and Accessories Bid 2016-16 Contract Renewal – Steve Johnson

The purpose of this item is to renew a one-year contract (year 2) to Western United Electric Supply Corporation for PVC Conduit and Accessories, Bid 2016-16.

Recommendation: Award the renewal contract for PVC Conduit and Accessories to Western United Electric Supply Corporation in an amount not to exceed \$899,191.85 and authorize the City Manager to execute the contract on behalf of the City.

Item #3: Wastewater Treatment Plant Biological Nutrient Removal – Contract Amendment for Engineering Services during Construction for Carollo Engineers – Brian Gandy

The purpose of this item is to amend our engineering contract with Carollo Engineering to add “Services During Construction” to the contract.

Per the Municipal Code, if a Contract exceeds \$500,000 or 20% of the original value through previously approved amendments, all subsequent amendments must be approved by the LUC. As such, this contract amendment is presented here for LUC consideration.

Recommendation: Adopt a motion to approve the amendment to Carollo’s contract for Engineering Services during Construction in the amount of \$287,623 and increase the not-to-exceed amount to \$1,920,311.

Motion: Dan Herlihey made the motion to accept the consent agenda items 1 and 3 as written.

Second: Dave Schneider seconded the motion. The motion was approved unanimously.

STAFF REPORTS

Items 10 and 9 were moved to allow guest presenters the option to leave early.

Item #10: Customized Resource Planning – Brad Decker, Platte River Power Authority

This presentation will cover the project deliverables and progress on Platte River Power Authority’s (PRPA) Customized Resource Plan (CRP).

Information item only. No action required

Item #9: CAMU Legislative Update – Kim O’Field & Dan Hodges

Loveland staff relies primarily on the Colorado Association of Municipal Utilities (CAMU) for information on electric-related legislation. This item is intended to give a brief overview of CAMU and an update on electric-related legislation.

Information item only. No action required

INFORMATION ITEMS

Item #4: Water Legislative Update – Derek Turner

This item and the attachment are intended to give a brief update on water-related legislation being contemplated by the Colorado General Assembly. Loveland Water and Power relies primarily on the Colorado Water Congress (CWC) for information on water-related legislation.

Information item only. No action required.

Item #5: Financial Report Update – John Beckstrom

This item summarizes the monthly and year-to date Preliminary financials for April 2017.

Information item only. No action required.

Comments: Dave Schneider would like to know why our investments are doing poorly. Dave Kavanagh would like to see the Power reserves listed on the financials. They are listed on the financials; however, it is not very clear. Gretchen Stanford stated we could add a footnote to clarify.

Item #6: Water Supply Update – Kim Frick

Raw water supply update.

Information item only. No action required

REGULAR AGENDA**Item #2: Right of First Refusal for Platte River Power Authority Sale of Windy Gap Units – Derek Turner**

Staff requests the LUC's recommendation on the City's course of action in response to a recent letter from the Platte River Power Authority (PRPA).

In 1974, the City of Loveland assigned to the PRPA the City's preferential right to contract with the Municipal Subdistrict (Subdistrict) of the Northern Colorado Water Conservancy District (NCWCD) for 40 units of Windy Gap contract water, representing one-half of the City's original allotment of Windy Gap units. As part of the assignment, PRPA agreed that if such units were ever offered to any other entity, PRPA shall first offer the use of the units to the City on substantially similar terms and conditions—effectively giving the City a right of first refusal if PRPA were to ever market the units. In early May 2017, PRPA formally provided notice to the City that it intended to sell 23 units of contract water in the Windy Gap project, and requested the City to formally exercise or decline its right of first refusal as a condition of the sale.

Recommendation: Adopt a motion recommending that the City Manager decline to exercise the City's right of first refusal for these Windy Gap units from PRPA.

Motion: Dan Herlihey made the motion.

Second: John Butler seconded the motion. The motion was approved unanimously.

Comments: Derek Turner clarified the term Right of First Refusal. Dave Schneider wants the block of 23 units of water notated as a specific name, such as Block A, in the contract so that in the future, if another 23 units comes available, the two contracts are not confused. Frisbie stated that there will be a contract signed with the purchasing entity, however if Loveland declines to exercise the right of first refusal they will still maintain the right of first refusal on 40 units and nothing changes for the City of Loveland.

Item #7: Award Construction Contract for the 2017 CIPP Sewer Rehabilitation Project

The purpose of this item is to award a construction contract to the lowest qualified bidder for the 2017 CIPP Sewer Rehabilitation Project.

Recommendation: Adopt a motion to award the 2017 CIPP Sewer Rehabilitation Project construction contract to Layne Inliner, LLC in the amount of \$837,667.50 and authorize the City Manager to execute the construction contract on behalf of the City.

Motion: Dan Herlihey made the motion.

Second: Dave Kavanagh seconded the motion. The motion was approved unanimously.

Comments: Randy Williams and Sean Cronin both had questions about significant differences in the bids on certain line items such as Sewer Service Reinstatement, Mobilization and Traffic Control. Craig Weinland stated he contacted several other municipalities for references and was pleased with their responses; the large differences in the bids on specific line items may just be from differences in internal accounting at the two companies. Dave Schneider would like a report in a future meeting detailing the locations of sewer rehabilitation.

Item #8: Algal Mitigation Assessment Results & Next Steps

Loveland Water and Power's (LWP) goal is to provide the best water quality possible to our customers. LWP experienced the largest algal blooms and taste and odor issues in its history in 2015 and 2016. These events prompted the need for better algal management practices to improve water quality. An algal mitigation assessment was conducted to identify potential solutions. This presentation focuses on the results of this assessment and the next steps LWP will be taking for algal management and taste and odor reduction.

Recommendation: Adopt a motion to support the efforts of the Algal Mitigation Assessment Technical Memorandum dating April 14, 2017.

Motion: Dan Herlihey made the motion.

Second: Gene Packer seconded the motion. The motion was approved unanimously.

Comments: Packer questioned if more SolarBee 10000 mixers would have been better, Tim Bohling answered that it depends on what problems you are dealing with, for our algal mitigation four was the correct number to provide a slow, constant movement. Dan Herlihey wanted to know if the units are left in the reservoir during the winter, Bohling stated that these could be left in the reservoir through the winter. Dave Schneider had questions about the effect on the ecology of the reservoir; Bohling assured him it would only help the fish and zooplankton thrive ensuring a healthier ecological system.

COMMISSION/COUNCIL REPORTS**Item #14: Commission/Council Reports**

Activity board members attended since last meeting – April 19, 2017

Dan Herlihey: nothing to report

Dave Kavanagh: nothing to report

Gene Packer: nothing to report

Dave Schneider: nothing to report

Gary Hausman: nothing to report

Larry Roos: nothing to report

Randy Williams: Was very interested in the Idylwilde report in the Director's Report

Sean Cronin: nothing to report

Stephanie Fancher-English: Absent

John Butler: nothing to report

Council Report: Gretchen Stanford gave on behalf of Troy Krenning

City Council Regular Meeting – May 2

- Drinking Water Week Proclamation
- Second Amendment to 5th Interim Agreement for Windy Gap Firing Project

***City Council Regular Meeting – May 16***

- Adoption of the Amended Requirements for Electric Service
- Pole Attachments
- Hydrozone Program Code Amendments

DIRECTOR'S REPORT**Item #15: Director's Report – Gretchen Stanford**

ADJOURN The meeting was adjourned at 7:40 pm. The next LUC Meeting will be June 21, 2017 at 4:00 pm.

Respectfully submitted,

Courtney Whittet
Recording Secretary
Loveland Utilities Commission

ITEM TITLE:

Financial Report Update

DESCRIPTION:

This item summarizes the monthly and year-to date Preliminary financials for May 2017.

SUMMARY:





The May 2017 financial reports are submitted for Commission review. The following table summarizes the sales and expense results for the month of May, and the May Year-To-Date results in comparison to the same periods from 2016. The summarized and detailed monthly financial statements that compare May Year-To-Date actuals to the 2017 budgeted figures are attached.

		May				May Year-To-Date					
		2017	2016	\$ Ovr/(Und)	% Ovr/(Und)			2017	2016	\$ Ovr/(Und)	% Ovr/(Und)
				vs. 2017	vs. 2017					vs. 2017	vs. 2017
WATER											
Sales		\$1,065,492	\$803,117	\$262,374	32.7%			\$4,277,360	\$3,655,107	\$622,253	17.0%
Operating Expenses		\$5,134,210	\$711,216	\$4,422,995	621.9%			\$9,689,682	\$4,575,510	\$5,114,172	111.8%
Capital (Unrestricted)		\$27,091	\$423,814	(\$396,723)	-93.6%			\$334,638	\$1,676,165	(\$1,341,527)	-80.0%
WASTEWATER											
Sales		\$907,576	\$779,915	\$127,661	16.4%			\$4,472,700	\$3,954,334	\$518,366	13.1%
Operating Expenses		\$603,568	\$471,536	\$132,033	28.0%			\$2,763,820	\$2,423,171	\$340,649	14.1%
Capital (Unrestricted)		\$121,742	\$260,104	(\$138,362)	-53.2%			\$651,010	\$769,701	(\$118,691)	-15.4%
POWER											
Sales		\$4,452,305	\$4,240,790	\$211,515	5.0%			\$23,343,301	\$22,391,756	\$951,544	4.2%
Operating Expenses		\$4,148,360	\$3,772,783	\$375,576	10.0%			\$20,847,380	\$19,452,157	\$1,395,223	7.2%
Capital (Unrestricted)		\$1,527,928	\$1,184,101	\$343,827	29.0%			\$4,273,994	\$3,441,965	\$832,029	24.2%

RECOMMENDATION:

Staff item only. No action required.

ATTACHMENTS:

-  Attachment A: City of Loveland Financial Statement-Raw Water
-  Attachment B: City of Loveland Financial Statement-Water
-  Attachment C: City of Loveland Financial Statement-Wastewater
-  Attachment D: City of Loveland Financial Statement-Power

Attachment A

City of Loveland
Financial Statement-Raw Water
For Period Ending 05/31/2017

	* TOTAL BUDGET *				OVER	
	FYE 12/31/2017	YTD ACTUAL	YTD BUDGET	<UNDER>	VARIANCE	
1 REVENUES & SOURCES	*	*				
2 High Use Surcharge	* 52,500 *	40,655	21,900	18,755	85.6%	
3 Raw Water Development Fees/Cap Rec Surcharge	* 411,446 *	156,819	176,416	(19,597)	-11.1%	
4 Cash-In-Lieu of Water Rights	* 250,000 *	58,381	104,150	(45,769)	-43.9%	
5 Native Raw Water Storage Fees	* 5,000 *	46,412	2,090	44,322	2120.7%	
6 Loan Payback from Water	* 4,050,375 *	4,161,687	4,050,375	111,312	2.7%	
7 Raw Water 1% Transfer In	* 434,340 *	128,321	116,390	11,931	10.3%	
8 Interest on Investments	* 374,120 *	105,217	155,900	(50,683)	-32.5%	
9 TOTAL REVENUES & SOURCES	* 5,577,781 *	4,697,492	4,627,221	70,271	1.5%	
10 OPERATING EXPENSES	*	*				
11 Loan to Water	* 0 *	0	0	0	0.0%	
12 Windy Gap Payments	* 7,100 *	7,044	2,960	4,084	138.0%	
13 TOTAL OPERATING EXPENSES	* 7,100 *	7,044	2,960	4,084	138.0%	
14 NET OPERATING REVENUE/(LOSS) (excl depr)	* 5,570,681 *	4,690,448	4,624,261	66,187	1.4%	
15 RAW WATER CAPITAL EXPENDITURES	* 2,051,794 *	1,262,691	1,246,774	15,917	1.3%	
16 ENDING CASH BALANCES	*	*				
17 Total Available Funds	* *	18,339,297				
18 Reserve - Windy Gap Cash	* *	0				
19 Reserve - 1% Transfer From Rates	* *	5,684,430				
20 Reserve - Native Raw Water Storage Interest	* *	1,611,701				
21 TOTAL RAW WATER CASH	* *	25,635,428				
22 MINIMUM BALANCE (15% OF OPER EXP)	* *	1,065				
23 OVER/(UNDER) MINIMUM BALANCE	* *	25,634,363				

NOTE: YTD ACTUAL DOES NOT INCLUDE ENCUMBRANCES TOTALING: 4906.1

Cell: G13

Comment: Laura Homiak:

Added 4,050,375 since loan paid back already.

Attachment B

City of Loveland
Financial Statement-Water
For Period Ending 05/31/2017

	TOTAL BUDGET		YTD ACTUAL	YTD BUDGET	OVER	VARIANCE
	FYE 12/31/2017				<UNDER>	
1 **UNRESTRICTED FUNDS**	*	*				
2 REVENUES & SOURCES	*	*				
3 Water Sales	*	14,477,980	*	4,277,360	3,833,638	443,722 11.6%
4 Raw Water Transfer Out	*	(434,340)	*	(128,321)	(116,390)	(11,931) 10.3%
5 Wholesale Sales	*	138,790	*	13,451	18,820	(5,369) -28.5%
6 Meter Sales	*	54,710	*	34,103	17,120	16,983 99.2%
7 Interest on Investments	*	152,410	*	40,803	63,500	(22,697) -35.7%
8 Other Revenue	*	950,250	*	157,355	711,690	(554,335) -77.9%
9 Federal and State Grants	*	0	*	75,804	0	75,804 0.0%
10 Internal Loan Monies Received	*	751,356	*	750,339	751,356	(1,017) -0.1%
11 External Loan Monies Received	*	0	*	0	0	0 0.0%
12 TOTAL REVENUES & SOURCES	*	16,091,156	*	5,220,893	5,279,734	(58,841) -1.1%
13 OPERATING EXPENSES	*	*	*			
14 Source of Supply	*	2,754,390	*	868,909	1,494,018	(625,109) -41.8%
15 Treatment	*	3,466,452	*	1,054,457	1,465,461	(411,004) -28.0%
16 Distribution Operation & Maintenance	*	3,674,830	*	1,243,249	1,613,736	(370,487) -23.0%
17 Administration	*	764,857	*	153,607	332,384	(178,777) -53.8%
18 Customer Relations	*	384,899	*	106,860	131,154	(24,294) -18.5%
19 PILT	*	983,050	*	290,433	287,051	3,382 1.2%
20 1% for Arts Transfer	*	101,551	*	2,073	63,691	(61,618) -96.7%
21 Services Rendered-Other Departments	*	1,309,058	*	545,847	545,847	0 0.0%
22 Internal Loan Debt Expense	*	4,856,625	*	4,908,116	4,856,625	51,491 1.1%
23 External Loan Debt Expense	*	1,013,988	*	516,132	422,495	93,637 22.2%
24 TOTAL OPERATING EXPENSES	*	19,309,700	*	9,689,682	11,212,462	(1,522,779) -13.6%
25 NET OPERATING REVENUE/(LOSS)(excl depr)	*	(3,218,544)	*	(4,468,789)	(5,932,728)	1,463,938 -24.7%
26 CAPITAL EXPENDITURES	*	3,552,038	*	334,638	2,178,609	(1,843,971) -84.6%
27 ENDING CASH BALANCE (21% of Oper Exp)	*		*	4,099,019		100
28 WATER DEBT FUNDS ENDING CASH BALANCE	*		*	(319)		100
29 MINIMUM BALANCE (15% OF OPER EXP)	*		*	2,896,455		
30 OVER/(UNDER) MINIMUM BALANCE	*		*	1,202,564		
31 **RESTRICTED FUNDS**	*	*	*			
32 REVENUES & SOURCES	*	*	*			
33 SIF Collections	*	2,755,460	*	1,010,674	934,940	75,734 8.1%
34 SIF Interest Income	*	33,180	*	10,780	13,380	(2,600) -19.4%
35 SIF Federal and State Grants	*	0	*	75,804	0	75,804 0.0%
36 Internal Loan Monies Received	*	0	*	0	0	0 0.0%
37 TOTAL SIF REVENUES & SOURCES	*	2,788,640	*	1,097,258	948,320	148,938 15.7%
38 SIF Capital Expenditures	*	828,787	*	55,300	456,786	(401,486) -87.9%
39 1% for Arts Transfer	*	1,049	*	512	260	252 96.9%
40 Legal Agreements & Settlements	*	53,700	*	17,885	53,700	(35,815) -66.7%
41 SIF ENDING CASH BALANCE	*		*	2,364,545		100
42 TOTAL ENDING CASH BALANCE	*		*	6,463,564		
NOTE: YTD ACTUAL DOES NOT INCLUDE ENCUMBRANCES TOTALING:			2,478,609			
43 Water Treated at WTP (in million gallons)	*		*	1,238		
44 Water Sold To Customers (in million gallons, includes Ranch Water & Hydrant Sales)	*	3,561	*	858	841	17 2.1%

Attachment C

City of Loveland-LIVE Financial Statement-Wastewater For Period Ending 05/31/2017

	TOTAL BUDGET			OVER	
	FYE 12/31/2017	YTD ACTUAL	YTD BUDGET	<UNDER>	VARIANCE
1 **UNRESTRICTED FUNDS**	*	*			
	*	*			
2 REVENUES & SOURCES	*	*			
	*	*			
3 Sanitary Sewer Charges	11,325,240	4,472,700	4,201,630	271,070	6.5%
4 High Strength Surcharge	360,690	152,360	139,360	13,000	9.3%
5 Interest on Investments	164,020	57,330	68,350	(11,020)	-16.1%
6 Other Revenue	12,920	5,634	5,260	374	7.1%
7 Bond Proceeds	16,000,000	0	16,000,000	(16,000,000)	-100.0%
8 Federal Grants	0	0	0	0	0.0%
9 State Grants	0	0	0	0	0.0%
# TOTAL REVENUES & SOURCES	27,862,870	4,688,024	20,414,600	(15,726,576)	-77.0%
# OPERATING EXPENSES	*	*			
	*	*			
	*	*		0	0.0%
# Treatment	3,998,641	1,318,216	1,678,130	(359,914)	-21.4%
# Collection System Maintenance	2,907,659	701,669	1,225,539	(523,870)	-42.7%
# Administration	422,986	96,024	198,930	(102,906)	-51.7%
# Customer Relations	45,509	15,933	19,441	(3,508)	-18.0%
# PILT	818,020	323,754	340,840	(17,086)	-5.0%
# 1% for Arts Transfer	234,793	2,386	177,083	(174,697)	-98.7%
# Services Rendered-Other Departments	633,529	264,271	264,271	0	0.0%
# Debt Service	1,051,432	41,567	438,100	(396,533)	-90.5%
# TOTAL OPERATING EXPENSES	10,112,569	2,763,820	4,342,334	(1,578,514)	-36.4%
# NET OPERATING REVENUE/(LOSS)(excl depr)	17,750,301	1,924,204	16,072,266	(14,148,062)	-88.0%
# CAPITAL EXPENDITURES	26,021,469	651,010	19,635,102	(18,984,092)	-96.7%
# ENDING CASH BALANCE (125% of Oper Exp)	*	12,593,774			100
# MINIMUM BALANCE (15% OF OPER EXP)	*	1,516,885			
# OVER/(UNDER) MINIMUM BALANCE	*	11,076,889			
# **RESTRICTED FUNDS**	*	*			
	*	*			
# REVENUES & SOURCES	*	*			
	*	*			
# SIF Collections	2,039,750	470,379	790,490	(320,111)	-40.5%
# SIF Interest Income	134,730	40,750	56,150	(15,400)	-27.4%
# SIF Bond Proceeds	8,900,000	0	8,900,000	(8,900,000)	-100.0%
# TOTAL SIF REVENUES & SOURCES	11,074,480	511,129	9,746,640	(9,235,511)	-94.8%
# SIF Capital Expenditures	14,052,210	222,414	10,167,117	(9,944,703)	-97.8%
# 1% for Arts Transfer	125,668	40	100,258	(100,218)	-100.0%
# Debt Service	584,859	25,477	243,690	(218,213)	-89.5%
SIF ENDING CASH BALANCE		8,827,582			100
TOTAL ENDING CASH BALANCE		10,344,467			
NOTE: YTD ACTUAL DOES NOT INCLUDE ENCUMBRANCES TOTALING					
		5,636,726			
# Wastewater Treated at WWTP (in million gallons)	N/A	898	N/A		
# Wastewater Billed To Customers (in million gallons)	1,767	678	695	(17)	-2.5%

Cell: F29

Comment: Laura Homiak:

Tsf to WW Debt Service 41,471.05 (object 47317)

Cell: F53

Comment: Laura Homiak:

Tsf to WW Debt Service 25,417.74 (object 47317)

Attachment D

City of Loveland Financial Statement-Power For Period Ending 5/31/2017

	* TOTAL BUDGET	* YTD ACTUAL	YTD BUDGET	OVER <UNDER>	VARIANCE
UNRESTRICTED FUNDS					
1 REVENUES & SOURCES:					
2 Electric revenues	\$62,342,360	\$23,343,301	\$24,034,830	(\$691,529)	-2.9%
3 Wheeling charges	\$244,650	\$87,586	\$101,938	(\$14,351)	-14.1%
4 Interest on investments	\$229,810	\$80,046	\$95,754	(\$15,708)	-16.4%
5 Aid-to-construction deposits	\$1,830,000	\$830,756	\$762,500	\$68,256	9.0%
6 Customer deposit-services	\$310,000	\$94,337	\$129,167	(\$34,830)	-27.0%
7 Late Payment Penalty Fees	\$415,000	\$198,615	\$172,917	\$25,698	14.9%
8 Connect Fees	\$160,000	\$61,950	\$66,667	(\$4,717)	-7.1%
9 Services rendered to other depts.	\$0	\$600	\$0	\$600	0.0%
10 Other revenues	\$333,100	\$119,643	\$138,792	(\$19,149)	-13.8%
11 Federal Grants	\$0	\$328,916	\$0	\$328,916	0.0%
12 State Grants	\$0	\$54,819	\$0	\$54,819	0.0%
13 Year-end cash adjustments	\$0	\$0	\$0	\$0	0.0%
14 TOTAL REVENUES & SOURCES	\$65,864,920	\$25,200,570	\$25,502,563	(\$301,994)	-1.2%
15 OPERATING EXPENSES:					
16 Hydro oper. & maint.	\$6,407,916	\$555,325	\$2,711,041	(\$2,155,716)	-79.5%
17 Solar oper. & maint.	\$90,000	\$284	\$38,077	(\$37,793)	-99.3%
18 Purchased power	\$43,452,943	\$15,553,220	\$16,208,204	(\$654,984)	-4.0%
19 Distribution oper. & maint.	\$4,926,787	\$1,700,144	\$2,084,410	(\$384,266)	-18.4%
21 Customer Relations	\$1,270,771	\$164,761	\$537,634	(\$372,873)	-69.4%
22 Administration	\$824,162	\$236,583	\$348,684	(\$112,100)	-32.1%
23 Payment in-lieu-of taxes	\$4,328,980	\$1,615,918	\$1,731,592	(\$115,674)	-6.7%
24 1% for Arts Transfer	\$147,470	\$29,963	\$58,988	(\$29,025)	-49.2%
25 Services rendered-other depts.	\$2,376,665	\$991,181	\$990,277	\$904	0.1%
26 TOTAL OPERATING EXPENSES (excl depn)	\$63,825,694	\$20,847,380	\$24,708,907	(\$3,861,527)	-15.6%
27 NET OPERATING REVENUE/(LOSS) (excl depn)	\$2,039,226	\$4,353,190	\$793,656	\$3,559,534	\$0
28 CAPITAL EXPENDITURES:					
29 General Plant/Other Generation & Distribution	\$15,667,513	\$3,328,784	\$6,621,772	(\$3,292,988)	-49.7%
30 Aid-to-construction	\$1,830,000	\$804,087	\$774,231	\$29,856	3.9%
31 Service installations	\$310,000	\$141,122	\$131,154	\$9,968	7.6%
32 TOTAL CAPITAL EXPENDITURES	\$17,807,513	\$4,273,994	\$7,527,157	(\$3,253,164)	-43.2%
33 ENDING CASH BALANCE (28% of Oper Exp)		\$17,666,509			
34 MINIMUM BAL. (23% of OPER EXP excl depn/chg 2017		\$14,679,910			
35 OVER/(UNDER) MINIMUM BALANCE		\$2,986,599			
RESTRICTED FUNDS					
37 PIF Collections	\$2,747,630	\$1,025,270	\$1,144,846	(\$119,576)	-10.4%
38 PIF Interest Income	\$25,030	\$14,758	\$10,429	\$4,329	41.5%
39 Water Loan Payback	\$806,250	\$791,700	\$806,250	(\$14,550)	-1.8%
40 Federal Grants	\$0	\$0	\$0	\$0	0.0%
41 State Grants	\$0	\$0	\$0	\$0	0.0%
42 TOTAL REVENUES	\$3,578,910	\$1,831,728	\$1,961,525	(\$129,797)	-6.6%
43 PIF Feeders	\$2,470,000	\$842,989	\$1,045,000	(\$202,011)	-19.3%
44 PIF Substations & Solar	\$2,715,000	\$120,955	\$1,131,250	(\$1,010,295)	-89.3%
45 TOTAL EXPENDITURES	\$5,185,000	\$963,944	\$2,176,250	(\$1,212,307)	-55.7%
46 ENDING PIF CASH BALANCE		\$2,407,051			
47 TOTAL ENDING CASH BALANCE		\$20,073,560			
NOTE: YTD ACTUAL does NOT include encumbrances totalling \$6,720,867					
48 Energy Purchased (in million kWh) from PRPA	737	282	293	(11)	-1.6%
49 Energy Sold to Customers (in million kWh)	715	276	287	(10)	-3.6%

**ITEM TITLE:**

Pole Attachment Rate Calculation

DESCRIPTION:

This item documents how the fee for attaching to City of Loveland Power poles is calculated.


SUMMARY:

At the last LUC meeting, Commissioner Kavanaugh posed a question regarding how our Power Pole Attachment Fee is calculated. Our fee was updated in 2014 by our Power rate consultant, Utility Financial Solutions, and an executive report that shows the methodology for calculating the fee is attached. The fee is calculated to be in compliance with FCC-approved methodologies.

