LOVELAND UTILITIES COMMISSION
REGULAR MEETING
February 15, 2017 - 4:00 p.m.
Service Center Willow Room
200 North Wilson Avenue

AGENDA

CALL TO ORDER

NEW EMPLOYEE INTRODUCTIONS

- Gordon Whitelock, Electric Distribution Design Supervisor

APPROVAL OF MINUTES – 1/18/2017

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

CONSENT AGENDA

1. Contract Award for Canyon Phase 1 (Circuit 911) Construction – Frank Lindauer
2. Approval of Revisions to Local Limits in Section 13.10.205 of Municipal Code – Bill Thomas

INFORMATION ITEMS

3. Water Supply Update – Larry Howard
4. Electric Legislative Update – Kim O'Field
5. Water Legislative Update – Michelle Erickson

REGULAR AGENDA

6. Contract Change Order No. 2 for Idylwilde Powerhouse Removal and Partial Penstock Decommissioning Project – Greg Dewey
7. The Foundry Utility Improvements Contract Award – Carlos Medina

STAFF REPORT

8. M36 Water Loss Audit Update – Michelle Erickson
9. 2016 Levels of Service Update for Water and Wastewater Utilities – Michelle Erickson
10. Financial Report Update – Jim Lees

11. **COMMISSION / COUNCIL REPORTS**

12. **DIRECTOR'S REPORT**

ADJOURN

The password to the public access wireless network (colguest) is accesswifi

*** 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 (Chairman), Gene Packer, Larry Roos, John Butler, Randy Williams

Council Liaison: Troy Krenning

City Staff Members: Alan Krcmarik, Alicia Calderón, Brieana Reed-Harmel, Christine Schraeder, Derek Turner, Frank Lindauer, Garth Silvernale, Greg Dewey, Gretchen Stanford, Jim Lees, John Beckstrom, Kim Frick, Lindsey Bashline, Larry Howard, Michael McCrary, Michelle Erickson, Mike, Margenau, Roger Berg, Mike Scholl

Guest Attendance: Chad Rodriguez from MSP Companies

CALL TO ORDER: Gary Hausman called the meeting to order at 4:00 pm

EMPLOYEE INTRODUCTION: Derek Turner

APPROVAL OF MINUTES: Hausman asked for a motion to approve the minutes of the December 14, 2016 meeting.

Motion: Dave Schneider made the motion.
Second: Dave Kavanagh seconded the motion. The minutes were approved unanimously. Randy Williams abstained due to not being present at the LUC meeting last month.

CITIZEN REPORTS: none

CONSENT AGENDA

Item 1: 2016 4th Quarter Goal Updates – Gretchen Stanford
This is a quarterly review of our progress on our 2016 utility goals.

Recommendation: Review the enclosed 2016 4th quarter goal updates and provide feedback to departmental staff.

Item 2: 2017 Contract Renewal for Hauling & Land Application of Biosolids – Michael McCrary
This item is to approve the 2017 contract renewal for hauling and land application of biosolids from the Wastewater Treatment Plant.

Recommendation: Adopt a motion recommending that LUC approve renewal of the biosolids hauling and land application contract for 2017 with Veris Environmental, LLC in an amount not to exceed $550,000 and authorize the City Manager to execute the contract on behalf of the City, following consultation with the City Attorney, and to modify the contract in form or substance as deemed necessary to protect the interests of the City.

Motion: Dave Schneider made the motion to accept the consent agenda items as written.
Second: Dan Herlihey seconded the motion. The motion was approved unanimously.

INFORMATION ITEMS

Item 3: Water Supply Update – Larry Howard
Raw water supply update.

Information item only. No action required.

REGULAR AGENDA

Item 4: Contract Award for Foothills Substation Construction – Frank Lindauer
Award of a contract for the Foothills Substation Construction Bid 2017-01.

Recommendation: Adopt a motion recommending that LUC award the contract for the construction services at the Foothills Substation site on Rio Blanco Avenue to Interstate Electrical Contractors, Inc. in an amount not to exceed $505,985.00 and authorize the City Manager to execute the contract on behalf of the City, following consultation with the City Attorney, and to modify the contract in form or substance as deemed necessary to protect the interests of the City.

Motion: Dan Herlihey made the motion.
Second: Gene Packer seconded the motion. The motion was approved unanimously.

Item 5: LUC 2016 Accomplishments and 2017 Goals – Gretchen Stanford
This item will give LUC a chance to review and set new goals for 2017 as well as update a staff compilation of the Utilities' 2016 accomplishments.

Staff will work with LUC Board Members by email to incorporate changes and suggestions to finalize the list of 2016 accomplishments and 2017 goals for inclusion in the Boards & Commissions Summit Book.

Item 6: Potential Acceptance of 4 Shares of Louden Ditch to the Water Bank – Kim Frick
This is a request to deposit 4 shares of Louden Irrigating Canal and Reservoir into the City's Water Bank.

Recommendation: Adopt a motion finding that the requirements set forth in City Code Section 19.04.080 have been met, and that acceptance of the Louden Irrigating Canal and Reservoir shares into the City of Loveland Water Bank is in the City's best interest and should be completed.

Motion: Dan Herlihey made the motion.
Second: John Butler seconded the motion. The motion was approved unanimously.

Item 7: CBT Market Prices – Larry Howard
Discuss the proposed CBT market price adjustment and the CBT purchase philosophy.

Recommendation I: Recognize, by resolution, the current CBT market price of $26,553/unit. This will result in a revised Cash-in-Lieu value, adding 5%, of $27,880/AF.

Motion: Dan Herlihey made the motion.
Second: Dave Schneider seconded the motion. The motion was approved unanimously.

Recommendation II: Direct staff to apply the concept of dollar cost averaging to potential purchases of CBT, not to exceed the 2017 budget allocation amount of $524,500, buying units periodically as C-I-L fees are collected, and direct that staff will negotiate prices as favorably as possible as market prices fluctuate up or down.

Motion: Dan Herlihey made the motion.
Second: Randy Williams seconded the motion. The motion passed with 7 members in favor and opposed by Dave Schneider.

STAFF REPORTS

Item 8: Update on The Foundry Project – Mike Scholl
This item is to provide the LUC with an overview of The Foundry Project.

Staff report only. No action required.

COMMISSION/COUNCIL REPORTS

Item 9: Commission/Council Reports

- **LUC Meeting Location:** We will host the next LUC meeting in the Willow Room at the Service Center and ask for feedback on whether to keep future meetings in the Willow Room or the Board Room at the Service Center.

- **Board Opening:** There is still an opening on the LUC Board; however, there are two individuals interested in applying for the position.

- **March LUC Meeting:** Due to Spring Break for both the Thompson and Poudre School Districts, which would result in poor staff attendance, it was decided to move the March LUC meeting up by one week to March 8, 2017.

Council Report: Gretchen Stanford gave on Troy Krenning's behalf

City Council Study Session – January 17
- Nothing of interest

City Council Study Session – January 10
- Nothing of interest

City Council Regular Meeting – January 3
- Nothing of interest

City Council Study Session – December 27
- Meeting Cancelled

City Council Regular Meeting – December 20
- Meeting Cancelled

DIRECTOR'S REPORT

Item 10: Director's Report – Gretchen Stanford
Discussed the changes in the look and content of the Director's Report. She asked for comments and suggestions from the board. Overall, the board liked the new look.

ADJOURN The meeting was adjourned at 7:13 pm. The next LUC Meeting will be February 15, 2017 at 4:00 pm.

Respectfully submitted,

Michelle Erickson
Recording Secretary
Loveland Utilities Commission

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

AGENDA ITEM: **1**
MEETING DATE: 2/15/2017
SUBMITTED BY: Frank Lindauer, Electrical Engineer

TITLE: Contract Award for Canyon Phase 1 (Circuit 911) Construction

DESCRIPTION:
The purpose of this item is to award a contract to Power Contracting, LLC, for the Canyon Phase 1 (Circuit 911) Construction, Bid 2016-87.

SUMMARY:
Circuit 911 provides power to customers over sixteen miles in the Big Thompson Canyon area from West Substation on Namaqua Road to the communities in Drake and Waltonia. The Canyon (Circuit 911) Construction project involves making system improvements, converting voltage to City standards, building new and rebuilding existing infrastructure. The primary goal of this project is to improve power quality and reliability to Loveland Water and Power customers. To minimize the number and length of power outages, the existing power lines will remain in place and energized until new lines are operational. The project is scheduled to proceed in three phases following the tentative schedule shown in the table below:

Project Phase	Geographic Area	Projected Start Date	Projected Finish Date
1	West Substation, Namaqua Road to City of Loveland Water Treatment Plant	March 1, 2017	September 1, 2017
2	City of Loveland Water Treatment Plant to Colorado Cherry Company Store	Fall 2017	Spring 2018
3	Colorado Cherry Company Store to end of line in Drake and Waltonia	Spring 2018	Winter 2018

On January 26, 2017, the City received bids from pre-qualified contractors for the Canyon Phase 1 (Circuit 911) Construction project. A committee comprised of Power Division personnel and our outside engineering consultant evaluated the bid responses and unit prices. Based upon this evaluation, the committee is recommending the lowest bidder Power Contracting, LLC for award.

Per Municipal Code 3.12.060A and 3.12.060B, the LUC must approve Water and Power contracts above $500,000 or any change order that causes a contract to equal or exceed $500,000 and which, when combined with all previous change orders, equals or exceeds 20% of the original contract amount.

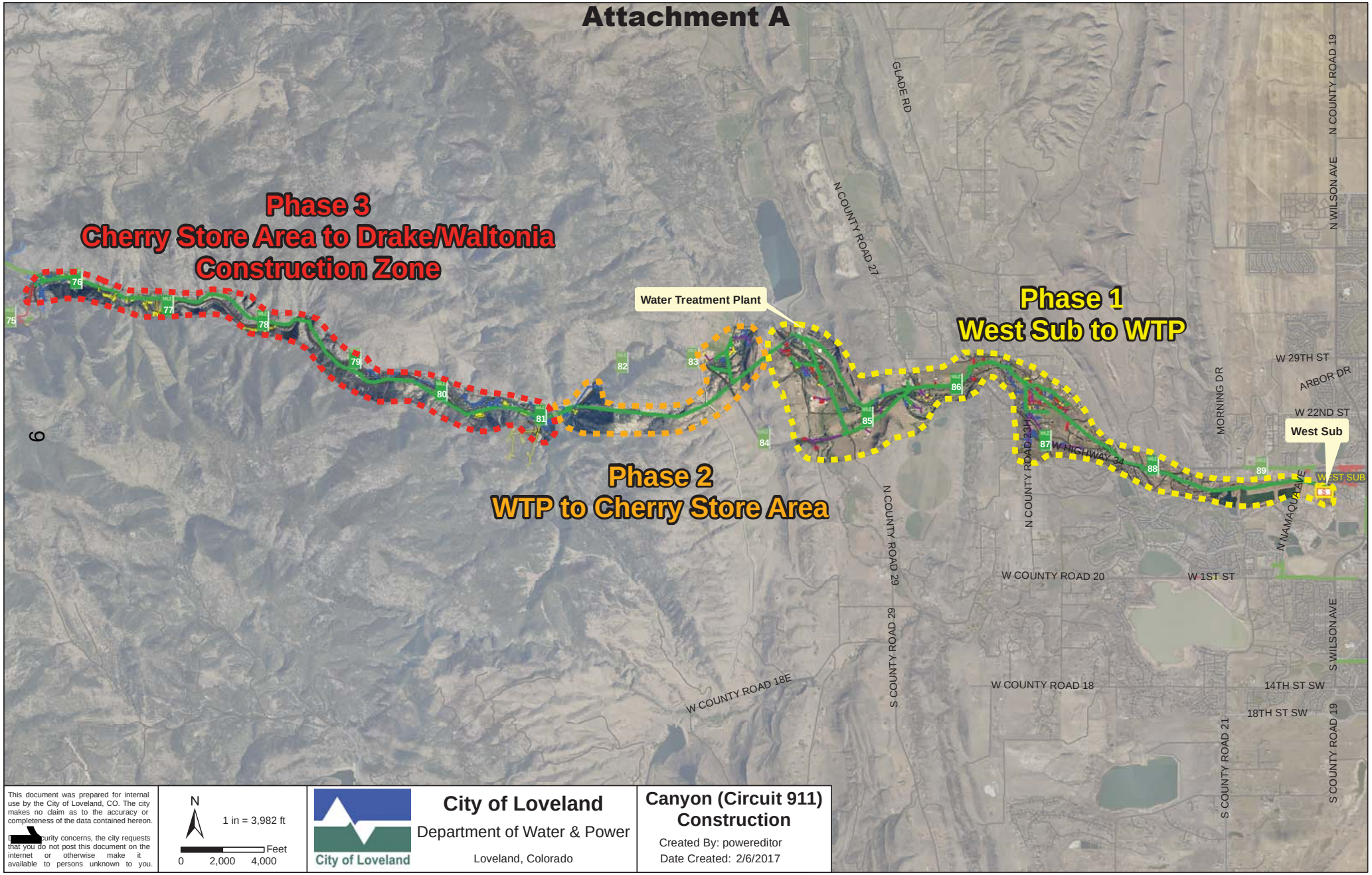
RECOMMENDATION:

Adopt a motion recommending that LUC award the contract for Canyon Phase 1 (Circuit 911) Construction to Power Contracting, LLC in an amount not to exceed $1,118,349.89 and authorize the City Manager to execute the contract on behalf of the City, following consultation with the City Attorney, and to modify the contract in form or substance as deemed necessary to protect the interests of the City.

ATTACHMENTS:

- **Attachment A:** Canyon (Circuit 911) Construction Overview Map
- **Attachment B:** Canyon Phase 1 (Circuit 911) Construction Detail Map
- **Attachment C:** Bid Tabulation

Attachment A



N

1 in = 3,982 ft

0 2,000 4,000 Feet

City of Loveland

City of Loveland

Department of Water & Power

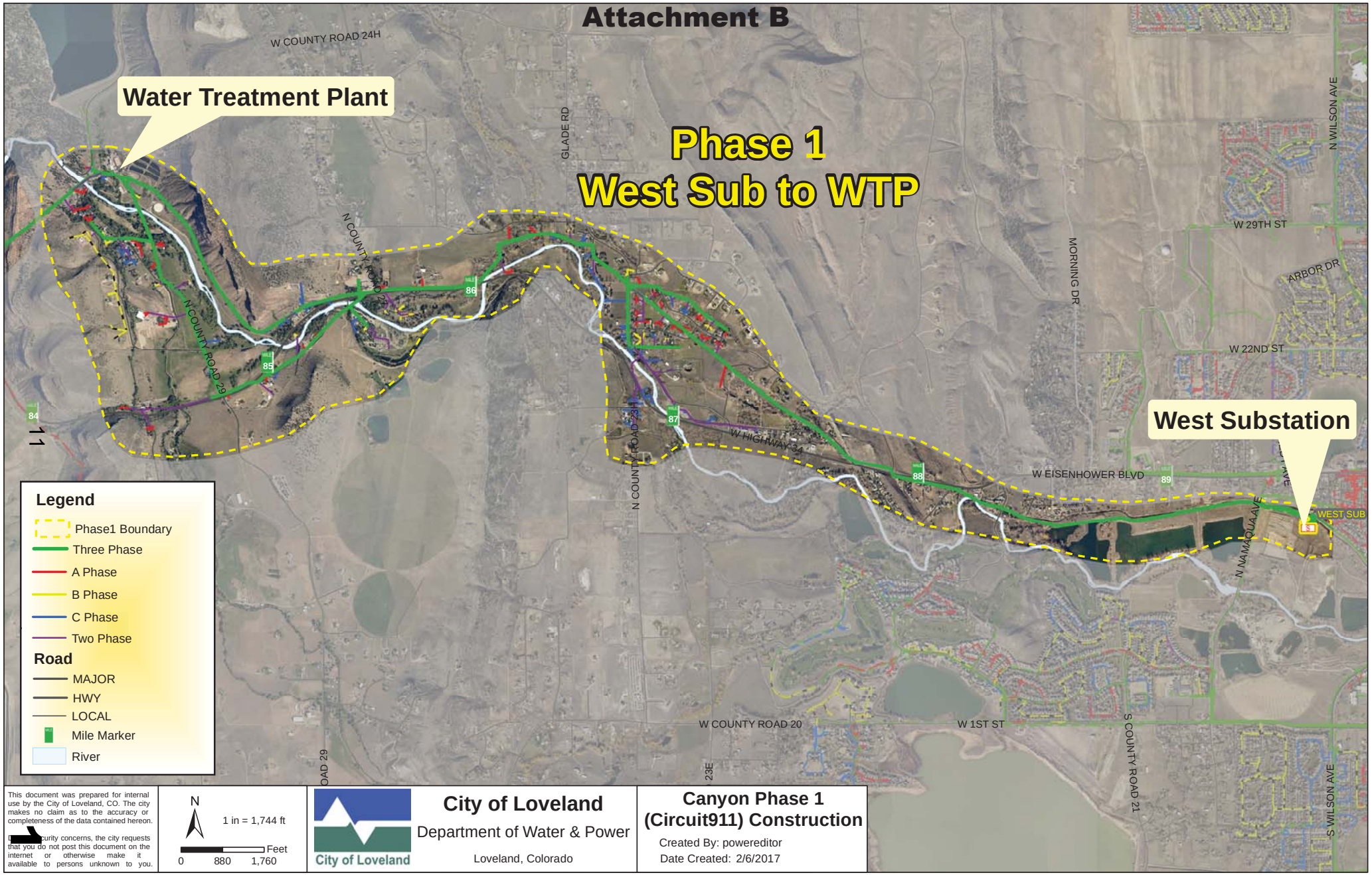
Loveland, Colorado

Canyon (Circuit 911) Construction

Created By: powereditor

Date Created: 2/6/2017

1


Attachment B
Water Treatment Plant
Phase 1
West Sub to WTP
West Substation
W COUNTY ROAD 24H
GLADE RD
N WILSON AVE
W 29TH ST
ARBOR DR
MORNING DR
W 22ND ST
N COUNTY ROAD 29
N COUNTY ROAD 23
N COUNTY ROAD 23H
W HIGHWAY 34
W EISENHOWER BLVD
N NAMAQUA AVE
WEST SUB
W COUNTY ROAD 20
W 1ST ST
S COUNTY ROAD 21
S WILSON AVE
84
85
86
87
88
89
Legend
Phase1 Boundary
Three Phase
A Phase
B Phase
C Phase
Two Phase
Road
MAJOR
HWY
LOCAL
Mile Marker
River
This document was prepared for internal use by the City of Loveland, CO. The city makes no claim as to the accuracy or completeness of the data contained hereon.
N
1 in = 1,744 ft
Feet
0 880 1,760
City of Loveland
City of Loveland
Department of Water & Power
Loveland, Colorado
Canyon Phase 1
(Circuit911) Construction
Created By: powereditor
Date Created: 2/6/2017

1

Attachment C - Bid Tabulation

Canyon Phase 1 (Circuit 911) Construction Bid #2016-87

Pre-qualified Contractor	Bid Price
Power Contracting, LLC	$1,118,349.89
Henkels & McCoy, Inc.	$1,377,750.58
Sturgeon Electric Company, Inc.	Did not submit bid by cutoff time

1

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

AGENDA ITEM: **2**
MEETING DATE: 2/15/2017
SUBMITTED BY: Bill Thomas, Pretreatment Coordinator

TITLE: Revision of Local Limits Wastewater Pretreatment Standards

DESCRIPTION:
Proposed revisions of local limits wastewater pretreatment standards in Section 13.10.205 of the Loveland Municipal Code.

SUMMARY:
In accordance with the Wastewater Treatment Plant's (WWTP) discharge permit, Loveland Water and Power's Pretreatment Program performed a technical evaluation of the need to revise or develop local limits. After evaluating current water quality standards, monitoring data, and WWTP operation data, the technical evaluation showed that local limits need to be revised. After considering toxicity, removal efficiency, the upcoming WWTP expansion project, potential for a discharge limit, and potential for a compliance schedule, the revised local limits should continue to protect against pass through and interference, protect beneficial use of biosolids of the WWTP, and have no impact on current significant industrial users.

The revised local limits were based on current water quality standards and the City of Loveland's Publicly-Owned Treatment Works ("POTW") operations and monitoring information from 2013 through 2016. The data shows arsenic, copper, iron, mercury, and selenium each make up twenty-five percent or more of their respective water quality standard. Currently, selenium is the only parameter for which the WWTP has a discharge limit. The WWTP currently demonstrates removal efficiency of greater than eighty percent (>80%) for just four pollutants. Three pollutants, arsenic, mercury and selenium, exceeded the current (2012) Maximum Allowable Headworks Loading (MAHL) over the 2013 through 2016 period. The potential for future discharge limits or a compliance schedule(s) exist.

Considering the above, and in an effort to prevent pass-through and interference, and to protect beneficial use of biosolids, various safety factors were used to account for and accommodate one or more of the following:

- Uncertainties that are associated with sample collection (type, duration, frequency, etc.)
- Sample analyses and measurements in micrograms per liter and nanograms per liter
- Potential increase from all domestic and industrial users
- Residential growth and contribution
- Industrial User (IU) and Significant Industrial User (SIU) growth and facility changes
- WWTP modifications and expansion
- Pollutant removal efficiency
- Unanticipated discharges, slug load
- Toxicity and bioaccumulation of the pollutant
- Potential for a discharge limit

- Potential for a compliance schedule
- Known or forthcoming regulatory standards

The following table compares the current MAHL to the proposed new MAHL. Converting the MAHL to a Maximum Allowable Industrial Loading (MAIL) then calculating the MAIL to a daily maximum uniform discharge concentration resulted in a recommendation to increase the local limit for seven pollutants (arsenic, chromium, copper, iron, molybdenum, silver, and zinc); decrease the limit for two pollutants (cyanide and selenium) and maintain the existing limit for four pollutants (cadmium, lead, mercury, nickel).

City of Loveland - Pretreatment Program - Local Limits comparison

MAHL Comparison pounds/day				SIU Uniform Daily Maximum Local Limit (mg/L)				Limiting Criteria		
Parameter	2012	2017		Parameter	2012	2017		Parameter	2012	2017
Arsenic	0.58	0.84		Arsenic	0.27	0.30		Arsenic	Biosolids	Biosolids
Cadmium	0.17	0.17		Cadmium	0.12	0.12		Cadmium	WQ (C)	WQ (C)
Chromium	2.73	3.85		Chromium	1.26	1.49		Chromium	Permit	WQ (C)
Copper	13.6	11.37		Copper	3.91	4.04		Copper	Biosolids	WQ (C)
Cyanide	0.85	0.91		Cyanide	0.46	0.44		Cyanide	Permit	WQ (A)
Iron	266	474		Iron	171	256		Iron	WQ (C)	WQ (C)
Lead	2.04	2.72		Lead	1.53	1.53		Lead	WQ (C)	WQ (C)
Mercury	0.013	0.016		Mercury	0.0001	0.0001		Mercury	Permit	WQ (C)
Molybdenum	1.97	1.64		Molybdenum	0.88	0.99		Molybdenum	Biosolids	Biosolids
Nickel	3.44	7.22		Nickel	2.49	2.49		Nickel	Biosolids	Biosolids
Selenium	0.55	0.46		Selenium	0.11	0.09		Selenium	Permit	Permit
Silver	2.75	2.01		Silver	1.50	1.67		Silver	WQ (C)	WQ (C)
Zinc	30.1	30.5		Zinc	9.06	11.12		Zinc	Threshold	Threshold

Increase in value

Decrease in value

No Change in Value

Attachment A is a copy of the spreadsheet used to calculate the new local limits. The most stringent value from the criteria evaluated is shown on the spreadsheet as black background and white text. The Pretreatment Coordinator finds the 2017 local limits are technically defensible, protect against pass through and interference, protect beneficial use of biosolids, and will protect the water quality of the Big Thompson River, and recommends that the LUC approve the revisions.

Additionally, the Pretreatment Coordinator proposes, by addition of a new subsection D of Section 13.10.205 of Loveland Municipal Code, to authorize the Director of Water & Power, or his or her designee, to develop specific discharge limitations for any other toxic or inhibiting pollutant as necessary to prevent interference, pass through, danger to the health and safety of POTW personnel or the general public, environmental harm, a POTW permit violation, or to avoid rendering the POTW's biosolids unacceptable for economical reclamation, disposal, or beneficial use. The authority for such provision is found in Sections 13.10.201 and 202 of the Loveland Municipal Code.

Revisions of the local limits require an ordinance approved by City Council. Draft language of the proposed ordinance is attached as Attachment B.

RECOMMENDATION:
Adopt a motion recommending that Loveland City Council approve the proposed revisions to the local limits wastewater pretreatment standards at Section 13.10.205 of the Loveland Municipal Code, as shown in the attached proposed ordinance, or as revised in form and substance as necessary.

