#### WATER & SEWER BOARD AGENDA

Wednesday, October 15, 2014 2:00 p.m.

#### LINCOLN PARK ANNEX <u>NUSBAUM ROOM</u> 919 7<sup>th</sup> Street Greeley, CO 80631

1. Roll Call:	Chairman Harold Evans	Vice Chairman Mick Todd
	Mr. Bob Ruyle	Mr. Fred Otis
	Mr. Joe Murphy	Mr. Tony Miller
	Mr. Manuel Sisneros	Mayor Tom Norton
	Mr. Roy Otto	Ms. Victoria Runkle

- 2. Approval of Minutes
- 3. Approval of and/or Additions to Agenda
- 4. Executive Session
- 5. Report: Cash-in-Lieu
- 6. Action: Approve Cash-in-Lieu
- 7. Action: Approve Dairy Farms of America Cash-in-Lieu and Recommend Approval of Phased Payment of Cash-in-Lieu to Council
- 8. Action: Approve Short-Term Augmentation Lease with Wagistics, LLC.
- 9. Action: Approve an Intergovernmental Agreement for the Lake Loveland Augmentation Structure and Recommend to City Council for Approval
- 10. Report: Water Conservation Plan
- 11. Legal Report
  - Action: Statement of Opposition (if any)
- 12. Director's Report:
  - Bellvue Pipeline Contract
  - Windy Gap Carriage Agreement
  - Little Thompson Windy Gap Agreement
  - Northern Rule Making
- 13. Such Other Business That May Be Brought Before The Board and Added to This Agenda by Motion of the Board.



*If, to effectively and fully participate in this meeting, you require an auxiliary aid or other assistance related to a disability, please contact Yvonne Thornberg at 970-350-9818.* 

#### City of Greeley Water and Sewer Board Minutes of September 17, 2014 Regular Board Meeting

Chairman Harold Evans called the Water and Sewer Board to order on Wednesday, September 17, 2014 at 2:01 p.m.

#### 1. Roll Call

At the time of roll call,

Board Members present:

Chairman Harold Evans, Vice Chairman Mick Todd, Bob Ruyle, Fred Otis, Joe Murphy, Tony Miller, and City Manager Roy Otto

Water and Sewer Department staff present:

Director of Water and Sewer Burt Knight, Deputy Director of Water Resources Eric Reckentine, Water Resources Manager Jim Hall, Water Operations Manager John Thornhill, Chief Engineer Bob Neal, Wastewater Collections Supervisor Paul Tucker, and Senior Administrative Specialist Yvonne Thornberg

Legal Counsel present:

Environmental and Water Resources Attorney Jerrae Swanson, Environmental and Water Resources Attorney Andy Nicewicz, Environmental and Water Resources Attorney Daniel Biwer, Assistant City Attorney Susan Anderson, and Water and Sewer Board Counsel Jim Witwer

#### 2. Approval of Minutes

Mr. Miller moved, and Vice Chairman Todd seconded, to approve the August 13, 2014 Water and Sewer Board meeting minutes as presented. The motion carried 7-0.

Chairman Evans congratulated Mr. Knight on his promotion to the Water and Sewer Director.

#### 3. Approval of and/or Additions to Agenda

There were no changes to the agenda.

#### 4. Executive Session

The Board moved into executive session at 2:05 p.m. to address the following matters:

Purchase, acquisition, lease, transfer, or sale of property under C.R.S §24-6-402(4)(a) and Greeley Municipal Code 2.04.020(1). Conferences with an attorney for the purpose of receiving legal advice as authorized by C.R.S §24-6-402(4)(b) and Greeley Municipal

Code 2.04.020(2). Determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and instructing negotiators, as authorized by C.R.S §24-6-402(4)(e) and Greeley Municipal Code 2.04.020(5).

Mr. Ruyle seconded to enter into executive session. The motion carried 7-0.

The following topics were discussed in executive session: (1) Issues related to the purchase and sale of windy gap units to Little Thompson; (2)Issues related to Pond 3 of the Overland Ponds Project; (3) Issues related to a potential three-year augmentation lease with Wagistics LLC; (4) Issues related to Bellvue pipeline Acquisition (Brinks, Humstone, and Taylor and Gill); and (5) Issues related to the purchase and sale of shares in the Windsor Reservoir and Canal Company.

Present during the executive session were:

Chairman Harold Evans, Vice-Chairman Mick Todd, Fred Otis, Joe Murphy, Bob Ruyle, Tony Miller, Director of Water and Sewer Burt Knight, Deputy Director of Water Resources Eric Reckentine, Water Resources Manager Jim Hall, Water Operations Manager John Thornhill, Chief Engineer Bob Neal, Wastewater Collections Supervisor Paul Tucker, Water Resources and Environmental Attorney Jerrae Swanson, Water Resources and Environmental Attorney Andy Nicewicz, Water Resources and Environmental Attorney Daniel Biwer, Assistant City Attorney Susan Anderson, Water and Sewer Board Counsel Jim Witwer, City Manager Roy Otto, and Senior Administrative Specialist Yvonne Thornberg.

Mr. Witwer left the Board meeting during executive session due to a conflict with the Windsor Reservoir and Canal Company discussion at 2:36 p.m.

Mr. Witwer rejoined the Board meeting at 2:48 p.m.

The executive session ended at 2:54 p.m. and the regular meeting resumed.

## 5. Action: Approve Second Amended Gravel Mining Lease with Martin and Marietta Materials (Trieber)

Mr. Murphy moved, and Vice Chairman Todd seconded, to approve the Approve Second Amended Gravel Mining Lease with Martin and Marietta Materials. The motion carried 7-0.

City Attorney Douglas Marek joined the Board meeting at 2:55 p.m.

## 6. Action: Approve Second Amended Gravel Mining Lease with Martin and Marietta Materials (Warson)

Vice Chairman Todd moved, and Mr. Murphy seconded, to approve the Second Amended Gravel Mining Lease with Martin and Marietta Materials. The motion carried 7-0.

## 7. Action: Approve First Amendment to Augmentation Water Lease (Martin Produce Company)

Mr. Reckentine presented the background regarding Martin Product Company and summarized the lease as a 10-year extension with the augmentation cost the same.

Mr. Ruyle moved, and Mr. Miller seconded, to approve First Amendment to Augmentation Water Lease (Martin Produce Company). The motion carried 7-0.

#### 8. Action: Approve Resolution Authorizing Acquisition of Revised Access Easement Across Former Larimer County Road 21F Parcel and Recommend to Council

Mr. Witwer discussed this item and pointed out that this road was a dead end, with some surrounding land owned by Colorado Division of Parks and Recreation. He mentioned that Board has previously approved an easement. However, questions arose from neighbors regarding what the City of Greeley's purpose is for the property. He also stated the City Council had approved this resolution due to timing.

Vice Chairman Todd moved, and Mr. Murphy seconded, to approve Resolution Authorizing Acquisition of Revised Access Easement Across Former Larimer County Road 21F Parcel and Recommend to Council. The motion carried 7-0.

#### 9. Legal Report

There were no Statement of Oppositions to be filed.

Mr. Witwer discussed the following item:

I. Appeal of Order in East Cherry Creek Valley WSD application (06CW40/14SA179) to change Greeley Irrigation Company shares, concerning burden of proof of "changed circumstances" in change of additional mutual ditch company shares following entry of initial "ditch-wide" change decree: Greeley, together with GIC and Central Colorado WCD, filed brief in support of applicant's appeal, which seeks to clarify that burden of proof is on opposers rather than applicant in subsequent cases.

Mr. Marek introduced Susan Henderson, from Florida, and mentioned she will be assisting the Water and Sewer Department with Right-of-Way acquisitions and easements.

#### 10. Director's Report

#### • Introduction to Wastewater Collections Supervisor

Mr. Knight introduced Paul Tucker as the Wastewater Collections Supervisor. Mr. Tucker holds a Class 4 certification in collections as well as other certifications in distribution. Chairman Evans welcomed Mr. Tucker.

#### • Northern Colorado Water Conservancy District Fees

Mr. Reckentine mentioned that Northern Water Conservancy District (NCWCD) is reviewing their rates and how to balance their reserve funds. Northern Water is considering raising CBT rental agricultural agreements.

## 11. Such Other Business That May Be Brought Before The Board And Added To This Agenda By Motion Of The Board

There being no further items for discussion, the Board adjourned at 3:12 p.m.

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Harold Evans, Chairman

Yvonne Thornberg, Secretary Pro-tem

#### WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_\_\_\_ NO ENCLOSURE \_\_X\_\_

ITEM NUMBER: 4

TITLE: EXECUTIVE SESSION

RECOMMENDATION: INFORMATIONAL ONLY

ADDITIONAL INFORMATION:

#### WATER & SEWER BOARD AGENDA October 15, 2014

ENCLOSURE \_\_\_\_ NO ENCLOSURE \_\_X\_\_

ITEM NUMBER: 5

TITLE: REPORT: CASH-IN-LIEU AND DEDICATION POLICY DISCUSSION

RECOMMENDATION: INFORMATIONAL ONLY

ADDITIONAL INFORMATION:

Report and discussion as to cash in lieu and water rights dedication policies that includes current policy review, potential policy alternatives and projected timing of cash in lieu revenues.

#### WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_X\_\_\_NO ENCLOSURE \_\_\_\_

ITEM NUMBER: 6

TITLE: ACTION: APPROVE CASH-IN-LIEU

RECOMMENDATION: APPROVE CASH-IN-LIEU

#### ADDITIONAL INFORMATION:

The Cash-in-Lieu memo handed out at the Board meeting will provide three months of sales data from the monthly C-BT *Change of Water Allotment Contracts*. The average market price per C-BT unit is used to calculate the City's Cash in-Lieu rate, by assuming a yield of 0.75 AF per unit.



# MEMORANDUM

To: Water and Sewer Board

From: Jennifer Petrzelka, Water Resource Administrator I

Date: October 15, 2014

Re: C-BT Applications for Change of Water Allotment Contracts

#### **ISSUE:**

The C-BT *Change of Water Allotment Contracts* for July, August, and September have been published. The average market price per C-BT unit will be used as an indicator for the City of Greeley Water and Sewer Board at the October Board Meeting to set the City's cash in-lieu rate.

#### **BACKGROUND:**

In the month of **July**, the NCWCD Board reviewed 9 applications for change of water allotment contracts, totaling 335 units. Transfers to cities, towns and rural domestic water providers totaled 83 units, of which 83 units were purchased.

The following table summarizes these findings

				Monthly Average
	Number of		Total	Purchase
	Units	Purchase Price	Purchase	Amount
Purchaser	Purchased	per Unit	Price	per Unit

July 2014

Fort Collins/Loveland Water District	18	\$25,000.00	\$450,000.00	
North Weld County Water District	65	\$25,000.00	\$1,625,000.00	
			\$0.00	
July Totals	83		\$2,075,000.00	\$25,000.00

In the month of **August**, the NCWCD Board reviewed 5 applications for change of water allotment contracts, totaling 226 units. Transfers to cities, towns and rural domestic water providers totaled 192 units, of which 192 units were purchased.

The following table summarizes these findings

SERVING OUR COMMUNITY • IT'S A TRADITION We promise to preserve and improve the quality of life for Greeley through timely, courteous and cost effective service. Page 1 of 2

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			Total	Monthly Average Purchase
	Number of Units	Purchase	Purchase	Amount
Purchaser	Purchased	Price per Unit	Price	per Unit

August 2014

Fort Collins/Loveland Water District	150	\$25,000.00	\$3,750,000.00	
Little Thompson Water District	2	\$23,500.00	\$47,000.00	
North Weld County Water District	40	\$25,000.00	\$1,000,000.00	
Aug Totals	192		\$4,797,000.00	\$24,984.38

In the month of **September**, the NCWCD Board reviewed 0 applications for change of water allotment contracts.

#### **RECOMMENDATIONS:**

The total average cost per unit over the study period is \$25,000.00 or the equivalent of \$33,300.00 per acre-foot. Set Cash in-lieu at \$33,300.00 per acre-foot.

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#### WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE X\_\_\_\_NO ENCLOSURE \_\_\_\_

ITEM NUMBER: 7

TITLE: ACTION: APPROVE DAIRY FARMERS OF AMERICA PAYMENT OF CASH-IN-LIEU FOR THE DEDICATION OF EIGHT ACRE-FEET OF RAW WATER AND RECOMMEND APPROVAL OF PHASED PAYMENT OF CASH-IN-LIEU TO COUNCIL

#### RECOMMENDATION: APPROVE THE PAYMENT OF CASH-IN-LIEU, AND RECOMMEND APPROVAL OF THE PHASED PAYMENT TO COUNCIL

#### ADDITIONAL INFORMATION:

Dairy Farmers of America (DFA) has recently constructed a dairy truck wash site east of the Greeley-Weld County Airport, and that property has recently been annexed to the City. Initially, the site will mostly consist of administrative offices, but within a few years, it will also be used for purposes such as truck washing. DFA has requested a two-inch water tap, which per the City Municipal Code requires the dedication of a minimum of eight acre-feet of raw water. DFA desires to pay cash, in lieu of providing raw water supplies ("cash-in-lieu"), for the required eight acre-feet. Pursuant to Water and Sewer Board Resolution No. 4, 2008, the Water and Sewer Board must approve cash-in-lieu payments in excess of six acre-feet of dedication. Staff recommends that the Board approve this relatively small cash-in-lieu payment.

DFA does not immediately have a need for a two-inch tap and thus will not initially use more that three acre-feet of water per year through the tap. However, as production at Leprino increases and the demand for milk goes up, DFA will increasingly need more water at the site to wash its milk trucks. As such, the water service agreement is structured whereby DFA will only be required to dedicate initially, by cash-in-lieu payment, three acre-feet of water upon connection to Greeley water service. DFA will dedicate (pay for) the remaining five acre-feet within the next five years. DFA will pay the current cash-in-lieu rate for the initial three acre-feet, but will pay the cash-in-lieu rate for the remaining five acre-feet effective at the time that balance is paid. DFA will also be assessed a surcharge for any annual water usage that exceeds the volume of water then dedicated. The City Code requires payment/dedication of the minimum amount prescribed in the Code as a perquisite to receiving City water service. Staff therefore also recommends that the Board recommend that Council approve, pursuant to its Code authority to enter into "special agreements regarding raw water requirements" (Code § 14.24.100(g)), the phased payment of the eight acre-feet (three acre-feet initially, and five acre-feet within five years) as part of a water service agreement with DFA. A draft of the water service agreement is attached as part of this Action Item.

#### DAIRY FARMERS OF AMERICA WATER AND SEWER SERVICE AGREEMENT

THIS WATER AND SEWER SERVICE AGREEMENT ("Water and Sewer Agreement"), dated this \_\_\_\_\_\_ day of \_\_\_\_\_\_ 2014, is entered into by and between THE CITY OF GREELEY, a municipal corporation, of the State of Colorado (hereinafter referred to as "City") whose principal office is located at 1000 10<sup>th</sup> Street, Greeley, Colorado 80631, and **DAIRY FARMERS OF AMERICA** (hereinafter referred to as "Property Owner") whose principal address is 22634 Union Colony Road, Greeley, Colorado 80631.

#### I. INTRODUCTION

The Property Owner owns approximately 20 acres of certain real property located in the City of Greeley, County of Weld, State of Colorado, more particularly described as Lot 1 and Lot 2 of the Union Colony Industrial Park on Exhibit A attached hereto (the "Property").

In order to obtain water and sewer service from the City on the Property, the Property Owner has agreed to enter into this Water and Sewer Agreement.

In consideration of the mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged by each of the parties hereto, the City and the Property Owner agree as follows.

#### **II. WATER AND SEWER SERVICE**

A. <u>Potable Water Service.</u> Upon dedication of sufficient raw water, in accordance with Section II.B below, and payment by Property Owner of potable water plant investment fees pursuant to Section 14.08.050 of the Greeley City Code and all installation costs, including, but not limited to, all meters, labor and materials required in tapping the water main, and installing the service pipes, pursuant to Section 14.080.060 of the Greeley City Code, the City agrees to provide potable water service to the Property. The cost-of-service rates shall be reviewed annually and adjusted in accordance with Section 17-4 of the Greeley City Charter. Property Owner agrees to extend potable water infrastructure at their sole cost and expense, in accordance with the City accepted construction drawings, which copies are on file with the City and are incorporated herein and made a part hereof by reference. The City shall regulate the installation of the potable water system for the Property in conjunction with the future development of the Property.

B. <u>Raw Water Dedication</u>. The Property Owner agrees to transfer, at no cost to the City, adequate water rights from a source selected by the Property Owner and approved by the

City, which water rights may include, but are not limited to, Northern Colorado Water Conservancy District allotments, (Colorado-Big Thompson Project units) or irrigation water and carriage rights, which the City, at the City's sole determination, can use in its system, as a prerequisite and as a part of the consideration to receive City water service and City water taps for the Property. For non-residential development, the Property Owner shall transfer such water rights at the time of purchase of individual water taps for each lot from the City. In the event the Property develops as residential, the Property Owner shall transfer such water rights upon subdivision or upon request for water service from the City, whichever occurs first. Such water rights shall meet legal criteria under Colorado law necessary to convert the water to municipal use in amounts sufficient to meet the projected water demands of the development(s) located on the Property including, but not limited to, sustained historical consumptive water use, and shall otherwise satisfy the requirements of Chapter 14.24 of the Greeley City Code.

#### C. <u>Raw Water Dedication for Lot 1.</u>

i. The City agrees to accept the dedication of 3 acre-feet of the required 8 acre-feet of raw water (which may be made by a cash-in-lieu payment) by the Property Owner for Lot 1 of the Union Colony Industrial Park. Upon said dedication or payment, the City agrees to provide potable water service to said Lot 1 through a 2-inch water meter.

ii. The Property Owner agrees to dedicate the remaining 5 acre-feet of the required raw water (which may be made by a cash-in-lieu payment) within 5 years of the date of execution of this agreement. The cost-of-service rates shall be reviewed annually and adjusted in accordance with Section 17-4 of the Greeley City Charter. Property Owner agrees to pay the cash-in-lieu rate current at the time the balance of the raw water is paid.

iii. Contemporaneously with the execution of this Agreement, the Property Owner will execute the Promissory Note, which is attached hereto as Exhibit B and incorporated herein by this reference, to secure payment to the City of the cash-in-lieu rate for the remaining 5 acrefeet of the required raw water. The Promissory Note shall be secured by the Deed of Trust which is attached hereto as Exhibit C and incorporated herein by this reference, which also shall be executed by the parties contemporaneously with the execution of this agreement. Nothing herein shall alter the Property Owner's responsibility to pay the cash-in-lieu rate at the time the balance of the raw water is paid as required in paragraph II.C.ii above. The City shall cancel the Promissory Note and release the Deed of Trust when the Property Owner pays the cash-in-lieu rate applicable at the time of payment for the remaining 5 acre-feet of the required raw water.

iv. Property Owner will be assessed a surcharge for any annual water usage exceeding the then current volume of dedicated raw water on Lot 1.

D. <u>Waterline Oversizing Reimbursement Agreement.</u> There is a future need for water service to properties located to the east of the Property; therefore, portions of the waterline adjacent to the Property shall be oversized to accommodate these future water needs. The City agrees to pay the material costs of the pipe to oversize the waterline from an 8" line to a 12" line within the eastern portion of Weld County Road 62 as indicated in the City accepted construction drawings. "Material costs" is defined as the difference in pipe material price between the 8" waterline and the 12" waterline. The Property Owner, or the Property Owner's representative, is responsible for providing suppliers' invoices showing material costs for the 8" and 12" pipe prior to being reimbursed. The City will reimburse the appropriate party (the Property owner or contractor) upon installation and initial acceptance of the waterline. As-built drawings must be approved by the City prior to receiving initial acceptance.

E. <u>Sanitary Sewer Service.</u> Upon request for sanitary sewer service, sanitary sewer plant investment fees and an offsite lift station expansion fee will be due prior to installing the new sewer service. The offsite lift station expansion fee shall be based on the size of the water service serving the Property as follows: Each three-quarter inch equivalent water tap will correlate with a 2 gallon per minute ("gpm") peak discharge to the lift station and will be assessed a lift station expansion fee based on the following table:

Water Tap Size	3/4" Equivalent	Lift Station Expansion Fee
3⁄4"	1	\$3,917.78
1"	1.67	\$6,542.69
1-1/2"	3.33	\$13,046.21
2"	5.33	\$20,881.77
3"	10	\$39,177.80
4"	16.67	\$65,309.39

Lift Station Expansion Fee

#### III. INFRASTRUCTURE

The Property Owner acknowledges that municipal infrastructure is not yet fully provided to the Property at levels typically required to permit development. The Property Owner acknowledges that development of infrastructure to serve the Property shall be approved by the City prior to accessing City facilities and services. The Property Owner shall be responsible for the design and construction of all public infrastructure in accordance with construction plans approved by the City, pursuant to the City Code and City engineering design criteria.

#### **IV. SUCCESSORS AND ASSIGNS**

Wherever used herein, the term "Property Owner" shall also include any heirs, successors, executors, personal representatives, transferees and assigns of the Property Owner, and all such parties shall have the right to enforce and be subject to enforcement under the terms of this Water and Sewer Agreement as if they were original parties hereto. This Water and Sewer Agreement does not waive or release the Property Owner from any fees, requirements or standards applied in a like fashion to other similar developments in the City.

#### **V. DEFAULT AND TERMINATION**

Each and every term and condition of this Agreement is deemed to be a material element thereof. In the event either party fails or refuses to perform according to the terms of this Agreement, such party may be declared in default. In the event a party had been declared in default hereof, such defaulting party is allowed a period of five (5) days within which to cure said default. In the event the default remains uncorrected, the party declaring default may elect to:

- 1. Terminate the Agreement, to include termination of water service to the property, and seek damages;
- 2. Treat the Agreement as continuing and require specific performance; or,
- 3. Avail itself of any other remedy at law or equity.

