

Utilities Department Update

CITY COUNCIL STUDY SESSION – October 8, 2024



Administrative Team



Scott Olsen, CFM
Director



Emily Meek
**Assistant
Director**



Liz Escatel
**Administrative
Assistant**

Leadership Team



Cody Henry
Maintenance
Operations
Manager



Anna Sparks, PE
Engineering
Manager



Rachel Mertens
Stormwater &
Environmental
Manager



Jordan Anderson
Water Treatment
Plant Manager



Austin Creswell, PE
Water Resource
Manger

New Addition!



Sherry Scaggiari
**Water Quality
Compliance
Coordinator**

Utilities by the Numbers

- 10 wells
- 5 storage tanks = 18.5 million gallons storage
- 14 MGD Water Treatment Plant
- 665 miles of pipeline
- 320 miles of potable water lines
- 198 miles of sewer lines
- 114 miles of stormwater pipelines
- 31 miles of raw water conveyance pipelines





Defining Our Mission and Vision

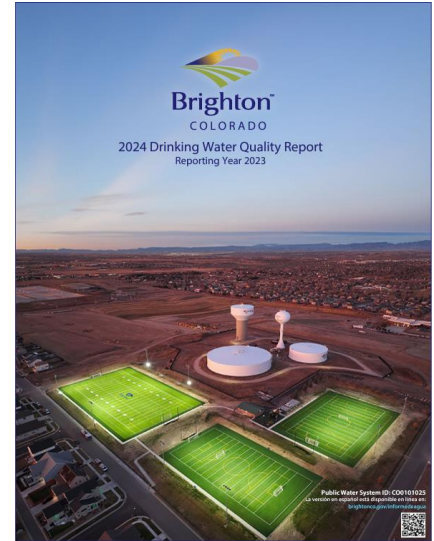
- Branding
- New Strategic Plan
- Investing in Customer Outreach



YOUR
WATER



TU
AGUA





Connecting With Our Valued Employees

- Bi-annual department meetings
- End of year celebrations
- In-house training program
 - ✓ Shadowing
 - ✓ Monthly trainings
 - ✓ Other growth opportunities

Staffing Now and Into the Future

	2024	2025	2026
FTEs	47	48	54

- As the City continues to rapidly grow, we will need to continue to add staff to provide adequate service levels and response times

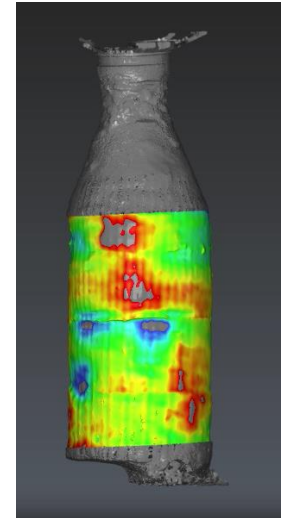
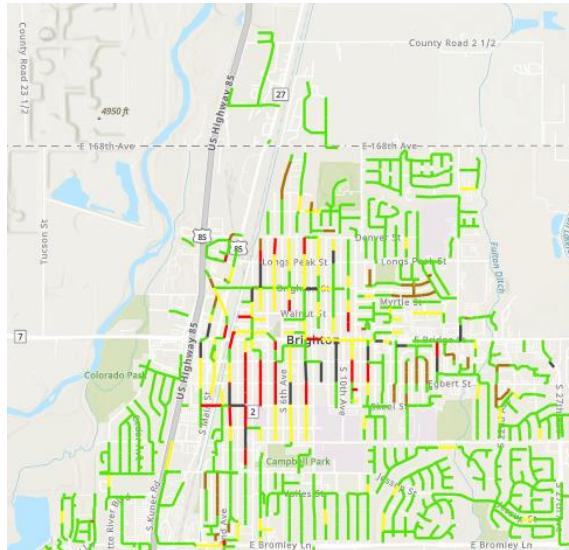
Utilities Maintenance Operations – 2024 Water Statistics

- Water main breaks repaired- 7
- Service line leaks repaired- 6
- On-call afterhours responses- 207
- Meters-
 - ✓ 356 old meters replaced
 - ✓ 413 new meters set
- Utility billing service orders- 1,696
- Fire hydrants serviced- 413
- Water valves exercised- 283