ATTACHMENTS:

- **Attachment A:** Copy of the spreadsheet used to calculate the local limits.
- **Attachment B:** Draft language of proposed ordinance revising the local limits and providing additional discretion to adjust discharge limitations for pollutants as necessary

Attachment A

City of Loveland - Pretreatment Program - 2017 Local Limits Calculations

Background Data[1]

Parameter	Discharge Permit Limit	Water Quality Acute	Water Quality Chronic	Activated Sludge Threshold	Anaerobic Digestion Threshold	Biosolids Disposal Criteria	Primary Treatment % Removal	WWTP % Removal	Receive Stream Level	Average Domestic Level
Arsenic		0.34	0.0076	0.1	1.6	75	5	43	0.00038	0.0007
Cadmium		0.0075	0.001	1	20	85	22	49		0.0003
Chromium*		0.016	0.011				25	75		0.0016
Copper		0.040	0.024	1	40	4300	26	82	0.0025	0.036
Cyanide		0.005		0.1	4		17	60		0.0013
Iron			1.0				29	82	0.102	0.37
Lead		0.269	0.01	1	340	840	41	68	0.00027	0.0013
Mercury			0.00001	0.1		57	40	95	0.0000027	0.00006
Molybdenum			0.15			75	11	22		0.005
Nickel		1.243	0.138	1	10	420	15	28	0.0009	0.007
Selenium	0.0046					100	9	35	0.0028	0.0035
Silver		0.015	0.0023		13		49	90	0.00001	0.0003
Zinc		0.457	0.346	0.3	400	7500	36	55		0.093

Flow data	MGD
POTW (avg.)	7.80
SIU (projected)	0.10
Dom/Comm (avg.)	7.70

Stream	MGD
A-1E3	0.9
C-30E3	2.7

Digester Data		
Digester TS-out	1.75	percent
Digester flow - in	0.035	MGD
Digester flow - out	0.033	MGD

SIU flow (max.)		
	GPD	MGD
Woodward	10,000	0.01
SIU	90,000	0.09
		0.10

Maximum Allowable Headworks Loading (MAHL) calculations

Parameter	Discharge Permit Limit (Ln)	Water Quality Acute (La)	Water Quality Chronic (Lc)	Activated Sludge Inhibition (Las)	Anaerobic Digestion Inhibition (Lad)	Biosolids Disposal Criteria (Lsd)	MAHL (lbs/day)	Safety Factor (percent)	MAHL w/ Safe.Fact. (lbs/day)	Domestic Loading (lbs/day)	SIU MAIL lbs/day	SIU Uniform Daily Maximum Limit	
Arsenic		43.3	1.15	6.8	1.1	**0.84**	0.84	65	0.29	0.04	0.25	0.30	mg/l
Cadmium		1.07	**0.17**	83.4	11.9	0.84	0.17	30	0.12	0.02	0.10	0.12	mg/l
Chromium		4.64	**3.85**				3.85	65	1.35	0.10	1.25	1.49	mg/l
Copper		16.0	**11.4**	87.9	14.2	25.3	11.37	50	5.68	2.31	3.37	4.04	mg/l
Cyanide		**0.91**		7.8	1.9		0.91	50	0.45	0.08	0.37	0.44	mg/l
Iron			**474**				474	50	237	24	213	256	mg/l
Lead		61.0	**2.72**	110	146	5.9	2.72	50	1.36	0.08	1.28	1.53	mg/l
Mercury			**0.02**	10.8		0.29	0.016	76	0.004	0.0039	0.0001	0.0001	mg/l
Molybdenum			16.8			**1.64**	1.64	30	1.15	0.32	0.83	0.99	mg/l
Nickel		125	16.8	76.5	10.4	**7.22**	7.22	65	2.53	0.45	2.08	2.49	mg/l
Selenium	**0.46**					1.38	0.46	35	0.30	0.22	0.07	0.09	mg/l
Silver		10.9	**2.01**		4.2		2.01	30	1.41	0.02	1.39	1.67	mg/l
Zinc		73.7	67.3	**30.5**	212	66	30.5	50	15.2	6.0	9.27	11.12	mg/l

Background Data(1) = mg/L, Biosolids in mg/kg, or as noted.

x.xx = Limiting criteria and most stringent value.

* - used Cr 6 values to protect WQ.

MGD = million gallons per day

MAHL = Maximum Allowable Headworks Loading

MAIL = Maximum Allowable Industrial Loading

Attachment B

FIRST READING _____

SECOND READING _____

ORDINANCE NO. _____

AN ORDINANCE AMENDING SECION 13.10.205 OF THE LOVELAND MUNICIPAL CODE CONCERNING LOCAL LIMITS WASTEWATER PRETREATMENT STANDARDS

WHEREAS, Chapter 13.10 of the Loveland Municipal Code sets forth the wastewater pretreatment standards for discharges into the City of Loveland's ("City's") Publicly Owned Treatment Works ("POTW") and enables the City to comply with applicable state and federal laws, including the Clean Water Act, 33 U.S.C. § 1251 *et seq.*, and the General Pretreatment Regulations, 40 C.F.R. Part 403; and

WHEREAS, the Colorado Department of Public Health and Environment (CDPHE) issued the POTW a discharge permit that required the City's Pretreatment Program to submit a Technical Evaluation of the need to revise the local limits. If the technical evaluation revealed that revision of local limits were necessary, the City was required to submit proposed revisions of local limits to CDPHE and the Environmental Protection Agency (EPA); and

WHEREAS, the City's technical evaluation revealed that a revision to the local limits wastewater pretreatment standards is necessary and was recommended by EPA;

WHEREAS, the City's Pretreatment Coordinator has proposed changes to Section 13.10.205 to respond to the EPA's recommendation; and

WHEREAS, in response to EPA's recommendation, the proposed changes to Chapter 13.10.205 will be submitted to the EPA after First Reading for its approval; and

WHEREAS, on February 15, 2017 the proposed changes were reviewed by the Loveland Utilities Commission, which adopted a motion recommending that the City Council adopt an ordinance amending Section 13.10.205 to incorporate the proposed changes to the local limits wastewater pretreatment standards; and

WHEREAS, the City Council desires to amend Chapter 13.10 to incorporate the proposed changes to the local limits, subject to final approval by the EPA.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOVELAND, COLORADO:

Section 1. That Section 13.10.205 of the Loveland Municipal Code is hereby repealed in its entirety and reenacted to read as follows:

13.10.205 Local limits.

A. The following pollutant limits are established to protect against pass through and interference **AND TO PROTECT BENEFICIAL USE OF BIOSOLIDS**. No significant industrial user shall discharge wastewater containing in excess of the following daily maximum limits (all concentrations are total):

Pollutant	Daily Maximum Limit
Arsenic	~~**0.27**~~ 0.30 mg/l
Cadmium	0.12 mg/l
Chromium	~~**1.26**~~ 1.49 mg/l
Copper	~~**3.91**~~ 4.04 mg/l
Cyanide	~~**0.46**~~ 0.44 mg/l
Iron	~~**171**~~ 256 mg/l
Lead	1.53 mg/l
Mercury	0.0001 mg/l
Molybdenum	~~**0.88**~~ 0.99 mg/l
Nickel	2.49 mg/l
Selenium	~~**0.11**~~ 0.09 mg/l
Silver	~~**1.50**~~ 1.67 mg/l
Zinc	~~**9.06**~~ 11.12 mg/l

B. The above daily maximum limits may apply at the significant industrial user's end of process or where the significant industrial user's facility wastewater is discharged to the POTW.

C. The director may impose mass limitations in addition to, or in place of, the concentration based limitations above.

D. IN ADDITION, THE DIRECTOR MAY DEVELOP SPECIFIC DISCHARGE LIMITATIONS FOR ANY OTHER TOXIC OR INHIBITING POLLUTANT AS NECESSARY TO PREVENT INTERFERENCE, PASS THROUGH, DANGER TO THE HEALTH AND SAFETY OF POTW PERSONNEL OR THE GENERAL PUBLIC, ENVIRONMENTAL HARM, A POTW PERMIT VIOLATION, OR TO AVOID RENDERING THE POTW'S BIOSOLIDS UNACCEPTABLE FOR ECONOMICAL RECLAMATION, DISPOSAL OR BENEFICIAL USE.

Section 2. That as provided in City Charter Section 4-9(a)(7), this Ordinance shall be published by title only by the City Clerk after adoption on second reading unless the Ordinance has been amended since first reading in which case the Ordinance shall be published in full or the amendments shall be published in full. This Ordinance shall be in full force and effect no sooner than 10 days from the date after publication after adoption on second reading, and only upon written approval from the U.S. Environmental Protection Agency.

ADOPTED this _____ day of _____, 2017.

_____

Cecil A. Gutierrez, Mayor

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
Assistant City Attorney

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

AGENDA ITEM: 3
MEETING DATE: 2/15/2017
SUBMITTED BY: Larry Howard, Senior Civil Engineer

TITLE: Water Supply Update

DESCRIPTION:
Raw water supply update.

SUMMARY:
Attachment A is the Snow–Water Equivalent chart for Bear Lake station as of February 7, 2017. Water Resources Staff generated this chart to show a range of low, median, and high years as well as the current year-to-date snow accumulation for the Bear Lake SNOTEL station in the Big Thompson Watershed.

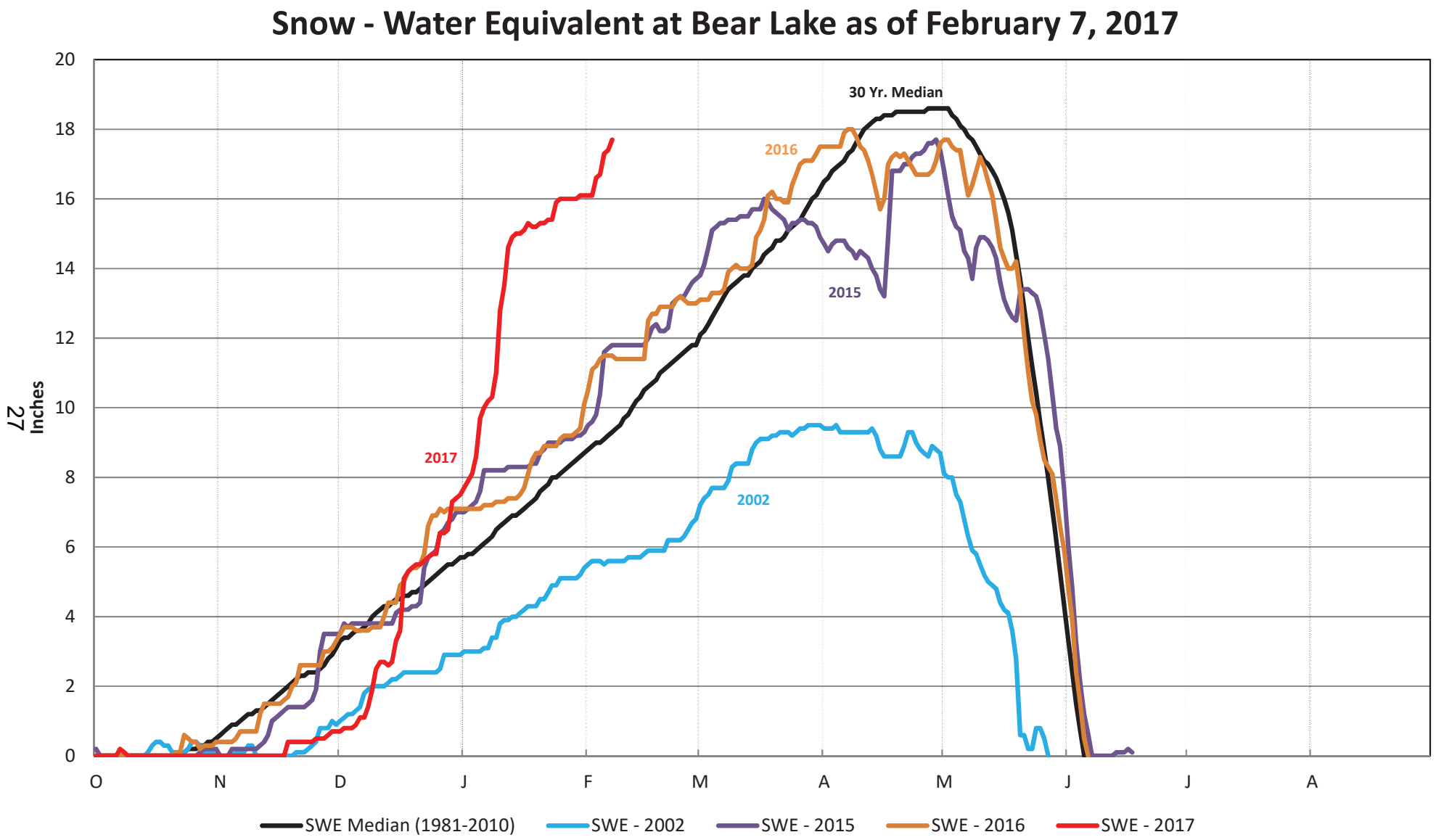
Snowpack for the Bear Lake station is continuing to rise and is well above average since January. This snowpack curve is very unusual, as it does not follow any of the other more gentle sloping lines shown on the chart. We still have some big snowpack months ahead of us, so continue to watch it accumulate.

Attachment B is snowpack and streamflow comparison. The Statewide snowpack is at 157% and the Big Thompson River specifically is at 151%. It appears that the highest snowpack is in the St. Vrain River. The streamflow forecast for the Big Thompson River is 122% of average. So far we have had 1.47 of precipitation.

RECOMMENDATION:
Information item only. No action required.

ATTACHMENTS:
- **Attachment A:** Snow–Water Equivalent Chart for Bear Lake SNOTEL Station
- **Attachment B:** Snowpack and Streamflow Comparison

Attachment A



Attachment B

Snowpack and Streamflow Comparisons
February 1, 2017

Northern Water

Snow Water Content — **% of Average**

Colorado's Statewide Snowpack	157%
Upper Colorado River (1)	145%
South Platte Tributaries (2)	154%

Preliminary

Snow-Water Content Comparisons (inches)

	February 1, 2017 Snow-Water Content			February 1 Comparative Snow-Water Content			
Watershed	**2017**	**Average**	**% Avg**	**2016**	**2015**	**2014**	**2002**
Blue River	12.3	8.9	139%	104%	111%	124%	74%
Upper Colorado River	13.9	9.8	142%	96%	84%	112%	64%
Willow Creek	11.1	6.6	167%	116%	69%	102%	54%
Fraser River	11.7	8.9	131%	118%	95%	118%	68%
Poudre River	12.0	8.7	137%	88%	79%	107%	53%
Big Thompson River	13.2	8.7	151%	99%	99%	123%	57%
St. Vrain River	11.8	6.7	176%	98%	93%	126%	56%
Boulder Creek	10.4	6.9	150%	100%	88%	123%	58%

FEB-Jul Maximum, Minimum and Most Probable Streamflow Forecasts (1000 af)

Watershed	Forecast Minimum	Most Probable	Forecast Maximum	Apr-Jul Avg (3)	Most Prob % Average
Blue River	240	345	470	275	125%
Upper Colorado River	192	265	350	220	120%
Willow Creek	46	70	99	47	149%
Fraser River	98	136	180	117	116%
Poudre River	179	265	350	225	118%
Big Thompson River	72	110	166	90	122%
St. Vrain River	73	113	176	88	128%
Boulder Creek	43	62	88	54	115%
South Platte Tributaries		550		457	120%

Precipitation within District Boundaries (4)

	Totals	Average	% Average
January		0.38	0%
Nov-Jan		1.47	0%

(1) Includes the Colorado, Willow Creek, Fraser and Blue River Watersheds
(2) Includes the Poudre, Big Thompson, Saint Vrain and Boulder Creek Watersheds
(3) Average for the period 1981-2010
(4) Computed using CoCoRaHS and Northern Water Stations

2/6/2017 - 2:04 PM

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

AGENDA ITEM: **4**
MEETING DATE: 2/15/2017
SUBMITTED BY: Kim O'Field, Technical Specialist

TITLE: Electric Legislative Update

DESCRIPTION:
This item and the attachment are intended to give a brief update on electric-related legislation at both the state and federal level. Loveland Water and Power works closely with Platte River Power Authority (PRPA) and its sister cities but relies primarily on the Colorado Association of Municipal Utilities (CAMU) for information on electric-related legislation.

SUMMARY:
State Update:
Please see Attachment A for the February Legislative Report and Attachment B for the legislative tracking sheet of current state bills from CAMU.

Federal Update:
Preservation of Municipal Tax Exemption – Please see Attachment C for a copy of the APPA Article – *Kelly highlights need for tax-exempt financing, industry-government work.*

A key federal issue related to electric legislation is to preserve the tax exemption for local governments and APPA and CAMU will be staying diligent on this topic at the federal level. The City has and continues to offer our support of this issue.

RECOMMENDATION:
Information item only. No action required**.**

REVIEWED BY DIRECTOR:

ATTACHMENTS:
- **Attachment A:** CAMU February 3, 2017 Legislative Report
- **Attachment B**: CAMU Legislative Tracking Sheet
- **Attachment C**: APPA Article - *Public Power Daily: Kelly highlights need for tax-exempt financing, industry-government work*

Attachment A

Legislative Report February 03,2017

Overview

2017 Legislative Session off and running

The Colorado General Assembly has just completed it's 3rd week of the 2017 Session and the legislative pace has begun to pick up after a slow start. As noted in our legislative preview report, several unresolved issues will be back this year including discussions on the hospital provider fee and construction defect reform.

The former issue does not seem to be any closer to resolution than it was a year ago with Senate Republicans unlikely to approve a measure that would allow the state to treat hospital provider fees as an enterprise not subject to TABOR calculations. The latter issue has been a hot topic at the capitol for the last four years. In an effort to lower risk and insurance rates to condominium builders and encourage new construction, local businesses and affordable-housing advocates have pushed to make it more difficult to file construction defect lawsuits. Previous Democratic legislators and homeowners groups have fought against this force arguing largely that clauses forcing alternative dispute resolutions block their right to relief by the courts. This week at least three other bills that deal with construction defects are expected to be introduced in an effort to reduce liability costs and promote construction growth.

The Colorado House of Representatives has given preliminary approval of a bill making it legal to post "ballot selfies" on social media. House Bill 17-1014 would reverse the125 year old state law that bans voters from sharing completed ballots. If the bill becomes law, Colorado will join 21 states that already allow "Ballot Selfies." Currently, photographing a completed ballot is a misdemeanor offense.

Key Industry Issues

SB17-089 "Energy Storage"

Senator Fenberg (D-Boulder) introduced SB17-089 in an attempt to set early rules and procedures around distributed battery storage in Colorado. The sponsor is desiring battery storage devices to be treated with the same net metering considerations as rooftop solar projects. As originally drafted, the bill sought to include "non-jurisdicitonal" utilities in its requirements. However, the bill sponsor has agreed to remove municipal utilities from the bill after meeting with CAMU.

Administration Appointments

New Faces at the PUC and Colorado Energy Office

Gov. John Hickenlooper has appointment of Jeff Ackermann and Wendy Moser to the Colorado Public Utilities Commission (PUC), replacing former Chairman Joshua Epel and Commissioner Glen Vaad left the Commission in recent months. Ackermann will serve as chairman of the PUC, and he and Moser will join Frances Koncilja, who has served on the PUC since January 2016. Both. Both appointments are effective Jan. 9, 2017.

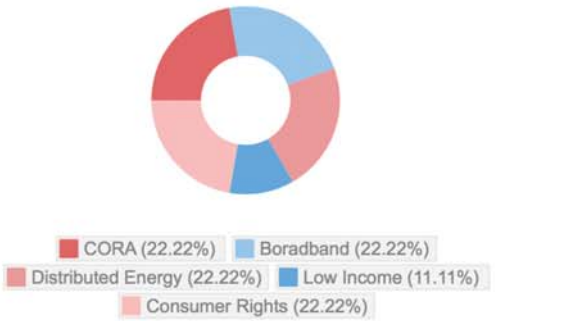
Ackermann has more than three decades of experience in state government and the energy sector. For the past three and a half years, Ackermann has served as the executive director of the Colorado Energy Office (CEO). Moser currently serves as senior manager at Charter Communications, where she is responsible for government franchise relations, public affairs policies and procedures, and regulatory requirements in multiple western states. She has vast experience in telecommunications and utilities, and more than 25 years of experience in regulatory law.

Kathleen Staks has been appointed to replace Ackermann at CEO. Stacks was most recently he assistant director for energy and minerals at the Colorado Department of Natural Resources (DNR

Legislative Report
February 03,2017

Issues Being Tracked

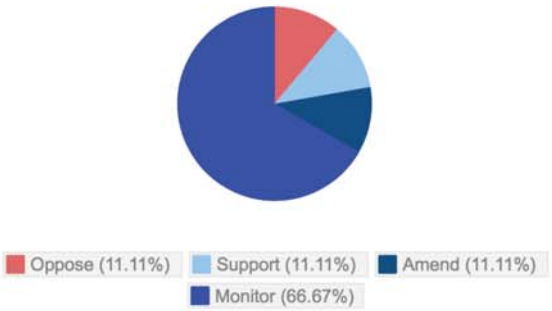
CAMU is currently tracking legislation pertaining the Colorado Open Records Act (2 bills); Broadband deployment (2 bills); Distributed Energy (2 bills); Energy Outreach Colorado (1 bill); and customer rights & protections (2 bills).



Proportion of Issues Tracked

Postions Taken

CAMU is currently taking positions on 3 bills (33% of the bills we are currently taking). As of 02/03 we are supporting HB17-1116 (extending funding for Energy Outreach Colorado); opposing SB17-4- (CORA changes); and Amending SB17-89 (electric storage mandate).



Positions Adopted

Legislative Outcomes

As of 02/03, CAMU is tracking 9 bills (2.6% of the 338 bills introduced to date). Of the bills we are following, the General Assembly has defeated 1; passed 0; and 0 have been singed into law.

Tracking Metrics

Scorecard

As of 02/03, CAMU has amended 1 bill; 0 bills we oppose have been defeated; and 0 bills we support have been passed.

CAMU obtained amendments:

1 passed / 0 defeated

Bills CAMU Supports:

0 passed / 0 defeated

Bills CAMU Opposes:

0 passed / 0 defeated

Attachment B

Colorado Association of Municipal Utilities
2017 State Legislative Tracking Sheet

HB17-1029	Open Records Subject To Inspection Denial
Comment:	
Position:	**Monitor**
Short Title:	Open Records Subject To Inspection Denial
Summary:	Applies to judicial branch only
Status:	1/11/2017 Introduced In House - Assigned to State, Veterans, & Military Affairs 2/2/2017 House Committee on State, Veterans, & Military Affairs Postpone Indefinitely

HB17-1069	Subcommittee On Data Privacy
Comment:	
Position:	**Monitor**
Short Title:	Subcommittee On Data Privacy
Summary:	Bill sponsor intends scope to be limited to state government.
Status:	1/17/2017 Introduced In House - Assigned to State, Veterans, & Military Affairs

HB17-1116	Continue Low-income Household Energy Assistance
Comment:	
Position:	**Support**
Short Title:	Continue Low-income Household Energy Assistance
Summary:	Current law provides that the department of human services low-income energy assistance fund, the energy outreach Colorado low-income energy assistance fund, and the Colorado energy office low-income energy assistance fund receive conditional funding from the severance tax operational fund through the state fiscal year

commencing July 1, 2018. The bill removes the automatic repeal which means that these funds will be eligible for this conditional funding indefinitely.

(Note: This summary applies to this bill as introduced.)

Status: 1/20/2017 Introduced In House - Assigned to Transportation & Energy

SB17-040 Public Access To Government Files

Comment:

Position: Oppose

Short Title: Public Access To Government Files

Summary: CAMU will be following CML's lead on this issue

Status: 1/11/2017 Introduced In Senate - Assigned to State, Veterans, & Military Affairs

SB17-042 Repeal Local Government Internet Service Voter Approval

Comment:

Position: Monitor

Short Title: Repeal Local Government Internet Service Voter Approval

Summary: Cities, counties, special districts, and other local governments (local government) are currently prohibited, with certain limited exceptions, from providing cable television, telecommunications service, or high-speed internet access without first seeking voter approval. A local government that does provide any of these services is further required to comply with all state and federal laws and regulations governing the service and prohibited from granting certain preferences or discriminating in connection with providing the service.

The bill repeals these restrictions on the provision of cable television, telecommunications service, or high-speed internet access by a local government.

(Note: This summary applies to this bill as introduced.)

Status: 1/11/2017 Introduced In Senate - Assigned to Business, Labor, & Technology

SB17-081 Rural Broadband Deployment

Comment:

Position: Monitor

Short Title: Rural Broadband Deployment

Summary: **Section 1** of the bill updates the definition of a broadband network for purposes

of telecommunications regulation and deregulation.

Section 2 updates how the public utilities commission (commission) makes an effective competition determination for high cost support mechanism (HCSM) funding, which is financial assistance provided to telecommunications companies that provide basic telephone service or broadband service in areas that lack effective competition.

Section 3 establishes that HCSM funding cannot be used to support more than one wireline and one wireless line per individual household or individual business.

(Note: This summary applies to this bill as introduced.)