In the event the default of any of the provisions hereof by either party which requires the party not in default to commence legal or equitable action against said defaulting party, the defaulting party is liable to the non-defaulting party for the costs incurred by reason of the default. Nothing herein shall be construed to prevent or interfere with the City's rights and remedies specified in this Agreement.

#### VI. RECORDING

This Water and Sewer Agreement, the Promissory Note and the Deed of Trust shall be separately recorded in the real property records of the Clerk and Recorder of Weld County. This Water and Sewer Agreement, the Promissory Note and the Deed of Trust shall each constitute a covenant running with the land and shall be binding upon all parties having any right, title or interest in and to the Property.

#### **VII. AMENDMENTS**

This Water and Sewer Agreement may be amended by the Property Owner or any subsequent owners of the Property with the mutual consent of the City, and may be amended by the City with the mutual consent of the Property Owner or any subsequent owners of a part of the Property, without the consent of other subsequent property owners, so long as such amendment affects only that owner's part of the Property. Such amendment shall be recorded in the real estate records of the Clerk and Recorder of Weld County and shall be a covenant running with the land and shall be binding upon all parties having any right, title or interest in and to the Property subject to the amendment unless otherwise specified in the amendment.

#### VIII. HEADINGS

The headings set forth in this Water and Sewer Agreement are for reference only and shall not be construed as an enlargement or abridgement of the language of this Water and Sewer Agreement.

#### [THE REMAINDER OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have set their hands and seals as of the day and year first above written.

#### **CITY OF GREELEY, COLORADO**

#### **PROPERTY OWNER** (Dairy Farmers of America)

By: \_

Mayor

#### **ATTESTED TO BY:**

By: \_\_\_\_\_

City Clerk

#### **APPROVED AS TO SUBSTANCE:**

By: \_\_\_\_\_

City Manager

#### **APPROVED AS TO LEGAL FORM:**

By:

City Attorney

#### **APPROVED AS TO AVAILABILITY OF FUNDS:**

By: \_\_\_\_\_

Director of Finance

By: \_\_\_\_\_

Printed Name: (printed name & title here)

#### **APPROVED AS TO LEGAL FORM:**

By:\_\_\_\_\_

Attorneys for Dairy Farmers of America

#### Exhibit A

Dairy Farmers of America Water and Sewer Service Agreement

Lot 1 Legal: Lot 1, Union Colony Industrial Park PUDF13-0001 Final Plat as recorded July 10, 2013 at Reception No. 3946337, County of Weld, State of Colorado.

Lot 2 Legal: Lot 2, Union Colony Industrial Park PUDF13-0001 Final Plat as recorded July 10, 2013 at Reception No. 3946337, County of Weld, State of Colorado.

#### **Promissory Note**

Dairy Farmers of America 22634 Union Colony Road Greeley, CO 80631

FOR VALUE RECEIVED, I promise to pay to the order of THE CITY OF GREELEY, COLORADO, a municipal corporation, at 1000 10<sup>TH</sup> Street, Greeley, Colorado 80631, the sum of not less than ONE HUNDRED FIFTY FOUR THOUSAND EIGHT HUNDRED AND FIFTY DOLLARS AND NO/100 (\$154,850.00), with interest at the rate of 11.75 percent per annum from the date of execution of this Promissory Note until due, which amount represents the cash-in-lieu rate for 5 acre feet of raw water as of October 7, 2014 plus interest. This amount shall secure payment to the City in the amount of the cash-in-lieu rate for 5 acre-feet of the required raw water owed by Maker pursuant to the parties' Water Service Agreement. The required cash-in-lieu payment shall be due and payable in one payment and shall be made no later than 5 years from the date of execution of this note. Maker waives demand protest and notice of dishonor and all defenses on the grounds of any extension of the time of its payment that may be given by the Holder. Nothing herein shall alter the Property Owner's responsibility to pay the appropriate cash-in-lieu rate at the time the balance of the raw water is paid as required in the Water Service Agreement executed by the parties contemporaneously with this Promissory Note.

MAKER: DAIRY FARMERS OF AMERICA		
By:		
STATE OF COLORADO		
COUNTY OF WELD ) ss.		
Acknowledged before me on this day of Dairy Farmers of America.	, 2014, by	of
WITNESS MY HAND AND OFFICIAL SEAL.		

My Commission Expires:\_\_\_\_\_

Notary Public

#### **DEED OF TRUST**

THIS INDENTURE, Made this \_\_\_\_\_ day of \_\_\_\_\_, 2014,

Between Dairy Farmers of America, Inc. whose address is 22634 Union Colony Road, Greeley, CO 80631,

hereinafter referred to as grantor, and the Public Trustee of the County of Weld, State of Colorado, hereinafter referred to as Public Trustee,

#### WITNESSETH, THAT, WHEREAS, DAIRY FARMERS OF AMERICA, INC.

has executed a promissory note or notes, hereinafter referred to in the singular, dated \_\_\_\_\_2014 for the principal sum of \_\_\_\_\_\_AND NO/100 (\$\_\_\_\_\_\_0) DOLLARS.

Payable to the order of THE CITY OF GREELEY, COLORADO, a municipal corporation whose address is 1100 10<sup>TH</sup> STREET, GREELEY, COLORADO 80631 after the date hereof, with interest thereon from the date thereof at the rate of \_\_\_\_\_ per cent per annum, payable at once in the event of sale or transfer as hereafter provided.

**AND WHEREAS**, the grantor is desirous of securing payment of the principal and interest of said promissory note in whose hands so ever the said note or any of them may be.

**NOW THEREFORE,** the grantor, in consideration of the premises and for the purpose aforesaid, does hereby grant, bargain, sell and convey unto the said Public Trustee in trust forever, the following described property, situate in the County of Weld, State of Colorado, to wit:

Lot 1, Union Colony Industrial Park PUDF13-0001 Final Plat as recorded July 10, 2013 at Reception No. 3946337, County of Weld, State of Colorado.

also known by street and number as 22634 Union Colony Road, Greeley, CO 80631.

WELD CO RECORDER RETURN TO: CITY OF GREELEY CITY CLERK'S OFFICE 1000  $10^{TH}$  STREET GREELEY, CO 80631

TO HAVE AND TO HOLD the same, together with all and singular the privileges and appurtenances thereunto belonging: In trust nevertheless, that in case of default in the payment of said note, or any of them, or in the payment of any prior encumbrances, principal or interest, if any, or in case default shall be made in or in case of violation or breach of any of the terms, conditions, covenants or agreements herein contained, the beneficiary hereunder or the legal holder of the indebtedness secured hereby may declare a violation of any of the covenants herein contained and may elect to advertise said property for sale, and demand such sale by filing a notice of election and demand for sale with the Public Trustee. Upon receipt of such notice of election and demand for sale, the Public Trustee shall cause a copy of the same to be recorded in the recorder's office of the county in which said property is situated. The Public Trustee shall then give public notice of the time and place of sale by advertisement to be published for four weeks (once each week for five successive weeks) in some newspaper of general circulation at the time published in the county or counties in which said property is located. A copy of such notice shall be mailed within ten days after the date of the first publication thereof to the grantor at the address given herein, to such person or persons appearing to have acquired a subsequent record interest in said property at the address give in the recorded instrument, and to any other person or persons as may be provided by law. It shall and may then be lawful for the Public Trustee to sell said property for the highest and best price the same will bring in cash and to dispose of the same (en masse or in separate parcels, as the said Public Trustee may think best), together with all right, title and interest of the grantor, his heirs or assigns therein, at public auction at any place as may be specified by statute and designated in the notice of sale. The Public Trustee shall make and give to the purchaser or purchasers of such property at such sale a certificate or certificates in writing describing such property purchased, and the sum or sums paid therefor, and the time when the purchaser or purchasers (or other person entitled thereto) shall be entitled to a deed or deeds therefor, unless the same shall be redeemed as is provided by law. The Public Trustee shall, upon demand by the person or persons holding the said certificate or certificates of purchase, when said demand is made, or upon demand by the person entitled to a deed to and for the property purchased at the time such a demand is made, the time for redemption having expired, make and execute to such person or persons a deed or deeds to the said property purchased. Said deed or deeds shall be in the ordinary form of a conveyance, and shall be signed, acknowledged and delivered by the said Public Trustee and shall confirm the foreclosure sale and sell and convey to such person or persons entitled to such deed, the said property purchased as aforesaid and all the right, title, interest, benefit and equity of redemption of the grantor, his heirs and assigns therein. The Public Trustee shall, out of the proceeds or avails of such sale, after first paying and retaining all fees, charges and costs of making said sale, pay to the beneficiary hereunder of the legal holder of said note the principal and interest due on said note according to the tenor and effect thereof, and all moneys advanced by such beneficiary or legal holder of said note for insurance, taxes and assessments, with interest thereon at \_\_\_\_\_ per cent annum, rendering the overplus, if any, unto the grantor, his legal representatives or assigns. Said sale or sales and said deed or deeds so made shall be a perpetual bar, both in law and equity, against the grantor, his heirs and assigns, and all other persons claiming the said property, or any part thereof, by, from, through or under the grantor, or any of them. The holder or holders of said note or notes may purchase said property or any part thereof; and it shall not be obligatory upon the purchaser or purchasers at any such sale to see to the application of the purchase money. If a release deed be required, it is agreed the grantor, his heirs or assigns, will pay the expense thereof.

And the grantor, for himself and his heirs, personal representatives or assigns covenants and agrees to and with the Public Trustee, that at the time of the ensealing of and delivery of these presents he is well seized of the said land and tenements in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in the manner and form as aforesaid; hereby fully and absolutely waiving and releasing all rights and claims he may have in or to said lands, tenements, and property as a Homestead Exemption, or other exemption, under and by virtue of any act of the General Assembly of the State of Colorado, or as any exemption under and by virtue of any act of the United States Congress, now existing or which may hereafter be passed in relation thereto and that the same are free and clear of all liens and encumbrances whatever, except such as are of record at the office of the Weld County, Colorado, Clerk and Recorder.

The grantor shall and will Warrant and Forever Defend the above bargained property in the quiet and peaceable possession of the Public Trustee, against all and every person or persons lawfully claiming or to claim the whole or any part thereof.

Until payment in full of the indebtedness, the grantor shall timely pay all taxes and assessments levied on the property; any and all amounts due on account of principal and interest or other sums on any senior encumbrances, if any; and will keep all improvements on said lands in good repair insured against any casualty loss, including extended coverage, by a company or companies meeting the net worth requirements of the beneficiary hereof in an amount not less than the then total indebtedness, including senior encumbrances. Each policy shall contain a loss payable clause naming the beneficiary as mortgagee and shall further provide that the insurance may not be canceled upon less than ten days written notice to the beneficiary. At the option of the beneficiary, the original policy or policies of insurance shall be delivered to the beneficiary as further security for the indebtedness. Should the grantor fail to insure and deliver the policies or to pay taxes or assessments as the same fall due, or to keep the property in good repair, or to pay any amounts payable upon senior encumbrances, if any, the beneficiary may make such repairs or any such payments or procure any such insurance without being required to do so, and all monies so paid with interest thereon at the rate of \_\_\_\_\_\_\_% per annum shall be added to and become a part of the indebtedness secured by the Deed of Trust and may be paid out of the proceeds of the sale of the property, if not paid by the grantor. In addition, and at its option, the beneficiary may declare the indebtedness secured hereby and this Deed of Trust to be in default for failure to procure insurance or make any payments or repairs required by this paragraph.

If all or any part of the property or an interest therein is sold or transferred by the grantor, excluding (a) the creation of a lien or encumbrance subordinate to this Deed of Trust, (b) the creation of a purchase money security interest for household appliances, (c) a transfer by devise, descent or by operation of law upon the death of a joint tenant all the sums secured by this Deed of Trust shall be immediately due and payable.

AND THAT IN CASE OF ANY DEFAULT, Whereby the right of foreclosure occurs hereunder, the Public Trustee or the holder of said note or certificate of purchase, shall at once become entitled to the possession, use and enjoyment of the property aforesaid, and to the rents, issues and profits thereof, from the accruing of such right and during the pendency of foreclosure proceedings and the period of redemption, if any there be: and such possession shall at once be delivered to the Public Trustee or the holder of said note or certificate of purchase on request, and on refusal, the delivery of such possession may be enforced by the Public Trustee or the holder of said note or certificate of purchase by any appropriate civil suit or proceeding, and the Public Trustee, or the holder of said note or certificate of purchase, or any thereof, shall be entitled to a Receiver for said property, and of the rents, issues and profits thereof, after such default, including the time covered by foreclosure proceedings and the period of redemption, if any there be, and shall be entitled thereto as a matter of right without regard to the solvency or insolvency of the grantor or of the then owner of said property and without regard to the value thereof, and such Receiver may be appointed by any court of competent jurisdiction upon ex parte application and without notice – notice being hereby expressly waived – and all rents, issues and profits, income and revenue therefrom shall be applied by such Receiver to the payment of the indebtedness hereby secured, according to the law and the orders and directions of the court.

**AND,** That in case of default in any of said payments of principal or interest, according to the tenor and effect of said promissory note aforesaid, or any of them, or any part thereof, or of a breach or violation of any of the covenants or agreements herein, by the grantor, his personal representatives or assigns, then and in that case the whole of said principal sum hereby secured, and the interest thereon to the time of the sale, may at once, at the option of the legal holder thereof, become due and payable, and the said property be sold in the manner and with the same effect as if said indebtedness had matured. If foreclosure be made by the Public Trustee, Trustee shall apply the proceeds of the sale in the following order: (a) to all expenses of the sale, including, but not limited to, reasonable Trustee's and attorneys' fees; (b) to all sums secured by this Security Instrument; and (c) any excess to the person or persons legally entitled to it; and if foreclosure be made through the courts a reasonable attorney's fee shall be taxed by the court as a part of the cost of such foreclosure proceedings.

It is further expressly understood and agreed that all the covenants and agreements herein contained shall extend to and be binding upon the heirs, personal representatives, successors and assigns of the respective parties hereto. Whenever used, the singular number shall include the plural, the plural the singular, the use of any gender shall be applicable to all genders.

Executed this \_\_\_\_\_\_, 2014.

DAIRY FARMERS OF AMERICA, INC.

By: \_\_\_\_\_

State of Colorado	)
	) ss.
County of Weld	)

The foregoing instrument was acknowledged before me this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2014 by

Witness my hand and seal.

Notary Public

My commission expires:

#### WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_\_\_ NO ENCLOSURE \_\_\_\_

ITEM NUMBER:

TITLE: ACTION: APPROVE SHORT-TERM AUGMENATION LEASE WITH TODD BEAN/WAGISTICE, LLC.

8

RECOMMENDATION: APPROVE LEASE

#### ADDITIONAL INFORMATION:

Approve an augmentation water lease between Wagistics, LLC, a Colorado limited liability corporation and the City of Greeley. The lease term shall be for a period of up to three (3) Augmentation Years.

#### AUGMENTATION WATER LEASE (Wagistics, LLC)

This Augmentation Water Lease ("Lease") is entered into this <u>9</u> day of October 2014, by and between Wagistics, LLC, a Colorado limited liability corporation (hereafter "Wagistics") and the City of Greeley, a Colorado municipal corporation, acting by and through its Water and Sewer Board ("Greeley").

#### Recitals

- Select Energy Services, LLC ("Select") will own and operate up to two alluvial groundwater wells on a parcel located south of Highway 34 in Section 22, Township 5 North, Range 64 West of the 6<sup>th</sup> P.M. in Weld County, Colorado (the "Select Energy Wells"). The parcel is more particularly described as being owned by the Sappington Trust and located at 27516 CR 54.5 in Kersey, Colorado (the "Property").
- Select will utilize the Select Energy Wells to divert groundwater for use in its oil and gas operations in Weld County.
- Select desires to develop and obtain a substitute water supply plan pursuant to C.R.S. §37-92-308, in order to replace depletions to the South Platte River caused by its pumping of the Wells (the "Select Energy SWSP").
- 4) Wagistics desires to secure a sufficient source of augmentation water for the Select Energy SWSP, and Greeley desires to lease augmentation water to Wagistics for that purpose, on the terms and conditions contained herein.

#### Agreement and Lease

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and in further consideration of the mutual covenants and agreements set forth below, the parties agree as follows.

Lease of Augmentation Water. Greeley hereby leases to Wagistics "Augmentation Water" (defined as water delivered as described in Paragraphs 1.3 and 1.4 herein, pursuant to water rights owned by or available to Greeley that are fully decreed and usable for augmentation purposes under Colorado water law) in an amount of up to three hundred (300) acre-feet of water per "Augmentation Year" (defined as the 12-month period from April 1 through March 31 of the following calendar year), as calculated and based upon the yield of that water as decreed for augmentation purposes. The Augmentation Water shall be used only to augment out-of-priority depletions which may result from pumping the Select Energy Wells on the Property.

1.1. <u>Term of Lease</u>. Subject to the terms and conditions herein, this Lease shall be for a period of up to three (3) Augmentation Years, beginning upon receipt by Select of the approved Select Energy SWSP by the State Engineer ("the Effective Date"). The term of this Lease may be extended or renewed only by mutual written agreement properly executed by the parties.

1.2. Assignment of Lease Rights. The Augmentation Water leased hereunder shall not be transferred by Wagistics, or by any of its successors in interest, for uses at any location other than the Property, or for any uses on the Property other than augmentation. Upon advance written notice to Greeley of thirty (30) days, Wagistics may assign its interest in this Lease to a successive owner of the Select Energy Wells, who may only use the Augmentation Water on the Property for the purposes expressly provided herein. In no event shall the assignment, sale, conveyance or subdivision of some or all of the Select Energy Wells or Property require Greeley to provide Augmentation Water in amounts greater, or for a period longer, than described herein. Greeley may not assign or delegate any or all of its obligations under this Lease without the prior written consent of Wagistics, which consent shall not be unreasonably withheld, provided that Greeley shall not be released from, and shall remain jointly responsible for, such obligations following any such assignment or delegation.

1.3. Delivery of Augmentation Water. As is more particularly described in this Paragraph and Paragraphs 1.4 and 1.7 herein, Greeley shall make available to Wagistics during each Augmentation Year of this Lease up to three hundred (300) acre-feet, but no more than forty (40) acre-feet in any calendar month, of Augmentation Water (a) released into the Cache la Poudre River immediately below Greeley's existing wastewater treatment plant outfall, at the outlet of the Flatiron Reservoir Nos. 1-5 (a/k/a the Poudre Ponds at Greeley), or at delivery stations from the Greeley Canal No. 3, or (b) in Lonetree Creek, a tributary to the South Platte River, immediately below the Swift wastewater treatment plant outfall, or (c) in the Big Thompson River at delivery stations or release structures from the Greeley Loveland Canal and related structures, or (d) at such other point or points on which the parties mutually agree in writing. Greeley shall make such Augmentation Water available regardless of whether a particular year is wet, average, or dry in terms of precipitation or water availability, subject to the conditions of Paragraphs 1.5 and 1.10. Wagistics shall be solely responsible for ensuring the proper administration of such Augmentation Water less any transmission losses charged by State water officials below such point(s). Greeley's obligation to deliver the Augmentation Water shall commence upon the Effective Date, subject to receipt of a timely projection schedule from Wagistics, pursuant to Paragraph 1.4.

1.4. Water Delivery Schedule and Administration. At least 60 days prior to the Effective Date of each year under this Lease, Wagistics shall submit to Greeley's Water and Sewer Department Staff the following Augmentation Year's 12-month schedule projecting the monthly delivery amounts of Augmentation Water deemed necessary by Wagistics to replace out-of-priority depletions caused by the Select Energy Wells, pursuant to any Select Energy SWSP approved by the State Engineer's Office or plan for augmentation approved by the Division 1 Water Court. Wagistics may update the 12-month projected schedule as necessary, with an advance written notice to Greeley of sixty (60) days. Irrespective of any delivery schedule projection submitted by Wagistics, Greeley shall not be obligated to deliver more than forty (40) acre-feet of Augmentation Water in any calendar month, or more than three hundred (300) acre-feet of Augmentation Water in any Augmentation Year beginning upon Select's receipt of the approved Select Energy SWSP by the State Engineer. Further, Greeley shall not be obligated to deliver more Augmentation Water in any Augmentation Year than specified by Wagistics in any projected or updated schedule for that Augmentation Year.

1.5. <u>Obligation to Deliver Augmentation Water</u>. Greeley's obligation to deliver the Augmentation Water under this Lease is irrevocable for the term of this Lease, but may be curtailed under the following circumstances.

a. If, in Greeley's sole discretion, it imposes mandatory city-wide water use restrictions to address drought conditions, dam or pipeline failure, or other catastrophic circumstance limiting Greeley's ability to satisfy the indoor water usage needs of its citizens, Greeley may curtail deliveries of Augmentation Water to Wagistics under this Lease so long as and to the extent that, delivery is prevented or delayed by such cause. In such event, Wagistics shall be subject to curtailment under the terms of any Select Energy SWSP approved by the State Engineer's Office or plan for augmentation approved by the Division 1 Water Court.

b. If an accident, act of war, natural catastrophe, fire, explosion, or other cause beyond the reasonable control of Greeley, prevents or delays its ability to deliver the Augmentation Water pursuant to this Lease, Greeley may curtail delivery of the Augmentation Water so long as and to the extent that, delivery is prevented or delayed by such cause. In such event, Wagistics shall be subject to curtailment under the terms of any Select Energy SWSP approved by the State Engineer's Office or plan for augmentation approved by the Division 1 Water Court.

c. If, at any time, use of the Select Energy Wells is permanently discontinued on the Property and causes no further depletions to the South Platte River, Greeley's obligation to deliver Augmentation Water under this Lease shall terminate and be of no further force and effect, subject to the terms and condition(s) herein. If Greeley believes that well pumping activities on the Property have been permanently discontinued and depletions to the South Platte River from the Select Energy Wells have ceased under the terms of a Select Energy SWSP approved by the State Engineer's Office or plan for augmentation approved by the Division 1 Water Court, Greeley may terminate this Lease. In such an event, Greeley shall provide sixty (60) days written notice to Wagistics or its successor(s) that Greeley intends to terminate the Lease. If, during this sixty (60)-day period, Wagistics or its successor(s) provide written confirmation to Greeley (a) that operations on the Property have not been permanently discontinued, or (b) that operations on the Property will resume prior to the projected termination date, Greeley shall not terminate the Lease in this instance.