Utilities Maintenance Operations - 2024 Sewer Statistics

- Sewer pipes cleaned- 107,671 linear feet
- CCTV inspected- 9,872 linear feet
- Accoustic soundwave score:
 - ✓ 91% of our pipes are clean.
 - ✓ 9% need to be cleaned.
- Manholes inspected- 1,210



Utilities Maintenance Operations – 2024 Backflow, Locates and Staffing Statistics

- 1,898 Backflow assemblies are active
 - ✓ 465 of them are irrigation backflows
- 14,024 locate tickets
- 13 Maintenance Operators
- 1 Administrative Assistant



Utilities Engineering

Guiding the City's waters through health and sustainability

- Reviews all capital projects and development utilities
- Host citizens public meeting open houses for capital projects
- Provide monthly in-service trainings for staff
- Professional development including conference attendance
- Encourage Professional Engineer EI testing for advancement
- In-house feasibility studies and design (i.e., standard details refresh and update, dump station, legal descriptions/exhibits)

Utilities Engineering

➤ Project Managers for the City's capital projects from design to construction including the following:

- ✓ Ken Mitchell to Beebe Draw Pump House Rehab
- ✓ Lupton Meadows Reservoir Design
- ✓ Water Master Plan with Future Forecasting
- ✓ SACWSD Disconnection - Shiraba Park and 112th Ave
Water
- ✓ 18th Ave Sanitary Sewer Rerouting
- ✓ 10th and Midland Storm Improvements

Utilities Engineering Capital Projects



**Lutz Reservoir
Sustainable
Irrigation System**



**Core City Phase III
Waterline Replacement**



**South Outfall Phase II
Culverts
Flood Control**

Stormwater and Environmental

- As of September 17th:
 - ✓ 64 active Erosion and Sediment Control (ESC) permits
 - ✓ 915 Inspections and 80 enforcement actions taken
- Education and Outreach:
 - ✓ Children's Water Festival, Adams County Career Expo and education videos
- Illicit Discharge Detection and Prevention: 8 Illicit Discharges



Stormwater and Environmental

➤ Upcoming Projects:

- ✓ Jacob's Run Drainage Channel
- ✓ South Outfall Study, Maintenance, and Construction



Water Treatment

- RO Water Treatment Plant 7.59 MGD
- Treating 6 South Platte Alluvial Wells for Nitrates
- Greensand Direct Filtration Plant 5.98 MGD
- Treating 4 Beebe Draw Alluvial Wells for High Manganese

Consecutive Connections

- Thornton Connection 1.8-2.2 MGD
- Denver Water Connection 0.5 MGD

Water Treatment Staffing and Staffing Challenges

➤ Operations

- ✓ 1 Chief Plant Operator
- ✓ 6 Water Treatment Plant Operators (A-D)

➤ Maintenance

- ✓ 1 Water Treatment Maintenance Supervisor
- ✓ 5 Plant Mechanics
- ✓ 1 Assistant Plant Mechanic

➤ SCADA

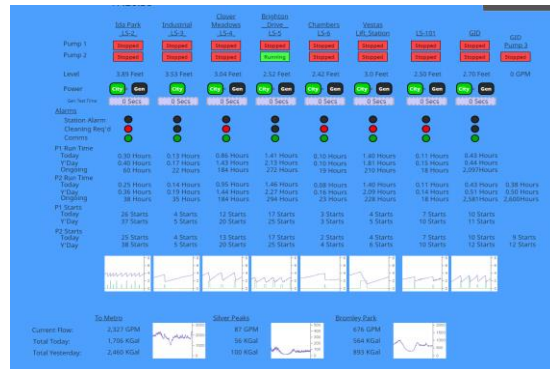
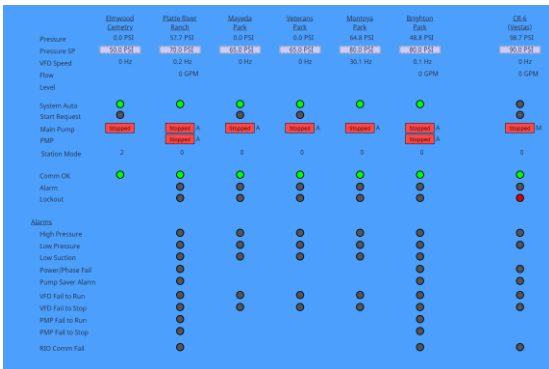
- ✓ 1 Controls System Technician