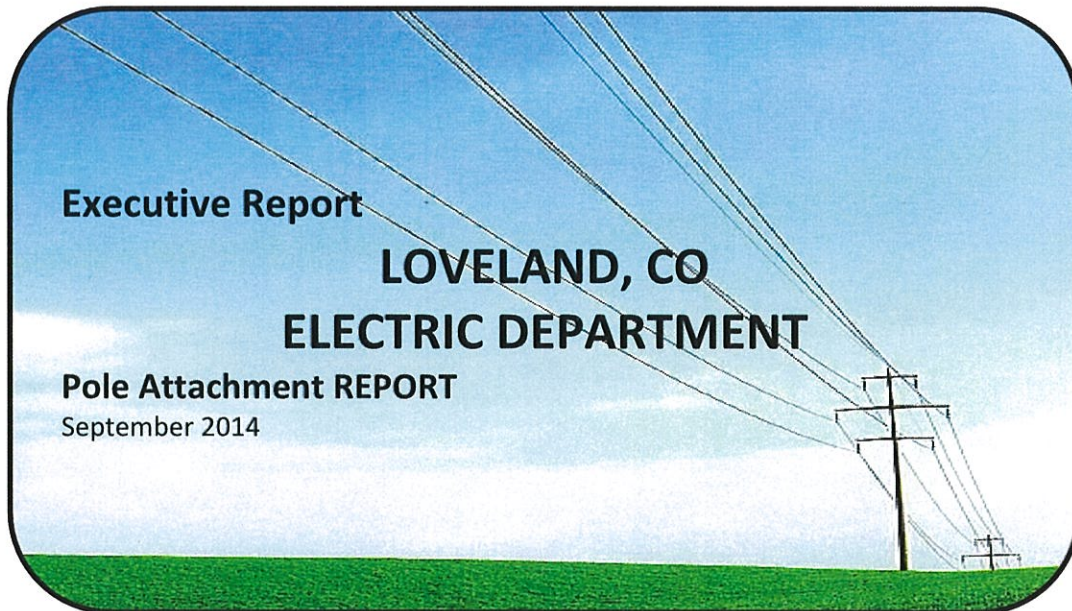
RECOMMENDATION:

Information item only. No action required.

ATTACHMENTS:

 Attachment A: Pole Attachment Fee Executive Report

Attachment A





September 2014

Jim Lees
Utility Accounting Manager
City of Loveland Water and Power
200 North Wilson Ave.
Loveland, Colorado 80537

Dear Mr. Lees;

We are pleased to present this executive summary report on Pole Attachment Rates for the City of Loveland, CO. This report includes the results and calculations for a pole attachment rate.

Sincerely,

Daniel Kasbohm

Utility Financial Solutions, LLC (UFS)

Introduction

This report summarizes the analysis on the electric pole attachment rates for City of Loveland Electric Department (LED). The pole attachment rate is \$11.93/Month.

The Federal Communications Commission has identified recommended formulas and methods to establish pole attachment rates for CATV and telecommunication providers. Two formulas are utilized depending on the nature of the connecting company.

1. Cable systems providing only cable service use a "Cable Formula." This formula allocates one foot of the usable pole space to the attaching customers.
2. Telecommunications carrier's rates use a "Shared Cost Rate." This formula allocates a share of the support space to the attaching customers.

Steps to Complete the Analysis

The analysis included the following steps to complete the analysis:

- 1) Data Collection and Assumptions
- 2) Calculation of Cable Rate
- 3) Calculation of Telecommunication Rate (Shared Cost Rate)

Data Collection and Assumptions

A cost of service study was completed in 2014 to determine the cost of providing service to each class of customers. The cost of service data combined with additional information on the number and average height of poles were used to compute the rate.

1. Loveland's investment in poles totaled **\$7,804,375**.
2. Investment in poles was adjusted for the cost of cross arms and used a Bare Pole Allocation factor as recommended by the FCC of 85%
3. Total number of poles: **7,800**
4. Average pole Height is **45 feet**
5. Calculated carrying charge of **19%**, as identified on page 2.

Cable Systems Assumptions

The following assumptions are made in determining the cable attachment rate.

1. Space used by attachment is **1 foot**
2. Usable pole space is **13.5 feet**

Telecommunication Systems Assumptions

The following assumptions are made in determining a telecommunication attachment rate.

1. Support Space of **24 feet** with a safety space of **3.33 feet** per attachment
2. Usable pole space is **17.67 feet**
3. Number of attachments per pole: **3 attachments**

Determination of Bare Pole Costs

The cost of a bare pole is determined by taking adjusted gross investment in poles divided by total number of poles. The cost of a bare pole is \$1,000 and its calculation is listed in table 1 below:

Table 1

Gross Investment in Poles	\$9,181,618
Bare Pole Allocation (remove cross arms etc)	85%
Investment in Poles	\$7,804,375
Number of Poles	7,800
Average Bare Pole Cost	\$ 1,000.56

Carrying Charge Calculation

The carrying charge was calculated as follows:

1. A&G Allocation – Total A&G as a percent of total plant
2. Supervisory expenses as a percent of Poles, Overhead and distribution expense
3. Depreciation rates on poles
4. Taxes and Payments in lieu of tax
5. Rate of return as identified in the cost of service study

The total carrying charge of 19% is calculated in table 2 below:

Table 2

<u>Carrying Charge</u>			
A&G Allocation			
Total A&G Expense		\$ 3,634,507	
Plant in Service		141,115,533	3%
O&M Allocation			
Supervision		\$ 178,573	
Poles and Overhead Line Exp	\$ 373,919		
Distribution Exp	2,986,535		
			13%
Supervision Exp		\$ 23,779	
Poles and OH line Exp		\$ 373,919	
Poles	\$ 9,181,618		
OH Conductors and Devices	7,204,188		
Services	6,251,805		
		\$ 22,637,611	2%
Pole Life	25 years		
Depreciation			4%
Tax/Contribution			7%
Return			4%
Carrying Charge			19%

Calculation of Cable Rate

The calculation of the cable rate is outlined in Table 3 below. The cost of a bare pole is adjusted for usable space and the carrying charge to determine a CATV Attachment rate of \$11.93.

Table 3

Pole Attachment FCC Cable		
Cost of Bare Pole		\$ 1,000.56
Pole Used by Attachment (ft)	1	
Usable Pole Space (ft)	13.5	7%
Carrying Charge		19%
FCC Order Multiplication Factor		85%
Rate per Attachment		\$ 11.93

**ITEM TITLE:**

Water Supply Update

DESCRIPTION:

Raw water supply update.

SUMMARY:

Attachment A is the snow–water equivalent graph for Bear Lake station as of June 13, 2017, showing a range of low, median, and high years for comparison, as well as the current year-to-date snow accumulation for the Bear Lake SNOTEL station in the Big Thompson Watershed. As the graph shows in red, the 2017 snowpack has melted and run off at that elevation. High flows in the Big Thompson have been the result. The snowpack accumulation began slowly last fall, but over the course of the season, 2017 became a good year for snowpack. Runoff began in April, but the snowpack increased when the watershed was hit by a storm in late April, and yet another storm in May. Those same storms were bringing much needed moisture to the plains, building up the soil moisture in what had been very dry soil conditions.



Attachment B is a copy of the June 1, 2017 Northern Water Balance Sheet. It is interesting to read the reports of storage currently in the CBT system, the types of water stored, delivery obligations, projected yields, and delivery summaries.

Supplies appear to be strong from native sources in the Big Thompson River and from the CBT system. The greatest uncertainties at this time related to scheduled construction at the Maitland Siphon in the 930 cfs portion of the Charles Hansen Feeder Canal, upstream of the Highway 34 crossing. From August 1 through November, this section of the CBT system will be closed and unavailable for making deliveries. Consequently all deliveries to Loveland, whether from native or CBT sources, will necessarily be made through and from the Big Thompson River or Dille Tunnel, which diverts from the Big Thompson River at the west end of the Narrows section of the canyon. With CDOT construction on Highway 34 continuing and with several restoration projects along the river channel underway by the Big Thompson Watershed Coalition, the potential exists for disturbances in the river upstream from the City's diversion points. Staff will fill Green Ridge Glade Reservoir by August 1st going into this construction period, much earlier than the usual topping off of the reservoir in late October. This will help secure the City's raw water supplies, and the goal will be to top the reservoir off a second time late in October or perhaps even in November going into winter operations, using CBT water. These projects and the City's operations are being coordinated in a series of operational meetings, which have already begun and will continue throughout the season.

RECOMMENDATION:

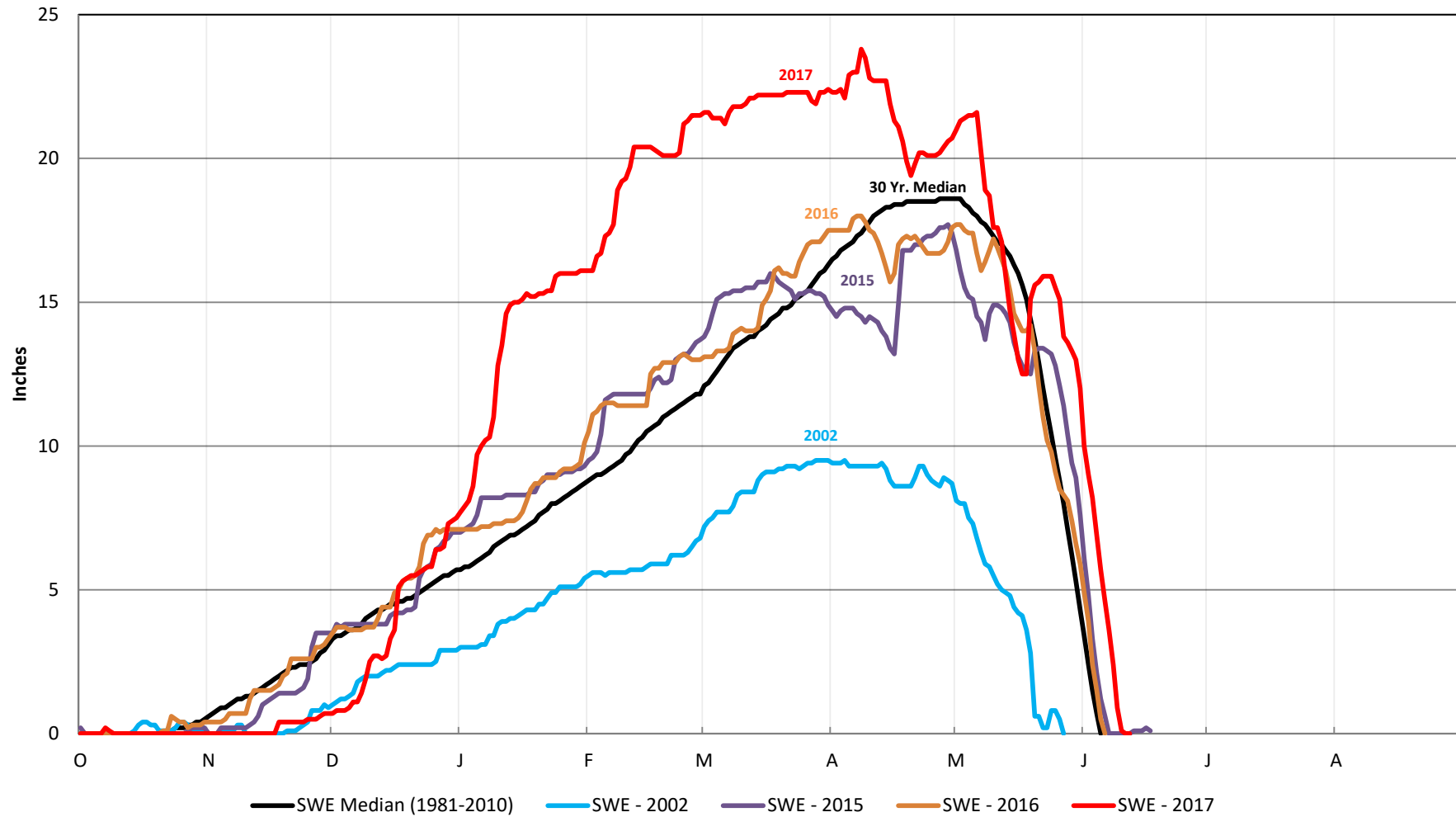
Information item only. No action required.

ATTACHMENTS:

-  Attachment A: Snow–Water Equivalent Chart for Bear Lake SNOTEL Station
-  Attachment B: Northern Water Reports

Attachment A

Snow - Water Equivalent at Bear Lake as of June 13, 2017

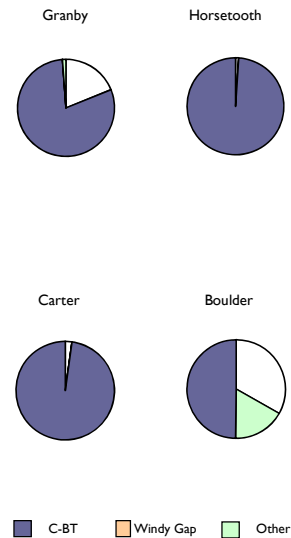


Attachment B

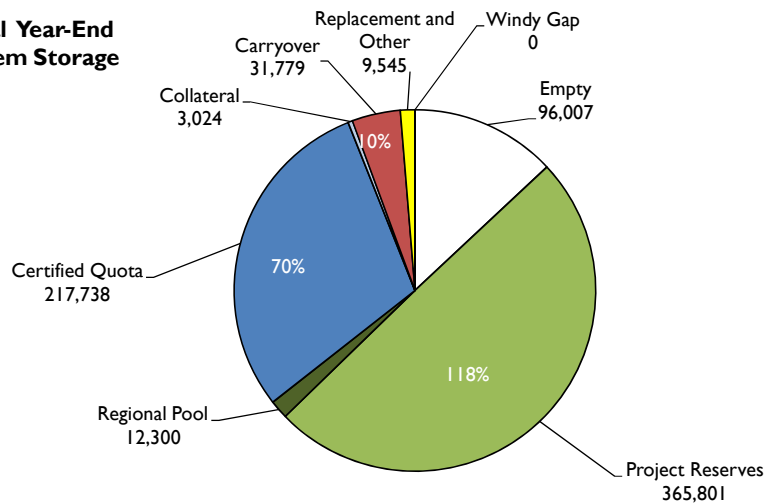
Northern Water Balance Sheet June 1, 2017

System Storage (in acre-feet)

	Active Capacity	Active Contents	Change in Storage	Equivalent Quota
Granby Reservoir	465,568	377,443		
C-BT		372,031	59,360	120%
Windy Gap		-		
Upper Colorado River Recovery		5,413		
Horsetooth	149,732	148,206		48%
C-BT		148,186	7,250	
Other Storage (Soldier Canyon)		20		
Carter Lake Reservoir	108,924	106,542		
C-BT		106,542	(443)	34%
Other Storage		-		
Boulder Reservoir	11,970	7,996		
C-BT		5,955	2,151	2%
Long-Term Storage (City of Boulder)		2,041		
Short-Term Storage (City of Boulder)		-		
20% - Left Hand (City of Boulder)		-		
Total C-BT Storage	736,194	632,713	68,318	204%



Total Year-End System Storage



Project Reserves

632,713	Total C-BT Storage
(266,913)	Remaining Obligations
365,801	Project Reserves
118%	Equivalent Quota

Storage to Obligation Ratio

$$\frac{632,713}{266,913} = 2.4$$

% number represents the equivalent quota

C-BT Delivery Obligations (acre-feet)

	Maximum Potential	Certified	Delivered YTD	Transferred to Collateral or Short Term Storage	Remaining	
					Obligation	Equivalent Quota
Certified Quota (note 1)	310,000	246,310	19,321	9,250	217,738	70%
Carryover (note 2)	51,126	50,312	18,533		31,779	10%
Replacement	3,206	3,206	1,134		2,072	1%
Regional Pool (note 3)	12,876	12,300	0		12,300	4%
Non-Charge Deliveries					0	0%
Collateral (note 4)		9,250	6,226		3,024	1%
Total		312,127	45,215		266,913	86%

Note 1

Certified Quota Computation:

	Units	Quota	Certified Quota (af)
Variable Quota Units	293,096		
1 st Declaration eff. 11/1/2016		50%	146,548
2 nd Declaration eff. 4/13/2017		30%	87,929
Fixed Quota Units	16,904	70%	11,833
Total	310,000		246,310

Note 2

Carryover

Carryover for 2017 was certified on April 30.

Note 3

Regional Pool

An allocation of 12,300 acre-feet was authorized on March 9, 2017. The entire allocation was claimed by bidders at an auction held on March 23, 2017.

Note 4

Collateral

Collateral was originally certified as Quota, therefore Collateral is not included in the Total Certified.

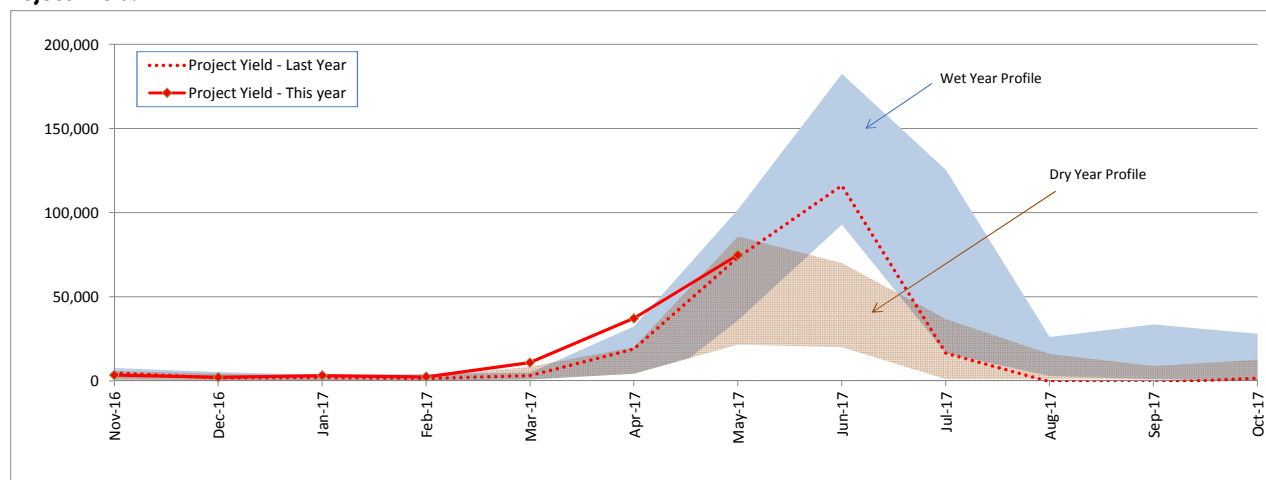
Collection System Summary

June 1, 2017

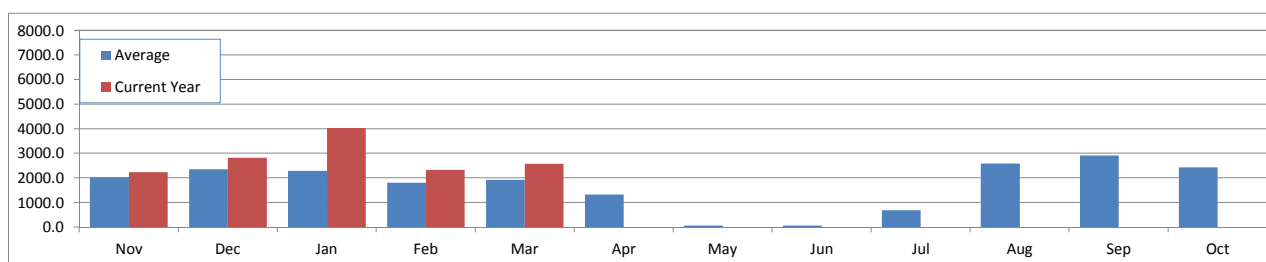
(all values in acre-feet)

	C-BT Project Yield				C-BT Project Depletion			
	Willow Creek Pumped to Granby	Granby - Shadow Mountain - Grand Lake Conserved Inflow ¹	East Slope Yields	Total C-BT Project Yield	Granby - Shadow Mountain - Grand Lake - Willow Creek Conserved Inflow ¹	West Slope Evaporation Losses	Total C-BT Project Depletion	Green Mountain Reservoir Replacement ²
November	2,148	1,386	-	3,534	1,666	397	2,063	2,233
December	-	2,271	-	2,271	2,708	31	2,739	2,816
January	-	3,309	-	3,309	3,766	-	3,766	4,026
February	-	2,522	-	2,522	2,929	-	2,929	2,329
March	3,786	7,242	-	11,029	9,841	315	10,156	2,572
April	13,773	23,492	-	37,265	37,829	1,330	39,159	-
May	23,246	51,352	317	74,916	75,973	3,070	79,043	-
June			-	-			-	
July			-	-			-	
August			-	-			-	
September			-	-			-	
October			-	-			-	
Total	42,954	91,575	317	134,846	134,712	5,143	139,855	13,977
Eq Quota	14%	30%	0%	43%				

Project Yield:



Replacement Releases from Green Mountain Reservoir:



¹ Includes Adams Tunnel diversions

² Out-of-priority C-BT Depletions are replaced by releases from Green Mountain Reservoir

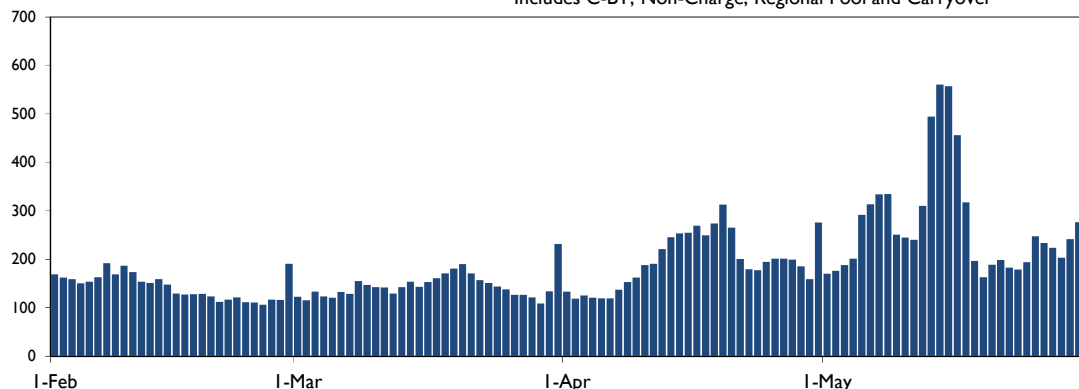
Monthly Deliveries Report

June 1, 2017

Daily C-BT Deliveries

(acre-feet)

Includes C-BT, Non-Charge, Regional Pool and Carryover



C-BT Delivery Summary

(acre-feet)

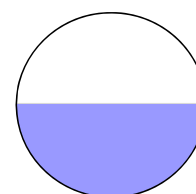
Feature	May				Water Year			
	C-BT	Carryover	Reg Pool	Total	C-BT	Carryover	Reg Pool	Total
Above Flatiron	12	-	-	12	27	13	-	40
Big Thompson River	203	84	-	288	305	520	-	825
Carter Lake	1,691	3,369	-	5,060	10,238	8,366	-	18,604
Boulder Creek	1,031	-	-	1,031	1,031	-	-	1,031
Boulder Creek Supply Canal	0	95	-	95	0	200	-	200
Boulder Feeder Canal	139	149	-	287	149	151	-	300
Little Thompson River	-	-	-	-	-	-	-	-
St Vrain River	0	-	-	0	0	-	-	0
St Vrain Supply Canal	7	87	-	94	19	91	-	110
SWSP	513	3,038	-	3,552	9,039	7,924	-	16,962
Hansen Feeder Canal	8	13	-	20	67	37	-	104
Horsetooth Reservoir	2,430	933	-	3,363	8,685	9,474	-	18,159
Dixon Feeder Canal	2,218	539	-	2,757	8,207	8,342	-	16,549
Hansen Supply Canal	4	391	-	395	4	537	-	541
Poudre River	208	3	-	211	474	595	-	1,069
Lower Platte River	-	-	-	-	-	123	-	123
Total	4,344	4,399	-	8,743	19,321	18,533	-	37,854

Miscellaneous Delivery Statistics

(acre-feet)

	May	WY 2017
Volume through Adams Tunnel	15,640	157,520
Volume through Farr Pump Plant	1,565	128,943
C-BT + Carryover + Reg Pool Delivered via Meters (est)	6,606	33,954
C-BT + Carryover + Reg Pool Delivered via Open Channel	2,137	3,899
Municipal/Industrial Deliveries (est.)	8,233	36,832
Agricultural Deliveries (est.)	510	1,022

Adams Tunnel Utilization

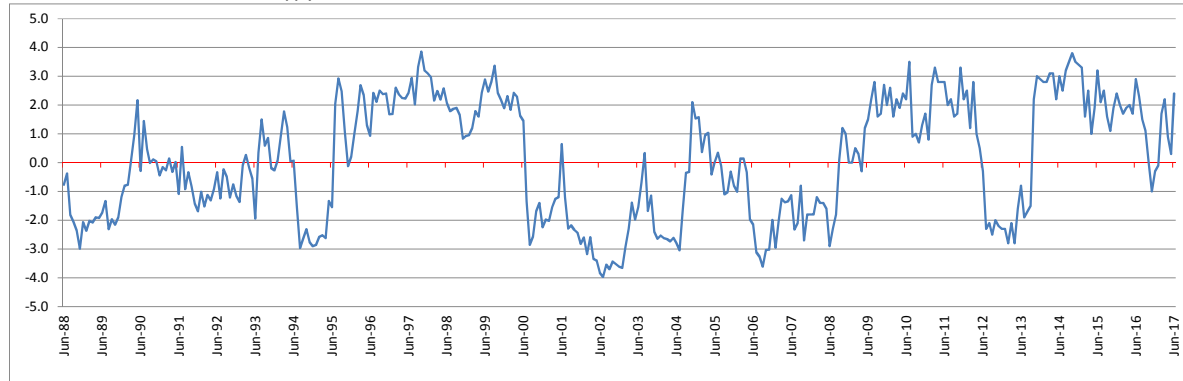


Native Water Supplies Report

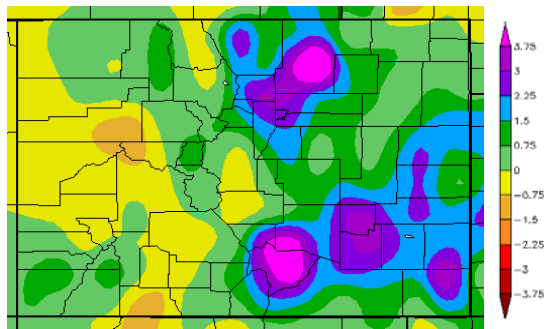
June 1, 2017

Northern Water Surface Water Supply Index

Current Value= 2.40



Departure from Normal Precipitation (in.) - May 2017



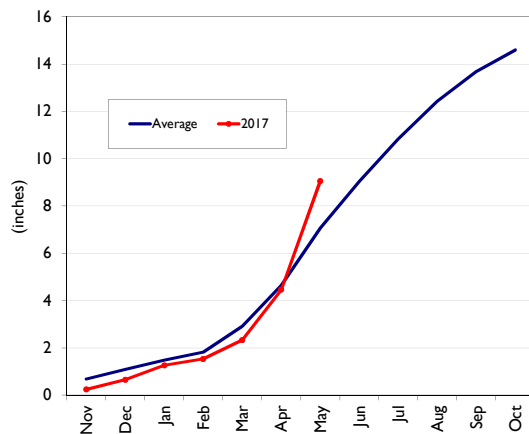
map source: NOAA Regional Climate Center

The Northern Water Surface Water Supply Index (SWSI) consolidates reservoir storage, streamflow (or Snow Water Equivalent during the winter), and precipitation into a single index value which ranges between -4.2 and +4.2.