1.6. <u>Select Energy SWSP or Plan for Augmentation</u>. The parties intend that the Augmentation Water provided by Greeley hereunder will be used under and incorporated into a State Engineer approved Substitute Water Supply Plan for the Select Energy Wells on the Property, pursuant to C.R.S. §37-92-308. Greeley shall not object to or oppose the inclusion and use of the Augmentation Water in Select Energy's application to obtain approval of such Substitute Water Supply Plan. Notwithstanding, Greeley may otherwise participate in any proceedings regarding a Select Energy SWSP or Plan for Augmentation if it may adversely affect Greeley's water rights, in the appropriate manner as Greeley deems necessary to protect its water rights. Greeley agrees that this Lease is contingent upon State Engineer approval of the Select Energy SWSP. Greeley agrees to cooperate with and provide reasonable assistance and information to Select Energy, based on Greeley's status as the owner and lessor of the Augmentation Water leased hereunder, to enable Select Energy to obtain approval of its Substitute Water Supply Plan from the State Engineer's Office. In the event Select's request for the Select Energy SWSP is denied, this Agreement shall be null and void, and no party shall have any further obligations hereunder. Select and Wagistics, in their sole discretion, may appeal a denial, but they are not required to under the terms of this Lease.

Annual Lease Payment. In consideration of the rights and interests 1.7. granted, costs incurred, and services rendered or performed by Greeley hereunder, Wagistics shall pay to Greeley THREE HUNDRED THOUSAND DOLLARS (\$300,000.00) within 15 days of Select's receipt of the State Engineer approval of the Select Energy SWSP, which is expected prior to April 1, 2015. Thereafter, on or before the Effective Date of each subsequent calendar year under this Lease, Wagistics shall pay to Greeley ONE THOUSAND DOLLARS (\$1,000.00) per acre-foot of Augmentation Water projected by Wagistics pursuant to Paragraph 1.4 above. Subject to the limitations in Paragraph 1.4, if Wagistics revises its projected delivery schedule so as to require more Augmentation Water than initially projected, Wagistics shall immediately pay to Greeley ONE THOUSAND DOLLARS (\$1,000.00) per acre-foot of additional Augmentation Water projected. If Wagistics revises its projected delivery schedule to require less Augmentation Water than initially projected, Greeley shall not be required to refund any previous payment made by Wagistics. Except as otherwise provided in Paragraphs 1.11 and 1.12 of this Lease, Wagistics and any successor(s) in interest hereunder shall not be liable or obligated to pay for any other charges or expenses of Greeley resulting from or relating to Greeley's performance of its duties hereunder.

1.8. <u>Notices</u>. Any notice required to be given hereunder shall be sent by certified mail or hand-delivered to the parties at the following addresses, unless a party notifies the other party in writing that such contact or address has changed.

For the City of Greeley:	Greeley Water and Sewer Department
	Attn: Eric Reckentine
	1100 10th Street, Suite 300
	Greeley, Colorado 80631
With a copy to:	Greeley City Attorney's Office
	Environmental and Water Resources Practice Group
	1100 10 <sup>th</sup> Street, Suite 401
	Greeley, Colorado 80631
For Wagistics:	Wagistics, LLC
	Attn: Todd Bean
	14339 WCR 74
	Eaton, Colorado 80615
With Copy To:	Select Energy Services, LLC
	Attn: William Fronczak

1551 S. Sunset St., Suite A Longmont, Colorado 80501

1.9. Water Rights Used for Augmentation Water. Greeley may use and deliver any water rights, water supplies, or combination thereof, which Greeley owns or has a right to use to satisfy its obligations under this Lease; provided that such water rights or water supplies are consistent with any Select Energy SWSP approved by the State Engineer's Office or plan for augmentation approved by the Division 1 Water Court. A list of water rights and water supplies that Greeley presently intends to have available for these purposes (the "List of Water Available for Lease Purposes") is attached as Exhibit A and incorporated herein by reference. Greeley may, if necessary, obtain Water Court approval of a change of use of any such water rights or water supplies owned or controlled by Greeley to the extent necessary and sufficient for Greeley to meet its obligations hereunder. The Director of the Greeley Water and Sewer Department may supplement or revise the List of Water Available for Lease Purposes, so long as the proposed revision is consistent with any Select Energy SWSP approved by the State Engineer's Office or plan for greater of the Greeley Water and Sewer Department may supplement or revise the List of Water Available for Lease Purposes, so long as the proposed revision is consistent with any Select Energy SWSP approved by the State Engineer's Office or plan for augmentation approved by the Division 1 Water Court and mutually consented to by the Parties. Such consent shall not be unreasonably withheld.

1.10. <u>Default</u>. If either party fails or refuses to perform according to the terms of this Lease, such party may be declared in default. Such declaration of default must be made in writing. Once a party has been declared in default of this Lease, such defaulting party shall have a period of sixty (60) days within which to cure the default. If the default remains uncured, the party declaring the default may elect to: (a) terminate the Lease and seek damages; (b) treat the Lease as continuing and seek specific performance; or (c) pursue any other remedy at law or in equity.

1.11. <u>Costs and Fees</u>. In addition to the remedies available pursuant to Paragraph 1.11, a party forced to commence legal action against the other due to a default of this Lease may recover from the defaulting party reasonable costs and attorneys' fees incurred during the course of such legal action.

1.12. <u>Governing Law and Venue</u>. This Lease shall be governed by and enforced in accordance with the laws of the State of Colorado. Proper venue for any action arising out of this Lease shall be the District Court for Weld County, Colorado, or the Division 1 Water Court as necessary.

1.13. <u>Recording</u>. This Lease may be recorded by either party in the office of the Clerk and Recorder of Weld County, Colorado, and may be disclosed and utilized in any proceeding to obtain approval of a Select Energy SWSP from the State Engineer's Office or decreed plan for augmentation from the Division 1 Water Court.

1.14. <u>Counterparts</u>. This Lease may be executed in counterparts, each of which (or combination of which), when signed by both parties shall be deemed an original, but both together shall constitute one agreement.

1.15 <u>Third Parties</u>. It is expressly understood and agreed that the enforcement of the terms and conditions of this Lease, and all rights of action relating to such enforcement, shall be strictly reserved to the undersigned parties and nothing in this Lease shall give or allow any claim or right of action whatsoever by another entity not a party to this Lease. It is the express intention of the undersigned parties that any entity or individual other than the undersigned parties receiving services or benefits under this Lease shall be an incidental beneficiary only.

1.16 <u>Integration and Merger</u>. This Lease constitutes a complete integration of the understanding and agreement between the parties with respect to the subject matter herein. No representations, negotiations, or warranties, express or implied, exist between the parties except as explicitly set forth in this Lease. This Lease may only be modified in writing with the signatures of both parties affixed thereto.

IN WITNESS WHEREOF, the parties have executed this Augmentation Water Lease on the date first set forth above.

WAGISTICS, LLC By: oda rean Name: Title:

STATE OF COLORADO ) ) ss. COUNTY OF \_\_\_\_\_\_\_ )

The foregoing instrument was	acknowledged before me this	day of October 2014 by
Todd Been	, as dwhar manager	of Wagistics, LLC.

Witness my hand and official seal.

n in

LYNN D. MORGAN NOTARY PUBLIC STATE OF COLORADO NOTARY ID 19904006407 AY COMMISSION EXPIRES 6-26-2016

Notary Public My commission expires: \_\_\_\_

6-26-2040

-6-

Municipal Corporation, Acting By and Through its Water and Sewer Board	
By:	By:
Chairman, Water and Sewer Board	Mayor
ATTESTED AND APPROVED AS TO SUBSTANCE:	ATTEST:
By: City Manager	By: City Clerk
APPROVED AS TO LEGAL FORM:	AS TO AVAILABILITY OF FUNDS:
Ву:	By:
City Attorney	Director of Finance

#### **Exhibit to Augmentation Water Lease**

The water rights that may be used for augmentation include:

A. <u>GLIC System Water Rights</u>. Water rights represented by shares of stock in the Greeley and Loveland Irrigation Company and the Seven Lakes Reservoir Company, and by Greeley's rights and interests in the Loveland and Greeley Reservoir (a/k/a Lake Loveland) (hereinafter collectively referred to as "GLIC System Water Rights") that Greeley has acquired or may acquire in the future, as these shares and rights are decreed for use by exchange in Case Nos. 87CW329 and 95CW042 and any subsequent decrees that may be obtained by the City of Greeley, including but not limited to any decree entered in Case No. 99CW235. The GLIC System Water Rights are more fully described as follows:

- 1. Barnes Ditch
  - a) Decree Information:

Amount	Appropria- tion Date	Adjudica- tion Date	<u>Court</u>
18.56 cfs	10/20/1865	05/28/1883	Boulder District Ct.
12.06 cfs	06/01/1867	05/28/1883	Boulder District Ct.
19.93 cfs	06/23/1873	05/28/1883	Boulder District Ct.

b) Point of Diversion:

The originally decreed point of diversion is in the NW 1/4 of the SE 1/4 of Section 17, Township 5 North, Range 69 West, on the north side of the Big Thompson Creek, in Larimer County. The Barnes Ditch has an alternate point of diversion in Section 15, Township 5 North, Range 69 West.

- c) Source: Big Thompson River
- d) Use: Irrigation

e) Portions of the Barnes Ditch water rights were owned by and delivered to owners of certain contractual rights, and these rights were excluded from the change decree.

2. Larimer County Irrigation and Manufacturing Ditch, a/k/a Chubbuck Ditch or the Chubbuck Ditch

a) Decree Information:

<u>Amount</u>	Appropria- tion Date	Adjudica- tion Date	Court
8.36 cfs	11/01/1865	05/28/1883	Boulder District Ct.
39.04 cfs	10/20/1870	05/28/1883	Boulder District Ct.
35.50 cfs	10/25/1873	05/28/1883	Boulder District Ct.
15.20 cfs	11/01/1878	05/28/1883	Boulder District Ct.

b) Point of Diversion:

Diverts from the Big Thompson River through the headgate(s) of the Loveland and Greeley Canal (see below).

- c) Source: Big Thompson River
- d) Use: Irrigation

e) Portions of the Chubbuck Ditch water rights were owned by and delivered to owners of certain contractual rights, and these rights were excluded from the change decree.

- 3. Loveland and Greeley Canal
  - a) Decree Information:

	Appropria-	Adjudica-	
<u>Amount</u>	tion Date	tion Date	Court
297.44 cfs	04/01/1881	05/28/1883	Boulder District Ct.

b) Point of Diversion:

Located in Section 15, Township 5 North, Range 69 West of the 6th P.M. Decreed with two separate and distinct headgates, one located Section 15 and one in Section 17, each in Township 5 North, Range 69 West of the 6th P.M. The actual point of diversion of the Loveland and Greeley Canal is at a dam constructed approximately northerly and southerly across the Big Thompson River through a point 1905 feet due north of the quarter section corner on the south boundary line of Section 15, T.5N., R.69W., 6th P.M.

- c) Source: Big Thompson River
- d) Use: Irrigation
- 4. Seven Lakes Reservoir System
  - a) Decree Information:

	Appropria-	Adjudica-	
Amount	tion Date	tion Date	<u>Court</u>
8,432 AF	04/28/1902	06/29/1916	
8,432 AF	04/28/1902	06/09/1978 <sup>1</sup>	District Court, Water Division No. 1
			Case No. W-8664-77

#### b) Location of Storage:

The Seven Lakes Reservoir System consists of Horseshoe Reservoir, Westerdoll Lake, Heinricy Lake, Upper Hoffman Lake, Lower Hoffman Lake, Boyd Lake, and Equalizer and Houts Reservoirs. These lakes are interconnected. The decrees describe the location of storage as being in Sections 30 and 31, Township 6 North, Range 68 West of the 6th P.M.; Section 36, Township 6 North, Range 69 West of the 6th P.M.; Section 1, Township 5 North, Range 69 West of the 6th P.M.; and Sections 6 and 7, Township 5 North, Range 68 West of the 6th P.M.; Larimer County, Colorado, the outlet of which is decreed as being located in the NW 1/4 of the SE 1/4, Section 6, Township 5 North, Range 68 West of the 6th P.M., at a point 1300 feet East and 850 feet South of the center of said Section 6, Larimer County, Colorado.

c) Source:

Big Thompson River Drainage. The lakes may be supplied by the Barnes Ditch, Lake Loveland, Little Barnes Ditch, Chubbuck Ditch, Louden Ditch, and the Greeley and Loveland Canal, as well as by the local drainages.

d) The Seven Lakes Reservoir Company also owns 26 ½ shares of the 600 shares in the Louden Irrigation Canal Company, and the water produced by these shares is used within the Seven Lakes Reservoir Company System. The decree information on the rights of the Louden Ditch are as follows:

	Appropria-	Adjudica-	
Amount	tion Date	tion Date	Court
7.0 cfs	11/10/1861	05/28/1883	Boulder District Ct.
40.0 cfs	10/01/1871	05/28/1883	Boulder District Ct.
123.0 cfs	11/01/1877	05/28/1883	Boulder District Ct.
0.008 cfs	09/17/1883	05/29/1884	Boulder District Ct.

The historical place of diversion of the Louden Ditch from the Big Thompson River is in the SW 1/4 of the NW 1/4 of Section 12, Township 5 North, Range 70 West of the 6th P.M.

e) Use:

<sup>1</sup> The date shown is the date the decree was signed. The tabulation shows a date of 12/31/77 for administration purposes.

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Irrigation, industrial, domestic, and recreational.

- 5. Boyd Lake
  - a) Decree Information:

	Appropria-	Adjudica-	
Amount	tion Date	tion Date	Court
48,564 AF	04/28/1902	06/29/1916	
44,031 AF	04/28/1902	06/27/1978 <sup>2</sup>	District Court, Water Division No. 1 Case No. W-8665-77

b) Location of Storage:

In Section 5, the SE 1/4 of Section 6, the E  $\frac{1}{2}$  of the E  $\frac{1}{2}$  of Section 7, and Section 8, all in Township 5 North, Range 68 West of the 6th P.M.; Section 29, the E  $\frac{1}{2}$  of the E  $\frac{1}{2}$  of Section 30, the E  $\frac{1}{2}$  of the E  $\frac{1}{2}$  of Section 31, and Section 32, all in Township 6 North, Range 68 West of the 6th P.M. in Larimer County, Colorado.

c) Source:

Boyd Lake is supplied by waters from the Big Thompson River, diverted by the Barnes Ditch and delivered to Boyd Lake through Lake Loveland and Horseshoe Reservoir, or diverted and delivered by the Louden Ditch or by the Loveland and Greeley Canal. In addition, Boyd Lake is supplied by storm and flood waters arising in the Dry Creek drainage basin and in the areas naturally sloping toward the lake.

d) Use:

Agricultural purposes, domestic uses, recreation and industrial uses for lands and users under Greeley and Loveland Irrigation System.

6. Loveland and Greeley Reservoir (Lake Loveland)

a) Decree Information:

	Appropria-	Adjudica-	
<u>Amount</u>	tion Date	tion Date	Court
14,238.7 AF	01/14/1893	06/29/1916	
14,239 AF	01/14/1893	06/27/78 <sup>3</sup>	District Court, Water Division No. 1

 $<sup>^{2}</sup>$  The date shown is the date the decree was signed. The tabulation shows a date of 12/31/77 for administration purposes.

Case No. W-8665-77

b) Reservoir Location:

Located in the NE 1/4 of Section 10, Section 11, and the N ½ of Section 14, all in Township 5 North, Range 69 West of the 6th P.M., Larimer County, Colorado.

c) Source:

Lake Loveland is supplied by diversions from the Big Thompson River through the Barnes Ditch or the Louden Ditch. In addition, Lake Loveland is supplied by storm and flood waters arising in the drainage basin into the reservoir.

d) Use:

Irrigation, Domestic Uses, recreational and industrial use for lands and users under the Greeley and Loveland Irrigation Company system.

B. <u>Greeley Irrigation Company Water Rights</u>. Water rights represented by shares of stock in the Greeley Irrigation Company (GIC) that have been acquired or may be acquired in the future by Greeley as these shares are decreed for use by exchange by the decree in Case No. 99CW232 and any subsequent decree obtained by Greeley. GIC owns a 5/8 interest in the water rights decreed to the Greeley Canal No. 3 (hereinafter "Canal No. 3"). The remaining 3/8 interest in the water rights decreed to Canal No. 3 is owned by Greeley.

1. The water rights originally decreed to Canal No. 3 by the District Court for Larimer County in Civil Action No. 320 on April 11, 1882 are as follows:

Priority	Appropriation Date	Amount (c.f.s.)
Original Constr. (Priority No. 35)	April 1, 1870	52.00
First Enlargement (Priority No. 46)	October 1, 1871	41.00
Second Enlargement (Priority No. 50)	July 15, 1872	63.13
Third Enlargement (Priority No. 58)	May 15, 1873	16.67

 $^3$  The date shown is the date the decree was signed. The tabulation shows a date of 12/31/77 for administration purposes.




GIC also owns 60 preferred rights in Fossil Creek Reservoir. The water rights originally decreed to Fossil Creek Reservoir by the District Court for Larimer County are as follows:

<u>Priority</u>	Approp. Date	Amount (AF.)	Adj. Date-Case No.
Original Constr. (Priority No. 40)	3/5/1901	12,052	10/28/1909-1591*
First Enlargement (Priority No. 66)	6/1/1904	1,545	4/22/1922-2031
Second Filling (Refill Priority No. 136E)	3/5/1901	12,052	9/10/1953-11217

\*Date of Revised Final Findings and Decree in Civil Action No. 1591.

2. <u>Decreed Points of Diversion</u>: The decreed location of the Canal No. 3 headgate is on south side of the Cache la Poudre River on South-east quarter of Section 32, Township 6 North of Range 66 West, Weld County, at a point 35 degrees 30 minutes West from South-east corner of said Section 32. Fossil Creek Reservoir's decreed location is in parts of Sections 9, 10, 15, 16 and 17, Township 6 North, Range 68 West, 6th P.M., Larimer County.

- 3. <u>Source</u>:
  - a) Canal No. 3: Cache la Poudre River.

b) Fossil Creek Reservoir: Cache la Poudre River and Fossil Creek, Box Elder Creek and Cooper and Ames Sloughs, tributaries of the Cache la Poudre River, diverted in part through feeder ditches decreed in the Revised Final Findings and Decree in Civil Action No. 1591.

C. <u>Windy Gap Water Rights</u>. Water available pursuant to water rights decreed to the Windy Gap Project, a transmountain water diversion project that delivers water from the Colorado River Basin to the South Platte River Basin, and of which Greeley is entitled to a portion of the yield pursuant to allotment contracts with the Municipal Subdistrict of the Northern Colorado Water Conservancy District (the "Windy Gap Water Rights"), which water rights are more particularly described in the decrees entered by the District Court, Water Division No. 5, on October 27, 1980 in Civil Action No. 1768 and in Case Nos. W-4001 and 80CW108, and/or on July 19, 1990 in Case No. 89CW298. The Windy Gap Water Rights are as follows:

1. Decree Information:

### Windy Gap Pump, Pipeline, and Canal

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- a) Date of Original Decree: October 27, 1980
- b) Case No: District Court, Water Division No. 5, Civil Action No.

1768

- c) Appropriation Date: June 22, 1967
  - d. Amount: 300 cfs, conditional

#### Jasper Pump and Pipeline

- a) Date of Original Decree: October 27, 1980
- b) Case No: District Court, Water Division No. 5, Civil Action No.
- 1768
- c) Appropriation Date: June 22, 1967
  - d. Amount: 300 cfs, conditional

#### Windy Gap Reservoir

- a) Date of Original Decree: October 27, 1980
- b) Case No: District Court, Water Division No. 5, Civil Action No.
- 1768
- c) Appropriation Date: June 22, 1967
- d) Amount: 1,546.14 acre-feet, conditional

#### Jasper Reservoir

- a) Date of Original Decree: October 27, 1980
- b) Case No: District Court, Water Division No. 5, Civil Action No.
- 1768
- c) Appropriation Date: June 22, 1967
- d) Amount: 11,291.58 acre-feet, conditional

### Windy Gap Pump, Pipeline, and Canal - First Enlargement

- a) Date of Original Decree: October 27, 1980
- b) Case No: District Court, Water Division No. 5, Case No. W-4001
- c) Appropriation Date: July 9, 1976
- d) Amount: 100 cfs, conditional

### Windy Gap Pump, Pipeline, and Canal - Second Enlargement

- a) Date of Original Decree: October 27, 1980
- b) Case No: District Court, Water Division No. 5, Case No.
- 80CW108
- c) Appropriation Date: April 30, 1980

d) Amount: 200 cfs, conditional

The conditional decrees for the Windy Gap Pump, Pipeline and Canal and the Windy Gap Pump, Pipeline and Canal - First and Second Enlargements were made absolute in District Court, Water Division 5 Case No. 89CW298, on July 19, 1990.

2. Decreed Locations or Points of Diversion:

a) <u>Windy Gap Pump, Pipeline and Canal and Windy Gap Pump,</u> <u>Pipeline and Canal - First and Second Enlargements</u>: A point on the north bank of the Colorado River whence the northwest corner of Section 25, Township 2 North, Range 77 West of the 6th P.M. bears north 17E30' west a distance of 2,380 feet.

b) <u>Jasper Pump and Pipeline</u>: A point on the North Bank of Willow Creek whence the southeast corner of Section 16, Township 2 North, Range 76 West of the 6th P.M. bears south 62E 30' east a distance of 2,730 feet.

c) <u>Windy Gap Reservoir</u>: The Windy Gap reservoir is an onstream reservoir located in Sections 25 and 26, Township 2 North, Range 77 West of the 6th P.M.

d) <u>Jasper Reservoir</u>: Jasper Reservoir is decreed to be an onstream reservoir located in portions of Sections 8, 16, 17, and 21, Township 2 North, range 76 West of the 6th P.M.