Status: 1/13/2017 Introduced In Senate - Assigned to Business, Labor, & Technology

SB17-089 Allow Electric Utility Customers Install Energy Storage Equipment

Comment:

Position: Amend

Short Title: Allow Electric Utility Customers Install Energy Storage Equipment

Summary: CAMU is seeking exemption for municipal utilities

Status: 1/18/2017 Introduced In Senate - Assigned to Business, Labor, & Technology

SB17-105 Consumer Right To Know Electric Utility Charges

Comment:

Position: Monitor

Short Title: Consumer Right To Know Electric Utility Charges

Summary: Applies to IOUs only

Status: 1/27/2017 Introduced In Senate - Assigned to Agriculture, Natural Resources, & Energy

SB17-145 Electric Utility Distribution Grid Resource Acquisition Plan

Comment: Exempts municipal utilities

Position: Monitor

Short Title: Electric Utility Distribution Grid Resource Acquisition Plan

Summary: The bill directs specified electric utilities to prepare, and the Colorado public utilities commission to review, proposals to integrate distributed energy resources into their plans to acquire new infrastructure. 'Distributed energy resources' is defined to include renewable distributed generation facilities, such as rooftop solar, energy storage facilities, electric vehicles, and other features of an improved and diversified electrical grid architecture. The commission may approve the plans as submitted or modify them

	in ways that improve system reliability, reduce costs, or increase the benefits to ratepayers. *(Note: This summary applies to this bill as introduced.)*
Status:	1/31/2017 Introduced In Senate - Assigned to Agriculture, Natural Resources, & Energy

Attachment C

PublicPowerDaily

Kelly highlights need for tax-exempt financing, industry-government work

From the February 6, 2017 issue of *Public Power Daily*
Originally published February 3, 2017

By Paul Ciampoli
News Director

Ensuring continued access to tax-exempt financing for public power utilities and maintaining and building upon the strong industry-government partnership on cyber and physical grid security are among the front burner issues for the American Public Power Association in 2017, Sue Kelly, the Association's president and CEO, said at a recent gathering of energy industry officials.

She made her remarks on Jan. 31 at the U.S. Energy Association's 13th annual "State of the Energy Industry" forum in Washington, D.C.

Tax reform "big agenda item" this year in Congress

Tax reform is a "big agenda item in Congress this year" and also a big concern for the Association because the primary financing tool that public power utilities use to construct new infrastructure is tax-exempt financing.

"Any time you get tax reform there's a certain number of what we call 'pay fors' that are on the table," Kelly noted. "The charitable deduction is one of them. Mortgage interest deduction is another one and deductibility of interest from state and local bonds is always another one."

The Association is already working with a broad array of other local and state government groups to highlight the benefits of tax-exempt financing.

Kelly noted at the USEA event that she is on the executive committee of Municipal Bonds for America. This group is a non-partisan coalition focused on explaining the many benefits of the traditional municipal bond market and highlighting the tax exemption that enables state and local governments to finance vital infrastructure at the lowest cost to their taxpayers.

“This is going to be the big issue for us this year,” Kelly said. She noted that Mick Cornett, the Republican mayor of Oklahoma City, Okla., has said that one cannot be for infrastructure and be against tax-exempt financing.

Kelly underscored the point that “so much of the infrastructure in the United States – not just poles and wires,” but also roads, schools, sewers and water systems, are built with tax-exempt financing, “so that will be a big message from us this year.”

She added that she was very pleased to see that when president-elect Trump met with the U.S. Conference of Mayors during the transition, “he told them that he supported tax-exempt financing. I was very relieved to hear that, as we all were, and we hope that that indeed turns out to be the case,” Kelly said.

Grid security and the industry-government partnership

Meanwhile, Kelly noted that grid security is another topic that is “top of mind right now.” She said that as “we transition to this new administration, I want to make sure that we continue and build on the close industry-government partnership” in this area.

Kelly highlighted the work being done by the Electricity Subsector Coordinating Council. “It’s an industry-government group. It enables us to meet periodically with high government officials and it enables us to work on issues of common interest and concern together and we have work groups that work between those meetings,” she remarked.

“We’ve done a lot of things to improve information sharing. We’ve done a lot of drills. And one of the things that I really hope and will try to work to see is that the change in administration does not mean that that falls down in any respect. That we’re able to maintain that and to continue to strengthen that partnership,” she said.

Kelly emphasizes need for resource decisions at state, local levels

“A lot of our members were feeling over the last few years very, very burdened by increased federal regulation,” she noted during the USEA event.

Kelly said that with the Association’s strategic planning effort in 2015, “we came up with six initiatives and one of them” focused on addressing increased federal regulation. “We in the Association were supposed to be assisting our members in pushing back and dealing” with increased federal regulation, she said.

In 2017, “we’ll have more of an opportunity, I hope, to make resource and service decisions at the state and local level as opposed to having those decisions imposed on us by the federal government through its policies – both at administrative agencies and in Congress and the executive.”

“My hope is that means these decisions are more in line with what the local communities themselves really want,” she added.

“And when I talk about resource decisions, I want to be clear that our members have retained the obligation to serve, so we are continuing to make sure that our customers” have reliable, affordable and environmentally responsible power, she said.

“We have not farmed that out,” Kelly said. “We’re all in on the entire resource decision basket,” she added.

“What we’re looking forward to is being able to take a long term view to procurement of resources and to balance on a community basis supply side versus demand side, wholesale generation versus distributed generation and to think about a truly holistic” and all of the above approach.

She noted the wide variety of resources that the Association’s members consider to be part of such an approach. Those resources run the gamut from geothermal resources to the potential use of small modular reactors to small hydro generation.

“These are community decisions and I can’t emphasize enough how important it is that we be able to make those at the community level,” she said.

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

AGENDA ITEM: **5**
MEETING DATE: 2/15/2017
SUBMITTED BY: Michelle Erickson, Technical Specialist

TITLE: Water Legislative Update

DESCRIPTION:
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.

SUMMARY:
The Second Regular Session of the Seventieth Colorado General Assembly convened on January 11, 2017 and will run through May 10, 2017. The Colorado Water Congress, through its State Affairs Committee, is currently tracking Colorado state house and senate bills related to water. This committee meets each Monday morning during the legislative session. After a bill is first introduced, they cover that bill at the next committee meeting to learn about it. Usually, this committee votes on whether to take a position on the bill at the following State Affairs Committee meeting. The voting may be delayed another week if more time is needed on a bill. For CWC to take a position on a bill, the bill must have at least a 2/3 vote from the State Affairs Committee. Once CWC takes a position, they then advocate on behalf of their members to policy makers. Of the state bills that CWC takes a position, their success rate in either killing bills that they oppose or passing bills that they support is eight-five percent.

While the state legislature is in session, each month in the LUC packet there will be a Bill Summary Sheet (See Attachment A) which gives a brief summary of each bill being tracked by CWC and a Bill Status Sheet (See attachment B) that will show how far along each bill is that CWC has taken a position to support, oppose or monitor. For additional information on a particular bill, please click on the hyperlink in the left most column of the Bill Status Report. Once a bill is killed in a committee or lost in a floor vote, it will be removed from this list. A state legislative item of interest to be aware of this legislative session is as follows:

Joint Budget Committee: The Colorado Department of Natural Resources has a $175 Million Budget paid for by the collection of severance taxes. There is a great deal of volatility in the amount of severance taxes collected each year with projections to not fund their tier II programs this year, which include Colorado Water Conservation Board Loans that help pay for water infrastructure projects, fund only 0% to 5% in 2018 of tier II programs and between 69% to 77% of tier II programs in 2019.

The joint budget committee is working to move a bill forward this year that would set a cap of $180 Million that would go to the current year's Department of Natural Resources budget and keep the excess funds in a reserve account to be used during years in which severance tax proceeds are low. Any amount received above the $180 Million would be exempt from TABOR.

The Colorado Water Congress, through its Federal Affairs Committee, provides the principal voice of Colorado's water community on federal issues that may affect Colorado or that are important to its members. The Federal Affairs Committee works closing with the National Water Resource Association (NWRA), a federation of state water organizations concerned with appropriate management, conservation and use of water resources. In the Federal Affairs section of the CWC website it lists a brief description of some key federal legislative items they are tracking (see attachment C). A couple of federal legislative items of interest are as follows:

Waters of the U.S. S. 1140: This was drafted to revise the definition of the term "waters of the United States" (WOTUS), defined in the Federal Register in April 2014 to clarify which areas around waterways the federal government has authority to either require a federal permit or stop any activity that would disturb the waterway. This bill provides an explanation of the hydrologic cycle that is crucial to Colorado's prior appropriation system. Opponents claim the rule would give the regulatory agencies broad authority over other waters with little or no connection to flowing streams and rivers. The Sixth Circuit Court of Appeals has granted a nationwide stay on the Waters of the United States (WOTUS) rule and noted that while there is no threat of immediate irreparable harm to any of the states, "the sheer breadth of the ripple effects caused by the Rule's definitional changes counsels strongly in favor of maintaining the status quo for the time being."

Endangered Species Act (ESA): Over the last two years, numerous ESA policy modifications were made. NWRA worked with the National Endangered Species Act Reform Coalition (NESARC) to weigh in on many of these proposals. There are also opportunities for ESA reform in the 115th Congress such as with H.R. 717 which would require a review of the economic cost of adding a species to the endangered species or threatened species list.

Please visit www.cowatercongress.org if you would like additional information regarding federal or state bills related to water.

RECOMMENDATION:
Information item only. No action required.

ATTACHMENTS:
- **Attachment A:** Colorado Water Bill Summary
- **Attachment B:** CWC, State Affairs Committee, Water Bill Status Sheet

Attachment A

2017 Colorado Water Bill Summary

HOUSE BILL 17-1008 Graywater Regulation Exemption for Scientific Research - CONCERNING AN EXEMPTION FROM THE WATER QUALITY CONTROL COMMISSION'S GRAYWATER CONTROL REGULATIONS FOR GRAYWATER USED FOR THE PURPOSE OF SCIENTIFIC RESEARCH INVOLVING HUMAN SUBJECTS.

CWC Position: TBD

Bill Summary: Water Resources Review Committee. The water quality control commission in the department of public health and environment (commission) is responsible for developing requirements, prohibitions, and standards that protect public health and water quality for the use of graywater for nondrinking purposes. Scientific research on graywater that might involve graywater uses and systems that do not strictly comply with the requirements, prohibitions, and standards developed by the commission would not be permitted under the control regulations.

To facilitate scientific research related to graywater uses and systems, the bill creates an exemption from the commission's graywater control regulations for scientific research involving human subjects whereby a person may collect and use graywater for purposes of scientific research involving human subjects if the person:

- Seeks to conduct the scientific research on behalf of an institution of higher education;
- Utilizes a graywater treatment works system that incorporates a secondary water supply to provide an alternative source of water if any portion of the system does not function properly; and
- Collects and uses graywater in accordance with the terms and conditions of the decrees, contracts, and well permits applicable to the use of the source water rights or source water and any return flows.

The person is required to report to the water resources review committee on an annual basis the results of periodic monitoring conducted to assess the continued functioning of the graywater treatment works system used in the project and the project's compliance with federal rules concerning the protection of human research subjects.

HOUSE BILL 17-1029 Open Records Subject to Inspection Denial - CONCERNING PUBLIC RECORDS THAT ARE SUBJECT TO DENIAL OF INSPECTION.

CWC Position: Monitor

Bill Summary: The bill allows a custodian to deny access to confidential personal information records and employee personal e-mail addresses. The provisions of the "Colorado Open Records Act" that relate to civil or administrative investigations and trade secrets and other privileged and confidential information apply to the judicial branch.

HOUSE BILL 17-1030 Update 1921 Irrigation District Law - CONCERNING PUBLIC RECORDS THAT ARE SUBJECT TO DENIAL OF INSPECTION.

CWC Position: Support

Bill Summary: Water Resources Review Committee. This bill amends the 1921 irrigation district law to:

- Remove inconsistencies and update antiquated provisions;
- Clarify the definition of landowners entitled to receive water, vote in district elections, and serve on the board of directors;
- Update dollar figures and, in subsequent years, adjust for inflation;
- Define "agricultural land";
- Update election procedures;
- Clarify how irrigation district assessments are collected and held; and
- Modernize procedures for selling surplus property.

The bill also clarifies that water acquired in excess of an irrigation district's own needs can be leased for all beneficial purposes, rather than only for domestic, agricultural, and power and mechanical purposes, and that the provisions of the 1921 irrigation district law are in addition to powers conferred on irrigation districts in other statutes.

HOUSE BILL 17-1033 CWCB Grants Loans Dredge South Platte Basin Reservoirs - CONCERNING AN AUTHORIZATION FOR THE COLORADO WATER CONSERVATION BOARD TO FINANCE SOUTH PLATTE RIVER BASIN RESERVOIR DREDGING PROJECTS.

CWC Position: TBD

Bill Summary: Water Resources Review Committee. The bill appropriates $5 million from the Colorado water conservation board construction fund to the Colorado water conservation board to make loans and grants to enable the recipients to dredge existing reservoirs located in the South Platte river basin to restore the reservoirs' full decreed storage capacity.

HOUSE BILL 17-1076 Artificial Recharge Nontributary Aquifer Rules - CONCERNING RULE-MAKING BY THE STATE ENGINEER REGARDING PERMITS FOR THE USE OF WATER ARTIFICIALLY RECHARGED INTO NONTRIBUTARY GROUNDWATER AQUIFERS.

CWC Position: Support

Bill Summary: Currently, the state engineer must promulgate rules for the permitting and use of waters artificially recharged into 4 named aquifers. The bill adds the requirement that the state engineer also promulgate rules for the permitting and use of waters artificially recharged into nontributary groundwater aquifers. The rules must be promulgated on or before July 1, 2018.

HJR17-1003 Water Projects Eligibility Lists - CONCERNING APPROVAL OF WATER PROJECT REVOLVING FUND ELIGIBILITY LISTS ADMINISTERED BY THE COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY.

CWC Position: Support

Bill Summary: Not available.

HJR17-1004 Funding for Prevention of Aquatic Nuisance Species - CONCERNING FUNDING FOR THE PREVENTION OF AQUATIC NUISANCE SPECIES IN COLORADO.
CWC Position: Support
Bill Summary: Not Available

SENATE BILL 17-002 Compulsory Review of Rules by Each Principal Department - CONCERNING THE COMPULSORY REVIEW OF RULES BY EACH PRINCIPAL DEPARTMENT, AND, IN CONNECTION THEREWITH, ESTABLISHING A TRIENNIAL BASIS FOR EACH REVIEW TO BE CONDUCTED.
CWC Position: Monitor
Bill Summary: Current law requires each principal department to review all of its rules, in accordance with a schedule established by the department of regulatory agencies (DORA), to assess, among other things, the continuing need and cost-effectiveness of each rule. The bill repeals the DORA schedule-setting and instead requires a review and supplemental update to be completed every 3 years, commencing in 2017. Thereafter, the bill imposes a triennial schedule for reviews to be conducted. The bill further specifies that the public and certain state agencies must be accorded no fewer than 14 business days to provide input regarding an agency's rules during its review, and that any input received must be attached to the report setting forth the results of the rule reviews included in each agency's departmental regulatory agenda.

SENATE BILL 17-026 State Engineer Statutes Cleanup - CONCERNING REQUIREMENTS GOVERNING IMPLEMENTATION OF THE STATE ENGINEER'S FUNCTIONS, AND, IN CONNECTION THEREWITH, RESTRUCTURING THE FEE THAT THE STATE ENGINEER MAY CHARGE FOR RATING CERTAIN TYPES OF WATER INFRASTRUCTURE, REPEALING CERTAIN REQUIREMENTS, AND UPDATING LANGUAGE IN THE STATUTES REGARDING THE DIVISION OF WATER RESOURCES.
CWC Position: Support
Bill Summary: Water Resources Review Committee. Section 8 of the bill restructures the fee that the state engineer may charge for rating certain types of water infrastructure from $25 per day for expenses incurred in determining the rating to a flat fee of $75.

Section 1 specifies the location of the state engineer's office as within the capitol complex.

Section 2 permits the state engineer to use new technology that can accomplish the same functions as satellite or telemetry-based monitoring systems and is more cost effective.

The bill repeals certain requirements as follows:

- In sections 1, 4, and 11, the requirement that certain officials take an oath and post bond;
- In section 8, certain fee requirements; and
- In section 14, the requirement that the state engineer survey, lay out, and locate a ditch or canal along the Arkansas river.

Section 16 increases the amount of time for filing comments on a substitute water supply plan from 30 days after the state engineer mails the notice to 35 days after mailing the notice.

The bill updates language within the statutes related to the state engineer and the division of water resources.

SENATE BILL 17-036 Appellate Process Concerning Groundwater Decisions - CONCERNING THE APPELLATE PROCESS GOVERNING A DISTRICT COURT'S REVIEW OF FINAL AGENCY ACTIONS CONCERNING GROUNDWATER.

CWC Position: TBD

Bill Summary: Under current law, the decisions or actions of the ground water commission (commission) or the state engineer regarding groundwater are appealed to a district court, and the evidence that the district court may consider is not limited to the evidence that was presented to the commission or state engineer. Therefore, unlike appeals from other state agencies' decisions or actions under the "State Administrative Procedure Act", a party appealing a decision or action of the commission or state engineer may present new evidence on appeal that was never considered by the commission or state engineer.

The bill limits the evidence that a district court may consider, when reviewing a decision or action of the commission or state engineer on appeal, to the evidence presented to the commission or state engineer.

SENATE BILL 17-040 Public Access to Government Files - CONCERNING PUBLIC ACCESS TO FILES MAINTAINED BY GOVERNMENTAL BODIES.

CWC Position: TBD

Bill Summary: Section 2 of the bill modifies the "Colorado Open Records Act" (CORA) by creating new procedures governing the inspection of public records that are stored as structured data. Section 1 defines key terms including "structured data", which the bill defines as digital data that is stored in a fixed field within a record or file that is capable of being automatically read, processed, or manipulated by a computer.

If public records are stored as structured data, section 2 requires the custodian of the public records to provide an accurate copy of the public records in a structured data format when requested. If public records are not stored as structured data but are stored in an electronic or digital form and are searchable in their native format, the custodian is required to provide a copy of the public records in a format that is searchable when requested.

Section 2 specifies the circumstances that exempt the custodian from having to produce records in a searchable or structured data format.

If a custodian is not able to comply with a request to produce public records in a requested format, the custodian is required to produce the records in an alternate format and to provide a written declaration attesting to the reasons the custodian is not able to produce the records in the requested format. If a court subsequently rules the custodian should have provided the data in the requested format but that the custodian reasonably believed, based upon the reasons stated in the written declaration, that the data could not be produced in the requested format, attorney fees may be awarded only if the custodian's action was arbitrary or capricious.

Nothing in the bill requires a custodian to produce records in their native format.

Section 3 expands the grounds permitting the filing of a civil action seeking inspection of a public record to include an allegation of a violation of the digital format provisions in the bill or a violation of record transmission provisions specified in CORA. This section also specifies that altering an existing record, or excising fields of information, to remove information that the custodian is required or allowed to withhold does not constitute the creation of a new public record. Such alteration or excision may be subject to a research and retrieval fee or a fee for the programming of data as allowed under existing provisions of CORA.

Section 4 modifies CORA provisions governing the copy, printout, or photograph of a public record and the imposition of a research and retrieval fee. Among these modifications:

- The bill deletes existing statutory language permitting the custodian to charge the same fee for services rendered in supervising the copying, printing out, or photographing of a public record as the custodian may charge for furnishing a copy, printout, or photograph;
- The bill replaces a reference in the statute to the phrase "manipulation of data" with the phrase "programming, coding, or custom search queries so as to convert a record into a structured data or searchable format";
- In connection with determining the amount of the fee for a paper or electronic copy of a public record, the bill specifies that, if a custodian performs programming, coding, or custom search queries to create a public record, the fee for a paper or electronic copy of that record may be based on recovery of the actual or incremental costs of performing the programming, coding, or custom search queries, together with a reasonable portion of the costs associated with building and maintaining the information systems; and
- When a person makes a request to inspect or make copies or images of original public records, the bill permits the custodian to charge a fee for the time required for the custodian to supervise the handling of the records, when such supervision is necessary to protect the integrity or security of the original records.

Section 5 repeals the existing criminal misdemeanor offense and penalty for a willful and knowing violation of CORA.

SENATE BILL 17-049 Exempt Drains Designated Groundwater Requirement - CONCERNING EXEMPTIONS FROM DESIGNATED GROUNDWATER REQUIREMENTS FOR CERTAIN DRAINS.
CWC Position: TBD

Bill Summary: To withdraw groundwater within a designated basin, current law requires a permit issued by the ground water commission, and typically a portion of the groundwater must be replaced. The bill exempts a drain from the permit and replacement obligations if the drain is for residential, commercial, or industrial development or utility lines installed to serve such development; the drain does not penetrate a confining layer; the removed groundwater is not put to any use other than collecting and removing groundwater from soils; and the removed groundwater is discharged essentially where the drain is located.

SENATE BILL 17-079 Limit Amendments to Initiated Statutory Laws - CONCERNING THE GENERAL ASSEMBLY'S INTENT TO LIMIT AMENDMENTS TO INITIATED STATUTORY LAWS.
CWC Position: Monitor

Bill Summary: The state constitution does not limit the general assembly's ability to amend, repeal, or otherwise supersede a statutory law initiated by the voters and specifies that bills will not become law unless approved by a majority vote of all members elected to each house. The bill states that it is the intent of the general assembly that it will not amend, repeal, or otherwise supersede an initiated law in the Colorado revised statutes that was approved at an election after the 2016 general election for a period of 3 years from the date the law takes effect unless such amendment, repeal, or supersession is approved by a vote of two-thirds of all the members elected to each house.

SENATE BILL 17-117 Recognize Industrial Hemp as Ag Product for Ag Water Right - CONCERNING CONFIRMATION THAT INDUSTRIAL HEMP IS A RECOGNIZED AGRICULTURAL PRODUCT FOR WHICH A PERSON WITH A WATER RIGHT DECREED FOR AGRICULTURAL USE MAY USE THE WATER SUBJECT TO THE WATER RIGHT FOR INDUSTRIAL HEMP CULTIVATION.
CWC Position: TBD

Bill Summary: In Colorado, water subject to a water right may be used for the purpose for which the water is decreed. The bill confirms that a person with an absolute or conditional water right decreed for agricultural use may use the water subject to the water right for the growth or cultivation of industrial hemp if the person is registered by the department of agriculture to grow industrial hemp for commercial or research and development purposes.

SENATE BILL 17-152 Implement Changes Made By Amendment 71 - CONCERNING THE IMPLEMENTATION OF VOTER-APPROVED CHANGES TO THE COLORADO CONSTITUTION THAT MAKE IT MORE DIFFICULT TO AMEND THE STATE CONSTITUTION, AND, IN CONNECTION THEREWITH, PROHIBITING A PETITION FOR AN INITIATED AMENDMENT TO THE STATE CONSTITUTION FROM BEING SUBMITTED TO VOTERS UNLESS THE PETITION IS SIGNED BY THE CONSTITUTIONALLY REQUIRED NUMBER OF REGISTERED ELECTORS WHO RESIDE IN EACH STATE SENATE DISTRICT AND TOTAL NUMBER OF REGISTERED ELECTORS, AND REQUIRING AT LEAST FIFTY-FIVE PERCENT OF THE VOTES CAST ON ANY AMENDMENT TO THE STATE CONSTITUTION TO ADOPT THE AMENDMENT UNLESS THE AMENDMENT ONLY REPEALS IN WHOLE OR IN PART A PROVISION OF THE STATE CONSTITUTION, IN WHICH CASE REQUIRING A MAJORITY OF THE VOTES CAST ON THE AMENDMENT TO ADOPT THE AMENDMENT.
CWC Position: TBD

Bill Summary: The bill implements changes to the Colorado constitution approved by voters at the 2016 general election that make it more difficult to amend the state constitution by:

- Prohibiting a petition for an initiated state constitutional amendment to be submitted to voters for approval or rejection unless the petition is signed by the constitutionally specified number of registered electors who reside in each state senate district and total number of registered electors; and
- Requiring at least 55% of the votes cast on any state constitutional amendment to adopt the amendment; except that only a simple majority of the votes cast is necessary to adopt a state constitutional amendment that only repeals in whole or in part a provision of the state constitution.

When a draft of a ballot issue that proposes a state constitutional amendment is filed with the title board, the title board must decide if the proposed constitutional amendment only

repeals in whole or in part a provision of the state constitution for purposes of determining the required percentage of votes cast to adopt the amendment. The designated representatives of the proponents or any registered elector who is not satisfied with the title board's decision may appeal the decision by filing a motion for rehearing to the title board. Decisions of the title board at the rehearing on this issue may be directly appealed to the Colorado supreme court in the same manner as ballot title and fiscal impact abstract appeals.

The bill requires the secretary of state to notify proponents of a petition for an initiated state constitutional amendment of the number and boundaries of the state senate districts in existence and the number of registered electors in each state senate district at the time the petition format is approved. The secretary of state must validate signatures on a petition for an initiated state constitutional amendment by random sampling. If the random sample establishes that the number of valid signatures is 90% or less of the total number of registered electors needed to declare the petition sufficient, the secretary of state is required to deem the petition to be not sufficient. If the random sample establishes that the
number of valid signatures is more than 90% of the total number of registered electors needed to declare the petition sufficient, the secretary of state is required to order the examination of each signature filed.

After the examination of a petition for an initiated constitutional amendment, the secretary of state is required to issue a statement as to whether a sufficient number of valid signatures from each state senate district and a sufficient total number of valid signatures appear to have been submitted to certify the petition to the ballot. If the secretary of state declares that the petition appears not to have either a sufficient number of valid signatures from each state senate district, a sufficient total number of valid signatures, or both, the secretary of state's statement shall specify the number of sufficient and insufficient signatures from each state senate district, the total number of sufficient or insufficient signatures, or both, as applicable. The bill allows the proponents of the petition to cure an insufficiency of signatures in one or more state senate districts, the total valid signatures, or both, as applicable.