The SWSI scale can be subjectively described as follows:

SWSI	Designation
+4	Abundant Supply
+2	Above Normal Supply
0	Near Normal
-2	Moderate Drought
-4	Severe Drought

District Mean Areal Precipitation - Cumulative Year to Date



Local Storage Summary

(acre-feet)	June 1	Average	% Average
Districts 1, 2 & 64 (So Platte)	279,370	260,015	107%
District 3 (Poudre)	191,508	161,001	119%
District 4 (Thompson)	93,668	90,078	104%
District 5 (St. Vrain & Left Hand)	45,835	48,837	94%
District 6 (Boulder Creek)	26,002	24,513	106%
Total Native Storage	636,383	584,443	109%

May Precipitation Summary

(inches)	May	YTD
District Mean Areal Precipitation*	4.59	9.05
Key Northern Water Weather Stations		
Fort Collins	4.20	9.05
Greeley	8.02	13.34
Longmont	4.89	9.79
Fort Morgan	4.31	10.39
Sterling	4.09	9.38

*computed using CoCoRaHS and Northern Water stations.

ITEM TITLE:

2018 Budget Review for Water, Wastewater and Power

DESCRIPTION:

The purpose of this is to ask the LUC to adopt a motion recommending that City Council approve the proposed 2018 Water and Power budget.

SUMMARY:

The 2018 Water & Power budget process is nearly complete, and the information is assembled and has been submitted to the Budget Office on June 16, 2017. Attachment A is the 10-Year Financial Projections and Attachment B is the 10-Year Capital Plans for the three utilities. Loveland Utilities Commission (LUC) members Gary Hausman and Larry Roos participated in this year's budget review meetings, and we thank them for their time, interest and guidance. Today, the LUC will receive an update on the 2018 budget. Some of the highlights and challenges from this budget process are discussed below.

CHANGES IMPACTING ALL THREE UTILITIES

- **Staffing** – There is an increase of 7.0 full-time equivalent (FTE) positions proposed for 2018. The positions and modifications that are being proposed are:
 - 1) Senior Electrical Engineer
 - 2) Senior Electric Distribution Designer
 - 3) Journey Water Systems Operator
 - 4) Plant Operator D at the Water Treatment Plant
 - 5) Utility Application Services Manager
 - 6) Utility Applications Business Analyst
 - 7) Administrative Specialist

The addition and modifications of these positions will generate an increase in Personal Services expense of \$728,000. The \$728,000 increase breaks down as \$216,000 for Water, \$151,000 for Wastewater and \$361,000 for Power.

There also have been some additions of temporary positions for 2018, which will result in an increase in Personal Services expense of approximately \$133,000. The \$133,000 increase breaks down as a \$23,000 increase for Water, a \$25,000 increase for Wastewater and an \$85,000 increase for Power.

- **Salaries** – A 3.5% salary increase has been built in for 2018, which will generate an overall increase in Personal Services of \$333,000. The \$333,000 increase breaks down as a \$106,000 increase for Water, a \$86,000 increase for Wastewater and a \$141,000 increase for Power.
- **Health Insurance Expense** – Health insurance expense went up 31% in 2018, which generated a total increase in the W&P budget of \$681,000. The breakdown by utility is that Water is up \$243,000, Wastewater is up \$185,000 and Power is up \$253,000.

- **New Customer Information System (CIS) Software and Implementation** – The City’s IT Department is looking to purchase a software package to replace and upgrade the existing utility billing software, which is 30-years old. Based on a weighted allocation, the W&P Utilities are paying for 75% of this purchase. The total 2018 expense for the purchase will be \$6.7 million, with Water and Wastewater each contributing \$1.1 million toward the purchase and Power contributing \$2.7 million.
- **Cost Allocation Expenses** – W&P’s allocation of services rendered by other City departments is increasing significantly in 2018. After a review with an outside consultant, a new methodology for allocating City department costs has been developed. In a nutshell, costs that were previously borne by the General Fund are now being covered by the City’s utilities, including Storm Water and Solid Waste. The departments where the largest increases are seen include Finance, Facilities Management, Utility Billing and Meter Reading. The total increase in Cost Allocations is \$635,000. The breakdown of the increase by utility is that Water is up \$202,000, Wastewater is up \$93,000 and Power is up \$340,000.
- **Vehicle O&M Expenses** – The vehicle O&M expense that was received from the Budget office shows an increase of \$182,000, or 39%, for expenses in 2018 compared to 2017. The department is replacing 3 vehicles in Water/Wastewater and 1 in Power. The breakdown of the O&M increase by utility is that Water is up \$81,000, Wastewater is up \$55,000 and Power is up \$46,000.
- **General Liability Expense** – General Liability expense is up \$118,000 in 2018. General Liability is calculated partially based on the past five years of claims experience and 2016 was a high year for claims and 2011, the year that dropped, was lower. The breakdown by utility is that Water is up \$4,000, Wastewater is up \$1,000 and Power is down \$73,000.
- **Training** – The department has overrun its training budget for the past four years, and during that time, 15 new staff positions have been added. This is leading to a request to increase the department training budget by \$55,000. The breakdown by utility is that Water is up \$13,000, Wastewater is up \$20,000 and Power is up \$22,000.
- **Transfers for Assets Funded by Multiple Utilities** – There is a large increase in the amount of capital purchases for assets that are used by more than one utility in 2018 compared to 2017, and these changes in the costs were allocated between the utilities. In total, 2018 is up from 2017 by \$1,059,000, and the breakdown by utility is that Water is up \$886,000 (primarily due to Water’s \$960,000 contribution to the cost of the Chemical Lab Building), Wastewater is up \$54,000 and Power is up \$119,000.
- **Non-recurrence of Service Center Building Projects** – Funding is included in 2017 for two much-delayed maintenance projects in the Administrative Building. \$200,000 is budgeted for replacing the skylights along the main corridor of the building and \$25,000 is budgeted for replacing wall coverings in some areas. Since these projects will not recur in 2018, they are budget reductions. The breakdown by utility is that Water is down \$88,000, Wastewater is down \$52,000 and Power is down \$85,000.
- **Work Order Software Replacement and Enhancement of Cityworks Software** – Another software replacement that is being projected for 2018 is the 22-year old HTE work order financial tracking software. In addition, enhancements to the capabilities of our existing Cityworks software, which is used

for tracking assets and maintenance on them, are programmed for next year. The total request is for \$150,000, with Water's portion being \$53,000, Wastewater \$42,000 and Power \$55,000.

- **1% For the Arts** – This is linked to the volume of capital activity in non-growth related projects, and this is down \$57,000 from 2017. The breakdown by utility is that Water is down \$7,000, Wastewater is up \$14,000 and Power is down \$64,000.

WATER

In accordance with the Water Rate Track and Financing Ordinance that was passed by City Council back in August of 2015, there is a 9% overall rate increase proposed for Water in 2018. The entirety of this increase will be to address aging infrastructure and operational needs.

In addition to the capital projects that are detailed in the Water 10-Year Capital Plan, key operating expense drivers (both increases and decreases) that are built into the 2018 budget include:

- **C-BT Facilities Contract – Decrease of \$215,000:** This cost allows the City to use excess capacity in existing Colorado-Big Thompson Project facilities to divert the City's water rights into Green Ridge Glade Reservoir. If this contract were not in place, the City would have to build, maintain and operate a pump station, diverting water from the Big Thompson River into Green Ridge Glade Reservoir. The U.S. Bureau of Reclamation owns the facilities which deliver C-BT, Windy Gap, and Big Thompson River water to Green Ridge Glade reservoir. The City pays the U.S. Bureau of Reclamation for use of these facilities. The reason the budget is lower is the projected charges per acre-foot have been decreased due to anticipated lower OM&R costs, in particular those related to the required repairs following the September 2013 flood.
- **Lawn Irrigation Return Flows (LIRFS) – Decrease of \$100,000:**
In 2016, the budget was increased by \$275,000 to pay for the majority of the engineering and legal work prior to filing a Water Court application. The work is expected to extend into 2019 but at a smaller amount. The projected resulting decree will give the City the ability to claim credit for reusable return flows which accrue to the river from lawn irrigation. Our current decrees only address water returning to the river through the WWTP.
- **Raw Water Supply Yield Analysis – Increase of \$50,000:** This analysis will be a key component to the update of the Raw Water Master Plan, which is scheduled for 2018.
- **Purchase of Water from Little Thompson Water District – Decrease of \$60,000:** With the capacity of the WTP increased, it is anticipated that there will be less need to access water at peak times from Little Thompson Water District.
- **Street Repairs – Increase of \$140,000:** There has been a higher than anticipated number of water line leaks over the past year-and-a-half, and the Water Operations Division has had to have monies transferred from elsewhere in the Water budget to cover shortfalls in their Street Repair budget.
- **Non-recurrence of Water Master Plan Update – Decrease of \$100,000:**
This update is budgeted for this year and will not recur in 2018.
- **Non-recurrence of Debt Service for Water \$4 Million, 2-Year Internal Loan from Raw Water – Decrease of \$4,000,000:** As part of the financing package for the Water Treatment Expansion Project, Water borrowed \$4,000,000 from Raw Water in the Spring of 2015 in order to maintain the Water fund balance at levels above the 15% of operating expenses target. This \$4,000,000 loan is scheduled to be paid back to Raw Water in 2017 and therefore will not recur in 2018.

CAPITAL

The capital program includes expenditures for 2018-2027 of \$140 million for Water and Raw Water. The biggest components of the \$117 million are: 1) \$40 million for engineering and construction of 9,451 acre-feet of storage at Chimney Hollow; 2) \$28 million of rehabilitation, replacement and oversizing projects for the water distribution system; 3) \$28 million for the construction of three new water storage tanks; and 4) \$19 million for the construction of new water lines. The enclosed 10-Year Financial Projection and 10-Year Capital Plan contain more detailed information.

BEYOND 2018

In the 10-Year Financial Projection, the 9% rate increase for 2018 is followed by one more rate increase of 9% in 2019, then three consecutive rate increases of 8% per year, capped off by five consecutive rate increases of 3.5% per year. This rate track is in accordance with the Council-approved Water Rate Track and Financing Ordinance from August of 2015. The current 10-year projection includes the assumption that existing customers (and new customers as they are added) will not be using more water in the future on a per customer basis than they are using right now. It assumes, in fact, that customers will be using 0.5% less water per year, and that decrease will continue year after year. In looking at our per customer usage trending over the past 5 years, the 0.5% decrease per customer is what we are seeing and believe will continue. Looking at the 10-year window, the Unrestricted fund balance stays positive in comparison to the 15% of operating expenses target throughout the ten-year window.

The bottom section of the 10 Year Financial Plan covers growth-related capital, which is funded by our System Impact Fees (SIF). The current 10-year projection shows the SIF balance staying positive throughout the ten-year timeframe.

WASTEWATER

In accordance with the Wastewater Rate Track and Financing Ordinance that was passed by City Council back in August of 2015, there is an overall average rate increase of 11% proposed for Wastewater in 2018. The 11% increase will be primarily to address aging infrastructure and regulatory compliance.

In addition to the capital projects that are detailed in the Wastewater 10-Year Capital Plan, key operating expense drivers (both increases and decreases) that are built into the 2018 budget include:

- **Utility Expenses at the Wastewater Treatment Plant (WWTP) – Increase of \$122,000:** In preparing for the WWTP Expansion and Rehabilitation Project, it was discovered that some of the buildings at the plant were being fed by water lines that were unmetered, so this increase is partly to account for all buildings now having their water usage metered. The increase is also for an increase in electric usage due to the construction.
- **Return Activated Sludge (RAS) Pump at WWTP - Increase of \$56,000:** This is a spare RAS pump for Final Clarifier #3.
- **Wastewater Model Update – Increase of \$75,000:** This update will take into account wastewater lines installed since the last update. This model is used for planning purposes and enables staff to respond to developers' capacity-related questions.
- **Debt Service for Wastewater \$24.9 Million External Loan – Decrease of \$1,500,000:** At the time the 2017 budget was assembled, it was assumed that we would obtain a conventional loan and that the full \$24.9 million would be drawn before the end of 2016. Instead, Executive Fiscal Advisor Alan Krcmarik was able to secure a loan where we will do four draws (two in 2017 and two in 2018) that will total

\$24.9 million. This staggered borrowing will lead to lower debt service in 2018 compared to what is budgeted in 2017.

CAPITAL

The capital program includes expenditures for 2018-2027 of \$64 million for Wastewater. The biggest components of the \$64 million are: 1) \$27 million for rehabilitation of wastewater lines; and 2) \$26 million for construction of new wastewater lines. The enclosed 10-Year Financial Projection and 10-Year Capital Plan contain more detailed information.

BEYOND 2018

In the 10-Year Financial Projection, the 11% rate increase for 2018 is followed by one more rate increase of 11% per year, then three consecutive rate increases of 7% per year, capped off by five consecutive years of 3.5% rate increases per year. This rate track is in accordance with the Council-approved Wastewater Rate Track and Financing Ordinance from August of 2015. The Unrestricted fund balance stays positive in comparison to the 15% of operating expenses target throughout the 10-year period.

The bottom section of the 10 Year Financial Projection covers growth-related capital, which is funded by our System Impact Fees (SIF). The current Wastewater 10 Year Financial Projection shows the SIF balance stays positive throughout the ten-year window. The SIF fund balance is buoyed by two short-term internal loans in 2020 and 2026 from the Wastewater Unrestricted Fund.

POWER

A 5% overall rate increase is currently proposed for the Power Utility in 2018. PRPA is planning on a 2.5% overall wholesale power rate increase in 2018, which, when passed through to customers, generates a 2.03% retail rate increase. In addition, Staff is recommending a 2.97% increase. This additional 2.97% increase is to help offset the combined impact of the increased costs for the new CIS software and implementation, Health Insurance and Cost Allocations that were discussed earlier, to offset costs associated with the new solar project and the new Foothills Substation that will not be eligible for FEMA or State reimbursement (about \$3.3 million) and to address additional capital needs. So, the entire proposed rate increase for 2018 is $2.03\% + 2.97\% = 5\%$. This 5% rate increase was supported by City Council at a Study Session on August 30, 2016. The 2.5% wholesale rate increase is a figure that is subject to change by the PRPA Board – the proposed increase will first be presented to the Board at their August meeting, then formally presented for the Board's action at their December meeting.

In addition to the capital projects that are detailed in the Power 10-Year Capital Plan, key operating expense drivers (both increases and decreases) for 2017 are:

- **Environmental Mitigation in the Big Thompson Canyon – Increase of \$300,000:** A higher level of activity is expected in 2018 compared to 2017 with regard to environmental mitigation associated with the removal of Idylwilde Dam, the hydro generating building and facilities and the associated pipelines.
- **Software Support for the New Yukon Metering Software – Increase of \$100,000:** With a need for ongoing configuration and support of the Yukon metering software and the prospect of starting conversion to a new CIS system in 2018, this request will cover support services provided by Excergy. Yukon is the new metering software that has been implemented for our Key Accounts, Coincident Peak customers and other large commercial customers.
- **Efficiency Works (EW) for Commercial Customers and a Program for Low Income and Multi-family Customers – Increase of \$215,000:** The success of the commercial energy efficiency projects is at an all-time high right now. In the first quarter of 2016, we committed all of our funds to projects for the entire year. This request is to make funding available throughout all of 2018. In addition, we are

desiring to initiate a program that will address full retrofit improvements for low income single family and multi-family customers.

CAPITAL

The capital program includes expenditures for 2018-2027 of \$147 million for Power. The biggest components of the \$147 million are: 1) \$43 million of rehabilitation, replacement and reliability-driven (R,R & R) system improvement projects; 2) \$38 million for system improvements; 3) \$13 million for extension of an underground transmission line to serve a new substation in the southeast corner of our service territory; 4) \$13 million for expenditures associated with overhead to underground conversions; and 4) \$17 million for completing the construction of a new substation and adding to existing substation capacity. The enclosed 10-Year Financial Projection and 10-Year Capital Plan contain more detailed information.

BEYOND 2018

Following 2018, the Power 10-Year Financial Projection is showing a rate increase of 5% in 2019 and 2020, then 3% in 2021 followed by 6 consecutive years of 2% per year. The 5% rate increases in 2019 and 2020 are 1% per year higher than the 4% each year that was supported by City Council at their Study Session held on August 30, 2016. The reasons cited in the first paragraph of the Power section are the drivers for these 1% increases. Platte River Power Authority (PRPA) is projecting 10 years of wholesale power rate increases at 2.5% per year. The primary drivers behind these projected wholesale rate increases are:

- O&M expense increases related to the Craig Unit 1 planned maintenance outage
- Solar generation facility costs
- Transmission expense increases for wind purchases
- Decreased market prices for surplus sales of energy
- Additional expenses related to carbon emissions and compliance with the EPA Clean Plan Regulation

These wholesale rate increases from PRPA have been taken into account in the retail rate increases for the 10-Year Financial Projection. PRPA will be quick to tell you that their projections could change, and change dramatically.

The Unrestricted Fund balance stays positive in comparison to the 15% of operating expenses target throughout the 10-year period.



The bottom section of the 10 Year Plan covers growth-related capital, which, for Power, is funded by our Plant Investment Fees (PIF). The PIF fund balance stays positive throughout the 10-year window, as well.

Commission members are encouraged to make any comments or ask questions at the meeting.

RECOMMENDATION:

Adopt a motion recommending that City Council approve the proposed 2018 Water and Power budget.

ATTACHMENTS:

-  Attachment A: 10-Year Financial Forecast for Raw Water, Water, Wastewater and Power
-  Attachment B: 10-Year Capital Improvement Plans for Water, Wastewater and Power

Attachment A

LOVELAND WATER AND POWER
RAW WATER FUNDING
FINANCIAL FORECAST
2018-2027

			3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	A	% of Water Sales Transferred to Raw Water Fur
			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	B	Future Raw Water Prj's % growth/year
			1.58%	2.00%	2.50%	3.00%	3.25%	3.50%	3.75%	3.75%	3.75%	3.75%	C	Interest on Investments
			0.00%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	D	Inflation Rate on Water & Wastewater Specific F
			2.48%	1.99%	1.60%	1.60%	2.10%	2.10%	2.10%	1.70%	1.70%	1.70%	E	Growth from New Development
			9.00%	9.00%	8.00%	8.00%	8.00%	3.50%	3.50%	3.50%	3.50%	3.50%	F	Water Sales Rate Increase
			-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	G	Usage Increase / (Decrease) Per Customer
			7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	H	Payment in Lieu of Taxes (PILT)
			3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	I	General Inflation Rate

	Preliminary Final 2016	Adopted Budget 2017	Forecast 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	A	B	C	D	E	F	G	H	I
1 BEGINNING BALANCE	\$21,176,563	\$20,905,908	\$20,905,908	\$22,275,321	\$18,892,193	\$293,236	\$409,373	\$574,579	\$803,289	\$1,071,619	\$1,382,913	\$1,729,247	\$2,112,208									
2 Hi-Use Surcharge	\$82,647	\$52,500	\$52,500	\$74,667	\$76,150	\$77,370	\$78,610	\$80,260	\$81,950	\$83,670	\$85,090	\$86,540	\$88,010					Y				
3 Raw Water Devlpmt Fees/Cap Rec Srchg	502,515	402,930	402,930	513,926	524,153	532,540	541,060	552,423	564,023	575,868	585,658	595,614	605,739									
4 Cash-in-Lieu	514,329	250,000	250,000	527,084	537,570	546,170	554,910	566,560	578,460	590,610	600,650	610,860	621,240					Y				
5 Native Raw Water Storage Fees Received	337,567	5,000	5,000	31,598	32,230	32,750	33,270	33,970	34,680	35,410	36,010	36,620	37,240					Y				
6 Water Loan Payments Received	41,745	4,050,375	2,061,067	32,500	2,040,000	0	0	0	0	0	0	0	0									
7 Revenue Transfer from Water Rates	420,267	434,340	446,880	491,220	542,750	592,140	646,020	708,040	744,150	782,100	818,860	857,350	897,650									
8 Interest	169,305	374,120	190,000	351,950	377,840	7,330	12,280	18,670	28,120	40,190	51,860	64,850	79,210			Y						
9 External Loan Received	0	0	0	0	16,500,000	0	0	0	0	0	0	0	0									
10 Transfer from General Funds	0	0	8,516	1,026	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,030	1,030									
11 Wastewater Loan	0	0	0	0	0	0	0	0	0	0	0	0	0									
12 Year End Cash Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0									
13 Total Revenues	\$2,068,375	\$5,569,265	\$3,416,893	\$2,023,972	\$20,631,723	\$1,789,330	\$1,867,180	\$1,960,953	\$2,032,413	\$2,108,878	\$2,179,158	\$2,252,864	\$2,330,119									
14 Operating Expenses																						
15 Windy Gap Annual Administration Fee	7,044	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100	7,100									
16 Windy Gap Annual Payment	848,979	0	0	0	0	0	0	0	0	0	0	0	0									
17 External Loan Payment	0	0	0	0	0	1,112,744	1,112,744	1,112,744	1,112,744	1,112,744	1,112,744	1,112,744	1,112,744									
18 Transfer to Restricted	0	0	0	0	0	0	0	0	0	0	0	0	0									
19 Loan to Water	0	0	0	0	0	0	0	0	0	0	0	0	0									
20 TOTAL OPERATING EXPENSES (excl depn)	\$856,023	\$7,100	\$7,100	\$7,100	\$7,100	\$1,119,844	\$1,119,844	\$1,119,844	\$1,119,844	\$1,119,844	\$1,119,844	\$1,119,844	\$1,119,844									
21 NET OPERATING REVENUE/(LOSS) (excl depn)	\$1,212,352	\$5,562,165	\$3,409,793	\$2,016,872	\$20,624,623	\$669,486	\$747,337	\$841,109	\$912,570	\$989,034	\$1,059,314	\$1,133,020	\$1,210,276									
22 FOOTNOTE: Depreciation Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0									
23 Capital Expenditures																						
24 Windy Gap Firming (W038AA)	(1,438,658)	(483,760)	(1,386,762)	(1,500,000)	(38,592,380)	0	0	0	0	0	0	0	0									
25 Future Water Court Transfer Actions	0	(104,900)	(104,900)	(100,000)	(105,200)	0	0	0	0	0	0	0	0									
26 Purchase CBT Water	0	(524,500)	(524,500)	(500,000)	(526,000)	(553,350)	(582,130)	(612,400)	(644,240)	(677,740)	(712,980)	(750,060)	(789,060)									
27 Down Stream Storage - Phase 1 Property Purchase	(44,349)	0	(24,218)	(3,300,000)	0	0	0	0	0	0	0	0	0									
28 Down Stream Storage - Phase 2 Design/SDC	0	0	\$0	0	0	0	0	0	0	0	0	0	(946,880)									
29 Down Stream Storage - Phase 3 Construction	0	0	\$0	0	0	0	0	0	0	0	0	0	0									
30	0	0	\$0	0	0	0	0	0	0	0	0	0	0									
31	0	0	\$0	0	0	0	0	0	0	0	0	0	0									
32	0	0	\$0	0	0	0	0	0	0	0	0	0	0									
30 Total Capital Expenditures	(\$1,483,007)	(\$1,113,160)	(\$2,040,380)	(\$5,400,000)	(\$39,223,580)	(\$553,350)	(\$582,130)	(\$612,400)	(\$644,240)	(\$677,740)	(\$712,980)	(\$750,060)	(\$1,735,940)									
31 Ending Balance Raw Water	\$20,905,908	\$25,354,913	\$22,275,321	\$18,892,193	\$293,236	\$409,373	\$574,579	\$803,289	\$1,071,619	\$1,382,913	\$1,729,247	\$2,112,208	\$1,586,544									