3. Source:

a) <u>Windy Gap Pump, Pipeline and Canal and Windy Gap Pump,</u> <u>Pipeline and Canal - First and Second Enlargements</u>: The Colorado River.

b) <u>Jasper Pump and Pipeline</u>: Willow Creek, a tributary of the Colorado River, through Jasper Reservoir.

c) <u>Windy Gap Reservoir</u>: The Colorado River.

d) <u>Jasper Reservoir</u>: The Colorado River and Willow Creek, a tributary of the Colorado River.

4. Uses (for all structures): Municipal, irrigation, industrial, and recreational.

Name	Adjudication Date	Case #
Direct-Flow (Dist 3)		
Larimer County Canal	1882/04/11	Case 320 Transfer (1423 TT)
Larimer County Canal	1882/04/11	Case 320 Transfer (1423 TT)
Larimer County Canal	1882/04/11	Case 320 Transfer (2406 TT)
Larimer County Canal	1882/04/11	Case 320 Transfer (2818 TT)
Larimer County Canal	1882/04/11	Case 320 Transfer (2406 TT)
Larimer County Canal (Henry Smith)	1882/04/11	Case 320 Original
Larimer County Canal	1882/04/11	Case 320 Original
Larimer County Canal	1945/12/18	Case 5362 (84CW204) Supp.
Storage (Dist. 3)		
Chambers Lake Reservoir	1886/10/12	Case 320 Original
WSSC Res. No. 2, 3	1904/12/09	Case 1591 Original
WSSC Res. No. 4	1904/12/09	Case 1591 Original
WSSC Res. No. 1 (Rocky Ridge)	1904/12/09	Case 1591 Original
WSSC Res. No. 5 (Long Pond)	1904/12/09	Case 1591 Original
Lindemeier Lake	1904/12/09	Case 1591 Original
WSSC Res. No. 4	1904/12/09	Case 1591 (W-7821- 74) Original
WSSC Res. No. 4	1904/12/09	Case 1591 Original
Black Hollow Res.	1922/04/22	Case 2031 Supp.
Chambers Lake Reservoir	1922/04/22	Case 2031 Supp.
Kluver Res.	1945/12/18	Case 5362 Supp.
Black Hollow Res.	1945/12/18	Case 5362 Supp.

D. <u>WSSC Water Rights</u>. Greeley has acquired and may in the future acquire additional water rights represented by shares of stock in the Water Supply and Storage Company<sup>4</sup>. The water rights represented by said shares of stock are as follows:

<sup>4</sup> The Water Supply and Storage Company owns shares of stock in the Jackson Ditch Company, which entitle shareholders in the Water Supply and Storage Company to a portion of the water yielded by water rights owned by the Jackson Ditch Company.

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Name	Adjudication Date	Case #
Long Draw Res.	1945/12/18	Case 5362 Supp.
Chambers Lake Reservoir	1945/12/18	Case 5362 Supp.
WSSC Res. No. 2, 3	1953/09/10	Case 11217 Supp.
WSSC Res. No. 2, 3	1953/09/10	Case 11217 (W-112- 74) Supp.
WSSC Res. No. 2, 3	1977/12/31	W-112-77 Supp.
Long Draw Res.	1977/12/31	W-9322-78 (83CW126) Supp.
Trap Lake II	1982/12/31	82CW289 Supp. – Cond.
Transbasin	· · · · · · · · · · · · · · · · · · ·	
Chambers Lake Reservoir	1896/10/30	Case 1247 Original
Laramie River Ditch (Skyline Ditch)	1896/10/30	Case 1247 Original (84CW204) Supp
Cameron Pass Ditch	1902/04/23	Case 1519 Original
Cameron Pass Ditch	1902/04/23	Case 1519 Original
Grand River Ditch Alternate Point	1906/08/11	Case 112 Original
Laramie River Tunnel*	1914/02/20	Case 2725 Case 5993 (84CW204) Supp.
Rawah Ditch*	1914/02/20	Case 2725 Case 5993 Supp.
Rawah and Lower Supply Ditch <sup>*</sup>	1914/02/20	Case 2725 Case 5993 Supp.
McIntyre Ditch*	1914/02/20	Case 2725 Case 5993 Supp.
Link Lake No. 1*	1914/02/20	Case 2725 Case 5993 Supp.
Link Lake No. 2*	1914/02/20	Case 2725 Case 5993 Supp.
Link Lake No. 3 <sup>*</sup>	1914/02/20	Case 2725 Case 5993 Supp.
Link Lake No. 4*	1914/02/20	Case 2725 Case 5993 Supp.
Link Lake No. 5 <sup>•</sup>	1914/02/20	Case 2725 Case 5993 Supp.
Link Lake No. 6 <sup>*</sup>	1914/02/20	Case 2725 Case 5993 Supp.

Name	Adjudication Date	Case #
Link Lake No. 7*	1014/02/20	Case 2725
LINK Lake NO. 7	1914/02/20	Case 5993 Supp.
Link Laka No. 8*	1014/02/20	Case 2725
LIIIK Lake NO. 6	1914/02/20	Case 5993 Supp.
Link Lake No. 0 <sup>*</sup>	1014/02/20	Case 2725
LIIIK LAKE INU. 7	1914/02/20	Case 5993 Supp.
Link Lake No. 10*	1014/02/20	Case 2725
LINK LAKE NU, 10	1914/02/20	Case 5993 Supp.
Link Lake No. 11*	1014/02/20	Case 2725
Link Eake 110. 11	1914/02/20	Case 5993 Supp.
Link Lake No. 12*	1014/02/20	Case 2725
	1914/02/20	Case 5993 Supp.
Link Lake No. 12 <sup>*</sup>	1014/02/20	Case 2725
	1914/02/20	Case 5993 Supp.
Link Lake No. 14 <sup>*</sup>	1014/02/20	Case 2725
LIIK Lake No. 14	1914/02/20	Case 5993 Supp.
Laramie Lake	1944/09/11	Case 5993 Supp.
Lost Lake	1944/09/11	Case 5993 Supp.
Lily Lake	1944/09/11	Case 5993 Supp.
Seepage		
Lind Reservoir <sup>*</sup>	1972/12/31	W-1748 W-1877 Supp.
WSSC Seepage A	1972/12/31	W-1877 Supp.
WSSC Seepage B	1972/12/31	W-1877 Supp.
WSSC Seepage 1	1972/12/31	W-1877 Supp.
WSSC Seepage 2	1972/12/31	W-1877 Supp.
WSSC Seepage 2A	1972/12/31	W-1877 Supp.
WSSC Seepage 2b	1972/12/31	W-1877 Supp.
WSSC Seepage 3	1972/12/31	W-1877 Supp.
WSSC Seepage 4	1972/12/31	W-1877 Supp.
WSSC Seepage 6	1972/12/31	W-1877 Supp.
WSSC Seepage 7	1972/12/31	W-1877 Supp.
WSSC Seepage 7a	1972/12/31	W-1877 Supp.
WSSC Seepage 7b	1972/12/31	W-1877 Supp.
WSSC Seepage 7c	1972/12/31	W-1877 Supp.
WSSC Seepage 8	1972/12/31	W-1877 Supp.
WSSC Seepage 9	1972/12/31	W-1877 Supp.
WSSC Seepage 10	1972/12/31	W-1877 Supp.

\* partial ownership WSSC/Windsor Reservoir and Canal Company.



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Name	Adjudication Date	Case #
Direct-Flow		
Dry Creek Ditch	1882/04/11	Case 320 Original
Dry Creek Ditch	1882/04/11	Case 320 Original
Dry Creek Ditch	1882/04/11	Case 320 Original
Dry Creek Ditch	1882/04/11	Case 320 Original
Seepage		
Jackson Ditch Seep A	1972/12/31	Case W-7157 Supp.
Jackson Ditch Seep B	1972/12/31	Case W-7157 Supp.
Jackson Ditch Seep C	1972/12/31	Case W-7157 Supp.

#### Jackson Ditch Company Water Rights

These water rights are generally decreed for irrigation use. Prior to use of these water rights for augmentation, Greeley shall obtain judicial or administrative approval for such use.

E. <u>Laramie River System water rights.</u> Greeley has acquired and may in the future acquire additional water rights represented by shares of stock in the Windsor Reservoir and Canal Company that entitle Greeley to water from the Laramie River System. The water rights associated with the Laramie River System are noted with asterisks in paragraph D above. These water rights are generally decreed for irrigation use. Prior to use of these water rights for augmentation, Greeley shall obtain judicial or administrative approval for such use.

F. <u>Flatiron Reservoir Nos. 1-5</u>. Water diverted into Flatiron Reservoir Nos. 1-5 pursuant to the rights claimed in the application and amendments in Case No. 99CW234.

G. <u>East 8th Street Reservoir</u>. Water diverted into East 8th Street Reservoir pursuant to the rights claimed in the application and amendments in Case No. 99CW234.

H. <u>F Street Reservoir</u>. Water diverted into F Street Reservoir pursuant to the rights claimed in the application and the amendments in Case No. 99CW234.

I. <u>Milton Seaman Reservoir Enlargements Water Storage Rights</u>: Water diverted pursuant to the water rights decreed to the Milton Seaman Reservoir Enlargements in Case Nos. 87CW42 and 90CW226 by the District Court for Water Division No. 1, which rights are more particularly described as follows:

1. Decree Information

	Appropria-	Adjudica-	
Amount (AF)	tion Date	tion Date	Case No.
680 absolute 06/28	8/1965	06/25/1992	87CW42
9,992 conditional	03/01/1980	12/06/1993	90CW226

2. Location

The Milton Seaman Dam is located in the SW 1/4 of the NE 1/4 and the SE 1/4 of the NW 1/4 of Section 33, Township 9 North, Range 70 West of the 6th P.M., in Larimer County. The Reservoir is located in Sections 33 and 28, Township 9 North, Range 70 West of the 6th P.M., in Larimer County.

3. Source

The waters of the North Fork of the Cache la Poudre River and its tributaries originating upstream of Milton Seaman Dam.

4. Use

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All municipal uses, including domestic; industrial; commercial; manufacturing; recreation; fire protection; power generation; replacement; augmentation; exchange; irrigation of lawns, gardens, parks, and city property; storage for later use; maintenance of adequate storage reserves, agricultural uses, and other beneficial uses relating to the operation of Greeley's municipal water system.

### WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_\_\_ NO ENCLOSURE \_\_\_\_

ITEM NUMBER:

TITLE: ACTION: APPROVE AN INTERGOVERNMENTAL AGREEMENT FOR THE LAKE LOVELAND AUGUMENTATION STRUCTURE

RECOMMENDATION: APPROVE AGREEMENT

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#### ADDITIONAL INFORMATION:

Greeley has a need for the ability to deliver changed Greeley Loveland supplies to meet return flow and augmentation demands to the South Platte river, both during irrigation and non-irrigation seasons. Return flow and augmentation demands during the non-irrigation season must be met directly out of stored water rather than ditch deliveries to downstream points.

Starting in 2013, several entities have been working on designing and constructing an augmentation structure that will allow releases out of Lake Loveland directly to the Big Thompson River. The following entities involved are: Central Colorado Water Conservancy District (CWCD), the City of Evans, JBS Five Rivers Cattle Feeding LLC (Five Rivers), the Greeley Loveland Irrigation Company (GLIC), as well as the City of Greeley. Once the structure is complete, Greeley will receive a dedicated capacity of 13 cubic feet per second (cfs). This ability to release from Lake Loveland will supplement the use of Windy Gap or GLIC effluent generated at the Water Pollution Control Facility or releases of wholly consumable water from Poudre Ponds.

A preliminary design services IGA was signed and approved by Board in March of 2012 with construction to start fall of 2013. Due to the September 2013 floods, GLIC decided to push construction and bidding of the project out to 2014. The design of the project was completed and accepted by all parties in spring of 2014. The project was put out to bid in July of 2014. All parties have accepted the bid from Concrete Structures Inc. for \$275,292.24 and have signed the operations and construction agreement with the exception of Greeley. Construction is planned for winter 2014-2015 with operations commencing in 2015.

#### AGREEMENT FOR THE CONSTRUCTION AND THE OPERATION AND MAINTENANCE OF THE LAKE LOVELAND RETURN FLOW STRUCTURE

THIS AGREEMENT made this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2014, by and between the Greeley and Loveland Irrigation Company ("the GLIC"), a Colorado mutual ditch and reservoir company; the City of Evans, Colorado ("Evans"), a Colorado municipal corporation; the City of Greeley, Colorado ("Greeley"), a Colorado municipal corporation; the Groundwater Management Subdistrict & Well Augmentation Subdistrict of the Central Colorado Water Conservancy District, and the Central Colorado Water Conservancy District ("Central"); and JBS Five Rivers Cattle Feeding LLC ("Five Rivers"), a Delaware foreign limited liability company (collectively, the "Parties").

#### RECITALS

WHEREAS, on or about February 1, 2012, the Parties hereto entered into an Agreement for Preliminary Engineering Design Services for the Lake Loveland Return Flow Structure in the GLIC System ("Preliminary Services Agreement"), attached hereto and incorporated herein, concerning Greeley, Evans, Central, and Five Rivers' ("the Participating Shareholders") desire to investigate the preliminary design for certain facilities that would allow the delivery of water, to which the Participating Shareholders are entitled in the GLIC system, to the Big Thompson River ("Return Flow Structure"); and,

WHEREAS, the Preliminary Services Agreement was largely limited to the allocation of the preliminary design costs between the Participating Shareholders; and,

WHEREAS, the final design of the Lake Loveland Return Flow Structure has been accepted by the Participating Shareholders; and,

WHEREAS, as designed, the Lake Loveland Return Flow Structure will release water from Lake Loveland to the Loveland and Greeley Canal and then to the Big Thompson River.

WHEREAS, Paragraphs 7 and 8 of the Preliminary Services Agreement requires that allocation of construction costs as well as the operation of the Return Flow Structure be determined by future agreement(s); and,

WHEREAS, the Parties have received the design and cost estimates for the construction of the Return Flow Structure; and,

WHEREAS, in order to meet the Parties' 33 cfs minimum capacity requirements, the structure was designed for a capacity of 50 cfs, which was accepted by the Parties on or about August 2013; and,

WHEREAS, the lease, sale, and/or use of any Excess Capacity (defined below) may be subject to rules and regulations proposed and approved by the Parties after the construction of the Return Flow Structure; and,

WHEREAS, the Participating Shareholders now desire to allocate the construction costs for the Return Flow Structure in accordance with Paragraph 12 below; and,

WHEREAS, payment to the GLIC pursuant to this Agreement shall be capital contributions by the Participating Shareholder; and,

WHEREAS, once constructed, the Return Flow Structure shall be owned, operated, maintained, replaced and repaired by the GLIC subject to the provisions of Paragraph 13 below; and,

WHEREAS, in return for its supervision of the construction and its obligation to operate, maintain, replace and repair the Return Flow Structure, GLIC shall receive 8 cfs (i.e. approximately 25%) of the total Reserved Capacity (defined below) in the Return Flow Structure, which may be freely assigned, leased, sold, or transferred, subject to the GLIC's continuing obligation to operate, maintain, replace, and repair the Return Flow Structure.

NOW, THEREFORE, in consideration of the premises, covenants and agreements herein, it is agreed as follows:

#### AGREEMENT

1. AUTHORITY. This Agreement has been duly adopted by the Parties' governing body, and the undersigned representatives have been authorized to execute this Agreement on behalf of the respective Party.

2. SEASON OF USE. The Return Flow Structure has been designed to allow the GLIC to deliver water to the Return Flow Structure and to operate the Return Flow Structure year round.

3. MAXIMUM CAPACITY. Upon completion of construction, the Return Flow Structure will have a maximum capacity of 50.0 cfs to 70 cfs, depending on flow within the GLIC System ("Maximum Capacity").

4. RESERVED CAPACITY. The total reserved capacity shall be 33.0 cfs ("Reserved Capacity") and shall be divided among the Parties as follows:

Greeley	13.0 cfs
Evans	8.0 cfs
Five Rivers	2.0 cfs
Central	2.0 cfs
GLIC	8.0 cfs
Total Reserved Capacity	33.0 cfs

The difference between the Reserved Capacity and the Maximum Capacity (i.e. 17 cfs to 37 cfs) shall be hereinafter referred to as the "Excess Capacity."

5. TRANSFER OF RESERVED AND EXCESS CAPACITY. The Parties may lease, assign, sell or transfer any part or all of their Reserved Capacity in the Return Flow Structure without prior consent of the GLIC or the other Participating Shareholders. Notwithstanding the foregoing, any lease, assignment, sale or transfer of a Party's Reserved Capacity shall be subject to the following terms and restrictions: the assignment, lease, sale, or transfer (1) shall be to a person or entity that owns water in the GLIC system or has a lawful right to use water in the GLIC system; (2) shall not interfere with or infringe upon the Reserved Capacity of the other Parties; and (3) shall be completed by providing the GLIC and the Participating Shareholders a written notice of the lease, assignment, sale, or transfer along with documents necessary to demonstrate that the Party has made an authorized and valid lease, assignment, sale, or transfer of some or all of its Reserved Capacity. Any sale or lease of the Excess Capacity shall be approved by all of the Parties and may include any such terms that the Parties deems

reasonable, including but not limited to, a method to refund the Participating Shareholders for capital contributions paid in accordance with Paragraph 12.

6. GLIC PERPETUAL OBLIGATION. Subject to the provisions of Paragraph 13 below, the GLIC has a perpetual obligation to operate, maintain, replace and repair the Return Flow Structure. No lease, assignment, sale, or transfer of all or any part of the GLIC's Reserved Capacity shall relieve the GLIC its obligation.

7. RESERVED AND EXCESS CAPACITY. The Parties may use, without charge, any unused Excess Capacity or Reserved Capacity, unless the GLIC adopts rules and regulations pursuant to Paragraph 8 to the contrary.

RULES AND REGULATIONS GOVERNING USE OF THE RETURN FLOW 8. STRUCTURE. Upon completion of the Return Flow Structure the GLIC may adopt rules and regulations for the daily measurements of releases from the Return Flow Structure. The GLIC may also, subject to the approval of the Participating Shareholders, propose other rules and regulations to govern use of the Return Flow Structure including, but not limited to: (1) the sale or lease of any Excess Capacity; (2) the process for adding and removing shareholders as Participating Shareholders under this Agreement upon the purchase, sale or transfer of any unused Reserved and Excess Capacity or the termination or default of any Participating Shareholder; (3) the process of notifying Participating Shareholders of any unused Reserved and Excess Capacity; (4) the process for any temporary use of any Reserved or Excess Capacity; (4) the process for requesting releases; and (5) the process for reporting and accounting of releases. The Participating Shareholders shall be given advance written notice of any proposed rules and regulations and given no less then thirty (30) days to submit written comments. Notwithstanding the foregoing, no rule or regulation may be adopted which reduces or has the effect of reducing the Participating Shareholder's Reserved Capacity, either individually or collectively, or which materially impairs the Participating Shareholders' rights and interests in the Return Flow Structure.

9. SELECTION OF CONTRACTOR AND CONSTRUCTION COST. The GLIC has put the construction of the Return Flow Structure out for bid. Upon review of those bids received, the GLIC has selected Concrete Structures Inc. to construct the Return Flow Structure ("Contractor"). The cost of constructing the Return Flow Structure is \$275,293.24 ("Initial Cost of Construction") and shall not exceed \$316,587.27 (i.e. Initial Cost of Construction plus ten percent (10%) for contingencies). Any change order request that exceeds \$316,587.27 shall be approved by the Participating Shareholders.

10. CONSTRUCTION CONTRACT, ADMINISTRATION, AND ACCEPTANCE OF THE RETURN FLOW STRUCTURE. Subject to paragraph 12 below, the GLIC shall execute a construction contract with the Contractor and shall obtain any necessary governmental permits or other approvals, or confirm and document any exemption therefrom, prior to issuing the Contractor a notice to proceed with construction. The GLIC shall ensure that the Contractor constructs the Return Flow Structure in accordance with the final design approved by the Parties. In addition, the GLIC shall be reasonable for taking all necessary actions to dispose of all contractual and administrative issues arising out of the construction contract, including but not limited to, disputes, claims, protests of award, and litigation that may result from the construction of the Return Flow Structure. Such actions will be at the sole expense of the GLIC, including legal expenses. Upon completion of the structure in accordance with the final design, the GLIC shall accept and operate, maintain, replace, repair, and insure the structure at its cost, subject to Paragraph 13.

11. PAYMENTS. Payments made by the Participating Shareholders to the GLIC for the construction costs of the Return Flow Structure are capital contributions.

12. ALLOCATION OF CONSTRUCTION COSTS. The Participating Shareholders shall pay the Initial Cost of Construction based on the following percentages:

Greeley:	52%
Evans:	32%
Five Rivers:	8%
Central:	8%
Total	100%

Each Participating Shareholder shall be responsible for making payment no later then thirty (30) days after the effective date of this Agreement ("Initial Payment"). All Initial Payments must be received by the GLIC prior to execution of the construction contract by the GLIC. Until a Participating Shareholder submits its Initial Payment, the Participating Shareholder shall have no right to use its Reserved Capacity or any Excess Capacity. If a Participating Shareholder fails to submit the Initial Payment within thirty (30) days, then the GLIC shall send written notice to the defaulting Participating Shareholder of payment due ("Notice of Default"). If the defaulting Participating Shareholder fails to make the Initial Payment thirty (30) days after receipt of the Notice of Default, then the defaulting Participating Shareholder shall lose all rights under this Agreement. In the event that a Participating Shareholder fails to make its Initial Payment, the non-defaulting Shareholders may agree to recalculate the percentages contained in this Paragraph 12 among the non-defaulting Shareholders and to redistribute the Reserved Capacity set forth in Paragraph 4 accordingly. The GLIC shall not execute the construction contract until the non-defaulting Participating Shareholders have recalculated the percentages in a manner sufficient to cover the full cost of construction. After the GLIC has received all Initial Payments, the GLIC may execute the construction contract and issue a notice to proceed subject to the conditions of Paragraph 10. In the event that the Contractor submits a change order that increases the Initial Cost of Construction, in accordance with Paragraph 9, each Participating Shareholder shall be responsible for making a second payment, no later then thirty (30) days after final completion of the Return Flow Structure, for the balance of the construction cost.