Industry Wide Challenges

- ✓ Aging Workforce
- ✓ Regulatory Pressure
- ✓ Technology
- ✓ Public Perception
- ✓ Funding

Addressing Staffing Challenges

- Refocusing recruitment efforts
- Training and retention initiatives
- Automation and technology



Safety Improvements

- Fall Protection Replacements
- MSDS to SDS
- SOPs Updates
- Training for Confined Space Protocols and Equipment
- Lockout Tag Out Equipment
- CPR Training
- Updating Safety Signage



RO Water Treatment Facility





Water Treatment Plant Update

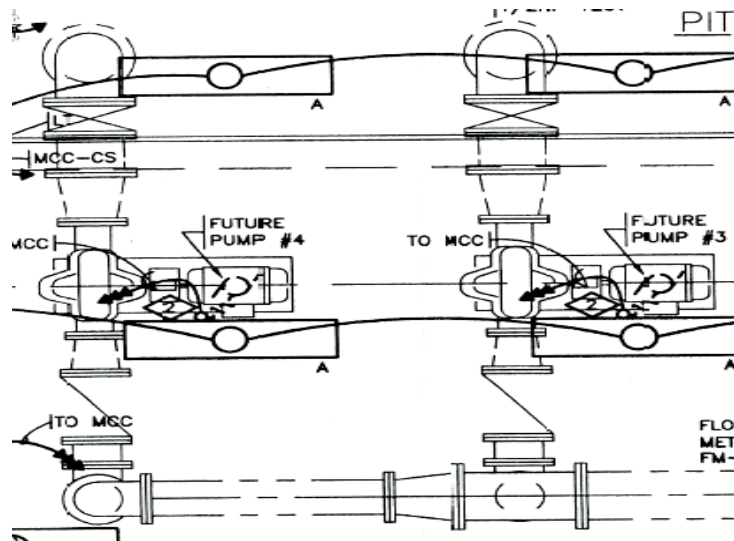


Future Projects

5.0 MG Storage Tank Roof



North Storage Pumps



Water Resources

- Staff of three, but soon to be four!
 - ✓ Water Resources Manager
 - ✓ Water Resources Analyst (additional position budgeted in 2025)
 - ✓ Water Resource Field Technician





The screenshot shows a complex data table with multiple columns and rows. The columns are color-coded: light blue, light green, and light purple. The table contains various data points, including dates, numbers, and text. At the bottom of the table, there are several tabs: 'Error Checking', 'States Daily Summary', 'States Daily Summary (Annual)', 'State Structure Summary', 'Contact Info', 'Modifications Log', 'Admin #s', 'Daily Call', and 'Assume'. The 'Assume' tab is currently selected.

Water Resources

- Manage the City's water rights
- Assist developers with water dedication requirements
- Account for all water in City's system daily
- Interface with State regulators
- Operate the City's reservoirs and ditch diversions
- Water supply planning
- Water Resource infrastructure improvements



July 29, 2024

Mr. Corey DeAngelis, Water Division 1 Engineer
Colorado Division of Water Resources
810 9th Street, 2nd Floor
Greeley, CO 80631

RE: 2023 System Loss Analysis

Water Resources

➤ Recent Projects



Baseline Weir Replacement



Cell 1 Gravity Line Flow Measurement

Water Resources

➤ Future Projects



Lutz Reservoir Non-Potable System



New Storage Reservoir

Water Quality Compliance Coordinator

- Drinking Water Regulations are complicated
- EPA has promulgated several new rules recently
 - ✓ PFAS (per and poly-fluoroalkyl substances)
 - ✓ CCR (Consumer Confidence Report) Rule, AKA Drinking Water Quality Report
 - ✓ LCRR (Lead and Copper Rule Revisions)
 - ✓ LCRI (Lead and Copper Rule Improvements) - expected this year

What is a service line?



