

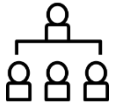
Water and Sewer Board

Regular Meeting

City Council Chambers – City Center South

1001 11th Avenue – Greeley, Colorado

November 15, 2023 at 2:00 p.m.



Regular meetings of the Water and Sewer Board are held **in person** on the 3rd Wednesday of each month in the City Council Chambers, 1001 11th Avenue, Greeley, Colorado.



Members of the public may attend and provide comment during public hearings.



Written comments may be submitted by US mail or dropped off at the Water and Sewer office located at 1001 11th Avenue, 2nd Floor, Greeley, CO 80631 or emailed to wsadmin@greeleygov.com. All written



comments must be received by 10:00 a.m. on the date of the meeting.

Meeting agendas and minutes are available on the City's meeting portal at [Greeley-co.municodemeetings.com/](https://greeley-co.municodemeetings.com/)

IMPORTANT – PLEASE NOTE

This meeting is scheduled as an **in-person session only**. If COVID, weather, or other conditions beyond the control of the City dictate, the meeting will be conducted virtually and notice will be posted on the City's MuniCode meeting portal by 10:00 a.m. on the date of the meeting (<https://greeley-co.municodemeetings.com/>).

In the event it becomes necessary for a meeting to be held virtually, use the link below to join the meeting. Virtual meetings are also livestreamed on YouTube at <https://www.youtube.com/CityofGreeley>.

For more information about this meeting or to request reasonable accommodations, contact the administrative team at 970-350-9801 or by email at wsadmin@greeleygov.com



November 15, 2023 at 2:00 PM
1001 11th Avenue, City Center South, Greeley, CO 80631

Agenda

1. Roll Call
2. Approval of Minutes
3. Approval of the Agenda
4. Welcome New Employees and Promotions
5. Recommend to Council Lead Service Line Prohibition Code Changes
6. Development Code Water Policy Update
7. Customer Information System (CIS) Update
8. Water Supply Update
9. Severance IGA Concept
10. Legal Report
11. Director's Report
12. Such Other Business That May Be Brought Before the Board Added to This Agenda by Motion of the Board.
13. Adjournment



If, to effectively and fully participate in this meeting, you require an auxiliary aid or other assistance related to a disability, please contact the Water and Sewer Department administrative staff at 970-350-9801 or wsadmin@greeleygov.com

**City of Greeley
Water and Sewer Board
Minutes of October 18, 2023
Regular Board Meeting**

Chairman Harold Evans called the Water and Sewer Board meeting to order at 2:00 p.m. on Wednesday, October 18, 2023.

1. Roll Call

The Clerk called roll and those present included:

Board Members:

Chairman Harold Evans, Vice Chairman Mick Todd, Cheri Witt-Brown, Fred Otis, Tony Miller, Manuel Sisneros, Joseph Murphy, Deputy City Manager Donald Tripp on behalf of City Manager Raymond Lee

Water and Sewer Department staff:

Director Sean Chambers, Deputy Director of Water Resources Ty Bereskie, Deputy Director of Utility Finance and Customer Service Erik Dial, Chief Engineer Adam Prior, Office Manager Gigi Allen, Administrative Assistant III Crystal Sanchez, Water Resource Administrator II Alex Tennant, Water Resource Administrator I Megan Kramer, Water Resource Operations Manager Leah Hubbard, Water Conservation Manager Dena Egenhoff, Water Resource Planning Manager Kelen Dowdy, Water Resource Administrator III Matt Sparacino, Plans Examiner Derek Hannon, Water Resource Administrator II Sam Harshbarger, Civil Engineer IV Jim Paulson, Rates and Budget Analyst Virgil Pierce, Communication Specialist II Cory Channell, Source Water Supply Manager Cole Gustafson, Water Efficiency Resource Coordinator Margarita Padilla-Pizarro

Legal Counsel:

Supervising Senior Environmental & Water Attorney Jerrae Swanson, Senior Environmental & Water Resources Attorney Dan Biwer, Environmental and Water Resources Attorney I Arthur Sayre, Counsel to Water & Sewer Board Attorney Jim Noble

Guests:

Emeritus Robert Ruyle, Councilmember Deb DeBoutez, James Sutherland from Wingfoot Water Resources

2. Approval of Minutes

Mr. Miller made a motion, seconded by Ms. Witt-Brown to approve the September 20, 2023 Water and Sewer Board meeting minutes. The motion carried 7-0.

3. Approval of Agenda

Item Number 5 (Trails Master Plan Update (CPRD)) was removed from the agenda as the person presenting this item was unable to attend the meeting.

4. Welcome New Employees and Promotions

Director Sean Chambers provided an introduction of new Water and Sewer Department employees starting this month.

5. CIP Update

Adam Prior gave updates on the following projects: Peterson Dam, treated water reservoir, distribution system rehab, 71st Ave water distribution repair, lead service line inventory and replacement, non-potable water expansion, Terry Ranch water pipeline, Hwy 257 Tunnel installation, sewer projects, nitrification project phase II.

Council member Deb DeBoutez joined the meeting at 2:26 pm

6. Water Development Code Policy

Erik Dial discussed proposed changes to Title 20 of the Municipal Code. Most of the changes proposed are aligning code with current practices and procedures but staff is proposing a limited number of changes to fees charged that deserve Board deliberation. Staff discussed the changes to the material that was presented to Board in September. Staff will provide additional details to the Board in November.

7. 60" Bellvue Transmission Pipeline and FEMA BRIC Grant Update

Adam Prior and Virgil Pierce presented an update to the Board on the progress and status of the 60" Bellvue Potable Water Transmission Pipeline and recent notice of award of the \$13.8M FEMA Building Resilient Infrastructure and Communities (BRIC) grant.

The following staff and guests left the meeting at 3:09 pm: Crystal Sanchez, Sam Harshbarger, Jim Paulson, Derek Hannon, Virgil Pierce, Matt Sparacino, Cory Channell, Margarita Padilla-Pizarro, Dena Egenhoff, James Sutherland, Deb DeBoutez.

8. Executive Session

Chairman Evans moved that the Board hold an executive session to address the following matters as provided by C.R.S. §24-6-402(4)(a), (b), and (e) and Greeley Municipal Code Sec. 2-151 (a) (1), and (5):

1. For the purpose of determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and instructing negotiators in potential water acquisitions based on the current water market.

The motion was seconded by Joe Murphy. The motion carried 7-0.

Present during Executive Session were:

Chairman Harold Evans, Vice Chairman Mick Todd, Tony Miller, Manuel Sisneros, Cheri Witt-Brown, Joe Murphy, Fred Otis, Emeritus Robert Ruyle, Director Sean Chambers, Deputy City Manager Don Tripp, Water Supply Manager Cole Gustafson, Supervising Senior Environmental & Water Attorney Jerrae Swanson, Senior Environmental & Water Resources Attorney Dan Biwer, Environmental and Water Resources Attorney I Arthur Sayre, Counsel to Water & Sewer Board Attorney Jim Noble, Deputy Director of Water Resources ty Bereskie, Deputy Director of Utility Finance and Customer Service Erik Dial, Chief Engineer Adam Prior, Water Resource Administrator II Alex Tennant, Water Resource Operations Manager Leah Hubbard, Water Resource Planning Manager Kelen Dowdy, Office Manager Gigi Allen

This executive session was authorized by Subsection(s) (a) and (e) of Section 24-6-402(4) of the Colorado Revised Statutes, and Subsection(s) (1) and (5) of Section 2-151 (a) of the Greeley Municipal Code.

The Executive Session ended at 3:35 pm.

Crystal Sanchez rejoined the meeting at 3:36 pm

9. Legal Report

Mr. Noble presented this month's legal report. He reported that, based on a review of the July, 2023 Water Division 1 Resume, staff and water counsel recommend that the Water and Sewer Board authorize filing statements of opposition to the following water court applications that would be due at the end of October, 2023:

1. **Case No. 23CW3100:** Applicant, Hartford Investments, LLC, is seeking to change 12.83 shares of stock in the Lake Canal Ditch Company, for use at a new 570 acre residential community north of Windsor named "Prairie Song." The Lake Canal is a senior ditch that diverts from the north side of the Cache la Poudre River in Fort Collins. Legal counsel and staff recommends participating in this case to ensure that the changed water rights are properly quantified and to protect Greeley's water rights from injury.

2. **Case No. 23CW3104:** Applicants, Fort Collins-Loveland Water District and East Larimer County Water District, are seeking to change the point of diversion, place, and purpose of use for 9.5794 shares in the New Mercer Ditch Company. The applicants seek to use the water rights for municipal purposes in their service areas. Legal counsel and staff recommends participating in this case to ensure that the changed water rights are properly quantified and to protect Greeley's water rights from injury.

Vice Chairman Todd moved that the Board authorize filing statements of opposition in Case Nos. 23CW3100 and 23CW3104, and for staff and legal counsel to seek resolution of issues raised by these cases consistent with Water and Sewer Board Resolution No. 3, 2015. Mr. Murphy Seconded the motion. The motion carried 7-0.

10. Director's Report

Sean Chambers provided the Water and Sewer Board a brief update on the following items of water utilities policy interest:

1. Distribution of bound final IWRP – Integrated Water Resources Plan.
2. Becky Mitchel's appointment to lead the state's Interbasin Compact Committee
 - a. Opportunity to align IBCC work and expertise with Colorado River Commissioner priorities on the upcoming renegotiations of the Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead.
 - i. Sean Chambers is the South Platte Basin alternate to the IBCC backing up Jim Yahn of North Sterling and Sean Cronin of Left Hand – St. Vrain Conservancy District.
3. City of Greeley and Colorado Water Industry Education and Advocacy Events Calendar
 - a. **Upper Colorado River Water Forum** - Oct. 30-31st
 - i. Colorado Mesa University in Grand Junction, CO.
 - ii. <https://www.coloradomesa.edu/water-center/events.html>
 - b. **CWCB's C-9 Statewide Water Basins Roundtable Summit** – November 14th
 - c. **Northern Colorado Water Conservancy District's Fall Symposium** – Nov. 15th
 - i. Embassy Suites – Loveland, CO
 - ii. <https://www.northernwater.org/NorthernWaterevents>
 - d. **Colorado Ag Water Alliance Agricultural Water Summit** – Nov. 17-18th
 - i. Larimer Co. Fairgrounds, Loveland, CO
 - ii. <https://www.coagwater.org/summit>
 - e. **West Greeley Conservation District Ag Symposium** – Nov. 29 – 30th
 - i. Island Grove Park, Greeley
 - ii. <https://www.wgcd.org/>

- f. **South Platte Basin Water Forum** – November 30th
 - i. Aims Community College Welcome Center
 - ii. <https://www.southplatteforum.org/>
- g. **Colorado River Water User Association (CRWUA) Annual Meeting** – Dec. 13 – 15th
 - i. <https://www.crwua.org/welcome.html>
- h. **Colorado Water Congress Annual Meeting & Legislative Breakfast** – Jan. 31- Feb 2nd
 - i. Aurora-Denver Hyatt Conference Center
 - ii. <https://www.cowatercongress.org/advocacy/>

11. Such Other Business That May Be Brought Before the Board Added to This Agenda by Motion of the Board

No other business was brought before the Board.

12. Adjournment

Chairman Evans adjourned the meeting at 3:51 pm.

Harold Evans, Chairman

Raymond Lee, Board Secretary



Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Sean Chambers, Water & Sewer Director

Title:

Welcome New Employees and Promotions

Summary:

New Hires: Richard Belisle – I and C – OT System Administrator
James McCullough – Bellvue – Maintenance Mechanic
Dariana Contreras - Utility Billing - Customer Service Rep

Promotions: Abigail Valdavia-Ramirez - Utility Billing Supervisor

Recommended Action:

Informational only

Recommended Motion:

N/A

Attachments:

None



Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Keri Fishlock, Engineer

Title:

Recommend to Council Lead Service Line Prohibition Code Changes

Summary:

The EPA's Lead and Copper Rule Revisions (LCCR) require the city to develop an inventory of all public and private water service line materials and remove lead service lines. The city is offering a free program to replace customer service lines that are found to contain lead. The City is proposing a new ordinance to prohibition lead service lines, require removal of lead service lines, and comply with LCCR Regulations.

Recommended Action:

Recommend to City Council Code Changes for Lead Service Line Prohibition

Recommended Motion:

N/A

Attachments:

1. Lead Service Line City Ordinance
2. W&S Code Lead Pipe Replacement

City Ordinance for Prohibition of Lead Service Lines

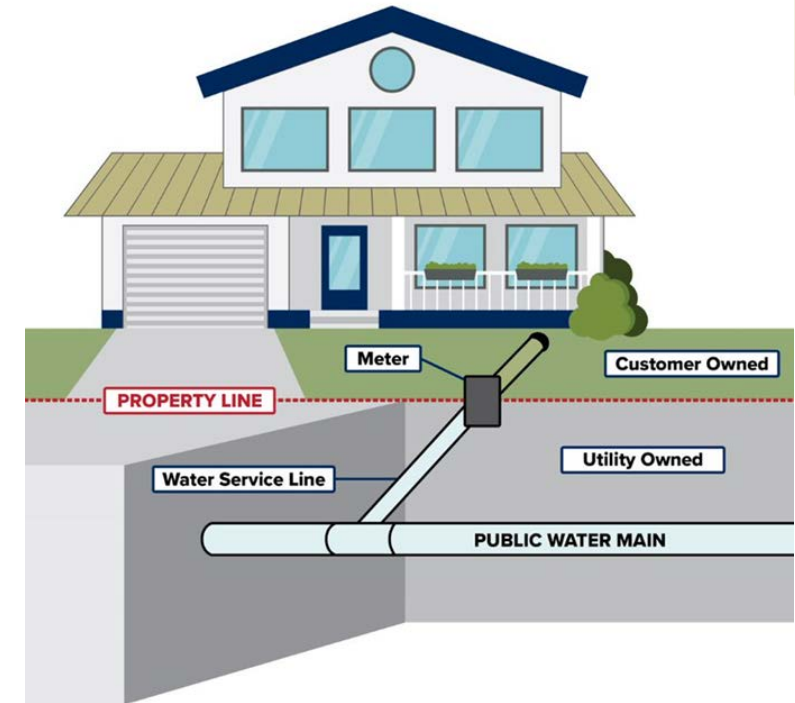
Adam Prior
Chief Engineer

Keri Fishlock
Project Manager

Water & Sewer Board Presentation
November 15th, 2023

Lead Inventory & Removal Project

- New EPA regulations (LCRR) require the city to develop and maintain a service line inventory.
- The city is offering a free replacement program to replace service lines containing lead.
 - Planned completion by end of 2025
- Proposing a new city ordinance to support:
 - Protecting public health
 - Remove lead service lines
 - Comply with LCRR Regulations



Inventory Progress:

- **Phase 01 Potholing (Completed)**
 - 140 properties investigated
 - 62 of these properties were identified to have service lines containing either lead or galvanized steel requiring replacement (GRR)
- **Phase 02 Potholing & Inspections (In Progress)**
 - 1,000 properties to be investigated



Replacements Progress:

Of the 62 planned replacements in Phase 01:

- Around 12 property owners remained unresponsive to our communication attempts
- Another 3 property owners provided consent but did not provide safe access
- Failure rate of close to 25%



City Ordinances on Lead Service Lines:

Have been utilized in other cities and included:

- Mandates for replacement of lead service lines
- Right of entry to property to perform work
- Proof of replacement required for real estate transfer

Not all cities offer free replacement, some pay a subsidy or offer low interest loans.



Proposed City of Greeley Ordinance

- Mandates that all lead service lines be replaced
- Gives property owners 60 days to **respond** to City of Greeley notification of lead service line.
- The Ordinance also prevents existing service lines being repurposed, unless proof is provided that they are constructed from approved materials.



Proposed City of Greeley Ordinance

If a property owner fails to respond to a free replacement:

- The City will record a notice of lead service line against the property
- The property owner will be charged a monthly administrative fee

which includes:

- Additional testing requirements
- Additional reporting requirements
- Communications / public outreach



Proposed City of Greeley Ordinance

The city may require the property owner to replace the lead service line prior to:

- Transfer of water account to new tenant or owner
- Issuing a permit



Proposed City of Greeley Ordinance

Finally, after December 31, 2025, the director may also, upon providing six months notice to the property owner, turn off water to the structure or building that is being served by the lead service line until it has been replaced.





Questions?



CITY OF GREELEY, COLORADO
ORDINANCE NO. _____, 2023

**AN ORDINANCE AMENDING TITLE 20, CHAPTER 3 OF THE GREELEY MUNICIPAL
CODE RELATING TO THE PROHIBITION OF LEAD SERVICE LINES**

WHEREAS, the City of Greeley, Colorado ("City") is a home rule municipality empowered pursuant to Sections 1 and 6 of Article XX of the Colorado Constitution to, inter alia, construct, purchase, acquire, lease, add to, maintain, conduct, and operate water works and everything required therefor, within or without its territorial limits, for the use of the City; and

WHEREAS, the United States Environmental Protection Agency (the "USEPA") adopted regulations to control lead and copper in drinking water and the Colorado Department of Public Health and Environment directed the City to replace lead service lines in accordance with the USEPA's lead and copper rule; and

WHEREAS, the City believes that providing clean, lead-free drinking water to its residents is a public purpose beneficial to the City as a whole and any benefit to any private landowner in accomplishing this purpose is incidental and subordinate to this primary public and governmental purpose; and

WHEREAS, in 2023, the City created a comprehensive plan to protect families that may be exposed to lead in the water due to lead service lines on their property; and

WHEREAS, in addition, the City created a program to replace lead service lines on private property ("Lead Service Line Replacement Program") and to protect its residents from the potential dangers of lead in the water; and

WHEREAS, it has come to the City's attention that some property owners with lead service lines are not providing consent for the Lead Service Line Replacement Program as fast as is necessary to immediately and effectively achieve regulatory compliance and protect the health and safety of its residents; and

WHEREAS, for the health, safety and welfare of its residents, City Council desires to require all property owners serviced by a lead service line, to replace that service line either through the program established by the City at no cost to the property owner or replace the line at their own expense.

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

Section 1. That Section 20-193 contained in Chapter 3 Article III Division 3 of Title 20 of the Greeley Municipal Code shall be amended as shown on Appendix A, attached hereto and incorporated herein.

Section 2. That Section 20-194 contained in Chapter 3 Article III Division 3 of Title 20 of the Greeley Municipal Code shall be amended as shown on Appendix A, attached hereto and incorporated herein.

Section 3. Except as explicitly modified on Appendix A, all other provisions of Title 20 of the Greeley Municipal Code shall remain in full force and effect.

Section 4. This Ordinance shall take effect on the fifth day following its final publication, as provided by Section 3-16 of the Greeley City Charter.