13. FUTURE CAPITAL EXPENDITURES. In the event that any additional capital expenditures are necessary for the repair or replacement of the Return Flow Structure, the GLIC shall notify each of the Participating Shareholders. Any work must be approved, in advance, by a vote of the majority of the Parties based on their historic use ratios ("Use Ratios"). A Participating Shareholder's Use Ratios shall be determined based upon a rolling five (5) year average of a Participating Shareholder's use of the Return Flow Structure, which shall be calculated by dividing the total amount of water (expressed in acre feet) that a Participating Shareholder has run through the structure for the proceeding five years by the total amount of water that has been run through the structure for the same five year period. Any capital expenditure following construction acceptance that is not covered by warranty shall be paid for by the Parties (including the GLIC) based on their Use Ratios. If any work is performed on the Return Flow Structure pursuant to this Paragraph 13, then the GLIC shall have the same obligation to obtain approval and to execute and administer the construction contract as stated in Paragraph 10.

14. TERM AND TERMINATION. The term of this Agreement is perpetual. After a Participating Shareholder has made full payment to the GLIC of its share of the construction costs, or after full payment for its share of any capital expenditures that have been authorized pursuant Paragraph 13 above, a Participating Shareholder may terminate its continuing participation under this Agreement

upon written notice to the other Parties. Upon termination, the Participating Shareholder shall forfeit its allocated Reserve Capacity as set forth in Paragraph 4 and shall lose any and all right to utilize the Return Flow Structure, unless the GLIC adopts rules and regulations, pursuant to Paragraph 8, to the contrary. The Reserved Capacity attributable to the terminating Participating Shareholder shall be redistributed to the remaining Participating Shareholders based on their respective construction cost percentage set forth in Paragraph 12. After redistribution, the balance of the terminating Participating Shareholder's Reserved Capacity shall be given to the GLIC.

15. BINDING EFFECT. This Agreement shall inure to the benefit of, and be binding upon, the Parties, and their respective legal representatives, successors, and assigns; provided, however, that nothing in this Paragraph 15 shall be constructed to permit the assignment of this Agreement except as otherwise specifically authorized in this Agreement.

16. INTEGRATION AND AMENDMENT. This Agreement represents the entire agreement between the Parties, and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the Parties.

17. COUNTERPARTS. This Agreement may be executed in counterparts and, as so executed, shall constitute one Agreement, binding on all the Parties even though all the Parties have not signed the same counterpart. Any counterpart of this Agreement which has attached to it separate signature pages, which altogether contain the signatures of all the Parties, shall be deemed a fully executed instrument for all purposes. Signatures transmitted by facsimile or e-mail shall be treated as original signatures.

18. GOVERNING LAW AND VENUE. This Agreement (which includes the Preliminary Services Agreement, attached hereto and incorporated herein) shall be construed in accordance with the laws of the State of Colorado. The Parties agree that venue for any litigated disputes regarding this Agreement shall be in the Weld County District Court.

19. NOTICES. All notices, demands, or other written communication required or permitted to be given by this Agreement shall be by electronic mail, hand delivered or sent by certified or registered mail, postage prepaid, and return receipt requested, to the Parties as follows or as modified by a party after notification to all other parties:

GREELEY AND LOVELAND IRRIGATION COMPANY Attn: Ron Brinkman 808 23rd Avenue Greeley, CO 80634-5922 Facsimile: (970) 352-2457 E-mail: rbglic808@aol.com

CITY OF GREELEY, COLORADO Attn: John Thornhill Water & Sewer Department 1100 10<sup>TH</sup> Street, Suite 300 Greeley, CO 80531 Facsimile: (970) 350-9805 E-mail: John.Thornhill@greeleygov.com CITY OF EVANS, COLORADO Attn: Aden Hogan 1100 37th Street Evans, CO 80620 Facsimile: (970) 330-3472 E-mail: ahogan@evanscolorado.gov

JBS FIVE RIVERS CATTLE FEEDING Attn: Nicholas M. White JBS USA Holdings, Inc. - Legal 1770 Promontory Circle Greeley, CO 80634 Facsimile: (970) 356-7481 E-mail: nicholas.white@jbssa.com GROUNDWATER MANAGEMENT SUBDISTRICT & WELL AUGMENTATION SUBDISTRICT OF THE CENTRAL COLORADO WATER CONSERVANCY DISTRICT, AND CENTRAL COLORADO WATER CONSERVANCY DISTRICT Attn: Randy Ray 3209 West 28th Street Greeley, CO 80631 Facsimile: (970) 330-4546 E-mail: <u>rray@ccwcd.org</u>

20. ATTORNEYS' FEES. If a Party shall commence any action or proceeding against another Party in order to enforce the provisions of this Agreement or to recover damages as a result of the alleged breach of any of the provisions of this Agreement, the prevailing Party shall be entitled to recover all reasonable costs in connections therewith, including reasonable attorneys' fees.

21. DRAFTING. The Parties drafted this Agreement jointly with each having an equal opportunity to contribute to its content.

22. NO WAIVER. The waiver of any breach of any provision of this Agreement by any Party hereto shall not constitute a continuing waiver of any subsequent breach of said Party for either breach of the same or any other provision of this Agreement.

23. IMMUNITY. This Agreement shall not create any duty of care or liability with respect to any person or entity not a party to this Agreement, or waive any of the privileges or immunities of the Parties or their officers, employees, successors and assigns may present pursuant to law, including, but not limited to, the Colorado Governmental Immunity Act, C.R.S. 24-10-101, et seq., as amended.

24. NO THIRD-PARTY BENEFICIARY. No provision of this Agreement shall in any way inure to the benefit of any third person (including the public at large) so as to constitute any such person a third-party beneficiary of this Agreement or of any one or more of the terms hereof, or otherwise give rise to any cause of action in any person not a party hereto.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first above written.

### [SIGNATURES CONTINUE ON THE FOLLOWING FIVE PAGES]

### GREELEY AND LOVELAND IRRIGATION COMPANY

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**CITY OF EVANS** Henrayen Marrayen 8 By Leosing / Acting at alty

JBS FIVE RIVERS CATTLE FEEDING, LLC.

By: res

GROUNDWATERMANAGEMENTSUBDISTRICT&WELLAUGMENTATION SUBDISTRICTOF THECENTRALCOLORADOWATERCONSERVANCYDISTRICT,ANDCENTRALCOLORADOWATERCONSERVANCY DISTRICTCONSERVANCY DISTRICT

By:\_\_ 0ci NCA entre Dire E

By: \_\_\_\_\_ Mayor

**CITY OF GREELEY, COLORADO** 

By: \_\_\_\_\_\_ Director of Water and Sewer

**RECOMMENDED**:

APPROVED AS TO AVAILABILITY OF FUNDS:

By: \_\_\_\_\_ Director of Finance

APPROVED AS TO SUBSTANCE:

By: \_\_\_\_\_\_City Manager

ATTEST:

By: \_\_\_\_\_ City Clerk

### APPROVED AS TO LEGAL FORM:

By: \_\_\_\_\_ City Attorney

### WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_X\_\_\_NO ENCLOSURE \_\_\_\_

ITEM NUMBER: 10

TITLE: REPORT: WATER CONSERVATION PLAN

RECOMMENDATION: INFORMATIONAL ONLY

### ADDITIONAL INFORMATION:

Greeley has established a goal of reducing demand by 9.3 percent directly through conservation program efforts over the period from 2015 to 2035 compared with projected future demand without conservation. The net impact of this program is an estimated cumulative savings of 156 acre-feet per year that will yield a total savings of 3,120 acre-feet of water by 2035. An analysis of estimated savings achieved through the current program suggests that this goal is attainable given the current level of conservation effort and may be exceeded.

Greeley is also looking into new programs to include modifying landscape codes which might limit how much turf can be installed and give larger landscaping credits for low water use trees, shrubs, and perennials. Parks and athletic field irrigation systems will be designed with conservation in mind and will be installed with 15-20 percent of the park planted in xeric plantings, in parking medians around buildings and entries into the park. City properties will demonstrate xeric plantings to show that conservation can be beautiful. Turf reductions will be studied and applied to HOA green spaces and commercial properties. Parking medians will no longer contain turf and detention ponds will no longer be planted with bluegrass and watered and maintained like parks.

This Conservation Plan provides details concerning each of these programs and explains how conservation is a key element of Greeley's overall supply planning.



October 2014



Prepared by:

Peter Mayer, P.E. Water Demand Management <u>www.waterdm.com</u>

### Ruth Quade

Water Conservation Coordinator City of Greeley Water and Sewer Department 1100 10th Street, Suite 300 Greeley, CO 80631-3876 www.greeleygov.com/wc







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### **EXECUTIVE SUMMARY**

Securing safe and sufficient water supplies for future generations of Greeley residents in the face of significant uncertainties such as drought and climate change is a major challenge. Successful stewardship of precious water resources is a benchmark by which future generations will judge the current citizens and water utility staff. This Water Conservation Plan for the City of Greeley has been developed to establish clear goals and to outline programs and measures to meet those goals that will ensure a healthy and sufficient water supply for the future. Greeley will update the plan every five to seven years and as such, this is the first update to the 2008 Greeley Water Conservation Plan.

Greeley has established a goal of reducing demand by 9.3 percent directly through conservation program efforts over the period from 2015 to 2035 compared with projected future demand without conservation. The net impact of this program is an estimated cumulative savings of 156 acre-feet per year that will yield a total savings of 3,120 acre-feet of water by 2035. An analysis of estimated savings achieved through the current program suggests that this goal is attainable given the current level of conservation effort and may be exceeded.

Conservation has been included in Greeley's overall supply planning for over 20 years. Greeley developed its first water conservation plan in 1992. In 1997, Greeley hired a full-time Water Conservation Coordinator, who has managed the City's water efficiency efforts for the past 17 years. In that time the program has grown to encompass all customer sectors in the City. In 2014, the Water Conservation Program budget was over \$500,000 making it one of the largest programs in Colorado. The Conservation Program addresses both indoor and outdoor water use through education, ordinances, direct outreach, rebates, and information. The Greeley Conservation Program implements social marketing as well as traditional marketing in campaigns that include advertisements on buses, print, radio, and local cable TV. Consequently, the Conservation Program has become one of the most visible and well publicized conservation efforts in Northern Colorado.

Greeley is also analyzing new programs to include modifying landscape codes which might limit how much turf can be installed and give larger landscaping credits for low water use trees, shrubs, and perennials. Parks and athletic field irrigation systems will be designed with conservation in mind and will be installed with 15-20 percent of the park planted in xeric plantings, in parking medians around buildings and entries into the park. City properties will demonstrate xeric plantings to show that conservation can be beautiful. Turf reductions will be studied and applied to HOA green spaces and commercial properties. Parking medians will no longer contain turf and detention ponds will no longer be planted with bluegrass and watered and maintained like parks.

This Conservation Plan provides details concerning each of these programs and explains how conservation is a key element of Greeley's overall supply planning. Greeley's Water Conservation Plan complies with Colorado Revised Statute § 37-60-126. An explanation of Greeley's compliance with the statute's requirements is presented on pages 43-47.

### **Greeley's Four Point Water Supply Plan**

Water is a precious commodity in Colorado, and it is only going to become more precious as Greeley's population grows and more water is needed. The mission at Greeley Water and Sewer is to make sure that the community has a secure and reliable water supply. To meet this goal, the Four Point Plan was developed with the leadership of the Greeley Water and Sewer Board.

The elements of the Four Point Plan are:

- Strengthening infrastructure
- Continuing water acquisition
- Expanding storage
- Continuing water conservation

### Strengthening Infrastructure

Greeley strives to keep the system in top shape through continuous maintenance, leak detection, repair, and pipe rehabilitation. More detail on Greeley's water loss control efforts is included in this plan.

New capacity to the system is added when needed. For example, Greeley is presently constructing a new pipeline from its Bellvue Water Treatment plant to Greeley.

Facilities are constantly upgraded to be as efficient as possible, such as the new liners installed to reduce leakage in treated water reservoirs.

### **Continuing Water Acquisition**

Greeley needs more water to meet customer demands in the future. Current water supplies available for acquisition are decreasing while prices continue to increase. For this reason, Greeley actively pursues the purchase of additional water.

### **Expanding Storage**

Additional storage is vital to fully utilize current and future water supplies. The cornerstone of Greeley's water storage plan is the enlargement of the existing Milton Seaman Reservoir on the North Fork of the Poudre River from 5,000 acre-feet to 53,000 acre-feet.

### Continuing Water Conservation

Greeley is a leader among Colorado utilities in developing and implementing innovative and effective water conservation and demand management measures. This 2014 Water Conservation Plan provides details on Greeley's Water Conservation Program efforts of the past, present, and future.

## INTRODUCTION AND SERVICE AREA CHARACTERISTICS

Securing safe and sufficient water supplies for future generations of Greeley residents in the face of significant uncertainties such as drought and climate change is a major challenge. This 2014 Water Conservation Plan for the City of Greeley establishes clear goals and outlines programs and measures to ensure a healthy and sufficient water supply for the future. The Plan meets all State of Colorado Water Conservation Board (CWCB) planning requirements.

Greeley, originally known as Union Colony, was organized in 1870 by Nathan Meeker, the agriculture editor for Horace Greeley's *New York Tribune*. Meeker dreamed of founding a "utopian community based on temperance, religion, education, agriculture, irrigation, cooperation, and family values."

As of 2014, the City of Greeley covers over 47 square miles of Weld County. Greeley is the largest city in the county and is the county seat. The City's water supply system stretches more than 60 miles from the western-most raw water collection and storage facilities to the eastern-most reaches of its finished water distribution system.

Located on Colorado's high plains, Greeley's average annual precipitation is 12-14 inches per year. In the 21<sup>st</sup> century, the Greeley area anticipates one of the highest average growth rates on Colorado's Front Range at 2.25 percent along with greater demands on resources and infrastructure. Greeley's 2014 population is estimated to be 100,372. By 2050, demographers predict Greeley will be home to 241,900 people. Given this high level of anticipated growth, a sustainable water supply along with associated treatment, collection, and distribution systems, are of primary importance.

### Water Supply and Reliability

### Water System Profile

Greeley's water sources include direct river diversions, ownership in the Colorado-Big Thompson (C-BT) and Windy Gap projects, high mountain reservoirs, and rights in several irrigation companies. Greeley treats water at two treatment plants, the Bellvue plant located on the Poudre River and the Boyd Lake Plant located adjacent to Boyd Lake in the Big Thompson drainage. The City also owns and operates a non-potable system with associated ditch shares, storage, and wells.

Kodak, along with three nearby municipalities (Evans, Windsor, and Milliken), annually transfer yield associated with their water rights to Greeley for treatment and delivery.

### Water Rights

Greeley draws raw water from four main river basins on both sides of the Continental Divide: the Cache la Poudre (Poudre), Big Thompson, Upper Colorado, and Laramie. This diversity of supply sources increases the reliability and security of Greeley's system. A map of the Greeley water supply system is shown in Figure 1.





### Cache la Poudre River

Greeley owns senior direct flow rights on the Poudre River. The direct flow rights consistently yield 9,000 acre-feet for treatment at the Bellvue Plant.

Milton Seaman Reservoir, on the Poudre River's North Fork, is the City's largest multi-year storage vessel within the Poudre basin (Figure 3). Milton Seaman Reservoir is primarily used as a drought storage vessel and in most years remains relatively full with about 5,000 acre-feet of available water supplies.



Figure 2: Cache La Poudre River

Other Poudre basin rights include storage rights in five high mountain reservoirs: Barnes Meadow, Peterson, Comanche, Hourglass, and Twin Lakes. The reservoirs capture water at high elevations from some of the Poudre River tributaries. However, Greeley's high mountain reservoir storage rights are junior and have low yields in drought years.



Figure 3: Milton Seaman Reservoir

A majority of Greeley's Poudre River water rights are treatable at Bellvue. However, some of Greeley's Poudre River water rights cannot be physically delivered to Bellvue. For example, Greeley's ownership in the Greeley Irrigation Company (GIC or the No. 3 Ditch) represents a supply located in the lower portion of the Poudre basin. These supplies are located too far downstream for treatment and thus are used for nonpotable irrigation of Greeley's

parks and golf courses. This reduces the amount of treated water used by the City.

Greeley also owns, and is in the process of acquiring, additional storage in the lower Poudre Basin. These storage facilities will reduce treated water demands and provide operational flexibility. For example, Poudre Ponds at Greeley are lined gravel pits located near the City that reuse, not physically but via river exchange, waste water effluent (effluent). Greeley uses the exchanged effluent to meet augmentation, non-potable, and return flow obligations.

### **Colorado River**

Greeley also obtains water from two interrelated transmountain diversion projects – the Colorado-Big Thompson (C-BT) and Windy Gap projects (Figure 1). Raw water from these projects can be delivered to either of Greeley's two treatment plants.

The C-BT Project provides supplemental water to its service area in northeastern Colorado. The project boasts 800,000 acre-feet of active storage and a relatively senior water right on the Colorado River. Owned by the U.S. Bureau of



Figure 4: Adams Tunnel East Portal of the Colorado-Big Thompson Project

Reclamation, it is operated by the Northern Colorado Water Conservancy District (NCWCD). With 22,565 units, Greeley is the largest municipal holder of C-BT rights.

The Windy Gap Project was planned and built between 1969 and 1985. Six C-BT stakeholders (Greeley, Loveland, Fort Collins, Longmont, Boulder, and Estes Park) cooperated to form a municipal subdistrict which oversees the Project and establishes the assessments for the existing Windy Gap shareholders.

Windy Gap consists of a diversion dam on the Colorado River, pump station, and a pipeline to deliver water to Lake Granby. The C-BT system conveys the water from Lake Granby to Windy Gap customers on the Front Range (Figure 4). The Windy Gap Subdistrict has a contract with the U.S. Bureau of Reclamation to allow the C-BT system to transport the water when there is unused capacity. In either a wet or dry year, Windy Gap does not yield. In a dry year, senior rights limit diversions and there may be little water to deliver. In a wet year, the C-BT system is at capacity and has no spare room to store or move Windy Gap water to the East Slope.

To firm the Windy Gap supply, additional storage is necessary. Chimney Hollow, a proposed 90,000 acre-foot East Slope reservoir, is the preferred alternative for the Windy Gap Firming Project. Greeley has committed to 7,000 acre-feet of storage space in this reservoir and will pay its proportionate share of the expected \$275 million cost.

### **Big Thompson River**

In the 1960s, Greeley began to acquire shares in three related agricultural water companies: the Seven Lakes Company, the Lake Loveland Company, and the Greeley-Loveland Irrigation Company (collectively the Greeley-Loveland Irrigation Companies (GLIC)). As the City grew westward over ground historically irrigated by GLIC water rights, Greeley accepted shares of GLIC for raw water dedication. Additionally, the City purchased numerous GLIC shares in the early 1990s, some of which Greeley still leases back to the original owners for agricultural use. GLIC water rights are relatively junior and do not yield well during droughts.

Greeley can only treat its GLIC water supplies at the city's Boyd Lake Plant. Greeley also uses GLIC water to meet non-potable irrigation demands in an effort to conserve and minimize plant treatment and transmission costs.

### Laramie River

Greeley owns 1/3 of the Laramie Poudre Tunnel Company, which yields about 1,100 acre-feet of water per year. The Tunnel water rights have been changed for municipal use and can be treated at Bellvue. Because they are transbasin rights, Greeley can reuse the water as many times as possible, usually through the reuse of effluent for augmentation demands. In addition, Greeley also owns a small interceptor ditch right in the Laramie River Basin that yields up to 300 acre-feet per year.

### **Drought Definitions and Greeley's Water Restriction Schedule**

Greeley uses a 1-in-50 year critical drought (drought) for water supply planning. In 2006, a modeling analysis of the water system defined the amount of water Greeley would need to have in storage, given then current supplies and demands, in order to supply its citizens throughout the drought. This analysis indicated that a target storage level of 20,000 acre-feet would provide adequate storage throughout the drought.

Therefore, the City's Drought Emergency Plan involves maintaining system storage of 20,000 acre-feet to ensure water service through times of drought. When this target storage level is met, the Greeley Water & Sewer Board (Board) can declare an adequate water year in April which means normal watering restrictions for citizens. If storage drops below 20,000 acre-feet, watering restrictions are enforced with the intention of dropping demand 10 percent below the demand predicted by the population and climate conditions.

With the target storage level is met at the beginning of the drought, Greeley will be able to maintain an adequate storage level throughout the duration of the drought. An adequate storage level is defined as six months of Greeley base (indoor) treated water demand which is approximately equal to 25 percent of annual treated water demand for all purposes.

In order to respond to drought reducing Greeley storage levels below target storage, the City has developed a Drought Emergency Plan. This plan is implemented if the Board declares drought conditions. The Greeley Municipal Code (the Code) specifically states:

Drought levels: On the determination by the Greeley Water and Sewer Board, after an analysis including but not limited to the Colorado Big Thompson quota, the level of storage in Greeley reservoirs, snow pack and yield thereof, and the long-range weather forecast, that Greeley's water supply situation is "Adequate" or in a "Mild Drought," "Moderate Drought" or "Severe Drought," §14.08.290(c) Greeley implements watering restrictions every year, even during adequate water years. Once the Board has declared a drought, the City Council may implement additional watering restrictions in accordance with the Code. Table 1 summarizes the drought information in the Code.

Drought Levels	Adequate Year	Level I Mild	Level II Moderate	Level III Severe
	Nur	mber of Days V	Vatering	
April 15-May 14	3	1	1	1**
May 15-June 14	3	2	2*	2**
June 15-August31	3	3	2*	0**
August 1-August 31 (mod-severe)	3	1	2	2**
September 1 - October 15	3	1	1	1**
	No watering 12 to 6 p.m. (10 a.m. to 6 p.m. proposed)	No watering	10 a.m. to 6 p.	m.
			*No new lawns between May 15 & August 31	**No new lawn variances allowed All fines doubled

Table 1: City of Greeley Watering Restrictions Adequate Supply – Severe Drought

Depending on the severity of drought, Greeley will implement other voluntary, and if necessary, mandatory limitations.

