

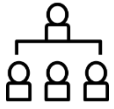
Water and Sewer Board

Regular Meeting

City Council Chambers – City Center South

1001 11th Avenue – Greeley, Colorado

September 18, 2024 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 <https://greeleyco.portal.civicclerk.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 CivicClerk meeting portal by 10:00 a.m. on the date of the meeting (<https://greeleyco.portal.civicclerk.com/>).

In the event it becomes necessary for a meeting to be held virtually, use the link below to join the meeting via Zoom. <https://greeleygov.zoom.us/j/84218093588>

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





Water & Sewer Board

September 19, 2024 at 2:00 PM

1001 11th Avenue, City Center South, Greeley, CO 80631

Agenda

1. Roll Call: _____ Chairman Harold Evans _____ Vice Chairman Mick Todd
 _____ Ms. Cheri Witt-Brown _____ Mr. Fred Otis
 _____ Mr. Joe Murphy _____ Mr. Tony Miller
 _____ Mr. Matt Anderson _____ Mayor John Gates
 _____ Mr. Raymond Lee _____ Ms. Tyra Litzau
2. Approval of Minutes
3. Approval of the Agenda
4. Welcome New Employees and Promotions
5. Direct Toilet Install Program – *Flush and Flow*
6. Transmission and Distribution Project Update
7. Backflow Cross Connection Control Program Ordinance Discussion
8. Water Court Update
9. Legal Report
10. Director's Report
11. Such Other Business That May Be Brought Before the Board Added to This Agenda by Motion of the Board
12. 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 August 21, 2024
Regular Board Meeting**

Chairman Harold Evans called the Water and Sewer Board meeting to order at 2:02 p.m. on Wednesday July 18, 2024.

1. Roll Call

The Clerk called the roll and those present included:

Board Members:

Chairman Harold Evans, Vice Chairman Mick Todd, Tony Miller, Joseph Murphy, Cheri Witt-Brown, Matt Anderson, Mayor John Gates, Director of Finance Tyra Litzau

Water and Sewer Department Staff:

Director Sean Chambers, Interim Deputy Director Water Resources Randy Gustafson, Deputy Director of Utility Finance and Customer Service Erik Dial, Chief Engineer Adam Prior, Office Manager Gigi Allen, Utility Finance Manager Virgil Pierce, Deputy Director of Operations and Maintenance Rebecca Andrus, Water Resource Administrator II Alex Tennant, Water Resource Operations Manager Leah Hubbard, Water Conservation Manager Dena Egenhoff, Water Conservation Coordinator Ben Schaffer, Administrative Assistant III Lisa Van Vorous, Water Resource Administrator II Sam Harshbarger, Water Resource Administrator III Matt Sparacino, Civil Engineer III John Goin, Communication Specialist II Cory Channell, Water Quality and Regulatory Compliance Manager Michaela Jackson

Legal Counsel:

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

Guests:

Former W&S Board member Manual Sisneros

2. Moment of Silence for the passing of Robert (Bob) Ruyle

The Board had a moment of silence for the passing of Emeritus Robert Ruyle. Afterwards they shared memories of Mr. Ruyle.

3. Approval of Minutes

Mr. Miller made a motion, seconded by Mr. Murphy to approve the July 2024 Water and Sewer Board meeting minutes. The motion carried 6-0.

4. Approval of Agenda

There were no changes to the agenda.

5. Welcome New Employees and Promotions

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

6. Recognition of Service for Retired Board Member Manuel Sisneros

Sean Chambers presented a plaque to Manuel Sisneros following ten years of dedicated service to the Greeley community through service on its Water and Sewer Board. The Board has recognized Mr. Sisneros and the many important projects, policy and initiatives undertaken by the Board during the term of Mr. Sisneros service by Resolution No. 2, 2024.

7. Update on Meter Replacement Project

John Goin discussed that the City of Greeley Water and Sewer Department has over 29,000 water meters ranging in size from 12 inch to ¾". These meters started experiencing reduced accuracy, battery failure and communications issues. The Department started replacing these aging water meters throughout the city in 2020, after receiving a Water Smart Grant for \$1.5 million. The Phase I & II water meter replacement project was completed with 14,500 new meters installed by end of 2022.

The City received a second \$2.0 million WaterSmart grant to replace another 11,193 meters and this process started in October of 2022. The final new meters were delivered in the summer of 2023 with installation by City staff and a small UMS crew. The City then started the final phase of replacement in 2024 with city staff and contractors (Utility Meter Solutions) replacing meters with expected completion in fall of 2025.

8. Update on Backflow Prevention and Cross Connection Compliance

Michaela Jackson discussed that on June 7, 2024, CDPHE issued 2 drinking water violations to Greeley's Backflow Prevention and Cross Connection Control (BPCCC) Program. W&S Staff have been working to resolve the violations by the compliance deadline of September 5th and Michaela gave an update on the progress towards violation resolution.

Matt Sparacino left the meeting at 3:00 pm

9. Legal Report

Carolyn Burr, outside counsel for the Greeley Water & Sewer Board provided the Legal Report for August.

Based on review of the June 2024 Water Division 1 Resume, staff and water counsel did not identify any new matters to recommend that the Water and Sewer Board file a statement of opposition by the end of August, 2024.

Ms. Burr also provided an update on Case No. 19CW3253 – Application of Parker WSD and Lower South Platte WCD: Update on the applicants' claims, Greeley's concerns, and the procedural status of the case.

10. Director's Report

Sean Chambers provided the Water & Sewer Board and staff with a brief update on the following items of water utilities policy interest;

Education and Advocacy and Events Calendar

Colorado Water Congress Summer Conference and Training

August 20th – 22nd in Colorado Springs, CO (conflict with August W&S Board meeting date)

<https://members.cowatercongress.org/calendar/Details/summer-conference-996589?sourceTypeId=Hub>

Rocky Mountain AWWA Water Conference

September 26 – 28th, Operator, Admin and Leadership Training Conference by the Rocky Mountain Section of the American Water Works Association. <https://www.rockymountainwaterconference.org/>

Water Quality Control Division (within CDPH&E) House Bill 24-1379 Dredge & Fill Workshops

Regulation 87, a control regulation for avoiding and minimizing impacts from dredge and fill activities; September 2024 workshops: <https://cdphe.colorado.gov/dredge-and-fill-engagement>

The Colorado River District's Annual Water Seminar

Friday, September 20th, 2024 at Colorado Mesa University in Grand Junction

<https://www.coloradoriverdistrict.org/annual-water-seminar-2024/>

Colorado Water Conservation Board Annual all basins summit (C-9 Summit) – a meeting of the state's 9 basin roundtables as guided by the Water for the 21st Century Act: Oct. 1-2, 2024, in Crested Butte

<https://cwcb.colorado.gov/events/c9-summit>

Water in the West Symposium by Colorado State University at Spur Campus

November 13 – 14th at Hydro building of CSU's Spur campus, Denver

Association of Metropolitan Water Agencies '24 Executive Management Conference

October 20th – 23rd <https://www.amwa.net/>

Colorado River Water Users (CRWU) Conference

December 4th – 6th <https://crwua.org/>

Terry Ranch Pipeline Phase 1 Completion Milestone

Staff, Contractors and consulting engineers are celebrating the completion of the first phase of pipeline construction. As we prepare to move forward with the next phase, this is a milestone worth celebrating.

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

Nothing else was brought before the Board.

12. Adjournment

The meeting ended at 3:23 p.m.

Harold Evans, Chairman

Raymond Lee, Board Secretary



Water & Sewer Agenda Summary

September 18, 2024

Key Staff Contact: Sean Chambers, Water & Sewer Director

Title:

Welcome New Employees and Promotions

Summary:

New Hires: Jeff Monson – Boyd Water Treatment Plant Superintendent
Damon Ratliff – T&D Operations Team Manager
Cort Nickel – T&D Engineer IV
Clayton Orback – T&D Engineer I
Eric Clark – Water Resource Administrator I

Promotions: Dustin Hatten – Equipment Operator – Crew Supervisor T&D Construction
Rick Ritchie – T&D Operations to T&D Operations II
Rod Jaramillo – T&D Operations Maintenance Technician to T&D Construction Maintenance Technician
Mason Anderson – T&D Operations Maintenance Technician to T&D Construction Maintenance Technician
Wyatt Watson – Maintenance Mechanic II to Maintenance Mechanic III
Devin Meyer - Maintenance Mechanic II to Maintenance Mechanic III
Cody Pittser – Non-Potable Seasonal to T&D Maintenance Technician I
Tyler Howard – T&D Maintenance Technician to Cross Connection Technician
Dain Daniels – T&D Maintenance Technician to Cross Connection Technician

Recommended Action:

Informational only

Recommended Motion:

None

Attachments:

None



Water & Sewer Agenda Summary

September 18, 2024

Key Staff Contact: Dena Egenhoff, Water Conservation Manager

Title:

Direct Toilet Install Program - *Flush and Flow*

Summary:

The Water Conservation program will be launching a direct toilet installation program named “Flush and Flow”. The Flush and Flow program is a partnership between the Weld County Youth Conservation Corps, Northern Water, and the City of Greeley, designed to help qualified families upgrade to high-efficiency toilets—free of charge.

Recommended Action:

Informational only

Recommended Motion:

None

Attachments:

1. 2. Board WC Toilet Install program



Direct Toilet Install Program

Flush and Flow

Dena Egenhoff
Water Conservation Manager

Agenda



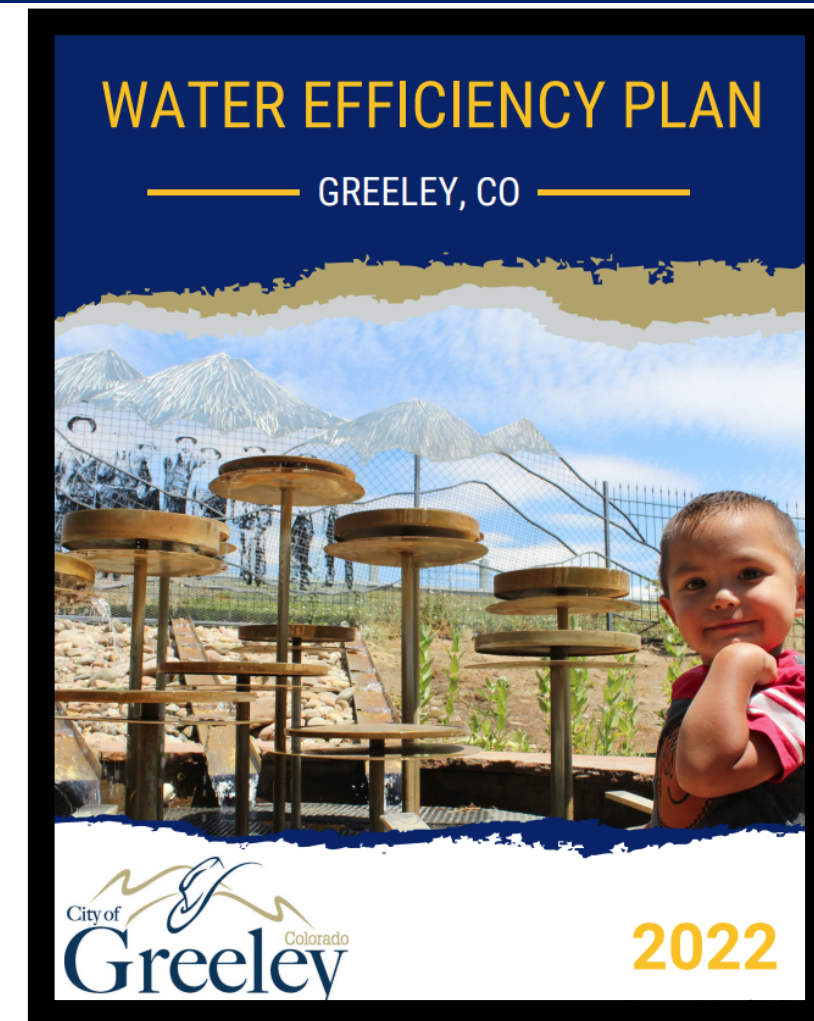
- 2022 Water Efficiency Plan
- Score Cards
- Partnerships
- Direct Toilet Install Program

Purpose: To update the W&S Board on Greeley Water Efficiency Efforts, including new programs designed to improve how we connect with and support our under-represented customers, non-English speaking residents, and disadvantaged residents.

2022 Water Efficiency Plan (WEP)



- Technical document required by the State
- Guide to sustainable water future
- Create efficiencies, synergies, and consistencies among policies, plans, projects and programs
- Maximize cost savings opportunities
- Create goals to measure success and progress





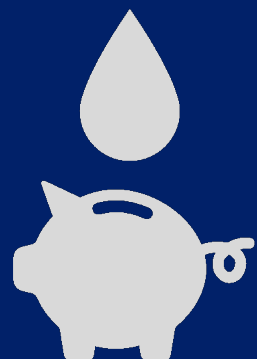
WEP Triple Bottom Line

- Total future water savings 2022- 2030

TBL Type	Acre-Feet
Community	386
Prosperity	1,363
Water Conservation Management	285
Total	2,034

- Average yearly savings 226 AF/year

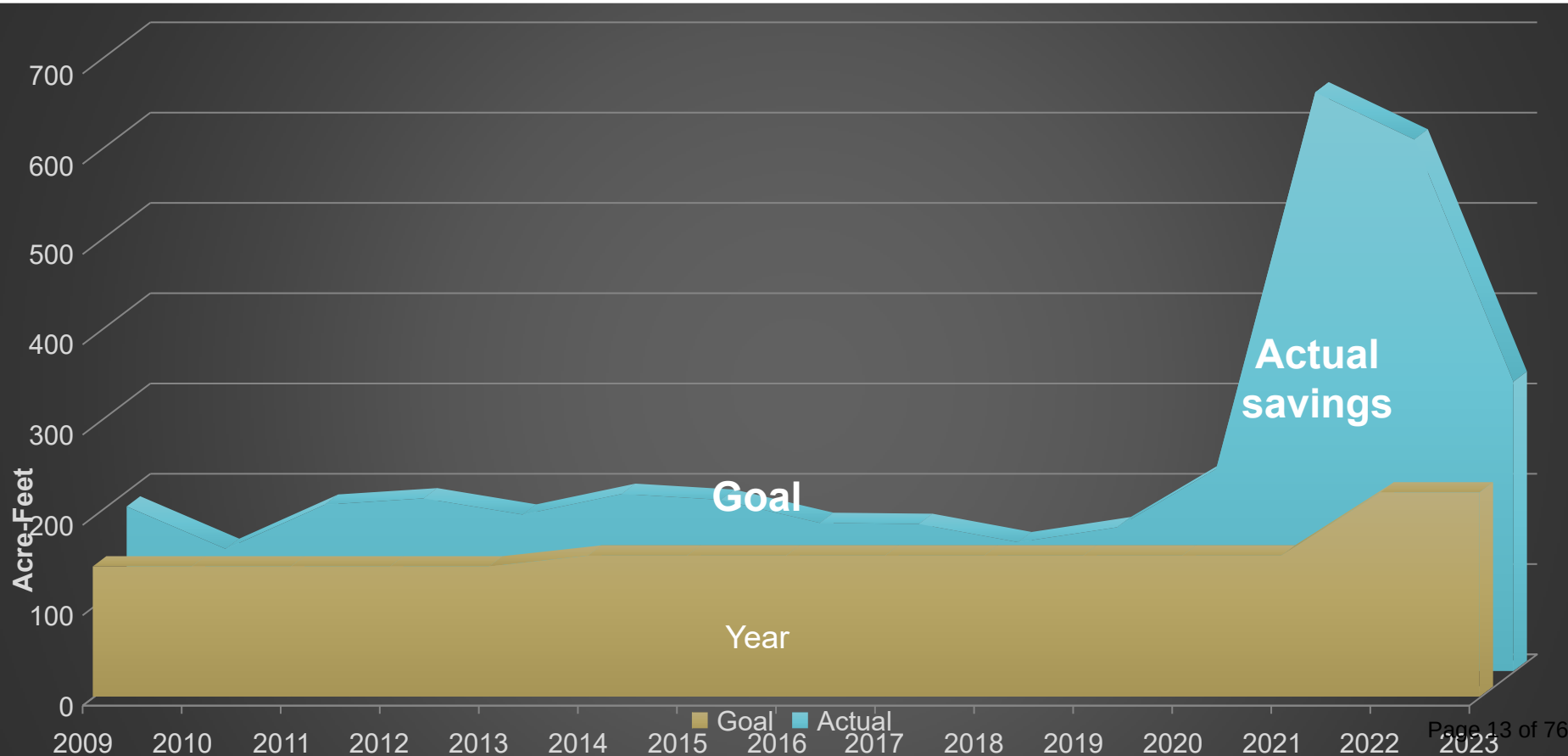




Largest Benefits

- Leak Alerts (based on AMI data only)
- Advanced Metering Infrastructure - AMI meters
- Water Wise Education
- Water Assessments
- Life After Lawn
- Increased Water Cost