PASSED AND ADOPTED, SIGNED AND APPROVED ON THIS ____ DAY OF _____, 2023

ATTEST

THE CITY OF GREELEY, COLORADO

By: _____
City Clerk

By: _____
Mayor

APPENDIX A

ORDINANCE AMENDING TITLE 20, CHAPTER 3 OF THE GREELEY MUNICIPAL CODE RELATING TO THE PROHIBITION OF LEAD SERVICE LINES

Section 1. That Section 20-193 contained in Chapter 3 Article III Division 3 of Title 20 of the Greeley Municipal Code be amended to read as follows:

Sec. 20-193—~~Reserved~~ Lead Service Lines Prohibited.

(a) All property owners must replace lead service lines connected to city water mains with water service lines made of materials approved by the city either through the program established by the city at no cost to the property owner or at their own expense. As used in this section, lead service line means all or a portion of the service line that is made of lead (including a galvanized service line that is or may have been previously located downstream from a lead service line or a service line made from an unknown or unverified material) and that runs from the water main into a structure or building.

(b) If the city notifies a property owner that their property is being served by a lead service line, the property owner shall have sixty (60) days to contact the city and arrange for the replacement of the lead service line. If a property owner fails to contact the city within sixty (60) days, the city will record a notice of lead service line against the property and charge the property owner a monthly administrative fee until the property owner replaces the service line. The administrative fee shall be based on the estimated cost to the city to conduct all necessary maintenance, testing, or reporting requirements related to the identified lead service line.

(c) If a property owner fails to comply with section (b), the city may require the property owner to replace the lead service line prior to (1) transferring a water service line account to a new tenant or property owner or (2) issuing a permit under title 22. After December 31, 2025, the director may also, upon providing six (6) months notice to the property owner, turn off water to the structure or building that is being served by the lead service line until it has been replaced.

Section 2. That Section 20-194 contained in Chapter 3 Article III Division 3 of Title 20 of the Greeley Municipal Code be amended to read as follows:

Sec. 20-194—~~Reserved~~ Repurposed Service Lines Prohibited.

No water service line, including fire, irrigation, or non-potable, may be repurposed for potable water service or any other type of water service until the city determines based on satisfactory evidence provided by the property owner that the line is not a lead service line as defined under section 20-193(a).



Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Erik Dial, Deputy Director of Utility Finance

Title:

Development Code Water Policy Update

Summary:

Staff will discuss with the Water and Sewer Board proposed changes to Title 20 of the Municipal Code. Most of the changes proposed are aligning code with current practices and procedures but staff is proposing a limited number of changes to fees charged that deserve Board deliberation. Staff will discuss the changes to what was presented to Board in September and October and seek additional feedback. Staff expects to bring the code changes to the Board in December for recommendation to City Council.

Recommended Action:

N/A

Recommended Motion:

N/A

Attachments:

1. 2023 Municipal Code Update - November



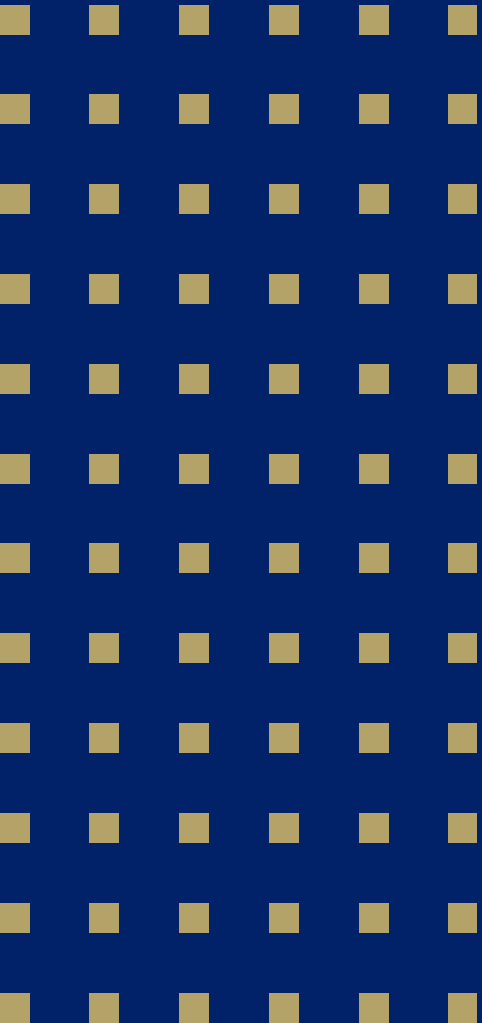
Municipal Code Title 20 Update Policy Discussion

**Water & Sewer Board
November 15, 2023**

Agenda



- Review Proposed Policy Changes
- Tap and Service Configuration – Outstanding Policy Issue

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Review Proposed Policy Changes

Minimum Water Dedication



- Propose minimum water dedication for a single-family tap set to 60,000 gallons
 - 2.7 people per lot using 60 gallons per capita per day works out to 59,130 gallons per year
 - 3 acre feet/acre criteria does not collect enough raw water for small lots
 - This will not lead to decreased water dedication for any size of lot, only increases.

Large Lot (1 ac or Larger) Dedication



- Current standard requires a service commitment agreement
 - Allows for dedication based on “developed” area
- Return to 3 acre-foot requirement for large lots
 - Reduce only if system has a private non-potable system and then require a minimum of 60,000 gallons of potable dedication
 - The addition of an accessory dwelling unit would require dedication of another 60,000 gallons



Additional Code Cleanup

- Raw water requirements for Car Wash category
 - Code change in 2019 changed the raw water requirement to 1,350,000 gallons per car wash bay
 - This did not accurately reflect water use
 - One customer used well in excess of dedication
 - Technology is changing – proposing engineering evaluation to determine raw water needs
- Clarified that no Plant Investment Fee credit given for redevelopment of a tap that has been inactive for 10 or more consecutive years

Plant Investment Fees

Residential Lot Type	Lot Size (s.f.)	Potable Irrigation	Common Space Non-Potable	House to House Non-Potable
Row House	>1000 s.f.	50%	50%	50%
Small Format	1,500-3000 s.f.	50%	50%	50%
Small Lot	3,000-4,500 s.f.	60%	60%	50%
Medium Lot	4,500-6,000 s.f.	70%	70%	50%
Standard Lot	6,000-13,000	100%	75%	50%
Estate Lot	>13,000	100%	100%	50%

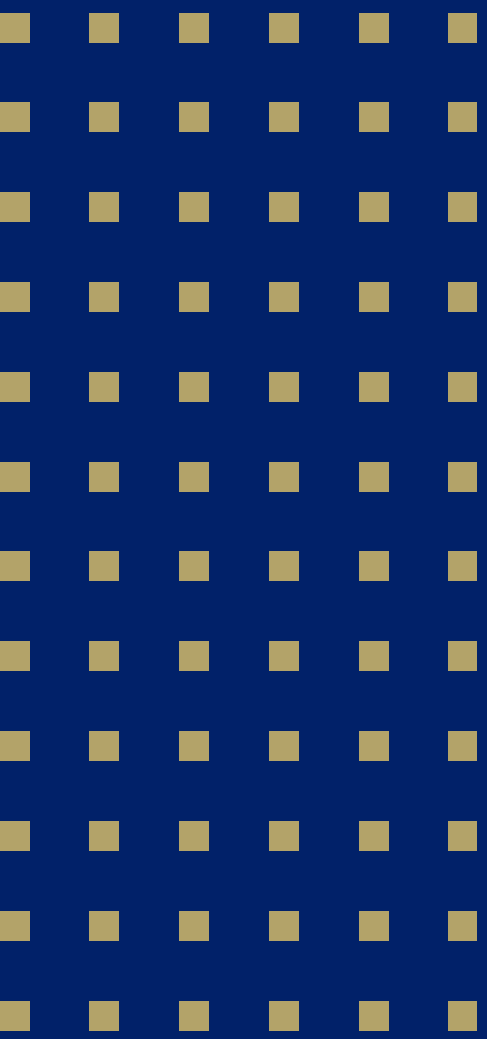
Plant investment fee schedule to be included in annual rate resolution

Small Lot Water PIF Comparison



	Proposed Mixed Development	6,000 SF Standard Lots	8,000 SF Standard Lots
Total Lot Area	16.1 Acres	16.1 Acres	16.1 Acres
Dwelling Units	174	116	87
Water PIFs	\$1,289,860	\$1,403,600	\$1,052,700
Sewer PIFs	\$1,200,600	\$800,400	\$600,300
Total PIFs	\$2,490,460	\$2,204,000	\$1,653,000

- Ongoing single-family development of 174 units split between duplexes and detached single family units
 - Duplex units 3,929 SF average - \$7,260 per tap
 - Single family units 4,691 SF average - \$8,470 per tap
 - Total PIFs collected per acre increases compared to standard lot development

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Tap and Service Configuration

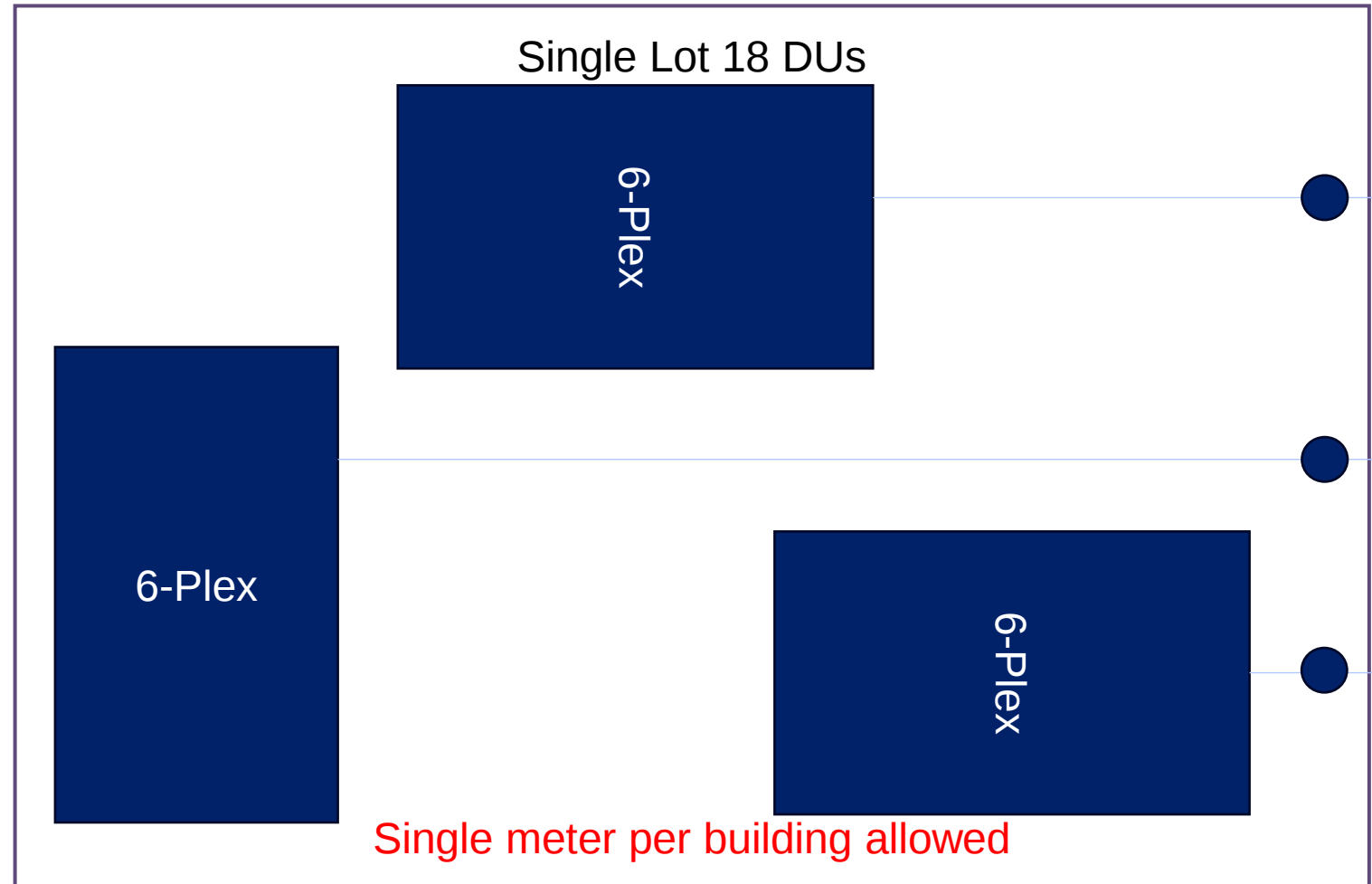
Protection & Equity

Tap & Service Configurations

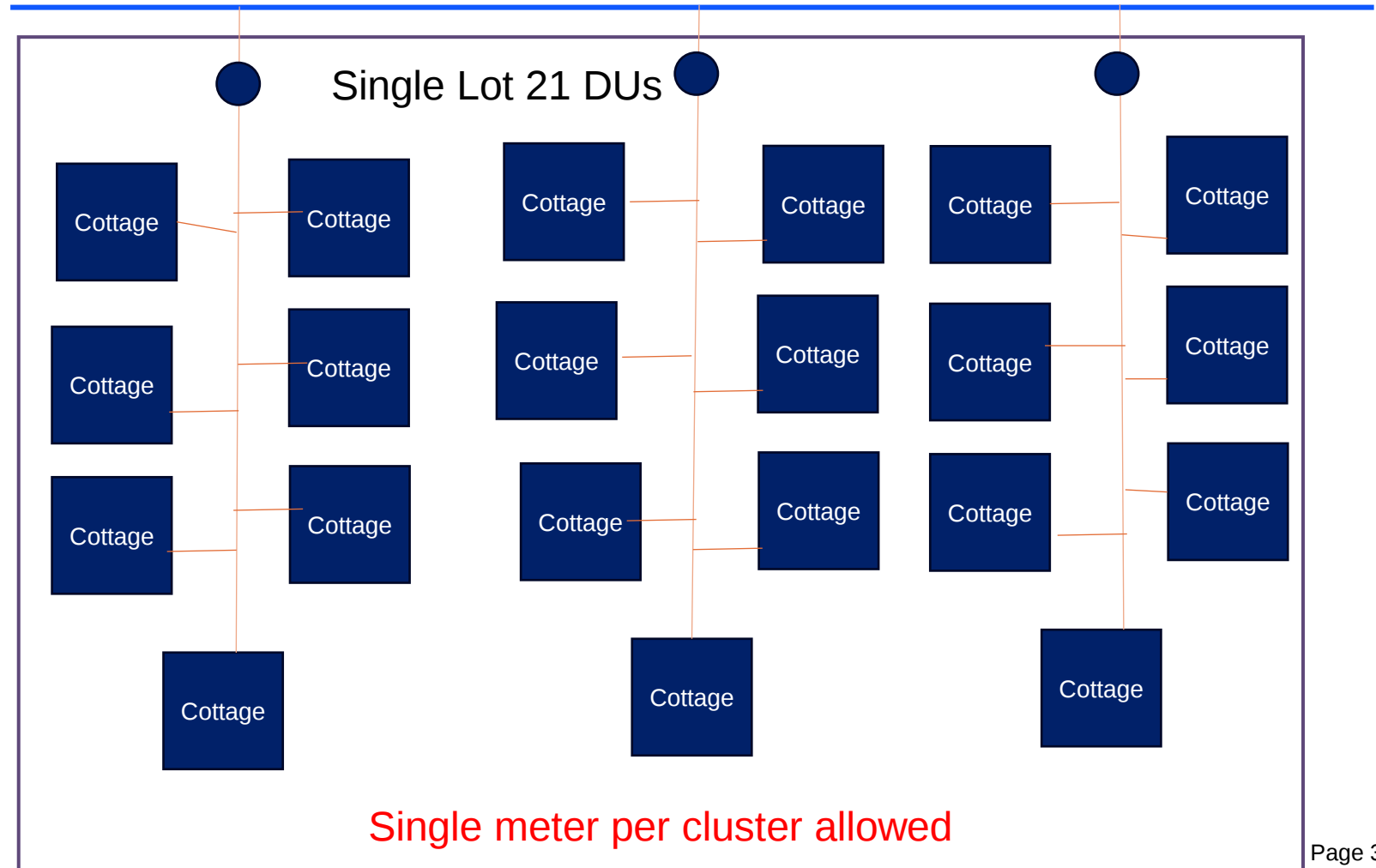
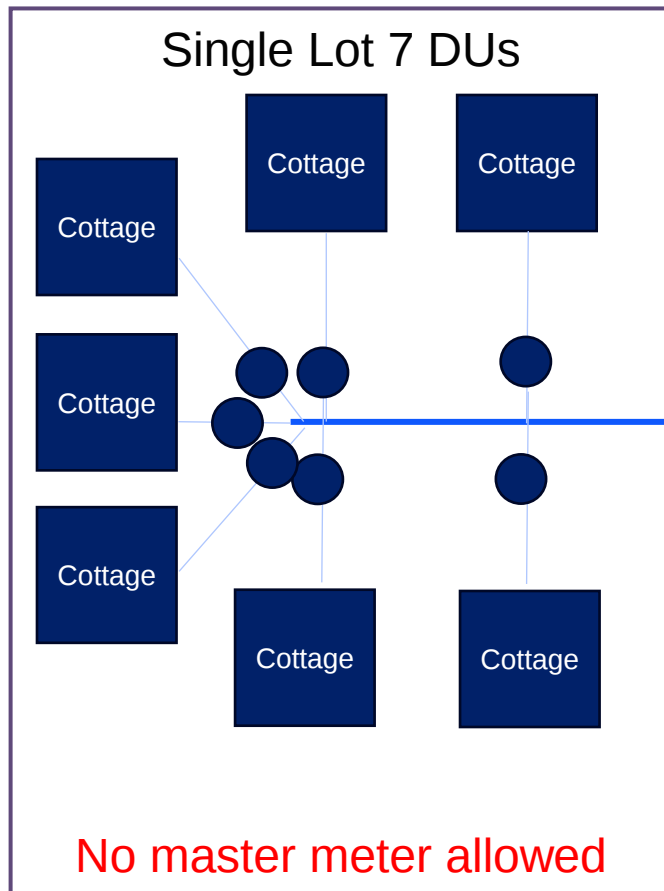


- Updated development code encourages mixture of housing types
- Allow for compound services on single lots
 - This would allow accessory dwelling units, detached garages, etc. to be served from the primary structure
- Right size service requirements
 - Design criteria to set a minimum number (10) of detached or row units on the lot to allow master meters
 - Criteria to also set a maximum number of 12 clustered detached units per meter

Row House Scenarios



Cottage or Mobile Home Scenarios



Future Steps



- Additional W&S Board feedback
- Code revisions to Board for approval next month
- Code changes to City Council in January/February
- Plant Investment Fee revisions included in 2024 Rate Resolution

Thank you





Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Erik Dial, Deputy Director of Utility Finance

Title:

Customer Information System (CIS) Update

Summary:

Staff will update the Water and Sewer Board about the status of the Customer Information System (CIS) replacement project. The limitations of Greeley's current CIS and the enhanced customer service functionality a new CIS will provide will be covered as well.