### **Greeley Firm Yield**

Firm yield is the water demand, including return flow obligations that Greeley can meet throughout the drought. To determine Greeley's firm yield, the Greeley water system model was run with drought data set and increasing water demands. The point at which an increasing demand would create a potable water deficit defines Greeley's firm yield. To meet water demands in the drought, Greeley must supplement the annual yield of its water rights with water from storage in the C-BT system, the Greeley and Loveland system, Milton Seaman reservoir, and Barnes Meadows reservoir.

Assuming that all of Greeley's existing water supplies have been decreed for municipal use, and all the City's proposed small retiming facilities (gravel pits) have been built, and all supplies are operational, Greeley's potable firm yield is 38,700 acre-feet.<sup>1</sup> This is the potable demand that can be met at the tap in the specific hydrologic conditions contained in the modeled drought scenario. Furthermore, the City anticipates that it can meet 3,500 acre-feet of non-potable demand through the planning drought.

<sup>&</sup>lt;sup>1</sup> 42,000 acre-feet at the plant less system and treatment losses.

#### Water Treatment

Greeley owns two water treatment plants, Bellvue and Boyd, with a combined treatment capacity of 62 million gallons per day (mgd). Both use conventional filtration and chemical treatment and have been upgraded to meet current regulatory requirements. Table 1 outlines treatment plant capacity as well as transmission capacity.

#### **Bellvue Filter Plant**

The Bellvue Filter Plant is located northwest of Fort Collins and has the capacity to treat 26.6 mgd. The plant consists of raw water settling ponds, rapid mix, flocculation, sedimentation, filtration, and disinfection. Treated water flows from Bellvue to Greeley by gravity. Operated year-round, Bellvue is the City's plant for meeting Greeley's base demand. The raw water entering the Bellvue plant has low turbidity and low hardness, thus making it easier to treat because it is a protected source water basing and has a high quality influent and effluent.

Over the last ten years, especially since the 2003 Water Master Plan, Greeley focused its planning on new Poudre Basin supplies. The Bellvue Filter Plant was extensively upgraded as a result of the Poudre River focus. Inlet piping to the raw ponds has been improved and toe drains were installed in 2008. The flocculation-sedimentation system has been upgraded with tilted-plate settlers. The filters were rebuilt with new piping, actuators, and controls. A new chemical feed building was constructed. A new clear well and solids thickening and dewatering system were built. Effluent piping and the laboratory were rebuilt. After a third-stage flocculation was added toward the end of 2008, the plant is rated at 32 mgd. Extensive testing over the last several years shows that the treatment system will meet or exceed all anticipated federal drinking water regulations.

### **Bellvue Plant Transmission**

The parallel transmission lines from the Bellvue Filter Plant operate by gravity and have a combined capacity of about 23.8 mgd. The first transmission line is predominantly a 27-inch line which splits into two 20-inch lines at Interstate 25. The second transmission line varies between 38-inch, 30-inch, and 27-inch. A number of customers are served directly from these transmission lines although Greeley would like to eventually eliminate all such connections.

### **Boyd Lake Filter Plant**

The Boyd Lake Filter Plant is located in east Loveland along the south shore of Boyd Lake reservoir. The plant has a capacity to treat about 38 mgd and is a conventional plant consisting of a raw water settling pond, rapid mix flocculation, sedimentation, filtration, and disinfection. The Boyd Lake Plant is used as a peaking plant to meet summer irrigation demands and is typically operated from April through October. The plant draws water from both Lake Loveland and Boyd Lake which are filled with C-BT and Big Thompson River water via irrigation ditches. The historical water sources for the Boyd Lake Water Filter Plant were irrigation water rights that were typically used from April through October. Raw water quality from Boyd Lake is not as good of quality as the Bellvue Water Filter Plant. Extensive development in the basin present source water quality challenges. Treated water from the plant has also been the subject of

several taste and odor complaints from customers over the years. Water must be pumped 18 miles to Greeley via two steel lines of 27 and 34-inch diameter.

Table 2 presents a summary of the Greeley Water Treatment and delivery System and the current capacity.

	Capacity	Comments
Raw Water	42,500 acre-feet (in 1-in-50-	Includes 3,500 acre-feet non-potable. Assumes
	year critical drought)	all rights are decreed.
Bellvue Filter Plant	32-mgd peak capacity	Upgraded in 2012
Boyd Lake Filter Plant	38-mgd peak capacity	Upgraded and expanded in 2012
Bellvue Transmission	23.8-mgd maximum capacity	New line under construction (70-mgd)
Boyd Lake Transmission	40-mgd maximum capacity	Lines are 35 to 40 years old; water must be
		pumped to Greeley

### **Table 2: Greeley Water System Summary**

### **BASELINE WATER USE**

Of the total water demand Greeley currently serves, approximately 82 percent is used within Greeley, and the remainder is associated with customers located outside of Greeley. In-City treated water use by customer type is shown in Table 2. Residential uses account for approximately 62 percent of total water use within Greeley; the remainder is comprised of commercial, industrial, and park or golf course uses. Fifty-five percent of residential water use goes to landscaping; therefore, residential use shows a strong seasonal variation with nearly 75 percent of total City annual use occurring between May and October.



Figure 5: In-City Potable Demand by Land Use Type 2013

### Table 3: Potable Water Demand Breakdown for Inside City Uses (2013)

\*ICI: Industrial, commercial, or institutional

Customer	Single-	Multi-family	Other	ICI*	Total
	Family		Residential		
Total Number of Accounts	20,749	1,994	806	1,732	25,281
Annual Billed Use 2013 (kgal)	2,521,516	930,371	200,834	200,834	7,152,905 (21,952 af)
Unit Use Annual (kgal/acct)	122	467	249	1,024	215


Figure 6: Annual and Residential Per Capita Demand in Greeley, 1997 - 2013

Figure 6 shows annual metered demand in Greeley from 1997 – 2013 along with the calculated residential gallons per capita per day (gpcd) for each of these years. This figure shows a 22 percent reduction in per capita residential demand, dropping from 154 gpcd in 1997-2002 to 121 gpcd from 2011-2013<sup>2</sup>. <sup>1</sup> Due to variations in precipitation, population densities, and landscaping, Greeley does not compare gpcd to other communities to assess water use and the effectiveness of its conservation program. Greeley uses gpcd as an internal comparison to demonstrate use reductions. Metered demand is essentially unchanged in sixteen years in spite of a 31.5 percent increase in population. Clearly, Greeley's water demand management efforts over the past 17 years have had an impact.

Figure 7 shows the annual metered demand for customers inside Greeley and outside Greeley along with Greeley's annual measurement of water loss. Demands outside of Greeley have stayed relatively stable over the past 16 years.



Figure 7: Annual Metered Demand Inside and Outside Greeley plus Water Loss, 1997-2013

# System Water Loss

Greeley has an active water loss control, detection, and maintenance program that has held water loss (real and apparent losses) to below six percent in seven of the past ten years which is well below industry standards of 15 percent water loss. This is a low system loss for a system the size and age of Greeley's and is indicative of the effort the City has made in this area. System losses have declined in volume from 1997 – 2014. Greeley is committed to its water loss control, detection, and maintenance system and will continue to strive to maintain exceptional system efficiency. Greeley plans to begin annual implementation of an American Water Works Association (AWWA) water loss control audit in 2015.

Leak detection is done on an on-going basis. The goal of the Leak Detection Program is to survey a portion of the pipelines every year with a priority placed on areas that have been prone to leaks. Crews use a Metrotech Correlator and Leak Logger with a LD12 Listening Device connected to the water main from a fire hydrant, valve, or meter to identify leaks in the main. Any suspected leak sounds will be correlated to authenticate the existence of a leak, and once identified, crews begin repairs.

Greeley works diligently to maintain a high functioning and efficient water system by constantly upgrading and repairing the system. About 81 miles of Greeley's pipelines were installed

before 1950 and had no lining for protection against corrosion and deterioration. When these pipes age, the rust on the inside restricts flow, creates rusty water, and makes the pipes more susceptible to leaks. The technology exists to recondition these pre-1950 pipes while maintaining water service to customers. The Cement Mortar Lining (CML) process scrapes the pipes clean on the inside and lines them with cement mortar to prevent future buildup of rust. The CML process can be done at half the cost of replacing the old pipe with very little inconvenience to customers. The Water Department began pipe cleaning and CML in 1991 to improve water flow and water quality and to minimize leaks. In 2012, Greeley completed lining of all remaining pre-1950 pipe. Table 4 shows a summary of leak detection efforts from 1997 – 2013.

Table 4: Greeley Leak Detection Summary (19	97-2013). This	table demonstrates the	
commitment Greeley has to finding and fixing	leaks within th	ne distribution system befo	re
they become a bigger problem.			

Year	System Miles of Pipe	Annual # Leaks	Leaks per 100 Miles	Annual Miles Increase	Annual Percent Increase	Leak Detection Miles
2013	467.12	55	8.49	3.8	1.32	40
2012	618.82	35	9.3	2.32	.95	35.3
2011	626.5	53	8.6	5.8	.95	52
2010	610.7	55	9	1.80	.30	60
2009	608.9	42	6.9	-1.8	-0.29	76.3
2008	610.7	51	8.4	0	0	51
2007	610.9	77	12.6	6.39	1.06	36.6
2006	604.51	68	11.2	8.51	1.43	29
2005	596	68	11.4	12.4	2.12	23.5
2004	583.6	46	7.9	9.6	1.67	18
2003	574	54	9.4	11.7	2.08	31
2002	562.3	65	11.5	20.34	3.75	12
2001	541.96	47	8.6	15.21	2.89	20
2000	526.75	51	9.7	11.57	2.25	37
1999	515.18	54	10.5	12.96	2.58	61
1998	502.22	51	10.2	18.68	3.86	104
1997	483.54	34	7	5.84	1.22	32

By cleaning and lining the pipes, the Department strengthens the infrastructure, and the pipes are less likely to burst, waste water, and put customers out of service. Also, by being proactive on this project, there is less interruption of service due to line breaks. A tight and well-maintained water system is cost-effective because lost water cannot be used by the City or sold to customers.

# **Peak Day Demand**

The peak day of water use for each year typically occurs, though not always, during July in Greeley. For example, in the last three years, peak day occurred on: July 26 in 2011 (45.3 mgd), June 26 (50.4 mgd) in 2012, and July 9 in 2013 (46.43 mgd). The overall water system, including treatment, transmission, and distribution, must be able to meet the peak day of use. Using the last 20 years of historical data, Greeley's peak day to annual demand ratio is 2:1. Peak demands from the years 2000 – 2013 as well as the treatment and transmission capacity of the system are shown in Figure 8.



Figure 8: Greeley Peak Day Demands 2000 - 2013

# **Demand Forecast**

Table 5 shows projected water demands for Greeley over the next 15 years. The focus of the Greeley Water Conservation Program is on in-city customers; hence, in-city demand will be the focus of this plan.

Year	Potable demands at the tap (acre- feet)	Potable demands plus 7% loss (acre- feet)	Non-potable demands (acre-feet)	Total demand potable + non-potable (acre- feet)
2015	27,612	29,658	2,755	32,413
2020	30,502	32,763	3,164	35,927
2025	33,742	36,243	3,573	39,816
2030	37,382	40,153	3,982	44,135
2035	41,462	44,535	4,391	48,926

#### Table 5: Projected Demands for Greeley 2015 – 2035

Between 2015 and 2035, Greeley expects 13,850 acre-feet of new potable demand (including losses). An additional 1,636 acre-feet of new non-potable demand is forecast over the same period.

# WATER RATES, COST, AND PRICING

# **Billing System and Water Rates**

Greeley is examining the feasibility of implementing a customized tiered rate (water budget) structure similar to those implemented by the Centennial Water and Sanitation District and the City of Boulder, Colorado. The intent of this new rate structure would be to encourage efficiency and to discourage waste. A simple tiered rate structure such as is common throughout the Front Range would face resistance in Greeley because of the wide variation in lot sizes and Greeley's historic raw water dedication policies. Custom tiered rates (water budget) that account for the customer's lot size and water dedication are more suitable to Greeley. More information about the on-going water budget study is provided later in this document.

Greeley was one of the first Front Range communities to be fully metered. Currently, Greeley water charges are billed every month using a uniform rate structure. The rate structure is developed annually by a cost-of-service rate model. Customers are metered and pay for the water they use. Each bill is composed of two parts: a fixed minimum charge and an amount of water used charge. Charges depend on customer class and customer location. Inside City fixed charges for 2014 are shown in Table 6.

Matan Cina	Inside City Fixed Minimum
wieter Size	Charge
5/8"	\$10.60
3/4"	\$10.60
1"	\$10.90
1-1/2"	\$14.20
2"	\$15.55
3"	\$43.40
4"	\$50.60
6″	\$63.75
Non-Potable	\$15.55

#### Table 6: Inside City – Service Charge

#### Inside City – Residential

The 2014 variable consumption rate is \$4.04 per thousand gallons. The fixed minimum charge is based on meter size as shown in Table 6 . For example, if a customer uses 5,000 gallons of water in a one month period and has a 3/4" meter, the bill would be \$30.80. The water-use charge is \$4.04 per 1000 gallons. A fixed charge of \$10.60 is added to the commodity charge of \$20.20 for a total of \$30.80.

#### Inside City – Commercial

The 2014 rate is \$3.66 per thousand gallons. The fixed minimum charge is based on meter size as shown in Table 6.

#### **Outside City – Residential**

When Greeley built the transmission mains from Bellvue and Boyd to Greeley, many property owners received water taps in exchange for easements. These accounts are classified as Outside City. City Council has a policy against granting additional water taps outside the City without annexation. The 2014 variable consumption rate is \$9.99 per thousand gallons for residential customers located outside of the City limits. The fixed minimum charge is based on meter size as shown in Table 6.

#### **Industrial Rates**

The rate for large industrial customers is also set by the cost-of-service rate model and depends primarily on maximum daily and peak hourly demands. A large industrial customer's 2014 variable consumption rate is \$2.84 per thousand gallons.

## **Commercial and Industrial Surcharges**

Commercial and industrial customers dedicate water to the City to cover the annual consumption based on their tap sizes and thus require an annual allotment of water. When annual use (based on billing records) exceeds the user's allotment, a raw water surcharge is assessed. The current surcharge is \$5.91 per 1,000 gallons in excess of the annual allotment. The surcharge is based on the market price of C-BT water and is established annually.

## Sewer Rates

Greeley sanitary sewer rates are also developed annually by a consultant using the cost-ofservice rate model. Sewer service charges are billed every month and appear on the same statement as the water bill. The sewer bill is divided into two parts: a fixed minimum every billing period and consumption charge that is based on water use. The charges depend on customer classification which depends primarily on the strength of the waste to be treated.

#### **Residential Single Family**

In 2014, the typical single family homeowner will pay a fixed minimum of \$11.55 on every sewer bill. The consumption charge is \$1.75 per thousand gallons of water used per billing period but not to exceed the winter quarter consumption. This keeps the summer lawn water use from being charged as sewer flow.

#### **Multi-Family**

The 2014 rate consists of a fixed minimum of \$11.55 per sewer connection plus \$2.09 per thousand gallons for water usage for the billing period not to exceed the winter quarter water use.

#### Commercial and Industrial

Commercial and Industrial rates depend on the type of customer (e.g. whether the customer operates a restaurant, car wash, or mortuary, etc.) These rates are based on how much and how contaminated the wastewater is for each customer group.

# **PROPOSED WATER SUPPLY PROJECTS**

## Windy Gap Firming Project

In 1985, the Windy Gap Project water supply was completed by the Municipal Subdistrict of the NCWCD. The goal of the Windy Gap Project was to deliver an average of 48,000 acre-feet of water annually to project participants. However, since 1985, the project has not met such projections due to deficiencies in water delivery and lack of storage. The Windy Gap Firming Project has been proposed to firm the participants' yield by constructing storage for the project water. The preferred alternative for this storage is the 90,000 acre-foot Chimney Hollow Reservoir located southwest of Loveland. Greeley will firm 44 units of Windy Gap by subscribing to 7,000 acre feet of storage in the proposed reservoir.

## Halligan-Seaman Water Management Project

The City of Greeley and City of Fort Collins are participating in the Halligan-Seaman Water Management Project (HSWMP) which proposes the enlargement of the existing Halligan and Seaman Reservoirs on the North Fork of the Cache la Poudre River. The HSWMP consists of two separate projects that are proceeding through a combined permitting process. Fort Collins plans to enlarge Halligan Reservoir from 6,400 acre-feet to 14,525 acre-feet in the near future. Greeley intends to enlarge Seaman Reservoir from its existing capacity of 5,000 acrefeet to 53,000 acre-feet by 2029.

The enlarged pools of both reservoirs will primarily be filled with senior agricultural water although both the cities of Fort Collins and Greeley will store some junior water rights when they are in priority. The senior agricultural water rights that the HSWMP participants own or will acquire for the enlargements have been historically diverted into agricultural ditches just a few river miles below the confluence of the Poudre main stem and the North Fork. Greeley anticipates that the project will increase its annual yield by approximately 6,600 acre-feet. The Seaman enlargement is intended to provide long-term storage which will provide protection from severe droughts. However, the City will also make annual releases from the reservoir in order to retime excess water supplies from the spring runoff to meet fall and winter demands.

The Halligan and Seaman Reservoirs are located 16 river miles apart. There may be an opportunity to provide ecological benefits to the North Fork by coordinated reservoir

operations and reallocation of storage. The HSWMP participants have solicited input from local stakeholders and environmental groups to evaluate this opportunity.

The HSWMP participants have requested permits to construct the reservoir enlargements from the U.S. Army Corps of Engineers (USACE). USACE is currently conducting all analyses necessary to complete an Environmental Impact Statement and Record of Decision for these projects.

# **Overland Trail Gravel Pits**

Greeley and the Tri-Districts (Fort Collins-Loveland, East Larimer County, and North Weld Water Districts) are in a joint venture to purchase, develop, and line several gravel pits along the Poudre River north of Fort Collins. These pits will be used by Greeley to maximize the utility of existing water rights and to meet return flows in that reach of the Poudre. Greeley's 1,800 acre-foot portion of the pits is expected to be online by 2022.

# **Poudre Ponds Gravel Pit**

Greeley will increase its lower Poudre storage by approximately 1,500 acre-feet by mining and lining a gravel pit in the north part of Greeley along the Poudre River. This storage facility will provide water for return flow and augmentation requirements owed by the City.

# **REVIEW OF CURRENT POLICIES AND PLANNING INITIATIVES**

The following policies and planning initiatives are in place in Greeley:

- 1. Growth shall pay its own way without unduly affecting existing ratepayers.
- 2. Greeley will not enter into any additional open-ended outside service contracts.
- 3. During a severe drought, Greeley shall incrementally increase the severity of water restrictions as drought conditions intensify, considering factors such as water storage within Greeley's system and regional water systems (e.g. C-BT system) Greeley depends on for yield.
- 4. Greeley will develop non-potable systems which will be equal to or less than the cost of potable sources.
- 5. Greeley will maintain a strong water conservation ethic and will invest in additional cost effective water conservation.
- 6. Every year Greeley will create a new rolling ten-year gpcd average that will be used to project future water demands. The new average will include the last five years' worth of conservation measures and ensure any savings through conservation are part of Greeley's long term planning.
- 7. Construction of new treatment and transmission capacity shall begin when peak demands exceed 90 percent of existing capacity.

# CITY OF GREELEY WATER DEMAND MANAGEMENT PROGRAMS AND MEASURES

Water conservation is one of the four key points identified in Greeley's future water supply plan. Greeley's Water Conservation Program is designed to address all areas of water demand across the City.

Greeley first imposed water restrictions in 1907 requiring residents to alternate watering days and avoid mid-day watering. This same ethic is in place today continuing Greeley's 107 year practice of proactive water demand management. This effort has successfully reduced costs, improved performance, and extended the service life of the water system.

The City has included conservation in overall supply planning for more than 20 years. Greeley developed its first Water Conservation Plan in 1992. In 1997, Greeley hired a full-time conservation coordinator, Ruth Quade, who has managed the City's water efficiency efforts for the past 17 years.

# **Greeley Conservation Program**

Greeley's Water Conservation Program has grown since 1997 to encompass all customer sectors in the City. In 2007, the City's conservation program budget was increased to \$500,000 making it one of the largest programs in Colorado. The conservation program addresses both indoor and outdoor water use through education, ordinances, direct outreach, rebates, and information. The Greeley Water Conservation Program implements an extensive social marketing campaign that includes advertisements on radio, in print, on buses, and cable TV. Consequently, the Greeley Water Conservation Program has become one of the most visible and well-publicized conservation efforts in Northern Colorado.

#### **Colorado Best Practices**

The Colorado WaterWise Guidebook of Best Practices for Municipal Water Conservation outlines 14 best water conservation practices. The guidebook was created by Colorado WaterWise with assistance from many water utility water conservation professionals and by a generous grant from the Colorado Water Conservation Board.

# colorado waterwise

In an effort to have a well-rounded program, Greeley incorporates these best practices that are effective for its system into the water conservation program.

The measures below describe Greeley's current and ongoing Water Conservation Program:

#### Metering

Greeley became fully metered in 1997. The City was one of the first Front Range communities in Colorado to be fully metered. This allows the community's water use to be tracked, measured, and evaluated.

Since 2011, Greeley has offered customers the use of hand-held electronic water meter monitors to check water use. The units have a built-in magnet, so it can be conveniently located on a refrigerator door. These units have been promoted on a limited basis due to the small quantities of these meters that have been purchased although the outreach has been targeted to participants of the Water Budget pilot study (described on pg. 29 Rate Structure and Water Budgets), customers that inquire about high water bills, and others who are actively engaged in their home water use. The use of these monitors will be evaluated for ease of use, customer service, and ability for customers to watch water use in real time.