LOVELAND WATER AND POWER
WATER UTILITY
FINANCIAL FORECAST
2018 - 2027

WELAND WATER AND POWER						3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%		A	% of Water Sales Transferred to Raw Water Fund												
WATER UTILITY						0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		B	Future Raw Water Prf's % growth/year												
FINANCIAL FORECAST						1.58%	2.00%	2.50%	3.00%	3.25%	3.50%	3.75%	3.75%	3.75%		C	Interest on Investments													
2018 - 2027						0.00%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%		D	Inflation Rate on Water & Wastewater Specific Projects													
						2.48%	1.99%	1.60%	1.60%	2.10%	2.10%	1.70%	1.70%	1.70%		E	Growth from New Development													
						9.00%	9.00%	8.00%	8.00%	8.00%	3.50%	3.50%	3.50%	3.50%		F	Water Sales Rate Increase													
						-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%		G	Usage Increase / (Decrease) Per Customer													
						7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%		H	Payment in Lieu of Taxes (PILT)													
						3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%		I	General Inflation Rate													
						25,996	26,404	26,404	27,143	27,683	28,126	28,576	29,176	29,789	30,414	30,932	31,457	31,992		J	Number of Customers (billed meters)									
	Prelim Final 2016	Adopted Budget 2017	Forecast 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027	2018 to 2027 Total	A B C D E F G H I J															
Unrestricted Funds																														
1 BEG'G WORKING CASH BALANCE: \$7,012,553 \$9,856,069 \$9,856,069 \$5,681,711 \$4,068,106 \$2,916,073 \$3,530,558 \$3,091,508 \$2,854,540 \$4,385,142 \$5,285,661 \$8,062,693 \$8,964,688																														
REVENUES & SOURCES:																														
2 Water Sales \$14,040,263 \$14,477,980 14,895,980 16,373,997 \$18,091,630 \$19,737,970 \$21,534,130 \$23,601,410 \$24,805,080 \$26,070,140 \$27,295,440 \$28,578,330 \$29,921,510 \$236,009,637																														
3 Water Sales Transferred to Raw Water Fund (\$420,267) (434,340) (446,880) (491,220) (542,750) (592,140) (646,020) (708,040) (744,150) (782,100) (818,860) (857,350) (897,650) (\$7,080,280)															Y															
4 Wholesale Sales \$156,585 138,790 138,790 161,307 164,520 167,150 169,820 173,390 177,030 180,750 183,820 186,940 190,120 \$1,754,847																														
5 Meter Sales \$111,152 54,710 54,710 94,722 101,530 108,430 115,800 124,250 133,320 143,050 152,920 163,470 174,750 \$1,312,242																														
6 Interest on investments \$62,842 152,410 60,000 89,770 81,360 72,900 105,920 100,470 99,910 164,440 198,210 302,350 336,180 \$1,551,510															Y															
7 Hydrant Rental \$109,704 81,720 81,720 111,350 123,590 135,450 148,450 163,440 172,590 182,260 191,740 201,710 212,200 \$1,642,780																														
8 Other revenues \$1,765,332 252,270 868,530 423,657 271,530 297,600 326,170 359,110 379,220 400,460 421,280 443,190 466,240 \$3,788,457																														
9 Federal & State Grants \$599,057 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
10 Internal Loan Received \$0 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
11 External Loan Received \$2,993,406 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
12 General Fund Contribution \$750,339 750,000 751,356 750,000 750,000 750,000 750,000 0 0 0 0 0 0 \$3,000,000																														
13 CIRSA, FEMA, and NRCS Revenue \$0 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
14 Year-end cash adjustments \$0 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
15 TOTAL REVENUES \$20,168,413 \$15,473,540 \$16,404,206 \$17,513,584 \$19,041,410 \$20,677,360 \$22,504,270 \$23,814,030 \$25,023,000 \$26,359,000 \$27,624,550 \$29,018,640 \$30,403,350 \$241,979,194																														
16 OPERATING EXPENSES:																														
17 Source of Supply 1,647,185 \$2,943,055 \$2,982,255 2,793,791 2,891,570 2,992,770 3,097,520 3,205,930 3,318,140 3,434,270 3,554,470 3,678,880 3,807,640 \$32,774,981																														
18 Treatment 2,909,010 3,382,782 3,405,052 3,783,977 3,991,720 4,195,300 4,409,260 4,656,180 4,916,930 5,192,280 5,462,280 5,746,320 6,045,130 \$48,399,377																														
19 Treatment O&M Projects 0 75,200 75,200 6,000 42,080 0 0 122,480 0 0 0 0 0 \$170,560																														
20 Distribution oper. & maint. 3,299,729 3,299,133 3,430,770 4,058,133 4,280,920 4,499,250 4,728,710 4,993,520 5,273,160 5,568,460 5,858,020 6,162,640 6,483,100 \$51,905,913																														
21 Distribution O&M Projects 0 266,740 266,740 0 0 0 58,210 0 0 0 0 975,080 0 \$1,033,290															Y															
22 Customer Relations 297,675 372,239 384,899 394,203 408,000 422,280 437,060 452,360 468,190 484,580 501,540 519,090 537,260 \$4,624,563																														
23 Administrative 437,518 588,728 650,205 597,717 618,640 640,290 662,700 685,890 709,900 734,750 760,470 787,090 814,640 \$7,012,087																														
24 Administrative O&M Projects \$0 91,972 91,972 \$1,876,263 \$115,821 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,992,084																														
25 Workers Comp & Gen'l Liability 0 135,530 135,530 185,590 192,090 198,810 205,770 212,970 220,420 228,130 236,110 244,370 252,920 \$2,177,180																														
26 1% for Arts Transfer 42,682 50,480 50,480 6,700 7,338 18,731 36,063 45,532 33,597 44,426 29,910 37,503 108,536 \$368,335																														
27 Internal Loan Payment (incl's interest) 796,620 4,856,625 2,867,317 827,500 2,823,750 772,500 761,250 0 0 0 0 0 0 \$5,185,000																														
28 External Loan Payment (incl's interest) 728,101 1,013,988 1,013,988 1,015,150 1,015,685 1,015,593 1,014,885 1,013,527 1,011,542 1,013,929 1,010,529 1,011,502 1,011,687 \$10,134,030																														
29 Payment in-lieu-of taxes PILT (7% of Water Sales 953,400 983,050 1,011,440 1,111,790 1,228,420 1,340,210 1,462,170 1,602,540 1,684,270 1,770,160 1,853,360 1,940,470 2,031,670 \$16,025,060															Y															
30 Services rendered-other depts. 1,130,380 1,173,528 1,173,528 1,295,086 1,340,410 1,387,320 1,435,880 1,486,140 1,538,150 1,591,990 1,647,710 1,705,380 1,765,070 \$15,193,136															Y															
31 TOTAL OPERATING EXP'S (excl deprn) 12,242,300 \$19,233,050 \$17,539,376 \$17,951,899 \$18,956,444 \$17,483,054 \$18,309,478 \$18,477,069 \$19,174,299 \$20,062,975 \$20,914,399 \$22,808,325 \$22,857,653 \$196,995,594																														
32 NET OPERAT'G REV/(LOSS) (excl deprn) 7,926,113 (\$3,759,510) (\$1,135,170) (\$438,315) \$84,966 \$3,194,306 \$4,194,792 \$5,336,961 \$5,848,701 \$6,296,025 \$6,710,151 \$6,210,315 \$7,545,697 \$44,983,600																														
33 FOOTNOTE: Depreciation Expense 3,175,184 \$3,286,315 \$3,286,315 \$3,401,336 \$3,401,336 \$3,520,383 \$3,520,383 \$3,643,596 \$3,643,596 \$3,771,122 \$3,771,122 \$3,903,112 \$3,903,112 \$36,479,100																														
34 CAPITAL EXPENDITURES 5,082,597 1,899,099 3,039,188 \$1,175,290 \$1,236,999 \$2,579,821 \$4,633,843 \$5,573,928 \$4,318,099 \$5,395,506 \$3,933,119 \$5,308,320 \$12,669,818 \$46,824,743															Y															
35 NET CHANGE IN WRK'G CASH BAL 2,843,516 (\$5,658,609) (\$4,174,358) (\$1,613,605) (\$1,152,033) \$614,485 (\$439,051) (\$236,967) \$1,530,602 \$900,519 \$2,777,032 \$901,995 (\$5,124,121)																														
36 (Net Oper Rev/(Loss) less Cap Exp)																														
37 ENDING WORKING CASH BALANCE \$9,856,069 \$4,197,460 \$5,681,711 \$4,068,106 \$2,916,073 \$3,530,558 \$3,091,508 \$2,854,540 \$4,385,142 \$5,285,661 \$8,062,693 \$8,964,688 \$3,840,568																														
38																														
39 Desired Balance (15% of Operat'g Exp's) \$1,836,345 \$2,884,958 \$2,630,906 \$2,692,785 \$2,843,467 \$2,622,458 \$2,746,422 \$2,771,560 \$2,876,145 \$3,009,446 \$3,137,160 \$3,421,249 \$3,428,648																														
40 Fav/(Unfav) to Desired Balance \$8,019,724 \$1,312,502 \$3,050,805 \$1,375,321 \$72,606 \$908,100 \$345,086 \$82,980 \$1,508,997 \$2,276,215 \$4,925,533 \$5,543,440 \$411,920																														
Restricted Funds (SIF)																														
41 BEG'G BALANCE-SYS IMPACT FEES \$2,012,830 \$1,281,044 \$1,281,044 \$3,269,452 \$2,117,886 \$3,880,245 \$252,296 \$3,780,649 \$4,184,513 \$6,400,785 \$4,125,423 \$8,586,648 \$8,050,076																														
42 SIF REVENUES																														
43 SIF Collections 2,769,799 2,599,930 2,599,930 3,304,201 3,485,602 3,663,368 3,850,199 4,065,810 4,293,496 4,533,932 4,769,696 5,017,720 5,278,642 \$42,262,665															Y Y															
44 Capital Recovery Surcharge 0 103,430 103,430 114,002 113,430 112,860 112,300 111,740 111,180 110,620 110,070 109,520 108,970 \$1,114,692															Y															
45 Developer Reimbursements 0 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
46 CIRSA and FEMA Revenue 520,691 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
47 SIF Interest Income 8,712 33,180 22,420 51,660 42,360 97,010 7,570 122,870 146,460 240,030 154,700 322,000 301,880 \$1,486,540															Y															
48 Loan from Raw Water 0 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
49 Transfers In 0 0 47,240 0 0 0 0 0 0 0 0 0 0 \$0																														
50 TOTAL SIF REVENUES \$3,299,202 \$2,736,540 \$2,773,020 \$3,469,863 \$3,641,392 \$3,873,238 \$3,970,069 \$4,300,420 \$4,551,136 \$4,884,582 \$5,034,466 \$5,449,240 \$5,689,492 \$44,863,898																														
51 SIF CAPITAL AND EXPENSES:																														
52 SIF Capital Expenditures 3,992,350 514,431 780,898 4,343,000 1,867,461 7,433,069 441,716 3,863,733 2,319,531 7,095,964 573,241 5,937,620 10,429,212 \$44,304,547															Y															
53 SIF 1% for Arts Transfer 38,638 1,049 3,714 37,800 11,572 68,117 0 32,824 15,333 63,979 0 48,192 77,644 \$355,461																														
54 Administrative O&M Projects 0 0 0 240,630 0 0 0 0 0 0 0 0 0 \$0																														
55 Internal Loan Payment (incl's interest) 0 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
56 Year End Cash Adjustment 0 0 0 0 0 0 0 0 0 0 0 0 0 \$0																														
57 TOTAL SIF CAPITAL & EXPENSES 4,030,988 515,480 784,612 4,621,430 1,879,033 7,501,186 441,716 3,896,557 2,334,864 7,159,943 573,241 5,985,812 10,506,856 \$44,900,638																														
58 END'G CASH BAL - SIF \$1,281,044 \$3,502,104 \$3,269,452 \$2,117,886 \$3,880,245 \$252,296 \$3,780,649 \$4,184,513 \$6,400,785 \$4,125,423 \$8,586,648 \$8,050,076 \$3,232,712																														
59 TOTAL AVAILABLE FUNDS \$11,137,113 \$7,699,564 \$8,951,163 \$6,185,992 \$6,796,318 \$3,782,854 \$6,872,157 \$7,039,053 \$10,785,927 \$9,411,084 \$16,649,341 \$17,014,765 \$7,073,280																														

**LOVELAND WATER AND POWER
WASTEWATER UTILITY
FINANCIAL FORECAST - 10 Year Plan
2018-2027**

V:\Water & Power\Finance\Utility Accounting\Ten Year Plan\2018\10 yr waste 2018 - For Monthly Revenue Projections. Wastewater 10 Yr City

**LOVELAND WATER AND POWER
POWER UTILITY
FINANCIAL FORECAST - Contract version
2018-2027**

		1.58%	2.00%	2.50%	3.00%	3.25%	3.50%	3.75%	3.75%	3.75%	3.75%	A	Interest on Investments
		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	B	General Inflation Rate
		3.77%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	C	Inflation Rate on Power Utility Specific Projects
		2.09%	1.99%	1.60%	1.60%	2.10%	2.10%	2.10%	1.70%	1.70%	1.70%	D	Growth from New Development
		-0.10%	-0.10%	-0.20%	-0.30%	-0.40%	-0.50%	-0.60%	-0.70%	-0.80%	-0.90%	E	Energy/Demand Increase/(Decrease) Per Customer
		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	F	PRPA Wholesale Rate Increase
		2.03%	2.03%	2.03%	2.03%	2.03%	2.03%	2.03%	2.03%	2.03%	2.03%	G ₁	Power Sales Rate Increase Due to PRPA Rate Incr.
		2.97%	2.97%	2.97%	0.97%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	G ₂	Power Sales Rate Increase Due to Dept Needs
		5.00%	5.00%	5.00%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	G	Total Power Sales Rate Increase
		7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	H	Payment in Lieu of Taxes (PILT)
		37,731	38,482	39,098	39,724	40,558	41,410	42,280	42,999	43,730	44,473	J	Power Customers

	Adopted														2018 to 2027 Total										
	Budget 2017	Actual 2016	Forecast 2017	Budget 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026	Projected 2027			A	B	C	D	E	F	G	G	H	I
Unrestricted Funds																									
1 BEGINNING WORKING CASH BALANCE:	\$22,323,372	\$26,255,156	\$22,323,372	\$16,355,958	\$13,081,353	\$14,328,037	\$16,701,347	\$18,514,557	\$21,592,796	\$21,515,224	\$21,420,393	\$21,839,380	\$27,137,184												
2 REVENUES & SOURCES:																									
3 Power Sales	\$62,277,413	\$58,381,938	\$61,842,550	\$65,420,510	\$69,927,980	\$74,403,370	\$77,602,710	\$80,474,010	\$83,371,070	\$86,289,060	\$88,877,730	\$91,455,180	\$94,015,930	\$811,837,550					Y	Y		Y			
4 Wheeling charges	244,650	267,098	244,650	260,000	264,910	268,620	272,110	276,740	281,170	285,390	288,240	290,830	293,160	\$2,781,170					Y	Y					
5 Interest on investments	229,810	113,070	140,000	258,420	261,630	358,200	501,040	601,720	755,750	806,820	803,260	818,980	1,017,640	\$6,183,460	Y										
6 Aid-To-Construction deposits	1,830,000	1,029,564	1,830,000	1,530,000	1,583,550	1,853,220	1,918,080	1,985,210	2,054,700	2,126,610	2,201,050	2,278,080	2,357,810	\$19,888,310											
7 Customer deposits - Service Installations	310,000	296,694	310,000	310,000	320,850	332,080	343,710	355,740	368,180	381,060	394,400	408,210	422,490	\$3,636,720											
8 Other revenues	963,997	413,528	963,997	920,230	938,540	953,560	968,820	989,170	1,009,940	1,031,150	1,048,680	1,066,510	1,084,640	\$10,011,240					Y						
9 FEMA and CIRSA Revenue	0	242,787	3,500,000	426,000	0	0	0	0	0	0	0	0	0	\$426,000											
10 Year-end cash adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0											
11 TOTAL REVENUES	\$65,855,870	\$60,744,679	\$68,831,197	\$69,125,160	\$73,297,460	\$78,169,050	\$81,606,470	\$84,682,590	\$87,840,810	\$90,920,090	\$93,613,360	\$96,317,790	\$99,191,670	\$854,764,450											
OPERATING EXPENSES:																									
13 Hydro oper. & maint.	1,058,422	\$338,920	\$881,327	\$1,309,880	\$1,645,000	\$1,645,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,599,880			Y								
14 Solar Oper & Maint	90,000	0	90,000	90,000	93,150	96,410	99,780	103,270	106,880	110,620	114,490	118,500	122,650	\$1,055,750			Y								
15 Purchased power	43,470,597	41,600,100	43,117,360	44,079,146	46,023,040	47,836,350	49,682,830	51,809,260	53,985,250	56,209,440	58,255,460	60,329,350	62,428,810	\$530,638,936					Y	Y	Y	Y			
16 Distribution oper. & maint.	4,926,787	3,848,933	4,926,787	5,652,287	5,869,450	6,072,380	6,282,290	6,530,830	6,789,680	7,059,280	7,311,870	7,573,590	7,844,770	\$66,986,427			Y		Y						
17 Customer Relations	1,270,771	1,117,488	1,270,771	1,530,944	1,584,530	1,639,990	1,697,390	1,756,800	1,818,290	1,881,930	1,947,800	2,015,970	2,086,530	\$17,960,174			Y								
18 Administration	824,162	1,024,422	824,162	869,673	900,110	931,610	964,220	997,970	1,032,900	1,069,050	1,106,470	1,145,200	1,185,280	\$10,202,483			Y								
Administration - O&M	0	0	0	2,867,461	279,333	0	0	0	0	0	0	0	0	\$3,146,794											
19 Workers Comp and Gen'l Liability	234,702	0	234,702	284,773	294,740	305,060	315,740	326,790	338,230	350,070	362,320	375,000	388,130	\$3,340,853			Y								
20 1% For the Arts Transfer	101,200	61,970	101,200	52,044	50,719	59,500	92,495	81,260	114,820	115,763	115,744	65,936	68,245	\$816,522			Y								
21 Payment in-lieu-of taxes PILT (7.0% of Power Sales)	4,363,970	4,068,499	4,328,979	4,579,440	4,894,960	5,208,240	5,432,190	5,633,180	5,835,970	6,040,230	6,221,440	6,401,860	6,581,120	\$56,828,630									Y		
22 Services rendered-other depts.	2,141,963	2,411,314	2,141,963	2,483,026	2,596,034	2,686,900	2,780,940	2,878,270	2,979,010	3,083,280	3,191,190	3,302,880	3,418,480	\$29,400,010			Y								
23 TOTAL OPERATING EXPENSES (excl depn)	\$58,482,574	\$54,471,646	\$57,917,251	\$63,798,675	\$64,231,066	\$66,481,440	\$67,347,875	\$70,117,630	\$73,001,030	\$75,919,663	\$78,626,784	\$81,328,286	\$84,124,015	\$724,976,461											
24 NET OPERATING REVENUE/(LOSS) (excl depn)	\$7,373,296	\$6,273,033	\$10,913,946	\$5,326,485	\$9,066,394	\$11,687,611	\$14,258,596	\$14,564,961	\$14,839,781	\$15,000,428	\$14,986,577	\$14,989,504	\$15,067,656	\$129,787,989											
25 FOOTNOTE: Depreciation Expense	\$4,366,320	0	0	4,302,760	4,801,820	5,267,070	5,793,470	6,321,490	6,860,460	7,486,640	8,178,120	8,862,880	9,577,830	\$67,452,540											
CAPITAL EXPENDITURES:																									
26 General Plant	\$589,350	\$314,878	\$819,350	\$206,090	\$98,330	\$101,770	\$105,330	\$109,010	\$112,830	\$116,780	\$120,870	\$125,100	\$129,480	\$1,225,590				Y							
27 Aid-To-Construction	\$1,830,000	1,454,006	1,830,000	1,530,000	1,583,550	1,853,220	1,918,080	1,985,210	2,054,700	2,126,610	2,201,050	2,278,080	2,357,810	\$19,888,310				Y							
28 Service Installations	\$310,000	303,284	310,000	310,000	320,850	332,080	343,710	355,740	368,180	381,060	394,400	408,210	422,490	\$3,636,720				Y							
29 Other Generation & Distribution	\$8,275,000	8,132,649	13,922,010	6,555,000	5,816,980	7,027,230	10,078,266	9,036,761	12,381,643	12,470,808	11,851,270	6,880,310	7,121,110	\$89,219,378				Y							
30 TOTAL CAPITAL EXPENDITURES	\$11,004,350	\$10,204,817	\$16,881,360	\$8,601,090	\$7,819,710	\$9,314,300	\$12,445,386	\$11,486,721	\$14,917,353	\$15,095,258	\$14,567,590	\$9,691,700	\$10,030,890	\$113,969,998											
31 NET CHANGE IN WORKING CASH BALANCE (Net Oper Rev/(Loss) less Cap Exp)	(\$3,631,054)	(\$3,931,784)	(\$5,967,414)	(\$3,274,605)	\$1,246,684	\$2,373,311	\$1,813,210	\$3,078,239	(\$77,573)	(\$94,830)	\$418,987	\$5,297,804	\$5,036,766												
32 ENDING WORKING CASH BALANCE	\$18,692,318	\$22,323,372	\$16,355,958	\$13,081,353	\$14,328,037	\$16,701,347	\$18,514,557	\$21,592,796	\$21,515,224	\$21,420,393	\$21,839,380	\$27,137,184	\$32,173,949												
Desired Balance %			15%	18%	21%	23%	23%	23%	23%	23%	23%	23%	23%												
33 Desired Balance (15% of Oper Exp excl'g depn)	\$8,772,386	\$8,170,747	\$8,687,588	\$ 10,967,619	\$13,488,524	\$15,290,731	\$15,490,011	\$16,127,055	\$16,790,237	\$17,461,522	\$18,084,160	\$18,705,506	\$19,348,523												
34 Fav/(Unfav) to Desired Balance	\$9,919,932	\$14,152,625	\$7,668,370	\$2,113,734	\$839,513	\$1,410,616	\$3,024,546	\$5,465,741	\$4,724,987	\$3,958,871	\$3,755,220	\$8,431,678	\$12,825,426												
Restricted Funds (PIF)																									
35 BEGINNING BAL-PLANT INVESTMENT FEE	\$1,841,588	\$2,180,771	\$2,237,688	\$1,177,698	\$1,919,004	\$2,099,650	\$3,664,556	\$3,395,502	\$3,560,377	\$5,140,318	\$9,406,944	\$6,452,612	\$10,348,495												
36 PIF REVENUES																									
37 PIF Collections	2,748,480	\$2,939,848	\$3,050,000	\$3,115,400	\$3,286,440	\$3,454,050	\$3,630,210	\$3,833,500	\$4,048,180	\$4,274,880	\$4,497,170	\$4,731,020	\$4,977,030	\$39,847,880			Y		Y						
38 PIF Interest Income	25,030	4,921	25,030	12,350	30,460	42,590	98,050	97,480	110,750	177,910	337,910	361,770	441,700	\$1,710,970	Y										
39 FEMA Alt Project Revenue	0	4,464,780	290,000	0	0	0	0	0	0	0	0	0	0	\$0											
40 Payments Rec'd from Loan to Water	806,250	1,796,620	806,250	795,000	783,750	772,500	761,250	0	0	0	0	0	0	\$3,112,500											
41 TOTAL PIF REVENUES	\$3,579,760	\$9,206,169	\$4,171,280	\$3,922,750	\$4,100,650	\$4,269,140	\$4,489,510	\$3,930,980	\$4,158,930	\$4,452,790	\$4,835,080	\$5,092,790	\$5,418,730	\$48,842,630											
PIF CAPITAL AND EXPENSES																									
43 PIF Capital Expenditures	4,920,000	\$9,545,352	5,185,000	\$3,150,000	\$3,881,250	\$2,678,050	\$4,712,060	\$3,729,450	\$2,553,520	\$184,390	\$7,712,990	\$1,185,130	\$3,611,670	\$33,398,510				Y							
44 PIF 1% For the Arts Transfer	46,270	0	46,270	31,444	38,754	26,185	46,504	36,656	25,469	1,775	76,422	11,777	36,040	\$331,022											
45 Year-end Cash Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0											
46 TOTAL PIF CAPITAL AND EXPENSES	\$4,966,270	\$9,545,352	\$5,231,270	\$3,181,444	\$3,920,004	\$2,704,235	\$4,758,564	\$3,766,106	\$2,578,989	\$186,165	\$7,789,412	\$1,196,907	\$3,647,710	\$33,729,532											
47 ENDING BALANCE-PLANT INVESTMENT FEE	\$455,078	\$1,841,588	\$1,177,698	\$1,919,004	\$2,099,650	\$3,664,556	\$3,395,502	\$3,560,377	\$5,140,318	\$9,406,944	\$6,452,612	\$10,348,495	\$12,119,516												
48 TOTAL AVAILABLE FUNDS	\$19,147,396	\$24,164,960	\$17,533,656	\$15,000,357	\$16,427,687	\$20,365,903	\$21,910,060	\$25,153,173	\$26,655,542	\$30,827,337	\$28,291,992	\$37,485,679	\$44,293,465												