SJM17-001 Memorialize Congress to Fund Wildfire Response - CONCERNING THE NEED FOR CONGRESS TO FUND CATASTROPHIC WILDFIRE RESPONSE COSTS OUTSIDE OF FEDERAL FOREST MANAGEMENT AGENCIES' NORMAL BUDGETS.

CWC Position: Monitor

Bill Summary: None available

Attachment B

CWC State Affairs 2017 Bill Status Sheet

			First House					Second House							
Bill No.	Short Title	CWC Position	Introduced	1st Committee	2nd Committee	2nd Reading	3rd Reading	Introduced	1st Committee	2nd Committee	2nd Reading	3rd Reading	First House Repass	Conference Committee	Governor
HB17-1008	Graywater Regulation Exemption For Scientific Research		Ag 1/11												
HB17-1029	Open Records Subject to Inspection Denial	Monitor	SVMA 1/11												
HB17-1030	Update 1921 Irrigation District Law	Support	Ag 1/11	1/23 Ag @ 1:30											
HB17-1033	CWCB Grants Loans Dredge South Platte Basin Reservoirs		Ag 1/11												
HB17-1076	Artificial Recharge Nontributary Aquifer Rules	Support	Ag 1/17	1/30 Ag @ 1:30		2/2									
HJR17-1003	Water Projects Eligibility Lists	Support	Ag 1/17	1/30 Ag @ 1:30		2/2									
HJR17-1004	Funding for Prevention of Aquatic Nuisance Species	Support	Ag 1/17	1/23 Ag @ 1:30			1/25	1/30				2/1			
SB17-002	Compulsory Review of Rules by Each Principal Department	Monitor	BLT 1/11	2/8 BLT @ 2:00											
SB17-026	State Engineer Statutes Cleanup	Support	Ag 1/11	1/19 Ag @ 1:30		1/24	1/25	1/26	1/30 Ag	Ap					
SB17-036	Appellate Process Concerning Groundwater Decisions		Ag 1/11												
SB17-040	Public Access to Government Files		SVMA 1/11	2/6 SVMA @ 1:30											
SB17-049	Exempt Drains Designated Groundwater Requirement		Ag 1/11	2/2 Ag @ 1:30											
SB17-079	Limit Amendments to Initiated Statutory Laws	Monitor	SVMA 1/13												
SB17-117	Recognize Industrial Hemp as Ag Product for Ag Water Right		Ag 1/27	2/16 Ag @ 1:30											

CWC State Affairs 2017 Bill Status Sheet

			First House					Second House							
Bill No.	Short Title	CWC Position	Introduced	1st Committee	2nd Committee	2nd Reading	3rd Reading	Introduced	1st Committee	2nd Committee	2nd Reading	3rd Reading	First House Repass	Conference Committee	Governor
SB17-152	Implement Changes Made By Amendment 71		SVMA 1/31	2/13 SVMA @ 1:30											
SJM17-001	Memorialize Congress to Fund Wildfire Response	Monitor	Ag 1/11	1/19 Ag @ 1:30			1/24	1/27							

BILL STATUS
Bill scheduled for action at next SA meeting (yellow)
Bill not calendared (no fill)
Bill Passed, date of action (green)
Bill no longer active (gray)
Bill Postponed Indefinitely, Lost or Laid Over to end of session, date of action (orange)
Bill did not go to second committee or no action required (black)

CWC POSITION	
Bill scheduled for activity in CWC State Affairs (yellow)	
Support (green)	
Oppose (orange)	
Amend (blue)	
Monitor, Neutral, No Position	

ABBREVIATIONS
Ag = Agriculture and Natural Resources Committee
Ap = Appropriations Committee
BLEW = Business, Labor, Economic and Workforce Development Committee
CC = Conference Committee
F = Finance Committee
HIE= Health, Insurance, and Environment
J = Judiciary
LG = Local Governement Committee
SVMA = State, Veterans, and Military Affairs Committee
TE = Transportation and Energy Committee
UA = Upon Adjournment
UR = Upon Recess

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

AGENDA ITEM: 6
MEETING DATE: 2/15/2017
SUBMITTED BY: Greg Dewey, Civil Engineer

TITLE: Contract Change Order No. 2 for Idylwilde Powerhouse Removal and Partial Penstock Decommissioning Project

DESCRIPTION:
Staff requests LUC to amend the original bid amount to cover the cost of hauling and landfill disposal of water encountered during demolition of this project. Staff will have a brief presentation of the work completed.

SUMMARY:
The Idylwilde Powerhouse Removal and Partial Penstock Decommissioning (Project 2016-67) is complete. The work included the following items:

- Removal and disposal of the remaining water in the penstock, the reservoir inside the powerhouse and inside the tailrace pipe.
- Plugging or filling of the penstock (a 24-inch HDPE slip lined inside a 36-inch steel pipe) from the powerhouse up to the location of the former hydrant near the parking lot for Summit Trail.
- Removal of the tailrace pipe (48-inch diameter RCP, approximately 320 linear feet).
- Removal and disposal of appurtenances and equipment that are located inside the powerhouse (including panels, turbines and generators).
- Removal and disposal of the powerhouse structure down to the concrete vault floor, or sub-basement.
- Backfilling the sub-basement. The remainder of the filling and compaction work to be conducted by the contractor for the Viestenz-Smith Mountain Park (VSMP) Reconstruction, commencing January 17, 2016.

The work was completed on time and within budget, such that the VSMP Reconstruction was not delayed. Work was done to the specifications and requirement of the various agencies: CDOT, FERC and USFS even though the work was done on wholly city-owned facilities. Prior to the final walkthrough, City Parks and Recreation staff walked the site to confirm the site would be left in a condition they approved. There are several City staff who made this project a success including Greg Dewey, Craig Weinland, Colleen Cameron and Steve Johnson.

The City used several consultants: Otak, Water Consult and CTL Thompson provided initial design and permitting support. The contractor, Nezhoni Construction, and subcontractor, Cherry Creek Recycling performed the work marvelously.

The base bid for the demolition work was $294,000. The bid also included alternate pricing for water and sediment removal with quantities to be determined. This allowed for change orders based on actual quantities encountered. In the bid, Alternate 1 was for hauling any water which was pumped and exceeded construction dewatering discharge limits. Water which was pumped was tested, and results showed the water exceeded the discharge limit for oil/grease. This water could not be discharged to the river and was required to be hauled away and disposed of at a facility equipped to deal with liquid waste. The hauling and disposal cost which was part of the bid was $3.50 per gallon.

During the powerhouse structure removal, 48,135 gallons of water were required to be hauled and disposed for a cost of $168,472.50. Staff approved the $168,472.50 as Change Order No. 1. This brought the total project cost to $462,472.50.

During the tailrace pipe removal, 51,058 gallons of water were encountered and pumped. This water was tested, and results showed the water exceeded the discharge limit for oil/grease. This water could not be discharged to the river and was required to be hauled away and disposed. At the bid cost of $3.50 per gallon, hauling and disposal of 51,058 gallons cost $178,703.00. Payment of this amount requires a Change Order No. 2, and if approved would bring the total project cost to $641,175.50.

Because the total contract amount would be between $500,000 and $1M, this Change Order No. 2 requires approval of the LUC. Per Municipal Code 3.12.060A and 3.12.060B, the LUC must approve Water and Power contracts above $500,000 or any change order that causes a contract to equal or exceed $500,000 and which, when combined with all previous change orders, equals or exceeds 20% of the original contract amount.

RECOMMENDATION:

Adopt a motion recommending that Loveland Utilities Commission approve Change Order No. 2 to the contract for Idylwilde Powerhouse Removal and Partial Penstock Decommissioning Project with Nezhoni Construction in the amount of $178,703.00 and increase the not-to-exceed amount of the total contract to $641,175.50 and authorize the City Manager to sign the change order on behalf of the City.

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

AGENDA ITEM: 7
MEETING DATE: 2/15/2017
SUBMITTED BY: Carlos Medina, Water Engineer

TITLE: The Foundry Utility Improvements Contract Award

DESCRIPTION:
This item is a construction contract award for the Foundry Utility Improvements Project. These improvements are to provide improvements to aging infrastructure and to help support the redevelopment of downtown Loveland.

SUMMARY:
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. This project will provide a strong foundation for the revitalization of Loveland's historic downtown. The three empty city blocks will soon be transformed into a movie theater, apartments, offices, retailers and additional parking to support the increased traffic generated by the redevelopment. In order to support the redevelopment, an existing sewer line will be rerouted, aging waterlines will be replaced, and both water and sewer lines will be increased in size to facilitate the increased service requirements of the area. More connections to the existing water distribution system will be installed to provide adequate fire protection and ensure reliable water service.

The project includes the following improvements:

- Install approximately 600 feet of 8 inch PVC waterline in Cleveland Avenue and Lincoln Avenue
- Replace 380 feet of existing 6 inch cast iron waterline with 8 inch PVC waterline in East 3rd Street, from Cleveland Avenue to Lincoln Avenue
- Install 12 inch gravity sewer main from the alley between East 3rd Street and East 2nd Street to the proposed connection point in East 1st Street
- Install two 100-foot guided pipe ram crossing under the Greeley Loveland Irrigation Company ditch with a 36 inch steel casing, one will accommodated both water and sewer lines, and the second casing pipe will accommodate an electrical duct bank
- Connect the existing water services to the 8 inch PVC waterline
- Connect the existing sanitary sewer system
- Connect the traffic control, asphalt patching, and other restoration

Please see attachment A for the Bid Tab breakout, attachment B for the layout of the water system improvements, and attachment C for the layout of the wastewater system improvements.

Per Municipal Code 3.12.060A and 3.12.060B, the LUC must approve Water and Power contracts above $500,000 or any change order that causes a contract to equal or exceed

$500,000 and which, when combined with all previous change orders, equals or exceeds 20% of the original contract amount.

RECOMMENDATION:
Adopt a motion recommending that LUC award the contract for The Foundry Utility Improvements to Connell Resources, Inc. in an amount not to exceed $1,038,063.65 and authorize the City Manager to execute the contract on behalf of the City, following consultation with the City Attorney, and to modify the contract in form or substance as deemed necessary to protect the interests of the City.

ATTACHMENTS:

- **Attachment A:** Bid Tab
- **Attachment B:** Water System Improvements
- **Attachment C:** Wastewater System Improvements

Attachment A

BIDS RECEIVED: Friday, February 9, 2017 @ 2:00PM
PROJECT NAME: The Foundry Utility Improvements (W1607C and W1702G)
BID NUMBER: 2017-06
BIDS TABULATED BY: Carlos Medina
BIDS CHECKED BY: Carlos Medina

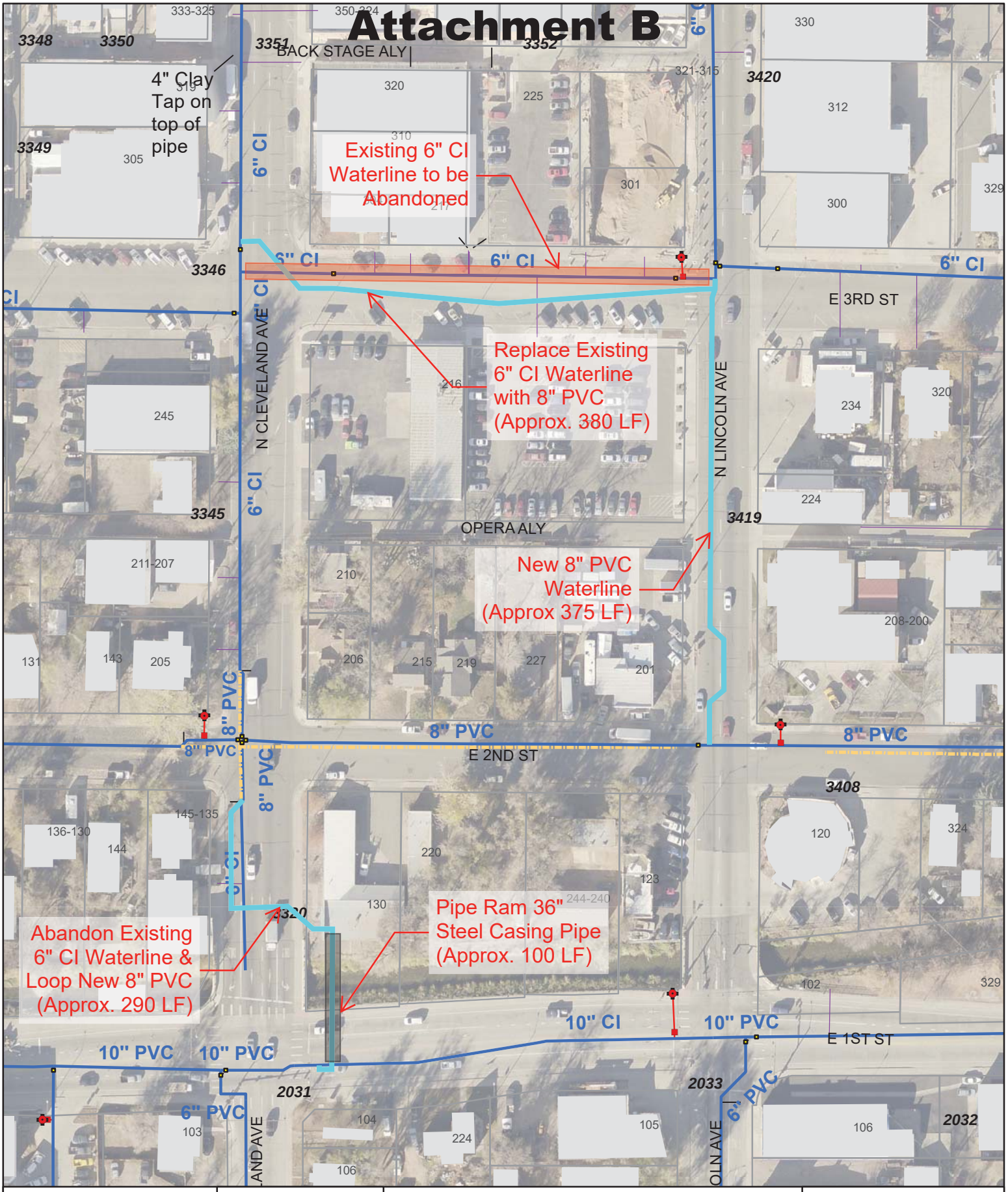
City of Loveland

NAME OF BIDDER				Brannan Construction Company		Duran Excavating, Inc.		Connell Resources, Inc.	
BIDDER'S CONTACT INFORMATION				2005 E. Brannan Way Denver, Colorado, 80229 Ph: (303) 273-9382 Fax: (303) 534-1236		14332 CR 64 Greeley, Colorado, 80631 Ph: (970) 351-0192 Fax: (970) 356-0145		7785 Highland Meadows Pkwy. Suite 100 Ft. Collins, Colorado, 80528 Ph: (970) 223-3151 Fax: (970) 223-3191	
ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	EXTENDED COST	UNIT COST	EXTENDED COST	UNIT COST	EXTENDED COST
A. Removal, Abandonment, & Erosion Control									
1	SILT FENCE	325	LF	$1.85	$601.25	$2.20	$715.00	$3.50	$1,137.50
2	INLET PROTECTION (CIP-1 AND DIP-2)	18	EA	$334.18	$6,015.24	$165.00	$2,970.00	$387.00	$6,966.00
3	CURBSIDE CHECKDAM, W4	3	EA	$121.52	$364.56	$275.00	$825.00	$199.00	$597.00
4	VEHICLE TRACKING CONTROL PAD	1	EA	$3,270.61	$3,270.61	$1,500.00	$1,500.00	$2,340.00	$2,340.00
5	CONCRETE WASHOUT AREA	1	EA	$1,032.91	$1,032.91	$1,600.00	$1,600.00	$2,090.00	$2,090.00
6	EX WATER SERVICE TO BE ABANDONED (RP-1)	2	EA	$1,137.78	$2,275.56	$340.00	$680.00	$1,710.00	$3,420.00
7	EX WATER LINE OR VALVE TO BE ABANDONED IN PLACE (RP-2)	6	EA	$732.94	$4,397.64	$560.00	$3,360.00	$987.00	$5,922.00
8	EX FIRE HYDRANT TO BE REMOVED (RP-3)	1	EA	$1,137.80	$1,137.80	$1,060.00	$1,060.00	$1,290.00	$1,290.00
9	EX SANITARY SEWER LINE TO BE ABANODED IN PLACE (RP-4)	225	LF	$36.17	$8,138.25	$10.00	$2,250.00	$9.25	$2,081.25
10	EX SANITARY SEWER MANHOLE TO BE ABANDONED (RP-5)	1	EA	$3,004.66	$3,004.66	$1,300.00	$1,300.00	$1,610.00	$1,610.00
11	EX SANITARY SEWER INVERT TO BE PLUGGED (RP-6)	2	EA	$2,034.77	$4,069.54	$61.00	$122.00	$626.00	$1,252.00
12	REMOVE AND REINSTALL CHAIN LINK FENCE (RP-7)	1	EA	$6,405.61	$6,405.61	$1,500.00	$1,500.00	$2,320.00	$2,320.00
13	REPLACE EX 21" CMP/VCP STORM (RP-8)	1	LS	$9,043.20	$9,043.20	$1,900.00	$1,900.00	$2,670.00	$2,670.00
14	REMOVE EXISTING ASPHALT/CONCRETE	1983	SY	$16.41	$32,541.03	$22.00	$43,626.00	$11.80	$23,399.40
B. Water System									
1	6" PVC WATER LINE	31	LF	$88.74	$2,750.94	$61.00	$1,891.00	$124.00	$3,844.00
2	8" PVC WATER LINE	972	LF	$86.37	$83,951.64	$83.00	$80,676.00	$90.70	$88,160.40
3	8" FPVC WATER LINE	108	LF	$117.69	$12,710.52	$62.00	$6,696.00	$70.00	$7,560.00
4	6" MRJ SOLID SLEEVE	4	EA	$468.55	$1,874.20	$434.00	$1,736.00	$1,830.00	$7,320.00
5	8" MRJ SOLID SLEEVE	1	EA	$569.44	$569.44	$523.00	$523.00	$1,930.00	$1,930.00
6	8"x6" MRJ TEE-TB	1	EA	$931.02	$931.02	$1,000.00	$1,000.00	$557.00	$557.00
7	8"x8" MRJ TEE-TB	3	EA	$1,217.19	$3,651.57	$1,100.00	$3,300.00	$830.00	$2,490.00
8	8"x6" MRJ REDUCER	4	EA	$703.77	$2,815.08	$650.00	$2,600.00	$303.00	$1,212.00
9	8" 11.25° MRJ BEND-TB	5	EA	$526.88	$2,634.40	$900.00	$4,500.00	$442.00	$2,210.00
10	8" 22.5° MRJ BEND-TB	3	EA	$537.21	$1,611.63	$850.00	$2,550.00	$452.00	$1,356.00
11	8" 45° MRJ BEND-TB	10	EA	$540.24	$5,402.40	$900.00	$9,000.00	$455.00	$4,550.00
12	8" 90° MRJ BEND-TB	6	EA	$567.58	$3,405.48	$940.00	$5,640.00	$481.00	$2,886.00
13	8"x8" WET-TAP SLEEVE WITH 8" GTV	1	EA	$6,885.13	$6,885.13	$7,000.00	$7,000.00	$5,250.00	$5,250.00
14	10"x8" WET-TAP SLEEVE WITH 8" GTV	1	EA	$6,897.28	$6,897.28	$7,250.00	$7,250.00	$5,200.00	$5,200.00
15	8" MRJ TEMP PLUG-TB W/ BLOW-OFF	2	EA	$1,094.47	$2,188.94	$3,450.00	$6,900.00	$2,200.00	$4,400.00
16	6" MRJ GTV & BOX	1	EA	$1,180.07	$1,180.07	$1,075.00	$1,075.00	$1,030.00	$1,030.00
17	8" MRJ GTV & BOX	5	EA	$2,416.15	$12,080.75	$1,525.00	$7,625.00	$1,400.00	$7,000.00
18	FIRE HYDRANT ASSEMBLY	1	EA	$5,490.07	$5,490.07	$5,200.00	$5,200.00	$4,540.00	$4,540.00
19	3/4" WATER SERVICE CONNECTION	1	EA	$1,710.76	$1,710.76	$1,315.00	$1,315.00	$2,360.00	$2,360.00
20	3/4" WATER METER PIT REPLACEMENT	3	EA	$1,855.75	$5,567.25	$1,670.00	$5,010.00	$2,160.00	$6,480.00
21	WRAP EX STORM DRAIN JOINTS AT EACH CROSSING	5	EA	$720.79	$3,603.95	$648.00	$3,240.00	$417.00	$2,085.00
22	BACKFILL REMOVAL/REPLACEMENT (R-40)	400	CY	$68.93	$27,572.00	$30.00	$12,000.00	$59.40	$23,760.00
23	STABILIZATION MATERIAL	100	TON	$16.79	$1,679.00	$35.00	$3,500.00	$28.40	$2,840.00
24	FLOWFILL (UTILITY CROSSINGS)	45	CY	$151.90	$6,835.50	$136.00	$6,120.00	$96.50	$4,342.50

BIDS RECEIVED: Friday, February 9, 2017 @ 2:00PM
PROJECT NAME: The Foundry Utility Improvements (W1607C and W1702G)
BID NUMBER: 2017-06
BIDS TABULATED BY: Carlos Medina
BIDS CHECKED BY: Carlos Medina

City of Loveland

C. Sanitary Sewer									
1	36" OD STEEL CASING (GUIDED PIPE RAM INSTALLATION)	100	LF	$935.37	$93,537.00	$1,800.00	$180,000.00	$1,440.00	$144,000.00
2	8" PVC SANITARY SEWER LINE	31	LF	$193.03	$5,983.93	$182.00	$5,642.00	$298.00	$9,238.00
3	12" PVC SANITARY SEWER LINE	365	LF	$255.93	$93,414.45	$120.00	$43,800.00	$126.00	$45,990.00
4	12" FPVC SANITARY SEWER LINE	119	LF	$125.76	$14,965.44	$62.00	$7,378.00	$79.10	$9,412.90
5	48" MANHOLE	5	EA	$10,515.32	$52,576.60	$4,700.00	$23,500.00	$4,500.00	$22,500.00
6	48" DROP MANHOLE	1	EA	$8,321.57	$8,321.57	$6,900.00	$6,900.00	$6,160.00	$6,160.00
7	BACKFILL REMOVAL/REPLACEMENT (R-40)	500	CY	$5.04	$2,520.00	$30.00	$15,000.00	$54.40	$27,200.00
8	STABILIZATION MATERIAL	50	TON	$39.55	$1,977.50	$35.00	$1,750.00	$28.40	$1,420.00
9	FLOWFILL (UTILITY CROSSINGS-RECEIVING PIT)	150	CY	$151.90	$22,785.00	$136.00	$20,400.00	$96.50	$14,475.00
C1. Electric									
1	36" OD STEEL CASING (GUIDED PIPE RAM INSTALLATION)	100	LF	$862.55	$86,255.00	$1,920.00	$192,000.00	$1,560.00	$156,000.00
2	INSTALL DUCT BANK	1	LS	$9,246.33	$9,246.33	$2,500.00	$2,500.00	$4,180.00	$4,180.00
3	FLOWFILL (36" OD STEEL CASING-RECEIVING PIT)	150	CY	$227.75	$34,162.50	$136.00	$20,400.00	$96.50	$14,475.00
D. Street Improvements									
1	SUBGRADE PREPARATION	1709	SY	$7.29	$12,458.61	$12.50	$21,362.50	$4.00	$6,836.00
2	ASPHALT PAVEMENT (MA-P) 12" HMA/6" ABC	278	SY	$170.13	$47,296.14	$113.00	$31,414.00	$133.00	$36,974.00
3	ASPHALT PAVEMENT (MA-I), 6" HMA/8" ABC	1057	SY	$80.20	$84,771.40	$75.00	$79,275.00	$55.20	$58,346.40
4	ASPHALT PAVEMENT (I/CL-I), 3" HMA/4" ABC	166	SY	$83.85	$13,919.10	$50.00	$8,300.00	$68.90	$11,437.40
5	CONCRETE PAVEMENT (MA-P), 9" CP	179	SY	$151.90	$27,190.10	$120.00	$21,480.00	$136.00	$24,344.00
6	AGGREGATE BASE COURSE (I/CL-I), 6" ABC	208	SY	$34.63	$7,203.04	$12.00	$2,496.00	$18.30	$3,806.40
7	CONCRETE FLATWORK (CURB & GUTTER, DRIVEWAY, & WALK)	855	SF	$13.37	$11,431.35	$14.00	$11,970.00	$13.10	$11,200.50
8	PAVEMENT STRIPING	1	LS	$1,822.77	$1,822.77	$5,500.00	$5,500.00	$1,740.00	$1,740.00
9	REPLACE EX THERMOPLASTIC PAVEMENT MARKING (PM-1)	6	EA	$577.21	$3,463.26	$500.00	$3,000.00	$329.00	$1,974.00
10	REPLACE EX THERMOPLASTIC CROSSWALK BARS (PM-2)	2	EA	$1,731.64	$3,463.28	$500.00	$1,000.00	$848.00	$1,696.00
E. Miscellaneous									
1	MOBILIZATION	1	LS	$117,023.01	$117,023.01	$69,000.00	$69,000.00	$75,600.00	$75,600.00
2	DEWATERING	1	LS	$10,461.51	$10,461.51	$7,500.00	$7,500.00	$21,800.00	$21,800.00
3	TRAFFIC CONTROL	1	LS	$51,888.30	$51,888.30	$26,000.00	$26,000.00	$60,100.00	$60,100.00
4	POTHOLE UTILITY CONFLICTS AND CONNECTION LOCATIONS	1	LS	$13,123.97	$13,123.97	$8,000.00	$8,000.00	$16,700.00	$16,700.00
			PROJECT TOTAL ($):		**$1,117,558.04**		**$1,065,322.50**		**$1,038,063.65**
			NOTES:						



This document was prepared for internal use by the City of Loveland, CO. The city makes no claim as to the accuracy or completeness of the data contained hereon.