# Lawn Watering Restrictions and Planting Ordinance

Greeley introduced its first lawn watering restrictions in 1907 and imposed fines for violations.<sup>3</sup> At the time, the City's population numbered no more than 8,000, and in a remarkable feat of conservation continuity, those first rules still apply today to nearly 100,000 citizens. For example, daily lawn watering and watering during the heat of the day is forbidden. Greeley's lawn watering restrictions (the minimum applicable every year) are shown in Table 7.

	cicy manualory (Aucquate	rear watering nestriction s	/circumic
	Single family residences &	Single family residences &	All others: home owner
	duplexes with <b>even</b> numbered	duplexes with <b>odd</b> numbered	association common areas,
	addresses ending in:	addresses ending in:	multi-family residences,
			apartments, businesses,
	0, 2, 4, 6, 8	1, 3, 5, 7, 9	government, non-profit,
			churches, commercial,
			industries, and institutions.
January 1 -	No Lawn Watering	No Lawn Watering	No Lawn Watering
April 14			
April 15 -	Sunday, Tuesday, Thursday	Monday, Wednesday, Saturday	Sunday, Tuesday,
December 31	No Watering	No Watering	Friday
	12 p.m. to 5 p.m.	12 p.m. to 5 p.m.	No Watering
			12 p.m. to 5 p.m.

#### Table 7: Greeley Mandatory (Adequate Year) Watering Restriction Schedule

City ordinance establishes the following watering restrictions in Greeley:

- Hand watering of brown spots in a lawn is allowed on any day. Greeley encourages customers not to hand water their lawns between 10 a.m. and 5 p.m. Trees, shrubs, flower and vegetable gardens may be watered at any time by hand, drip irrigation, low volume, bubblers or by weeping-type soaker hoses. Using a watering can or a hose with a restrictive nozzle is considered watering by hand. Hand watering does not include using a hose with a sprinkler or manually operating an irrigation controller.
- Occasional washing/hosing off vinyl siding, washing out roof gutters, washing in preparation for paint or staining is allowed within reason.
- Home car washing is allowed with a restrictive nozzle hose and bucket and minimal runoff.

<sup>&</sup>lt;sup>3</sup> A 1908 Greeley Tribune article reports "eight or nine prominent Greeley" citizens complained that their fines for sprinkling out of hours should go to the water works fund, not to the Police Magistrate.

- New lawn watering variances are available with proper soil amendment (4 cubic yards per 1,000 square feet of lawn).
- Waste of water is prohibited at any time (listed in detail on page 34).

When landscaping a new home or planting seed or sod in an established yard, Greeley residents must get a variance to water during restricted periods. Greeley also requires residents to prepare the soil with compost (organic matter) before receiving a variance. Under a 2002 City ordinance, new lawns require proof of adequate compost. The program has the following rules:

- Sod and compost receipts must be provided to the City to verify the installation.
- Four cubic yards of compost must be used for every 1,000 square feet of sod put down.
- The compost must be rototilled, and the property owner must provide photos or tiller rental receipts as proof.
- City employees check to verify the new lawn and compost.
- The property owner must post a variance notice when the off-hour irrigation is occurring.

## Toilet and Clothes Washer Rebates

In 2014, Greeley offered up to a \$50 rebate for any brand new WaterSense labeled high-efficiency toilet (HET) equal to or less than 1.28 gallons per flush (gpf). In order to receive the full amount, the customer must take the old toilet to the City's recycling facility where it is destroyed and used for



road base. A voucher from the recycling facility serves as proof of destruction. Greeley pays up to \$75 for a 0.8 gpf toilet with the recycling voucher.

Greeley offers a rebate of \$100 for the purchase of a high efficiency clothes washer. Only washers on the "qualifying list" are eligible for the rebate. The list is regularly updated and is available on the City's web site (www.greeleygov.com/rebates).

Greeley's rebate programs operate under the following rules:

Rebates are subject to available funds. The current budget is \$85,000 annually.

- Clothes washers must be on qualifying list.
- For each year's rebate, products must be purchased between January 1 and December 31 of the year the customer requests the rebate. Applications must be submitted before January 7 of the following year.
- The original sales receipt must be attached to the application and include the date of purchase, price, brand name and model number.
- Products must be for use at an address that receives a City of Greeley water bill.
- The owner bears responsibility for installation.

- The City of Greeley reserves the right to inspect and verify the purchase and installation location of any appliance or device for which a rebate is provided.
- The rebate is for a maximum of two toilets per customer and one washer per address.

The rebate program began in July 2006. Since then Greeley has processed 1,971 toilet rebates and 3,030 clothes washer rebates to residential customers to date.

#### Irrigation Efficiency Rebates and Grants

Greeley offers a grant for schools, businesses, or Homeowners' Associations (HOAs) to replace turf with xeric plantings. A customer may apply for up to \$1,500 per year and may apply up to three years in a row.

To participate in the irrigation rebate program, customers must first receive a City of Greeley Irrigation Audit.

During the irrigation audit, products may be suggested to help customers increase water use efficiency. These recommendations are personalized to the individual property. Products that are frequently recommended include:

- Smart Controllers
- Pressure Reducing Valves
- Rotary Nozzles

# Commercial, Institutional, and Industrial Efficiency Incentives (CII)

Greeley encourages water efficiency in commercial, industrial, multi-family, non-profit and governmental properties by providing rebates for installation of water efficient appliances and fixtures. In addition to the rebate program, Greeley offers free indoor and outdoor audits to commercial properties and can help determine which products make sense for any organization.

Large scale projects with rebates totaling more than \$1,000 must be pre-approved to ensure funds are available. Table 8 provides details on all of Greeley's commercial rebates and items that can be requested for free.

Table 8:	Greeley CII Rebates and Incentives for 2014
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Bathroom Rebates	
Toilet (0.8 gallons per flush or less) – MaP* test score of 500 and above strongly recommended	\$50 or \$75 w/recycling voucher
Toilet or Urinal (1.28 gallons per flush or less) MaP test score of 500 and above strongly recommended	\$25 or \$50 w/recycling voucher
Flush Valve Toilet or Urinal (1.28 gallons per flush or less)	\$125 or \$150 w/recycling
MaP test score of 500 and above strongly recommended	voucher
Bathroom Faucet Aerator	free by request
Leak Detection Dye Tablets (for tank type toilets)	free by request
Industrial Rebates	
Cooling Tower Conductivity Controller	30% up to \$900
Cooling Tower Meter (replaced every 5 years)	\$50
Kitchen/Restaurant Rebates	
Ice Machine (water cooled to air cooled)	\$450
Dish Machine (high-efficiency)	25% up to \$400
Refrigeration Condenser (water cooled to air cooled)	25% up to \$400
Pre-Rinse Spray Valve (high-efficiency)	free by request
Restaurant Table Tents (serving water upon request)	free by request
Laundry Rebates	
Coin Operated/ Commercial Washer on qualifying list	\$300
Clothes Washer on qualifying list	\$100
Outdoor Rebates	
Irrigation Rebates vary, please see residential irrigation rebates for details	
Water Broom (replacing hose sprayers)	50% up to \$100
Commercial Car Wash Spray Nozzle (up to 300 per year)	\$1 each

\*MaP is the maximum performance score for each toilet tested by an independent lab.

## Water Efficiency Audits

#### Irrigation Audits

The Greeley Water Conservation Program offers free irrigation efficiency audits to customers interested in learning about ways to improve the efficiency and operation of their irrigation systems. Customers can request an appointment for an evaluation from the City.

The Irrigation Auditing Program has gradually modified each year since 2001 to meet the changing needs of customers. Demand for irrigation audits exceeded what the conservation program could support. In response to demand, a full time Conservation Irrigation Specialist was hired in 2007. This staff member now supervises the program and hires and trains the auditors.

#### **Commercial Indoor Audits**

In 2007, a Commercial Auditor was hired to assist commercial and industrial customers with their indoor water consumption. After auditing approximately 160 businesses, Greeley developed its commercial rebate program for these customers (described above) based on information learned from the audits.

#### WaterInsight Pilot

Another pilot program that Greeley implemented to assist residential customers in learning more about their water use is using a software program called WaterInsight. To implement the program, Greeley teamed with San Francisco-based technology company WaterSmart Software in 2013 to determine the effectiveness of this program.

In this pilot program, WaterSmart provided 2,600 randomly selected residents with personalized Home Water Reports beginning in May 2013. These reports track household water use, compare household usage to their neighbors, and suggest targeted conservation techniques. Those in the pilot program can also sign up for the WaterInsight online portal to view water use, create a water savings plan, and update their information to get more accurate savings suggestions. Once the program is complete, Greeley will evaluate if WaterInsight is effective and if the program should be rolled out to all residential customers. As of the writing of this plan, the pilot is still ongoing and preliminary results show that those who received a printed home water report had a 5.8 percent cumulative water reduction. Residents in the pilot program with an e-mail copy of the report had a 2.6 percent cumulative water savings. Total savings for the one year pilot of WaterInsight software is 13.2 acre-feet of savings when compared to control households not getting the information.

#### Smart Meter Evaluation

Greeley staff is also looking into the feasibility of implementing an AMI/AMR (Smart Meter) system. Staff envisions a system that allows customers to view real time water use on a computer or a smart phone. This will prevent water waste by alerting customers sooner about high volume leaks and give customers an overall awareness of the water that they use in their homes.

Greeley will continue to provide ways for customers to be aware of their water use. The city hopes that an awareness of individual water use will help promote efficiency, enhance customer service, and empower customers to make informed water choices.

#### Rate Structure and Water Budgets

At the present time, Greeley has a uniform rate structure (described in detail on pg. 22). The City of Greeley is evaluating moving to a Water Budget Rate Structure. Greeley began a Water Budget Study in 2011. The project goal for the study was to evaluate the effectiveness of empowering customers with information to improve their water efficiency.



The purpose of the informational water budget program is to provide customers with a reasonable way to evaluate water use for their own property. This is particularly important information for customers who regularly exceed their water budget. The City expects this program will reduce excessive indoor and outdoor use.

The Water Budget provides individual households with a monthly estimate of projected water needs based on individual lot size and assumed persons per household. In 2010, plans were made to implement a water budget program over the next few years.

The first year of the program was completed in 2011. An informational Water Budget pilot project was conducted with approximately 250 volunteers. Most of the participants who completed the survey (94.6 percent) found the Water Budget to be helpful and increased the understanding of household water needs. A large percentage (75.5 percent) of the respondents would like additional information on how much water the lawn needs. The survey found that customers do not spend a lot of time looking at their water bill, but during the Water Budget pilot study that time increased, potentially making people more aware of their personal water use. An example of what each customer receives on their water bill illustrating the customer's individualized monthly water budget is shown in Figure 9. The bill also includes how much money the customer could have saved had they stayed in budget.





The program was expanded in 2012 to include a random sample of up to 1,000 residential customers in addition to existing volunteers. The water budget was modified to forecast the customer's water demand, based on historic averages, instead of calculating the previous month's water needs based on actual temperatures and rainfall as was done in 2011. The modified plan allowed customers to be aware of the water budget prior to their water usage. In 2013, the program was expanded to all residential customers citywide. Per customer feedback, the water budget is now based on actual weather data instead of historical weather data which was used in 2012.

Customers who use more water are in most need of water conservation messages and incentives. The City develops targeted communication pieces for customers who regularly exceed water budgets. This will give inefficient customers time to move toward efficiency before a higher rate is potentially attached for excessive use in the future.

Exceptionally high water bills are also flagged by utility billing. Water meter technicians go out to investigate and determine if it is a leak or if the conservation staff needs to be contacted.

In 2014, the results of providing information to customers in the Water Budget study will be evaluated, and if warranted, individualized tiered rates may be introduced to send a price signal to those customers who continue to use water well in excess of their actual need.

# **Commercial Efficiency Project**

Greeley's water customers are separated into several different customer classes: residentialsingle family, residential, commercial, and industrial. These users are separate in the billing system. Greeley plans to focus on improving commercial water use efficiency by separating indoor and outdoor consumption allowing the City to better evaluate and inform these customers concerning their efficiency. To get started, a pilot project is planned to separate indoor and outdoor use at several existing commercial and industrial facilities.

The City is evaluating whether to extend this program by requiring separate meters for indoor and outdoor use for new commercial and multi-family developments.

## Water Conservation Program Staff

A successful water conservation program needs people to guide water conservation efforts in the community. A great team is essential for the implementation and management of thriving water conservation programs. Customer service and a passion for conservation are a must when talking with water customers. There are currently three full-time employees, one part time employee and seasonal staff and volunteers dedicated to developing, implementing, and promoting water efficiency programs in Greeley.

In 1997, Greeley hired a full-time Conservation Coordinator who plans and manages water efficiency programs. The Conservation Coordinator researches and develops new programs and finds ways to continually improve existing policies and initiatives.

A part-time water conservation employee was hired in 2006. The Marketing Technician promotes water conservation in a variety of ways using public relations, marketing, and social media techniques. This position also guides efforts in water education projects for K-12 education.

In 2007, two water conservation specialists were hired. The Outdoor Water Conservation Specialist leads the irrigation audit program and consults on programs that are focused on proper irrigation methods. The Commercial Water Conservation Specialist helps businesses,

landlords, HOAs, schools, and industrial facilities implement water conservation technology and best management practices.

Seasonal employees assist in a variety of areas. This includes administrative assistant tasks such as customer service for Greeley's many incentive programs, data entry for rebates and variances, and assistance with special events. Seasonal staff and volunteers also assist with maintaining the Xeriscape Garden, responding to watering violations, checking soil amendment, and helping with irrigation audits.

# Greeley's Water Waste Ordinance

An ordinance enacted in 2002 prohibits water waste of any kind in Greeley. Water utility staff members are empowered to enforce this ordinance and issue tickets with inclining fines for repeat violations.

The ability to ticket waste is important because a customer may be following the watering restrictions and still waste water. For instance, the customer is informed that water running in the gutter is not allowed (see photo below) even if the customer is in compliance with the watering schedule.

The ordinance defines waste in the following ways:

• It is unlawful for any person using City of Greeley water to use said water to allow or permit water to run to waste upon his or her premises, buildings, houses or lots, in

through or out of any water closet, lavatory, urinal, bathtub, hose, hydrant, faucet, or other fixtures, appliances, or apparatus whatsoever or in any manner through neglect or by reason of faulty or imperfect plumbing or fixtures.

 It is unlawful for any person, partnership, company, corporation, or other entity using City of Greeley water



to at any time use water to clean any hard surface upon or adjacent to the premises, building, house, or lot. For purposes of this section, hard surface includes but is not limited to driveways, sidewalks and streets, and street gutters.

 It is unlawful for any person, partnership, company, corporation, or other entity using City of Greeley water to allow either manually or automatically the sprinkling or watering of hard surface to allow excessive runoff of water from the premises, building, house, or lot and to allow the excessive pooling of water upon or adjacent to the premises, houses, or lots. During times of drought, a water education team is assembled to closely monitor waste in the community. Water conservation staff also investigates water waste reported by concerned citizens or other City of Greeley staff.

#### Public Information and Education

Public information and education is an essential element of a vibrant and well-rounded utilitybased water conservation program. Greeley's Water Conservation Program staff provides proactive public information and marketing for all water conservation programs. Every program has a significant portion of time and resources dedicated to education and information.

Each year a Water and Sewer Communications Plan is developed to help focus, monitor, and evaluate the department's outreach efforts. Conservation information and initiatives are an important part of Greeley Water and Sewer's overall public messaging.

A mix of media is important to any public outreach campaign. Different people rely on different information sources to get information. A 2011 City of Greeley resident survey showed that there are multiple places where people get information. This is why many different communications tactics must be utilized.

#### Face-to-Face Marketing

Communication research studies have shown that personal contact is often more persuasive in changing behaviors than advertising is. Greeley is steadfast in the belief that personal contact is the most effective element of its education program. Program staff strives to be visible in the

community and to meet with as many citizens as possible. For example, staff spends one-onone time with customers explaining compost requirements for installation of a new lawn, covering the water saving potential of a sprinkler system audit and tune-up, and answering questions when customers complete paperwork for a rebate. These are valuable and positive education opportunities that often lead customers to participate in additional programs.



#### **Public Events**

Educational opportunities are provided to teach children and adults appreciation of water, practical water conservation techniques, and help facilitate a community conservation ethic. Water conservation staff sponsors and participates in a broad array of events and educational activities to foster face-to-face interaction. Greeley participates in fairs, events sponsored by other organizations, and children's water festivals. These events offer ready-made outreach opportunities to a receptive audience. Added to those educational efforts are neighborhood meetings, speaking engagements, discussions with local civic groups, and classroom visits.

#### **Media Relations**

Information is sent to the media in the form of news releases. Water conservation staff sends out over 20 news releases each year in an effort to get news coverage. Staff also answers media inquiries about water conservation projects.

#### **Paid Advertising**

The Program has an advertising budget of \$15,000. Larger projects are promoted through paid advertising in print, radio and online. With the increased costs of advertising, this budget is used thoughtfully and strategically to target those who may be interested in water conservation programs in Greeley.

#### **Promotional Items**

Various giveaway items are purchased to promote water conservation. These items are designed to keep water conservation in mind and are distributed at community events and in our office. This includes pens, water bottles, stickers with lawn watering suggestions, refrigerator magnets, and more. In 2013, the program printed water conservation tips on coffee sleeves for use at local coffee shops and coasters to be used at restaurants. Magnets are also purchased for City vehicles promoting irrigation audits. These items are frequently requested

by other departments to put in goodie bags at their events.

#### **Direct Mail**

Approximately eight times per year, water conservation information is inserted into customer's water bills. Many of these flyers have forms that residents send back to sign up for conservation programs, including irrigation audits. Separate mailings are also targeted to groups to promote particular programs to a receptive audience or customers who are over the water budget.

#### Web and Social Media

Electronic communications is a relatively inexpensive and effective way to send messages to the public. The Water Conservation website is updated frequently to promote programs and the City maintains an



#### Figure 10: Greeley's Conservation Facebook Page

active water conservation presence on Facebook (Figure 10) where residents can get water conservation information. On average three Facebook messages per week are sent about conservation. Information is also posted on the City's home page to promote conservation. In

addition, a water conservation e-newsletter is published each month, and a water topic is included in every issue of the Greeley's City Scoop e-newsletter. Twitter is used to interact with the public and the larger water and environmental community. Water videos are also posted to YouTube. You can view the large selection of videos at www.greeleygov.com/Water/multimedia.aspx.

#### **Community Relations**

Making connections and partnerships in the community helps position Greeley's Water Conservation Program is an important resource and avenue for information in the community.

Staff members are involved with professional organizations, such as Rocky Mountain Section American Water Works Association Conservation Committee, Colorado State University Cooperative Extension Master Gardeners, American Water Resources Association, Colorado WaterWise, EPA WaterSense Promotional Partner, Alliance for Water Efficiency, Green Plumbers, Irrigation Association, Greeley Garden Tour, Greeley Chamber of Commerce, Latino Chamber, Real Estate Association, Poudre Learning Center, and the Association of Landscape Contractors of Colorado (ALCC).

#### **School Education Program**

Educating youth on water and conservation issues is important as it gives children and young adults an appreciation for water and an orientation towards protecting precious natural resources. Providing information for children also assists in conservation as they remind parents to use water wisely.

Greeley co-sponsors the Children's Water Festival which hosts 1,200 children at Island Grove Regional Park. The water festival brings water professionals from around Colorado to provide presentations and activities



Figure 11: Children's Water Festival

about water, conservation, human health, and aquatic life. A wide range of curriculum areas are covered including language arts, math, science, social studies, visual arts, and health. The festival goals are to teach students that water is an essential, limited resource and that they can take action. The Festival is usually held during the last week of April.



The City of Greeley also co-sponsors The Confluence Institute. It is a 4-day training of K-12 teachers on water and conservation issues at the Poudre Learning Center. It provides teachers with resources and activities to use inside their classrooms. Teachers receive District Six credit and can receive Adams State University credit if they need it.

The Caring for Our Watersheds project is sponsored by the Poudre Learning Center and Agrium. Water conservation staff supports the project by judging projects and mentoring students through implementation. In this project, high school students must answer the question: "What can I do to improve my watershed?" They must research and develop a project that is implementable and solves a watershed issue. In 2013, the top three groups were mentored by City of Greeley staff.

In 2011, a group of students implemented a

project to install 44 toilets in the older part of Greeley Central High School. This project ranked third in the competition, and the toilets were installed in June with the help of conservation staff and the rebate program. The Water Conservation Program continues to support Caring for Our Watersheds and helps implement projects when feasible.

## **Targeted Outreach**

Many water efficiency messages are sent out to all water customers (e.g. in water bills or direct mail) since everyone uses water in one way or another. Other messages can be targeted to particular groups that address unique needs. For example, Greeley sends post cards to people who exceeded their water budget in one or more month. The water bill itself also informs customers of how much money they could have saved by using water efficiency in accordance with their water budget.

It is anticipated that Greeley's Water Conservation Program will continue to evolve and change over the next seven years, but the financial and human resource commitment from Greeley and the associated water savings are expected to remain strong.

# New programs, analyses, and evaluations to be added to the existing Water Conservation Program

#### City of Greeley, Parks, Water System

- Re-landscape Greeley Parks: Parks will gradually reduce turf by 5-10 percent at existing parks and new parks will be designed to have 15-20 percent non-turf landscaping
- Xeriscape street medians rather than plant with turf
- Explore lining ponds at City golf courses to reduce evaporation
- Re-landscape City facilities, City Hall, Annex, etc.
- Conduct annual IWA/AWWA desktop water loss audit
- Assist local golf courses in converting roughs to more natural, Colorado landscape creating wildlife habitat and work with courses to get Audubon designation

#### New Construction and Non-Residential Accounts

- Continue to evaluate revisions to landscape codes to enhance water efficiency
- Require separate meters for outdoor and indoor water use for new commercial customers with landscape larger than 1 acre
- Explore sub-metering for new commercial properties and retrofitting existing commercial (e.g. strip malls, Centerplace, etc.)
- Retrofit detention ponds (from bluegrass to native turf)
- Pilot project of a permeable paving demonstration for conservation and water quality
- Investigate WaterSense model home in Greeley
- Provide assistance to assure new GURA & Habitat for Humanity homes are WaterSense certified
- Provide scholarships for irrigation and landscaping professionals to get training and certification
- Offer Green Plumber training in Greeley to teach plumbers the benefits of WaterSense products, etc.