Project	Type	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2027)	10-Year Total (2018-2027)	Raw Water	General Unrestricted	SIF - Restricted	Raw Water - 5 year	General Unrestricted - 5 year	SIF - Restricted - 5 year	Raw Water - 10 year	General Unrestricted - 10 year	SIF - Restricted - 10 year
TRANSMISSION/DISTRIBUTION PROJECTS																						
Water Main Replacement Projects																						
2020 Water Line Replacement (Sherri Mar)- Design/SDC	Design/SDC	0	0	106,240	111,770	0	0	0	0	0	0	218,010	218,010	0%	100%	0%	\$0	\$218,010	\$0	\$0	\$218,010	\$0
2020 Water Line Replacement (Sherri Mar) - Construct	Construct	0	0	0	1,397,100	0	0	0	0	0	0	1,397,100	1,397,100	0%	100%	0%	\$0	\$1,397,100	\$0	\$0	\$1,397,100	\$0
2021 Water Line Replacement - Design/SDC	Design/SDC	0	0	106,240	111,770	0	0	0	0	0	0	218,010	218,010	0%	100%	0%	\$0	\$218,010	\$0	\$0	\$218,010	\$0
2021 Water Line Replacement - Construct	Construct	0	0	0	1,397,100	0	0	0	0	0	0	1,397,100	1,397,100	0%	100%	0%	\$0	\$1,397,100	\$0	\$0	\$1,397,100	\$0
2022 Water Line Replacement - Design/SDC	Design/SDC	0	0	0	130,400	137,180	0	0	0	0	0	267,580	267,580	0%	100%	0%	\$0	\$267,580	\$0	\$0	\$267,580	\$0
2022 Water Line Replacement - Construct	Construct	0	0	0	0	1,714,710	0	0	0	0	0	1,714,710	1,714,710	0%	100%	0%	\$0	\$1,714,710	\$0	\$0	\$1,714,710	\$0
2023 Water Line Replacement - Design/SDC	Design/SDC	0	0	0	0	183,720	193,270	0	0	0	0	183,720	376,990	0%	100%	0%	\$0	\$183,720	\$0	\$0	\$376,990	\$0
2023 Water Line Replacement - Construct	Construct	0	0	0	0	0	2,576,970	0	0	0	0	0	2,576,970	0%	100%	0%	\$0	\$0	\$0	\$0	\$2,576,970	\$0
2024 Water Line Replacement - Design/SDC	Design/SDC	0	0	0	0	0	193,270	203,320	0	0	0	0	396,590	0%	100%	0%	\$0	\$0	\$0	\$0	\$396,590	\$0
2024 Water Line Replacement - Construct	Construct	0	0	0	0	0	0	2,710,970	0	0	0	0	2,710,970	0%	100%	0%	\$0	\$0	\$0	\$0	\$2,710,970	\$0
2025 Water Line Replacement - Design/SDC	Design/SDC	0	0	0	0	0	0	203,320	213,900	0	0	0	417,220	0%	100%	0%	\$0	\$0	\$0	\$0	\$417,220	\$0
2025 Water Line Replacement - Construct	Construct	0	0	0	0	0	0	0	2,851,940	0	0	0	2,851,940	0%	100%	0%	\$0	\$0	\$0	\$0	\$2,851,940	\$0
2026 Water Line Replacement - Design/SDC	Design/SDC	0	0	0	0	0	0	0	96,250	101,260	0	0	197,510	0%	100%	0%	\$0	\$0	\$0	\$0	\$197,510	\$0
2026 Water Line Replacement - Construct	Construct	0	0	0	0	0	0	0	0	1,350,110	0	0	1,350,110	0%	100%	0%	\$0	\$0	\$0	\$0	\$1,350,110	\$0
2027 Water Line Replacement - Design/SDC	Design/SDC	0	0	0	0	0	0	0	0	101,260	106,520	0	207,780	0%	100%	0%	\$0	\$0	\$0	\$0	\$207,780	\$0
2027 Water Line Replacement - Construct	Construct	0	0	0	0	0	0	0	0	0	1,420,310	0	1,420,310	0%	100%	0%	\$0	\$0	\$0	\$0	\$1,420,310	\$0
36" Transmission Line Relining Design/SDC	Design/SDC	0	0	0	0	0	0	0	0	468,040	492,380	0	960,420	0%	100%	0%	\$0	\$0	\$0	\$0	\$960,420	\$0
36" Transmission Line Relining Construct	Construct	0	0	0	0	0	0	0	0	0	6,154,690	0	6,154,690	0%	100%	0%	\$0	\$0	\$0	\$0	\$6,154,690	\$0
24" & 48" Cathodic Protection Installation Design/SDC	Design/SDC	0	0	35,410	37,260	0	0	0	0	0	0	72,670	72,670	0%	100%	0%	\$0	\$72,670	\$0	\$0	\$72,670	\$0
24" & 48" Cathodic Protection Installation Construct	Construct	0	0	0	465,700	0	0	0	0	0	0	465,700	465,700	0%	100%	0%	\$0	\$465,700	\$0	\$0	\$465,700	\$0
2018 ROW Relocates	Construct	75,000	78,900	83,000	87,320	91,860	96,640	101,660	106,950	112,510	118,360	416,080	952,200	0%	100%	0%	\$0	\$416,080	\$0	\$0	\$952,200	\$0
34" Waterline Valve Insertions Design/SDC	Design/SDC	0	0	0	18,630	0	0	0	0	0	0	18,630	18,630	0%	100%	0%	\$0	\$18,630	\$0	\$0	\$18,630	\$0
34" Waterline Valve Insertions Construct	Construct	0	0	0	232,850	0	0	0	0	0	0	232,850	232,850	0%	100%	0%	\$0	\$232,850	\$0	\$0	\$232,850	\$0
New water lines																						
East Gravity Zone 24" Phase 1 St Louis Design/SDC	Design/SDC	0	0	0	339,959	235,161	0	0	0	0	0	575,120	575,120	0%	30%	70%	\$0	\$172,540	\$402,580	\$0	\$172,540	\$402,580
East Gravity Zone 24" Phase 1 St Louis Construct	Construct	0	0	0	0	2,939,500	0	0	0	0	0	2,939,500	2,939,500	0%	30%	70%	\$0	\$881,850	\$2,057,650	\$0	\$881,850	\$2,057,650
East Gravity Zone 24" Phase 2 28th St SW Taft to Garfield Design/SDC	Design/SDC	0	0	0	0	289,050	175,230	0	0	0	0	289,050	464,280	0%	30%	70%	\$0	\$86,720	\$202,340	\$0	\$139,280	\$325,000
East Gravity Zone 24" Phase 2 28th St SW Taft to Garfield Construct	Construct	0	0	0	0	0	2,190,420	0	0	0	0	0	2,190,420	0%	30%	70%	\$0	\$0	\$0	\$0	\$657,130	\$1,533,290
East Gravity Zone 24" Phase 3 Garfield to 402 Design/SDC	Design/SDC	0	0	0	0	0	0	0	630,280	513,040	0	0	1,143,320	0%	30%	70%	\$0	\$0	\$0	\$0	\$343,000	\$800,320
East Gravity Zone 24" Phase 3 Garfield to 402 Construct	Construct	0	0	0	0	0	0	0	0	6,413,010	0	0	6,413,010	0%	30%	70%	\$0	\$0	\$0	\$0	\$1,923,900	\$4,489,110
16" Mtn View Discharge in Boyd Lake Ave Design/SDC	Design/SDC	110,000	115,720	0	0	0	0	0	0	0	0	225,720	225,720	0%	0%	100%	\$0	\$0	\$225,720	\$0	\$0	\$225,720
16" Mtn View Discharge in Boyd Lake Ave Construct	Construct	0	1,157,200	0	0	0	0	0	0	0	0	1,157,200	1,157,200	0%	0%	100%	\$0	\$0	\$1,157,200	\$0	\$0	\$1,157,200
16" in Granite (57th to 50th) (Ranch Acres) Design/SDC	Design/SDC	0	0	0	0	0	0	0	50,190	52,800	0	0	102,990	0%	50%	50%	\$0	\$0	\$0	\$0	\$51,500	\$51,500
16" in Granite (57th to 50th) (Ranch Acres) Construct	Construct	0	0	0	0	0	0	0	0	660,050	0	0	660,050	0%	50%	50%	\$0	\$0	\$0	\$0	\$330,030	\$330,030
Morning Drive 30" Waterline Phase 2 Design/SDC	Design/SDC	280,000	0	0	0	0	0	0	0	0	0	280,000	280,000	0%	10%	90%	\$0	\$28,000	\$252,000	\$0	\$28,000	\$2

2018 Water 10 Year Capital Budget - For City

	Project	Type	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2027)	10-Year Total (2018-2027)	Raw Water	General Unrestricted	SIF - Restricted	Raw Water - 5 year	General Unrestricted - 5 year	SIF - Restricted - 5 year	Raw Water - 10 year	General Unrestricted - 10 year	SIF - Restricted - 10 year
66	TRANSMISSION/DISTRIBUTION SIF TOTAL =		4,343,000	1,232,316	7,350,064	441,716	3,863,733	2,319,531	7,095,964	573,241	5,937,620	8,535,460	17,230,829	41,692,645									
67	SIF OVERSIZING =		0	631,200	0	0	0	0	0	0	0	0	631,200	631,200									
68																							
69	WATER TREATMENT PLANT PROJECTS																						
70	Expansion																						
71	Phase 3 Expansion (38-46 MGD) Design/SDC	Design/SDC	0	0	0	0	0	0	0	0	0	2,367,190	0	2,367,190	0%	20%	80%	\$0	\$0	\$0	\$0	\$473,440	\$1,893,750
72	Cold Storage Building Design/SDC	Design/SDC	0	7,890	0	0	0	0	0	0	0	0	7,890	7,890	0%	50%	50%	\$0	\$3,950	\$3,950	\$0	\$3,950	\$3,950
73	Cold Storage Building Construct	Construct	0	0	166,010	0	0	0	0	0	0	0	166,010	166,010	0%	50%	50%	\$0	\$83,010	\$83,010	\$0	\$83,010	\$83,010
74	Improvements																						
75	WTP Admin/Office Renovation Design/SDC	Design/SDC	0	0	0	58,210	61,240	0	0	0	0	0	119,450	119,450	0%	100%	0%	\$0	\$119,450	\$0	\$0	\$119,450	\$0
76	WTP Admin/Office Renovation Construct	Construct	0	0	0	0	612,400	0	0	0	0	0	612,400	612,400	0%	100%	0%	\$0	\$612,400	\$0	\$0	\$612,400	\$0
77	WATER TREATMENT PLANT TOTALS		\$0	\$7,890	\$166,010	\$58,210	\$673,640	\$0	\$0	\$0	\$0	\$2,367,190	905,750	3,272,940				0	818,810	86,960	0	1,292,250	1,980,710
78																							
79	WATER TREATMENT PLANT GENERAL TOTAL =		0	3,945	83,005	58,210	673,640	0	0	0	0	473,438	818,800	1,292,238									
80	WATER TREATMENT PLANT SIF TOTAL =		0	3,945	83,005	0	0	0	0	0	0	1,893,752	86,950	1,980,702									
81																							
82	WATER RESOURCES PROJECTS																						
83	Windy Gap Firming (W038AA)	Contract	1,500,000	38,592,380	0	0	0	0	0	0	0	0	40,092,380	40,092,380	100%	0%	0%	\$40,092,380	\$0	\$0	\$40,092,380	\$0	\$0
84	Future Water Court Transfer Actions	Design/SDC	100,000	105,200	0	0	0	0	0	0	0	0	205,200	205,200	100%	0%	0%	\$205,200	\$0	\$0	\$205,200	\$0	\$0
85	Purchase CBT Water (W1014A) years 1 to 3	Contract	500,000	526,000	553,350	0	0	0	0	0	0	0	1,579,350	1,579,350	100%	0%	0%	\$1,579,350	\$0	\$0	\$1,579,350	\$0	\$0
86	Purchase CBT Water (W1014A) years 4 to 6	Contract	0	0	0	582,130	612,400	644,240	0	0	0	0	1,194,530	1,838,770	100%	0%	0%	\$1,194,530	\$0	\$0	\$1,838,770	\$0	\$0
87	Purchase CBT Water (W1014A) years 7 to 9	Contract	0	0	0	0	0	0	677,740	712,980	750,060	0	0	2,140,780	100%	0%	0%	\$0	\$0	\$0	\$2,140,780	\$0	\$0
88	Purchase CBT Water (W1014A) year 10	Contract	0	0	0	0	0	0	0	0	0	789,060	0	789,060	100%	0%	0%	\$0	\$0	\$0	\$789,060	\$0	\$0
89	Down Stream Storage - Phase 1 Property Purchase	Contract	3,300,000	0	0	0	0	0	0	0	0	0	3,300,000	3,300,000	100%	0%	0%	\$3,300,000	\$0	\$0	\$3,300,000	\$0	\$0
90	Down Stream Storage - Phase 2 Design/SDC	Design/SDC	0	0	0	0	0	0	0	0	0	946,880	0	946,880	100%	0%	0%	\$0	\$0	\$0	\$946,880	\$0	\$0
91	WATER RESOURCES TOTAL		\$5,400,000	\$39,223,580	\$553,350	\$582,130	\$612,400	\$644,240	\$677,740	\$712,980	\$750,060	\$1,735,940	46,371,460	50,892,420				46,371,460	0	0	50,892,420	0	0
92																							
93	WATER GENERAL PLANT																						
94	Replace Vehicle #5790 (other revenue from WW 8,694 & P 12,880	GP	32,200	0	0	0	0	0	0	0	0	0	32,200	32,200	0%	100%	0%	\$0	\$32,200	\$0	\$0	\$32,200	\$0
95	Sampling Stations (4 per year)	Construct	20,000	21,040	22,130	23,290	24,500	25,770	27,110	28,520	30,000	31,560	110,960	253,920	0%	100%	0%	\$0	\$110,960	\$0	\$0	\$253,920	\$0
96	Hydraulic Hammer	GP	22,000	0	0	0	0	0	0	0	0	0	22,000	22,000	0%	100%	0%	\$0	\$22,000	\$0	\$0	\$22,000	\$0
97	Standalone Server - dbWP2	GP	8,090	0	0	0	0	0	0	0	0	0	8,090	8,090	0%	100%	0%	\$0	\$8,090	\$0	\$0	\$8,090	\$0
98	Service Center Renovations Construct	GP	250,000	0	0	0	0	0	0	0	0	0	250,000	250,000	0%	100%	0%	\$0	\$250,000	\$0	\$0	\$250,000	\$0
99	Service Center Renovations (years 2, 3, & 4) Construct	GP	0	102,570	107,900	113,510	0	0	0	0	0	0	323,980	323,980	0%	100%	0%	\$0	\$323,980	\$0	\$0	\$323,980	\$0
100	Service Center Renovations (years 5, 6, & 7) Construct	GP	0	0	0	0	119,420	125,630	132,160	0	0	0	119,420	377,210	0%	100%	0%	\$0	\$119,420	\$0	\$0	\$377,210	\$0
101	Service Center Renovations (years 8, 9, & 10) Construct	GP	0	0	0	0	0	0	0	139,030	146,260	153,870	0	439,160	0%	100%	0%	\$0	\$0	\$0	\$0	\$439,160	\$0
102	WATER GENERAL PLANT TOTAL		\$332,290	\$123,610	\$130,030	\$136,800	\$143,920	\$151,400	\$159,270	\$167,550	\$176,260	\$185,430	866,650	1,706,560				0	866,650	0	0	1,706,560	0
103	Total Water General capital		\$1,175,290	\$1,236,999	\$2,579,821	\$4,633,843	\$5,573,928	\$4,318,099	\$5,395,506	\$3,933,119	\$5,308,320	\$12,669,818	\$15,199,881	\$46,824,743									
104	TOTAL WATER CIP		\$10,918,290	\$42,328,040	\$10,566,240	\$5,657,689	\$10,050,061	\$7,281,870	\$13,169,210	\$5,219,340	\$11,996,000	\$24,834,970	79,520,320	142,021,710			Total =	46,371,460	15,199,910	17,949,000	50,892,420	46,824,790	44,304,580
105	Total Water less Raw Water CIP		\$5,518,290	\$3,104,460	\$10,012,890	\$5,075,559	\$9,437,661	\$6,637,630	\$12,491,470	\$4,506,360	\$11,245,940	\$23,099,030	33,148,860	91,129,290					\$50			\$80	
106	Wtr SIF Capital		4,343,000	1,867,461	7,433,069	441,716	3,863,733	2,319,531	7,095,964	573,241	5,937,620	10,429,212	17,948,979	44,304,547									
107	Raw Water Capital		\$5,400,000	\$39,223,580	\$553,350	\$582,130	\$612,400	\$644,240	\$677,740	\$712,980	\$750,060	\$1,735,940	46,371,460	50,892,420									
108	TRANSMISSION/DISTRIBUTION O&M PROJECTS																						
109	Distribution System Model Update		0	0	0	58,210	0	0	0	0	75,010	0											
110	29th St Tank Re-Coat		0	0	0	0	0	0	0	0	750,060	0											
111	Master Plan Updates (Water Engineering)		0	0	0	0	0	0	0	0	150,010	0											
112	TRANSMISSION/DISTRIBUTION O&M TOTAL		\$0	\$0	\$0	\$58,210	\$0	\$0	\$0	\$0	\$975,080	\$0	\$58,210	\$1,033,290									
113																							
114	WATER TREATMENT PLANT O&M PROJECTS																						
115	Renew WTP Sludge Pond Discharge Permit		6,000	0	0	0	0	0	0	0	0	0											
116	Update Emergency Response Plan		0	42,080	0	0	0	0	0	0	0	0											
117	Water Treatment Plant Master Plan		0	0	0	0	122,480	0	0	0	0	0											
118	WATER TREATMENT PLANT O&M TOTAL		\$6,000	\$42,080	\$0	\$0	\$122,480	\$0	\$0	\$0	\$0	\$0	\$170,560	\$170,560									
119																							
120	ADMIN O&M PROJECTS / Shared Assets Expense																						
121	CIS UB System		1,139,553	115,821		0	0	0	0	0	0	0											
122	Plotter		3,510	0	0	0	0	0	0	0	0	0											
123	Misc Hardware Failures		2,930	0	0	0	0	0	0	0	0	0											
124	Copier Replacement		8,390	0	0	0	0	0	0	0	0	0											
125	WWTP WQ Lab Remodel - General		721,880	0	0	0	0	0	0	0	0	0											
126	WWTP WQ Lab Remodel - SIF		240,630	0	0	0	0	0	0	0	0	0											
127	ADMIN O&M TOTAL		\$2,116,893	\$115,821	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,232,714	\$2,232,714									
128																							

2018 Water 10 Year Capital Budget - For City

Project	Type	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2027)	10-Year Total (2018-2027)	Raw Water	General Unrestricted	SIF - Restricted	Raw Water - 5 year	General Unrestricted - 5 year	SIF - Restricted - 5 year	Raw Water - 10 year	General Unrestricted - 10 year	SIF - Restricted - 10 year
General Plant Inflation Only		100.00%																				
Inflation =		100.00%	105.20%	110.67%	116.43%	122.48%	128.85%	135.55%	142.60%	150.01%	157.81%											
WATER GENERAL TOTAL =		6,243,000	40,336,969	3,003,141	5,079,173	6,042,408	4,810,939	5,913,976	4,478,549	5,882,120	14,220,328	\$60,704,691										
WATER SIF TOTAL =		4,343,000	1,867,461	7,433,069	441,716	3,863,733	2,319,531	7,095,964	573,241	5,937,620	10,429,212	\$17,948,979										

2018 Wastewater 10 Year Capital - For City

Project	Proj #	Design/SDC or Construct	#	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2022)	10-Year Total (2018-2027)	General Unrestricted	SIF - Restricted	General Unrestricted - 5 Year	SIF - Restricted - 5 Year	General Unrestricted - 10 Year	SIF - Restricted - 10 Year
WASTEWATER LINE REPLACEMENT PROJECTS																					
New Wastewater Lines				0																	
Parallel Boyd Intcp Design/SDC	W1701H	Design/SDC		384,000	0	0	0	0	0	0	0	0	0	\$384,000	\$384,000	20%	80%	\$76,800	\$307,200	\$76,800	\$307,200
Parallel Boyd Intcp Construct	W1701H	Construct		4,800,000	0	0	0	0	0	0	0	0	0	\$4,800,000	\$4,800,000	20%	80%	\$960,000	\$3,840,000	\$960,000	\$3,840,000
Highway 402 Wastewater Main Extension Design/SDC	0	Design/SDC		0	0	0	0	0	0	0	955,400	1,005,080	0	\$0	\$1,960,480	0%	100%	\$0	\$0	\$0	\$1,960,480
Highway 402 Wastewater Main Extension Construct	0	Construct		0	0	0	0	0	0	0	0	10,050,800	0	\$0	\$10,050,800	0%	100%	\$0	\$0	\$0	\$10,050,800
East Side Discharge Trunk to WWTP Design/SDC	0	Design/SDC		0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	100%	\$0	\$0	\$0	\$0
East Side Discharge Trunk to WWTP Construct	0	Construct		0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	100%	\$0	\$0	\$0	\$0
Sewer Line Replacement (Capacity) Design/SDC	0	Design/SDC		0	0	0	0	0	0	0	0	0	0	\$0	\$0	50%	50%	\$0	\$0	\$0	\$0
Sewer Line Replacement (Capacity) Construct	0	Construct		0	0	0	0	0	0	0	0	0	0	\$0	\$0	50%	50%	\$0	\$0	\$0	\$0
Upper Boyd Basin Sanitary Sewer Design/SDC	0	Design/SDC		0	557,560	586,550	0	0	0	0	0	0	0	\$1,144,110	\$1,144,110	10%	90%	\$114,410	\$1,029,700	\$114,411	\$1,029,699
Upper Boyd Basin Sanitary Sewer Construct	0	Construct		0	0	5,865,530	0	0	0	0	0	0	0	\$5,865,530	\$5,865,530	10%	90%	\$586,550	\$5,278,980	\$586,553	\$5,278,977
Upper Boyd Interim 43rd Street Sewer Solution Design/SDC	W1801H	Design/SDC		54,000	0	0	0	0	0	0	0	0	0	\$54,000	\$54,000	10%	90%	\$5,400	\$48,600	\$5,400	\$48,600
Upper Boyd Interim 43rd Street Sewer Solution Construct	W1801H	Construct		300,000	0	0	0	0	0	0	0	0	0	\$300,000	\$300,000	10%	90%	\$30,000	\$270,000	\$30,000	\$270,000
43rd Street Sewer Solution Design/SDC	0	Design/SDC		0	0	0	128,070	134,730	0	0	0	0	0	\$262,800	\$262,800	10%	90%	\$26,280	\$236,520	\$26,280	\$236,520
43rd Street Sewer Solution Construct	0	Construct		0	0	0	0	1,347,270	0	0	0	0	0	\$1,347,270	\$1,347,270	10%	90%	\$134,730	\$1,212,540	\$134,727	\$1,212,543
				0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0
Rehab Wastewater Lines				0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0
2019 CIPP Sewer Rehab Construct	0	Construct		0	1,157,200	0	0	0	0	0	0	0	0	\$1,157,200	\$1,157,200	100%	0%	\$1,157,200	\$0	\$1,157,200	\$0
2021 CIPP Sewer Rehab Construct	0	Construct		0	0	0	2,677,780	0	0	0	0	0	0	\$2,677,780	\$2,677,780	100%	0%	\$2,677,780	\$0	\$2,677,780	\$0
2023 CIPP Sewer Rehab Construct	0	Construct		0	0	0	0	0	2,576,970	0	0	0	0	\$0	\$2,576,970	100%	0%	\$0	\$0	\$2,576,970	\$0
2024 CIPP Sewer Rehab Construct	0	Construct		0	0	0	0	0	0	5,421,940	0	0	0	\$0	\$5,421,940	100%	0%	\$0	\$0	\$5,421,940	\$0
2025 CIPP Sewer Rehab Construct	0	Construct		0	0	0	0	0	0	0	5,703,880	0	0	\$0	\$5,703,880	100%	0%	\$0	\$0	\$5,703,880	\$0
2026 CIPP Sewer Rehab Construct	0	Construct		0	0	0	0	0	0	0	0	4,500,360	0	\$0	\$4,500,360	100%	0%	\$0	\$0	\$4,500,360	\$0
2027 CIPP Sewer Rehab Construct	0	Construct		0	0	0	0	0	0	0	0	0	4,734,380	\$0	\$4,734,380	100%	0%	\$0	\$0	\$4,734,380	\$0
				0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0
Large Projects				0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0
North Horseshoe Lift Station Upgrades Design/SDC	0	Design/SDC		0	0	66,400	69,860	0	0	0	0	0	0	\$136,260	\$136,260	100%	0%	\$136,260	\$0	\$136,260	\$0
North Horseshoe Lift Station Upgrades Construct	0	Construct		0	0	0	698,550	0	0	0	0	0	0	\$698,550	\$698,550	100%	0%	\$698,550	\$0	\$698,550	\$0
East Side Lift Station 3rd Pump Install Design/SDC	0	Design/SDC		0	0	33,200	34,930	0	0	0	0	0	0	\$68,130	\$68,130	0%	100%	\$0	\$68,130	\$0	\$68,130
East Side Lift Station 3rd Pump Install Construct	0	Construct		0	0	0	349,280	0	0	0	0	0	0	\$349,280	\$349,280	0%	100%	\$0	\$349,280	\$0	\$349,280
Southside Lift Station Generator Design/SDC	0	Design/SDC		0	0	44,270	46,570	0	0	0	0	0	0	\$90,840	\$90,840	100%	0%	\$90,840	\$0	\$90,840	\$0
Southside Lift Station Generator Construct	0	Construct		0	0	0	465,700	0	0	0	0	0	0	\$465,700	\$465,700	100%	0%	\$465,700	\$0	\$465,700	\$0
Bus Barn & Taft Lift Station Renovation Design/SDC	W1703G	Design/SDC		0	99,940	0	0	0	0	0	0	0	0	\$99,940	\$99,940	100%	0%	\$99,940	\$0	\$99,940	\$0
Bus Barn & Taft Lift Station Renovation Construct	W1703G	Construct		0	999,400	0	0	0	0	0	0	0	0	\$999,400	\$999,400	100%	0%	\$999,400	\$0	\$999,400	\$0
				0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0
Miscellaneous				0	0	0	0	0	0	0	0	0	0	\$0	\$0	0%	0%	\$0	\$0	\$0	\$0
Oversizing & Extensions Agreement Construct	W1232H	Construct		75,000	78,900	83,000	87,320	91,860	96,640	101,660	106,950	112,510	118,360	\$416,080	\$952,200	0%	100%	\$0	\$416,080	\$0	\$952,200
Interchange Lift Station Design/SDC	W1802H	Design/SDC		80,000	0	0	0	0	0	0	0	0	0	\$80,000	\$80,000	0%	100%	\$0	\$80,000	\$0	\$80,000
WASTEWATER LINE REPLACEMENTS TOTAL				\$5,693,000	\$2,893,000	\$6,678,950	\$4,558,060	\$1,573,860	\$2,673,610	\$5,523,600	\$6,766,230	\$15,668,750	\$4,852,740	\$21,396,870	\$56,881,800			\$8,259,840	\$13,137,030	\$31,197,371	\$25,684,429
WW LINE REPLACEMENT GENERAL TOTAL =				1,072,200	2,312,296	755,878	3,971,267	148,200	2,576,970	5,421,940	5,703,880	4,500,360	4,734,380	8,259,841	31,197,371						
WW LINE REPLACEMENT SIF TOTAL =				4,545,800	501,804	5,840,072	499,473	1,333,800	0	0	955,400	11,055,880	0	12,720,949	24,732,229						
WW SIF OVERSIZING TOTAL =				75,000	78,900	83,000	87,320	91,860	96,640	101,660	106,950	112,510	118,360	416,080	952,200						
WASTEWATER TREATMENT PLANT PROJECTS																					
WWTP Final Clarifier #4 and RAS/Scum	0	Design/SDC		0	0	0	0	0	0	0	0	0	789,060	\$0	\$789,060	20%	80%	\$0	\$0	\$157,812	\$631,248
WWTP Final Clarifier #4 and RAS/Scum Construct	0	Construct		0	0	0	0	0	0	0	0	0	0	\$0	\$0	20%	80%	\$0	\$0	\$0	\$0
WWTP Primary Clarifier #3 & Trickling Filter Demo Design/SDC	0	Design/SDC		0	0	0	0	0	0	0	0	0	473,440	\$0	\$473,440	20%	80%	\$0	\$0	\$94,688	\$378,752
WWTP Primary Clarifier #3 & Trickling Filter Demo Construct	0	Construct		0	0	0	0	0	0	0	0	0	0	\$0	\$0	20%	80%	\$0	\$0	\$0	\$0
WWTP Digested Sludge Dewatering Design/SDC	0	Design/SDC		0	0	0	0	0	0	0	0	0	1,467,660	\$0	\$1,467,660	75%	25%	\$0	\$0	\$1,100,745	\$366,915
WWTP Digested Sludge Dewatering Construct	0	Construct		0	0	0	0	0	0	0	0	0	0	\$0	\$0	75%	25%	\$0	\$0	\$0	\$0
WWTP Laboratory Building & Admin Remodel	W1702H	Design/SDC		350,000	0	0	0	0	0	0	0	0	0	\$350,000	\$350,000	75%	25%	\$262,500	\$87,500	\$262,500	\$87,500
WWTP Laboratory Building & Admin Remodel	W1702H	Construct		3,500,000	0	0	0	0	0	0	0	0	0	\$3,500,000	\$3,500,000	75%	25%	\$2,625,000	\$875,000	\$2,625,000	\$875,000
WWTP Upgrade PLC Processors Design/SDC	0	Design/SDC		0	0	0	40,750	0	0	0	0	0	0	\$40,750	\$40,750	100%	0%	\$40,750	\$0	\$40,750	\$0
WWTP Upgrade PLC Processors Construct	0	Construct		0	0	0	407,490	0	0	0	0	0	0	\$407,490	\$407,490	100%	0%	\$407,490	\$0	\$407,490	\$0
WWTP Expansion to 12 MGD Design/SDC	W1604H	Design/SDC		100,000	0	0	0	0	0												