**If your water meter is located inside the home, the service line is privately-owned to the curb stop. The curb stop is typically located at the property line.*

Lead Inventory

- Inventory report due to Colorado Department of Public Health and Environment on October 16, 2024, outlining the service line materials for each Brighton address
- Notice to all addresses (owner and occupant) that are considered “unknown material” sent by November 15, 2024
- Lead Service Line Replacement Plan due October 16, 2024

We currently believe we do not have any lead service lines.



Lead Inventory Map

Goes Live October 16, 2024

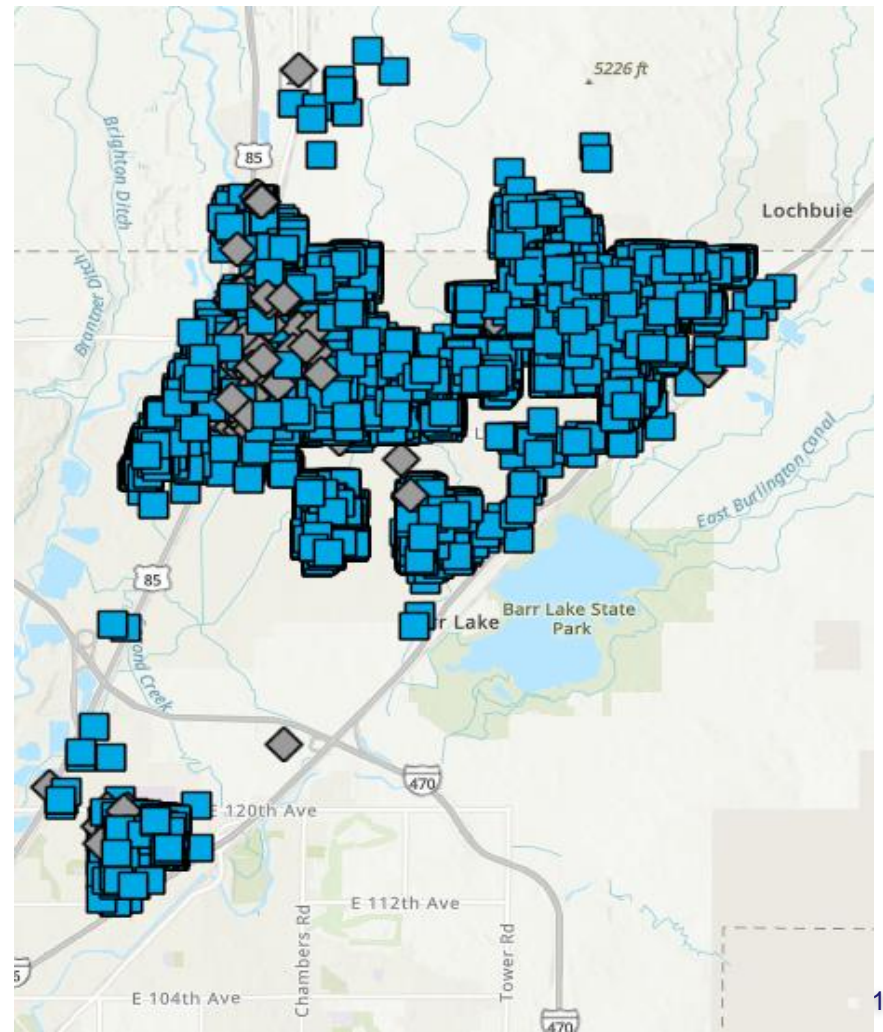
www.brightonco.gov/lead

Legend ⌵ ✕

Service Line

Public Lead Category

- Lead - Inspection Verified
- ▲ Galvanized Requiring Replacement
- Non-Lead
- ◆ Unknown
- Other



What does “unknown” mean?

- City currently has about 1,730 addresses where we have not confirmed the material of the service line
- City must confirm service line material of City-owned and customer-owned portions of the water service line
- Homes older than 1960



How will the City confirm the material of the unknown service lines?

- Core Drilling
- Core Drilling involves using water to excavate a small hole over the service line to determine the material
- City will be required to pothole at least 317 addresses, both on the City-owned portion and the customer-owned portion of the service line

Next Steps

- City staff have extensive experience and knowledge on the topic
- Staff has and continues to research the best available approach to confirming unknown service line material
- City staff will present options to this Council with a final recommendation for the approach to confirming the unknown service line materials at a future study session.

~Thank you for your time~

Questions?