Due to security concerns, the city requests that you do not post this document on the internet or otherwise make it available to persons unknown to you.

N

Feet

0 30 60

City of Loveland

City of Loveland

Department of Water & Power

61 Loveland, Colorado

Water System Improvements

Created By: gisview

Date Created: 2/7/2017

This document was prepared for internal use by the City of Loveland, CO. The city makes no claim as to the accuracy or completeness of the data contained hereon.

Due to security concerns, the city requests that you do not post this document on the internet or otherwise make it available to persons unknown to you.

N

Feet

0 30 60

City of Loveland

63

City of Loveland

Department of Water & Power

Loveland, Colorado

Wastewater System Improvements

Created By: gisview

Date Created: 2/7/2017

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

AGENDA ITEM: 8
MEETING DATE: 2/15/2017
SUBMITTED BY: Michelle Erickson, Technical Specialist

TITLE: M36 Water Loss Audit Update

DESCRIPTION:
This item reviews the results of the 2016 M36 Water Loss Audit and the actions and the plans Loveland Water and Power (LWP) has to manage and reduce non-revenue water.

SUMMARY:
Previously, LWP used percentages to track our progress toward reducing water losses from the distribution system. One of the goals in the Water Conservation Plan published in 2013 was to reduce non-revenue water to 10-11% of total treated water by 2020. From 2000 to 2015, we conducted annual "unaccounted for water" calculations as a percent of the total water that enters the distribution system. We have since learned that expressing water losses as a percent of supply is not a good indicator of performance.

Total treated water produced has great variability from year to year based on weather and economic conditions. In hot dry years or times of economic booms, the demand for water is much higher than in cold wet years or times of economic recessions or high water rate increases. The water treatment plant produces water in relation to customer demands, which can vary widely from year to year. In contrast, background water system leakage tends to not have great variability from year to year. If we express our water losses, which remain fairly constant from year to year, as a percentage of the total water produced, which is quite variable from year to year, the percent is much smaller in hot dry years or times of economic booms and much higher in cold wet years or times of recession. This percentage calculation does not accurately indicate whether we have made actual progress to reduce water losses.

The American Water Works Association (AWWA) has encouraged utilities to move away from using the "unaccounted for water" calculation or expressing water losses as a percent of supply. They urge utilities to use AWWA's M36 Water Loss Audit Methodology which is a more precise and well-defined measure of accounting for water and focuses on the gallons of non-revenue water rather than on a percentage of water produced as the measure of whether a utility is making progress to reducing water losses.

In 2016, LWP conducted our first M36 Water Loss Audit. We employed AWWA's methodology in the Water Audits and Loss Control Programs, Manual of Water Supply Practices M36. We performed a top-down audit approach, to gather information from existing records, procedures,

and databases to help categorize where the water that entered our distribution system went during the 2015 calendar year. The sum of each column of components in the Water Balance Table are equal and therefore “balance”. The Water Balance Table is based on the theory that all water placed into a distribution system would equal all the water taken out of a distribution system. This information is summarized in the Water Balance Table (see Attachment A).

Our goals in performing these water audits are to identify areas where we can make improvements, work to reduce water losses, improve data validity and increase the proportion of revenue water verses non-revenue water. Below are some of the findings from our first water audit and our efforts so far toward making improvements.

Source Water Meters: In reconciling the metered water entering the water treatment plant verses what leaves the plant (by either entering the water distribution system or that is removed during the treatment process), we found that one of the computer programs was calculating the water produced at one meter with a daily averaging function rather than a summing function. We have corrected this calculation to help obtain more accurate figures for total water produced.

AWWA recommends that water supplied meters be tested annually. The configuration of our Water Treatment Plant does not allow us to remove the water meters for testing; however, it was identified that we should do regular calibrations of at least the electronic components of our source water meters.

Billed Metered Consumption: The majority of our customer accounts fall into this category of being regularly metered and regularly billed. We identified our interconnects with neighboring water districts as an area in which we could improve. Through the audit, we discovered that some interconnect meters are not read frequently and depending on when the meter was read, it could be difficult to ascertain whether the water usage was for the current year or the prior year. To address this, our metering department is now scheduled to go out to our interconnect meters near the end of each year to take readings for that year. We plan to work with our neighboring water districts to do likewise and have them read their interconnect meters near the end of each calendar year.

Billed Unmetered Consumption: Although most City vehicles with water tanks have meters installed on the vehicles, and we bill the water taken from fire hydrants based on the meter reads, the Public Works Department has a few vehicles with unmetered water tanks. The water usage for these vehicles is estimated based on load counts according to the volume of tank capacity. LWP then bills Public Works based on the estimated water usage. During 2016, two additional water meters were installed on street sweeper vehicles. There are now only four vehicles in Public Works for which we estimate and bill water usage based on load counts, which helps to more accurately reflect water usage.

Unbilled Metered Consumption: In the audit, we identified the locations of water meters that were not set to bill to any party (outside customer, within the City to a specific department or division, etc.). We then researched the historical records to determine what had happened and who should be paying for the water usage.

- ***Inactive Meters:*** The majority of the locations identified that are set to not bill are for inactive accounts or for areas in which the water meter was installed for future development. Once activated, these meters will be set to bill for water usage.
- ***Parks:*** We found one location in which the Parks department would hook up to fill a small vehicle with a water tank to do downtown watering of beds. This metered water usage is now billed to the Parks Department.
- ***Detention Ponds:*** We found two detention ponds in which the irrigation water was not set to bill to any party. We are researching which City department this water usage should be charged to.
- ***Storm Water Ditch Syphon:*** The irrigation water of the landscaping around a ditch syphon was also found to not be billing. This was probably due to an oversight when Storm Water left Loveland Water and Power and became part of the Public Works Department. We are in the process of getting this water usage charged to Storm Water.
- ***Wastewater Utility:*** We had three water meters at the Wastewater Treatment Plant that were not set to bill. We began billing the wastewater utility in 2016 for all three of these meters.
- ***HOA:*** The water used to irrigate the landscaping around one of our lift stations was not set to bill. In researching the subdivision plans, it was found that the HOA was responsible for the water usage and other maintenance costs of the site. As of the beginning of 2017, this water usage is now set to bill to this HOA.

Unbilled Unmetered Consumption: In the audit, we identified the locations where treated water is used that is not metered or billed. Some of these uses of water are paid for by all water customers, such as the water used to maintain the distribution system and water used in firefighting. When economically feasible, we are working to get this water usage metered. When that is not economically feasible, we are working to improve the methods used to estimate and track water usage.

- ***Parks:*** We found one park had unmetered water usage for a concession stand sink. We have plans to install a meter at this location later this year and begin billing Parks for the water usage.
- ***Wastewater Utility:*** There were two swamp coolers on the roof of the Blower Building and an eyewash station in the UV Building at the Wastewater Treatment Plant that had unmetered water usage. In 2016, we installed meters at both locations and began billing the wastewater utility for the water usage.
- ***Fire Training Grounds:*** At the fire training grounds, there is unmetered water usage at the hydrants when they are performing fire training. We previously investigated installing a water meter and pit at both ends of the Fire Training Grounds, but found the project to be cost prohibitive. We are working with the Fire Authority to maintain better logs of water usage when they or other parties hook up to the on-site hydrants for fire training exercises.
- ***Off-Site Fire Training:*** The fire department does off-site fire training in which they hook up to fire hydrants throughout the City. We are working with the Fire Authority to maintain better logs of which water district's fire hydrants they hook up to and to estimate the water used during these off-site training exercises.

- ***Fire Fighting:*** We met with Fire to review how they track the amount of water used when they respond to a fire incident. They have a goal to improve their logs to account for the actual water used at each incident.
- ***Fire Sprinkler Systems:*** In meeting with the fire department, we learned that unmetered treated water is used in fire sprinkler systems in the following circumstances: after initial installation to flush the line, during final sprinkler inspections, during annual system inspections, when the system is triggered by building temperatures reaching at least 155 degrees or when activated due to high water pressure incidences. The Fire Authority does not have a complete list of all buildings with fire sprinkler systems in Loveland and has not had a comprehensive tracking mechanism for water usage of these instances. The aggregate water usage for fire sprinkler systems is comparatively low to other water uses in the City. We are investigating whether it would be worth the time and effort to try to track and estimate the gallons used for fire sprinkler systems.
- ***Maintenance of Water Distribution System:*** We use water to flush transmission lines, clean water storage tanks, flush fire hydrants, and to perform fire hydrant flow tests. We reviewed the calculations used to estimate the water usage and are working with staff to maintain more detailed and accurate logs.
- ***Disinfection & Construction Projects:*** We use water to disinfect water pipes and for non-emergency de-watering of lines. Both of these primarily occur during construction projects and for new developments. We reviewed the calculations used to estimate the water usage and are working with staff to maintain more detailed and accurate logs.

Apparent Losses Definition: Nonphysical or "paper" water losses. No water is physically lost from the water supply process. These losses include unauthorized consumption, metering inaccuracies and systematic data handling errors.

- **Systematic Data Handling Errors:** Water & Power and Public Works is working with our Finance Department to sign a contract with Water Company of America to do a review of unbilled or misbilled utilities. The consultant will look for billing errors for water, wastewater, power, stormwater and solid waste. The consultant will work to find areas in which we may be able to recapture revenue such as when a City rate structure was misapplied, finding billing system inaccuracies, detecting unknown connections, finding account coding errors, flagging chronic meter reading errors, etc. Some of this work may lead to corrections in the actual number of the gallons of water consumed to help us more accurately reflect our true water consumption. This is an important component identified in the AWWA M36 Water Loss Audit Program.
- **Customer Meter Inaccuracies:** Water Meters are like the cash registers for the Water Utility. It is important that they accurately record water usage, particularly for customers that use a lot of water, so that the utility is paid for the water that customers use and so that each customer pays their fair share of the cost of the utility. LWP works hard to test our meters on an ongoing bases and to replace meters as necessary.
- **Account Anomalies:** 5/8" and ¾" meters are tested when there is some type of anomaly recorded such as a big change in consumption or a problem with the actual meter (high bill, meter stuck, non-consumption read, meter malfunction, etc.)
- **Large Meters:** 1-1/2" and greater sized meters are tested every 5 years.

LWP's Water Metering group tested a total of 680 water meters in 2015 and 760 water meters in 2016 and replaced close to 530 water meters in 2015 and 570 water meters in 2016. Following are the primary reasons behind replacing rather than rebuilding meters:

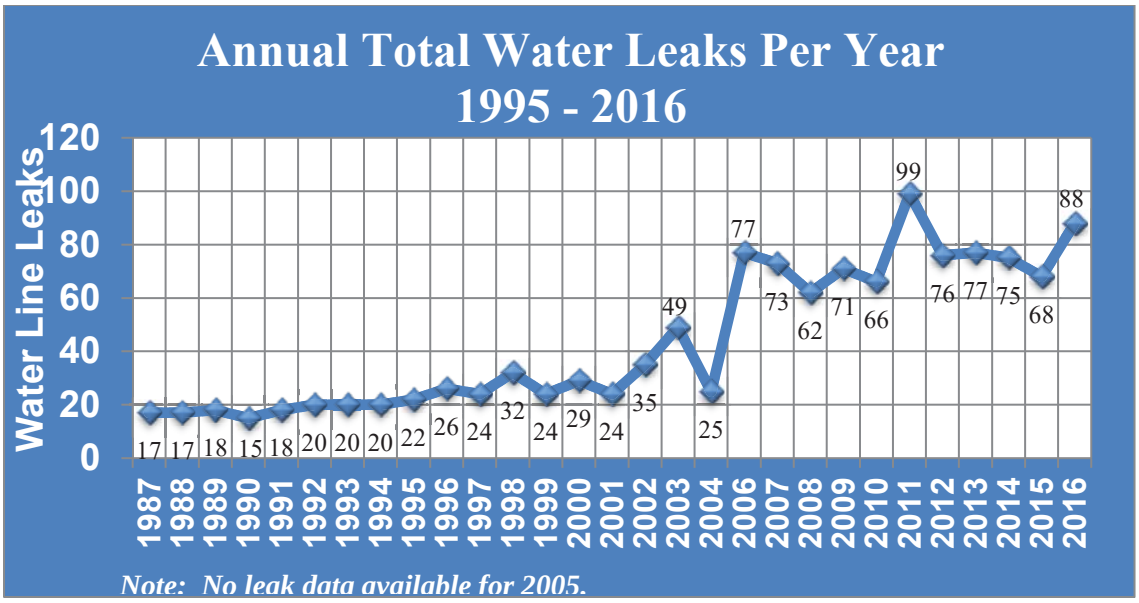
- **Cost-Effectiveness:** The majority of the meters replaced are the smaller 5/8" or 3/4" meters, most of which are at least 20 to 30 years old and were flagged for testing due to some type of error already occurring. It is more cost-effective to replace rather than rebuild these smaller meters.
- **Discontinued Parts:** Particularly for older meters when issues are found, we often need to replace a meter due to discontinued replacement parts.
- **Lead Components:** Meters with lead components removed for testing, may not be reinstalled at a different location, which often results in replacing the meter.
- **AMI Incompatibility:** Some of the older meters are not Advanced Meter Infrastructure (AMI) compatible and would need to be replaced if we were to upgrade our meter reading to do remote meter reads.

See the following table for a breakout of the sizes and quantities of water meters tested in 2015 and 2016.

Size of Meter	Quantity Tested in 2015	Quantity Tested in 2016
5/8" or 3/4"	392	412
1"	191	208
1.5"	59	47
2"	16	68
3"	16	15
4"	3	5
6"	3	5
Total	**680** (Replaced about 530)	**760** (Replaced about 570)

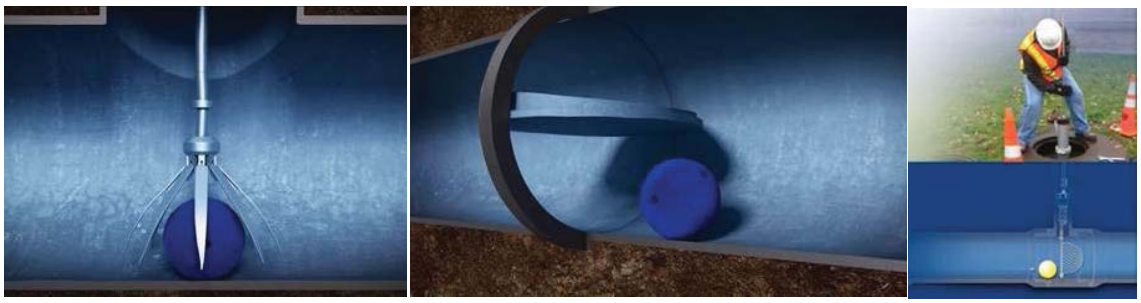
Real Losses Definition: Physical water losses of treated, energized water from the water distribution system from breaks, leaks and overflows.

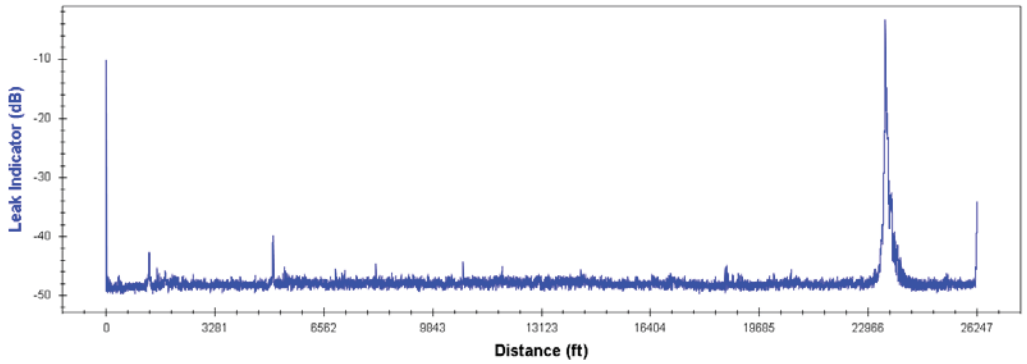
- **Water Line Replacement & Rehabilitation Budget:** Since 2006, we have seen an overall jump in the number of water leaks we address each year with an all-time high in 2011 of 99 leaks (82 water main leaks and 17 service line leaks). Our Water Operations crews spend an increasing amount of time addressing leaks. City Council approved the Water Division's request for additional investment through rate increases starting in 2014 to help address leaks associated with aging and failing infrastructure, and we were given a $6 million program budget to put toward these efforts. We have replaced/rehabbed over 5 miles of waterlines with the $6 million program budget. Going forward we have budgeted over $23 million in our 10-year Capital Improvement Plan to address water line replacement and rehabilitation work.



- **SmartBall:** In 2016, the City contracted with Pure Technology to use their SmartBall technology to assess the condition of a 36" diameter steel water transmission line constructed in 1961 west of town that then ties into a 34" diameter steel water line built in 1962 that runs along an old railroad south of Highway 34. Due to 2013 flood related work, it was discovered that water was leaking from the 36" pipe somewhere along a 14,500' stretch that crosses State Highway 34 in three locations, the Big Thompson River in four locations, and is located in fields and near residences throughout the stretch, all which make access to evaluating the pipe much more challenging. This SmartBall technology used a free-swimming ball that was inserted into the water transmission line. The ball traveled through the water main while still in operation and detected information during its journey. The watertight core of the ball houses instruments with an acoustic sensor, accelerometer, magnetometer, GPS synchronized ultrasonic transmitter and temperature sensor. All of this is enclosed in an outer foam shell.

  The following figure shows the acoustic profile of the inspection with respect to the position of the tool within the pipeline, as detected by the SmartBall technology. The magnitude of a leak is estimated by correlating acoustic signal values.





This SmartBall technology identified the location of two leaks in the line as well as a couple of valves kept open to allow the SmartBall to pass through the water line. The first leak identified was dug up and addressed in the Fall of 2016. For the second leak, we have locates scheduled for the second week of February 2017. We will then work to gain legal access to the property to excavate and address the issue.

Description	Distance from Insertion (feet)	Time Since Launch (hh:mm:ss)
Leak (Small)	5,036	01:17:33
Leak (Large)	23,495	06:03:50

- **In-House Leak Detection:** LWP's Water Operations group owns LC-2500 Leak Noise Correlators (contractor grade leak detection and locating equipment). Acoustic sound sensors are placed in contact with the pipe, at two points, to record the sound emitted by a leak (e.g. a hissing noise) somewhere between the points. The sound data is processed through a mathematical algorithm that compares or correlates the two recordings to determine the difference in the times it takes noise to travel from the site of the leak to each of the sensors. The primary purposes of this equipment is to first detect the presence of leaks on a section of line, and second to pinpoint the location of leaks for repair. Over the last 6 years, from 2011 to 2016, the Water Operations group has performed acoustic leak detection on 87.5 miles of our 437.5 total miles of water lines - focusing primarily on problem areas and areas with older waterlines. They have been able to locate various non-surfacing leaks with this equipment such as when the leaking water finds its way to a storm drain, a sewer manhole, a river crossing or into a high water table. They hope to increase the number of miles they listen to as staffing and resources will allow.

Next Steps: Continue to perform annual water loss audits and make continuous improvements to reduce water losses, improve data validity and increase the proportion of revenue water verses non-revenue water. As we accumulate more data, we should set volume targets and track our progress toward reaching those targets. Eventually, we would like to incorporate into the annual audits a component analysis and a bottoms-up approach to verify the audit findings.

- **Component Analysis:** Includes modeling leakage volumes based on the nature of leak occurrences and the duration of the occurrences.

- **Bottom-up Approach:** Includes validating the Water Loss audit findings with actual field measurements, physical inspections and process flowcharting to help identify possible errors or methods for improvements.

RECOMMENDATION:
Staff item only. No action required.

ATTACHMENTS:

- **Attachment A:** 2015 Loveland Water & Power Water Balance Table

Attachment A

Water Balance Table

Loveland Water & Power
2015 Calendar Year
(Million Gallons)

Volume from Own Sources **4,463.039**	System Input Volume **4,467.389**	Water Exported **87.113**	Billed Water Exported **87.113**			Revenue Water **87.113**
			Authorized Consumption **3,631.120**	Billed Authorized Consumption **3,564.193**	Billed Metered Consumption **3,564.000**	Revenue Water **3,564.193**
					Billed Unmetered Consumption **0.193**	
				Unbilled Authorized Consumption **66.927**	Unbilled Metered Consumption **12.173**	Non-Revenue Water (NRW) **816.083**
					Unbilled Unmetered Consumption **54.753**	
		Water Supplied **4,380.276**	Water Losses **749.157**	Apparent Losses **168.868**	Unauthorized Consumption **10.951**	
					Customer Metering Inaccuracies **149.007**	
					Systematic Data Handling Errors **8.910**	
				Real Losses **580.289**	Leakage on Transmission and Distribution Mains **Not broken down**	
					Leakage and Overflows of Utility's Storage Tanks **Not broken down**	
Water Imported **4.350**					Leakage on Service Connections up to the point of Customer Metering **Not broken down**	

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

AGENDA ITEM: 9
MEETING DATE: 2/15/2017
SUBMITTED BY: Michelle Erickson, Technical Specialist

TITLE: 2016 Levels of Service Update for Water and Wastewater Utilities

DESCRIPTION:
This item is to review the definition of Levels of Service (LOS) and present the yearly update of our 2016 LOS for the Water and Wastewater Utilities in comparison to prior years.

SUMMARY:
Asset management can be defined as managing infrastructure capital assets to minimize the total cost of owning, operating, and maintaining assets at acceptable Levels of Service. Our Levels of Service targets are the minimum acceptable levels that water and wastewater should strive to maintain.

Water and Wastewater Utilities

As part of the City of Loveland's Asset Management Program, we have developed Levels of Service for the Water and Wastewater Utilities. Defining Levels of Service, tracking performance against these targets, and working to improve in areas in which we fall short are a key part of our asset management program. This is our third year in which staff has tracked LOS performance criteria in both the Water and Wastewater Utilities in the following areas:

- Regulatory compliance
- Quantity of services provided
- Availability of services provided
- Reliability of services provided
- Responsiveness to outages or blockages
- Aesthetics (odor, taste, smell, etc.)

When we initially worked on setting our LOS, we took into consideration LUC, internal staff, and customer expectations, regulatory requirements, actual performance, and the physical capabilities and limits of our current assets. Please see the attached presentation slides to view the results of our 2016 LOS compared to historical records back to 2009 in each of the categories listed categories.

Improvements in LOS performance require additional resources. For instance, if we want to see fewer leaks, then we need to invest additional resources (time, money, equipment, manpower, etc.) to repair or replace failing water lines. It is important to balance the costs verses the

benefits of improvements in our LOS. For example, a target of zero water main breaks in any given year may sound desirable, but it is not likely that customers would be willing to pay substantially more for the associated costs required to provide and maintain that high of a water availability LOS. LOS improvements require additional operational costs, which in turn require additional funding through mechanisms such as debt financing or raising the rates charged to customers.

Measuring our progress and comparing it against our target LOS will help us to better focus on the areas that need improvement and help us better communicate which areas need additional resources for progress to be made. LOS requirements may need to be updated to adapt to changes such as population growth, increased regulatory requirements or technology improvements. Our hope is that over time, we will have the resources in place to meet all of our desired LOS performance measures, while still maintaining our assets in a cost-effective manner.

RECOMMENDATION:
Staff item only. No action required.

REVIEWED BY DIRECTOR:

ATTACHMENTS

- **Attachment A:** Presentation Slides

LEVELS OF SERVICE (LOS) DOCUMENT

Levels of Service | Sets the minimum acceptable levels that the Water & Wastewater Utilities should strive to maintain in areas such as:

- Regulatory Compliance
- Quantity
- Availability & Capacity
- Reliability
- Responsiveness
- Aesthetics & Quality

LOS • WATER REGULATORY COMPLIANCE

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Safe Potable Water: *Compliance with Drinking Water Standards and all requirements of the Safe Drinking Water Act*								
100% Compliant	✓	✓	✓	✗	✓	✓	✓	✗
No Tier Notifications	✓	✓	✓	✓	✗	✓	✓	0
Fluoride: *Optimally fluoridate water*								
Number of months fluoride did not meet the optimally fluoridated requirements set by the state.	✓ 0	✗ 2	✗ 7	✗ 12	✗ 12	✗ 4	✓ 0	✓ 0

LOS • WATER QUANTITY

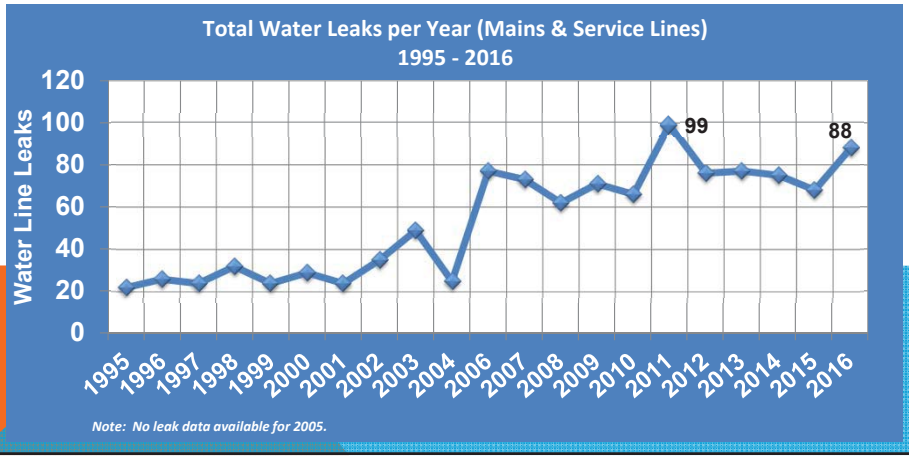
Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Pressure: *Minimum Pressure at Meter*								
All properties receive at least 40 PSI static pressure where not prevented due to high property elevations.	?	?	?	?	?	✗ 2	✗ 1	✗ 4
Flow: *Water system maintained to meet fire suppression flow requirements.*								
Maintain a Public Protection Classification of 2 in the Water Supply area of the survey conducted by the Insurance Services Office (ISO).	?	?	?	?	?	?	✓	✓

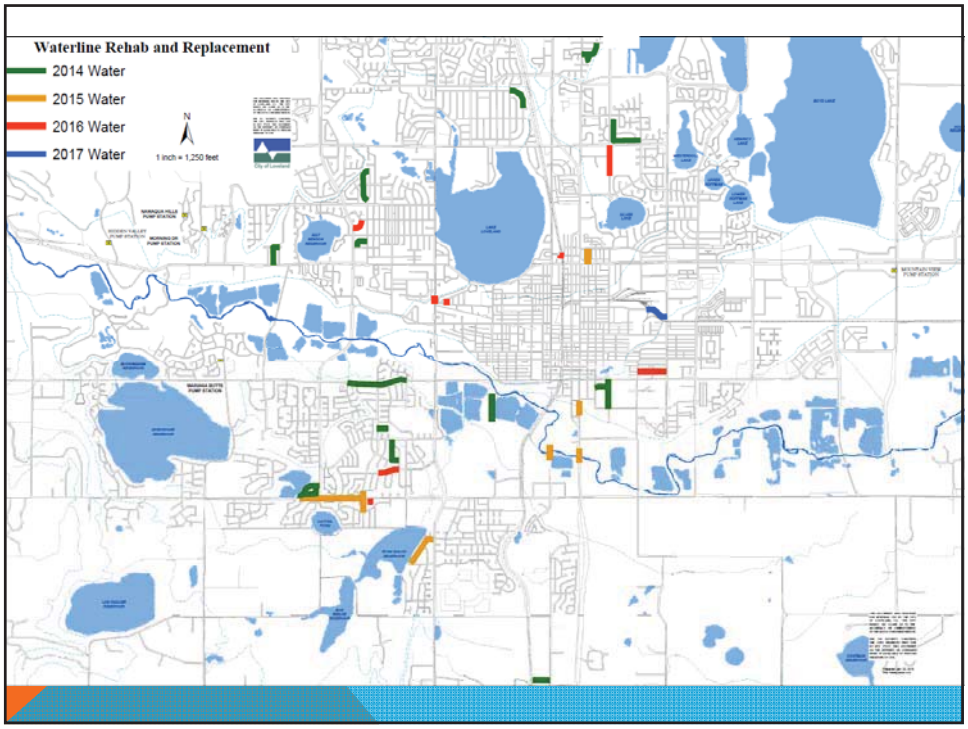
LOS • WATER AVAILABILITY

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Drought Storage: *System to endure a 100-year drought event without mandatory watering restrictions*								
Did not implement mandatory watering restrictions.	✓	✓	✓	✓	✓	✓	✓	✓
Did not consider implementing mandatory watering restrictions.	✓	✓	✓	✗	✓	✓	✓	✓
System Capacity: *Treatment capacity and system storage*								
Capacity to supply peak demand to all customers utilizing interconnects if necessary	✓	✓	✓	✓	✓	✓	✓	✓

LOS • WATER RELIABILITY

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Unplanned Interruptions: *Number of un-notified system interruptions*								
No more than 2 un-notified interruptions on any 1000' of waterlines	✗ 7	✗ 6	✗ 11	✗ 9	✗ 12	✗ 9	✗ 6	✗ 4



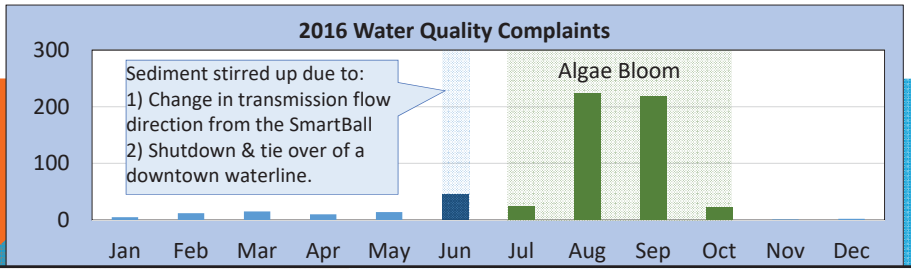


LOS • WATER RESPONSIVENESS

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Response to Unplanned Water Outages: *Time to respond to unplanned water outages*								
Respond on-site to all water outage complaints within 1 hour	?	?	?	?	?	✓	✓	✓

LOS • WATER AESTHETICS

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Water Quality Complaints: *Number of water quality complaints*								
Water quality complaints do not exceed more than 1% of the number of active water meters.	✓	✓	✓	✓	✓	✓	✓	✘



LOS • WASTEWATER REGULATORY COMPLIANCE

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Compliance with Wastewater Permit Limits & Requirements: *Compliance with all regulatory and permit requirements*								
Zero exceedances and zero violations to all regulatory and permit requirements	✓	✓	✓	✗ 2	✓	✗ 1	✗ 3	✗ 3

LOS • WASTEWATER AVAILABILITY

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
System Capacity: *Collection, treatment, and lift station capacity and performance even during a 25-year rain storm event*								
0% exceedance of collection system and treatment plant capacity	✓	✓	✓	✓	✓	✓	✓	✓
No sanitary sewer overflows	✗ 1	✓	✓	✓	✗ 2	✗ 4	✓	✓

LOS • WASTEWATER RELIABILITY

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Unplanned Interruptions: *Number of sewer main backups*								
No more than 2 sewer main backups.	✗ 13	✗ 2	✗ 7	✗ 8	✗ 4	✗ 14	✗ 4	✗ 5

LOS • WASTEWATER RESPONSIVENESS

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Response to Unplanned Blockages: *Time to respond to blockage complaints*								
Respond to all blockage complaints on-site within 1 hour.	?	?	?	?	?	✓	✓	✓

LOS • WATER AESTHETICS

Target Performance per Year	2009	2010	2011	2012	2013	2014	2015	2016
Wastewater Odor Complaints: *Number of odor complaints related to the wastewater system*								
No more than 10 odor complaints	✓	✓	✓	✓	✓	✓	✓	✓

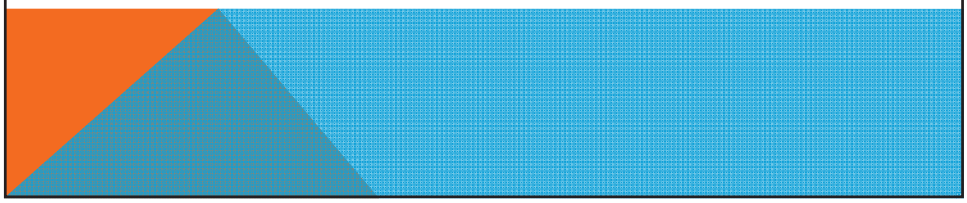
- **Narrow the Focus:** Helps narrow the focus to areas in which we are not meeting the minimum Levels of Service
- **Project Identification:** Helps identify areas where we may look at doing repair, replacement or risk mitigation projects
- **Communication Tool:** Ties results to funding and provides justification for decision-making and resource allocation
- **Trending:** Measures and documents actual performance against defined performance criteria which leads to greater understanding of trends and allows benchmarking against other utilities
- **Prioritization Tool:** Use as an additional tool to help prioritize capital improvement projects in conjunction with other tools such as:
  - Leak frequency and blockage maps
  - Budget projections
  - Project cost projections

BENEFITS OF LEVELS OF SERVICE

- **Develop Risk Assessments & Mitigation Plans**
  - Wastewater Treatment Plant – In progress
  - Pump/Lift Stations
- **Develop Systems for:**
  - Preventative Maintenance Work Order System
  - Replacement Plans for High Risk Systems
- **Complete Asset Register**
  - Water/Wastewater Treatment Plants
- **Develop an Asset Policy Supported by City Council and Cost of Service Study**
- **Continue to do Annual Reports on LOS Performance**

NEXT STEPS FOR THE WATER & WASTEWATER UTILITIES

QUESTIONS?



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

AGENDA ITEM: **10**
MEETING DATE: 2/15/2017
SUBMITTED BY: Jim Lees, Utility Accounting Manager

TITLE: Financial Report Update

DESCRIPTION:
This item summarizes the monthly and year-to-date Preliminary financials for December 2016.

SUMMARY:
The December 2016 financial reports are submitted for Commission review. The following table summarizes the sales and expense results for the month of December, and the December Year-To-Date results in comparison to the same periods from 2015. The summarized and detailed monthly financial statements that compare December Year-To-Date actuals to the 2016 budgeted figures are attached.

	December				December Year-To-Date			
	2016	2015	$ Ovr/(Und) vs. 2015	% Ovr/(Und) vs. 2015	2016	2015	$ Ovr/(Und) vs. 2015	% Ovr/(Und) vs. 2015
WATER								
Sales	$760,895	$676,753	$84,142	12.4%	$14,008,892	$11,947,460	$2,061,432	17.3%
Operating Expenses	$943,417	$1,008,191	($64,774)	-6.4%	$11,605,575	$11,030,849	$574,727	5.2%
Capital (Unrestricted)	$267,111	$1,958,645	($1,691,534)	-86.4%	$4,807,173	$10,367,221	($5,560,048)	-53.6%
WASTEWATER								
Sales	$870,750	$760,186	$110,564	14.5%	$10,072,773	$9,057,418	$1,015,355	11.2%
Operating Expenses	$630,097	$607,108	$22,989	3.8%	$6,640,659	$6,123,987	$516,673	8.4%
Capital (Unrestricted)	$93,918	$299,933	($206,015)	-68.7%	$2,438,388	$2,503,907	($65,518)	-2.6%
POWER								
Sales	$4,609,970	$4,407,776	$202,193	4.6%	$58,399,241	$55,971,562	$2,427,680	4.3%
Operating Expenses	$4,416,499	$4,645,925	($229,426)	-4.9%	$53,412,777	$52,390,890	$1,021,888	2.0%
Capital (Unrestricted)	$530,625	$615,098	($84,474)	-13.7%	$9,030,479	$5,826,323	$3,204,157	55.0%

RECOMMENDATION:
Staff report only. No action required.

LIST OF 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 E:** Presentation Slides

Attachment A

City of Loveland
Financial Statement-Raw Water
For Period Ending 12/31/2016
Preliminary as of 2/6/2016

		TOTAL BUDGET FYE 12/31/2015	YTD ACTUAL	YTD BUDGET	OVER <UNDER>	VARIANCE
1	**REVENUES & SOURCES**					
2	Hi-Use Surcharge	52,500	82,647	52,500	30,147	57.4%
3	Raw Water Development Fees/Cap Rec Surcharge	336,920	502,515	336,920	165,595	49.1%
4	Cash-In-Lieu of Water Rights	250,000	514,329	250,000	264,329	105.7%
5	Native Raw Water Storage Fees	5,000	337,567	5,000	332,567	6651.3%
6	Loan Payback from Water	134,000	41,745	134,000	(92,255)	-68.8%
7	Raw Water 1% Transfer In	396,080	420,267	396,080	24,187	6.1%
8	Interest on Investments	237,270	212,014	237,270	(25,256)	-10.6%
9	**TOTAL REVENUES & SOURCES**	**1,411,770**	**2,111,084**	**1,411,770**	**699,314**	**49.5%**
10	**OPERATING EXPENSES**					
11	Loan to Water	9,000,000	0	9,000,000	(9,000,000)	-100.0%
12	Windy Gap Payments	856,080	856,023	856,080	(57)	0.0%
13	**TOTAL OPERATING EXPENSES**	**9,856,080**	**856,023**	**9,856,080**	**(9,000,057)**	**-91.3%**
14	NET OPERATING REVENUE/(LOSS) (excl depr)	(8,444,310)	1,255,061	(8,444,310)	9,699,371	-114.9%
15	RAW WATER CAPITAL EXPENDITURES	2,620,820	1,479,804	2,620,820	(1,141,016)	-43.5%
16	**ENDING CASH BALANCES**					
17	Total Available Funds		13,860,852			
18	Reserve - Windy Gap Cash		0			
19	Reserve - 1% Transfer From Rates		5,530,510			
20	Reserve - Native Raw Water Storage Interest		1,604,391			
21	**TOTAL RAW WATER CASH**		**20,995,752**			
22	MINIMUM BALANCE (15% OF OPER EXP)		1,478,412			
23	OVER/(UNDER) MINIMUM BALANCE		19,517,340			

NOTE: YTD ACTUAL DOES NOT INCLUDE ENCUMBRANCES TOTALING: 5586.1

Attachment B

City of Loveland
Financial Statement-Water
For Period Ending 12/31/2017
Preliminary as of 2/6/2016

		TOTAL BUDGET FYE 12/31/2015	YTD ACTUAL	YTD BUDGET	OVER <UNDER>	VARIANCE
1	****UNRESTRICTED FUNDS****					
2	**REVENUES & SOURCES**					
3	Water Sales	13,202,610	14,008,892	13,202,610	806,282	6.1%
4	Raw Water Transfer Out	(396,080)	(420,267)	(396,080)	(24,187)	6.1%
5	Wholesale Sales	137,200	156,585	137,200	19,385	14.1%
6	Meter Sales	51,530	111,152	51,530	59,622	115.7%
7	Interest on Investments	88,560	93,417	88,560	4,857	5.5%
8	Other Revenue	1,415,760	533,307	1,415,760	(882,453)	-62.3%
9	Federal and State Grants	1,560,135	1,110,983	1,560,135	(449,152)	-28.8%
10	Internal Loan Monies Received	1,753,087	750,339	1,753,087	(1,002,748)	-57.2%
11	External Loan Monies Received	2,793,406	2,993,406	2,793,406	200,000	7.2%
12	**TOTAL REVENUES & SOURCES**	**20,606,208**	**19,337,815**	**20,606,208**	**(1,268,393)**	**-6.2%**
13	**OPERATING EXPENSES**					
14	Source of Supply	3,072,290	1,524,826	3,072,290	(1,547,464)	-50.4%
15	Treatment	2,890,881	2,790,088	2,890,881	(100,793)	-3.5%
16	Distribution Operation & Maintenance	3,525,553	3,049,939	3,525,553	(475,614)	-13.5%
17	Administration	596,968	371,804	596,968	(225,164)	-37.7%
18	Customer Relations	339,276	281,099	339,276	(58,177)	-17.1%
19	PILT	896,460	951,204	896,460	54,744	6.1%
20	1% for Arts Transfer	62,725	42,743	62,725	(19,982)	-31.9%
21	Services Rendered-Other Departments	1,147,987	1,069,152	1,147,987	(78,835)	-6.9%
22	Internal Loan Debt Expense	817,500	796,620	817,500	(20,880)	-2.6%
23	External Loan Debt Expense	292,151	728,101	292,151	435,950	149.2%
24	**TOTAL OPERATING EXPENSES**	**13,641,791**	**11,605,575**	**13,641,791**	**(2,036,216)**	**-14.9%**
25	NET OPERATING REVENUE/(LOSS)(excl depr)	6,964,417	7,732,239	6,964,417	767,822	11.0%
26	CAPITAL EXPENDITURES	5,634,304	4,807,173	5,634,304	(827,131)	-14.7%
27	ENDING CASH BALANCE		**10,145,277**			100
28	WATER DEBT FUNDS ENDING CASH BALANCE		**447,313**			100
29	MINIMUM BALANCE (15% OF OPER EXP)		2,046,269			
30	**OVER/(UNDER) MINIMUM BALANCE**		**8,099,008**			
31	****RESTRICTED FUNDS****					
32	**REVENUES & SOURCES**					
33	SIF Collections	2,075,550	2,788,950	2,075,550	713,400	34.4%
34	SIF Interest Income	52,670	16,237	52,670	(36,433)	-69.2%
35	SIF Federal and State Grants	937,440	635,595	937,440	(301,845)	-32.2%
36	Internal Loan Monies Received	8,000,000	0	8,000,000	(8,000,000)	-100.0%
37	**TOTAL SIF REVENUES & SOURCES**	**11,065,660**	**3,440,782**	**11,065,660**	**(7,624,878)**	**-68.9%**
38	SIF Capital Expenditures	4,418,493	3,918,646	4,418,493	(499,847)	-11.3%
39	1% for Arts Transfer	97,229	38,291	97,229	(58,938)	-60.6%
40	Internal Loan Debt Expense	0	0	0	0	0.0%
41	**SIF ENDING CASH BALANCE**		**2,177,237**			**100**
42	**TOTAL ENDING CASH BALANCE**		**12,322,513**			
	NOTE: YTD ACTUAL DOES NOT INCLUDE ENCUMBRANCES TOTALING:		1,222,688			
43	Water Treated at WTP (in million gallons)		4,605			
44	Water Sold To Customers (in million gallons, includes Ranch Water & Hydrant Sales)	3,795	3,884	3,795	90	2.4%

Attachment C

City of Loveland-LIVE
Financial Statement-Wastewater
For Period Ending 12/31/2016
Preliminary as of 2/6/2016

		TOTAL BUDGET FYE 12/31/2016	YTD ACTUAL	YTD BUDGET	OVER <UNDER>	VARIANCE
1	****UNRESTRICTED FUNDS****					
2	**REVENUES & SOURCES**					
3	Sanitary Sewer Charges	10,142,610	10,072,773	10,142,610	(69,837)	-0.7%
4	High Strength Surcharge	358,330	428,001	358,330	69,671	19.4%
5	Interest on Investments	103,760	116,565	103,760	12,805	12.3%
6	Other Revenue	126,990	111,740	126,990	(15,250)	-12.0%
7	Bond Proceeds	16,000,000	0	16,000,000	(16,000,000)	-100.0%
8	Federal Grants	148,787	32,415	148,787	(116,371)	-78.2%
9	State Grants	1,174,501	739,464	1,174,501	(435,037)	-37.0%
10	**TOTAL REVENUES & SOURCES**	**28,054,978**	**11,500,958**	**28,054,978**	**(16,554,020)**	**-59.0%**
11	**OPERATING EXPENSES**					
					0	0.0%
12	Treatment	3,594,798	3,077,792	3,594,798	(517,006)	-14.4%
13	Collection System Maintenance	2,446,731	2,033,875	2,446,731	(412,856)	-16.9%
14	Administration	393,216	230,477	393,216	(162,739)	-41.4%
15	Customer Relations	40,842	33,992	40,842	(6,850)	-16.8%
16	PILT	735,070	735,054	735,070	(16)	0.0%
17	1% for Arts Transfer	176,935	13,223	176,935	(163,712)	-92.5%
18	Services Rendered-Other Departments	749,891	516,246	749,891	(233,645)	-31.2%
19	**TOTAL OPERATING EXPENSES**	**8,137,483**	**6,640,659**	**8,137,483**	**(1,496,824)**	**-18.4%**
20	NET OPERATING REVENUE/(LOSS)(excl depr)	19,917,495	4,860,298	19,917,495	(15,057,196)	-75.6%
21	CAPITAL EXPENDITURES	20,027,871	2,438,388	20,027,871	(17,589,483)	-87.8%
22	ENDING CASH BALANCE		**12,145,651**			100
23	MINIMUM BALANCE (15% OF OPER EXP)		1,220,622			
24	OVER/(UNDER) MINIMUM BALANCE		10,925,029			
25	****RESTRICTED FUNDS****					
26	**REVENUES & SOURCES**					
27	SIF Collections	1,516,790	1,740,034	1,516,790	223,244	14.7%
28	SIF Interest Income	108,410	86,423	108,410	(21,987)	-20.3%
29	SIF Bond Proceeds	8,900,000	0	8,900,000	(8,900,000)	-100.0%
30	**TOTAL SIF REVENUES & SOURCES**	**10,525,200**	**1,826,457**	**10,525,200**	**(8,698,743)**	**-82.6%**
31	SIF Capital Expenditures	10,949,788	966,032	10,949,788	(9,983,756)	-91.2%
32	1% for Arts Transfer	98,104	3,219	98,104	(94,885)	-96.7%
33	**SIF ENDING CASH BALANCE**		**8,919,774**			100
	TOTAL ENDING CASH BALANCE		**21,065,425**			
	NOTE: YTD ACTUAL DOES NOT INCLUDE ENCUMBRANCES TOTALING		2,964,692			
34	Wastewater Treated at WWTP (in million gallons)	N/A	2,393	N/A		
35	Wastewater Billed To Customers (in million gallons)	1,806	1,751	1,806	(55)	-3.0%

Attachment D

City of Loveland
Financial Statement-Power
For Period Ending 12/31/2016
Preliminary as of 2/7/2016

		*	TOTAL BUDGET	*	YTD ACTUAL	YTD BUDGET	OVER <UNDER>	VARIANCE
	****UNRESTRICTED FUNDS****	*		*				
		*		*				
1	REVENUES & SOURCES:	*		*				
2	Electric revenues	*	$58,665,860	*	$58,399,241	$58,665,860	($266,619)	-0.5%
3	Wheeling charges	*	$240,000	*	$267,098	$240,000	$27,098	11.3%
4	Interest on investments	*	$256,680	*	$207,948	$256,680	($48,732)	-19.0%
5	Aid-to-construction deposits	*	$1,530,000	*	$1,022,950	$1,530,000	($507,050)	-33.1%
6	Customer deposit-services	*	$260,000	*	$295,694	$260,000	$35,694	13.7%
7	Late Payment Penalty Fees	*	$415,000	*	$515,472	$415,000	$100,472	24.2%
	Loan to Power PIF		$0		($1,000,000)	($1,000,000)	$0	0.0%
8	Connect Fees	*	$160,000	*	$181,617	$160,000	$21,617	13.5%
9	Services rendered to other depts.	*	$5,890	*	$600	$5,890	($5,290)	-89.8%
10	Other revenues	*	$387,220	*	$349,448	$387,220	($37,772)	-9.8%
11	Federal Grants	*	$3,500,000	*	$1,396	$3,500,000	($3,498,604)	-100.0%
12	State Grants	*	$0	*	$233	$0	$233	0.0%
13	Year-end cash adjustments	*	$0	*	$0	$0	$0	0.0%
14	**TOTAL REVENUES & SOURCES**	*	**$65,420,650**	*	**$60,241,698**	**$64,420,650**	**($4,178,952)**	**-6.5%**
		*		*				
15	OPERATING EXPENSES:	*		*				
16	Hydro oper. & maint.	*	$5,842,549	*	$161,825	$5,842,549	($5,680,724)	-97.2%
17	Purchased power	*	$42,673,764	*	$41,600,100	$42,673,764	($1,073,664)	-2.5%
18	Distribution oper. & maint.	*	$6,673,658	*	$3,624,514	$6,673,658	($3,049,144)	-45.7%
19	Customer Relations	*	$1,305,442	*	$1,015,227	$1,305,442	($290,215)	-22.2%
20	Administration	*	$841,837	*	$645,063	$841,837	($196,774)	-23.4%
21	Payment in-lieu-of taxes	*	$4,120,990	*	$4,044,553	$4,120,990	($76,437)	-1.9%
22	1% for Arts Transfer	*	$86,060	*	$52,924	$86,060	($33,137)	-38.5%
23	Services rendered-other depts.	*	$2,184,721	*	$2,268,573	$2,184,721	$83,852	3.8%
24	**TOTAL OPERATING EXPENSES (excl depn)**	*	**$63,729,021**	*	**$53,412,777**	**$63,729,021**	**($10,316,244)**	**-16.2%**
		*		*				
25	NET OPERATING REVENUE/(LOSS) (excl depn)	*	$1,691,629	*	$6,828,920	$691,629	$6,137,291	$0
		*		*				
26	CAPITAL EXPENDITURES:	*		*				
27	General Plant/Other Generation & Distribution	*	$13,700,486	*	$7,292,491	$13,700,486	($6,407,995)	-46.8%
28	Aid-to-construction	*	$1,530,000	*	$1,437,901	$1,530,000	($92,099)	-6.0%
29	Service installations	*	$290,000	*	$300,087	$290,000	$10,087	3.5%
30	**TOTAL CAPITAL EXPENDITURES**	*	**$15,520,486**	*	**$9,030,479**	**$15,520,486**	**($6,490,007)**	**-41.8%**
		*		*				
31	**ENDING CASH BALANCE**	*		*	**$18,331,629**			
		*		*				
32	MINIMUM BAL. (15% of OPER EXP excl depn)	*		*	$9,559,353			
33	OVER/(UNDER) MINIMUM BALANCE	*		*	$8,772,275			
		*		*				
34	****RESTRICTED FUNDS****	*		*				
		*		*				
35	PIF Collections	*	$2,741,830	*	$2,939,848	$2,741,830	$198,018	7.2%
36	PIF Interest Income	*	$45,850	*	$15,428	$45,850	($30,422)	-66.4%
37	Water Loan Payback	*	$913,050	*	$796,620	$913,050	($116,430)	-12.8%
	Loan from Power General		$0		$1,000,000	$1,000,000	$0	0.0%
38	Federal Grants		$4,434,516		$3,487,440	$4,434,516	($947,076)	-21.4%
39	State Grants		$0		$581,240	$0	$581,240	0.0%
40	**TOTAL REVENUES**	*	**$8,135,246**	*	**$8,820,576**	**$9,135,246**	**($314,670)**	**-3.4%**
		*		*				
41	PIF Feeders	*	$2,800,000	*	$2,393,317	$2,800,000	($406,683)	-14.5%
42	PIF Substations & Solar	*	$6,768,018	*	$6,555,620	$6,768,018	($212,398)	-3.1%
43	**TOTAL EXPENDITURES**	*	**$9,568,018**	*	**$8,948,937**	**$9,568,018**	**($619,081)**	**-6.5%**
		*		*				
44	**ENDING PIF CASH BALANCE**	*		*	**$3,114,571**			
		*		*				
45	**TOTAL ENDING CASH BALANCE**	*		*	**$21,446,200**			

NOTE: YTD ACTUAL does NOT include encumbrances totalling $6,734,156.

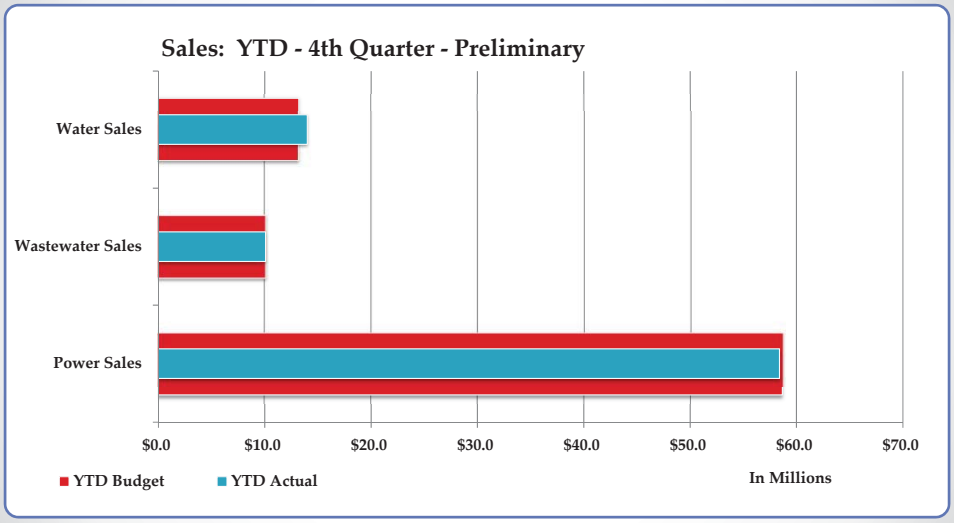
46	Energy Purchased (in million kWh) from PRPA	*	742	*	732	742	(10)	2.7%
47	Energy Sold to Customers (in million kWh)	*	713	*	702	713	(10)	-1.4%

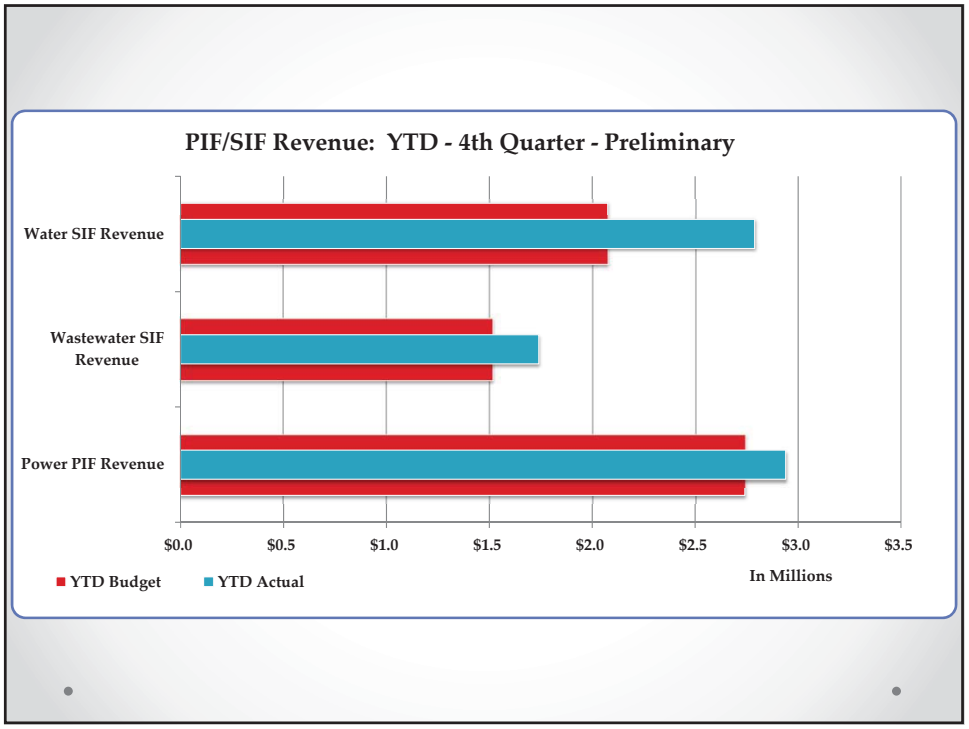
Loveland Water and Power

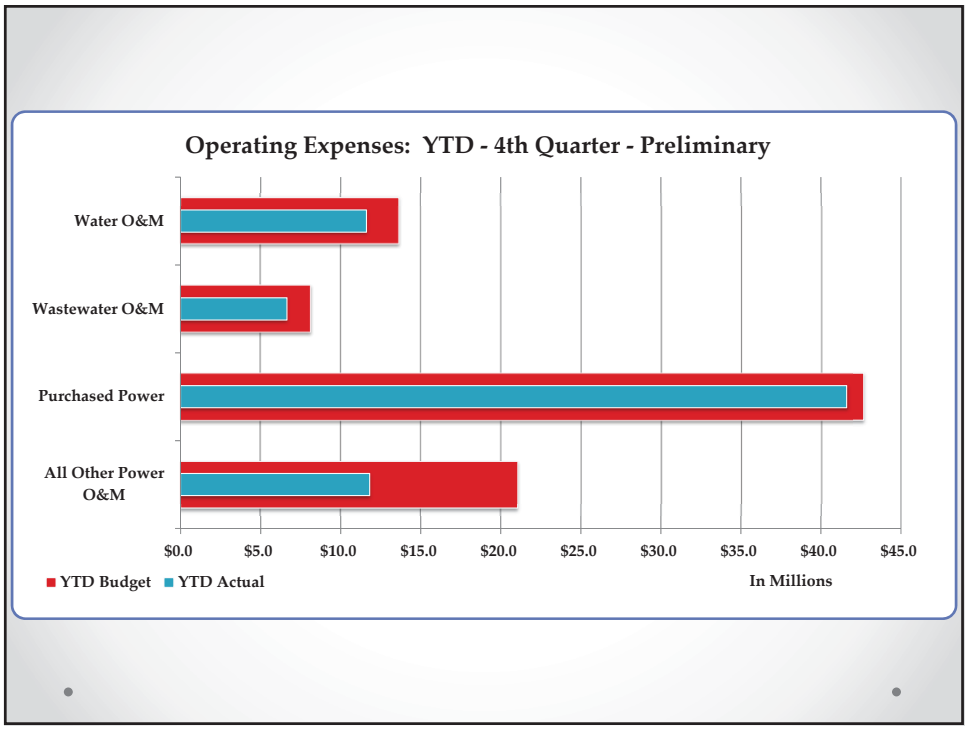
Water & Power
Quarterly Financial Report

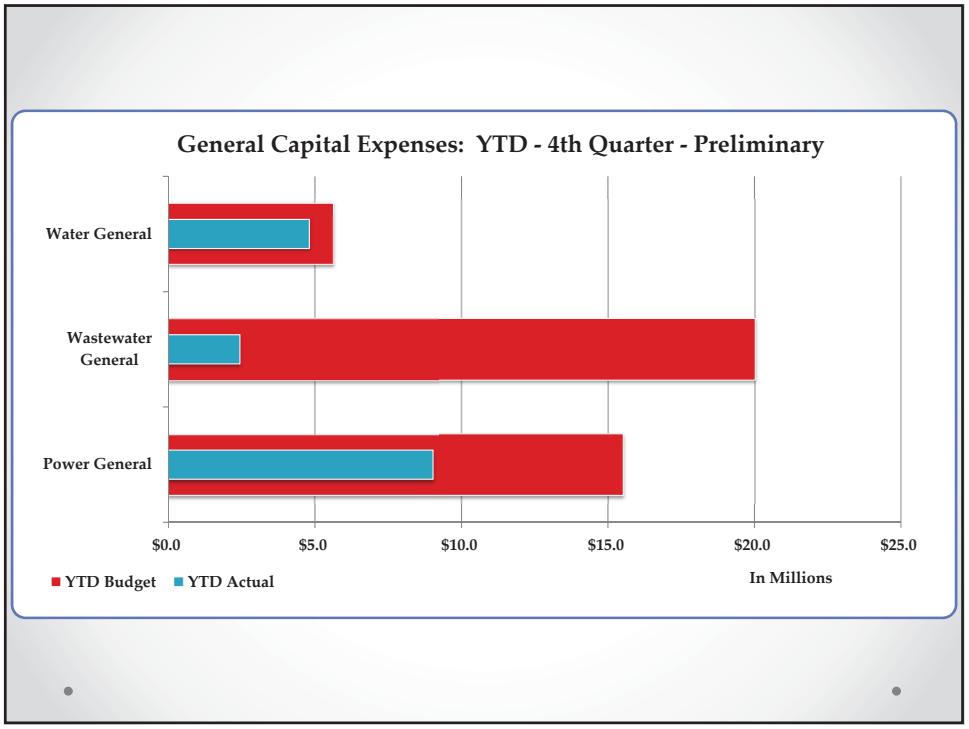
Loveland Utilities Commission

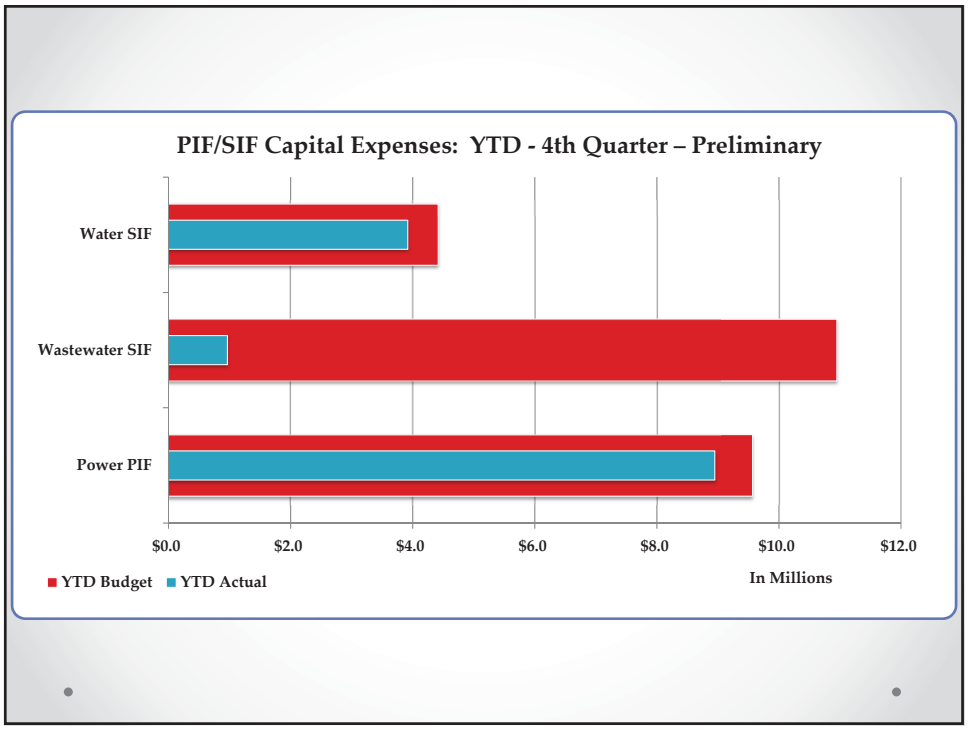
February 15, 2017




PIF/SIF Revenue: YTD - 4th Quarter - Preliminary
Water SIF Revenue
Wastewater SIF Revenue
Power PIF Revenue
$0.0
$0.5
$1.0
$1.5
$2.0
$2.5
$3.0
$3.5
YTD Budget
YTD Actual
In Millions


Operating Expenses: YTD - 4th Quarter - Preliminary
Water O&M
Wastewater O&M
Purchased Power
All Other Power O&M
$0.0
$5.0
$10.0
$15.0
$20.0
$25.0
$30.0
$35.0
$40.0
$45.0
YTD Budget
YTD Actual
In Millions


General Capital Expenses: YTD - 4th Quarter - Preliminary
Water General
Wastewater General
Power General
$0.0
$5.0
$10.0
$15.0
$20.0
$25.0
YTD Budget
YTD Actual
In Millions


PIF/SIF Capital Expenses: YTD - 4th Quarter – Preliminary
Water SIF
Wastewater SIF
Power PIF
$0.0
$2.0
$4.0
$6.0
$8.0
$10.0
$12.0
YTD Budget
YTD Actual
In Millions

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

AGENDA ITEM: **11**
MEETING DATE: 2/15/2017
SUBMITTED BY: Gretchen Stanford, Acting Director

TITLE: Commission & Council Reports

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.

- **LUC Interviews:** The LUC Chairman, City Council Liaison and the Acting Director interviewed two candidates on February 14th. An update will be given at the meeting.
- **Colorado Water Congress:** January 25-27, 2017
- **March LUC Meeting:** Due to Spring Break, the March meeting is moved up one week to Wednesday, March 8th.

RECOMMENDATION:
Commission/Council report only.

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

AGENDA ITEM: **12**
MEETING DATE: 2/15/2017
SUBMITTED BY: Gretchen Stanford, Acting Director

TITLE: Director's Report

CORPORATE SERVICES

Human Resources: There are 55 applicants for the Water and Power Director position. The Power Operations Manager, HR and the City Manager are currently reviewing the applications. At this time, we are unsure of a date for interviews.

Staff has made significant progress on succession planning in Water and Power. Recently staff received excellent training from the Alliance for Innovation on succession planning and will be making changes to its current processes. Please see the attached article, "Why Governments need to Ramp Up Succession Planning". See attachment A.

GENERAL & FOLLOW UP ITEMS

Follow Up Items from Last Month's Meeting:

- **Directional Bore & Substructure Contracts:** At the end of each quarter, we hope to report to LUC on the two contracts you approved last month for directional boring and substructure.

- **LUC Goals & Accomplishments:** Thank you for all your input on the LUC 2016 Goals and 2017 Accomplishments. Please see Attachment B for the finalized list.

- **Water Loss Update:** Michelle Erickson is providing an update at this meeting on the results of last year's M36 Water Loss Audit in response to an inquiry from board member Larry Roos.

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.

Boards & Commission Summit:

Rialto Theater Center
228 East 4th Street
Thursday, March 9, 2017
5:00 pm to 9:00 pm

Spring Water Users Meeting: Northern Water's Spring Water Users Meeting will be on Tuesday, April 11, 2017 at The Ranch. More details will be provided as they become available.

Tri-City Event 2017: Mark your calendars for the 2017 Tri-City Event, to be held on Thursday, May 25, 2017 at the Lincoln Center in Fort Collins. More information about this event will be discussed in the coming months.

OPERATIONS

Water Treatment Plant (WTP) Electric Switch Gear Building Replacement: The City of Loveland WTP experienced significant damage to its primary electric switch gear building on January 9, 2017. Extreme high winds along the Front Range caused a large Blue Spruce tree to fall on the primary electric switch gear. The WTP had to be shut down for 8 hours during the removal of the tree for safety concerns. After the tree was removed, the electric switch gear was assessed by the Eaton

Corporation (cabinet manufacturer). The Eaton Corporation deemed the building and all internal breaker support racks a total loss ("damaged beyond repair") and recommended complete replacement. We have received an initial cost estimate of $300,000. Replacement of the building and internal breaker support racks is essential and needs to be replaced as soon as possible in order to keep the WTP operating. W&P staff is working with Risk Management and CIRSA to determine if the building and equipment is covered by our insurance.

Cleaning of the South Concrete Water Tank: The existing 5 million gallon (MG) South Concrete water storage tank was taken out of service and cleaned at the end of January. Periodically all of the tanks are drained and cleaned and a thorough inspection is conducted. The tank was construction in 1981 of concrete and predominately serves the southern portion of the gravity zone of the City. It is located at the southwest corner of South Taft Avenue and Weld County Road 14. The inspection of the tank found it to be in good condition and upon cleaning ready to return to operation.

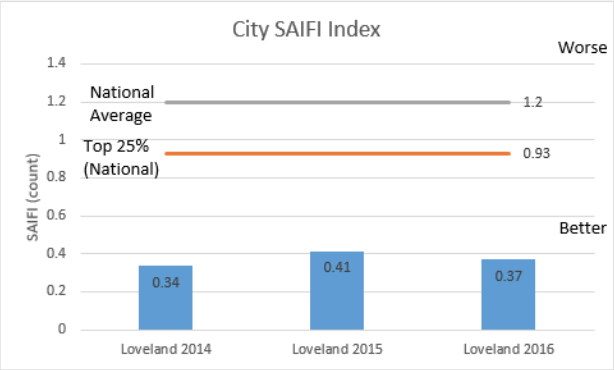
Staff Tour of Forterra: A small entourage of representatives from the Power Division traveled south to Henderson for a walk through of Forterra. Forterra is a maker of concrete products from sewer manholes, piping, to electrical vaults and other products. The tour of the plant was very educational as staff was educated in the methods that Forterra uses to produce their products.

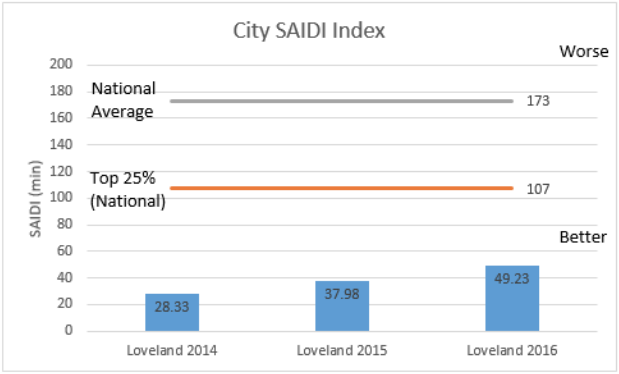
Reliability Indices: The Loveland Power Division, who is a platinum level Reliable Public Power Provider, is proud to present reliability indices for the 2016 calendar year that are in the top benchmarks for power providers reporting in the nation. The Loveland Power Division serves 35,934 customers as of the end of 2016. In general, only 20%* of our customers experienced an interruption in service during the course of 2016. When compared to the 2015 calendar year, the number of customers that experienced an outage has decreased from 37%*.

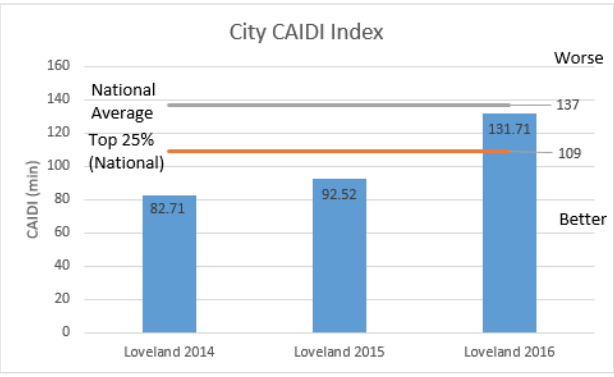
Although the number of customers interrupted has decreased from 2015, the length of outage has increased in 2016. On average in 2016, a customer who was out of power experienced a service interruption for 2 hours and 10 minutes*, compared to 1 hour and 32 minutes* in 2015. We believe this difference in the length of interruption may be attributed to two major factors: the age of the Canyon circuit and an aging underground electrical system. The City of Loveland has a large portion of underground lines, which usually translates to fewer but longer outages simply due to the nature of how issues are investigated for underground infrastructure.

This combination of reliability numbers leads to the City of Loveland to report a decrease in an average service availability from 99.9928%* in 2015 to 99.9907%* in 2016. Over the past three years, the City of Loveland has been experiencing a steady decline in the overall system performance that it is able to provide to its customers.

The City's Power Division is dedicated to providing reliable electric service to its customers, which includes decreasing the number and length of system interruptions. Through the course of the year the electric division will be working to establish a new maintenance crew who will work closely with other staff to help monitor, inspect and determine if equipment is near the point of failure and work to repair or replace such equipment prior to causing an un-planned system interruption to our customers. We are also in process of a voltage conversion and rebuild of the circuit that feeds the Canyon to improve reliability to the customers served from this circuit.







SAIFI, SAIDI and CAIDI are indices established by the Institute of Electrical and Electronics Engineers (IEEE) that allow utilities nation wide to compare system reliability. These values are better described as:

SAIFI – is the average number of times a customer experiences an outage during the course of the year.
SAIDI – is the average total downtime in minutes a customer experiences during the course of the year.
CAIDI – is the average amount of time taken to restore customers power once an interruption occurred.

** The City of Loveland Power Division excludes major event days, such as the snow storm on March 23, 2016, in accordance to industry standards from reliability calculations.*

*** The National comparisons presented are from reporting utilities in 2015.*

Big Thompson Canyon: From Christmas Day thru the first two weeks of January, high winds hit the Big Thompson Canyon causing bump after bump on the 22kv line. This frustrated both operations and our customers serviced on circuit 911. As crews patrolled the overhead power lines during these events, they were able to identify two areas that needed attention during scheduled outages. Working with Tracey Hewson with Customer Relations, outages were scheduled so crews could safely and effectively make repairs.

Highway 34 Rebuild: Power will begin working on “Construction Package – 2” shortly. This will involve relocating 12-13 poles below Drake in the Moodie Dr. area. CDOT & Kiewit will be installing a new bridge that requires the grade of the road to be raised which force the pole relocation. The roadway will also be armored to protect against future flood events. The roadway will basically be a reinforced concrete bathtub with an asphalt overlay. Several other areas have been identified for road location realignment that is forcing us to move several poles.

Streetlight Replacement: We are currently looking to replace the existing Streetlights on the corner of 14th Street and Taft Avenue with new LED equivalent streetlights. The project will include the replacement of a string of 11 new breakaway streetlights and concrete bases as well as installing new CIC and Hand Holes. Please see the images below.

GENERATION, TRANMISSION & NORTHERN COLORADO UTILITY REPORTS

Northern Water Conservancy District: The most recent Board meeting occurred February 9, 2017. The agenda was longer than normal because it included a number of items from the February 2, 2017 Planning & Action Session, cancelled due to an ice storm the previous evening. The next Board meeting occurs March 9, 2017. At the February 7, 2017 Windy Gap Participants Meeting, discussion was held on a number of subjects related to the Windy Gap Firming Project:

- A sheet showing the adjusted participation storage levels of all thirteen participants in the WG Firming Project was shared. A copy of this table is attached for your review (See attachment C). Loveland's current volume is 9,451 acre-feet, out of 90,000 acre-feet total in the Project.
- An adjusted project cost projection was provided, showing Loveland's costs as its current participation level of 9,451 acre-feet. This table is attached for your information and review (See attachment D). Total estimated Projects costs are $4,530/acre-foot of storage space.
- Windy Gap Firming Project funding options were presented. First Southwest, funding consultant for the Participants, discussed a proposed $90M Colorado Water Conservation Board subordinate loan and its benefits, credit enhancement structures, rating levels, interest rates, and driving factors in decisions to participate in pooled funding. Attached for your information is an outline of these issues prepared by First Southwest (See attachment E).

Platte River Power Authority (PRPA): The board did not meet in January. The next board meeting will be held on February 23, 2017 at 9 am at PRPA headquarters located at 2000 E. Horsetooth Rd, Fort Collins, CO 80525.