2018 Wastewater 10 Year Capital - For City

Project		Proj #	Design/SDC or Construct	#	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2022)	10-Year Total (2018-2027)	General Unrestricted	SIF - Restricted	General Unrestricted - 5 Year	SIF - Restricted - 5 Year	General Unrestricted - 10 Year	SIF - Restricted - 10 Year
47	WWTP Expansion to 12 MGD Construct	W1604H	Construct		3,700,000	0	0	0	0	0	0	0	0	0	\$3,700,000	\$3,700,000	62%	38%	\$2,294,000	\$1,406,000	\$2,294,000	\$1,406,000
48	WWTP Rehabilitate Digester 1 & 2 Design/SDC	0	Design/SDC		0	0	0	0	551,160	579,820	0	0	0	0	\$551,160	\$1,130,980	100%	0%	\$551,160	\$0	\$1,130,980	\$0
49	WWTP Rehabilitate Digester 1 & 2 Construct	0	Construct		0	0	0	0	0	5,798,170	0	0	0	0	\$0	\$5,798,170	100%	0%	\$0	\$0	\$5,798,170	\$0
50	WWTP Roof Replacement (various buildings)	W1801G	Construct		130,000	0	0	0	0	0	0	0	0	0	\$130,000	\$130,000	100%	0%	\$130,000	\$0	\$130,000	\$0
	Construct																					
51	WASTEWATER TREATMENT PLANT TOTAL				\$7,780,000	\$0	\$0	\$448,240	\$551,160	\$6,377,990	\$0	\$0	\$0	\$2,730,160	\$8,779,400	\$17,887,550			\$6,372,900	\$2,406,500	\$14,104,135	\$3,783,415
52	WW TREATMENT PLANT GENERAL TOTAL =				5,373,500	0	0	448,240	551,160	6,377,990	0	0	0	1,353,245	6,372,900	14,104,135						
53	WW TREATMENT PLANT SIF TOTAL =				2,406,500	0	0	0	0	0	0	0	0	1,376,915	2,406,500	3,783,415						
WASTEWATER GENERAL PLANT																						
54	Security Upgrades at WWTP (cameras/recording device)	WW930	GP		0	52,600	0	0	0	0	0	0	0	0	\$52,600	\$52,600	100%	0%	\$52,600	\$0	\$52,600	\$0
55	Service Center Renovations - inflated	WW930	GP		0	60,490	63,640	66,940	0	0	0	0	0	0	\$191,070	\$191,070	100%	0%	\$191,070	\$0	\$191,070	\$0
56	Service Center Renovations - inflated - continued	WW930	GP		0	0	0	0	0	70,430	74,090	77,940	0	0	\$70,430	\$222,460	100%	0%	\$70,430	\$0	\$222,460	\$0
	2																					
57	Service Center Renovations - inflated - continued	WW930	GP		0	0	0	0	0	0	0	81,990	86,260	90,740	\$0	\$258,990	100%	0%	\$0	\$0	\$258,990	\$0
58	Copier Replacement	WW930	GP		21,510	0	0	0	0	0	0	0	0	0	\$21,510	\$21,510	100%	0%	\$21,510	\$0	\$21,510	\$0
59	Replace Vehicle #6140 - 4wd SUV	WW930	GP		32,500	0	0	0	0	0	0	0	0	0	\$32,500	\$32,500	100%	0%	\$32,500	\$0	\$32,500	\$0
60	Replace Vehicle #6123 - 1/2 ton, 4wd regular cab	WW930	GP		34,600	0	0	0	0	0	0	0	0	0	\$34,600	\$34,600	100%	0%	\$34,600	\$0	\$34,600	\$0
61	WASTEWATER GENERAL PLANT TOTAL				\$88,610	\$113,090	\$63,640	\$66,940	\$70,430	\$74,090	\$77,940	\$81,990	\$86,260	\$90,740	\$402,710	\$813,730			\$402,710	\$0	\$813,730	\$0
62	WW General Capital				6,534,310	2,425,386	819,518	4,486,447	769,790	9,029,050	5,499,880	5,785,870	4,586,620	6,178,365	15,035,451	46,115,236						
63	TOTAL WASTEWATER CIP				\$13,561,610	\$3,006,090	\$6,742,590	\$5,073,240	\$2,195,450	\$9,125,690	\$5,601,540	\$6,848,220	\$15,755,010	\$7,673,640	\$30,578,980	\$75,583,080			\$15,035,450	\$15,543,530	\$46,115,236	\$29,467,844
64	WW SIF Capital				7,027,300	580,704	5,923,072	586,793	1,425,660	96,640	101,660	1,062,350	11,168,390	1,495,275	15,543,529	29,467,844						
65	WASTEWATER LINE REPLACEMENT O&M																					
66	Collection System Model Update (Division 310)	WW380			75,000	0	0	0	0	96,640	0	0	0	0	75,000	171,640						
					0	0	0	0	0	0	0	0	0	0	0	0						
67	WASTEWATER LINE REPLACEMENT O&M TOTAL				\$75,000	\$0	\$0	\$0	\$0	\$96,640	\$0	\$0	\$0	\$0	\$75,000	\$171,640						
WASTEWATER TREATMENT PLANT O&M PROJECTS																						
68	NPDES WWTP Permit Application	N/A			0	27,040	0	0	0	0	0	0	0	0	27,040	27,040						
69	Utility Plan Update	N/A			0	112,880	0	0	0	0	0	0	0	0	112,880	112,880						
70	CIS UB Software Package - not inflated	WW520			1,139,550	115,821	0	0	0	0	0	0	0	0	1,255,371	1,255,371						
71	CIS UB Software Package - not inflated (continued)	WW520			0	0	0	0	0	0	0	0	0	0	0	0						
					0	0	0	0	0	0	0	0	0	0	0	0						
72	WASTEWATER TREATMENT PLANT O&M TOTAL				\$1,139,550	\$255,741	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,395,291	\$1,395,291						

Power 2017-2026 Ten Year Plan for City

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Project	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2012)	10-Year Total (2018-2027)	General Unrestricted	SIF - Restricted	General Unrestricted - 5 year	PIF - Restricted - 5 year	General Unrestricted - 10 year	PIF - Restricted - 10 year
2	CAPITAL BLANKETS																		
3	Hydro Generation	0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
4	Overhead Distribution Lines	25,000	25,880	26,780	27,720	28,690	29,690	30,730	31,810	32,920	34,070	134,070	293,290	100%	0%	\$134,070	\$0	\$293,290	\$0
5	Underground Distribution Lines	70,000	72,450	74,990	77,610	80,330	83,140	86,050	89,060	92,180	95,400	375,380	821,210	100%	0%	\$375,380	\$0	\$821,210	\$0
6	Meter purchases/installs/upgrades	150,000	155,250	160,680	166,310	172,130	178,150	184,390	190,840	197,520	204,430	804,370	1,759,700	100%	0%	\$804,370	\$0	\$1,759,700	\$0
7	Distribution transformers-non ATC	75,000	77,630	80,340	83,150	86,060	89,080	92,190	95,420	98,760	102,220	402,180	879,850	100%	0%	\$402,180	\$0	\$879,850	\$0
8	Substation	0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
9	Street lights & Yard lights	70,000	72,450	74,990	77,610	80,330	83,140	86,050	89,060	92,180	95,400	375,380	821,210	100%	0%	\$375,380	\$0	\$821,210	\$0
10	Overhead Service installations/upgrades	10,000	10,350	10,710	11,090	11,480	11,880	12,290	12,720	13,170	13,630	53,630	117,320	100%	0%	\$53,630	\$0	\$117,320	\$0
11	Underground Service installations/upgrades	250,000	258,750	267,810	277,180	286,880	296,920	307,310	318,070	329,200	340,720	1,340,620	2,932,840	100%	0%	\$1,340,620	\$0	\$2,932,840	\$0
12	Temporary Service installations	50,000	51,750	53,560	55,440	57,380	59,380	61,460	63,610	65,840	68,140	268,130	586,560	100%	0%	\$268,130	\$0	\$586,560	\$0
13	CAPITAL BLANKETS TOTAL	700,000	724,510	749,860	776,110	803,280	831,380	860,470	890,590	921,770	954,010	3,753,760	8,211,980			3,753,760	0	8,211,980	0
14																	0		0
15	GENERAL (UNRESTRICTED) TOTAL =	700,000	724,510	749,860	776,110	803,280	831,380	860,470	890,590	921,770	954,010	3,753,760	8,211,980						
16	PIF (RESTRICTED) TOTAL =	0	0	0	0	0	0	0	0	0	0	0	0						
17		0	0	0	0	0	0	0	0	0	0	0	0						
18	SPECIFIC PROJECTS																		
19	HYDRO GENERATION	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
20		0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
21	SUBSTATION	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
22	Capital Maintenance	150,000	155,250	160,680	166,310	172,130	178,150	184,390	190,840	197,520	204,430	804,370	1,759,700	100%	0%	\$804,370	\$0	\$1,759,700	\$0
23	Security gates and fences at Substations	0	672,750	0	720,667	745,890	772,000	0	0	0	0	2,139,307	2,911,307	100%	0%	\$2,139,310	\$0	\$2,911,310	\$0
24	Relay Replacements at Substations	0	0	241,030	0	0	0	0	0	0	0	241,030	241,030	100%	0%	\$241,030	\$0	\$241,030	\$0
25	East Substation - Order & install new transformer to replace E1	0	0	1,071,230	0	0	0	0	0	0	0	1,071,230	1,071,230	100%	0%	\$1,071,230	\$0	\$1,071,230	\$0
26	Substation Annunciators	150,000	0	0	0	0	0	0	0	0	0	150,000	150,000	100%	0%	\$150,000	\$0	\$150,000	\$0
27	Extend new feeders for PRPA community solar garden into system	250,000	0	0	0	0	0	0	0	0	0	250,000	250,000	100%	0%	\$250,000	\$0	\$250,000	\$0
28	Begin retirement of west substation	0	0	0	0	0	0	0	636,140	0	0	0	636,140	100%	0%	\$0	\$0	\$636,140	\$0
29	Extention of underground transmission to serve new substation in SE corner of service territory	0	0	0	0	0	5,047,670	4,917,020	3,498,770	0	0	0	13,463,460	100%	0%	\$0	\$0	\$13,463,460	\$0
30	CUSTOMER ATC	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
31	Transformers	270,000	279,450	289,230	299,350	309,830	320,680	331,900	343,520	355,540	367,980	1,447,860	3,167,480	100%	0%	\$1,447,860	\$0	\$3,167,480	\$0
32	Labor/Fleet & Other Materials	1,260,000	1,304,100	1,563,990	1,618,730	1,675,380	1,734,020	1,794,710	1,857,530	1,922,540	1,989,830	7,422,200	16,720,830	100%	0%	\$7,422,200	\$0	\$16,720,830	\$0
33	Flood Related Hwy 34 Road Rebuild (CDOT Reimbursable)	0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
34	SYSTEM IMPROVEMENTS	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
35	Underground blanket-development driven construction of lateral feeder extentions as required to meet new load requirements	150,000	155,250	160,680	166,310	172,130	178,150	184,390	190,840	197,520	204,430	804,370	1,759,700	100%	0%	\$804,370	\$0	\$1,759,700	\$0
36	Demand Response	150,000	155,250	160,680	166,310	172,130	178,150	184,390	190,840	197,520	204,430	804,370	1,759,700	100%	0%	\$804,370	\$0	\$1,759,700	\$0
37	Smaller Aging Infrastructure Replacement Projects - Unplanned	375,000	388,130	401,710	415,770	430,320	445,380	460,970	477,100	493,800	511,090	2,010,930	4,399,270	100%	0%	\$2,010,930	\$0	\$4,399,270	\$0
38	Distribution Automation	110,000	113,850	117,830	121,960	126,230	130,650	135,220	139,950	144,850	149,920	589,870	1,290,460	100%	0%	\$589,870	\$0	\$1,290,460	\$0
39	Planned Future Projects - General	0	0	0	1,829,380	1,721,280	1,793,410	2,827,290	4,007,680	3,555,380	3,679,820	3,550,660	19,414,240	100%	0%	\$3,550,660	\$0	\$19,414,240	\$0
40	Energy Diversification Projects	300,000	310,500	321,370	332,620	344,260	356,310	368,780	381,680	395,040	408,870	1,608,750	3,519,430	100%	0%	\$1,608,750	\$0	\$3,519,430	\$0
41	200 AMP Cable Replacement - Planned	300,000	310,500	321,370	332,620	344,260	356,310	368,780	381,680	395,040	408,870	1,608,750	3,519,430	100%	0%	\$1,608,750	\$0	\$3,519,430	\$0
42	1 - Install 600 amp tie from Cascade west along Hwy 34, turning south on Rossum to Saint Andrews	0	517,500	0	0	0	0	0	0	0	0	517,500	517,500	100%	0%	\$517,500	\$0	\$517,500	\$0
43	2 - Phase 4 of Canyon Voltage Conversion from Idlewilde Park to Waltonia Rd	1,000,000	0	0	0	0	0	0	0	0	0	1,000,000	1,000,000	100%	0%	\$1,000,000	\$0	\$1,000,000	\$0
44	3 - Extend new feeders from Foothills Substation from W. 22nd & Rio Blanco to Cascade	500,000	0	0	0	0	0	0	0	0	0	500,000	500,000	100%	0%	\$500,000	\$0	\$500,000	\$0
45	43 - Extend new feeders from Foothills Substation from W. 22nd & Cascade to Eisenhower	0	517,500	0	0	0	0	0	0	0	0	517,500	517,500	100%	0%	\$517,500	\$0	\$517,500	\$0
46	Metering Equipment	1,000,000	517,500	535,610	554,359	573,762	593,843	614,628	0	0	0	3,181,230	4,389,701	100%	0%	\$3,181,230	\$0	\$4,389,700	\$0
47		0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
48	CONVERSION PROJECTS	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
49	4 - Overhead to underground conversion Wilson Ave & Carlisle to SW 10th & Tyler	0	0	696,300	0	0	0	0	0	0	0	696,300	696,300	100%	0%	\$696,300	\$0	\$696,300	\$0
50	5 - Overhead to underground circuit 214 - Eisenhower between Goram and Madison	0	0	0	11,090	585,240	0	0	0	0	0	596,330	596,330	100%	0%	\$596,330	\$0	\$596,330	\$0
51	6 - Overhead to underground conversion along 29th St from Madison to Hwy 287	0	0	0	831,540	0	0	0	0	0	0	831,540	831,540	100%	0%	\$831,540	\$0	\$831,540	\$0
52	8 - Overhead to underground conversion (circuits 222 & 221) from 11th along Madison to 1st	0	0	32,140	504,470	0	0	0	0	0	0	536,610	536,610	100%	0%	\$536,610	\$0	\$536,610	\$0
53	9 - Overhead to underground conversion (circuit 713) from 402 & Lincoln N to 1st St	0	0	0	0	0	47,510	995,700	0	0	0	0	1,043,210	100%	0%	\$0	\$0	\$1,043,210	\$0

Power 2017-2026 Ten Year Plan for City

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Project	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2012)	10-Year Total (2018-2027)	General Unrestricted	SIF - Restricted	General Unrestricted - 5 year	PIF - Restricted - 5 year	General Unrestricted - 10 year	PIF - Restricted - 10 year
54	10 - Overhead to underground conversion (circuit 411) along S. Taft from 20th St. SW to 23rd St. SW.	0	0	42,850	787,190	0	0	0	0	0	0	830,040	830,040	100%	0%	\$830,040	\$0	\$830,040	\$0
55	12 - Overhead to underground conversion (circuit 411) on railroad right of way from Taft to Grant	0	0	589,170	0	0	0	0	0	0	0	589,170	589,170	100%	0%	\$589,170	\$0	\$589,170	\$0
56	13 - Overhead to underground conversion along 14th St. SW between Roosevelt & S. Taft Ave.	0	0	0	22,170	665,560	0	0	0	0	0	687,730	687,730	100%	0%	\$687,730	\$0	\$687,730	\$0
57	14 - Overhead to underground conversion along 14th St. SE from St. Louis going .26 miles east	0	0	10,710	432,400	0	0	0	0	0	0	443,110	443,110	100%	0%	\$443,110	\$0	\$443,110	\$0
58	15 - Overhead to underground conversion along Madison between 16th & SW257 along ckt 231	0	0	0	0	57,380	1,128,300	0	0	0	0	57,380	1,185,680	100%	0%	\$57,380	\$0	\$1,185,680	\$0
59	16 - Overhead to underground conversion along Madison between 29th and vault 1023 - 200 amp	0	0	0	0	0	0	12,290	496,190	0	0	0	508,480	100%	0%	\$0	\$0	\$508,480	\$0
60	17 - Overhead to underground conversion - Foundry	850,000	0	0	0	0	0	0	0	0	0	850,000	850,000	100%	0%	\$850,000	\$0	\$850,000	\$0
61	18 - Overhead to underground conversion on 29th - Logan to Garfield	0	0	803,420	0	0	0	0	0	0	0	803,420	803,420	100%	0%	\$803,420	\$0	\$803,420	\$0
62	34 - Overhead to underground conversion on S. Roosevelt	0	0	0	1,330,460	0	0	0	0	0	0	1,330,460	1,330,460	100%	0%	\$1,330,460	\$0	\$1,330,460	\$0
63	40 - Overhead to underground conversion circuit 214 - Eisenhower between Madison and Boise - Downtown Backbone	0	0	0	0	527,860	0	0	0	0	0	527,860	527,860	100%	0%	\$527,860	\$0	\$527,860	\$0
64	36 - Overhead to underground conversion circuit 214 - RR between 3rd and 7th Downtown Backbone	430,000	0	0	0	0	0	0	0	0	0	430,000	430,000	100%	0%	\$430,000	\$0	\$430,000	\$0
65	37 - Overhead to underground conversion circuit 214 - 7th between RR and Monroe - Downtown Backbone	0	646,880	0	0	0	0	0	0	0	0	646,880	646,880	100%	0%	\$646,880	\$0	\$646,880	\$0
66	38 - Overhead to underground conversion circuit 214 - Monroe between 7th and 11th - Downtown Backbone	0	0	460,630	0	0	0	0	0	0	0	460,630	460,630	100%	0%	\$460,630	\$0	\$460,630	\$0
67	41 - Overhead to underground conversion circuit 214 - Gorom between Eisenhower and 11th - Downtown Backbone	0	0	0	255,010	0	0	0	0	0	0	255,010	255,010	100%	0%	\$255,010	\$0	\$255,010	\$0
68		0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
69	ROAD RELATED PROJECTS	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
70	Miscellaneous Small Projects	100,000	103,500	107,120	277,180	286,880	296,920	307,310	318,070	329,200	340,720	874,680	2,466,900	100%	0%	\$874,680	\$0	\$2,466,900	\$0
71	19 - Reconductor 921 on N Taft Ave from railroad right of way to Eisenhower	0	486,710	0	0	0	0	0	0	0	0	486,710	486,710	100%	0%	\$486,710	\$0	\$486,710	\$0
72	20 - Extension of 600 amp from 14th St SW to Hwy 60 along Hwy 287	0	0	0	0	1,262,280	0	0	0	0	0	1,262,280	1,262,280	100%	0%	\$1,262,280	\$0	\$1,262,280	\$0
73		0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
74	STREET LIGHT PROJECTS	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
75	Arterials/Major Collectors	150,000	155,250	160,680	166,310	172,130	178,150	184,390	190,840	197,520	204,430	804,370	1,759,700	100%	0%	\$804,370	\$0	\$1,759,700	\$0
76	Customer requests/Miscellaneous projects/LED Installation Program	200,000	207,000	214,240	221,740	229,500	237,540	245,850	254,460	263,360	272,580	1,072,480	2,346,270	100%	0%	\$1,072,480	\$0	\$2,346,270	\$0
77		0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
78	TOTAL SPECIFIC PROJECTS	7,695,000	6,996,870	8,462,670	11,563,946	10,574,431	13,973,143	14,118,008	13,556,130	8,644,830	8,947,400	45,292,917	104,532,428			45,292,920	0	104,532,430	0
79																	0		0
80	HYDRO GENERATION (GENERAL) =	0	0	0	0	0	0	0	0	0	0	0	0						
81	SUBSTATION (GENERAL) =	550,000	828,000	1,472,940	886,977	918,020	5,997,820	5,101,410	4,325,750	197,520	204,430	4,655,937	20,482,867						
82	CUSTOMER ATC (GENERAL) =	1,530,000	1,583,550	1,853,220	1,918,080	1,985,210	2,054,700	2,126,610	2,201,050	2,278,080	2,357,810	8,870,060	19,888,310						
83	SYSTEM IMPROVEMENTS (GENERAL) =	3,885,000	2,985,980	2,019,250	3,919,329	3,884,372	4,032,203	5,144,448	5,769,770	5,379,150	5,567,430	16,693,930	42,586,931						
84	CONVERSIONS (GENERAL) =	1,280,000	646,880	2,635,220	4,174,330	1,836,040	1,175,810	1,007,990	496,190	0	0	10,572,470	13,252,460						
85	ROAD RELATED PROJECTS (GENERAL) =	100,000	590,210	107,120	277,180	1,549,160	296,920	307,310	318,070	329,200	340,720	2,623,670	4,215,890						
86	STREET LIGHT PROJECTS (GENERAL) =	350,000	362,250	374,920	388,050	401,630	415,690	430,240	445,300	460,880	477,010	1,876,850	4,105,970						
87		0	0	0	0	0	0	0	0	0	0	0	0						