Recommended Action:

N/A

Recommended Motion:

N/A

Attachments:

1. CIS Project Update



Customer Information System Project Update

**Water & Sewer Board
November 15, 2023**

CIS Replacement Need



Details ▾ Links ▾ Actions ▾

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Account Information

Account Number [REDACTED] - 1
Meter Route * 077 - ROUTE077
Master Account [REDACTED] 🔍

Account Detail

Balance 0.00
Pending Payment 0.00
Account Status Active Change

Service Address

Address * [REDACTED] 🔍
City/State/Zip GREELEY CO [REDACTED]
PARCEL R8111799
Unit
Owner [REDACTED]
Municipality * 1 - GREELEY

Defined Fields

ACCOUNT TYPE
USER 2
LAND USE RES LO
FINAL BILL FNLB 05/14

Occupant Information Dual Notification ACH Details Balance Information History

Billing Address

Owner/Tenant * O - Owner
Customer Name * [REDACTED] 🔍
Use Default ☒
Address [REDACTED]
City/State/Zip GREELEY CO [REDACTED]

General

Social Security
Drivers License
Phone
Email Address

Exempt

- Current system is a 1990's era platform
- Inflexible database structure
 - Example: Cannot add a 5th water rate tier
- Customer experience lacking
- Interfaces difficult/expensive
- Utility Billing has many manual workarounds

Modern CIS Functionality



localhost:9006/Viewitem/Account/00fb3eea-544a-46be-91ec-dafe456770cf

Recently Visited

Home / Accounts / Accounts List

Watch out for Gregory's dog! #alertlow

Active R6867997 Gregory Speaker 4105 30th St

CityEmployee Demo

Type	Residential	Status	Active
Billing Cycle	Residential Accounts 1	Last Statement	\$234.08 on Oct 26, 2023
Statement Option	Utility Statements - Regular	Last Payment	\$35.87 on Aug 17, 2023 9:00 PM
Due Date Method	By billing cycle	Collections Routine	General Collections Routine
		Credit Rating	0

Account Balance Summary

Total Balance	\$234.08
Current	\$0.00
Total Past Due	\$234.08

Deposit Summary

Deposit On Hand	\$0.00
Outstanding Deposits (To Be Paid)	\$0.00
Total Deposit Due	\$0.00

Map

Legacy Account ID R6867997

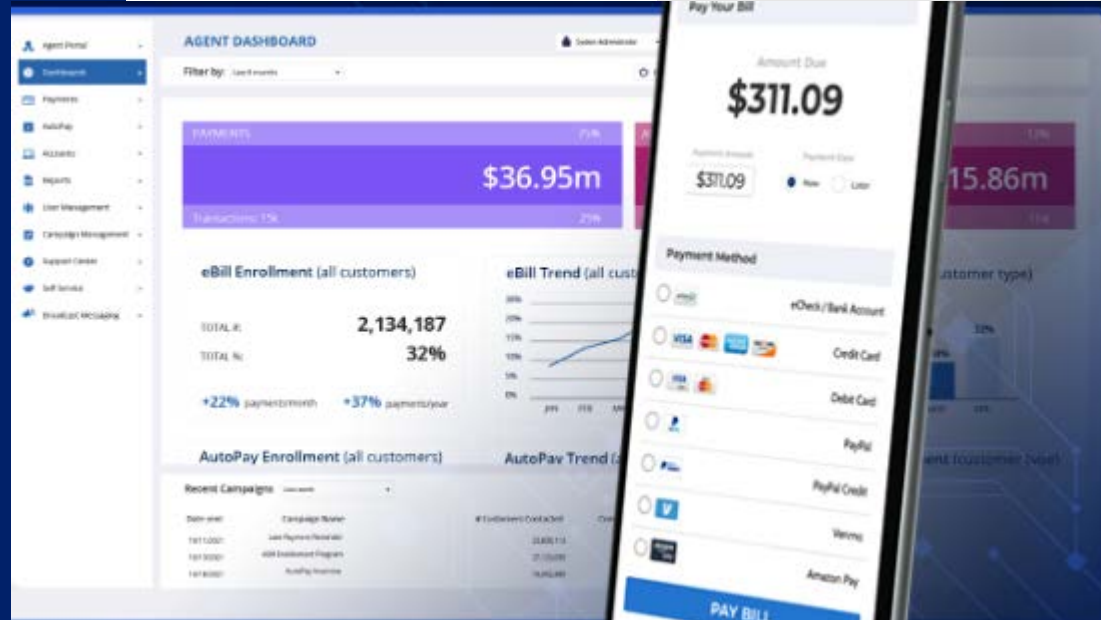
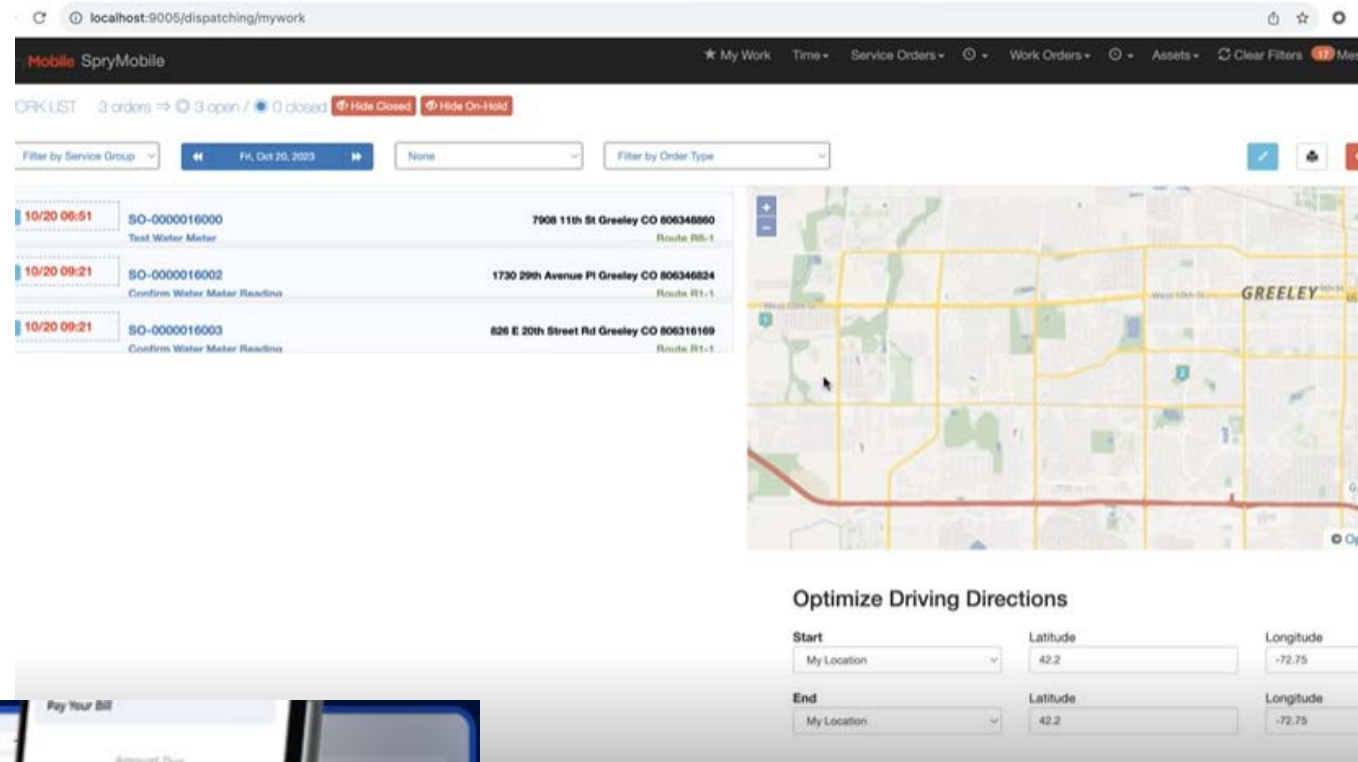
Billing Agreements

BA0000051442 - Water - Residential	Active	Service Date: Feb 20, 2005 - Present
Rate: WB-Rt - Water Budget - Residential		
BA0000051443 - Sewer - Residential <td>Active</td> <td>Service Date: Feb 20, 2005 - Present</td>	Active	Service Date: Feb 20, 2005 - Present
Rate: S-CM-01 - Sewer - Commercial Service		
BA0000051444 - Stormwater - General <td>Active</td> <td>Service Date: Feb 20, 2005 - Present</td>	Active	Service Date: Feb 20, 2005 - Present
Rate: SW-GS-01 - Stormwater - General		

- Browser based
- Intuitive
- Configurable
- Easily integrated
- Better collections
- Customer focused – additional self serve functionality
- Better data, better decisions



Additional Functionality



- Customer portal – payment and account management
 - Payment processing integration and flexibility
- Mobile work order for field staff
- Cross connection control
- Call center integration



Teams and Team Members

Steering

- Erik Dial – W&S
- Sean Chambers – W&S
- Krystal Dilka – IT
- Bret Nabor - IT
- Nick Hoyle - IT
- Kelli Johnson - CMO
- Kimberly Southern-Weber – CMO
- Cory Channell – C&E

Project

- Erik Dial – W&S
- Yesenia Padilla – W&S
- Annamaria Ramirez – W&S
- Ana Vega – W&S
- Dena Egenhoff – W&S
- Dennis Margheim – W&S
- Krystal Dilka – IT (Project Manager)
- Scott Swanson - IT
- 2 App Analysts – IT
- Ryan LaFave – Stormwater
- Brian Pesis – Plante Moran



Timeline (Rough)



↓

Narrowed down to one vendor finalist – 2-day demonstration mid-December

Thank you





Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Alex Tennant, Water Resource Administrator II

Title:

Water Supply Update

Summary:

Staff will provide a presentation and memorandum to the W&S director on current water supply, 2023 weather summary, 2023 agricultural water rental summary, and the drought forecast through the end of the year.

Recommended Action:

N/A

Recommended Motion:

N/A

Attachments:

1. 2023 November Water Supply Update
2. 2023 Water Supply Update

2023 Water Supply Update

Water & Sewer Board
November 15th, 2023

Ag Water Rental Summary

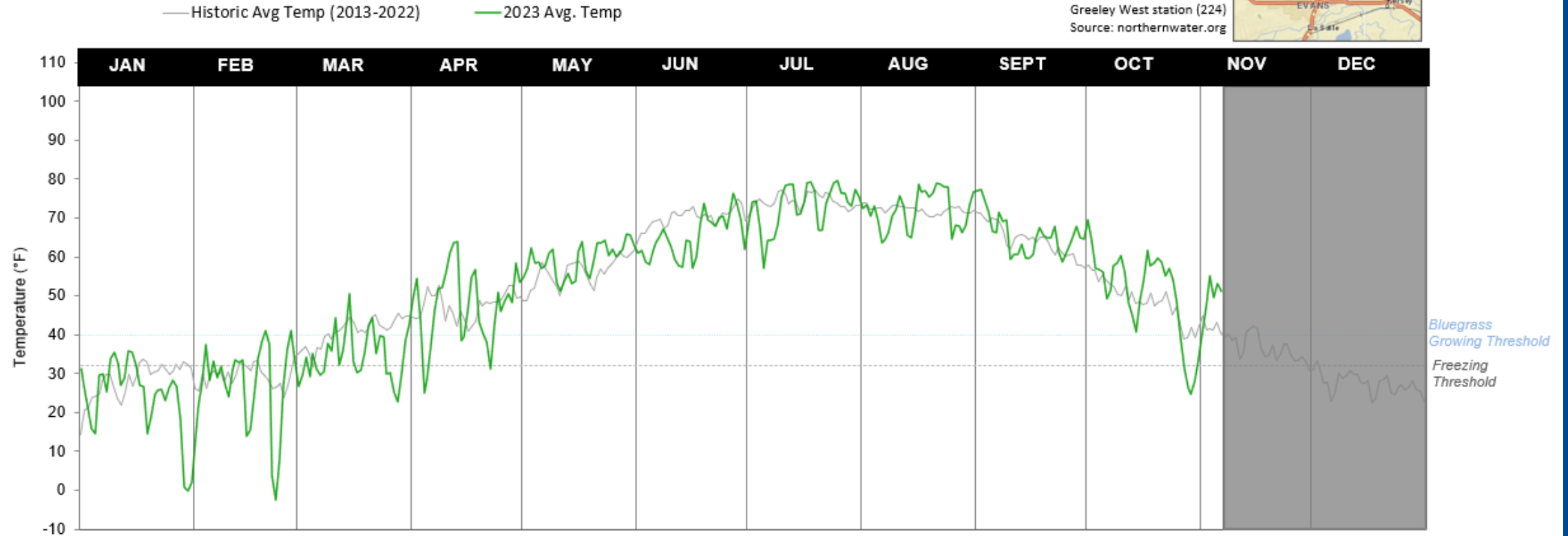
• C-BT	6,000	AF
• GLIC changed	1,722	AF
• GLIC unchanged	3,669	AF
• WSSC	517	AF
• NPIC	187	AF
• HMR	4,300	AF
• Leasebacks		
◦ WSSC	1,808	AF
◦ GLIC	9,655	AF
◦ L&W	614	AF
◦ New Cache	488	AF
Total	28,960	AF



City of Greeley: Temperature (°F) and Precipitation 2023



Greeley West station (224)
Source: northernwater.org

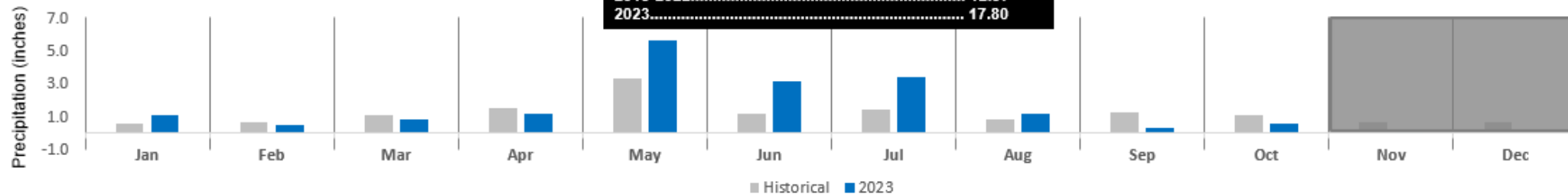


MONTHLY AVERAGE TEMPERATURE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
2013-2022	28.2° F	29.4° F	40.8° F	47.4° F	55.9° F	70.0° F	74.2° F	72.2° F	64.4° F	48.9° F	37.7° F	27.4° F
2023	24.0° F	27.0° F	34.8° F	47.3° F	59.2° F	65.2° F	72.9° F	71.9° F	65.7° F	50.6° F	49.4° F	0.0° F

CUMULATIVE PRECIPITATION TO DATE (INCHES)

2013-2022.....	12.97
2023.....	17.80



2023 Weather

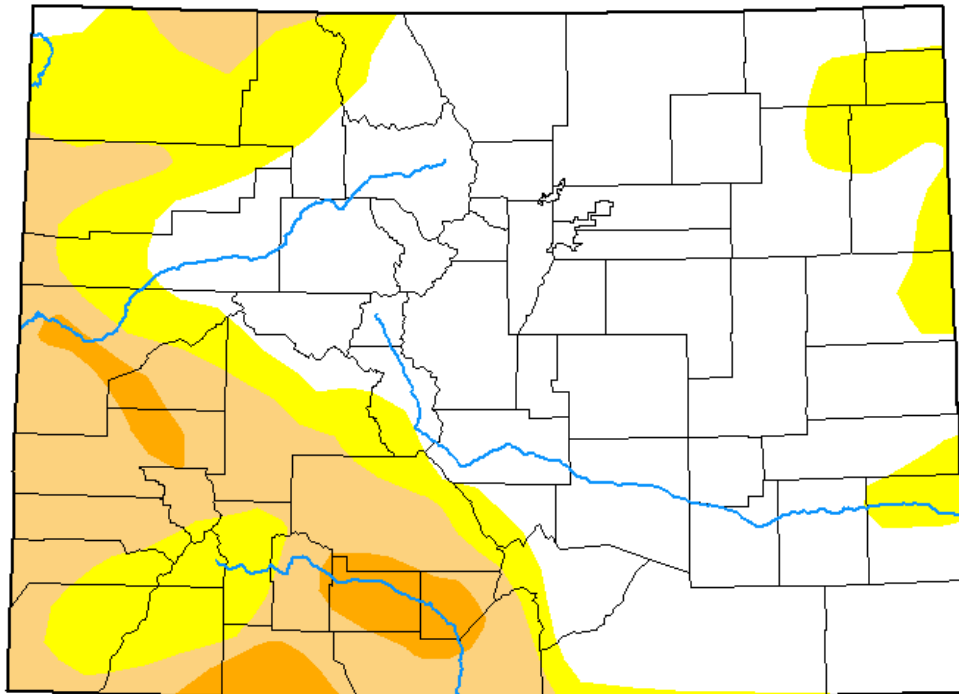
- Above average precipitation
- Colorado temperatures were below average January-July
- 2023 has been the hottest meteorological summer in the Northern Hemisphere
- El Nino climate pattern
- Snowpack is low, but it is still early



Current Drought Conditions

U.S. Drought Monitor Colorado

October 31, 2023
(Released Thursday, Nov. 2, 2023)
Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

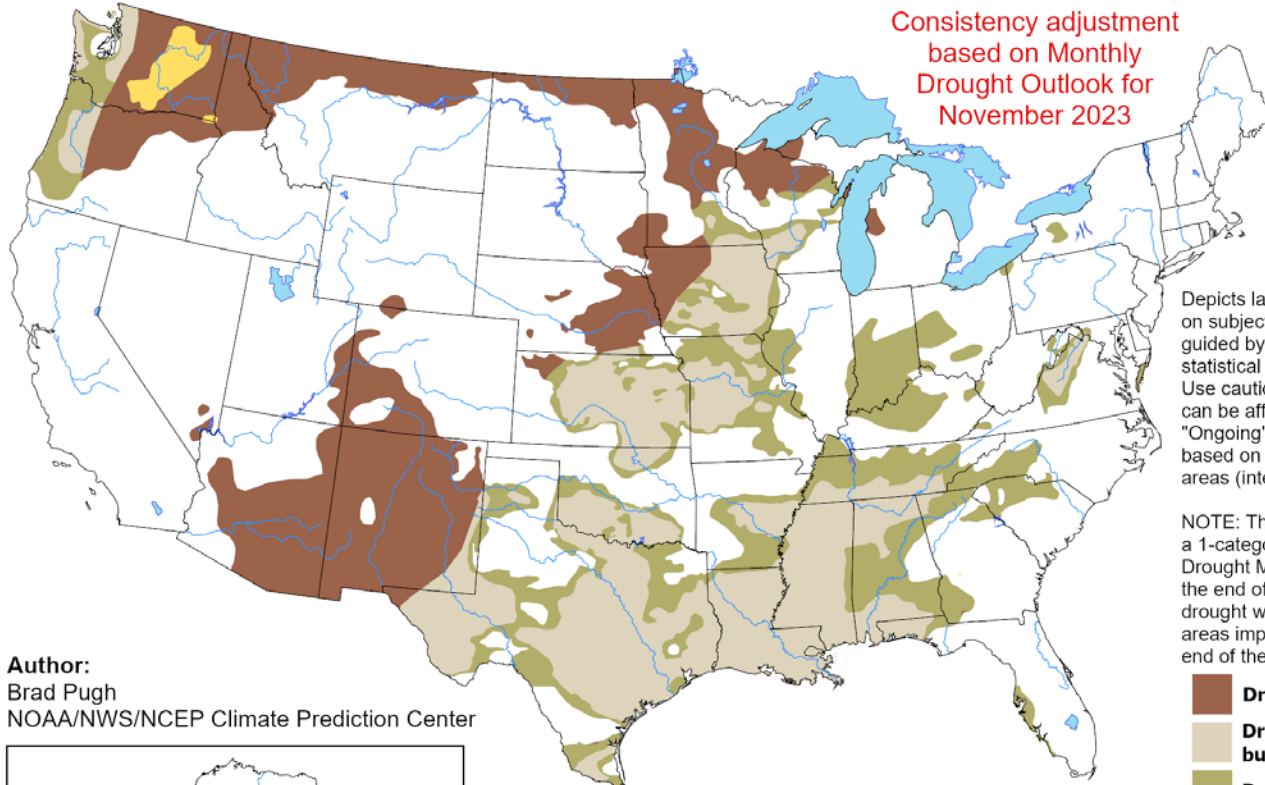


Drought Outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for November 1, 2023 - January 31, 2024
Released October 31, 2023

Consistency adjustment
based on Monthly
Drought Outlook for
November 2023

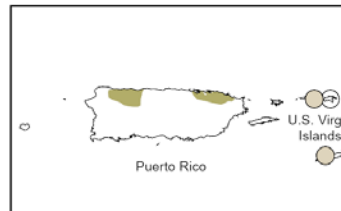


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought

Author:
Brad Pugh
NOAA/NWS/NCEP Climate Prediction Center



<https://go.usa.gov/3eZ73>



3-month temperature outlook

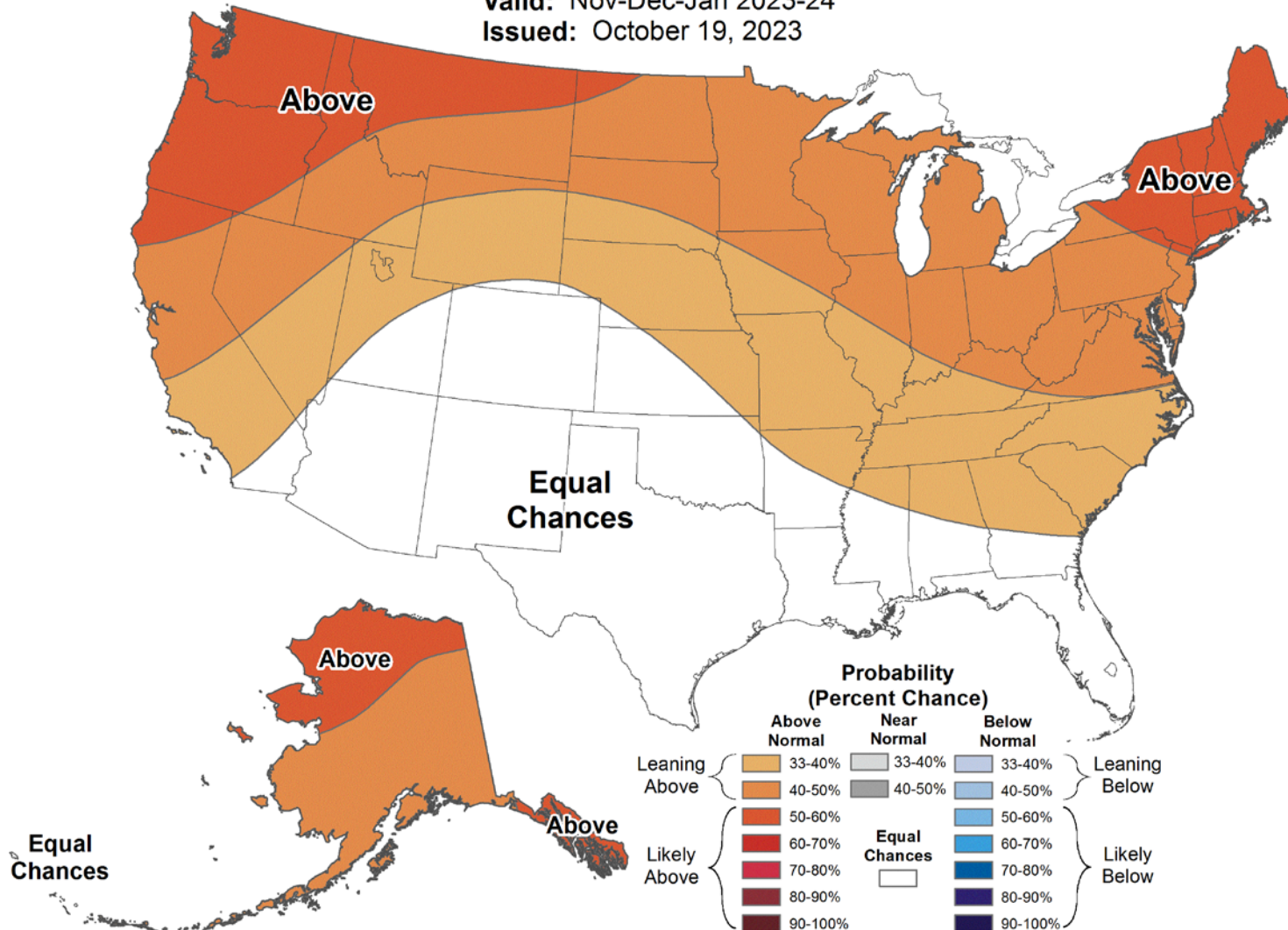


Seasonal Temperature Outlook



Valid: Nov-Dec-Jan 2023-24

Issued: October 19, 2023



3-month precipitation outlook

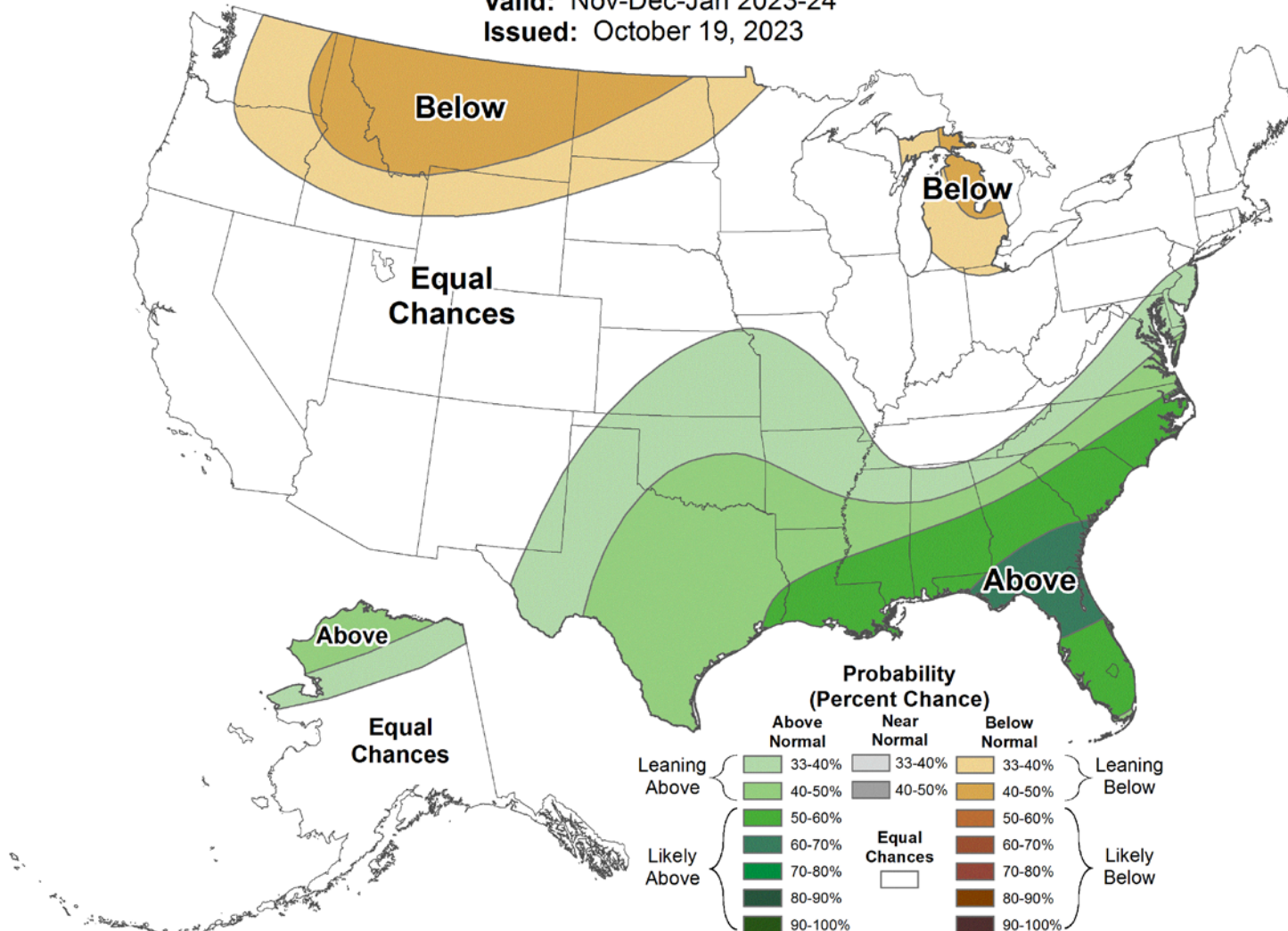


Seasonal Precipitation Outlook



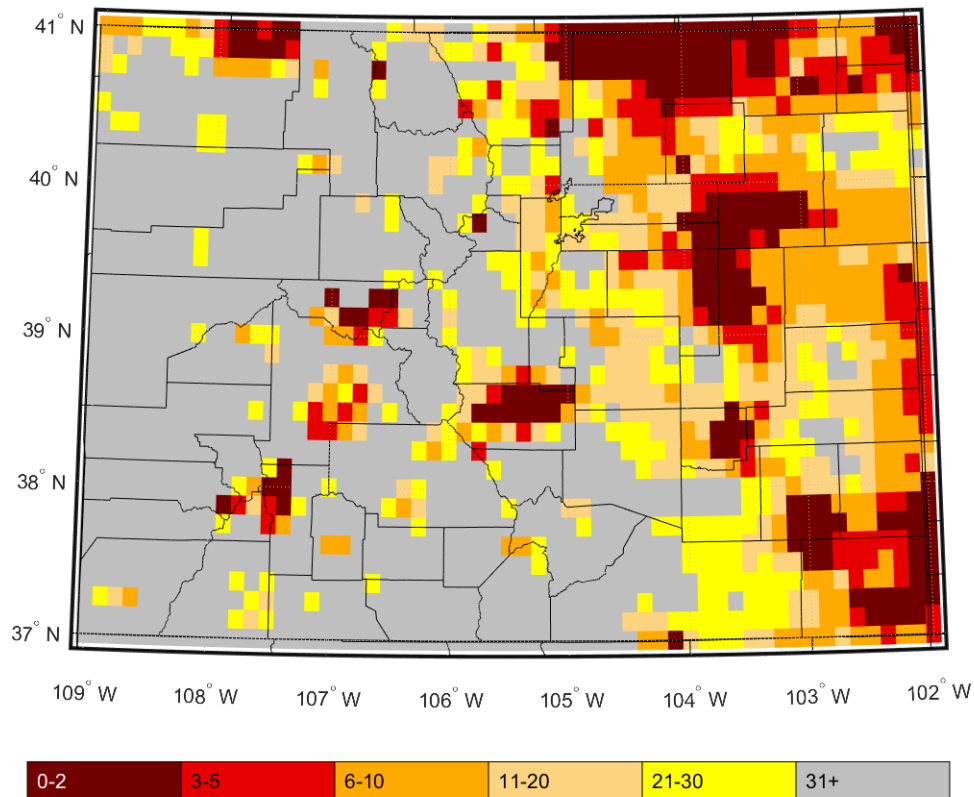
Valid: Nov-Dec-Jan 2023-24

Issued: October 19, 2023

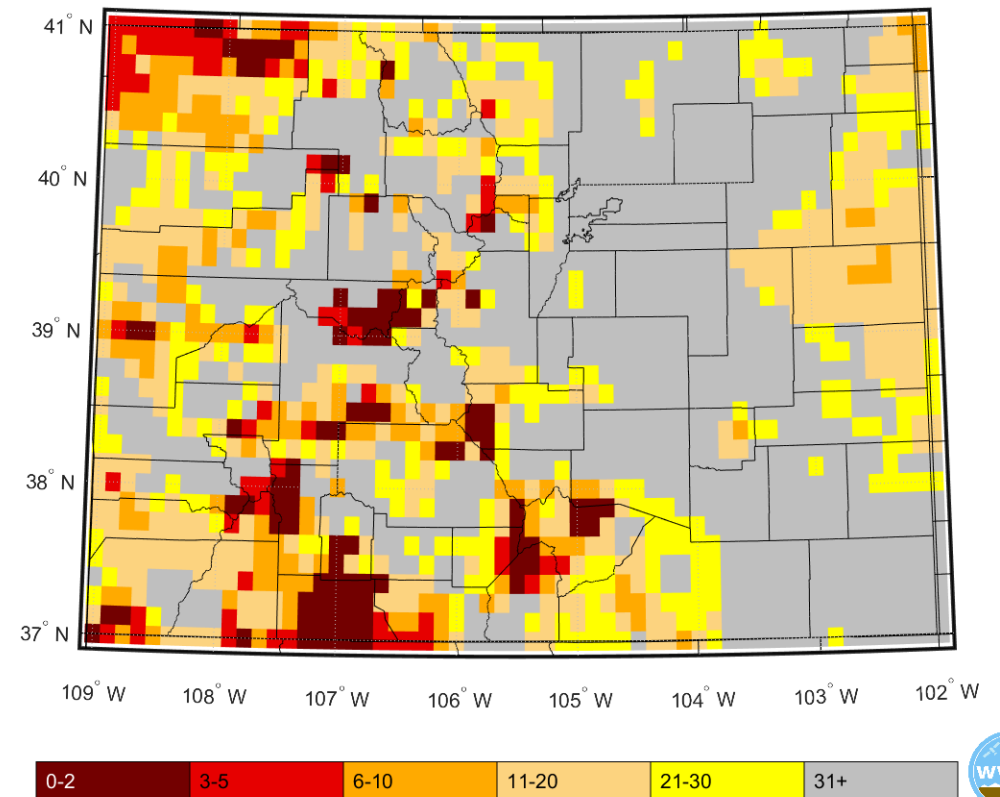


Soil Moisture Comparison

Top Meter Soil Moisture Percentile
11/01/2022



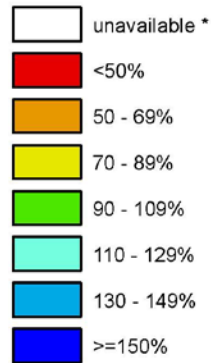
Top Meter Soil Moisture Percentile
10/31/2023



Colorado SNOTEL Current Snow Water Equivalent (SWE) % of Normal

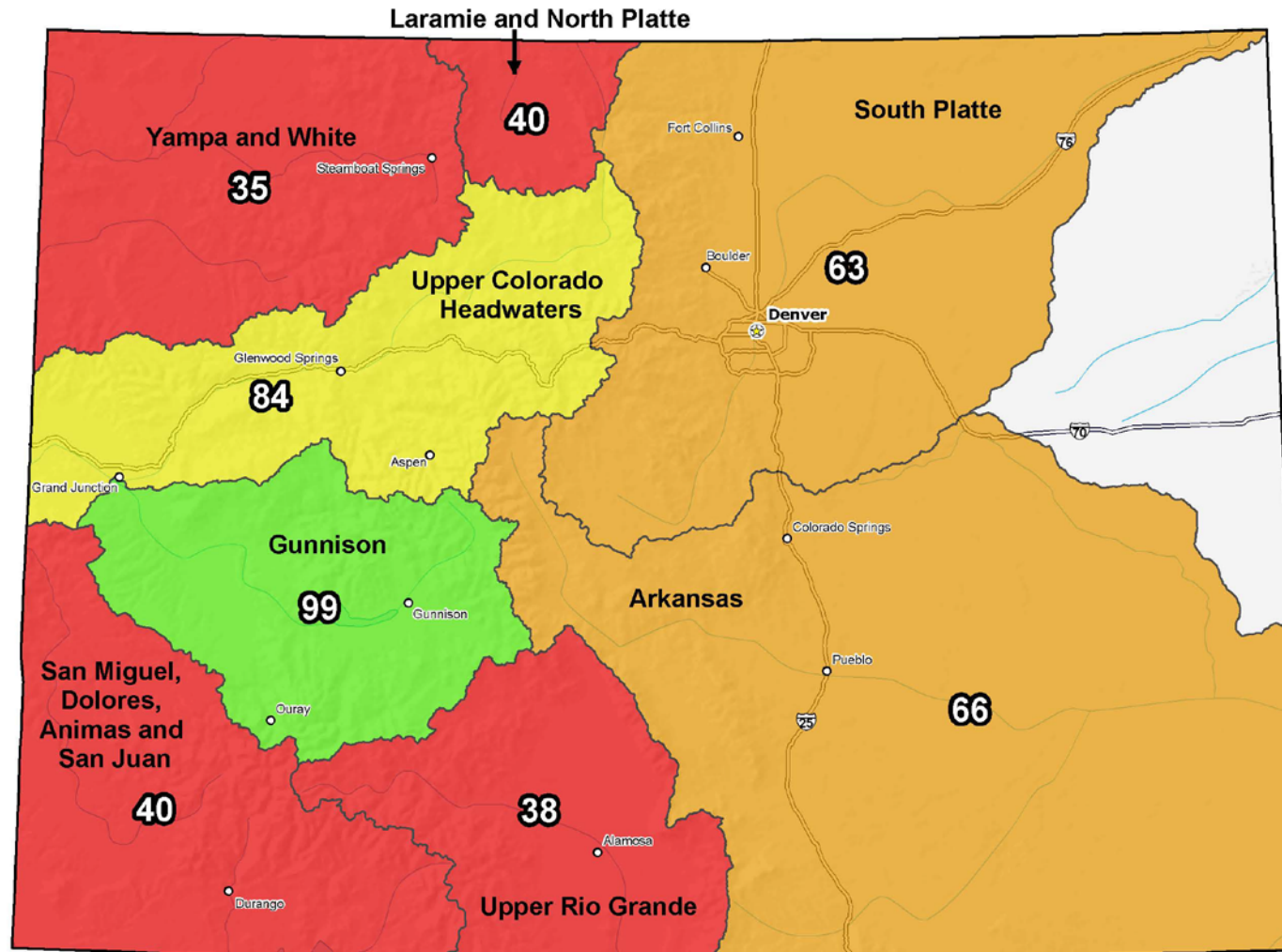
Nov 07, 2023

Current Snow Water
Equivalent (SWE)
Basin-wide Percent
of 1991-2020 Median



* Data unavailable at time
of posting or measurement
is not representative at this
time of year

**Provisional Data
Subject to Revision**



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<https://www.nrcs.usda.gov/wps/portal/wcc/home/>

Milton Seaman Reservoir



- Reservoir was full by mid-October
- The last time the reservoir was full by this time of year was in 2018
- Staff achieved this by taking advantage of late-season North Fork flows

Greeley System Storage

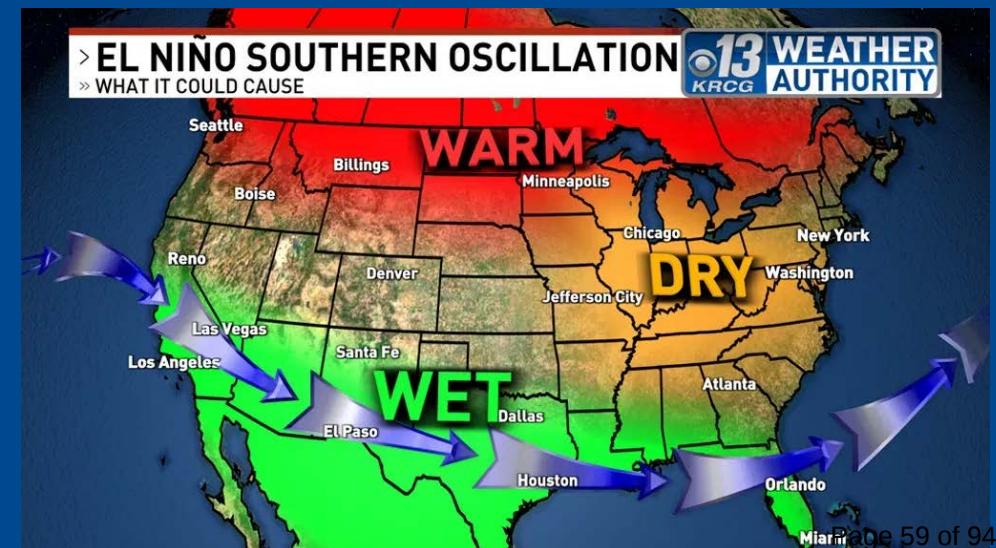
April 1, 2024 Storage (acre-feet)	
CBT	19,511
Windy Gap	500
GLIC	20,322
Tunnel	1,174
Total	41,507
Demands (April 1, 2024 - March 31, 2025) (acre-feet)	
CBT	16,500
Windy Gap	2,500
GLIC	10,500
Tunnel	1,000
Total	30,500
Yields through March 2025	
CBT	11,402
Windy Gap	4,000
GLIC	11,250
Tunnel	800
Total	27,452
April 2025 Projected Storage (acre-feet)	
CBT	16,402
Windy Gap	0
GLIC	21,072
Tunnel	1,000
Total	31,474
Target Storage	21,300

- Initial CBT quota set at 50%
- GLIC reservoirs filled in June
 - System storage approximately 75%
- HMR's operated successfully in 2023



Summary

- Drought conditions is not currently present in the South Platte River basin
- Good soil moisture is a factor in strong runoff
- Many local reservoirs are above 60% capacity
- Shifting to El Nino climate pattern. In Northern Colorado, El Nino often brings warmer weather, but good chance at an average snowpack



Moving into winter



- Continue to maintain adequate target storage volume
- Monitor drought and water supply

Northern Water Board

- Longtime Northern Colorado Water Conservancy District Board of Directors president, Mike Applegate, retired after 32 years as a director and 25 years as president.
 - Longest serving president in Northern Water's history
- Dennis Yanchunas from Boulder County has been elected as the new president
 - Served on the Board since 2010
 - Previously the president of the Municipal Subdistrict
- Vacant Larimer County director seat has been filled by Dave Stewart of Fort Collins
 - Owner and president of Stewart Environmental Consultants Inc
 - Previously served on Fort Collins Water Board



Questions?



MEMORANDUM

TO: Sean Chambers, Water and Sewer Director
FROM: Alex Tennant, Water Resources Administrator II
DATE: November 8, 2023
RE: 2023 November Water Supply Update

ISSUE

In accordance with the Drought Emergency Plan, staff will report the water supply status to the Greeley Water and Sewer Board (“Board”) in April, July and November of each year. This report is on the final numbers from water year 2023 and the forecast for water year 2024.

The Water Resources Division’s goal is maximize rentals, maximize storage and minimize spill by closely monitoring drought conditions, associated hydrologic conditions, and storage levels. Previous modeling analysis has shown that the target storage level needed to provide adequate drought protection for the citizens of Greeley is approximately 21,300 acre-feet. When the target storage level is met, Board can declare an “adequate water year” with normal watering restrictions. As base use demands increase in the future, periodic reevaluation of the target storage level will be required to ensure it is adequate to supply the citizens of Greeley.

The Greeley System Storage Analysis MS excel application is used for projecting the target storage level over a 12-month period. The model performs an annual water balance to arrive at a forecasted April 1st carryover storage based on existing supplies and demands for the current year. The storage analysis model only includes standard operational practices and does not take into account other plans (additional drought restrictions, etc.) that may be available to Greeley.

BACKGROUND

In 2023, monthly temperatures were below average January through July. This year’s cumulative precipitation to date 17.8 inches which is 140% of the 10-year average of 12.8 inches. Monthly precipitation totals from January through April varied between above and below average and precipitation May through August was significantly above average. Currently, the South Platte Basin storage is at 116% of average and the state is at 110% of average. Production through October totaled 20,907 acre-feet, which 9% lower than the 5-year average due to the cool, wet spring and summer weather.

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.

The Colorado drought monitor shows the majority of Colorado is not in a drought condition; however, there is some moderate drought in the southwest portion of the state. The NOAA 3-month temperature projections indicate average temperatures throughout the state. The NOAA 3-month projection for precipitation indicates equal chance for an average precipitation year. Soil conditions are wetter than normal for much of the state. In 2022, the east slope was very dry while the west slope was closer to normal, but in 2023 the soil moisture profile flipped, the east slope is in great condition heading into the winter. Snowpack levels are at 62% and 79%, for the South Platte and Colorado Basin, respectively. While the snowpack is below average, reservoir levels and soil moisture are both in favorable condition which should keep drought at bay through the winter.

We are entering the first year of El Nino climate pattern. This developed in summer 2023 and has strengthened to almost a 100% certainty that at least some form of El Nino will be present through March 2024. For Colorado, this means variable conditions across the state and from year to year, however, generally the northern portion of the state experiences warmer conditions, but equal chances of precipitation for the entire state.

For Water Year (WY) 2023, the High Mountain Reservoir (HMR) system yielded around 4,300 acre-feet of supply with the majority of that rented out to agriculture. This is back on track with the historical yield because we filled Comanche and Hourglass reservoirs. The Greeley Loveland System (GLIC) yielded 24,683 acre-feet which was a full dividend. This resulted in a spill of all carryover water from 2022. Greeley rented out over 6,000 acre-feet of excess Colorado Big Thompson water (C-BT) to agriculture. In total, Greeley leased approximately 28,960 acre-feet in agricultural leases and high mountain reservoir water.

The Greeley System Storage Analysis table for Water Year 2024 shows the April 2025 storage level will be approximately 36,662 acre-feet. This conservatively assumes the following:

- High demands in Greeley
- No Windy Gap carryover
- 50% quota issued for the C-BT project
- Collateralizing 4,450 acre-feet of C-BT for Greeley's Windy Gap requirements
- Dry year yields for the GLIC system

Given GLIC cannot currently be treated and fully utilized year round, the estimated target storage volume minus the GLIC water that cannot feasibly be used is 29,662 acre-feet, which is still above Greeley's 21,300 acre-foot target.

April 1, 2024 Storage (acre-feet)	
CBT	19,511
Windy Gap	500
GLIC	20,322
Tunnel	1,174
Total	41,507
Demands (April 1, 2024 - March 31, 2025) (acre-feet)	
CBT	16,500
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Windy Gap	4,000
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Tunnel	800
Total	27,452
April 2025 Projected Storage (acre-feet)	
CBT	16,402
Windy Gap	0
GLIC	21,072
Tunnel	1,000
Total	31,474
Target Storage	21,300

SUMMARY

Initial Projections show the target storage volume is greater than 21,300 acre-feet. Staff will revise the projected storage volume in April after Northern declares the quota and the Board will make a determination of adequate water year at the April 2025 Board meeting.



Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Adam Prior, Chief Engineer

Title:

Severance IGA Concept

Summary:

The town of Severance approached the city about constructing an emergency water interconnect from Greeley. The original proposal infrastructure had limited benefits or justifications for the extensive time and resources to complete the interconnect. Staff has reviewed the 2021 Transmission and Distribution Master Plans, City of Greeley Comprehensive Plan, and worked in collaboration with the Town to adjust the infrastructure concepts to provide mutual benefits for Greeley and Severance. Staff will discuss the original and revised concepts for an emergency interconnect with Severance and associated master plan considerations for expansion of Greeley's water system.

Recommended Action:

N/A

Recommended Motion:

N/A

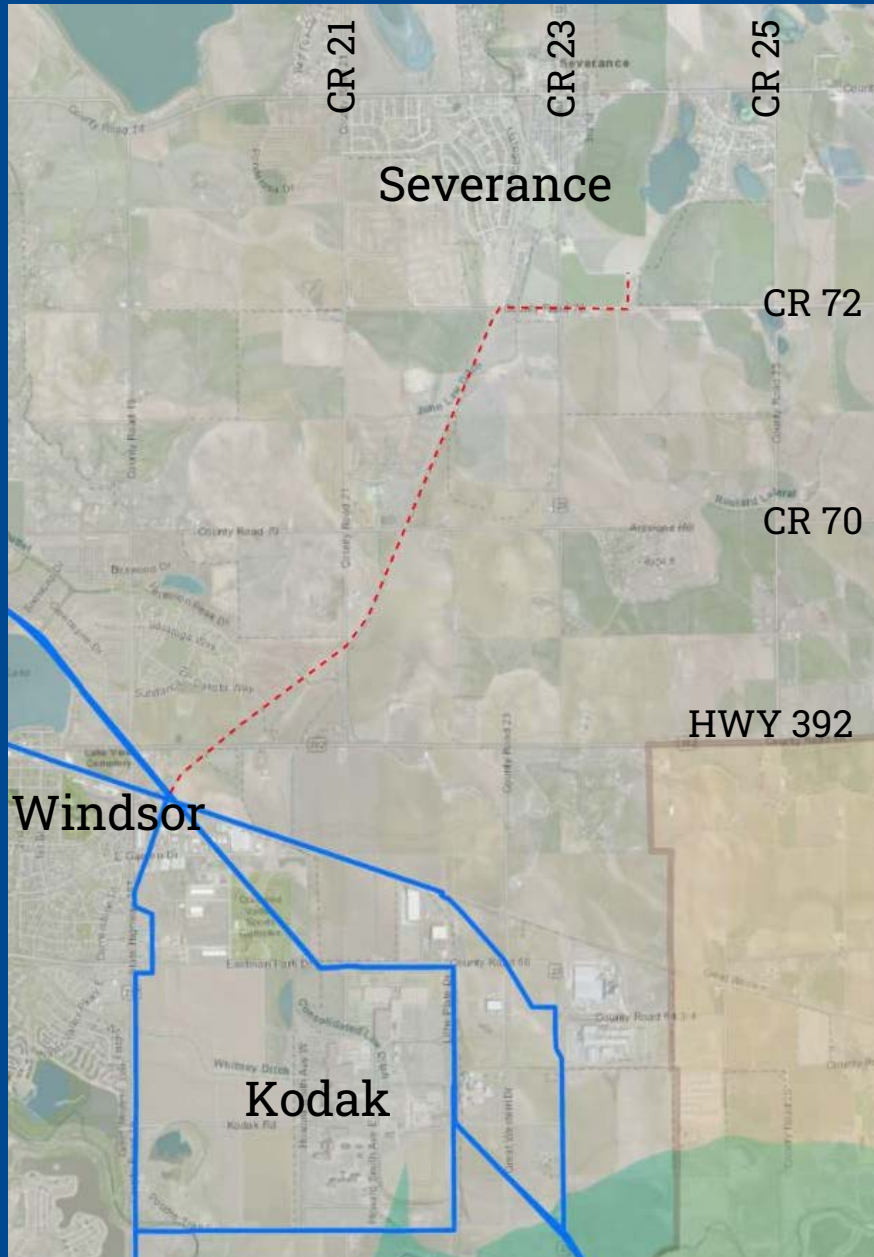
Attachments:

1. Severance IGA Concept

Severance Emergency Interconnect Concept

Water & Sewer Board
November 15, 2023

Severance Emergency Interconnect

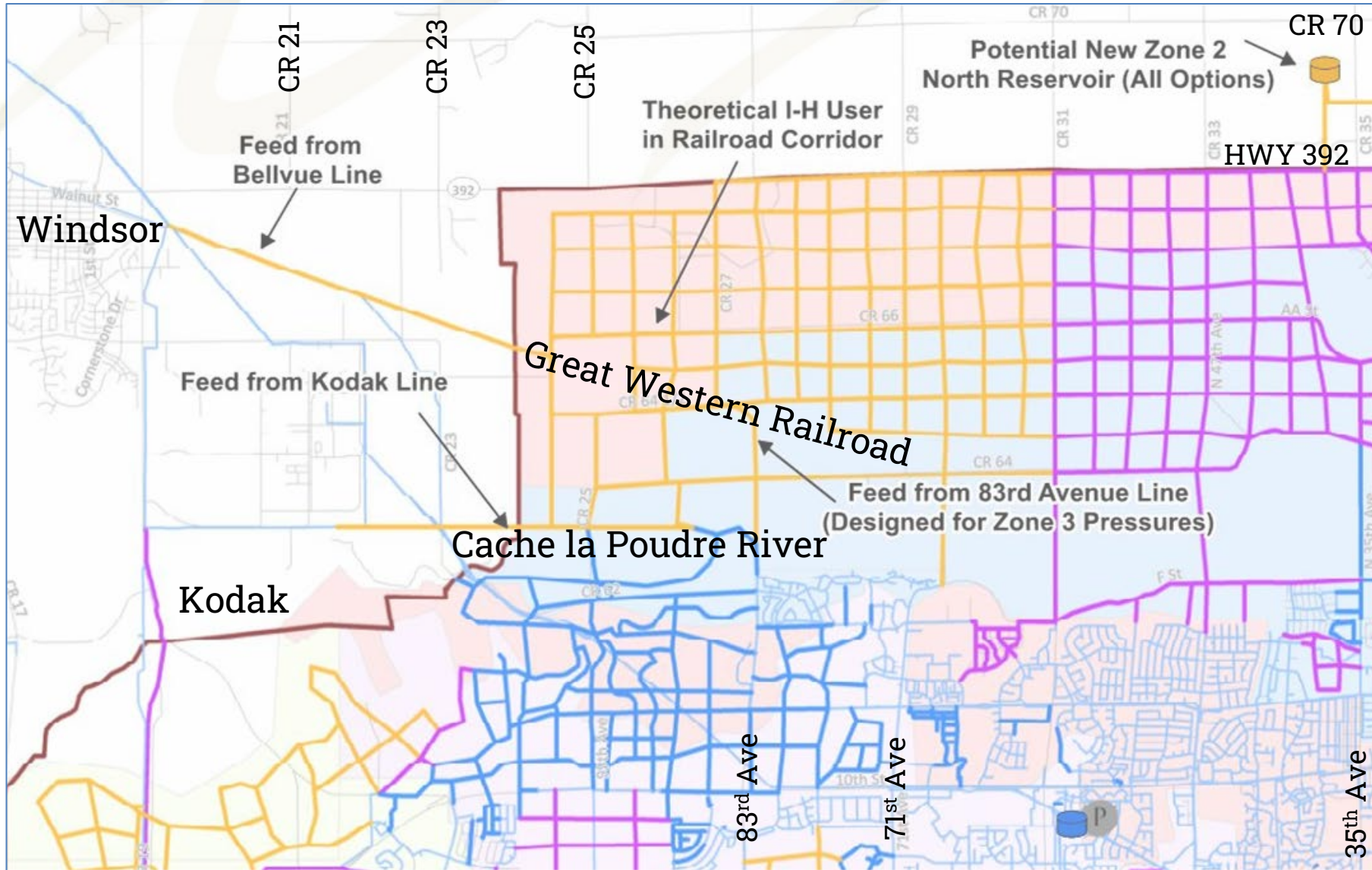


Severance Proposal

- Severance Approached Greeley to Discuss an Emergency Interconnect
- Alignment Shown Along Railroad Spur
- No Benefits to Greeley System



Master Plan Considerations



Zone 2 Storage and Transmission

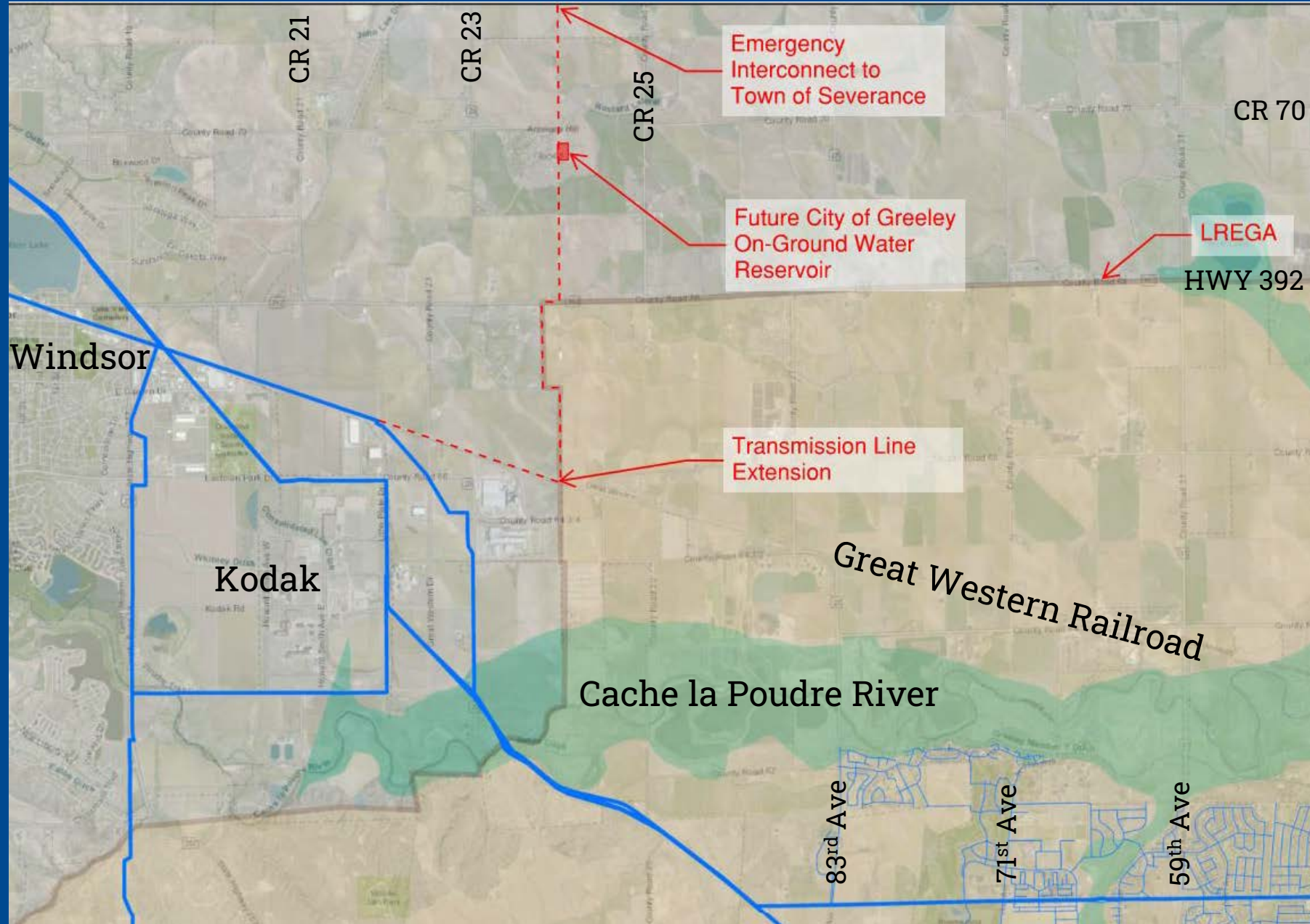
- Storage Location in Master Plan Requires Elevated Reservoir
- Transmission Evaluation



Master Plan Considerations

- Existing Zone 2 – 15,000 acres
- Current Zone 2 System Limitations
 - No Reservoirs
 - No Direct Transmission
 - Relies Solely on PRVs from Zone 3
- North of the River buildout will add more than 10,000 acres to Zone 2
 - Plan Now for Transmission and Storage
 - Identified property with higher elevation near Severance

Greeley Alternative

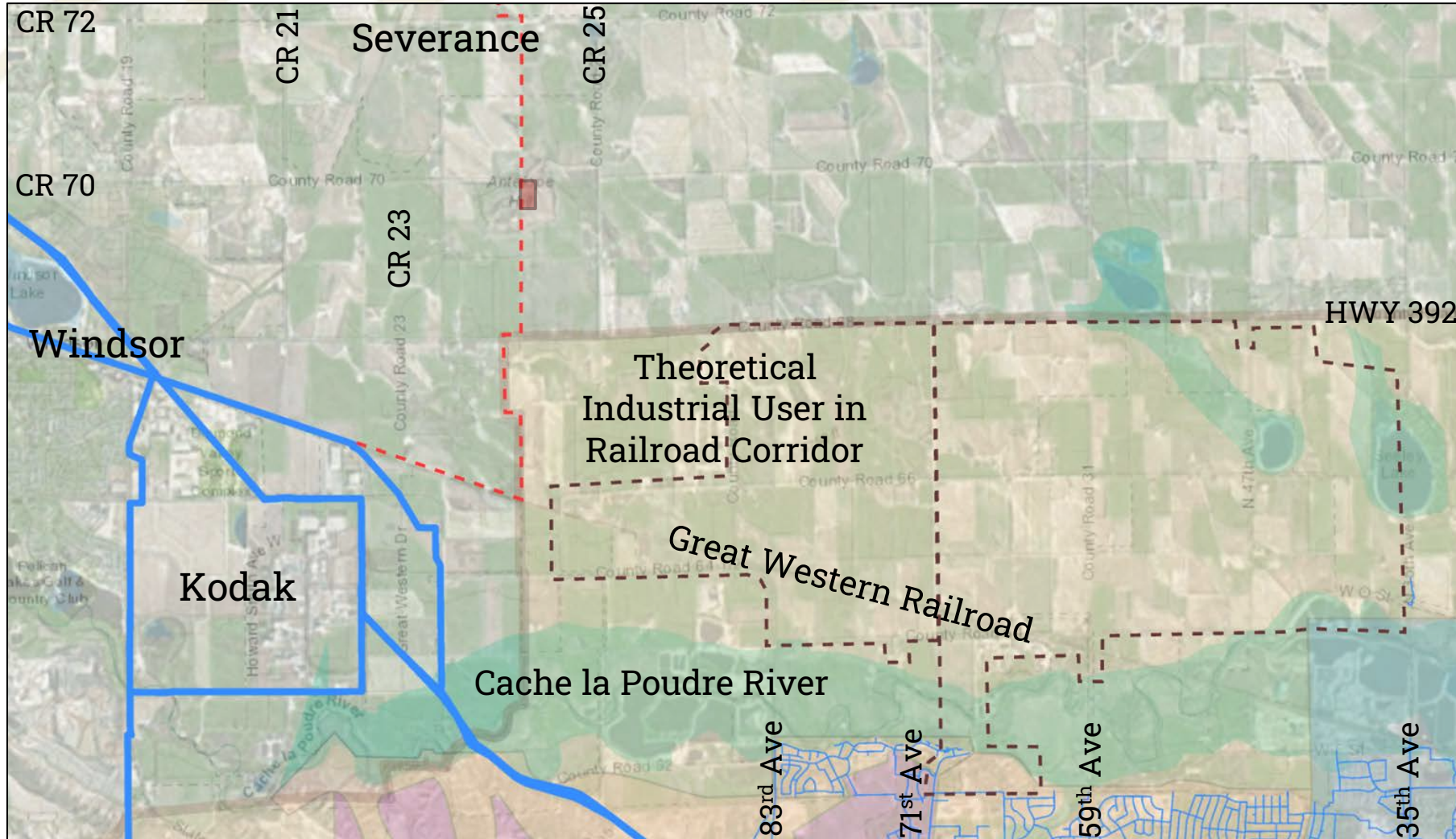


Benefits to Greeley

- Shared Cost for Transmission Line Extension to Area North of the River
- Ground Reservoir Option (\$2-3/gallon vs. \$5-7/gallon for elevated reservoir)
- North Weld System Integration – Opens Industrial Corridor Sooner

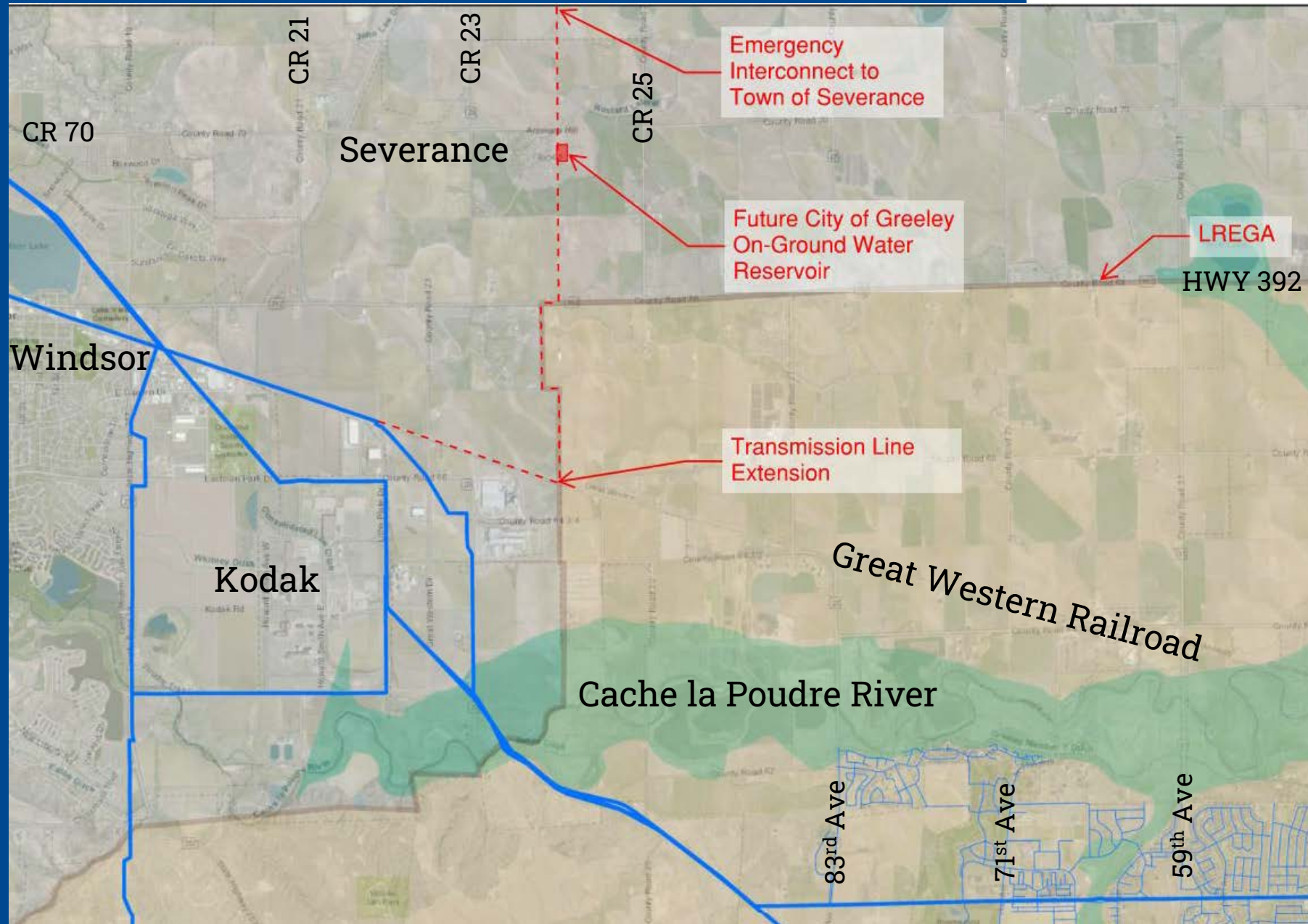


North Weld System Integration



- Connection to area proposed for North Weld System Takeover per IGA
- Opens Industrial Corridor Sooner

Next Steps



Treatment and Transmission Master Plan (2024)

- Pipe Sizing
- Reservoir Locations

IGA with Severance

- Emergency Interconnect
- Shared cost

Tank Property Acquisition



A decorative wavy line in a light beige color spans the top of the slide.

Questions? Feedback?

Thank You!





Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Leah Hubbard, Water Resource Operations Manager

Title:

Legal Report

Summary:

This report has been provided by Carolyn Burr, outside counsel for the Greeley Water & Sewer Board.

Based on our review of the September, 2023 Water Division 1 Resume, staff and water counsel recommend that the Water and Sewer Board file a statement of opposition by the end of November, 2023 to the following water court application:

Case No. 23CW3112: Applicant, Hartford Investments, LLC, is seeking to appropriate 340 acre feet of conditional storage rights with the right to continuously fill and refill their storage structures any time the water rights are in priority. This water would be for use at a new 570 acre residential community north of Windsor named "Prairie Song." The proposed storage rights are off the Lake Canal Ditch, which is upstream of New Cache and other junior water rights. Staff recommends participating in this case to ensure that the proposed storage rights meet all of the requirements of new appropriations and that the terms of any decree ensure that the junior, conditional rights do not injure Greeley's water rights.

Recommended Action:

Staff and water counsel recommend authorizing filing a statement of opposition in Division 1 Case Number 23CW3112.

Recommended Motion:

"I move that the Board authorize filing a statement of opposition in Case No. 23CW3112 and for staff and legal counsel to seek resolution of issues raised by this case consistent with Water and Sewer Board Resolution No. 3-15."

Attachments:

None



Water & Sewer Agenda Summary

November 15, 2023

Key Staff Contact: Sean Chambers, Water & Sewer Director

Title:

Director's Report

Summary:

The Director will provide the Water & Sewer Board and staff with a brief update on the following items of water utilities policy interest;

1. Northern Water Conservancy District Board fills vacancy and elects new president
2. Noteworthy month for water leaks, particularly in areas with 1960's era cast iron lines
3. City of Greeley and Colorado Water Industry Education and Advocacy Events Calendar
 - a. **CWCB's C-9 Statewide Water Basins Roundtable Summit** – November 14th Broomfield
<https://engagecwcb.org/c9-summit>
 - b. **Northern Colorado Water Conservancy District's Fall Symposium** – Nov. 15th at
The Embassy Suites – Loveland, CO
<https://www.northernwater.org/NorthernWaterevents>
 - c. **Colorado Ag Water Alliance Agricultural Water Summit** – Nov. 17-18th at
Larimer Co. Fairgrounds, Loveland, CO
www.coagwater.org/summit
 - d. **West Greeley Conservation District Ag Symposium** – Nov. 29 – 30th at
Island Grove Park, Greeley
<https://www.wgcd.org/>
 - e. **South Platte Basin Water Forum** – November 30th at
Aims Community College Welcome Center
<https://www.southplatteforum.org/>
 - f. **Water Stewardship and Innovation Summit** – Dec. 4th Denver, CO
Black & Vetch and Google collaboration draft agenda is attached.
 - g. **Colorado River Water User Association (CRWUA) Annual Meeting** – Dec. 13 – 15th
<https://www.crwua.org/welcome.html>
 - h. **Colorado Water Congress Annual Meeting & Legislative Breakfast** – Jan. 31- Feb 2nd at
Aurora-Denver Conference Center
<https://www.cowatercongress.org/advocacy/>

Recommended Action:

Informational Only

Recommended Motion:

N/A

Attachments:

1. CWCB C9 2023 Save the Date
2. NCWCD Board Newsletter
3. DRAFT AGENDA_BV-Google Roundtable for AWWA
4. Board Meeting Charts 2023

9 SUMMIT

Join us on November 14, 2023 for a meeting of the Colorado nine (9) Basin Roundtables, the Interbasin Compact Committee and the CWCB Board for a thoughtful discussion around current issues and collaboration.

WHEN:

November 14, 2023

C-9 Summit 8:00 - 5:30

Dinner & Reception 5:30 - 8:00

WHERE:

The Westin Hotel

10600 Westminster Blvd.

Westminster, CO 80020



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

From: Northern Water <northernwater@public.govdelivery.com>
Sent: Friday, October 27, 2023 8:27 AM
To: Nina Cudahy
Subject: October 2023 E-Waternews



E-Waternews | October 2023



Board members appointed to the Northern Water Board of Directors include, from left, Dale Trowbridge of Weld County, Rob McClary of Sedgwick County and Dave Stewart of Larimer County. Stewart was appointed to his first term on the Board; Trowbridge and McClary were reappointed to their seats.

Northern Water Board of Directors Elect New President, Welcome New and Reappointed Directors

The 13-member Northern Water Board of Directors has a new president and a new Board member representing Larimer County, while two current Board directors have been reappointed to four-year terms.

At the Oct. 5, meeting of the Board, members elected Dennis Yanchunas to be the president of the Northern Water Board. Yanchunas, who represents Boulder County, has served on the

Northern Water Board of Directors since 2010, and previously served as the president of the Municipal Subdistrict Board of Directors.

The position of Board president became open because of the retirement of Mike Applegate from the Northern Water Board of Directors. Applegate, the longest-serving president in Northern Water's history, stepped down after serving as a director from Larimer County for 32 years, and president of the Board for 25 years.

With the opening for a Board director for Larimer County, the judges who serve the judicial districts covered by Northern Water have appointed Dave Stewart of Fort Collins to a four-year term on the Board.

Stewart is the owner and president of Stewart Environmental Consulting Group, LLC. A native of Fort Collins, Stewart has a doctorate in environmental engineering from Colorado State University and has a long career working on water-related projects throughout the country. He has served on the Fort Collins Water Board and is an active member of the Rotary Club.

Reappointed to four-year terms on the Board are Rob McClary of Sedgwick County and Dale Trowbridge of Weld County. Trowbridge was also re-elected as the vice president of the Northern Water Board.

Officers for the Municipal Subdistrict Board also were chosen on Thursday. Bill Emslie of Larimer County was elected as the president of the Municipal Subdistrict Board, for which he had previously served as its vice president. Director Dick Wolfe of Broomfield County was elected the vice president of the Municipal Subdistrict Board.

The Board is constituted of representatives from the counties within Northern Water. Boulder, Larimer and Weld counties are represented by three directors each, Broomfield, Logan and Sedgwick counties are represented by one director each, and Morgan and Washington counties share a director.

Biographies of the board members are available on the Northern Water [website](#).



Northern Water was presented with a WaterSense Sustained Excellence Award from the EPA. Water Efficiency Planner Darren Nowels, fourth from the right, accepted on behalf of Northern Water.

Northern Water Wins 2023 WaterSense Sustained Excellence Award

The U.S. Environmental Protection Agency (EPA) has honored Northern Water with a WaterSense Sustained Excellence Award for its work promoting WaterSense and water efficiency in 2022.

WaterSense recognized its Sustained Excellence, Partner of the Year and Excellence Award winners during the WaterSmart Innovations Conference in Las Vegas, Nevada, on Oct. 5. Northern Water was one of 13 Sustained Excellence Award winners nationwide. This is the fourth year that Northern Water has been a recipient of a WaterSense award.

WaterSense, a voluntary partnership program sponsored by EPA, is both a label for water-efficient products, programs and homes and a resource for helping consumers learn ways to save water. More than 2,100 manufacturers, builders, retailers, utilities, government and nonprofit organizations partner with WaterSense to promote water-efficient products, homes and programs.

Northern Water was recognized for its efforts to help commercial customers save water. In the past year, Northern Water performed 48 landscape consultations, inspecting landscape conditions and irrigation components, and recommending WaterSense labeled irrigation controllers and sprinkler components to help improve efficiency.

Northern Water also funded 11 projects through its Collaborative Water-Efficient Landscape Grant Program, which specifically requires WaterSense labeled equipment be installed; the 11 projects funded from the 2023 Water-Efficient Landscape Grant Program help save more than 7 million gallons of water each year.

“The WaterSense program and products provide an ideal foundation to promote, facilitate and celebrate water efficiency,” said Frank Kinder, Northern Water’s Water Efficiency Department Manager. “The public-private partnership delivers sustained water savings and high performance, allowing comprehensive conservation of this vitally important resource on which we all rely. We appreciate the value WaterSense provides to all stakeholders.”



The initial 2024 quota for the Colorado-Big Thompson Project has been set at 50 percent.

Northern Water Board Sets Initial Quota at 50 Percent

The Northern Water Board of Directors has set the initial 2024 quota for the Colorado-Big Thompson Project at 50 percent.

At its Oct. 12 meeting, the board voted to start the water year with a 50 percent quota to help water managers and allottees manage their respective water supplies in the early months of the water year.

Quotas are expressed as a percentage of an acre-foot. Thus, a 50 percent initial quota means that the Board has allocated 0.5 acre-feet of water for delivery before Nov. 1, 2024, per C-BT unit. In April 2024, the Board will further assess conditions such as available local water storage levels, soil moisture, mountain snowpack and additional information to potentially further adjust the quota for the 2024 peak water-use season.



New Video Provides Glimpse into Steep-Slope Grouting Operation at Chimney Hollow Reservoir

Grouting by its very nature presents its share of challenges and is often referred to by construction managers as one of the toughest aspects of a project to predict. As crews inject a cementitious slurry into a foundation to fill cracks and voids below the surface, they deal with a number of unknowns in terms of what the geology looks like beneath them.

Even with extensive pre-construction rock and soil assessments, the amount of time it will take to sufficiently grout and seal any given location can only be estimated, with operations sometimes going much longer, or much quicker in some cases, than anticipated.

Added to those challenges at the Chimney Hollow Reservoir construction site are surfaces as steep as 45-degrees on which the grouting has to be done. This [3-minute video](#) offers a snapshot into the steep-slope grouting currently underway at Chimney Hollow, the additional procedures and safety steps it takes to perform this work, and how crews continue making progress in spite of the taxing conditions.



Waitlist Available for Fall Water Symposium

Our popular Fall Water Symposium has already reached registration capacity for the Nov. 15 event at the Embassy Suites in Loveland. However, guests are encouraged to add their name to the waitlist. Doors will open at 8 a.m. for Symposium check-in and to allow attendees to network.

Water users in Northeastern Colorado will hear from multiple speakers including presentations on preserving the region's water supply, the unbreakable nexus between regional livestock and water and remarks by Amy Parsons, the new president of Colorado State University. A panel of experts will speak on the ongoing Colorado River challenges, and attendees will also hear updates on the Colorado River Connectivity Channel and the Chimney Hollow Reservoir Project.

Add your name to the waitlist by completing our registration form online at www.northernwater.org/NorthernWaterevents. Lunch is provided.

If you are unable to register online, please call the Water Symposium registration line at 970-622-2234.



From the Archives: A Wild and Scenic Poudre River

Colorado has only one river that has the federal Wild and Scenic River designation, and it flows through Northern Colorado.

In October of 1986, President Ronald Reagan signed the legislation designating portions of the Poudre and its South Fork above the mouth of the Poudre Canyon as Wild and Scenic, concluding a long-sought compromise by conservation advocates and water managers.

In a video interview conducted by Northern Water in early 2022, former U.S. Sen. Hank Brown discussed the work necessary for passage of the legislation. He noted that cooperation among water users in the Poudre Valley, including the cities of Greeley and Fort Collins, ditch companies and environmental groups was vital to getting bipartisan support for the designation. One of the key elements in the compromise was the recognition that water storage sought by water providers would occur outside of the canyon – a site later designated as Glade Reservoir.

Today, Glade Reservoir is part of the Northern Integrated Supply Project, and it has received its federal, state and county permits for construction. Upstream of the Glade Reservoir, the Poudre River flows freely as a Wild and Scenic River.

See the [full interview](#) with Sen. Brown.

[View Our History Timeline](#)

Join Our Team

With an inviting culture and long-standing history, Northern Water is committed to hiring and retaining the best employees. Our organization is growing and we're seeking employees who are passionately committed to helping Northern Water continue its mission to collect and deliver water.



- [Communications Specialist I](#)
- [Control Center Operator](#)
- [GIS Analyst II](#)
- [Project Engineer](#)
- [Right-of-Way Agent](#)
- [Staff Accountant II](#)

More From Northern Water



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Water Stewardship and Innovation Summit

4 December 2023 | Denver

Session

Speakers

7:30 am - 8:15 am

BREAKFAST

8:15 am - 8:45 am

Welcome | Setting the Stage for the Day

Mike Orth, B&V
Ben Townsend, Google
David LaFrance, AWWA

8:45 am - 9:00 am

Keynote Address

Radhika Fox, EPA Office of Water

9:00 am - 9:45 am

Emerging Considerations for Water Management

Sean Chambers, City of Greeley
Barb Martin, AWWA
Dave Johnson, SNWA
Melanie Tan, B&V (Moderator)

9:45 am - 10:30 am

Water Policy in the Age of Water Scarcity

Felicia Marcus, Stanford Water in The West
Mindy Bridges, US Water Alliance
Ben Townsend, Google
Kelley Gage, SDCWA
James Schlaman, B&V (Moderator)

10:30 am - 10:45 am

BREAK

10:45 am - 11:30 pm

Planning for the Unplanned – How Are Utilities Addressing New Water & Wastewater Demands from Hyperscalers?

Marshall Brown, Director of Aurora Water
Brian Perkins, GBRA
Brian Haemmerle, City of Columbus
Marina Kopytkovskiy, B&V (Moderator)

11:30 pm - 12:15 pm

Implementing Data Centers Responsibly Within Communities

Anthony Giovannone, Google
Rob Sedivy, Google
Ufuk Erdal (Moderator)

12:15 pm - 1:15 pm

LUNCH

1:15 pm - 2:00 pm	One Water Solutions – Holistic Strategies that Can Support Broad Community Development	Virginia Walsh, Miami-Dade Laura Rocha, MNWD Zeynep Erdal, Black & Veatch (Moderator)
2:00 pm - 2:45 pm	Partnerships and Big Data That Support Water Stewardship	Joone Lopez, MNWD
2:45 pm - 3:00 pm	BREAK	
3:00 pm - 3:30 pm	Corporate Water Replenishment Program/Strategy	Ben Townsend, Google
3:30 pm - 4:15 PM	Innovation & Collaboration: Where Do We Go From Here?	James Strayer, B&V
4:15 pm - 4:30 pm	Closing Remarks	Mike Orth, Black & Veatch Ben Townsend, Google Barb Martin, AWWA
4:30 pm - 5:00 pm	BREAK	
5:00 pm - 6:30 pm	NETWORKING EVENT	

Emerging Considerations for Water Management - An exploration into the critical factors shaping water management practices in the present day. The discussion will cover a range of essential themes, including water scarcity, water quality, population migration, hyperscaling, decarbonization, affordability/cost, ESG, social equity, and new policies/regulations. The panel will share insights into the latest trends and challenges in water management, and how organizations are addressing these issues to ensure a sustainable future for all.

Planning for the Unplanned - How Are Utilities Addressing New Water & Wastewater Demands from Hyperscalers? - A discussion around the latest strategies being implemented by utilities, municipalities, and water agencies planning for the future and addressing emerging issues and demands. Topics will include integrated water resource planning methodologies, water sustainability, partnerships with stakeholders, land-use and environmental considerations, resource management and protection, and local policies. Learn how these organizations are leveraging technology, data, and collaboration to ensure access to clean, reliable water in infrastructure planning.

Implementing Data Centers Responsibly Within Communities - A unique opportunity to learn from Google as they share their insights on infrastructure needs and their collaborations with the utility, municipal, and public sector to plan and implement sustainable data center infrastructure. They will provide an overview of Google's best practices and strategies for developing and managing data centers in a responsible manner, with a focus on energy efficiency, water usage, waste reduction, and other environmental considerations that benefits both the company and the community.

Water Policy in the Age of Water Scarcity - A discussion around the latest policies and regulations aimed at addressing water scarcity challenges and promoting sustainable water management practices. The discussion will also delve into the crucial role of collaboration and partnerships between the public and private sectors in addressing these challenges. The panel will provide valuable insights into the importance of water policy in promoting sustainable water management practices, as well as the challenges and opportunities involved in implementing effective water policies in the age of water scarcity.

One Water Solutions – Holistic Strategies that Can Support Broad Community Development - A deep dive into the benefits of deploying One Water strategies and tactics to support water sustainability and border community development. The discussion will cover a range of essential topics, including potable reuse, industrial reuse, stormwater capture, desalination, conservation, and infrastructure colocation. Learn about the latest innovations in water management and how these strategies are driving sustainability and economic growth while supporting the needs of local communities.

Partnerships and Big Data That Support Water Stewardship - Join Joone Lopez, General Manager of Moulton Niguel Water District, as she discusses the importance of partnership and big data in supporting water stewardship. In this presentation, Lopez will share how the California Data Collaborative is using technology and data to save water and improve reliability while informing water policy and operational decision-making.

Corporate Water Replenishment Program/Strategy - An informative session into Google's water stewardship and ESG corporate goals and the steps they are taking to achieve them. Google will share their efforts to replenish the water they use in their operations through various initiatives, such as watershed restoration projects, wastewater treatment plant upgrades, water conservation, and water loss management. They will talk about the challenges and opportunities involved in these initiatives and how organizations can work together to promote sustainable water management practices.

Innovation & Collaboration: Where Do We Go From Here? - Mr. Strayer will lead an open discussion with the audience reflecting on the day's topics. He will explore questions and share perspectives on the challenges and opportunities involved in promoting sustainable water management practices, creating win-win partnerships, and highlighting valuable insights regarding where the industry is headed next.

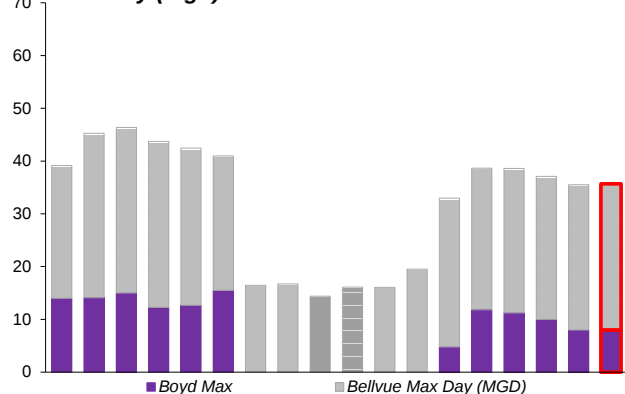
Water Treatment

Bellvue Water Treatment Plant operates year-round with a transmission capacity of 29.1 million gallons per day (mgd) (plant capacity is 32 to 35 mgd). Water sources include Poudre River direct flows, Colorado-Big Thompson (C-BT), Windy Gap, High Mountain Reservoirs, Laramie-Poudre Tunnel, and Water Supply and Storage. Average volume is 19,000 acre-feet a year (2000-2011). The plant was built in 1907, with its last treatment upgrade in 2009. Solar panels were added in 2014.

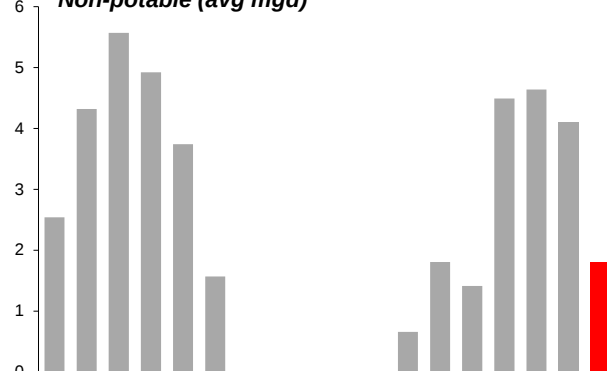
Boyd Water Treatment Plant operates normally from April to October with a plant capacity of 38 mgd (transmission capacity is 40 mgd). Water sources include Greeley-Loveland Irrigation Company, C-BT, and Windy Gap. Average Volume is 8,200 acre-feet (2000-2011). The current plant was built in 1974, with its last treatment upgrade in 1999. Solar panels were added at Boyd in 2014. In 2016, tube settlers and plate settlers were replaced in the sedimentation basins. In 2018, all old existing chemical lines were replaced with new lines and the piping was up-sized to carry more chemical. A PLC upgrade was done on the SCADA system. Sludge pumps were replaced and hooked into the Trac Vac system that pulls sludge out of the sedimentation basins.

Combined, Bellvue and Boyd can treat a maximum of 70-73 million gallons per day.

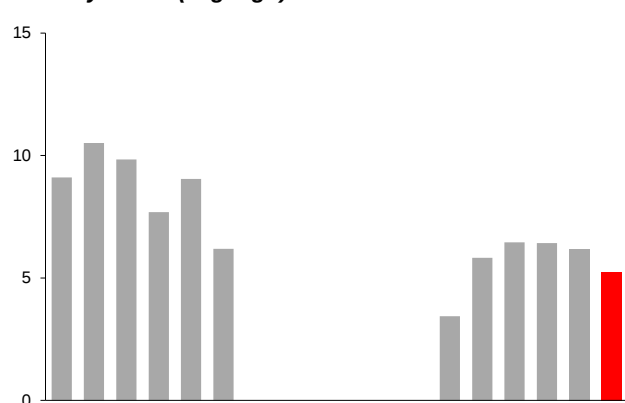
Max Day (mgd)



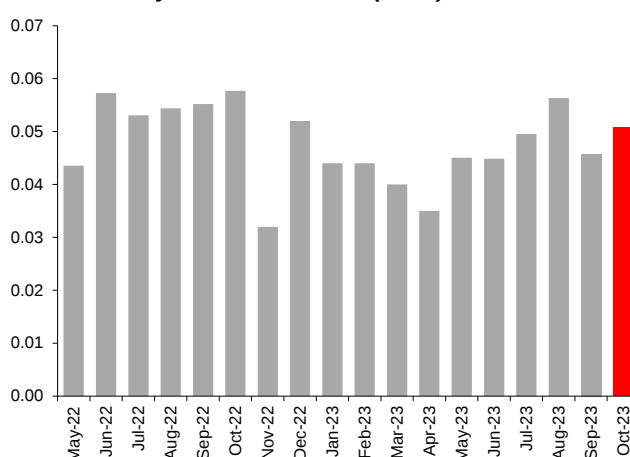
Non-potable (avg mgd)



Boyd WTP (avg mgd)



Turbidity of Finished Water (NTU*)



Starting May 2016 Bellvue turbidity measurements will use a new method resulting in more accurate readings.

*Turbidity limit: 95% of samples must be below 0.3 NTU.

Turbidity is the measure of relative clarity of a liquid. Clarity is important when producing drinking water for human consumption and in many manufacturing uses. Turbidity is measured in Nephelometric Turbidity Units (NTU).

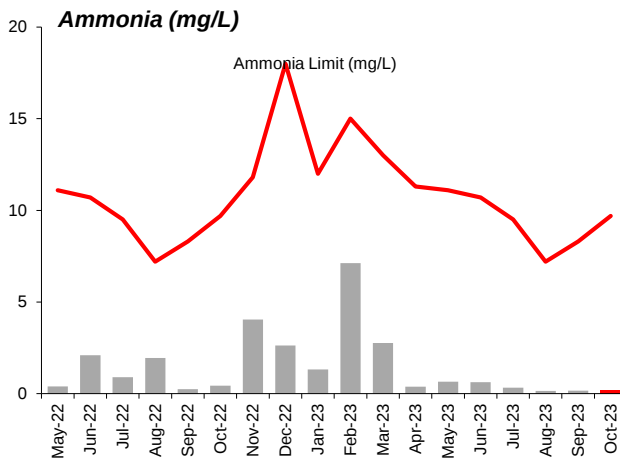
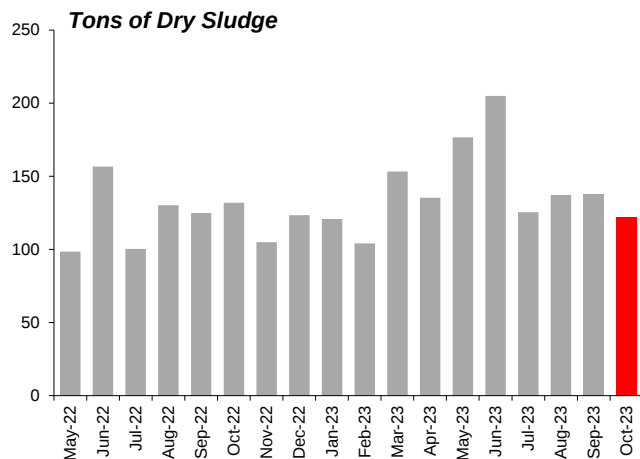
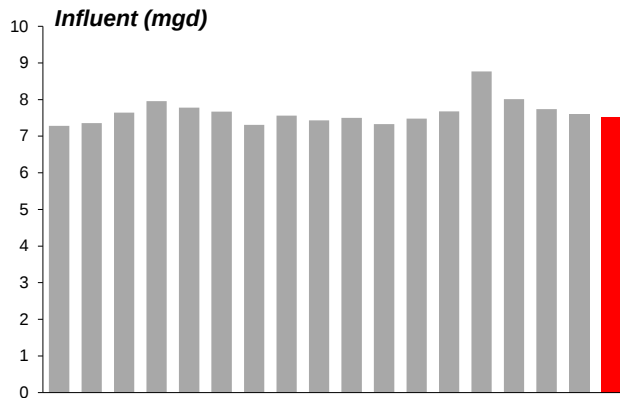
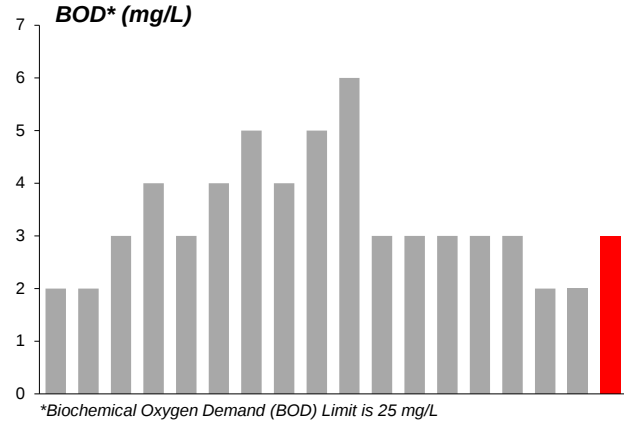
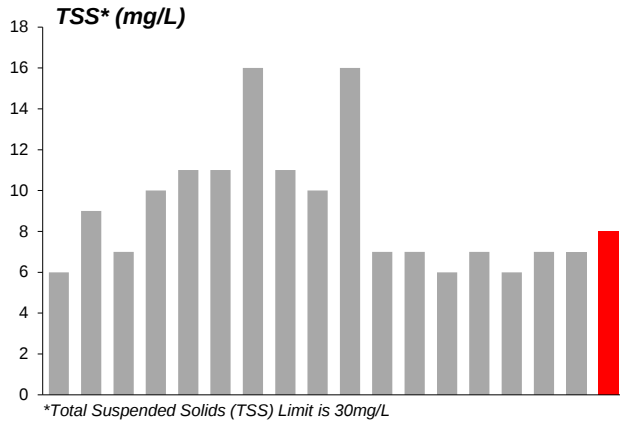


Wastewater Treatment

The Water Pollution Control Facility (WPCF) staff are dedicated environmental professionals who provide quality, safe and cost-effective wastewater treatment services for the citizens of Greeley. The WPCF treats wastewater to meet or exceed Environmental Protection Agency (EPA) and Colorado Department of Public Health & Environment requirements.

In 2011, the WPCF received an Xcel Energy Custom Efficiency Achievement Award for saving 2.78 million kWh and reducing CO2 emissions by 1,584 tons. In 2012, the WPCF received the Rocky Mountain Water Environment Association's (RMWEA) Sustainability Award for Colorado demonstrating excellence in programs that enhanced the principles of sustainability. A Certificate of Achievement from the Colorado Industrial Energy Challenge program managed through the Colorado Energy Office was received in the same year. In 2013, the plant received the City of Greeley's Environmental Stewardship Award for outstanding efforts to reduce energy (watts), conserve energy and water, reduce air and water pollution, and educate and encourage others to be environmental stewards. Also, in 2013, the plant was the recipient of a Bronze Award from the Colorado Environmental Leadership Program. In 2015, after having 5 years without a plant violation, the plant received the 2015 National Association of Clean Water Agencies (NACWA) Platinum Peak Performance award for the City of Greeley Water and Sewer Department.

Note: the red column indicates the current month.



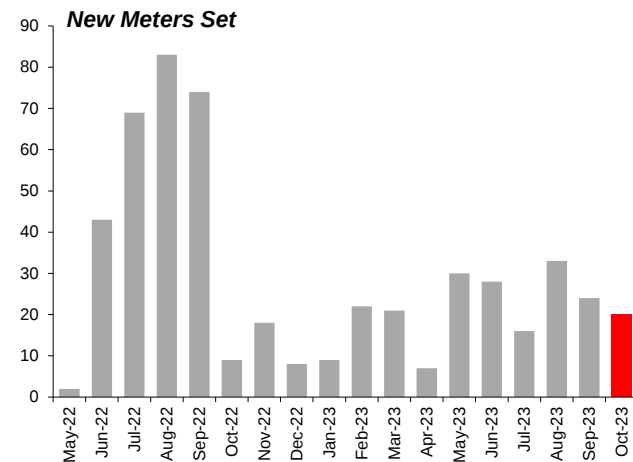
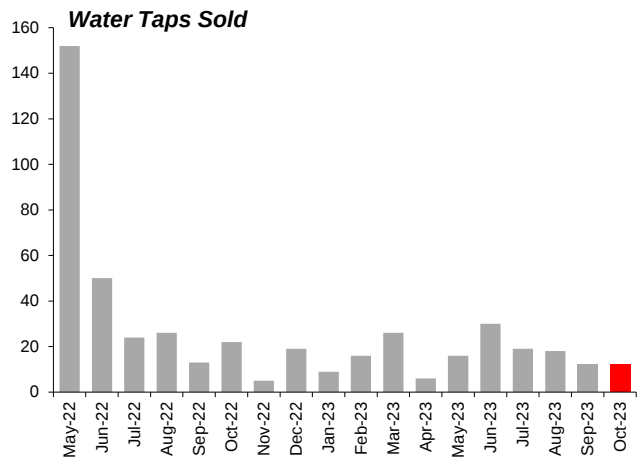
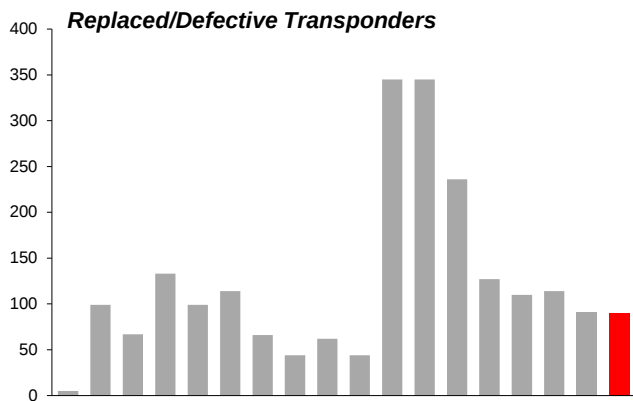
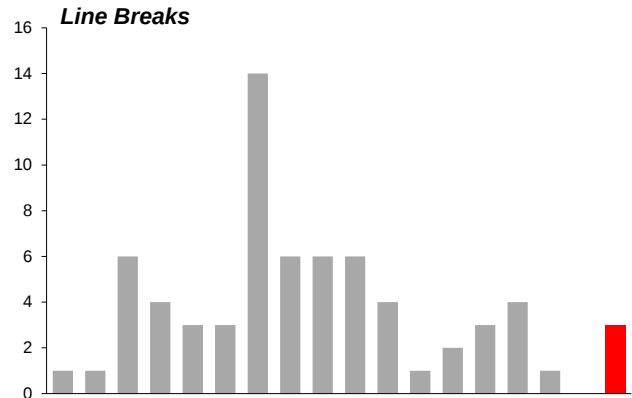
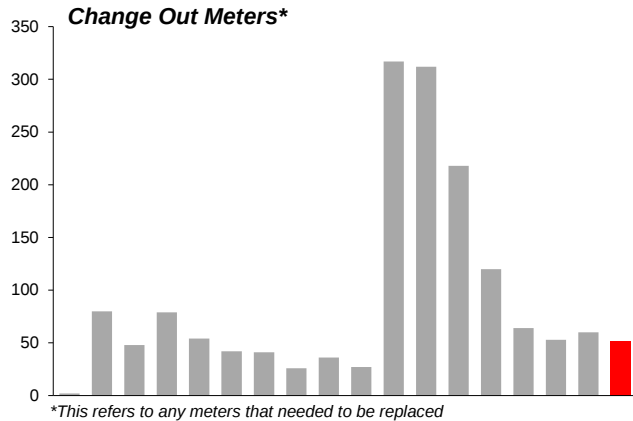
Water Distribution

The Greeley water distribution system consists of various sizes of pipes that generally follow the streets within the City. The distribution system serves residences and businesses in Greeley, Evans and Garden City, and the system is divided into four pressure zones.

There are 69.75 million gallons of potable water storage in Greeley. The water is stored within three covered reservoirs and one elevated tank; 23rd Avenue - 37.5 million gallons, Mosier Hill - 15 million gallons, and Gold Hill - 15 million gallons. The system also has 476 miles of pipeline, 24,233 water meters and 3,378 fire hydrants.

The water pipes in the distribution system vary in size from 4" to 36". Pipe material is steel, ductile iron, cast iron, or polyvinyl chloride. The age of the pipes varies from the 1890's to new installations.

Note: the red column indicates the current month.



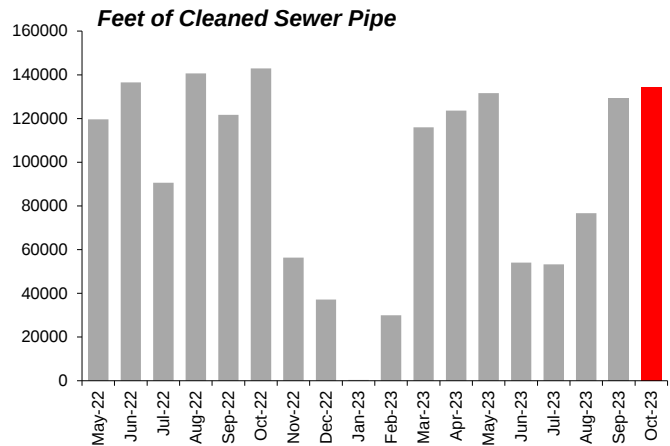
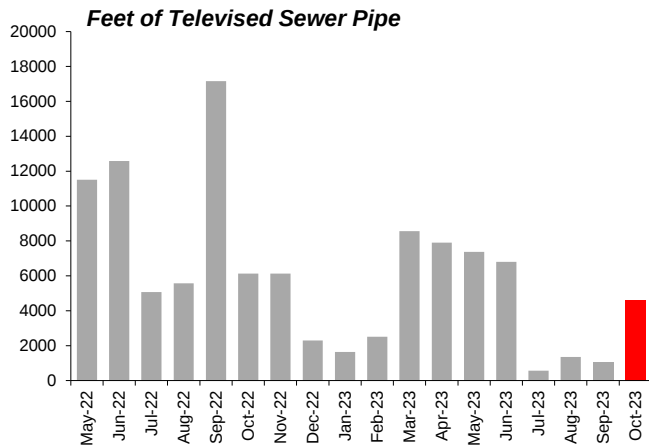
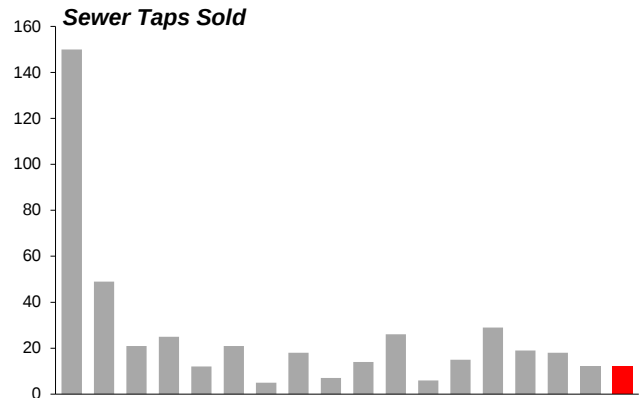
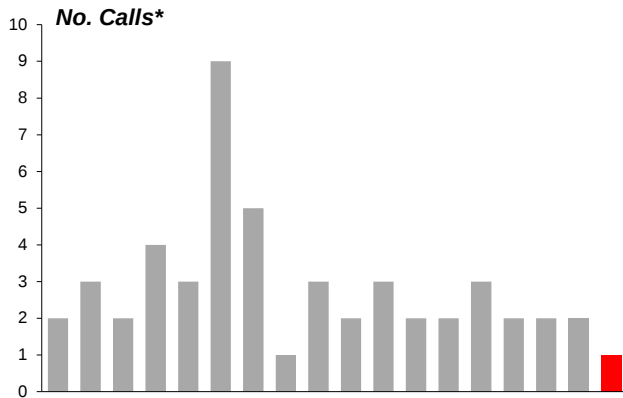
Wastewater Collection

The mission of the Wastewater Collection Division of the Water and Sewer Department is to protect community health by transporting wastewater away from homes and businesses. This includes respecting property values and public safety by reducing the frequency of blockages in the sanitary sewer lines.

A wide variety of work is performed including routine cleaning of sewer lines, inspection of sewer lines, maintenance of the sewage pumping stations, rehabilitation of the system and responding to emergencies.

The wastewater collection system dates back to 1889. At the end of 2017, the system had a total of 364.8 miles of line and 10 sewage pumping stations. The sewer service area is approximately 51 square miles. Over the last 10 years, the system has grown by 17 miles.

Note: the red column indicates the current month.

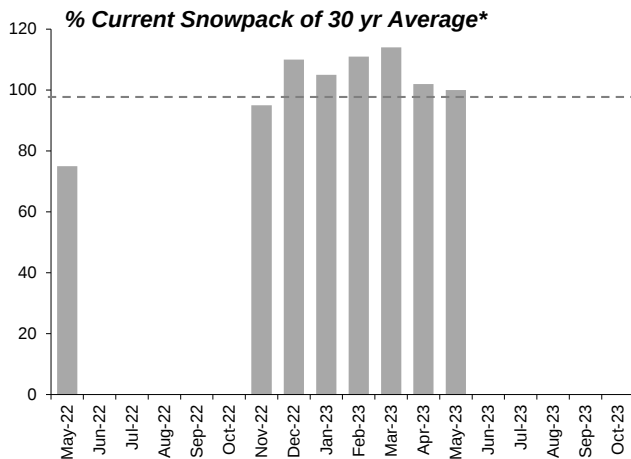
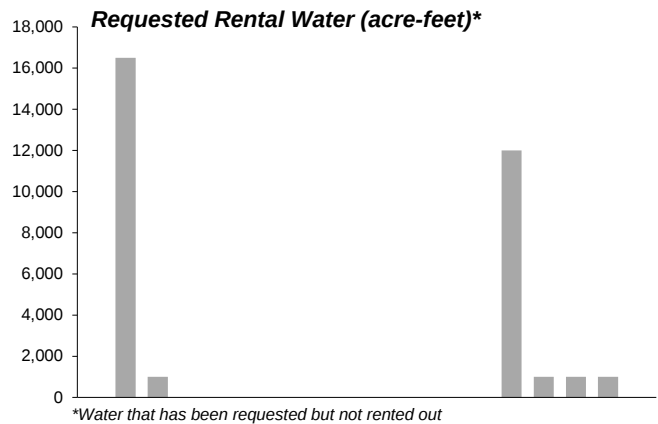
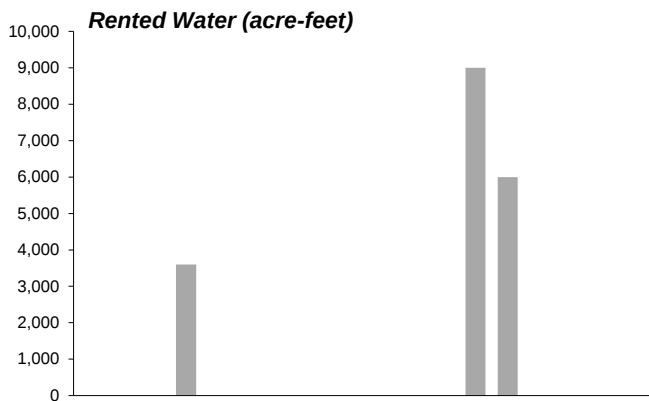
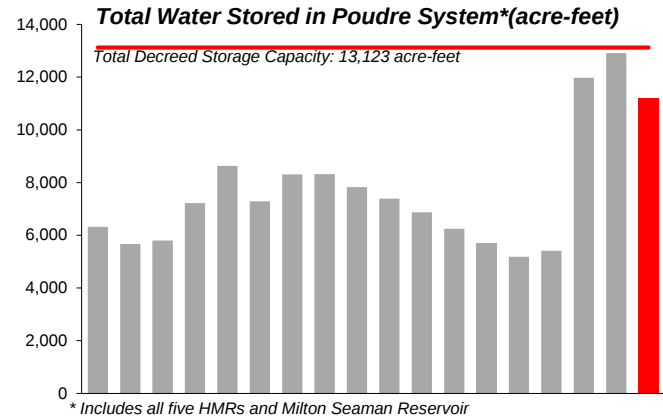
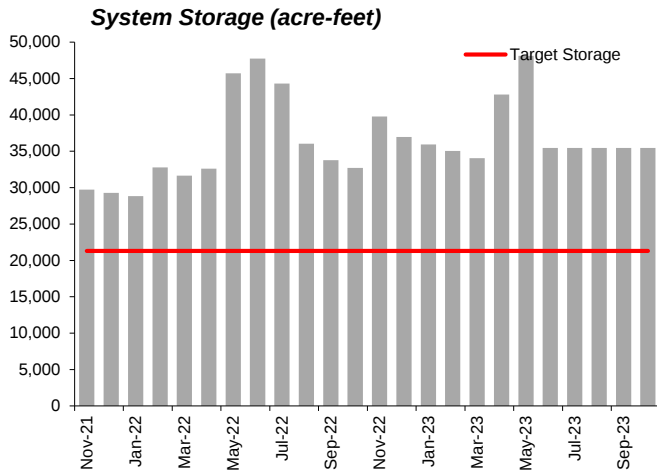


Water Resources

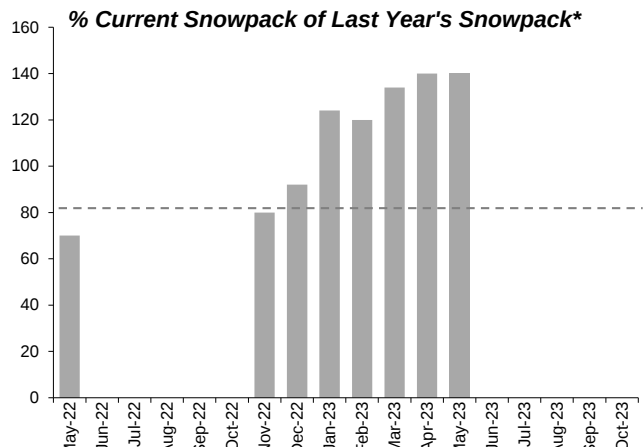
Greeley has numerous water rights in four river basins; the Upper Colorado River, Cache La Poudre, Big Thompson and Laramie River. The Water Resource staff must account for all of this water and comply with the rules of the Colorado Water Court and the State Engineer's Office which is in charge of allocating all of Colorado's water resources. Approximately one-third of the City's water supply comes from agricultural water rights. These water rights must be formally changed to municipal use by a special legal process through the Water Court. In this court, Water Resource staff and attorneys also defend the City's water rights against adverse claims from other parties.

Greeley's goal is to have enough water in carry-over storage to sustain Greeley through a 50-year critical drought. Water in excess of this carry-over drought supply can be leased to agriculture, both for revenue and to support our local agricultural community. Modeling has shown that, given existing population and demand factors, Greeley will have sufficient water for citizens, if at the beginning of the 6-year long, 50-year critical drought, there is 20,000 acre-feet in storage on April 1st of the following year.

Note: the red column indicates the current month.



*Data is from the 1st of the month
 **Average of Deadman Hill and Joe Wright



*Data is from the 1st of the month
 **Average of Deadman Hill and Joe Wright

Treated Water and Weather Data

January was a cold month with an average temperature of 24°F. The average temperature for February was 27°, about 4° lower than the historical. It's been another cold month in March with an average temperature of 34.8°F, which is still 4° lower than the historical average. The average temperature in April was 47.33°F which is very close to the historical average. May's average temperature was slightly above average at 59.23°. June's average temperature was 65.15°F, about 2° lower than the historical average. The average temperature in July was 72.95°F, which was very close to the historical average. The average temperature in August was 71.9°F, slightly above average. The average temperature in September was 65.7° slightly above the historical average.

Greeley received 1.1 inches of precipitation in January, this is more than double the historical average for this month. February brought 0.51 inches of precipitation. Total precipitation for March was 0.81 inches, bring the total so far this year to 2.42. Greeley received 1.14 inches of precip in April, bringing the cumulative precip very close to the historical. Greeley received an astonishing 5.63 inches of precipitation in May, this is close to 3 inches above average. Another 3.16 inches of precipitation fell in June, which is more than double what has historically been received in June 3.37 inches of rain fell in July, bringing the annual total to 15.72 inches. In August, another 1.17 inches of rain fell. September was a relatively dry month only receiving 0.33 inches of rain.