Water Savings Estimate



Score cards



Community	Performance Indicators
Education- Lectures Series (webinars), Presentations, and Tours	• Work to partner with planned events/workshops • Utilize marketing strategies to increase participation • Include translations opportunities in materials and presentations
Education-Teacher Training	
Online Water Efficiency Tools	
Technology and Innovation	
Strategic Marketing Plan	
Collaboration	

Prosperity	Performance Indicators
Rebates and Incentives	• Annually review of rebate program including alignment with state and federal standards, industry changes, and City and Department goals and data-driven decision on rebate performance. • Annual review of return on investment and water saving calculations. Monitor programs effectiveness. • •
Advanced Metering Infrastructure (AMI) Optimization	• • •
Leak Detection	• • • •
Enforcement	• • • •
Income Qualified	• • • •

Water Conservation Management	Performance Indicators
Organizational Collaboration (Internally)	• Foster alignment with internal City partnerships to enhance water conservation methods • Enhance the data set and quantify the park's water budget for improved accuracy • Align assets in the field identified by Water Conservation to rectify any discrepancies
Land Use	• Leverage the Water Budget across all customer classes to optimize outdoor water use • Aid in the development of effective methods to boost soil amendments, improve Section 6 plan reviews, and address lawn variances. • Actively promote waterwise landscapes and establish demonstration garden areas.
Water Conservation Development	• Align performance goals with annual scorecard • Provide training, leadership and certification opportunities for staff • Enhance overall efficiency by implementing cross-training initiatives, thoroughly documenting operations and procedures, increasing internal mobility, and fostering a culture of collaboration.
Financial Resources and Budget	• Timely submission of the Conservation Budget • Track budget and current grants • Measure the return on investment for programs/projects
Reporting	• Track, compile and submit the mandated reports (HB1051, M36, AMI and other grant reports) • Align data analyses with program priorities
Water Loss	• Internal collaboration to reduce water loss • Incorporate leak notifications through customer service business processes • Conduct data analyzes on locations of leaks
Facility Maintenance	• Redesign and implement a new irrigation system at the Reservoir Rd. garden • Ensure the upkeep of two demonstration gardens • Develop a structured maintenance plan to guide and optimize care of the demonstration gardens • Establish sustainable methods for accommodating future EV/Hybrid vehicles
Customer Information System (CIS)	• Commit to a two-year initiative to ensure the successful launch of the new CIS • Undertake comprehensive database clean-up, management, and documentation processes • Develop and implement report outputs to streamline and enhance operational processes



2024 Score Cards



Highlights of Goals and Strategies

Community

- Education
- Indoor and Outdoor-DEI water conservation programs
- Strategic Marketing Plan
- External Collaboration

Prosperity

- Rebate spatial analysis
- CII program development
- Leak detection

Management

- Data driven programs, policies and procedures
- Reporting to Federal, State and local
- Land Use
- Collaboration within the City
- CIS

Residential Water Conservation Offerings

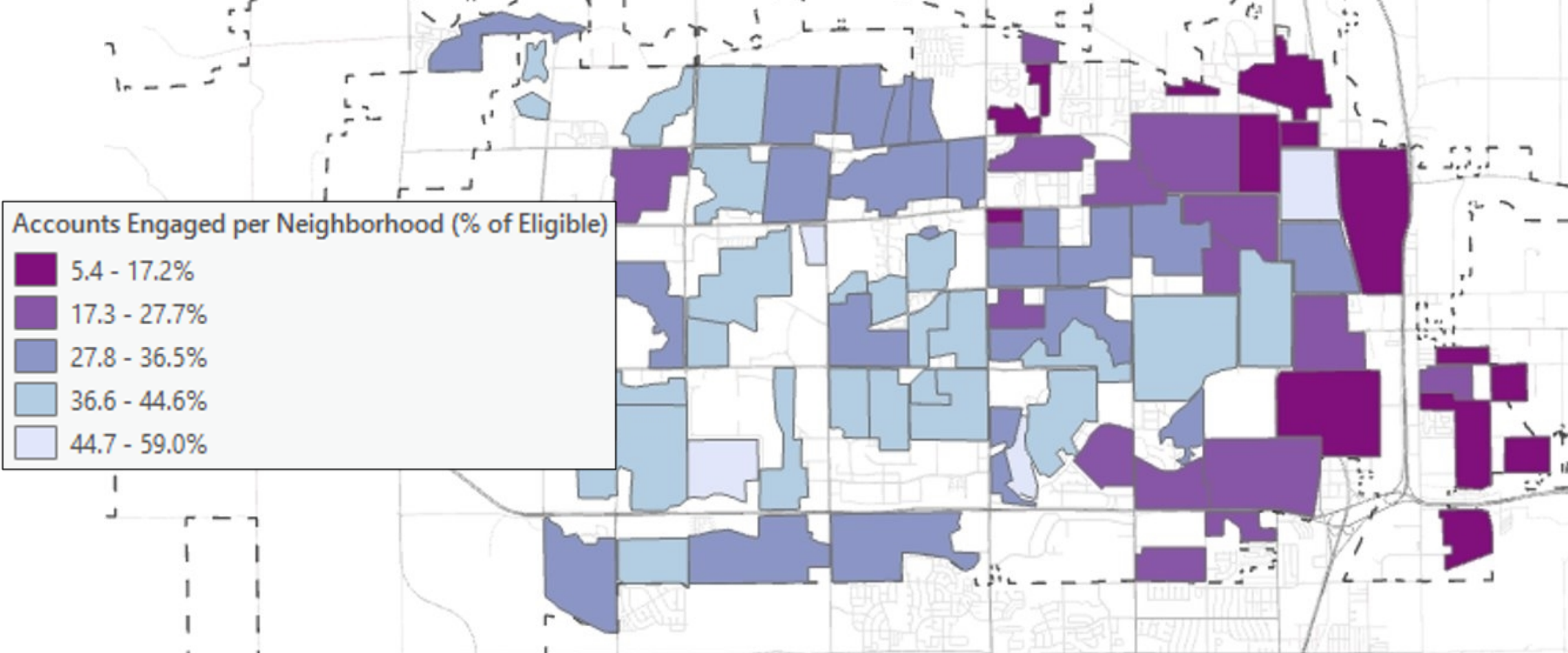
Method	Type	What
Free	Services	Water use assessments
		Leak detection
		Variances
		Landscape classes, tours
	Items	Exchanged showerheads
		Faucet aerators
	Customer tools	WaterSmart portal
		Water budget portal
		Plant database website
Discount	Items	Garden in a Box (plants)
Rebate	Replacements	Toilets
		Irrigation parts
		Cool-season turf

GREELEY WATER CONSERVATION PROGRAMS

The City of Greeley

is proud to have a long history of water stewardship here in northern Colorado. Since 1907, we've provided safe, high-quality water supplies for our residents while ensuring a reliable supply for the future. One of the many ways we're safeguarding your water supply is through water conservation. In fact, Greeley offers one of the most robust water conservation programs in Colorado.

With just over 13 inches of rainfall per year, Greeley is considered a semi-arid climate. This means local water supplies are scarce and must be used very wisely. To help customers save water indoors as well as outdoors, Greeley provides a wide range of water conservation programs and services that benefit a variety of water users. We hope you'll take a few minutes to learn more about these offerings and take the next steps to use water wisely.



Water Conservation Program Use

Partnerships



Direct Toilet Install Program

Flush and Flow



Greeley residents could receive:

- Free water use report
- Vouchers for 1-2 high-efficiency toilets
- Free installation
- Lower water bills

Sign up today! greeleygov.com/FlushAndFlow

City of Greeley



Inscríbese en el programa Flush and Flow de Greeley:

- Informe gratis sobre el uso del agua
- Vales para 1 o 2 inodoros de alta eficacia
- Instalación gratis
- Facturas de agua más bajas

¡Inscríbese hoy! greeleygov.com/FlushAndFlow

City of Greeley



Is your toilet using too much water?

Sign up for City of Greeley's Flush and Flow program and start saving today!

Qualified applicants receive vouchers for **TWO FREE TOILETS.**

We'll do the rest - including **FREE INSTALLATION!**

Customers on a fixed income or who receive assistance through government, or non-profit programs are automatically pre-qualified.

Visit greeleygov.com/flush-and-flow



Participate in Flush and Flow



Eligibility

- SNAP
- LEAP
- Food tax rebate
- Medicaid
- WIC
- Located within targeted Greeley Urban Renewal Authority (GURA)
- Etc.

Indoor Assessment

- Greeley staff site visit
- Install faucet aerators and low-flow showerheads
- Assist toilet's replacement viability
- Complete eligibility criteria

Schedule Installation

- Weld County Youth Conservation Corps installs the toilet



Bilingual Communications

Door hangers

Mailers

Posters

Flyers

“Business cards”

WaterSmart emails and text messages

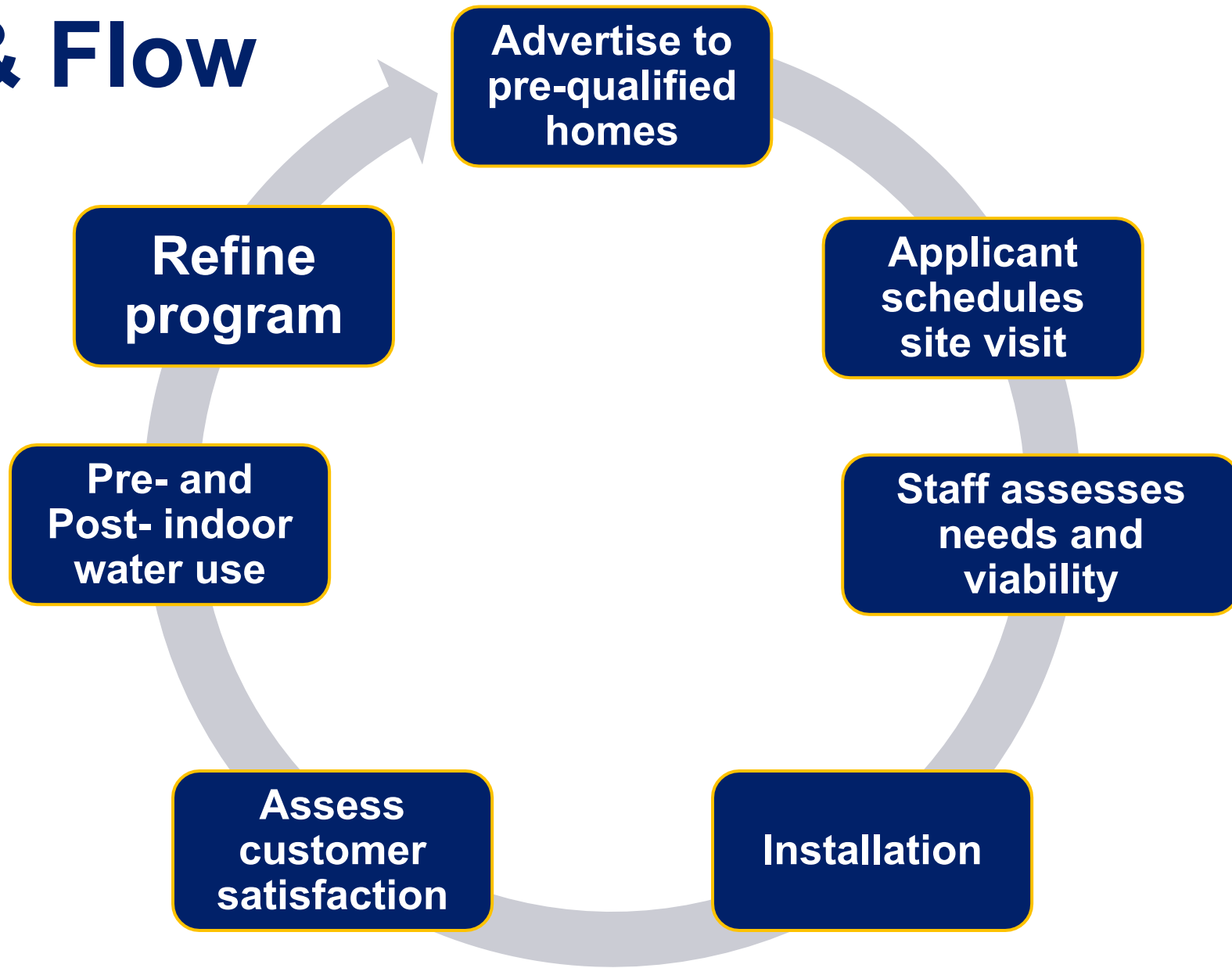
Social media posts

Digital ads

Radio ads

Newsletters

Flush & Flow



Thank you





Water & Sewer Agenda Summary

September 18, 2024

Key Staff Contact: Rebecca Andrus, Civil Engineer IV

Title:

Transmission and Distribution Project Update

Summary:

Staff will review 2024 capital projects, maintenance, and organizational changes in Greeley's Water Transmission and Distribution system.

Recommended Action:

Informational only

Recommended Motion:

None

Attachments:

1. Transmission and Distribution Project Update Discussion



Transmission and Distribution Project Update

**Rebecca Andrus,
Deputy Director Water and Wastewater Operations
Water and Sewer Board – September 18, 2024**

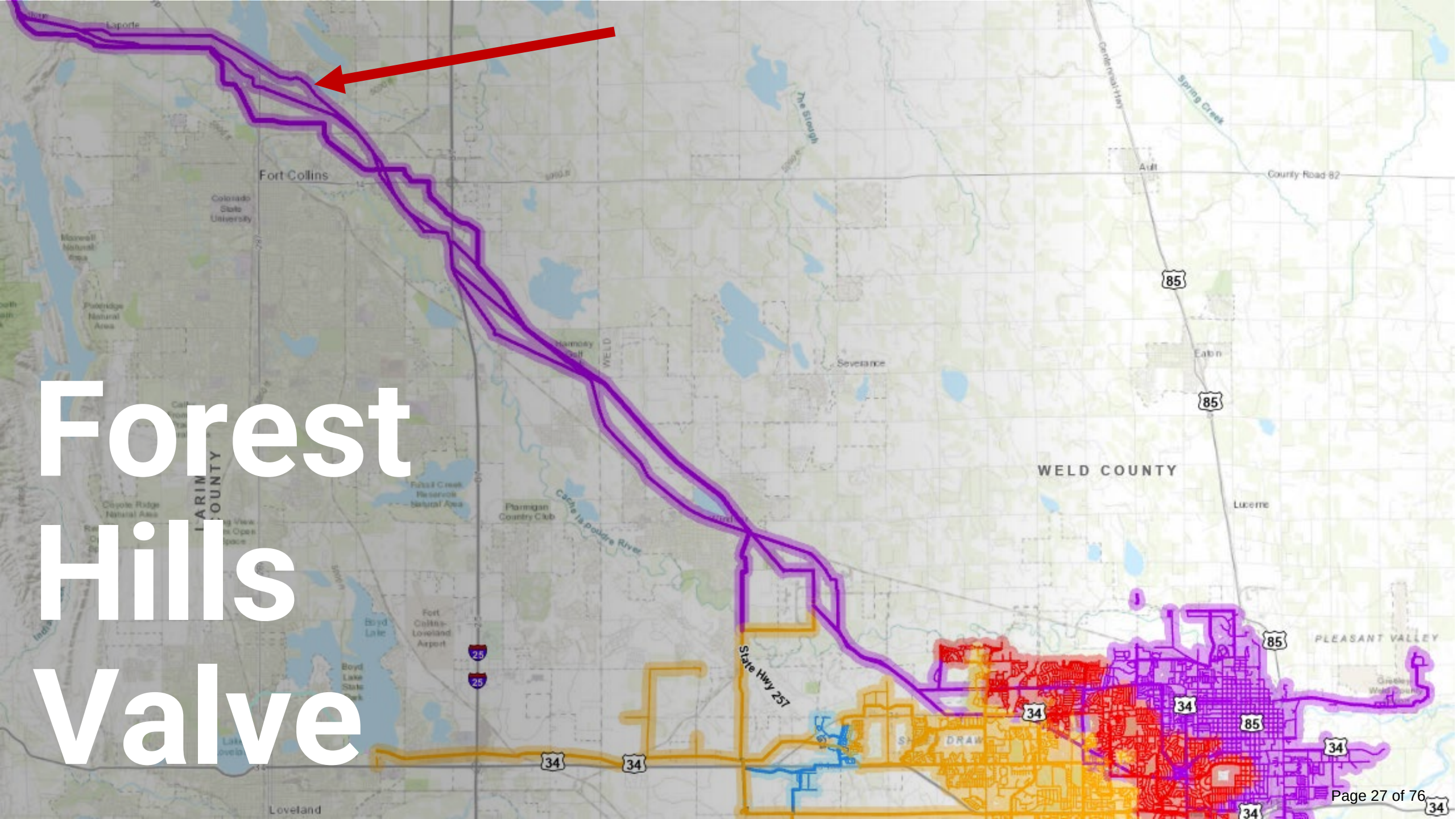


High Performance Government

Agenda

- Forest Hills Valve
- Mosier Transmission Rehab and Relocation of PRV 3
- Watermain Relocation Project (27th Street and Montview)
- Zone 1 PRVs
- Transmission and Distribution Reorganization
- Leak Repair and Preventative Maintenance
- Johnson's Subdivision Sewer (WWC)
- Budget





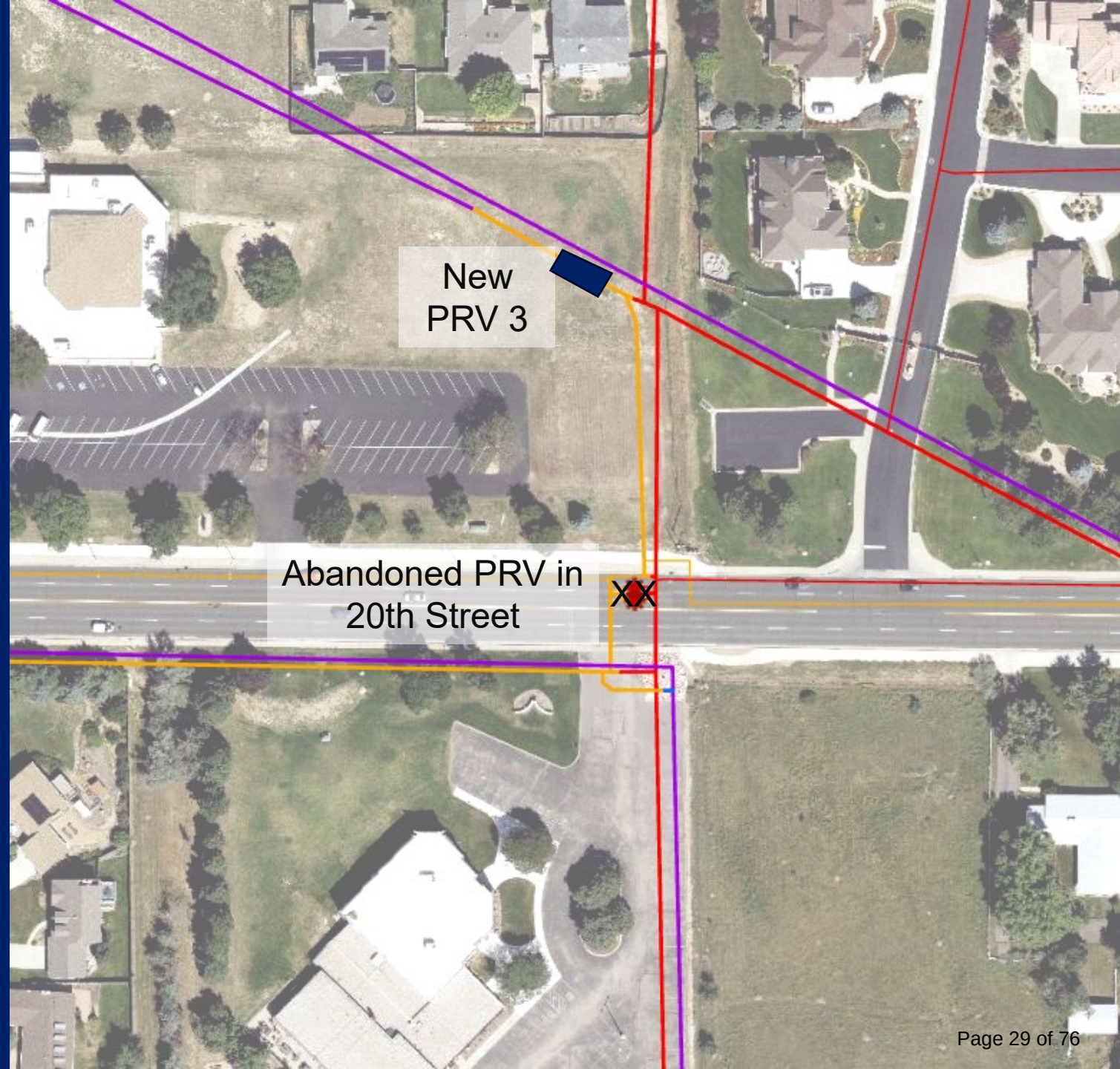
Forest Hills Valve

Forest Hills Valve



- 24" Valve on Bellvue 1
- Controls pressure and flow for upstream and transmission line
- SCADA Remote Control

Mosier Transmission Rehab and PRV #3 Relocation



PRV #3 (20th Street)





PRV #3 (20th Street)



SCADA Controls



PRV #3 (20th Street)



Chlorine and pH Monitoring



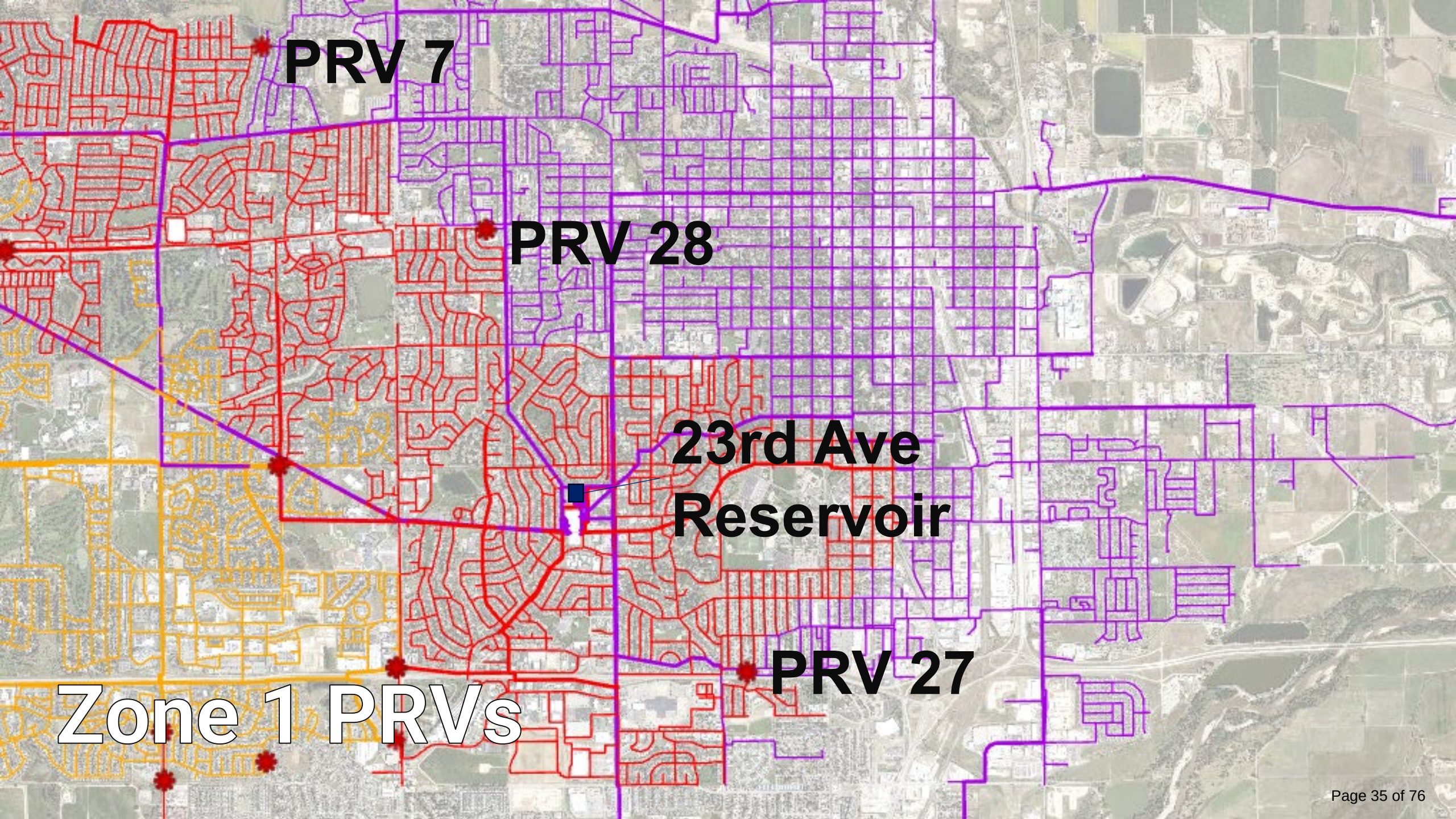
Water Main Replacement

Relocating
backyard
waterlines to
Streets

Water main Replacement

2024 Projects -
27th Street
Montview Neighborhood





PRV 7

PRV 28

**23rd Ave
Reservoir**

PRV 27

Zone 1 PRVs



PRV 28 (10th Street)



PRV 28 (10th Street)

Water Transmission & Distribution Team Proposed Reorganization

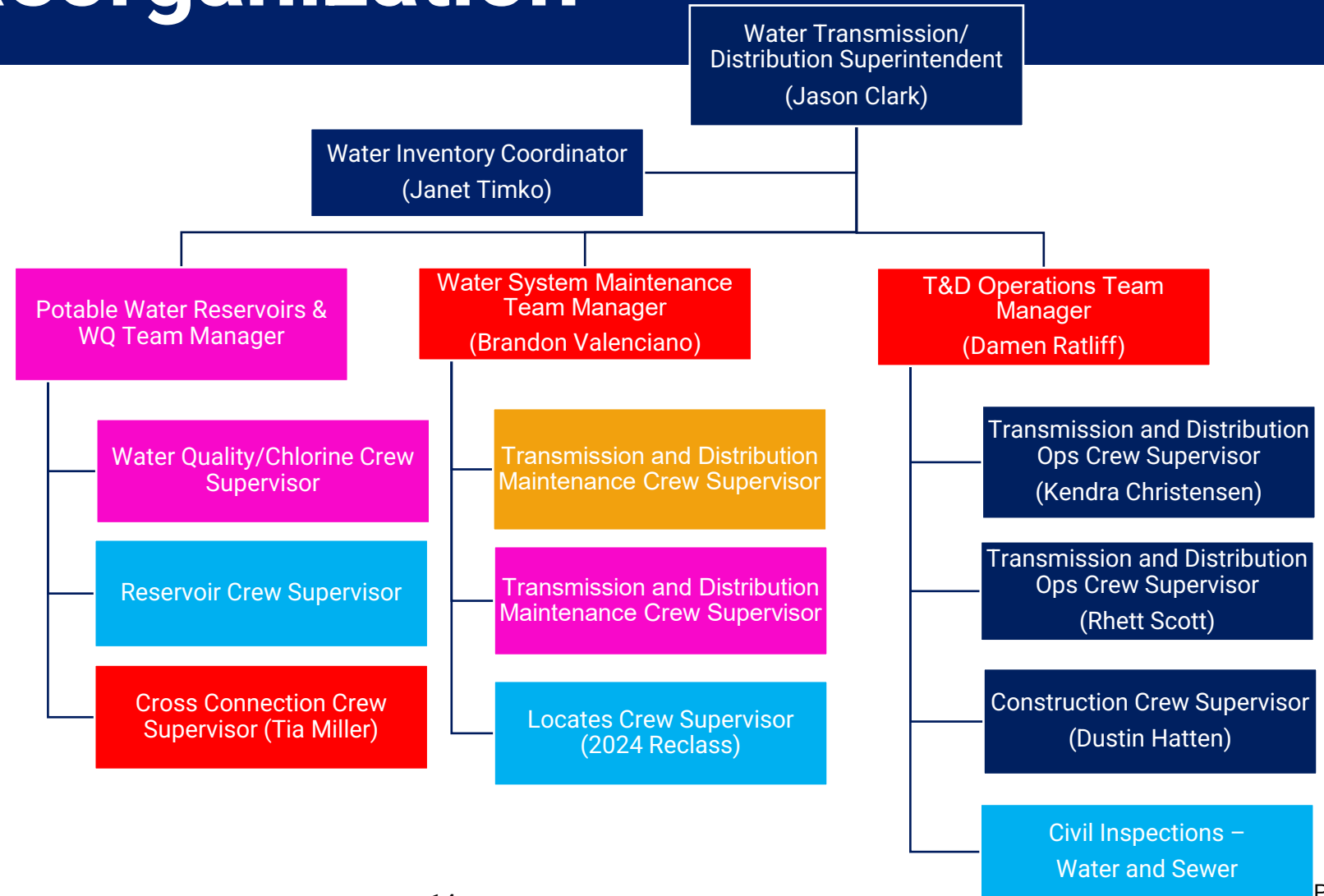
Currently Staffed

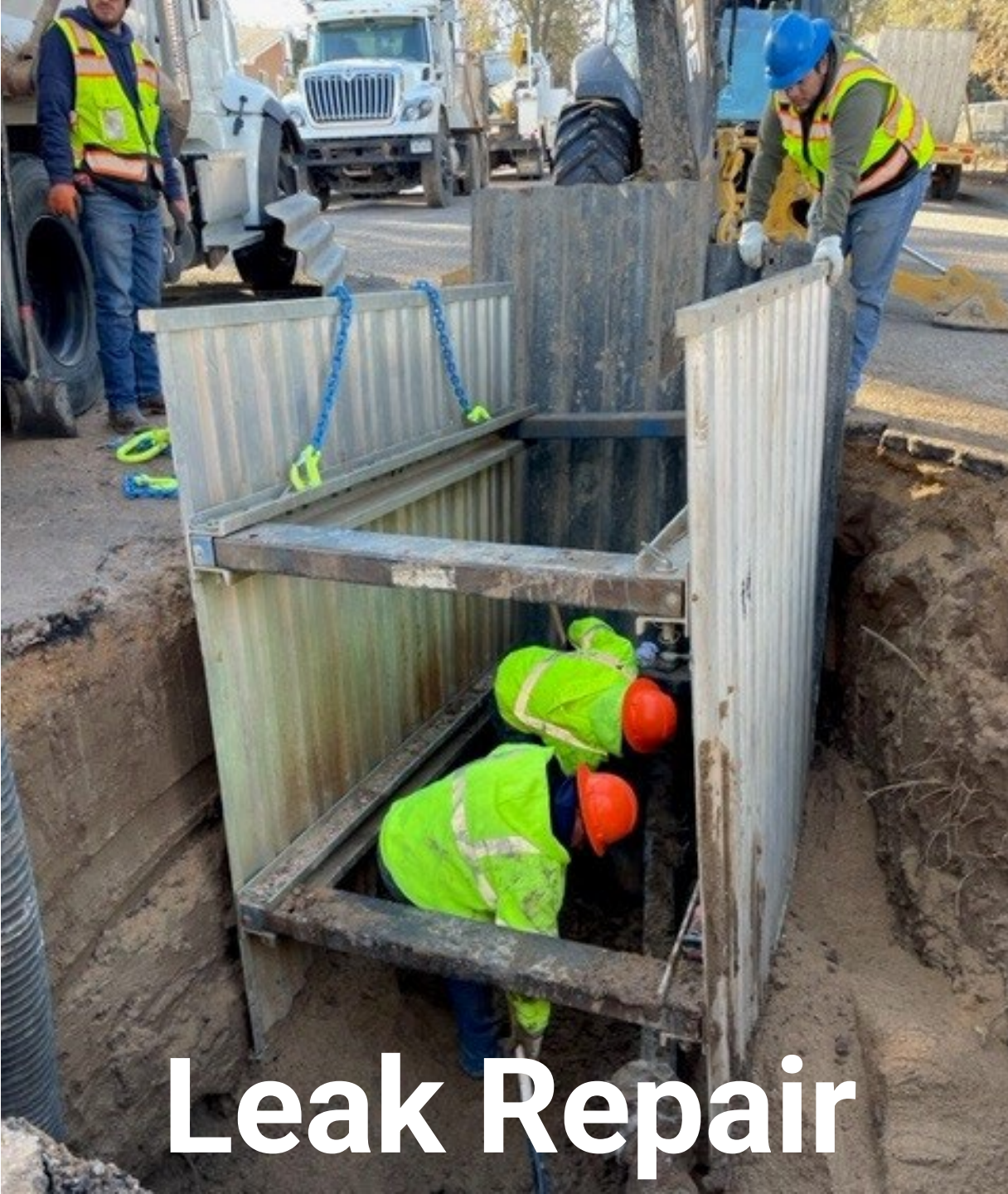
Current opening

Repurposed or Reclassified
existing FTE

2025 New Supervisor
Position

2026 New Supervisor
Position





Leak Repair



Greeley Water

Published by Cory Channell · 1m ·

Repairs to a water main break on 16th Street near North Colorado Medical Center will affect traffic into next week.

Greeley Water's Brandon Valenciano said the city is maintaining public safety by limiting 16th Street traffic to one eastbound and one westbound lane between 20th and 23rd Avenues. In addition, the city has put up fencing along the sidewalk to protect pedestrians.

The city expects traffic impacts to last until next week as crews wait for specialty parts to be fabricated and shipped.



WATER MAIN BREAK

16th Street
between
20th and 23rd Avenues

Maintenance

Hydrant Flushing

Valve Exercising

PRVs





Hydrant Replacement

Johnson's Subdivision Sewer Installation





Increased Budget for Capital Projects

Construction Crew

Preventative Maintenance Emphasis

Active communication and engagement

Budget



Questions?



Water & Sewer Agenda Summary

September 18, 2024

Key Staff Contact: Rebecca Andrus, Civil Engineer IV

Title:

Backflow Cross Connection Control Program Ordinance Discussion

Summary:

Section 20-191 of the Greeley Municipal Code is being revised to better conform to the revisions to 11.39 adopted by CDPHE in October 2023.

Recommended Action:

Informational only

Recommended Motion:

None

Attachments:

1. Backflow Cross Connection Control Program Ordinance Discussion
2. 2024-09-12 Revised Draft Ordinance and Exhibit A (Cross Connections)



Backflow Cross Connection Control Program Ordinance Discussion

Water and Sewer Board – September 18, 2024



High Performance Government

Agenda



- Overview of revisions to Section 20-191
- Comments or Questions

Section 20-191 Revisions



CDPHE Revised 11.39 and guidance Policy in October 2023

20-191

- Added and revised definitions
- Cross Connections and Backflow Prohibited
- Testing, Reporting, and Inspection
- Identification and Enforcement

Comments or Questions?



CITY OF GREELEY, COLORADO

ORDINANCE NO. ___, 2024

**AN ORDINANCE AMENDING TITLE 20, CHAPTER 3, ARTICLE III
OF THE MUNICIPAL CODE OF THE CITY OF GREELEY
(CONCERNING REGULATION OF CROSS CONNECTIONS IN THE PUBLIC WATER SYSTEM)**

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, Section 17-1 of the Greeley City Charter authorizes the Greeley Water and Sewer Board ("Board") to qualify the Water and Sewer functions and operations as an "enterprise" as that term is contained in Article X, Section 20 of the Colorado Constitution, and to provide for every function and operation of an enterprise, including but not limited to, bond issuance and all other necessary and ordinary functions of the Water and Sewer operations; and

WHEREAS, Section 17-4(c) of the Greeley City Charter and Section 20-30 of the Greeley Municipal Code authorize the Board to acquire, develop, convey, lease and protect the water and sewer assets, supplies and facilities needed to fully use the water supplies decreed, adjudicated or contracted for the City; and

WHEREAS, Section 20-191 of the Greeley Municipal Code sets forth the requirements and regulations related to cross connections and backflow prevention in the City's public water system; and

WHEREAS, City staff and the Board have recommended amending Section 20-191 of the Greeley Municipal Code as set forth on Appendix A, attached hereto and incorporated herein, to ensure compliance with applicable state and federal regulations and for the health and safety of the general public; and

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

Section 1. That Section 20-191 be amended as set forth on Appendix A, attached hereto and incorporated herein.

Section 2. Except as explicitly modified as set forth on Appendix A, all other provisions contained within Title 20 of the Greeley Municipal Code shall remain in full force and effect.

Section 3. This Ordinance shall take effect immediately following its final publication.

PASSED AND ADOPTED, SIGNED AND APPROVED ON THIS ____ DAY OF _____ 2024.

ATTEST

CITY OF GREELEY, COLORADO

City Clerk

Mayor

APPENDIX A
ORDINANCE AMENDING TITLE 20, CHAPTER 3, ARTICLE III
OF THE GREELEY MUNICIPAL CODE

Sec. 20-191. Cross connection control.

(a) *Purpose.* This section is intended to protect the city's ~~potable waterworks~~ PUBLIC WATER SYSTEM from contamination by backflow from a property owner's internal plumbing system or private water SUPPLY system through an ongoing program of cross connection control (also known as containment). Nothing in this section relieves a property owner from the cross connection control requirements of the plumbing code contained in chapter 9 of title 22 of this Code, which protects against backflow within a property owner's system (also known as isolation).

(b) *Definitions.* ~~As used in this section, unless the context otherwise requires~~ THE FOLLOWING WORDS, TERMS, AND PHRASES, WHEN USED IN THIS SECTION, SHALL HAVE THE MEANINGS ASCRIBED TO THEM BELOW, EXCEPT WHERE OTHERWISE DEFINED OR THE CONTEXT CLEARLY INDICATES A DIFFERENT MEANING:

AIR GAP MEANS A PHYSICAL SEPARATION BETWEEN THE FREE-FLOWING DISCHARGE END OF A POTABLE WATER SUPPLY PIPELINE AND AN OPEN OR NON-PRESSURE RECEIVING VESSEL INSTALLED IN ACCORDANCE WITH STANDARD ASME A112.1.2.

Backflow means THE UNDESIRABLE reversal of the normal direction of flow OF WATER OR MIXTURES OF WATER AND OTHER LIQUIDS, GASES, OR OTHER SUBSTANCES INTO in the city's ~~potable waterworks~~ PUBLIC WATER SYSTEM that can occur when pressure within a-ANY UNINTENDED source connected to the city's PUBLIC WATER system is greater than the water pressure within the city's ~~potable waterworks~~ PUBLIC WATER SYSTEM.

BACKFLOW CONTAMINATION EVENT MEANS BACKFLOW INTO THE CITY'S PUBLIC WATER SYSTEM FROM AN UNCONTROLLED CROSS CONNECTION SUCH THAT THE WATER QUALITY NO LONGER MEETS THE COLORADO PRIMARY DRINKING WATER REGULATIONS OR PRESENTS AN IMMEDIATE HEALTH OR SAFETY RISK TO THE PUBLIC.

Backflow preventer means a ~~device~~, BACKFLOW PREVENTION assembly OR BACKFLOW PREVENTION method or type of construction designed to prevent backflow into the city's ~~potable waterworks~~ PUBLIC WATER SYSTEM by separating the property owner's water SUPPLY system from the city's PUBLIC water system.

BACKFLOW PREVENTION ASSEMBLY MEANS ANY MECHANICAL ASSEMBLY INSTALLED AT A WATER SERVICE LINE OR AT A PLUMBING FIXTURE TO PREVENT A BACKFLOW CONTAMINATION EVENT, PROVIDED THAT THE MECHANICAL ASSEMBLY IS APPROPRIATE FOR THE IDENTIFIED CONTAMINANT AT THE CROSS CONNECTION AND IS AN IN-LINE FIELD-TESTABLE ASSEMBLY.

BACKFLOW PREVENTION METHOD MEANS ANY METHOD AND/OR NON-TESTABLE DEVICE INSTALLED AT A WATER SERVICE LINE OR AT A PLUMBING FIXTURE TO PREVENT A

BACKFLOW CONTAMINATION EVENT, PROVIDED THAT THE METHOD OR NON-TESTABLE DEVICE IS APPROPRIATE FOR THE IDENTIFIED CONTAMINANT AT THE CROSS CONNECTION.

~~Certified cross connection technician means a person who meets the requirements of article 12.2 of the Colorado Primary Drinking Water Regulations (as effective on March 30, 2004)~~ MEANS A PERSON WHO POSSESSES A CURRENT AND VALID BACKFLOW PREVENTION ASSEMBLY TESTER CERTIFICATION FROM ONE OF THE FOLLOWING APPROVED ORGANIZATIONS: AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) OR THE AMERICAN BACKFLOW PREVENTION ASSOCIATION (ABPA).

CONTAINMENT MEANS THE INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY OR A BACKFLOW PREVENTION METHOD AT ANY CONNECTION TO THE CITY'S PUBLIC WATER SYSTEM THAT SUPPLIES AN AUXILIARY WATER SUPPLY SYSTEM, LOCATION, FACILITY, OR AREA SUCH THAT BACKFLOW FROM A CROSS CONNECTION INTO THE CITY'S PUBLIC WATER SYSTEM IS PREVENTED.

CONTAINMENT BY ISOLATION MEANS THE INSTALLATION OF BACKFLOW PREVENTION ASSEMBLIES OR BACKFLOW PREVENTION METHODS AT ALL CROSS CONNECTIONS IDENTIFIED WITHIN A CUSTOMER'S WATER SUPPLY SYSTEM SUCH THAT BACKFLOW FROM A CROSS CONNECTION INTO THE CITY'S PUBLIC WATER SYSTEM IS PREVENTED.

CONTROLLED MEANS HAVING A PROPERLY INSTALLED, MAINTAINED, AND TESTED OR INSPECTED BACKFLOW PREVENTION ASSEMBLY OR BACKFLOW PREVENTION METHOD THAT PREVENTS BACKFLOW THROUGH A CROSS CONNECTION.

~~Cross connection means a link between the city's potable waterworks and a potential source of contamination, which could allow such contamination to backflow into the city's system~~ MEANS A CONNECTION THAT COULD ALLOW ANY WATER, FLUID, GAS, OR OTHER SOURCE OF CONTAMINATION TO FLOW FROM ANY PIPE, PLUMBING FIXTURE, OR CUSTOMER WATER SUPPLY SYSTEM INTO ANY PART OF THE CITY'S PUBLIC WATER SYSTEM THROUGH BACKFLOW, SUCH THAT THE RESULTING WATER QUALITY COULD PRESENT AN UNACCEPTABLE HEALTH OR SAFETY RISK TO THE GENERAL PUBLIC.

Industrial and commercial operations means any property or account whose ~~operations are~~ WATER USE IS not strictly domestic residential.

PUBLIC WATER SYSTEM MEANS THE PUBLICLY OWNED TRANSMISSION AND DISTRIBUTION SYSTEM, AND ALL ASSOCIATED FACILITIES AND APPURTENANCES, THERETO THROUGH WHICH THE CITY DELIVERS WATER TO ITS CUSTOMERS FOR HUMAN CONSUMPTION.

UNCONTROLLED MEANS NOT HAVING A PROPERLY INSTALLED AND MAINTAINED AND TESTED OR INSPECTED BACKFLOW PREVENTION ASSEMBLY OR BACKFLOW PREVENTION METHOD, OR THE BACKFLOW PREVENTION ASSEMBLY OR BACKFLOW PREVENTION METHOD DOES NOT PREVENT BACKFLOW THROUGH A CROSS CONNECTION.

WATER SUPPLY SYSTEM MEANS A PRIVATELY OWNED WATER DISTRIBUTION SYSTEM, PIPING, CONNECTION FITTINGS, VALVES AND APPURTENANCES WITHIN A BUILDING, STRUCTURE, OR PREMISES.

(C) APPLICABILITY. THE PROVISIONS OF THIS SECTION APPLY TO ALL PERSONS WITH COMMERCIAL, INDUSTRIAL, AND MULTI-UNIT RESIDENTIAL SERVICE CONNECTIONS TO THE CITY'S PUBLIC WATER SYSTEM, INCLUDING, WITHOUT LIMITATION, ANY PERSONS OUTSIDE THE CITY WHO ARE USERS OF THE PUBLIC WATER SYSTEM BY AGREEMENT WITH THE CITY.

~~(e)-(D) *Illegal e-Cross connections AND BACKFLOW PROHIBITED.*~~ It is unlawful for any person to make, install, maintain, or permit any cross connection to the city's ~~potable waterworks~~ PUBLIC WATER SYSTEM, except in accordance with the provisions of this section, OR FOR ANY PERSON TO CAUSE OR PERMIT ANY BACKFLOW FROM THEIR WATER SUPPLY SYSTEM INTO THE CITY'S PUBLIC WATER SYSTEM.

(1) THE DIRECTOR SHALL IDENTIFY THOSE CROSS CONNECTIONS REQUIRING A BACKFLOW PREVENTER BASED UPON THE DEGREE OF HAZARD PRESENTED BY SUCH CROSS CONNECTION, AS DETERMINED BY THE DIRECTOR IN THEIR SOLE DISCRETION, AND NOTIFY THE RESPONSIBLE PROPERTY OWNER THAT A BACKFLOW PREVENTER MUST BE INSTALLED. UPON RECEIPT OF NOTICE THAT THE DIRECTOR HAS IDENTIFIED SUCH A CROSS CONNECTION, THE SUBJECT PROPERTY OWNER SHALL INSTALL A BACKFLOW PREVENTOR AT THE WATER SERVICE CONNECTION WITHIN 120 DAYS OF SUCH NOTICE.

(2) IF ANY SUBJECT PROPERTY OWNER FAILS TO INSTALL A BACKFLOW PREVENTER WITHIN 120 DAYS OF SUCH NOTICE, THE DIRECTOR SHALL (A) CONTROL THE CROSS CONNECTION, (B) REMOVE THE CROSS CONNECTION, OR (C) SUSPEND WATER SERVICE TO THE SUBJECT PROPERTY.

(3) ANY PERSON WHO BECOMES AWARE OF AN UNCONTROLLED CROSS CONNECTION THAT MAY REQUIRE INSTALLATION OF A BACKFLOW PREVENTER PURSUANT TO THIS SECTION SHALL PROMPTLY REPORT SUCH CONNECTION TO THE DIRECTOR.

~~(d) *Backflow prohibited.* Any backflow into the city's potable waterworks is strictly prohibited.~~

~~(e) *Backflow preventers*~~; TESTING, REPORTING, AND inspection requirements.

~~(1) The director of water and sewer shall identify those cross connections requiring a backflow preventer based on the degree of hazard presented by such cross connection, as determined by the director of water and sewer. Such cross connections shall at least include all industrial and commercial operations connected to the city's potable waterworks. All backflow preventers must be approved by and installed in accordance with the standards and specifications established or adopted by the director of water and sewer.~~ ALL BACKFLOW PREVENTERS INSTALLED PURSUANT TO THIS SECTION SHALL BE OF A TYPE, SIZE AND DESIGN THAT IS APPROVED BY THE DIRECTOR AND INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS ESTABLISHED BY THE WATER AND SEWER DEPARTMENT IN A LOCATION WITH ADEQUATE ACCESS FOR MAINTENANCE, TESTING AND REPAIRS.

~~(2) The property owner shall install, operate, test and maintain backflow preventers at the property owner's expense to protect the city's potable waterworks. The property owner shall have the~~

~~backflow preventer tested upon installation by a certified cross connection control technician, and annually thereafter, unless, due to the hazard presented by the connection, the director of water and sewer requires more frequent testing. The property owner shall immediately repair or replace any backflow preventer found to be defective.~~ ALL PERSONS REQUIRED TO INSTALL A BACKFLOW PREVENTER PURSUANT TO THIS SECTION SHALL INSTALL, OPERATE, TEST, AND MAINTAIN THE BACKFLOW PREVENTER AT THEIR SOLE EXPENSE. ANY PERSON THAT FINDS A BACKFLOW PREVENTER ON THEIR PROPERTY TO BE DEFECTIVE SHALL IMMEDIATELY REPAIR OR REPLACE THE BACKFLOW PREVENTER AT THEIR SOLE EXPENSE.

~~(3) The property owner shall submit records of testing, maintenance and repairs to the water and sewer department within five days of completing such activities. The property owner and the water and sewer department shall retain such records for at least three years.~~ ALL PERSONS REQUIRED TO INSTALL A BACKFLOW PREVENTER PURSUANT TO THIS SECTION SHALL HAVE THE BACKFLOW PREVENTER TESTED BY A CERTIFIED CROSS CONNECTION CONTROL TECHNICIAN UPON INSTALLATION AND THEN ANNUALLY THEREAFTER, UNLESS, DUE TO THE HAZARD PRESENTED BY THE CONNECTION, THE DIRECTOR REQUIRES MORE FREQUENT TESTING.

~~(4) The director of water and sewer retains the right to test or otherwise check the installation and operation of any backflow preventer to ensure proper installation and operation.~~ ALL PERSONS REQUIRED TO INSTALL A BACKFLOW PREVENTER PURSUANT TO THIS SECTION SHALL SUBMIT TO THE DIRECTOR RECORDS CONCERNING THE TESTING, MAINTENANCE, AND REPAIR OF THE BACKFLOW PREVENTER WITHIN FIVE (5) DAYS OF COMPLETING SUCH ACTIVITIES AND SHALL RETAIN COPIES OF SUCH RECORDS FOR NO LESS THAN THREE (3) YEARS.

(5) RECORDS CONCERNING THE TESTING, MAINTENANCE AND REPAIR OF BACKFLOW PREVENTERS TO BE SUBMITTED TO THE DIRECTOR PURSUANT TO THIS SECTION SHALL INCLUDE, WITHOUT LIMITATION: (A) BACKFLOW PREVENTION ASSEMBLY OR METHOD TYPE AND LOCATION, (B) BACKFLOW PREVENTION ASSEMBLY OR METHOD MAKE, MODEL AND SERIAL NUMBER, (C) BACKFLOW PREVENTION ASSEMBLY OR METHOD SIZE, (D) TESTING DATES AND TESTING RESULTS, INCLUDING ALL RESULTS THAT WOULD JUSTIFY A PASS OR FAIL OUTCOME, (E) CERTIFIED CROSS-CONNECTION CONTROL TECHNICIAN CERTIFICATION AGENCY, (F) CERTIFIED CROSS-CONNECTION CONTROL TECHNICIAN'S CERTIFICATION NUMBER AND EXPIRATION DATE, (G) TEST KIT MANUFACTURER, MODEL AND SERIAL NUMBER, AND (H) TEST KIT CALIBRATION DATE.

(6) WITHOUT LIMITING ANY OTHER PROVISION OF THIS SECTION, THE DIRECTOR MAY INDEPENDENTLY TEST OR OTHERWISE INSPECT THE INSTALLATION AND OPERATION OF ANY BACKFLOW PREVENTER AT ANY TIME TO ENSURE PROPER INSTALLATION, OPERATION, AND PROTECTION OF THE CITY'S PUBLIC WATER SYSTEM.

~~(f) Survey and prevention. The director of water and sewer is authorized to conduct SUCH surveys AS ARE NECESSARY to identify hazardous cross connections AND verify the existence of backflow preventers, and to otherwise UNDERTAKE ANY OTHER NECESSARY ACTION support a program to eliminate TO~~

PROTECT THE CITY'S PUBLIC WATER SYSTEM AND ITS CUSTOMERS FROM CROSS connection hazards. THE DIRECTOR MAY CONTROL ANY SERVICE CONNECTIONS WITHIN THE PUBLIC WATER SYSTEM IN LIEU OF A SURVEY AS LONG AS THE SERVICE CONNECTION IS CONTROLLED WITH AN AIR GAP OR REDUCED PRESSURE ZONE BACKFLOW PREVENTION ASSEMBLY.

~~(g) Reporting of uncontrolled cross connections. Any person who becomes aware of an uncontrolled cross connection that may require a backflow preventer pursuant to this section shall promptly report such connection to the water and sewer department.~~ PENALTIES. ANY PERSON THAT FAILS TO COMPLY WITH THE PROVISIONS OF THIS SECTION, OR FAILS TO COOPERATE WITH THE INSTALLATION, INSPECTION, TESTING, MAINTENANCE, OR AS NEEDED REPAIR AND REPLACEMENT OF BACKFLOW PREVENTERS, IS PUNISHABLE UNDER CHAPTER 9 OF TITLE 1 OF THIS CODE.

~~(h) Discontinuing water service. The director of water and sewer may discontinue water service to any premises for which the owner fails to comply with the requirements of this section, or to which the owner denies reasonable access to the director of water and sewer as authorized by section 20-85 to determine compliance with this section. Such discontinuance of water service may be summary, immediate and without written notice whenever the director of water and sewer determines that such action is necessary to address an imminent threat to the city's waterworks or its water customers.~~ SUSPENSION OF WATER SERVICE. IN ADDITION TO ANY PENALTIES IMPOSED UNDER CHAPTER 9 OF TITLE 1 OF THIS CODE, THE DIRECTOR MAY SUSPEND WATER SERVICE TO ANY PERSON WHO FAILS TO COMPLY WITH THE PROVISIONS OF THIS SECTION, OR TO ANY PROPERTY UPON WHICH THE OWNER DENIES THE DIRECTOR REASONABLE ACCESS TO DETERMINE COMPLIANCE WITH THIS SECTION, AS AUTHORIZED BY SECTION 20-85. THE DIRECTOR MAY SUSPEND WATER SERVICE AS DESCRIBED IN THIS SECTION IMMEDIATELY AND WITHOUT NOTICE IF THE DIRECTOR DETERMINES THAT SUCH ACTION IS NECESSARY TO PROTECT THE CITY'S PUBLIC WATER SYSTEM AND ITS CUSTOMERS FROM CROSS CONNECTION HAZARDS.



Water & Sewer Agenda Summary

September 18, 2024

Key Staff Contact: Sam Harshbarger - Water Resource Administrator II

Title:

Water Court Update

Summary:

The City of Greeley Water and Sewer Department is active in numerous Water Court matters to develop additional water supply and to protect existing water rights. In the second trimester, Greeley filed five statements of opposition and stipulated out of four cases. Water court legal costs equaled \$113,088 and engineering costs equaled \$101,191 for a total cost of \$214,279 this trimester. This brings the total legal costs to \$231,101 and the engineering costs to \$215,146 for a total of \$446,247 for this year.

Recommended Action:

Informational only

Recommended Motion:

None

Attachments:

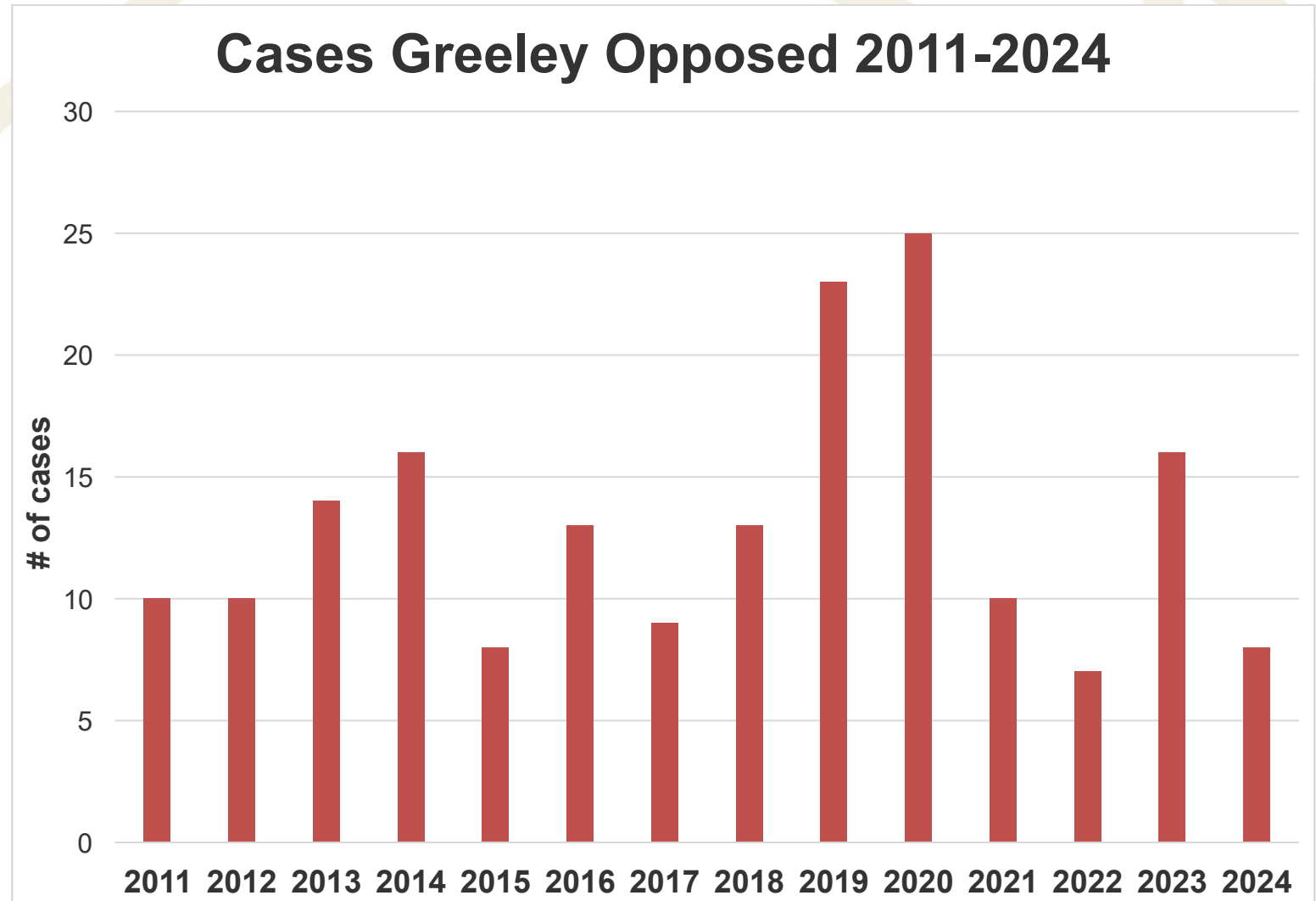
1. Water Court Update
2. 2nd Tri-Annual Water Court Update

2nd Trimester Water Court Update

Sam Harshbarger, Water Resources Administrator II
September 18, 2024

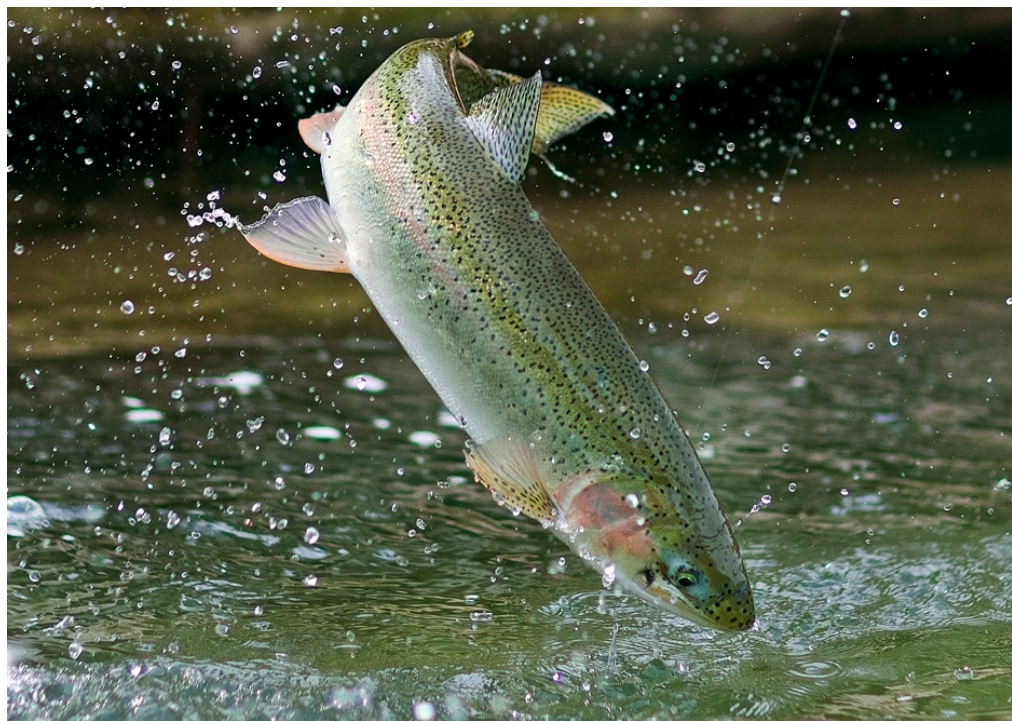
Statements of Opposition

- T2 2024: 5 statements of opposition filed, 4 stipulations reached, and 22CW3220 Lower Poudre Diligence decree received
- Number of cases Greeley is *currently* an opposer: **33**
- Total number of active cases in 2024: **36**



Greeley as Applicant

Poudre Instream Flows Aug. Plan 21CW3056



- Preserve and improve Poudre River instream flows
- Co-Applicants with CWCB, Fort Collins, and Thornton
- Greeley using GIC rights
- 20 statements of opposition filed
- Case has been re-referred to Judge
- The applicants are meeting with opposers individually to address remaining issues

Greeley as Applicant

Greeley Change of WSSC (22CW3042)

- Changing 23.917 shares
- Municipal, augmentation, and other uses
- Includes plan for augmentation for return flows
- Conditional direct flow water right for return flows
- 24 statements of opposition were filed; 8 stipulations reached
- Greeley is meeting with opposition directly to address remaining concerns



Greeley as Applicant

Greeley Lower Poudre Water Stewardship Project Diligence (23CW3158)



- Filed application on November 30, 2023.
- Greeley is not claiming additional conditional groundwater rights or rights of exchange as absolute.
- 3 statements of opposition filed. All parties have stipulated or withdrawn their statements of opposition
- Greeley has resolved all opposition and expect to receive a final decree in the near future.

Legal & Engineering Expenses

2024 Costs

Legal	\$ 231,101
Engineering	\$ 215,146
Total	\$ 446,247

This is 75.9% of the \$587,472 spent in 2023

Questions?





Water & Sewer Department MEMORANDUM

TO: Greeley Water & Sewer Board
FROM: Sam Harshbarger, Water Resources Administrator II
DATE: September 10, 2024
RE: 2024 2nd Tri-Annual Water Court Update

This memorandum is a review of the Water and Sewer Department's legal activities from May 2024 through August 2024. The review includes an update on Greeley's current Water Court cases and a summary of the Water Resources Division's legal expenses.

STATEMENTS OF OPPOSITION

Since the last update in May, Greeley has filed five statements of opposition and stipulated in six cases. As of September 10, 2024, the number of pending Water Court cases in which Greeley was an opposer is 33.

Statements of Opposition filed:

Case	Applicant
24CW3041	Basin Lands, LLC
24CW3059	Groundwater Management Subdistrict of the Central Colorado Water Conservancy District
24CW3060	United Water and Sanitation District
24CW3078	Groundwater Management Subdistrict of the Central Colorado Water Conservancy District
24CW3079	Ed Orr, Susie Ann Orr and the Cache LLC

Stipulations filed:

Case	Applicant
20CW3073	PVIC Augmentation Group, LLC
22CW3107	Buckhorn Highline Ditch
23CW3012	ACWWA, FIDCO
23CW3137	City of Fort Collins Natural Areas
21CW3229	East Larimer County Water District
21CW3199	North Weld County Water District

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.

GREELEY AS APPLICANT

A summary of pending Water Court cases in which Greeley is the applicant is as follows:

21CW3056 (City of Greeley, et al., Poudre River Instream Flows Augmentation Plan)

On April 29, 2021, the City of Greeley filed a joint application with the Colorado Water Conservation Board, Colorado Water Trust, City of Fort Collins, City of Thornton, Northern Water, and the Cache la Poudre Water Users Association for approval of a plan of augmentation for instream flows in the Cache la Poudre River. The purpose of the augmentation plan is to preserve and improve the natural environment to a reasonable degree at various locations in the Poudre River from the Cache la Poudre at Canyon Mouth near Fort Collins gage to the confluence of the South Platte River. Greeley has proposed to include certain of its changed Greeley Irrigation Company shares in the plan. Twenty statements of opposition have been filed. This case has been re-referred to the water judge and is set for trial in October 2025. Greeley and the other applicants are continuing to work toward settlement with the opposing parties, and preparing for trial in the event that the case is not settled. Applicants' expert disclosures are due in January 2025.

22CW3042 (City of Greeley Change of WSSC)

On March 31, 2022, the City of Greeley filed its application for the change of 23.917 shares in the Water Supply and Storage Company ("WSSC"). Greeley is changing the shares from irrigation to municipal, augmentation, and other uses. Greeley also seeks a plan for augmentation and water exchange project for the replacement of return flows from the native portion of the Subject Shares and an appropriation of such return flows. Greeley also seeks a conditional direct flow water right for replacement of return flows. Twenty-four statements of opposition were filed. Greeley has stipulated with eight opposers and has made substantial progress toward stipulation with many of the remaining parties. We are in the fifth round of informal comments on the referee's docket in this case. Greeley is meeting with parties individually to discuss the remaining issues and work toward settlement.

22CW3220 (City of Greeley Lower Poudre Diligence)

On December 31, 2022, the City of Greeley filed its application for diligence and to make an additional portion absolute for partially conditional water rights originally decreed in Case No. 99CW234. This application concerns the partially conditional water storage rights for Flatirons Reservoirs 1-5 (a.k.a. Poudre Ponds) and the partially conditional rights of substitution and exchange. Greeley is seeking to increase the absolute storage amount in Poudre Ponds from 1,304 acre-feet to 1,458.6 acre-feet. Greeley is also seeking to increase the absolute rate of exchange from 6.14 c.f.s. to 9.04 c.f.s. from the Wastewater Treatment Plant to the Boyd and Freeman Headgate. Four statements of opposition were filed, and all parties stipulated to the proposed decree. Greeley has received a decree for this case.

23CW3158 (City of Greeley Lower Cache la Poudre River Water Stewardship Project)

On November 30, 2023, Greeley filed this application for diligence for conditional groundwater rights and a conditional exchange water right previously decreed in Case No. 99CW231. The groundwater rights include several wells at various locations within Greeley, and the Flatiron

Reservoirs (a.k.a. Poudre Ponds). The exchanges will be used to replace depletions from various structures including the groundwater rights that are also the subject of this application. Three statements of opposition were filed. Greeley has reached stipulations with all remaining parties and circulated a final decree for review. It is anticipated that Greeley will have a final decree soon.

LEGAL & ENGINEERING EXPENSES:

The Water Resource Division's outside legal and engineering expenses from January 2024 through August 2024 totaled \$446,247, which is 75.9% of the total \$587,472 spent in 2023.

2024 Water Resources Legal and Engineering Costs

<u>1st trimester</u>	
Legal	\$118,013
Engineering	\$113,955
<i>Total</i>	\$231,968
 <u>2nd trimester</u>	
Legal	\$113,088
Engineering	\$101,191
<i>Total</i>	\$214,279
 <u>3rd trimester</u>	
Legal	\$0.00
Engineering	\$0.00
<i>Total</i>	\$0.00
 <u>Annual Totals</u>	
Legal	\$231,101
Engineering	\$215,146
Total	\$446,247



Water & Sewer Agenda Summary

September 18, 2024

Key Staff Contact: Leah Hubbard, Water Resource Operations Manager

Title:

Legal Report

Summary:

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

Based on our review of the July 2024 Water Division 1 Resume, staff and water counsel recommend that the Water and Sewer Board file no statements of opposition this month.

Recommended Action:

Informational only

Recommended Motion:

None

Attachments:

None



Water & Sewer Agenda Summary

September 18, 2024

Key Staff Contact: Sean Chambers, Water & Sewer Director

Title:

Director's Report

Summary:

The Director is traveling with other members of the city's executive leadership team on a legislative advocacy trip, communicating on the need for infrastructure funding, the renewal of federal funds for low income water utility assistance, water workforce development grant programs, water quality monitoring funding, and Farm Bill programs that support healthy watersheds.

Deputy Director of Utility Finance and Customer Service, Erik Dial will coordinate the Director's report.

1. Education and Advocacy and Events Calendar

Colorado River District Annual Water Seminar

Friday, September 20th at Colorado Mesa University, Grand Junction

www.coloradoriverdistrict.org/annual-water-seminar-2024/

Water Quality Control Division Dredge & Fill Workshops

October - December, Workshop on Regulation 87 Dredge & Fill rulemaking

www.cdphe.state.gov/dredge-and-fill

Colorado Water Conservation Board Annual C-9 all basins summit

A meeting of the state's 9 basin roundtables, guided by Water for the 21st Century Act; Oct. 1-2, 2024
Crested Butte

www.cwcb.colorado.gov/events/c9-summit

Energy & Environment Leadership Symposium

Oct. 3-4, Hosted by University of Northern Colorado and Greeley Chamber

<https://business.greeleychamber.com/events/details/energy-environment-leadership-symposium-19177>

Dedication of Colorado River Connectivity Channel at Windy Gap

October 15th, 1:30 pm, Granby, CO

<https://www.northernwater.org/in-the-community/Northern-Water-events>

Association of Metropolitan Water Agencies '24 Executive Management Conference

October 20th – 23rd

<https://www.amwa.net>

Norther Water Fall Water Users Symposium

October 30th – Loveland, CO

<https://www.northernwater.org/in-the-community/Northern-Water-events>

Water in the West Symposium by Colorado State University at Spur Campus
November 13 – 14th at Hydro building of CSU’s Spur campus, Denver

<https://csuspur.org/witw/>

South Platte Basin Forum

November 21st at Aims Welcome Center, Greeley, CO

<https://www.southplatteforum.org/>

Colorado River Water Users (CRWU) Conference

December 4th – 6th 2024

<https://crwua.org/>

2. Recognition of Staff Presenting at Water Industry Events and Conferences:

Staff from across the W&S Dept. have been representing Greeley water utilities at a variety of industry conferences and events. These presentations develop staff and they demonstrate Greeley’s leadership in the water utility industry.

Recommended Action:

Informational only

Recommended Motion:

None

Attachments:

1. WS-Community-Tour-2024-Flyer
2. Board Meeting Charts_2024



WATER & SEWER

REGISTER TODAY!

Community
Water & Sewer Tour
September 20, 2024
8 a.m. to 2 p.m.

It's as easy as 1-2-3!

1. Scan the QR Code.
2. Register for the tour.
3. Join us on September 20, 2024.

This year's tour stops include:

- Greeley's wastewater treatment plant
- Neighborhood waterline replacement project
- Gold Hill water tower and reservoir
- Lunch at the Bellvue Water Treatment Plant

Space is limited so sign up today!

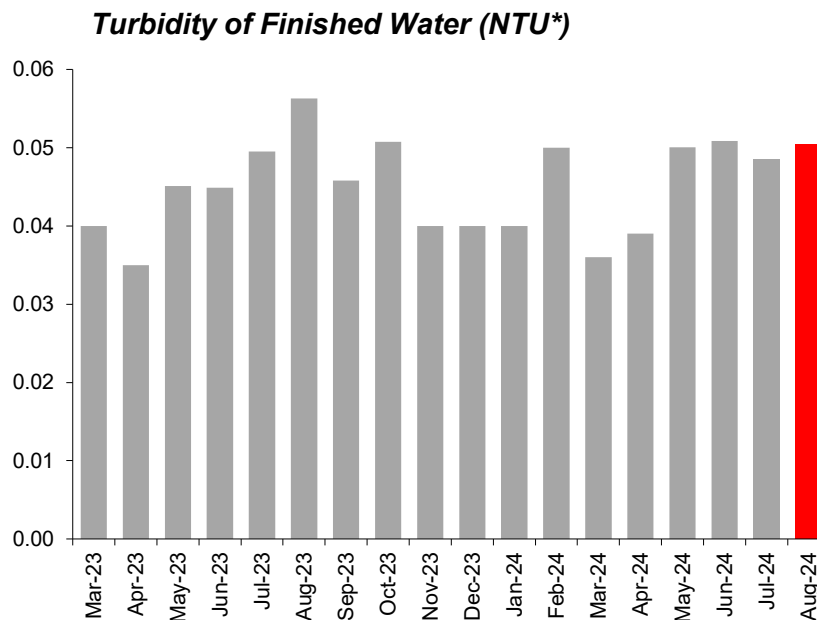
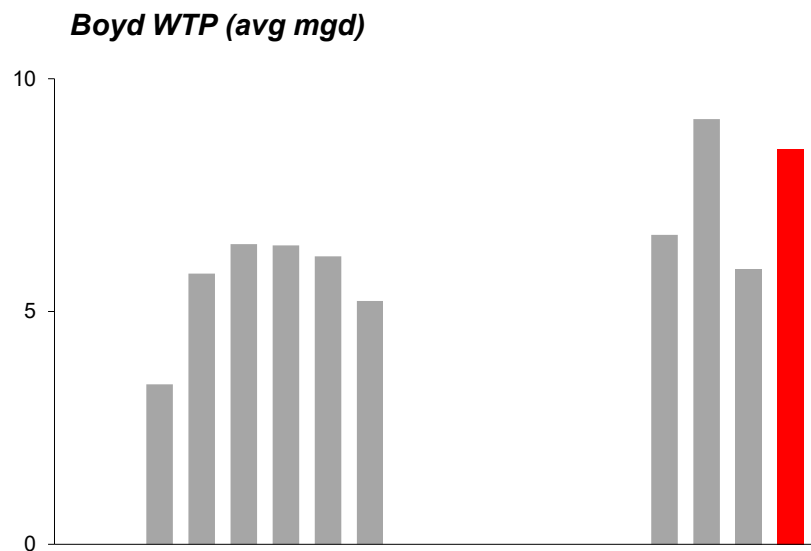
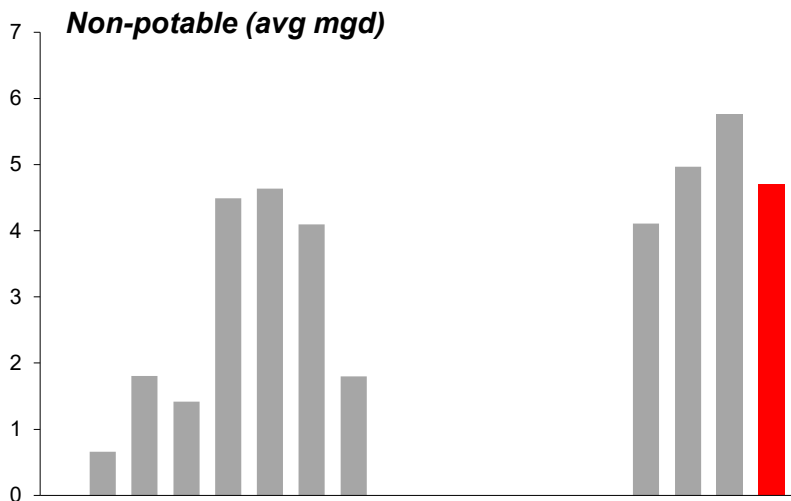
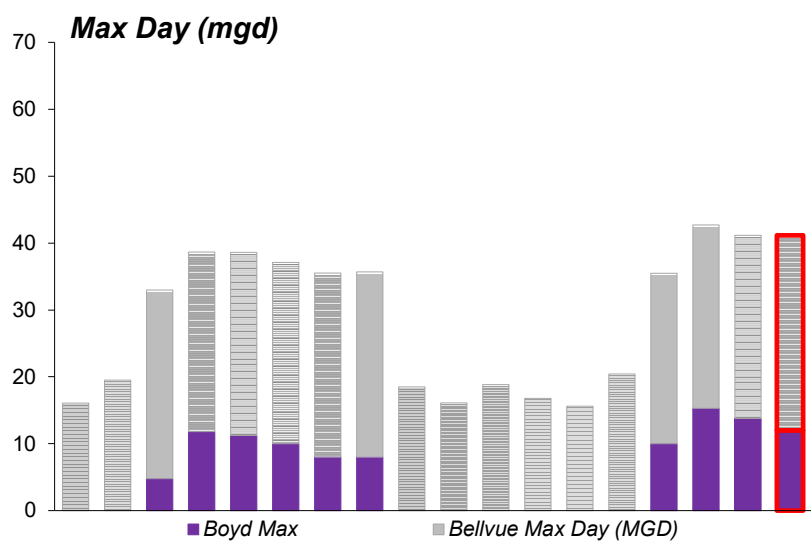


Water Treatment

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 platte 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.

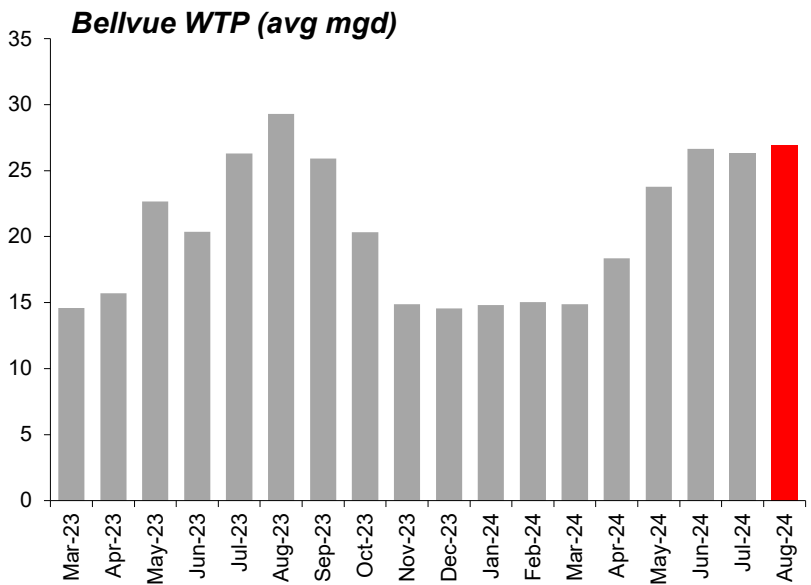
Combined, Bellvue and Boyd can treat a maximum of 70-73 million gallons per day.



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).

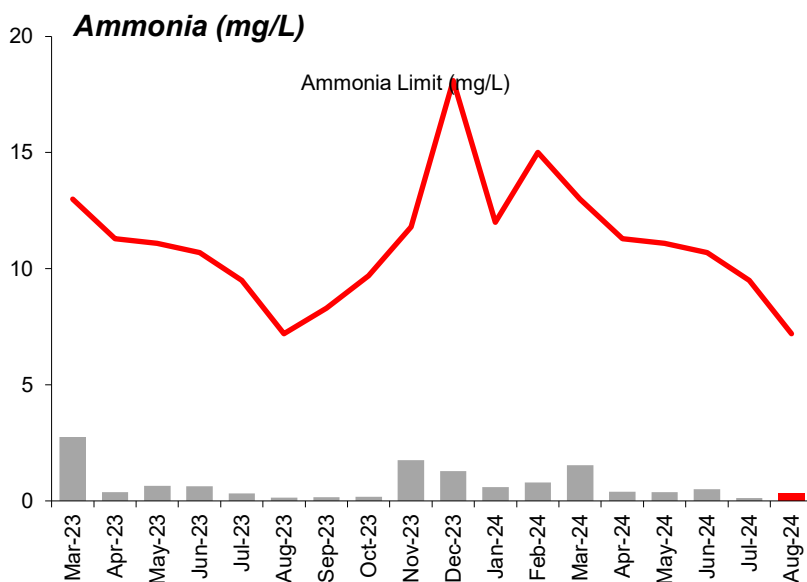
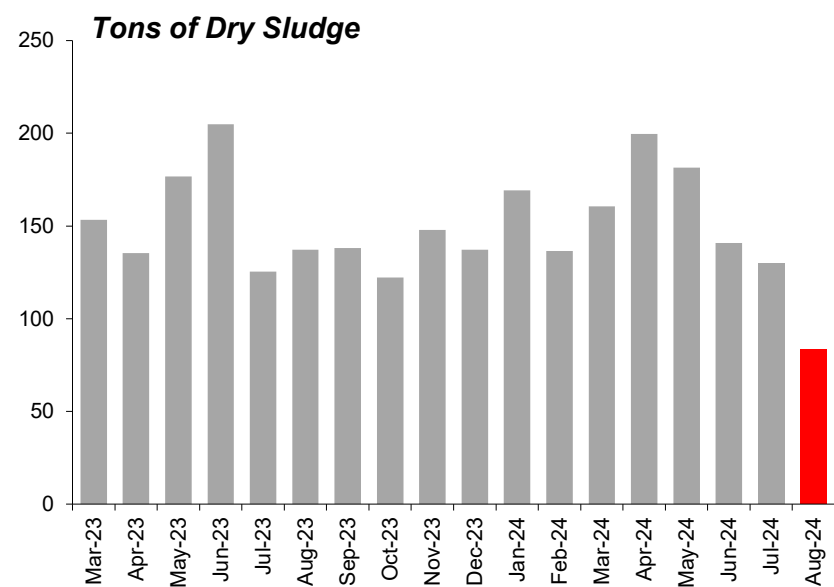
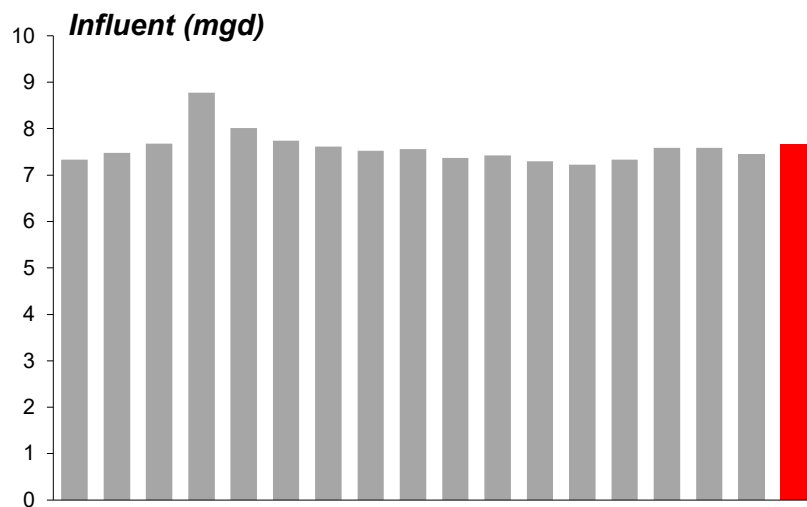
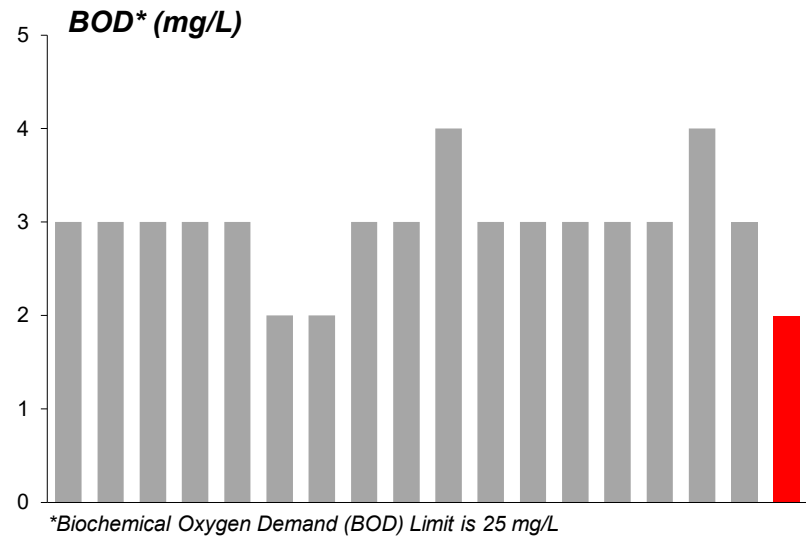
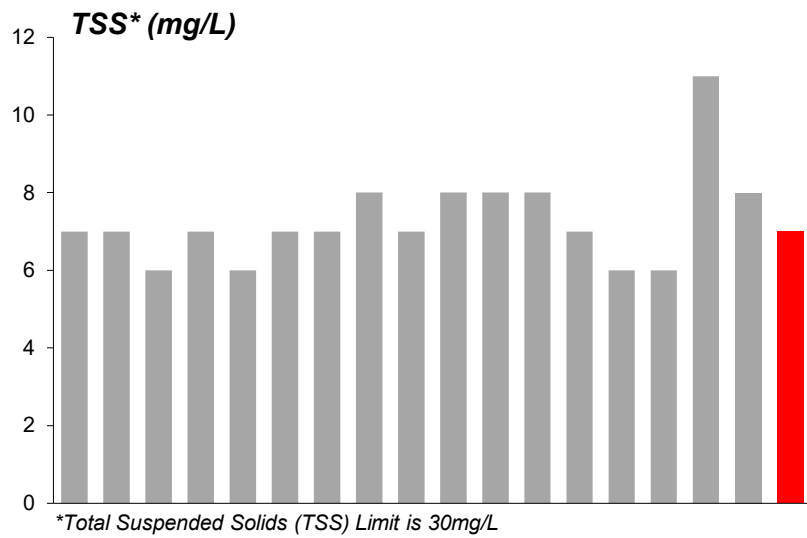


Wastewater Treatment

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.



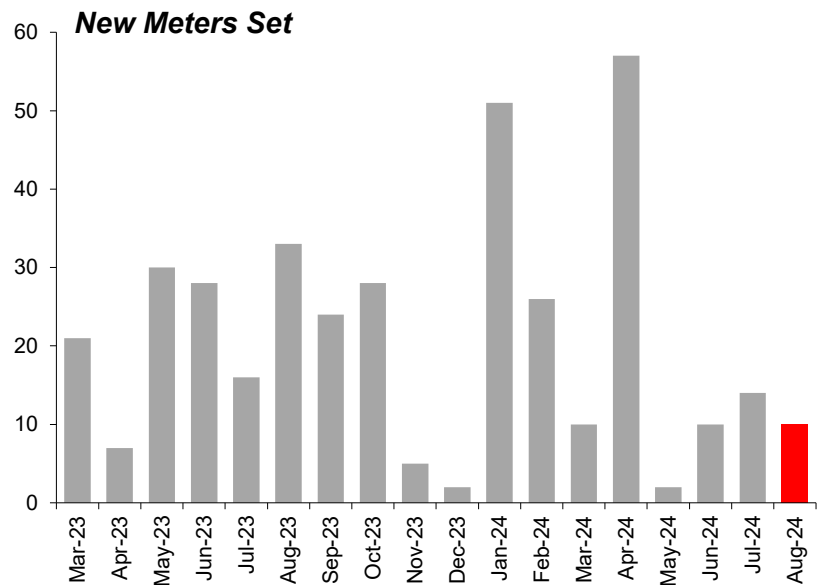
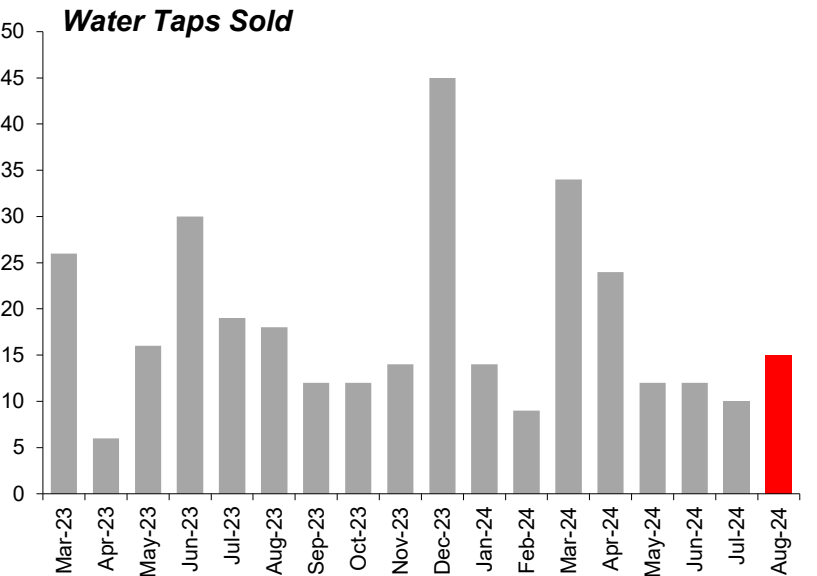
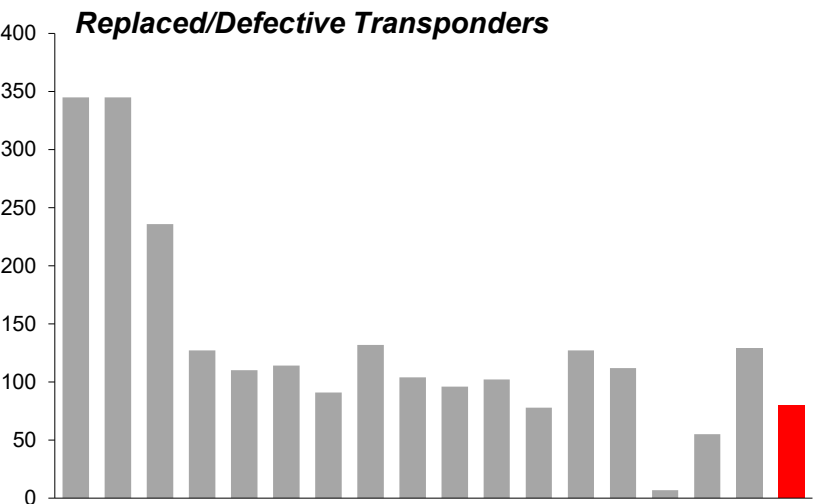
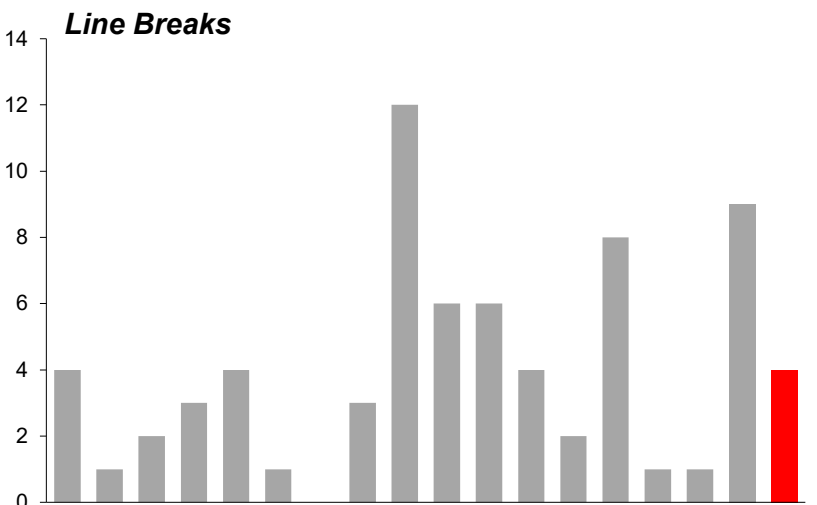
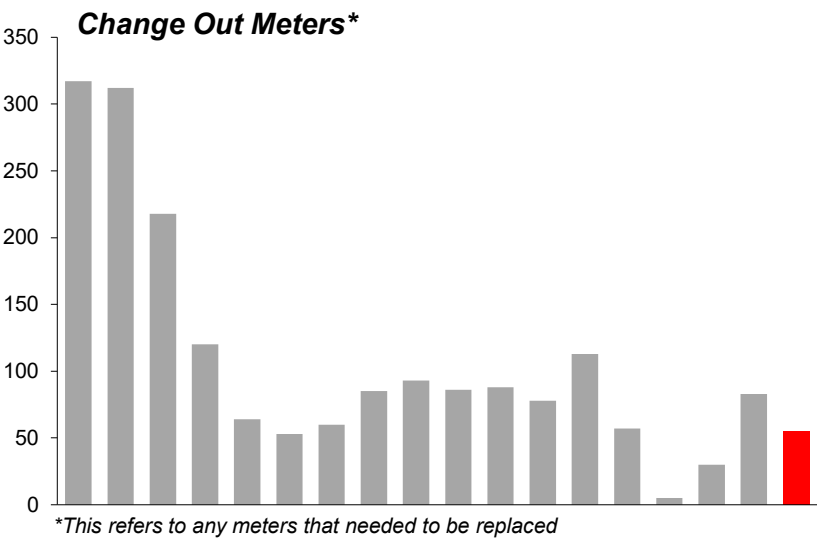
Water Distribution

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.



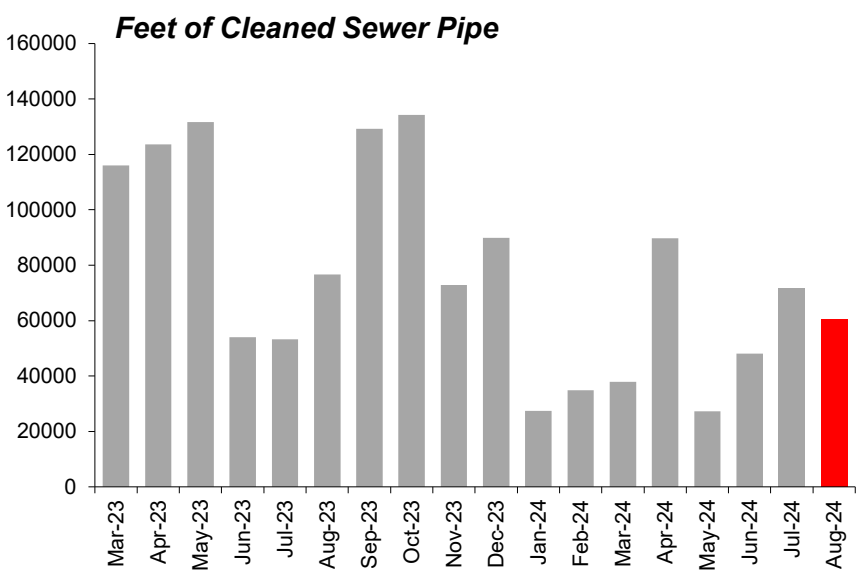
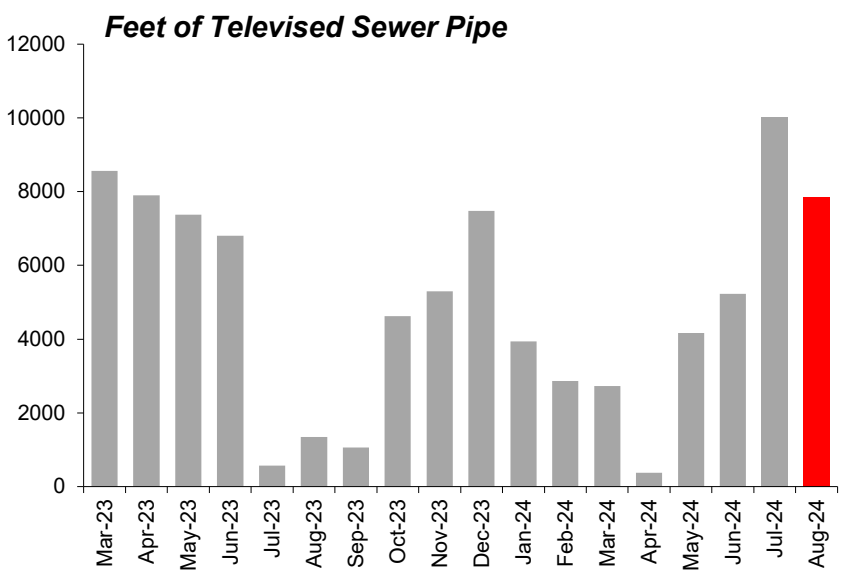
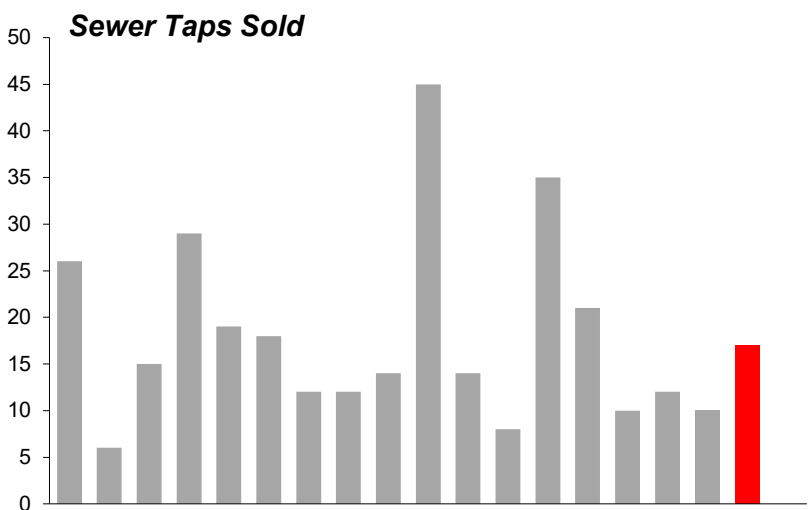
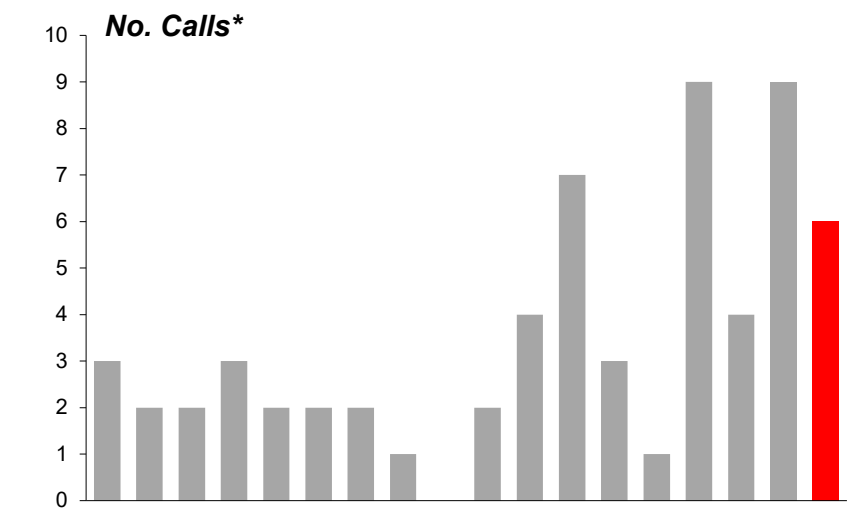
Wastewater Collection

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.

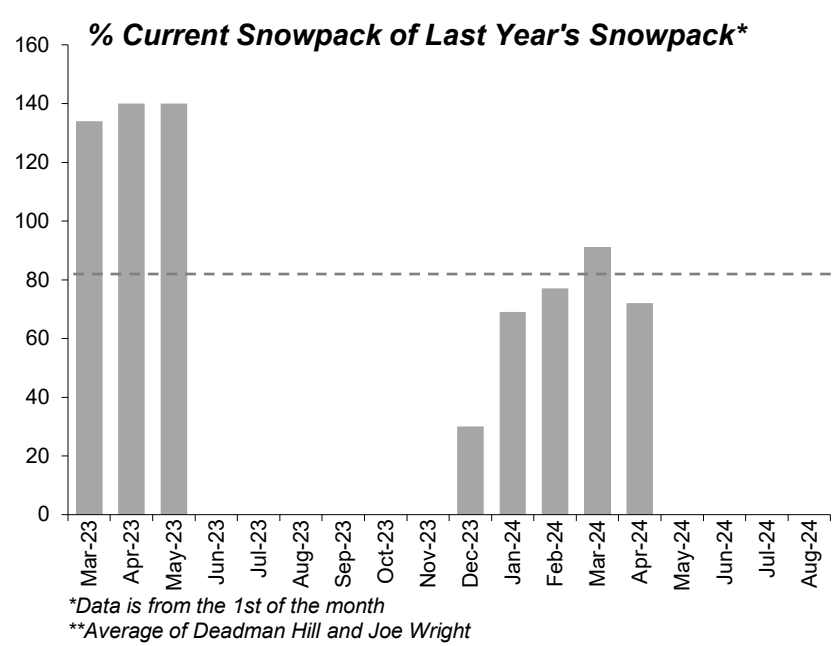
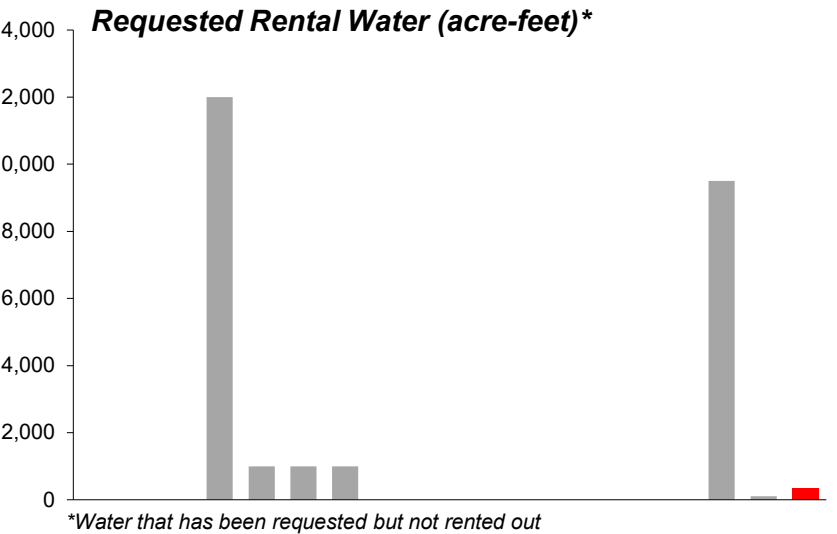
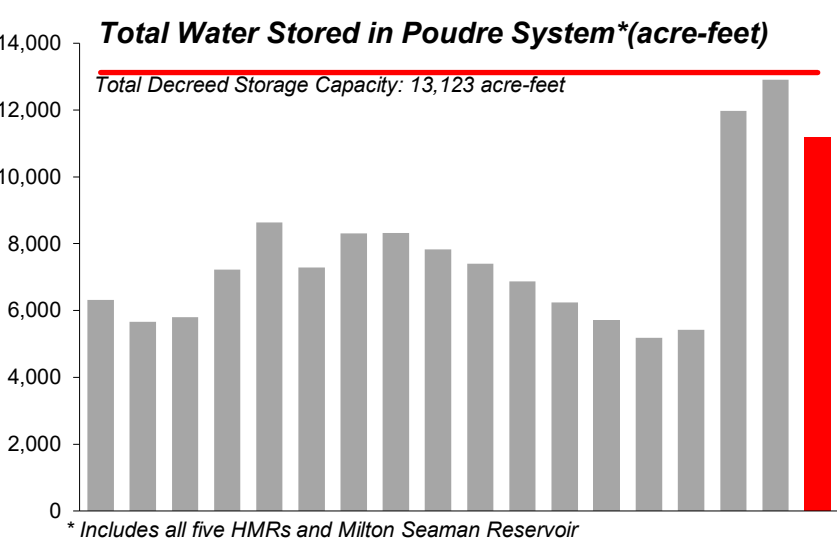
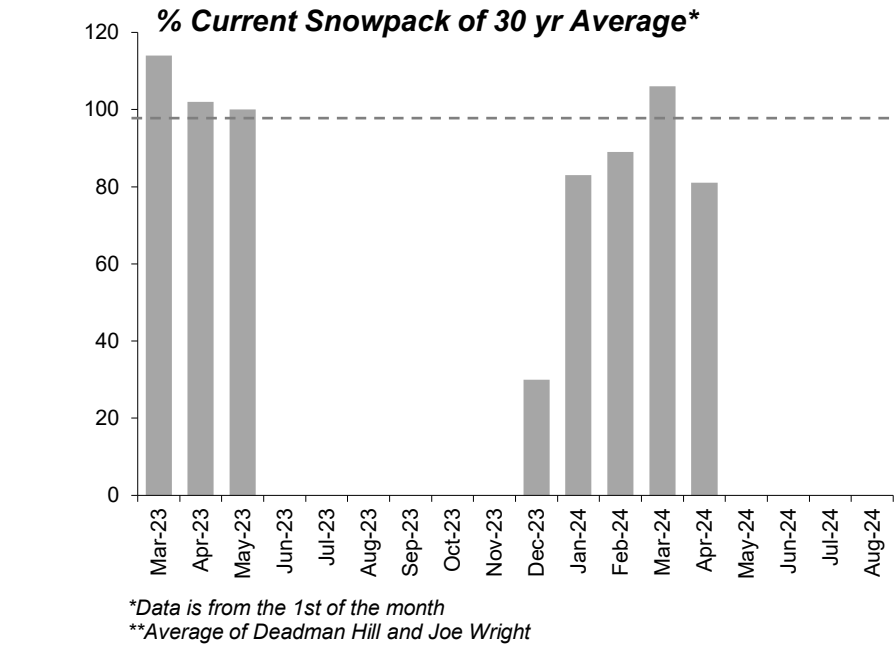
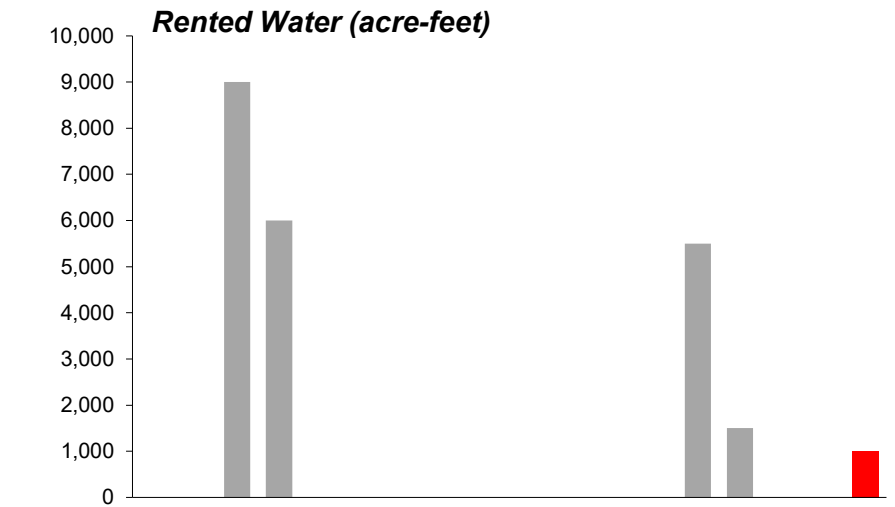
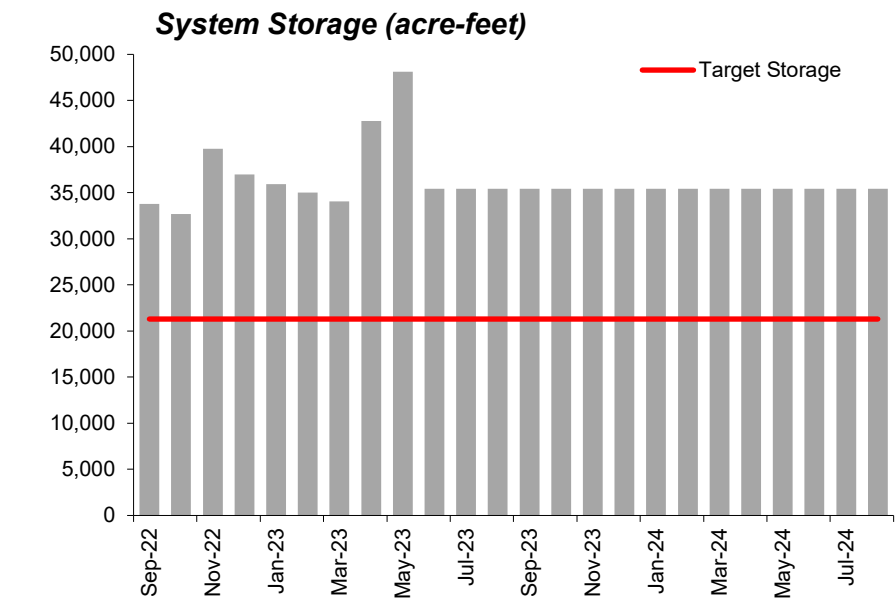


Water Resources

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.

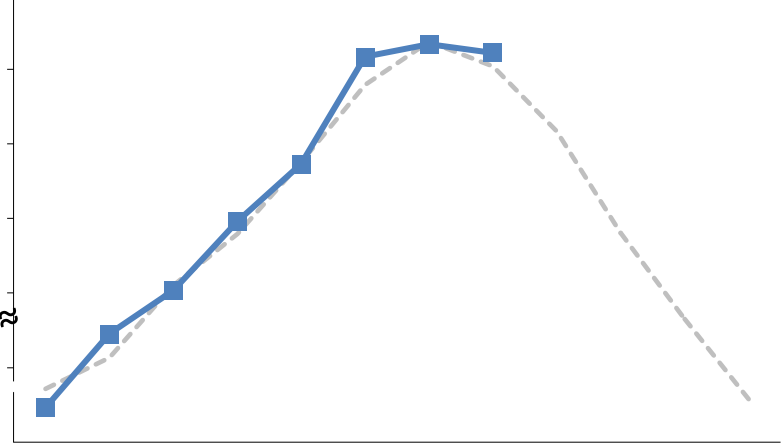


Treated Water and Weather Data

January was a cold month with an aveage temperature of 24.63°F. Temperatures warmed up in February with an average temperature of 34.52°F. The average teperature was 40.38°F in March and 49.62°F in April. May signaled the start of summer with an average temperature of 57.27°F. June tracked slightly higher than average at 71.6°F. July temperatures were seasonably average at 73.3°F. Temperatures in August were slightly above average, but slightly cooler than July.

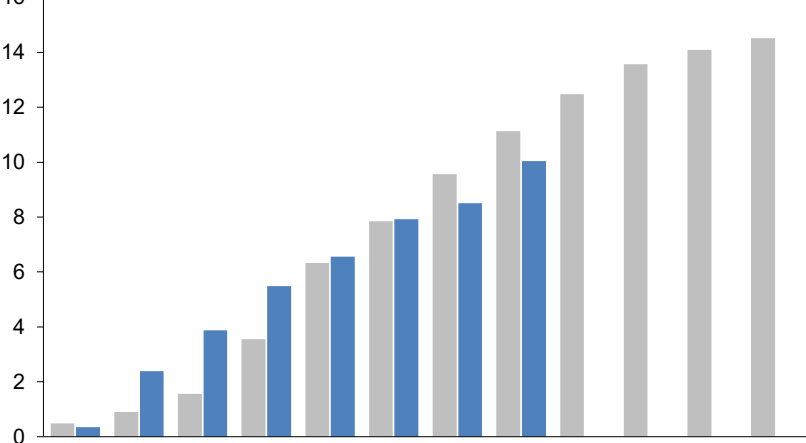
Greeley received 0.35 inches of precipitation in January. A big snow storm brought 2.03 inches of precipitation in February. Greeley received 1.5 inches of precipitation in March and 1.6 inches in April. May brought less precipitation than expected, with 1.07 inches for the month. June precip was just below average, but kept the total precip above average. July was dry and only produced 0.58 inches of precipitation. There was 1.53 inches of precipitation which is slightly below average. The total to date is 6.51 inches.

Average Temperature (°F)

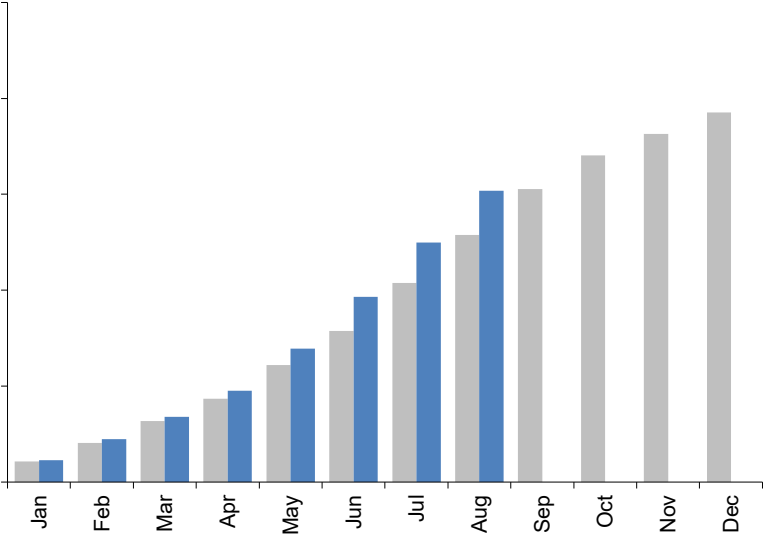


Scale altered to highlight the variability between months

Cumulative Precipitation (inches)



Cumulative Treated Water (billion gallons)



Cumulative Irrigation Water Requirement (IWR) (gallons/sq.ft)