Power 2017-2026 Ten Year Plan for City

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Project	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	5-Year Total (2018-2012)	10-Year Total (2018-2027)	General Unrestricted	SIF - Restricted	General Unrestricted - 5 year	PIF - Restricted - 5 year	General Unrestricted - 10 year	PIF - Restricted - 10 year
88	PLANT INVESTMENT FEE PROJECTS																		
89	SUBSTATION PIF PROJECTS	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
90	Valley Substation - Order new transformer - V3	0	0	0	0	1,032,770	0	0	0	0	0	1,032,770	1,032,770	0%	100%	\$0	\$1,032,770	\$0	\$1,032,770
91	Valley Substation - Order new switchgear lineup for V3	0	0	0	0	860,640	0	0	0	0	0	860,640	860,640	0%	100%	\$0	\$860,640	\$0	\$860,640
92	Valley Substation - Install new switchgear lineup & transformer for V3	0	0	0	0	0	593,840	0	0	0	0	0	593,840	0%	100%	\$0	\$0	\$0	\$593,840
93	East Substation - Install new switchgear lineup for E3	600,000	0	0	0	0	0	0	0	0	0	600,000	600,000	0%	100%	\$0	\$600,000	\$0	\$600,000
94	New Substation in SE corner of service territory	0	0	0	0	0	0	0	7,458,540	0	0	0	7,458,540	0%	100%	\$0	\$0	\$0	\$7,458,540
95	Replace Airport Substation Transformer	0	0	964,100	0	0	0	0	0	0	0	964,100	964,100	0%	100%	\$0	\$964,100	\$0	\$964,100
96	Foothills Substation - Order & Install F3 & F4 Transformers	0	0	0	0	0	0	0	0	0	3,407,240	0	3,407,240	0%	100%	\$0	\$0	\$0	\$3,407,240
97	Replace Horseshoe Substation Transformer H1	0	931,500	0	0	0	0	0	0	0	0	931,500	931,500	0%	100%	\$0	\$931,500	\$0	\$931,500
98	Order and Install of Switchgear for H1 & H2	0	1,242,000	0	0	0	0	0	0	0	0	1,242,000	1,242,000	0%	100%	\$0	\$1,242,000	\$0	\$1,242,000
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	100%	\$0	\$0	\$0	\$0
100	FEEDER PIF PROJECTS	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
101	Blanket-development driven construction of miscellaneous primary feeder extentions as required to meet new load requirements	150,000	155,250	160,680	166,310	172,130	178,150	184,390	190,840	197,520	204,430	804,370	1,759,700	0%	100%	\$0	\$804,370	\$0	\$1,759,700
102	21 - Feeder from Foothills to Hunters Run	1,500,000	0	0	0	0	0	0	0	0	0	1,500,000	1,500,000	0%	100%	\$0	\$1,500,000	\$0	\$1,500,000
103	22 - Install conduits from Byrd Dr to I25 Frontage Rd, connecting at Kendall Pkwy	0	0	964,100	0	0	0	0	0	0	0	964,100	964,100	0%	100%	\$0	\$964,100	\$0	\$964,100
104	44 - Install 750 AL from MCR to Kendall Pkwy & I25 - sub to sub tie between Crossroads and Airport	400,000	0	0	0	0	0	0	0	0	0	400,000	400,000	0%	100%	\$0	\$400,000	\$0	\$400,000
105	23 - Sub to Sub Tie - Install new conduit bank and 750 AL from Garfield to CR 11	0	0	0	0	0	950,150	0	0	0	0	0	950,150	0%	100%	\$0	\$0	\$0	\$950,150
106	24 - Sub to Sub Tie - Install new conduit bank and 750 AL from 57th and Taft to vault V1780.	0	0	0	0	57,380	831,380	0	0	0	0	57,380	888,760	0%	100%	\$0	\$57,380	\$0	\$888,760
107	25 - Foothills Substation Conduit - Install new conduit along W. 22nd east from Rio Blanco to Van Buren	0	1,552,500	0	0	0	0	0	0	0	0	1,552,500	1,552,500	0%	100%	\$0	\$1,552,500	\$0	\$1,552,500
108	26 - Extend new feeders from Valley V3 into system	0	0	0	55,440	1,606,530	0	0	0	0	0	1,661,970	1,661,970	0%	100%	\$0	\$1,661,970	\$0	\$1,661,970
109	42 - Extend new feeders from East Sub to Boise and 402	0	0	535,610	0	0	0	0	0	0	0	535,610	535,610	0%	100%	\$0	\$535,610	\$0	\$535,610
110	27 - Extend new feeders from Boise and 402 to I25 towards future new substation	0	0	32,140	1,962,430	0	0	0	0	0	0	1,994,570	1,994,570	0%	100%	\$0	\$1,994,570	\$0	\$1,994,570
111	29 - Sub to Sub Tie - Install new duct bank and 750 AL on Madison E on 37th to CR11C, N to 57th St	0	0	0	0	0	0	0	63,610	987,610	0	0	1,051,220	0%	100%	\$0	\$0	\$0	\$1,051,220
112	30 - Sub to Sub Tie - Extend new feeders along CR 11 from 57th St. to CR 30	0	0	21,420	864,800	0	0	0	0	0	0	886,220	886,220	0%	100%	\$0	\$886,220	\$0	\$886,220
113	31 - Sub to Sub Tie - Extend new feeders along CR 11 from Boyd Lake Ave. to CR 30	0	0	0	1,663,080	0	0	0	0	0	0	1,663,080	1,663,080	0%	100%	\$0	\$1,663,080	\$0	\$1,663,080
114	35 - The Brands - Byrd Dr Fairgrounds along Crossroads	500,000	0	0	0	0	0	0	0	0	0	500,000	500,000	0%	100%	\$0	\$500,000	\$0	\$500,000
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	100%	\$0	\$0	\$0	\$0
116	POWER GENERATION PIF	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	\$0	\$0	\$0	\$0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	100%	\$0	\$0	\$0	\$0
118	TOTAL PIF PROJECTS	3,150,000	3,881,250	2,678,050	4,712,060	3,729,450	2,553,520	184,390	7,712,990	1,185,130	3,611,670	18,150,810	33,398,510			0	15,101,510	0	30,349,210
119																	0		0
120	SUBSTATION PROJECTS (RESTRICTED) =	600,000	2,173,500	964,100	0	1,893,410	593,840	0	7,458,540	0	3,407,240	5,631,010	17,090,630						
121	FEEDER PROJECTS (RESTRICTED) =	2,550,000	1,707,750	1,713,950	4,712,060	1,836,040	1,959,680	184,390	254,450	1,185,130	204,430	12,519,800	16,307,880						
122	POWER GENERATION PROJECTS (RESTRICTED) =	0	0	0	0	0	0	0	0	0	0	0	0						
123		0	0	0	0	0	0	0	0	0	0	0	0						
124	GENERAL PLANT																		
125	Trailer mounted Puller/Tensioner	110,000	0	0	0	0	0	0	0	0	0	110,000	110,000	100%	0%	\$110,000	\$0	\$110,000	\$0
126	4WD PU to replace 5130	53,000	0	0	0	0	0	0	0	0	0	53,000	53,000	100%	0%	\$53,000	\$0	\$53,000	\$0
127	Replacement of large format plotter	9,000	0	0	0	0	0	0	0	0	0	9,000	9,000	100%	0%	\$9,000	\$0	\$9,000	\$0
128	Misc Hardware Failures	7,500	0	0	0	0	0	0	0	0	0	7,500	7,500	100%	0%	\$7,500	\$0	\$7,500	\$0
129	Two Revolution PQ Recorders	18,090	0	0	0	0	0	0	0	0	0	18,090	18,090	100%	0%	\$18,090	\$0	\$18,090	\$0
130	New Electronic Utility Locator Transmitter and Receiver	8,500	0	0	0	0	0	0	0	0	0	8,500	8,500	100%	0%	\$8,500	\$0	\$8,500	\$0
131	Service Center Renovations	0	98,330	101,770	105,330	109,010	112,830	116,780	120,870	125,100	129,480	414,440	1,019,500	100%	0%	\$414,440	\$0	\$1,019,500	\$0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
133	0	0	0	0	0	0	0	0	0	0	0	0	0	100%	0%	\$0	\$0	\$0	\$0
134	TOTAL GENERAL PLANT PROJECTS	206,090	98,330	101,770	105,330	109,010	112,830	116,780	120,870	125,100	129,480	620,530	1,225,590			620,530	0	1,225,590	0
135																			
136																			
137	POWER GENERAL TOTAL =	8,601,090	7,819,710	9,314,300	12,445,386	11,486,721	14,917,353	15,095,258	14,567,590	9,691,700	10,030,890	49,667,207	113,969,998						
138	POWER PIF TOTAL =	3,150,000	3,881,250	2,678,050	4,712,060	3,729,450	2,553,520	184,390	7,712,990	1,185,130	3,611,670	18,150,810	33,398,510						
139		0	0	0	0	0	0	0	0	0	0								
140																			
141	TOTAL POWER CAPITAL EXPENDITURES =	11,751,090	11,700,960	11,992,350	17,157,446	15,216,171	17,470,873	15,279,648	22,280,580	10,876,830	13,642,560	67,818,017	147,368,508						

**ITEM TITLE:**

Community Solar Program Update: Survey Results and Preliminary Cost Estimates

DESCRIPTION:

Staff from Platte River, Loveland, Fort Collins and Longmont have been working to develop a community solar program that could serve all four municipalities. This item will review the results of their recent customer survey and discuss how this information will be used to guide a community solar program design.

SUMMARY:

Paul Davis, Customer Services Manager with Platte River will be giving a presentation to the Commission.

Platte River and municipality staff members continue to work on developing a community solar program that could serve all four member municipalities. The concept behind community solar is to “provide power and/or financial benefit to multiple community members”.¹ Primary reasons Platte River and the municipalities are considering a program is growing interest from customers and the ability to compete with rooftop solar using the economies of scale advantage inherent to utilities. Additionally, it is hoped that a successful joint community solar program will give Platte River and the member municipalities a base upon which to build other distributed energy resource program options.

This item will review preliminary cost estimates, the results of their recent customer survey and discuss how this information will be used to guide a community solar program design.

The Platte River Board of Directors received this information at the May 25, 2017 meeting. The Board supported Platte River continuing to work with municipality staff in development of a community solar project.

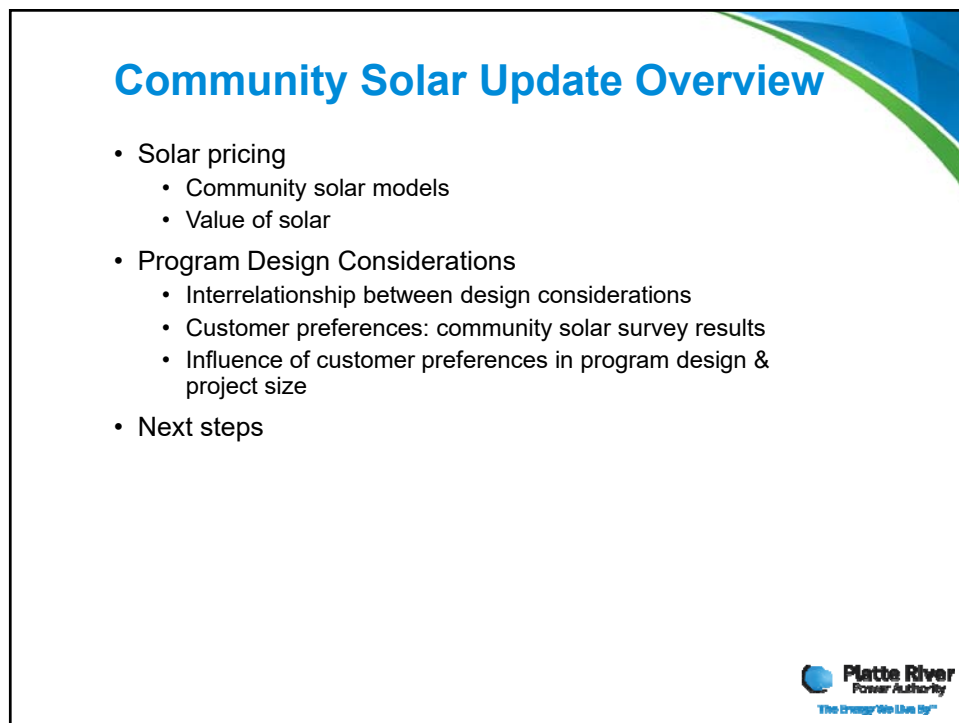
RECOMMENDATION:

Staff item only. No action required.

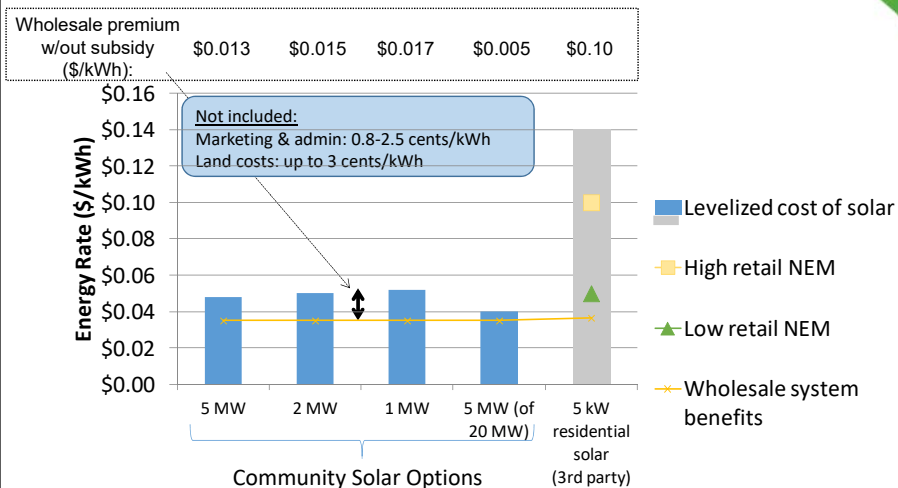
ATTACHMENTS:

 Attachment A: Presentation slides

¹ “A Guide to Community Shared Solar: Utility, Private, and Nonprofit Project Development”
(National Renewable Energy Laboratory – NREL).



Solar Costs and Savings

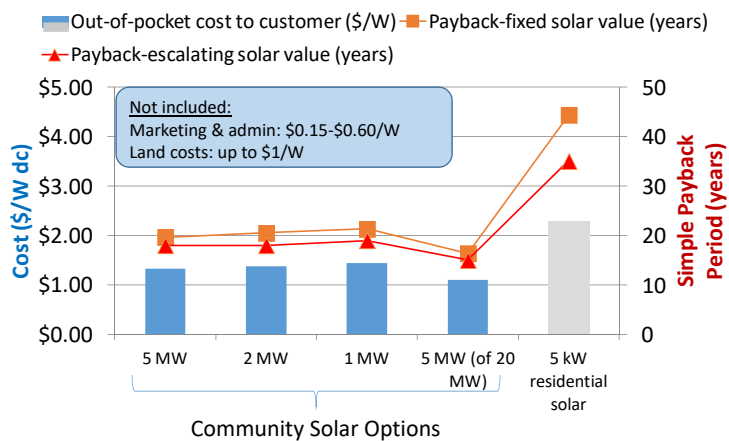


“Energy Model” program or “Pay as You Go.”



Capital Investment and Simple Payback

Costs are net of Investment Tax Credit.
Paybacks based on wholesale solar value unless otherwise indicated.
Escalating value assumed 2% value escalation and 0.5% output degradation.



“Capacity Model” program or “Prepay Model.”



Solar Wholesale System Value

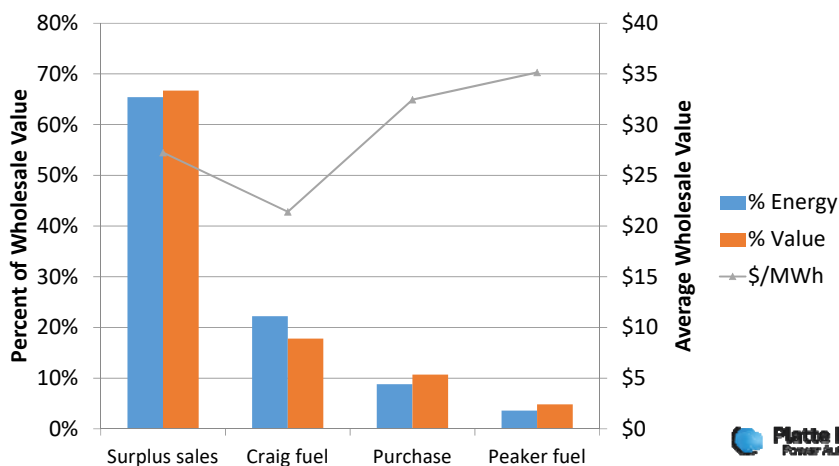
- What is the wholesale system value of solar?
 - The estimated financial benefit to Platte River due to solar energy & capacity
 - Does not include the cost of purchasing or transmitting (if applicable) the solar
- How is value of solar used?
 - Compensation for solar energy provided to Platte River
 - Fort Collins Solar Power Purchase & Community Solar
 - Portion of Loveland's Foothills Solar Project (~0.5 MW of 3.0 MW)
 - Community solar program planning / pricing
- The value includes
 - Avoided energy costs / increased energy revenues
 - Avoided generation capacity cost (15+ years away)
- The value does not include
 - Avoided transmission capacity – none to avoid
 - Avoided GHG costs – currently none to avoid
 - Ancillary services / integration costs
 - Storage / demand response costs
 - Avoided distribution costs (determined by munis)
 - Future market effects



Wholesale System Benefits

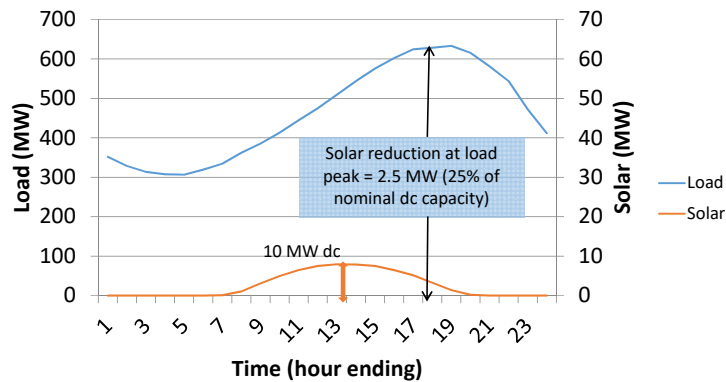
Energy value is based on hourly maximum marginal dispatch costs when solar is generating

Solar energy value (2016) = \$26.70/MWh (net) = \$27.90/MWh (retail)



Wholesale System Benefits

Generation capacity value – based on avoided peaker capacity using 25.5% of solar nameplate (dc rating): approximately \$1/kW(dc) per month or ~\$8.30/MWh (net) or \$8.70/MWh (retail)



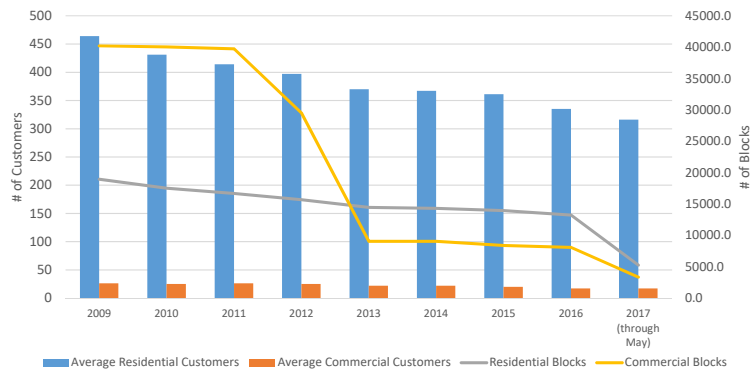
Total solar value = \$35/MWh (net) = \$36.60/MWh (retail)



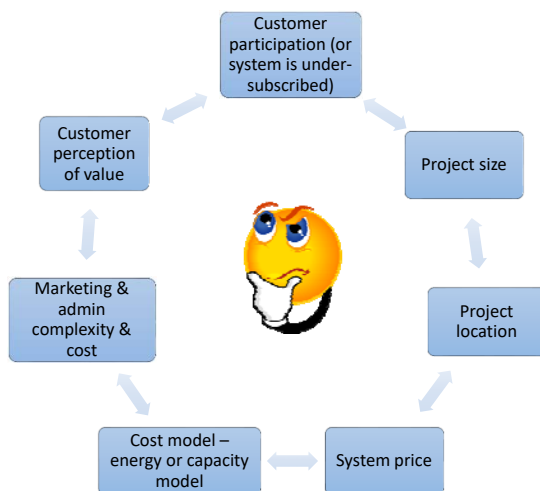
GreenSwitch

- 1999 - Renewable energy sales in Loveland began
- July 2006 – Combined sources to create renewable energy program "GreenSwitch"
 - Energy sold in 100 kWh blocks

Participation and Sales History



Program Design Considerations



Research Objective & Questions Addressed

- The primary objective of this market research was:
 - To identify which community solar program features are most preferred by the municipalities' customers

Important
features?

Price?

Feature
tradeoffs?

Potential
market?

Sample Size & Confidence Intervals

	Sample	Margin of Error
Estes Park Light & Power	135	(+/-) 8.43%
Fort Collins Utilities	291	(+/-) 5.74%
Longmont Power and Communications	350	(+/-) 5.24%
Loveland Water and Power	480	(+/-) 4.47%
Total	1256	(+/-) 2.77%



What's Important to Customers? "Survey Says..."

Program Attributes	Attribute Levels	Utility Score
Initial Investment	\$0	80.68
	\$1,000	50.30
	\$5,000	-13.59
	\$7,500 with financing	-42.01
	\$7,500 without financing	-75.38
Net Monthly Impact on Bill	\$30 less on bill	44.70
	\$12 less on bill	37.49
	\$2 less on bill	15.08
	\$10 more on bill	.84
	\$30 more on bill	-27.51
	\$60 more on bill	-70.60
Percent of Usage Covered by Solar Power	5%	-62.44
	25%	-11.21
	50%	19.12
	100%	54.53
Duration of Contract at Initial Sign-up	Month-to-month	17.33
	6 months	13.74
	1 year	10.27
	10 years	-10.85
	20 years	-30.48
Location of Solar Garden	At the power plant north of Fort Collins	-1.18
	Neighboring community	1.36
	Highly visible in your community	-8.05
	Less visible, but in your community	7.87

Consumer Choice Modeling:

Customers were presented with pairs of program scenarios, each having different attribute levels, then asked which they prefer.

This forces customer to weigh tradeoffs.

Utility Scores:

The collection of customer responses results in "Utility" values: measures the value customers attach to each Attribute Level.

A high utility value indicates a favorable level, negative indicates unfavorable.

Utility score range indicates how important an attribute is compared to other attributes.

Initial investment is the most important attribute, location of solar is least important. Location is least important and highly visible in community is least favorable location.

The total of all Utilities for a Scenario can tell us something about how favorable the Scenario is to customers.



Location

- Least important factor for customers (of factors surveyed)
- Does relate to other participation drivers:
 - Cost – look for locations that can maximize installed capacity and minimize costs
 - Solar value – are there quantifiable benefits or costs associated with particular locations?

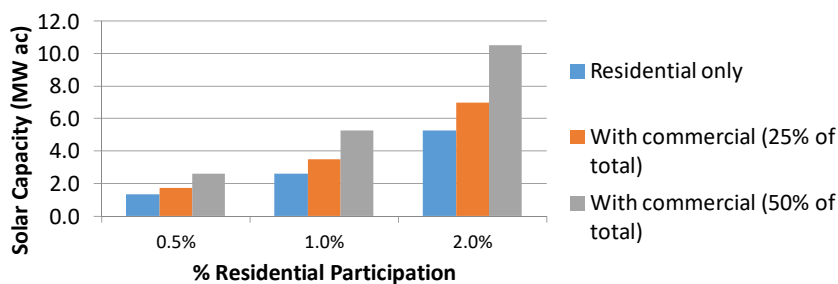


Energy or Capacity Model

- Survey results indicate a clear preference energy model
 - Early community solar projects were largely capacity model
 - Market is evolving towards energy model
- Capacity model key concerns:
 - Less customer demand
 - More complex / costly to administer
 - What is our vision for future solar program pricing models?
- Key concern of energy model: maintaining subscribers
 - Future solar costs likely to drop, leaving early community solar projects above market
 - Third-party (and some utilities) require long-term customer agreements
 - Risk: maintaining long-term customer satisfaction
 - Without long-term agreements:
 - Expect ongoing marketing
 - May need some price subsidy (to stay competitive with market)
 - Or risk unsubscribed portions of system (and full price subsidy)



Project Size & Potential Demand

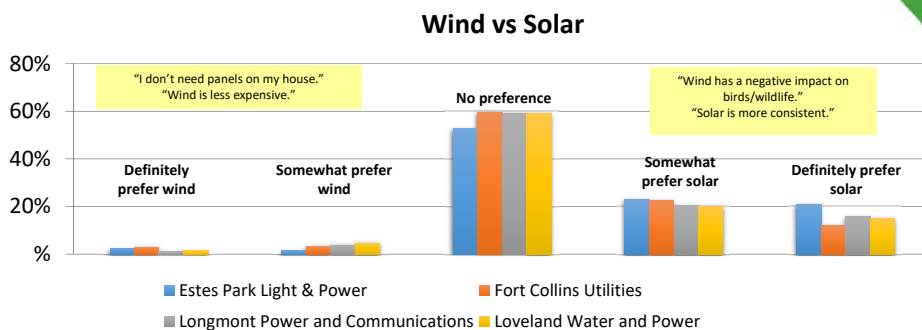


Reference point - wind program participation:

- 1 - 1.5% of residential customers
- 45 – 65% of total energy to commercial



Competition Between Programs



- Current Tariff 7 wind and new solar likely will have similar price premium
- More customers display a clear preference for solar
- Solar program could gain participation at wind program expense
 - Will leave more current wind program costs to be rate-based
- New wind may have a price advantage compared to solar



Next Steps

- Determine program design/implementation
 - Preferred model: energy or capacity
 - Marketing approach
 - Customer service / call center approach
 - Billing approach
 - Determine degree of outsourcing
- Determine preferred project size & location
 - Research available land and interconnection capacity at Rawhide
- RFP for solar project and community solar support services
 - Consider joint purchase with Northern Colorado coops / RMI RFP
 - Results in Aug/Sep time frame (assumes no major holdups from the group)





ITEM TITLE:

Commission & Council Report

SUMMARY:

Discuss events that the Loveland Utility Commission Board members attended, special topics and any City Council items related to the Water and Power Department from the past month.

-  City Council Report
-  2017 Annual Tri-City & District Water Board Meeting

RECOMMENDATION:

Commission/Council report only.

**ITEM TITLE:**

Director's Report

GENERAL & PREVIOUS LUC MEETING FOLLOW UP ITEMS:

Citizen Report on Self-Generating Rates: Bruce Croissant was informed that all of his documentation would be provided to our rate consultant for consideration during the next power cost of service rate study in 2019. He wanted to thank the utility and the commission for their time and listening to his concerns.

Investment Performance: Commissioner Schneider had asked a question at last month's meeting about interest income coming in below budget. For the 2017 budget process, the assumed return on the City's investments was 1.75%. The actual so far this year has been about 1.3%, so this is the biggest contributor to interest income coming in under budget. The projected interest income for a given year is based on the ending balance of the previous year, so if the monthly fund balances vary significantly from the prior year-end balance that could contribute to the interest income coming in below budget.

Reserve % Included on Financial Reports:

Sewer Rehabilitation Locations: Attachment A is a list of all locations for 2017 CIPP Rehabilitation. The contractor manages the locations, dates and times based on their schedule and material requirements. Scheduling occurs approximately one week in advance, however, there are occasionally last minute changes to schedules and locations. If interested in the current schedule and location, please contact Craig Weinland.

EVENTS:

The following events are coming up in the near future that we would like you to be aware of and attend if you find the time in your schedules.

Big Thompson River Stakeholder Meeting: This meeting will be held at the City of Loveland Public Works Department Room 202 and 203 on July 14, 2017, 10:30 a.m. – 12:00 p.m. This meeting will be a discussion covering the Big Thompson River Corridor Master Plan.

Colorado Water Congress 2017 Summer Conference: The conference will be held at Hotel Talisa in Vail, Colorado from August 23 through 25, 2017. Please let Courtney Whittet know if you are interested in attending. For more information, visit <http://www.cowatercongress.org/summer-conference.html>

2017 RMSAWWA/RMWEA Joint Annual Conference: The 2017 RMSAWWA/RMWEA Joint Annual Conference will be held at the Embassy Suites in Loveland, Colorado from September 10 - 13, 2017. For more information, visit http://www.rmwea.org/annual_conference.php



South Platte Forum: Save the date for the 2017 South Platte Forum on October 25th & 26th at the Loveland Embassy Suites. For more information, visit www.southplatteforum.org.

OPERATIONS:

Water Operations:

Reservoir Mixing System: The Loveland Water Treatment Plant (WTP) has installed a new reservoir mixing system. The mixing system components consisting of four individual mixing units, known as Solarbees, were installed on May 12, 2017. The solar-powered mixers were purchased as an outcome of the City's algal mitigation study in an attempt to alleviate taste and odor events caused by algal blooms within the Green Ridge Glade Reservoir. The basic mechanical concept of the Solarbee mixers is that thermally stratified water will be constantly mixed thus reducing the "sweet spot" where algae can proliferate. The Medora Corporation manufactured, delivered and assembled these Solarbee units, as can be seen in the attached photos.



Wastewater Treatment Plant (WWTP) Laboratory: The City of Loveland went through a Request for Proposal and interview process to select a design engineer/architect for the new Water Quality Laboratory to be situated at the WWTP. HDR, with offices in Fort Collins and Denver, was selected and negotiations are ongoing for a scope and fee to design the building. HDR has substantial municipal laboratory design experience, which should help guide City staff in determining the needs of the facility. Currently water quality work is completed in very small and antiquated laboratories situated at the WWTP and the Water Treatment Plant. The completion of the facility will allow for adequate laboratory and office space for personnel to continue to ensure the City complies with current and future water quality regulations. Construction of the facility is expected to begin in the summer or fall of 2018.

Mod-Valve Vault Study: Currently all of the water produced at the WTP passes through a series of vaults near the Devil's Backbone Trailhead area. These series of vaults, called the Mod-Valve Vault, house numerous pipes and valves from various vintages. Within the vault is a 30" butterfly valve that modulates and provides WTP operators a way to regulate the flow of water to the City. The City is in the process of completing a study looking at piping and valve improvements that will make the vaults safer, the system more redundant, and reduce headloss through the structure. Additionally, old and decommissioned pipes and valves will be removed and vaults that are no longer necessary will be filled to make the site safer. Stantec Consulting in Fort Collins is completing the study. Final design is scheduled for 2018 and construction in 2019.



The Foundry Utility Improvements: The Foundry Project, formerly known as the South Catalyst Project, is an extensive redevelopment of nearly three city blocks in the southern part of downtown Loveland. The Foundry Utility Improvement project is the installation of water, sewer and power infrastructure to replace aging infrastructure and put in place the appropriate water and sewer system improvements to support the redevelopment. The project is comprised of the installation of approximately 700 feet of 8 inch of waterline in Cleveland and Lincoln Avenue and the replacement of 370 feet of 6 inch waterline in E. 3rd Street with 8 inch waterline. Installation of 490 feet of new 12 inch sanitary sewer from the alley between E. 2nd Street and E. 3rd Street was added to connect to the sanitary sewer collection system located in E. 1st Street. The project also included the trenchless crossing

under the Greeley-Loveland Irrigation Company's ditch with two 36 inch steel casing pipes housing the water, sewer, and power utilities. The sanitary sewer improvements and ditch crossing were completed in mid-April and the remainder of the tasks associated with the Foundry Utility Improvements were completed on May 18, 2017.

Lakeside Terrace Forcemain: The Lakeside Terrace Lift Station is currently serviced by a 4 inch cast iron force main that was installed with the lift station in 1973. In 2016, the Lakeside Terrace Lift Station was renovated and upgraded. While testing the pumps, a leak on the forcemain was discovered. The leak was repaired and the forcemain was found to be in need of replacement in order to continue to provide reliable service. Colorado Civil Group out of Loveland, Colorado has been hired to complete the design to replace approximately 670 feet of cast iron forcemain with 4 inch PVC pipe. The construction is expected to occur by the Fall of 2017.

2017 Sewer Rehabilitation Project: Layne Inliner Inc has been awarded 2017 Sewer Rehabilitation Project. This project involves cleaning and lining the smaller collection clay sewer lines that have become cracked and have roots entering the line. As the roots enter the pipe and grow, the flow in the pipe is restricted causing maintenance problems. All this work is performed without any excavation, all access is gained through the existing manholes. Work is expected to start in July of 2017.

Power Operations:

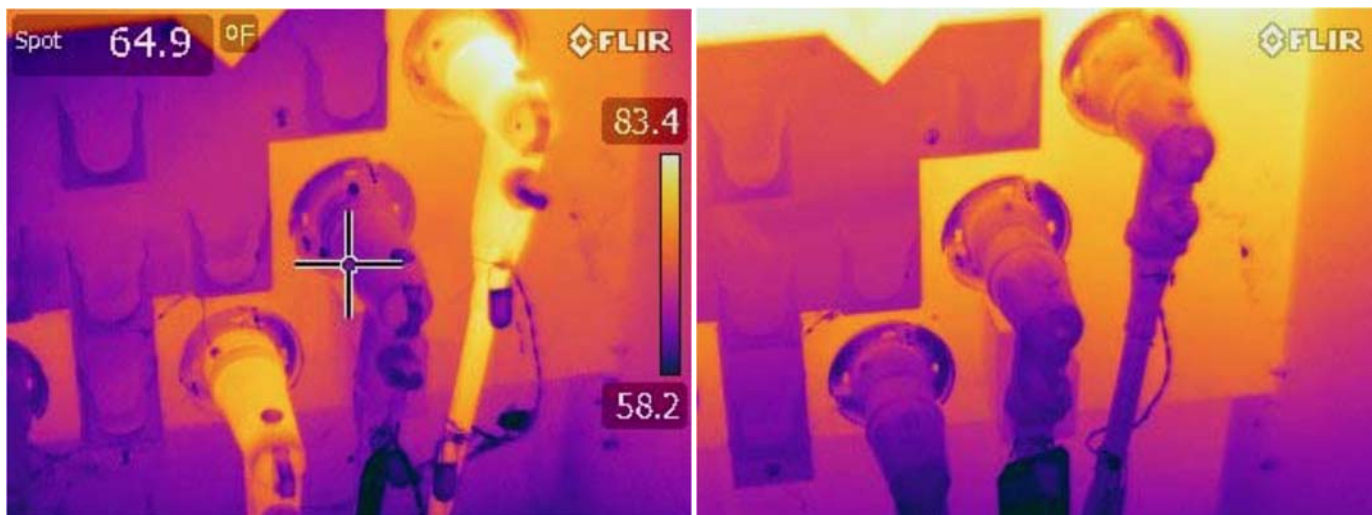
News from Power Crews: Crews set 14 new power poles in east Drake along the north side of Highway 34. As a team, crews strung in new line and secured to each pole. This process was time consuming since there was limited access for bucket trucks and the linemen had to climb most poles. This work completed the first section of overhead rebuild in the area called CP2 by CDOT and Kiewit Construction. Work continues on the 911 Big Thompson Canyon feed out of West Substation. GE Construction and Colorado Bore are both back on site to extend the underground infrastructure from Rossum Drive to Langston Lane. We are anticipating their work will be completed by June 9. Once the new underground conduits and vaults have been installed, Loveland Line Crews will follow by pulling wire and completing the underground installation in the area at both Langston Lane and Becker Lane off Glade Road. At the same time the underground system is being installed. Power contracting is working at a steady pace on the overhead rebuild of the 911 circuit. This work is currently being performed along Glade Road and Highway 34. With the current schedule, it appears that crews will be able to tie in the underground to the overhead the week of June 12th. The Water Treatment Plant (WTP) has been gracious to Power to allow a section of the WTP Campus to be used as storage. This minimizes the travel time to pick up material and keep it organized.



Substation Construction: Construction of the new substation continues at the end of May. The block wall and security gates are in place around the perimeter. Delivery and installation of the two power transformers, high voltage circuit breakers, and the buildings for both the City and Platte River Power Authority (PRPA) is complete. Crews from Interstate Electrical are currently constructing the high voltage bus infrastructure, site ground grid, and pulling power and control cable to the equipment. Brink Constructors is installing new transmission poles and conductor just west of the site. Construction is currently scheduled to wrap up near the end of June with an overall project completion goal of July 31st, 2017. Crews are continuing their work at Foothills Substation. This month we

completed the installation of the main feeder wires from the control building to the switchgears both inside and outside of the substation. Once the switchgears had been set, crews worked on the termination of the wires in both the switchgear and the control building breaker line up.

While doing key account inspections, crews found two transformers that had elbows which were showing a condition that would lead to an outage as the elbows failed. We used an infrared camera to identify hot spots in the transformers and switch cabinets. Once these elbows have been identified as being stressed, crews are scheduled to replace them ASAP to avoid an un-scheduled outage. Below is an example of elbows in heat stress before and after the replacement has been completed.



GENERATION, TRANSMISSION & NORTHERN COLORADO UTILITY REPORTS:

[Northern Water Conservancy District](#): The minutes from the May 11, 2017 board meeting have been posted. The next board meeting will be held on Thursday, July 13, 2017 at 9 am at Northern Water headquarters located at 220 Water Ave., Berthoud, CO 80513.

Northern Water summer tour season: Northern Water conducts two full-day East Slope facility tours, and two full-day West Slope facility tours, each summer. The two East Slope tours highlight the Conservation Gardens, water operations and proposed storage projects. The two West Slope tours travel through Rocky Mountain National Park to the collection facilities for the C-BT and Windy Gap projects.

Please let Courtney Whittet know if you are interested in attending one of the tours. The dates and approximate times for the 2017 tours are:

East Slope (7:30 a.m. - 4 p.m.)	West Slope (7 a.m. - 6 p.m.)
Wednesday, Sept. 6, 2017	Thursday, July 18, 2017
	Tuesday, Aug. 1, 2017

Chimney Hollow Reservoir receives final approval: The U. S. Army Corps of Engineers has signed the final Record of Decision and approved a 404 Clean Water Act Permit for the Windy Gap Firing Project. Final design of Chimney Hollow Reservoir is underway and construction is slated to begin in 2019. Water storage in Chimney Hollow Reservoir could occur by 2021 or 2022. The project is anticipated to cost \$400 million.

Platte River Power Authority (PRPA): The minutes from the May 25, 2017 meeting have not been posted yet. There is not a board meeting scheduled for June 2017, the next board meeting will be held on Thursday, July 27, 2017 at 9 am at PRPA headquarters located at 2000 E. Horsetooth Rd, Fort Collins, CO 80525.

Fort Collins Energy Board: The board met on June 8, 2017 and heard presentations on the following: Wholesale Renewable Premium, Future State Electric System Design, Rate Philosophy and Engage Volunteer Website Training. The minutes from this meeting have not yet been posted. The next board meeting will be held on Thursday, July 13, 2017 at 5:30 pm at the Colorado River Community Room, 222 LaPorte Avenue, Fort Collins, CO.

UTILITY APPLICATION SERVICES

CIS Replacement: We will be wrapping up the RFP process the week of June 12-14. This will be our final review of the RFP before it is released. We will be reviewing the vendor applications starting in late August.

Project & Request Tracking: One of the Technology Roadmap recommendations was to establish a tracking system for our team's work. Since the beginning of the year we have configured Cityworks for this purpose. The big projects, tracked as work orders, are reported to, approved and prioritized by our LWP Technology Steering Committee. There are currently 32 approved projects in our queue. The smaller, maintenance-type jobs are tracked as service requests. So far this year we have completed 110 requests within an average of 3.28 days. Here they are broken down by type:

- Application Requests - 1.8 days
- Application Support – 4.29 days
- Data Requests - 2.32 days
- Hardware Support - 4 days
- Map Requests – 5.71days
- Report Requests – 1.6 days

UTILITY ACCOUNTING:

Power Demand Up Slightly and Energy Continues To Be Sluggish: It has been a rather similar story to 2013 through 2016 with regard to power usage and peak demand through the first four months of this year – usage and demand both being flat, down or up slightly. Loveland's share of PRPA's peak was 80,729 kW, up 1.3% from April of last year. Purchased energy was up 3.4% vs. April of 2016. Overall, in comparing the year-to-date total of the January-April monthly peak demands to the same period in 2016, this year is up 3.7% (primarily due to January), and purchased energy is down 2.7% year-to-date.

Water Sales Update: It is early in the year, but the average water usage per customer is off to a slow start. This year's YTD average through April is 5,823 gallons per customer. The 5,823 gallons is 2.1% lower than the April YTD average usage of the past five years. In spite of this slow start, water sales are behind budget by only \$18,000 through April.

Update On 2018 Wholesale Power Rate: In a memo from PRPA General Manager and CEO Jason Frisbie dated May 12, 2017, PRPA staff anticipates recommending a 2.5% wholesale rate increase for 2018 to the PRPA Board at their August, 2017 meeting. This 2.5% increase is consistent with what PRPA projected for 2018 in August of last year. At the August 30, 2016 City Council Study Session, W&P staff projected a 5.0% retail rate increase for 2018. Since PRPA is looking to hold firm on the 2.5% wholesale rate increase for 2018, W&P staff anticipates holding to the 5.0% retail rate increase for 2018.

CUSTOMER RELATIONS:

Community Outreach:

Customer Relations will be participating in the following events:

1. Loveland Youth Gardeners Garden Tour and Art Show on June 17, 2017
2. Farmers Market June 25, 2017
3. Community Stewardship Lecture Series – Smart Homes July 11, 2017



(Photos left to right – Children's Water Festival, Trinity Lutheran Pre-K Earth Day, HPEC Grand Opening)

Facebook Insights (May - 2017):

- Reach (unique users) – 3269 people
- Engagement (unique users) – 250 people
- Impressions (total count) – 15846 people

Water Quality Campaign: A summer water campaign, communicating the “value” of water service began May 1st. Each month, the campaign focus on the *Colorado Water - Live Like You Love It* themes of care commit and conserve. Learn more at cityofloveland.org/LWP.

Media:

- Reporter Herald – May 8, 2017: [Loveland to look at mitigation of drinking water concerns](#)
- Reporter Herald – May 10, 2017: [Rocky Mountain Flycasters help fishers master the sport \(Loveland Children's Water Festival\)](#)
- Reporter Herald – May 17, 2017: [Feds issue permit for water project](#)
- Reporter Herald – May 18, 2018: [Texas man chosen to lead Loveland Water and Power](#)
- Reporter Herald – May 19, 2017: [Loveland takes stock as sloppy storm abates](#)
- Reporter Herald – May 21, 2017: [Loveland City Council to hear about actions against algae](#)
- Reporter Herald – May 23, 2017: [Loveland City Council gets report on algal bloom battle](#)
- American Cities and Towns – Staff received a media inquiry from the national magazine American Cities and Towns regarding the Efficiency Works – Homes program. The article is scheduled to be published in the June issue.
- The Best of Loveland – Staff received a media inquiry from the local magazine Best of Loveland. The article is scheduled to be published in the July issue.

Energy Efficiency:

From May 1 – June 30, customers can receive a double rebate (\$70) for recycling an old refrigerator and/or freezer.

Water Conservation:

The Garden in a Box program wrapped-up on May 11th with the garden pick-up event. The program promoted 80 low water use gardens with a \$25 discount from the utility. Gardens sold out for the fifth year in a row. This year LWP will also be offering a \$25 discount on an additional 15 gardens for sale in the Fall.



The Slow the Flow program offer residents and HOA customers a free irrigation inspection and a customized watering schedule designed to reduce water usage and keep landscaping healthy and beautiful all summer long. Assessments will run from June 12 – September 15. Enrollment information available at conservationcenter.org/slow-the-flow-2/outdoor-sprinkler-consultation/.

ATTACHMENTS:

 Attachment A: 2017 CIPP Rehabilitation Locations

Attachment A

Collector Sewerlines for Rehabilitation							
Location	Up Manhole	Down Manhole	Line Location	Pipe	Pipe Material	Pipe Length	Services
1300 block N Jefferson Ave.	3489	3488	In alley	8"	VCP	359	8
100 & 200 block of 4th St.	3348	3350	In alley	8"	VCP	65	2
101 & 200 block of 4th St.	3350	3351	In alley	8"	VCP	162	3
102 & 200 block of 4th St.	3351	3352	In alley	8"	VCP	186	4
103 & 200 block of 4th St.	3352	3420	In alley	8"	VCP	178	2
1300 Block N Taft Ave. (Westside)	1267	1268	Backyards	8"	VCP	151	2
1301 Block N Taft Ave. (Westside)	1268	1265	Backyards	8"	VCP	267	5
Behind houses in 1000 block Cimмерon Dr.	1194	1193	Backyards	8"	VCP	222	6
Behind houses in 1000 block Cimмерon Dr.	1193	1181	Backyards	8"	VCP	298	7
Behind house in 1500 (east) N. Dotsero Dr.	92	91	Backyards	8"	VCP	313	8
Behind house (east) 3200 Blk Franklin Ave.	918	919	Backyards	8"	VCP	288	8
Behind house (east) 3100 Blk Franklin Ave.	917	918	Backyards	8"	VCP	286	6
Behind house (east) 3000 Blk Franklin Ave.	909	917	Backyards	8"	VCP	245	8
Behind house (east) 3100 N. Sheridan Ave.	922	923	Backyards	8"	VCP	50	1
Behind house (east) 3100 N. Sheridan Ave.	923	924	Backyards	8"	VCP	233	6
Behind house (east) 3200 N. Sheridan Ave.	924	926	Backyards	8"	VCP	219	6
Behind house (east) 3400 N. Sheridan Ave.	974	930	Backyards	8"	VCP	226	6
Behind house (east) 3300 N. Sheridan Ave.	930	929	Backyards	8"	VCP	244	6
Behind house (east) 3300 N. Sheridan Ave.	929	925	Backyards	8"	VCP	302	6
Behind house (east) 3500 N. Franklin Ave.	972	959	Backyards	8"	VCP	96	2
Behind house (east) 3500 N. Franklin Ave.	959	864	Backyards	8"	VCP	231	6
Behind house (east) 3400 N. Franklin Ave.	864	928	Backyards	8"	VCP	310	8
Behind house (east) 3300 N. Franklin Ave.	928	927	Backyards	8"	VCP	297	8
Behind house (east) 3000 N. Colorado Ave.	692	8727	Backyards	8"	VCP	242	6
Behind house (east) 3100 N. Colorado Ave.	8727	704	Backyards	8"	VCP	286	8
Behind house (east) 3300 N. Colorado Ave.	704	703	Backyards	8"	VCP	298	8
Behind house (east) 3200 N. Colorado Ave.	708	703	Backyards	8"	VCP	300	8
Behind house (east) 3400 N. Logan Ave.	707	706	Backyards	8"	VCP	166	4
Behind house (east) 3300 N. Logan Ave.	706	705	Backyards	8"	VCP	300	10
Behind house (east) 3300 N. Logan Ave.	705	702	Backyards	8"	VCP	300	6

Collector Sewerlines for Rehabilitation							
Location	Up Manhole	Down Manhole	Line Location	Pipe	Pipe Material	Pipe Length	Services
Behind house (east) 3000 N. Logan Ave.	690	700	Backyards	8"	VCP	235	8
Behind house (east) 3100 N. Douglas Ave.	693	695	Backyards	8"	VCP	249	6
3108 N. Duffield Ave.	677	679	Sideyard	12"	VCP	151	2
2208 Frances Dr.	3895	3898	Sideyard	8"	VCP	233	2
2207 Frances Dr.	3902	3897	Backyards	8"	VCP	299	2
1506 Gloria CT	3851	3849	Street	8"	VCP	182	3
1404 23rd St. SW	3820	3869	ckyard/stre	8"	VCP	266	5
Behind house (west) 2100 blk. S Taft Ave.	3901	3899	Backyards	8"	VCP	291	7
800 Block Kelly Dr.	1173	1228	Street	8"	VCP	252	7
900 Block Kelly Dr.	1228	1230	Street	8"	VCP	275	8
900 Block Kelly Dr.	1230	1231	Street	8"	VCP	101	3
900 Block Kelly Dr.	1231	1229	Street	8"	VCP	113	3
209 Namaqua Ave. Elementry School	1361	9486	Street	8"	VCP	318	1
3310 N. Garfield Ave.	3103	3104	Parking lot	8"	VCP	434	
3400 N. Garfield Ave.	3104	3105	Open Field	8"	VCP	279	3
226 Harding Ct.	3105	4249	Sideyard	8"	VCP	82	2
Behind house 1220 blk of N. Jefferson	3488	3487	Alley	8"	VCP	358	8
500 Block E. 10th St.	3481	3503	Street	8"	VCP	589	20
1500 Blk. Of S. Douty Ave.	2509	2432	Street	8"	VCP	434	6
900 Blk 16th St. SW	2432	2434	Street	8"	VCP	261	3
901 Blk 16th St. SW	2429	2432	Street	8"	VCP	211	3
Fuchsia Ct.	2409	2414	Street	8"	VCP	206	5
1915 Daphine Dr.	2417	2418	Street	8"	VCP	144	2
1903 Daphine Dr.	2418	2414	Street	8"	VCP	137	2
1701 Daphine Dr.	2423	2424	Street	8"	VCP	133	2
923 Daphine Dr.	2424	2430	Street	8"	VCP	255	4

Collector Sewerlines for Rehabilitation							
Location	Up Manhole	Down Manhole	Line Location	Pipe	Pipe Material	Pipe Length	Services
903 Daphine Dr.	2430	2431	Street	8"	VCP	251	3
908 Deborah Dr.	2419	2421	Street	8"	VCP	254	3
1900 Blk S. Douglas Ave.	2399	2421	Street	8"	VCP	261	6
1800 Blk. S. Douglas Ave.	2422	2420	Street	8"	VCP	323	3
1900 Blk. S. Douglas Ave.	2420	2421	Street	8"	VCP	88	1
1814 Diana Dr.	2410	2401	Street	8"	VCP	247	6
1620 Diana Dr.	2412	2427	Street	8"	VCP	178	6
2004 S. Douglas Ave.	2394	2399	Street	8"	VCP	253	3
912 21st St. SW	2393	2397	Street	8"	VCP	274	4
905 S. Douglas Ave.	2397	2396	Street	8"	VCP	52	1
1407 S. Douglas Ave.	2511	2433	Street	8"	VCP	326	10
1512 S. Douglas Ave.	2433	2434	Street	8"	VCP	108	4
1018 20th St. SW	2373	2391	Street	8"	VCP	218	8
In Alley (North) behind 100 Blk of E. 4th	3343	3354	Alley	10"	VCP	379	8
In Alley (North) behind 200 Blk of E. 4th	3354	3422	Alley	10"	VCP	359	10
In Alley (North) behind 200 Blk of E. 2nd	unk	3419	Alley	8"	VCP	80	0
324 E. 2nd St.	3408	3409	Street	8"	VCP	321	5
404 E. 2nd St.	3409	3410	Street	8"	VCP	333	7
500 N. Washington Ave.	3428	3425	Street	12"	VCP	383	6
341 N. Washington Ave.	3425	3424	Street	12"	VCP	378	5
219 N. Washington Ave.	3424	3410	Street	12"	VCP	188	1
105 N. Washington Ave.	3410	2044	Street	12"	VCP	217	2
541 Lariat Dr.	4121	4120	Street	8"	VCP	293	3
5305 Lariat Dr.	4120	4114	Street	8"	VCP	316	3
5009 Ranch Acres Dr.	4105	4107	Sidyard	8"	VCP	120	2
3362 Florida Dr.	536	535	Street	8"	VCP	299	7
3284 Florida Dr.	535	539	Sidyard	8"	VCP	219	2
1029 21st. St. SW	2369	2387	Street	8"	VCP	301	10
1008 21st. St. SW	2387	2390	Street	8"	VCP	300	7

Collector Sewerlines for Rehabilitation							
Location	Up Manhole	Down Manhole	Line Location	Pipe	Pipe Material	Pipe Length	Services
928 21st. St. SW	2390	2393	Street	8"	VCP	307	10
844 22nd St. SW	2436	2441	Street	8"	VCP	302	7
2115 S. Custer Ave.	2445	2436	Street	8"	VCP	289	4
2115 Doreen Ct.	2392	2385	Street	8"	VCP	289	6
1918 S. Custer Ave.	2470	2448	Street	8"	VCP	207	3
1919 Crystal Ct.	2472	2450	Street	8"	VCP	115	3
719 19th St. SW	2477	2469	Street	8"	VCP	299	10
3rd St SE and S. Washington Ave.	2039	2037	Street	8"	VCP	177	0
Garfield Ave. Project							
	8964	2540	Street	6"	VCP	316	5
	2540	1442	Street	6"	VCP	146	2
	2539	2540	Street	6"	VCP	180	2
							479
Project Totals							
6" Total Footage		642	Ft				
8" Total Footage		21499	Ft				
10" Total Footage		738	Ft				
12" Total Footage		1317	Ft				
Project Services		479	Ea				

Attachment B



Big Thompson River Corridor Master Plan



We invite you to a Big Thompson River Stakeholder Meeting to discuss this project and gather your input!

**Friday, July 14, 2017
10:30 a.m. – 12:00 p.m.**

City of Loveland
Public Works Department
2525 West 1st Avenue
Loveland, CO 80537
Room # 202 & 203

Please RSVP to: stillack@wrightwater.com if you will be attending!

More information will be available on the project-specific website.

You will be notified via email when the website is launched.

The City's vision for the Big Thompson River corridor through Loveland is a fully "Connected Corridor," which includes a network of interconnected greenways, parks, open space and natural areas that provides the public with opportunities for recreation and interaction with the river and nature, while at the same time providing a healthy river and riparian ecosystem for aquatic and terrestrial wildlife, and reducing flood hazards.