Fort Collins Energy Board: The minutes from the January board meeting have not been posted yet. Please continue to check their website if you are interested in their discussion.

The board met on February 9, 2017 to hear three presentations on PRPA's customized resource portfolio project, solar affordability program and rate ordinance and the Efficiency Works neighborhood pilot.

FINANCE

2016 Year-end and 2018 Budget: Staff is in the process of closing out the 2016 year in preparation for review by the City's auditors and, ultimately, generating the Comprehensive Annual Financial Report (CAFR). Staff will soon be starting the process of assembling the 2018 budget. Our staff kickoff meeting has not yet been scheduled, but will be during the week of February 27. We will be coming to the LUC in March or April to select liaisons for this year's process.

Another Solid Showing in December For Water Sales: After getting out of the gate slowly for the first five months of 2016, June through year-end water usage has helped to pick up the lagging year-to-date average usage that prevailed earlier in the year. For 2016, the total year average usage is 12,330 gallons per customer. The 12,330 gallons is 0.7% higher than the total average usage of the past five years, and is a great improvement over the 13.5% lower average usage through May. This rally in June through year-end has allowed water sales to be ahead of budget by $826,000 for the year.

Power Usage Update: December of 2016 showed a slight upswing from last December in both demand and purchased energy. This year, Loveland's share of PRPA's December peak was 103,116 kW, up 1.3% from December of last year. Purchased energy was up 1.8% vs. December of 2015. Overall, in comparing the sum of all the monthly peak demands for 2016 to the total for 2015, this year is down 1.4%, and purchased energy for 2016 was down 2.9% from 2015. Remarkably, over the past 5 years, total annual billed peak demand from PRPA has increased an average of 0.02% per year and total annual purchased energy has increased an average of 0.01% per year.

Year-end Inventory: The year-end inventory count for the Warehouse showed impressive results again for 2016. First, in order to accommodate a request from the City's auditors to have the year-end count occur closer to December 31, Warehouse staff modified their work schedules to complete the process on December 30. As far as the results, there were no items that showed a variance between the physical count and the count in the Innoprise system. With year-end inventory value totaling $2.1 million, having no variance is an outstanding accomplishment. Big kudos to Tim Hedgespeth, Steve Johnson, Steve Lindenmuth and Keith Leonard for a job well done!

CUSTOMER RELATIONS

Marketing/Public Relations: Customer Relations is in the first stages of sourcing a graphic design and marketing company to assist with LWP projects. Services requested from a qualified firm will assist in capitalizing on the work LWP is doing in 2017 and further work to build a strong brand identity and increase public awareness.

Facebook Insights (January - 2017):
- Reach - 2,450
- Engagement - 197
- Impressions - 11,972

Media: Reporter Herald – January 24, 2017: Wind turbines the last of Thompson schools' energy projects. Staff received one media inquiry from the Reporter Herald regarding the recent installation of a wind turbine at Walt Clark Middle School. LWP was not mentioned in the story.

Energy Efficiency:
Consumer Products: By the end of April we hope to add at least three new products to our residential consumer products category. Currently discounts are available for specialty LED bulbs, dimming switches and occupancy sensors. In the next few months, we will include smart thermostats, clothes washers and refrigerators. For both clothes washers and refrigerators, incentives will be paid at the retail level. Smart thermostat discounts will be paid to the consumer.

Larimer County Conservation Corps: Assessments have begun! The LCCC group offers free home energy assessments and direct install of water and energy products for Loveland customers. This program is offered to all customers but targeted towards customers who are on a limited income and who may not be interested in the Home Efficiency Audit Program. This is a limited time offer; the program ends in May.

Thompson School District: Staff met with the facilities management staff at the district and Platte River to develop a plan to assess the condition of each school in our territory and perform Building Tune Ups or efficiency measures for each school.

Renewable Energy: Platte River and its owner municipalities continue to explore the development of a shared community solar facility. Staff is presently in the process of conducting a market survey to assess consumer interest in community solar and to establish the size of the solar installation. See attachment F for an article from *Public Power Daily* entitled, "Community Solar Coming Into Its Own – Report Says".
http://www.publicpower.org/Media/daily/ArticleDetail.cfm?ItemNumber=47520

UTILITY APPLICATION SERVICES DIVISION

Technology Project Steering Committee: A new technology project governance steering committee has been organized and the first several meetings have been scheduled. This will be a key tool to help our department prioritize, coordinate and communicate regarding the directions we go with our technology efforts.

Technology Roadmap: Our Technology Roadmap document is in its final stage of review. We are already using it in charting several new efforts and it will continue to be a valuable resource as we move forward. Many thanks to the whole department for allowing us the opportunity and for everyone's participation!

Designer Express Software: Power's new design & estimate software, called Designer Express, went live the week of January 23, 2017. This is a GIS-based system that integrates seamlessly with our other GIS applications, including Responder OMS.

Departmental Collaboration: We held a meeting of directors between W&P and IT to discuss our recent organizational changes as well as opportunities for cross-department collaboration. IT will be sending a representative to sit on our technology steering committee.

New CIS: Our team is serving on the committee to select a new Customer Information System (CIS), or utility billing system. We will be assisting with coordination efforts in our department in the coming phases of the project.

WHY GOVERNMENTS NEED TO RAMP UP SUCCESSION PLANNING

This article originally appeared in the February 10, 2016 issue of Governing.com By Patrick Ibarra

mejorando group

Every day in the United States, 10,000 people turn 65. And according to the Pew Research Center, millennials now outnumber baby boomers in the workplace, 76 million to 75 million, while millennials will make up 75 percent of the workforce just 10 years from now.

As a result of the rapidly aging workforce, government organizations -- small and large, rural and urban -- are experiencing a brain drain that is placing their organizations at a critical juncture: The need for experienced and seasoned employees has never been greater, yet those are the very workers who are most likely to be departing in the very near future. It's clear that governments need to get serious about succession planning.

Small organizations are particularly challenged when an employee departs, since a natural successor may not already be within the workforce. That problem may not be as much of an issue for mid-sized and large organizations, but a wave of retirements can still disrupt service delivery. And even in larger organizations, it's a challenge to replace a sole incumbent who handles a breadth of responsibilities or possesses extensive specialized knowledge.

Beyond simply replacing positions that become vacant, effective succession planning is an ongoing process of identifying, assessing and developing talent to ensure leadership, management and supervisory continuity throughout an organization and, moreover, to sustain its performance. The major focus is that replacements are prepared to fill key vacancies on short notice and that individuals have the development capacity to assume greater responsibilities and exercise increased technical proficiency and expanded management roles.

Succession planning is about a lot more than just increasing employee training. Nor should it be the exclusive responsibility of the human-resources department. Effective succession planning requires advocacy and visible support by all members of the executive leadership team. A well-designed succession-planning program will enable an organization to align workforce requirements directly to strategic and operational plans; identify and implement strategies to transition from the existing workforce to the one that will be needed; and build the capability to continually shape the workforce to respond to emerging trends, shifting priorities and technological change.

Establishing systematic succession planning can entail a culture change. It can be a major shift in an organization where decision-makers may have been accustomed to filling one vacancy at a time. It requires commitment to a longer-term strategic view of talent needs, and doing it will bring a number of benefits:

- Identifying the bench strength that is in place will help departments and divisions meet both long-term and emergency leadership, management and non-supervisory needs.
- It sends a positive message throughout the workforce. Promoting people is good for morale, and promoting from within encourages people to take on responsibility, assume risk and grow through their achievements.
- The organization will have a clearer sense of the strengths of internal candidates, enabling more informed selection and promotion decisions.

Effective succession planning in government is an ongoing, dynamic process, not a static, one-time objective. It not only empowers employees to achieve their professional goals but also supports organizational goals. It's essential in today's competition for talent.

Patrick Ibarra is an "entrepreneur of ideas" and architect of innovation who takes the headwinds governments are facing about the current climate of unprecedented changes and translates them into a tailwind with practical, tactical and impactful solutions that can be used immediately. A former city manager, Patrick owns and operates The Mejorando Group consulting practice (www.gettingbetterallthetime.com). Mejorando is Spanish for "getting better all the time" and Patrick's firm partners with governments helping them increase employee performance and organizational effectiveness by providing consultation, facilitation, and training. Ibarra is an author, speaker, blogger and educator who brings fresh thinking, innovation, and new ideas to help public sector organizations succeed in the 21st century.

For those agencies interested in immediately improving your organization's performance, Mr. Ibarra can be reached at **925.518.0187** and/or **patrick@gettingbetterallthetime.com** and follow the Mejorando Group on Facebook and Twitter.

Attachment B

2016 ACCOMPLISHMENTS & 2017 GOALS OF THE LUC

2016 Accomplishments

1. Completed a 2016 Cost-of–Service Rate Study for the Power Division which included a rate analysis of each customer class and the implementation of a new Residential Self-Generation rate. A 5-year Power rate track was developed to maintain a fund balance that exceeds target minimum cash reserves.
2. Completed $24M reliability, safety and capacity capital improvement project at the Water Treatment Plant which increased capacity by 8 million gallons.
3. Sourced a $24.9M loan for Wastewater Treatment Plant expansion and renovation project and began the design phase of the $32M project.
4. Redefined the Key Accounts Program implementing qualifying metrics for existing and new customers.
5. Acquired an additional 2,000 acre-feet of storage in the Windy Gap Firming Project.
6. Completed a $6M three-year water main replacement program replacing or relining 27,200 feet of water mains.
7. Completed the design, construction and commissioning of the Foothills Solar project. Completed the design and began the construction of the Foothills Substation.
8. Assisted in the development of Platte River's Integrated Resource Plan, which encompasses resource planning, demand side management, and energy efficiency goals. The plan was approved by Western Area Power Administration in September 2016.
9. Implemented a web portal for Coincident Peak Demand Rate customers to manage their energy usage.
10. Developed new rate design for Hidden Valley Estates water customers.
11. Completed an M36 water loss audit which now serves as a baseline of our water balance which compares treated water to the sum of customer consumption and water losses.

2017 Goals

1. Finalize design and begin construction in spring 2017 of the Wastewater Treatment Plant expansion and rehabilitation project.
2. Complete the construction of the Foothills Substation by September 2017.
3. Complete an algae mitigation study and implement selected solutions to prevent taste and odor issues by July 2017.
4. Participate with Platte River and member cities in the program evaluation of common Demand Side Management programs.
5. Support the efforts of a new Customer Information Systems (CIS), IT Roadmap and Community Solar Initiative working collaboratively with Platte River, member cities and various City departments.
6. Support the Colorado Water Plan and strengthen Loveland's raw water supply portfolio through continued participation in the Windy Gap Firming Project, finalizing a decision on acquiring downstream storage, and continuing to explore how to use alternative transfer methods (ATMs) when opportunities arise.Complete an infiltration and inflow/selenium study in our wastewater collection system and develop a selenium reduction program to reduce selenium discharges from the Wastewater Treatment Plant.
7. Complete a comprehensive in house audit and update of the Water & Power Schedule of Rates, Charges and Fees.
8. Continue the second phase of the M36 water loss audit which will improve water tracking methods and practices to ensure data validity. Review and implement cost-effective recommendations.
9. Acquire additional CBT shares that apply the concept of dollar cost averaging to future purchases and negotiate prices based on the market.
10. Continue water and electric resource planning to address current and anticipated trends and concerns.

Attachment C

WGFP Storage Requests
January 10, 2017

Storage Target (af):	**90,000**
Current Unallocated Storage (af):	**3,820**
Total Storage for Participants Requesting Unallocated Storage:	**76,180**

Participant	Units Owned	Current Requested Storage Volume (af)	Request Unallocated Storage 1=yes, 0=no	Rounded Pro-rata Share of Unallocated Storage (af)	Total Requested Storage (af)
Broomfield	56	25,200	1	1,264.00	26,464.00
CWCWD	1	330	1	16.00	346.00
Erie	14	6,000	1	301.00	6,301.00
Evans	0	1,750	1	88.00	1,838.00
Fort Lupton	3	1,050	1	53.00	1,103.00
Greeley	52	7,000	1	351.00	7,351.00
Lafayette	1	1,800	1	90.00	1,890.00
Little Thompson WD	12	4,850	1	243.00	5,093.00
Longmont	80	10,000	0	-	10,000.00
Louisville	6	2,700	1	135.00	2,835.00
Loveland	40	9,000	1	451.00	9,451.00
PRPA	160	12,000	1	602.00	12,602.00
Superior	15	4,500	1	226.00	4,726.00
TOTAL	**440**	**86,180**		3,820.00	**90,000.00**

Attachment D

PRELIMINARY

Windy Gap Firming Project
Projected Cash Flow - Preliminary Estimate with Mitigation and Enhancement
February 7, 2017

Estimate of Total Project Cost

Construction/Construction Management	*$ 355,181,800*
Design	*$ 15,730,000*
Planning & Permitting	*$ 12,423,514*
Mitigation and Enhancement	*$ 23,306,650*
Total Project Cost:	***$ 406,641,964***

Participant	Units Owned	Requested Storage Volume (af)	Total Participant Contributions Through 2015	Phase 4 Participant Contributions Through 2015	2016 Participant Contributions	Phase 4 Participant Contributions to Date	2017 Participant Contributions	Phase 4 Participant Obligation to Date	Phase 4 Participant Payment Adjustment	2017 Adjusted Participant Contributions	2018	2019	2020	Total Future Contributions	Estimated Total Project Contributions	
					$ 13,456,248		*$ 10,464,291*				*$ 363,625,978*					
Broomfield	56	26,464	$ 4,814,330	$ 3,852,466	$ 4,028,242	$ 7,880,709	$ 3,076,967	$ 7,983,896	$ 103,188	$ 3,180,154	$ 106,922,199	$ -	$ -	$ 110,102,353	$ 118,944,926	
CWCWD	1	346	67,624	$ 50,448	$ 52,751	$ 103,198	$ 40,229	$ 104,384	$ 1,186	$ 41,415	$ 1,397,940	$ -	$ -	$ 1,439,355	$ 1,559,730	
Erie	14	6,301	1,127,959	$ 948,081	$ 959,105	$ 1,907,187	$ 732,617	$ 1,900,942	$ (6,245)	$ 726,372	$ 25,457,859	$ -	$ -	$ 26,184,231	$ 28,271,295	
Evans	0	1,838	264,210	$ 264,210	$ 279,739	$ 543,949	$ 213,704	$ 554,504	$ 10,555	$ 224,259	$ 7,426,051	$ -	$ -	$ 7,650,310	$ 8,194,259	
Fort Lupton	3	1,103	110,720	$ 110,720	$ 167,843	$ 278,563	$ 128,246	$ 332,763	$ 54,200	$ 182,446	$ 4,456,438	$ -	$ -	$ 4,638,884	$ 4,917,447	
Greeley	52	7,351	2,180,569	$ 1,322,450	$ 1,118,956	$ 2,441,406	$ 854,700	$ 2,217,715	$ (223,691)	$ 631,009	$ 29,700,162	$ -	$ -	$ 30,331,171	$ 33,630,696	
Lafayette	1	1,890	377,587	$ 275,176	$ 287,732	$ 562,908	$ 219,750	$ 570,192	$ 7,284	$ 227,034	$ 7,636,146	$ -	$ -	$ 7,863,180	$ 8,528,499	
Little Thompson WD	12	5,093	511,419	$ 511,419	$ 775,277	$ 1,286,696	$ 592,163	$ 1,536,502	$ 249,806	$ 841,968	$ 20,577,190	$ -	$ -	$ 21,419,158	$ 22,705,854	
Longmont	80	10,000	2,963,224	$ 2,047,162	$ 1,598,509	$ 3,645,671	$ 1,162,699	$ 3,016,889	$ (628,781)	$ 533,918	$ 40,402,886	$ -	$ -	$ 40,936,804	$ 45,498,537	
Louisville	6	2,835	567,348	$ 412,762	$ 431,597	$ 844,360	$ 329,625	$ 855,288	$ 10,929	$ 340,554	$ 11,454,218	$ -	$ -	$ 11,794,772	$ 12,793,718	
Loveland	40	9,451	1,971,377	$ 1,284,331	$ 1,118,956	$ 2,403,287	$ 1,098,867	$ 2,851,262	$ 447,975	$ 1,546,842	$ 38,184,768	$ -	$ -	$ 39,731,610	$ 42,821,943	
PRPA	160	12,602	2,881,626	$ 1,904,878	$ 1,918,211	$ 3,823,089	$ 1,465,233	$ 3,801,884	$ (21,205)	$ 1,444,029	$ 50,915,717	$ -	$ -	$ 52,359,746	$ 57,159,583	
Superior	15	4,726	1,227,454	$ 711,654	$ 719,329	$ 1,430,983	$ 549,492	$ 1,425,782	$ (5,201)	$ 544,291	$ 19,094,404	$ -	$ -	$ 19,638,695	$ 21,585,478	
TOTAL	**440**	**90,000**	**19,065,447**	**$ 13,695,757**	**$ 13,456,248**	**$ 27,152,005**	**$ 10,464,291**	**$ 27,152,005**	**$ (0)**	**$ 10,464,291**	**$ 363,625,978**	**$ -**	**$ -**	**$ 374,090,269**	**$ 406,641,964**	$ 406,641,964
														$ 374,090,269		

Phase 4 Cost per Acre Foot: $ 301.69

Unit Cost: $ 4,518

Notes:
1. Cost allocation based on percent of total requested storage volume
2. Project Costs based on Engineering Solutions LLC's July 2015 Cost Estimate for 90,000 AF Earthfill/Rockfill Dam including Mitigation, Enhancement and Subdistrict costs .
3. Allowance for cost escalation between 2016 and the beginning of construction at 2% per year for 2 years (2016-2018).
4. Mitigation Costs include Enhancements and are based on current estimates, which include all requirements from EIS, FWMP, FWEP, 1041 Permit, IGA, Rancher Settlement, and 2014 Carriage Contract.
5. Projections assume issuance of all permits and approvals in 2017.
6. Contributions for 2018 include all costs shown during construction period in Budget Detail worksheet

Attachment E

Municipal Subdistrict, Northern Colorado Water Conservancy District
Windy Gap Firming Project
Discussion Agenda for Participants Meeting
February 7, 2017

1) Update on Where we are
   a) Have a meeting with CWCB on February 9th to discuss the proposed $90 million subordinate loan
      i) Timing
         (1) What needs to be done to lock the rate and secure the funds
         (2) Can the Subdistrict enter into the loan agreement in June of 2017 without participant executed allotment contracts with the participants
      ii) Documentation (loan agreement, feasibility study)
      iii) Reserve Funds
   b) Benefits of CWCB Loan
      i) Lower than market interest rate
      ii) Draw down feature saves interest costs on undrawn balance
      iii) Spend down and arbitrage rebate calculations
      iv) Credit enhancement for Senior Bonds

2) Credit Enhancement Structures
      i) Excess Debt Service Coverage for Senior Bonds
         (1) Provided by CWCB Loan
      ii) Reserve Funds
         (1) Traditional Debt Service Reserve Fund for Bonds as Part of Master Resolution
            (a) Sizing - Maximum Annual Debt Service
         (2) Surplus and Deficiency Fund to protect the Subdistrict from participant defaults and allows for remaining participants to fund Step-up provisions
            (a) Sizing – dependent on timing of cure-period
      iii) Step-up Provisions
         (1) Voluntary – for entities that want to obtain the defaulting participants storage
         (2) Mandatory – requirement of remaining participants to cover debt service and O&M
            (a) Possible to limit amount of Step up - 50% of annual debt service
      iv) Take or Pay contracts
         (1) For Debt Service and O&M
      v) Bond Insurance
         (1) For Senior Bonds
         (2) For individual participants payments to the Subdistrict

3) Rating Levels and Interest Rates
   a) Higher ratings lead to lower interest rates
   b) Ratings are driven by a combination of project specific factors, economic and demographic factors, and bond specific factors
      i) Credit enhancement features can push ratings up one to two notches (A, A+, AA-, AA)
   c) Think most likely rating for pooled structure is A+ to AA- depending on credit features
      i) Obtaining ratings higher than that would require inefficient structural features
      ii) Three participants in the financing have ratings higher than A+

4) What will be the driving factor in participation in the pool
   a) Lower borrowing costs
   b) Ease of execution
   c) Certainty of execution – coordinated effort

Attachment F

PublicPowerDaily

Community solar coming into its own, report says

From the February 10, 2017 issue of *Public Power Daily*
Originally published February 9, 2017

By Peter Maloney
Contributing Writer

Last year was a record year for community solar and the solar segment is poised for further significant growth, according to a new report from GTM Research.

“Over the next three years, as a number of state markets begin to pick up steam, community solar has the potential to be on a footing with the other segments of the solar market,” says Cory Honeyman, associate director, solar at GTM and, with M.J. Shaio and Sarah Krulewitz, one of the authors of the report, “U.S. Community Solar Outlook 2017.”

The two main segments of the solar market are utility scale and residential solar. Community solar is a sub-segment of the non-residential market segment.

GTM Research estimates that 218 MW of community solar installations came online in 2016, quadrupling the community solar capacity put in place in 2015.

The research firm expects that momentum to continue with community solar becoming a 500 MW annual market and accounting for nearly 25% of the U.S. non-residential PV market over the next five years. Between 2017 and 2021, GTM expects community solar will add 1.8 GW of solar capacity.

The residential solar market is now about 1 GW annually, and the utility scale market is about 10 GW annually.

The expected breakdown of community solar installations in 2016 reflects the major trends in the sector. Most of the installations, about 133 MW, are expected to be voluntary utility-led projects. About 85 MW of the installations are expected to be legislatively driven third party-led projects.

GTM says the third party-led market is strongest in 14 states, plus Washington, D.C., that have policies favoring community solar. And five of those states -- Colorado, Massachusetts, Minnesota, New York and Maryland -- are expected to drive the overwhelming majority of third-party-led community solar, according to the report. All of those states have enacted legislation that enables developers to sell community solar subscriptions directly to residential and commercial customers.

But regulatory lag is going to create a boom-bust cycle in the third party-led market segment, according to the report.

There has been a lot of upheaval and debate over the design of community solar programs at the state level and that creates “regulatory cliffs” in states such as Colorado, Massachusetts and New York, says Honeyman.

A pipeline of projects can build up in a state until regulatory issues are resolved. When the issues are resolved, projects get built, but the pipeline diminishes. Then the same process can occur in another state. The result, says Honeyman, is that every year there could be a different state that is ranked number one in terms of community solar development.

The report says Massachusetts and Minnesota are on track to be the top third party-led state markets over the next two years, but will see “stark downturns” in 2019. But by 2019 Maryland and New York, which are now finalizing their community solar rules, will be the states to watch. Beyond that, the report also names Hawaii, Illinois and Oregon as states to watch for growth in third party-led community solar.

In the utility-led market segment, GTM notes that 150 utilities now have some form of community solar program, and they are going to be looking at procuring larger projects as they scale up from pilot programs.

One of the drivers in the utility-led market segment has been the declining cost of large PV solar projects, which is enabling utilities to buy community solar projects and complete subscriber acquisition after commercial operation is achieved.

“The confluence of dirt cheap PPA pricing with the desire to strengthen customer relationships is resulting in an influx of utility procurement of larger scale community solar projects,” says Honeyman.

That trend will help keep the utility-led market on a growth track over the next few years, but it will be partly supported by “somewhat nebulous” projects that lack 100% subscriber participation upon installation, says Honeyman.

While the utility-led sector has been strong, its subsectors also are showing strong growth. As of fourth quarter 2016, GTM has tallied 113 MW of utility-led community solar procured by public power utilities, compared with 26 MW procured by cooperatives and 227 MW procured by IOUs.

Cooperatives have spurred the majority of utility-led community solar programs in terms of the number of projects, even though IOUs have led in terms of capacity, says Honeyman. This, he says, is partially because cooperatives are not subject to the same degree of regulatory oversight as are IOUs, so they can move a project to completion more quickly.

GTM expects to see cooperatives continue to play a meaningful role in the community solar market as they scale up from pilot projects.

Smaller public power utilities have procured community solar more like rural electric cooperatives, while larger public power utilities have bought community solar more like IOUs, Honeyman says. Smaller public power utilities, he said, have piloted community solar programs comprised of individual smaller projects below 1 MW in size while larger public power utilities, similar to IOUs, have piloted community solar programs comprised of multiple projects larger in size typically above 1 MW.

But cooperatives and public power utilities are unlikely to take the market lead away from IOUs, says

Honeyman. They both have smaller customer bases and smaller loads to serve than IOUs. It could be a challenge for developers pitching community solar projects to have a program large enough to pitch to an IOU and flexible enough to pitch to a public power utility or cooperative.

“Community solar has reached an inflection point in terms of what it actually looks like,” says Honeyman. The big question for the next wave of development, he says, is if utilities will continue with the existing business model, which generally prices community solar at a premium, or begin to offer subscribers savings for enrolling in a community solar program.

As solar power from other market segments becomes increasingly competitive, Honeyman says it will be interesting to see if utilities take advantage of cheap PPAs to pass lower prices on to community solar subscribers.

Association offers guidance to public power utilities on community solar

The Association in late 2016 released a report that offers guidance to public power utilities on community solar projects.

The guide was prepared by Paul Zummo, director for policy research and analysis at the Association, with assistance from consulting firm Leidos.

Additional details on the guide and other community solar resources are available on the Public Power Forward webpage on the Association’s website.