## Existing Customers

- Provide low income assistance (elderly on fixed incomes) for irrigation system upgrades and retrofits
- Replace toilets of older large apartment complexes (east of 35<sup>th</sup> Avenue & older than 1993) with the Stealth toilet (0.8 gpf)
- Exchange showerheads
- Provide large HOA irrigation efficiency grants and Xeric grants (turf removal)
- Assist with water wise landscape design
- Do a pilot project for a xeriscape rebate for replacement of turf to residential customers to gauge interest in the program and evaluate cost and water savings
- Offer a scholarship to encourage youth from the Greeley community to study natural resources and engineering modeled after Big Thompson Watershed Forum and West Greeley Conservation District's scholarships

 Develop a team of community members to become conservation ambassadors to spread the word about conservation programs and City services in general as well as volunteer at educational events

Given that 55 percent of treated drinking water is used for landscape irrigation, (as much as 70 percent between April and October) it makes sense to focus conservation in making landscape irrigation more efficient while reducing high water demand plantings. There is a long window of opportunity to start changing the perception of what the landscape in Greeley could look like.

Some of these changes include changing the landscape codes which will limit how much turf can be installed and give larger landscaping credits for low water use trees, shrubs and perennials. Parks and athletic field irrigation systems will be designed with conservation in mind and will be installed with 15-20 percent of the park planted in xeric plantings, in parking medians around buildings and entries into the park. City properties will demonstrate xeric plantings to show that conservation can be beautiful. Turf reductions will be studied and applied to HOA green spaces and commercial properties. Parking medians will no longer contain turf and detention ponds will no longer be planted with bluegrass and watered and maintained like parks.

For existing customers, assistance will include design and rebates or grants for xeric plantings and turf removal.

# **CONSERVATION GOAL**

In Greeley's 2008 Water Conservation Plan, a goal was established of reducing demand by 8.2 percent from 2010 to 2030 directly through its conservation program. The net impact of this program is an estimated savings of 144 acre-feet per year, every year which will yield a total savings of over 3,000 acre-feet of water by 2030. This 2014 plan affirms that Greeley continues to support this goal and is on track to achieve these savings. An analysis of estimated savings achieved through the current program, as described below, suggests that this goal is attainable. Indeed the goal may be exceeded, given the current level of conservation effort, particularly as Greeley implements the Water Budget Program.

Table 9: Annual Savings Compared to 2009 Conservation Goal		ioal			
	Goal	2009	2010	2011	2012
Savings in acre-feet	144	182	135	184	191

Table 9: Annual	Savings Con	npared to	2009 Conservation	Goal

Table 10 below shows a list of current and potential future water conservation program measures and presents an analysis of the estimated water savings achievable through the Greeley Water Conservation Program.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Where possible, water savings were measured using data from the Greeley billing system. In most cases, savings were estimated from published research and references are listed in the table. The estimates provided in this table are conservatively low, and it is possible that Greeley may achieve higher savings in the coming years.

			Estimated		
	# of	Estimated	Total		
	Customers	Savings Per	Savings Per		
Current	Impacted Per	Account	Year (ACRE-		
Program/Measures	Year	(kgal/year)	FEET)	Comments	Citation
Mandatory watering				Existing program for 100 years. Unprecedented. Key	
restrictions (3 days per				benefits include: reduced peak demand, more	
week - no watering				regularized demand patterns, useful education tool,	
from noon- 5 p.m.)	ALL	0		keeps water use and efficiency in public eye.	
Soil amendment					
ordinance	200	16.3	10	Estimate based on discussions with Ruth Quade.	"30 % less water is needed" - A1
	4		0	Estimate based on customer contacts and citations	
water waste Urginance	ALL		IU	Issued.	
				Based on average savings level determined at 95 %	Residential End Uses of Water - AWWA, 1999; EPA Residential Retrofit Study -
HET toilet rebate (\$50 -				confidence level. 1,971 rebates have been processed	Aquacraft, 2004; Handbook of Water Use
\$75)	280	10	8.6	since July 2006.	and Conservation, A. Vickers 2001.
					EPA Residential Retrofit Study -
				Based on average savings level determined at 95 %	Aquacraft, 2004; Handbook of Water Use
<b>Clothes washer rebate</b>				confidence level and current clothes washer water use	and Conservation, A. Vickers 2001;
(\$100)	430	5.5	7.3	data	Consortium for Energy Efficiency
Indoor Commercial				Calculation based on data from Ruth Quade (assumes	
Water efficiency audits	200	29.1	17.9	customers take advantage of retrofits).	
	<b>_</b>			Based on 5.8% reduction from paper reports and 2.6%	
WaterInsight home				reduction from emailed reports compared to control	WaterSmart Software Report to City of
water reports			13.2	group.	Greeley.
Conservation education					
program (indeer/outdoor)					"Ac Wa Coolt Education on Water Hea
Includes: water hudget					is Essential as Ponulation Demand Soar"
pilot, public info and				Estimate based historic demand patterns and	Fender, Douglas H. Journal AWWA, Vol.
education programs,				education program implementation timeline. Assumes	95 Iss. 2, February 2003; Handbook of
school program, and				50 % of customers save 500 gallons per year through	Water Use and Conservation, A. Vickers
targeted outreach.	MANY/ALL	0.5	23.0	educational efforts.	2001.
Irrigation efficiency					
audits	300	20	18.4	Engineering estimate	

Table 10: Greeley Water Conservation Program Matrix, Estimated Water Savings, and Source Citation

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	و #	Ectimotod	Estimated Total		
	Customers	Savings Per	Savings Per		
Current	Impacted Per	Account	Year (ACRE-		
Program/Measures	Year	(kgal/year)	FEET)	Comments	Citation
				Based on a measured 1 % reduction in system loss between 97-01 and 02-07 (-6% vs5%) amounting to a 0.1% reduction per year. Reductions will likely taper off	
				at the -3% to -4% levels, but the program effort is probably worthwhile to maintain such a low level of	Greeley water use data provided by
Water loss control	Ч	N/A	25	system losses.	water distribution staff
ESTIMATED ANNUAL PROGRAMS	SAVINGS FROM	CURRENT	133.4	Does not include significant peak usage reductions result be reducing coincident peak day demand by 30 - 40%.	ing from watering restrictions which could
Natural Replacement					
					Residential End Uses of Water - AWWA,
Residential toilet				Assumes 1% of residential customers per year replace	1999; EPA Residential Retrofit Study -
replacement (1% per				toilets. Some apply for the available rebate and some	Aquacraft, 2004; Handbook of Water Use
year)	140	6	3.9	don't.	and Conservation, A. Vickers 2001.
					Residential End Uses of Water - AWWA,
Residential CW				Assumes 3% of residential customers per year replace	1999; EPA Residential Retrofit Study -
replacement (3% per				their washer. Some apply for the available rebate and	Aquacraft, 2004; Handbook of Water Use
year)	430	5.5	7.3	some don't.	and Conservation, A. Vickers 2001.
					Commercial and Institutional End Uses of
					Water - AWWA, 2000; A Practical
					Approach to Water Conservation for
Commercial Industrial				Assumes 1% of CII customers will replace toilets each	Commercial and Industrial Facilities,
Institutional (CII) toilet				year. Water savings estimate is on the low side of	Mohan Seneviratne, 2007; Handbook of
replacement (1% per	) EO	ç	-	scale. Savings are dependent upon usage frequency of	Water Use and Conservation, A. Vickers
ycar)	000	PT			Commercial and Institutional End Uses of
					Water - AWWA, 2000; A Practical
					Approach to Water Conservation for
				Assumes 1% of CII customers will replace faucet	Commercial and Industrial Facilities,
				aerators each year. Water savings estimate is on the	Mohan Seneviratne, 2007; Handbook of
Cll faucet replacement				low side of scale. Savings are dependent upon usage	Water Use and Conservation, A. Vickers
(1% per year)	250	Ŋ	3.8	frequency of the old and new fixture.	2001.
ESTIMATED ANNUAL REPL	. SAVINGS FROM ACEMENT	NATURAL	22.7		

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Comments	e amount represents approximately 0.62% of Greeley's total annual demand. The expected nge of savings should be + or - 10% of the total (140 - 172 ACRE-FEET). When developing these vings into a long-term demand forecast changes in technology and program implementation rates ust be considered.	
Estimated Total Savings Per Year (ACRE- FEET)	156.1	
Estimated Savings Per Account (kgal/year)	DM CURRENT MENT	
# of Customers Impacted Per Year	'UAL SAVINGS FR( IATURAL REPLACE	
Current Program/Measures	TOTAL ESTIMATED ANN PROGRAM AND N	

# IMPLEMENTATION PLAN FOR GREELEY CONSERVATION PROGRAM

Greeley is actively implementing the conservation program described above. The program has evolved over the past 17 years under the guidance of the Water Conservation Coordinator. The Water Conservation Program continues to innovate and offer new programs while focusing on the growing needs of the community and water utility.

# **Monitoring and Evaluation**

The entire suite of current conservation programs are regularly evaluated and judged against annual, seasonal, per customer, and per capita demands. For each program, Greeley will evaluate and monitor the program's progress towards the stated 9.3 percent water savings goal. Additionally, net and gross water savings are regularly evaluated. The water use trends presented earlier in this plan (Figure 5 and Figure 6) demonstrate that per capita water demands in Greeley have declined measurably since 1997.

Every year Greeley creates a rolling 10-year gpcd average that will be used to project future water demands. The new gpcd average will include all active conservation measures and ensure that any savings through conservation are part of Greeley's long-term planning. Water use will also be evaluated taking into account variations created by annual weather conditions. The monitoring and savings will be reported annually on all programs when there is at least a year's worth of consumption data. See Table 7.

Objective and actual conservation results achieved by each component of the plan will be quantitatively monitored and reported to management and the Water Board at least once a year. For example, consumption for those who have received a conservation incentive from the previous year(s) will be monitored and quantified similar to what has been done with the monitoring for the Parks Department.

# **Updating the Conservation Plan**

Greeley will update the conservation plan every seven years per Colorado Water Conservation Board requirements unless significant changes occur within that time frame warranting an accelerated schedule. Greeley's previous Water Conservation Plan was approved in 2009. As part of this, all demand forecasts will be reevaluated at that time.

# **Conservation Plan Review Process, Public Participation, and Adoption**

2008 Conservation Plan Review Process, Public Participation, and Adoption

On August 20, 2008, the City of Greeley Water and Sewer Board reviewed the plan and made comments after which the public comment period began. Public comments ended on October 20, 2008.

On August 21, 2008, the Greeley Water Conservation Plan was posted on the City of Greeley website <u>www.greeleygov.com</u> and hard copies were made available to any interested members of the community at City Hall (1000 10<sup>th</sup> Street) and the Water and Sewer Department at City Hall Annex (1100 10<sup>th</sup> Street).

A total of four public comments were received during the 60-day comment period. To the extent possible, comments were addressed in the revised conservation plan.

Public comments and proposed changes were presented to the City of Greeley Water and Sewer Board on November 19, 2008. The Greeley Water and Sewer Board formally adopted the 2008 Water Conservation Plan on November 19, 2008.

2014 Conservation Plan Review Process, Public Participation, and Adoption

On October 15, 2014, the City of Greeley Water and Sewer Board will review the plan and make comments after which the public comment period will begin. The public comment period will end on December 15, 2014. The plan will be posted on the City of Greeley website <u>www.greeleygov.com</u> and hard copies will be made available to any interested members of the community at City Hall (1000 10<sup>th</sup> Street) and the Water and Sewer Department at City Hall Annex (1100 10<sup>th</sup> Street, Suite 300).

Proposed changes reflecting public comments will be incorporated into the plan, where appropriate, from December 15 through December 30, 2014, with a final draft presented to the Greeley Water and Sewer Board for adoption on January 21, 2015.

The adopted plan will be sent to the Colorado Water Conservation Board for approval on January 22, 2015.

# COMPLIANCE WITH STATE PLANNING REQUIREMENTS

Colorado Revised Statute § 37-60-126 requires a covered entity to develop, adopt, make publicly available, and implement a water conservation plan that will encourage its domestic, commercial, industrial, and public facility customers to use water more efficiently. Key elements that must be considered in development of the plan are listed as follows:

- Water-saving measures and programs including: (I) water-efficient fixtures and appliances; (II) water-wise landscapes; (III) water-efficient industrial and commercial water-using processes; (IV) water reuse systems; (V) distribution system leak identification and repair; (VI) information and education; (VII) conservation oriented rate structure; (VIII) technical assistance; (IX) regulatory measures designed to encourage water conservation; (X) incentives to implement water conservation techniques including rebates.
- 2. Role of conservation in the entity's supply planning.
- 3. Plan implementation, monitoring, review, and revision.
- 4. Future review of plan within 5-7 years.
- 5. Estimated savings from previous conservation efforts as well as estimates from implementation of current plan and new plan.
- 6. A 60-day minimum public comment period.

The following section of the plan details Greeley's compliance with this statute.

# **Greeley Compliance**

The City of Greeley developed this conservation plan in order to comply with C.R.S. § 37-60-126. Each element of compliance is documented below.

## 1. Consideration of specific conservation measures

(I) *Fixture and appliances* – The current program includes residential and commercial toilet rebates and clothes washer rebates, sprinkler clocks, rain sensors and heads, free water conservation kits and general promotion of water efficient fixtures and appliances.

(II) *Water-wise landscape* – The current program includes: rebate for controllers and components; Xeriscape Grant program offering matching money for schools and commercial properties; and Xeriscape education and demonstration gardens. A proposed revision of landscape codes to incorporate water conserving practices into all new landscaping is currently being evaluated.

(III) *Commercial, Industrial and Institutional (CII) measures* – The current program includes: free audits; rebates for toilets, urinals, and clothes washers; air-cooled ice machines; conductivity controllers for cooling towers, etc.; hotel and restaurant conservation cards; CII benchmarking effort; see Appendix A for a complete list of commercial rebates.

(IV) *Water reuse systems* – The water from the wastewater plant is used to satisfy augmentation, return flow, and non-potable demands (by exchange).

(V) *Water loss and system leakage reduction* – The current program includes an active utility water loss and leak detection program. Customer's high bills are flagged and leak investigation is implemented. Currently, Greeley is lining the in-town treated water

reservoirs to tighten up the system. It is estimated that the rehab and lining of in-town treated reservoirs will cut leaks by 98 percent. Water mains in older areas of town are targeted every other year for rehabilitation with a cement mortar lining as a preventative measure.

(VI) Information and public education – The current program includes: various public information campaigns with bill stuffers and related informational materials; Xeriscape education; annual youth water festival; classroom presentations, workshops, classes, and presentations to customers, civic groups and anyone who requests a presentation. A large portion of the budget is dedicated to print, radio and other advertising and promotions.

(VII) Water rate structure – The current program is a billing system based on the cost of service for water; a water budget pilot program is providing feedback to City officials and staff on the best way to implement a custom individualized tiered rate (water budget). Greeley is moving forward with research and development of a water budget based rate structure for implementation in the next five to ten years. In the meantime, Greeley is providing water budget information to individual single family residential customers, so they can better manage their water use.

(VIII) *Technical assistance* – There were none requested for development of this plan.

(IX) *Regulatory measures* – The current program includes: watering restrictions, lawn permit ordinance, soil amendment ordinance, water wasting ordinance, and landscape ordinances.

(X) *Incentives* – A broad range of incentive and rebate programs are included in the measures described above as well as free products.

#### 2. Role of conservation in Greeley supply planning.

Greeley has a \$500,000 budget for conservation. The conservation program is well integrated into overall water supply planning and anticipated conservation savings are included in future demand projections. Water demand forecasts include the expected impacts of water conservation. Greeley is currently examining the potential impacts of the proposed water budget-based rate structure on future demands.

#### 3. Plan implementation, monitoring, review, and revision.

Greeley has developed a careful plan implementation program along with monitoring mechanisms and scheduled review and revisions. Details of this effort are described in the preceding section of this document.

#### 4. Future review of plan within seven years.

The City of Greeley intends to review and update the Water Conservation Plan every seven years.

#### 5. Estimated savings from previous conservation efforts and current plan.

The Greeley Water Conservation Program has accomplished significant demand reductions. Residential per capita use from 1997 to 2001 was 156 gpcd. From 2002 to 2007, gpcd decreased to 133 – a 14.7 percent reduction. Greeley intends to maintain these savings in the coming years. Greeley has established a goal of reducing demand by 9.3 percent directly through its conservation program efforts over the period from 2015 to 2035 compared with projected future demand without conservation.

#### 6. Public comment period.

The Greeley Conservation Plan approval process included the required 60-day comment period. The public participation process started October 15, 2014, through presentation of the draft plan to the Greeley Water and Sewer Board. A 60-day comment period ending on December 15, 2014, followed and was concluded with the adoption of the plan by the Water and Sewer Board on January 21, 2014. A total of XXXX public comments were received.

# APPENDICES:

#### RESOLUTION

Public Notice Announcement Public Comments Official Plan Adoption Resolution

# WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_\_\_\_ NO ENCLOSURE \_\_X\_\_

ITEM NUMBER: 11

TITLE: LEGAL REPORT

POSSIBLE ACTION: STATEMENTS OF OPPOSITION, IF ANY

RECOMMENDATION: INFORMATIONAL ONLY

ADDITIONAL INFORMATION:

# WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_X\_\_\_NO ENCLOSURE \_\_\_\_

ITEM NUMBER: 12

TITLE: DIRECTOR'S REPORT

RECOMMENDATION: INFORMATIONAL ONLY

#### ADDITIONAL INFORMATION:

- Bellvue Pipeline Contract
- Windy Gap Carriage Agreement
- Little Thompson Windy Gap Agreement
- Northern Rule Making



# Water & Sewer Department MEMORANDUM

TO:	Roy Otto, City Manager
FROM:	Burt Knight, Water and Sewer Director
DATE:	October 3, 2014
RE:	Bellvue Transmission Line Northern Segment Phase I Contract

The Bellvue Transmission Line northern segment has two phases. Only two bids were received on August 22 for the first phase. Bid costs were \$22,120,499 and \$22,002,484, respectively. The total budget for both phases was set at \$32,601,060. The 2014 appropriation for construction is \$13,613,747.

This creates two challenges.

1. The bid was over budget and the engineering estimate. A bid review was done and it identified the reasons for the higher than expected bid. There were two primary reasons that the construction bids were higher than the engineer's estimate. Furnishing and installing the pipeline, which includes the pipe material, labor, and bedding material, accounted for 70% of the low bidder's cost. This element exceeded the original estimate by \$4.96 million. The cost for dewatering the construction site was 272% higher than the engineer's estimate. Both bidders used the same subcontractor for dewatering and quoted the same price. This accounts for a differential of \$2.17 million more than the engineer's estimate.

The engineer's estimate for this phase of the northern segment was \$17 million or \$5 million less than the low bid. These two items within the bid package account for a differential of \$7.13 million more in the low bid than the engineer's estimate and account for the bid being over budget.

2. Staff evaluated the appropriation authority to award the contract by consulting with the Finance Department. Finance has determined that there is sufficient budget authority with the budgeted Water Fund to obligate this contract.

Having stated that, we recommend that we amend the 2014 budget to accommodate this contract. We will do this in the final budget amendment ordinance proposed for late November and December. This will ensure a historical record of what transpired from a budgeting perspective.

The timeline on this first phase of the project is tight. Construction for phase I must be complete by mid-April to avoid irrigation impacts to the construction site and construction activity causing damage to adjacent agricultural property during the growing season. This is only one property in phase 1 where easements are being acquired (condemned), and a hearing on the City's request for possession in the condemnation case is scheduled for October 30. Additionally, staff's analysis does not indicate that there would be any improvement in price if we were to rebid the work. We recommend proceeding with this contract.

#### Phase II

This leaves a funding challenge for Phase II of the project. The following table outlines the issue:

Total Project Budget:	\$32,601,060
Spent in 2013:	(1,190,060)
Remaining Budget	31,411,000
Phase I bid award	(22,002,484)
Spent through September, 2014	(1,517,123)
Expected through EOY	(50,000)
Project Balance	\$7,841,393

Water and Sewer currently estimates phase II will cost approximately \$12 million. For the purposes of this discussion, we have increased the cost by 20% and added administrative costs for phase II through the life of the total project. These changes translate into a total budget requirement for phase II of approximately \$16 million. This suggests an additional \$8 million is needed to complete phase II.

The additional funds needed to complete phase II will likely be met with the issuance of future debt. Future debt issuances are already planned within the water fund but the increase in cost for this project will increase the amount of debt issued. This will increase debt service payments and possibly require future rate increases beyond what is currently expected. The impact of taking on an additional \$8 million in debt is projected to be relatively minor, however, and would probably cause rates to increase about 1% beyond the rate increases currently scheduled. That being said, future rate increases are difficult to forecast because factors like growth, water use, and debt interest rates are unknown and variable.

Phase II will be bid in the fall of 2015. The City has acquired easements on all but two of the properties in phase II, and has filed condemnation actions to acquire the remaining easements. Right of way costs are a comparatively small part of the project budget, and there is ample funding to complete these acquisitions. There are monies appropriated in the 2015 budget to accommodate administrative and planning expenses.

# WATER & SEWER BOARD AGENDA OCTOBER 15, 2014

ENCLOSURE \_\_\_\_\_ NO ENCLOSURE \_\_X\_\_

ITEM NUMBER: 13

TITLE: SUCH OTHER BUSINESS THAT MAY BE BROUGHT BEFORE THE BOARD AND ADDED TO THIS AGENDA BY MOTION OF THE BOARD

RECOMMENDATION: TO BE DETERMINED

ADDITIONAL INFORMATION: