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!

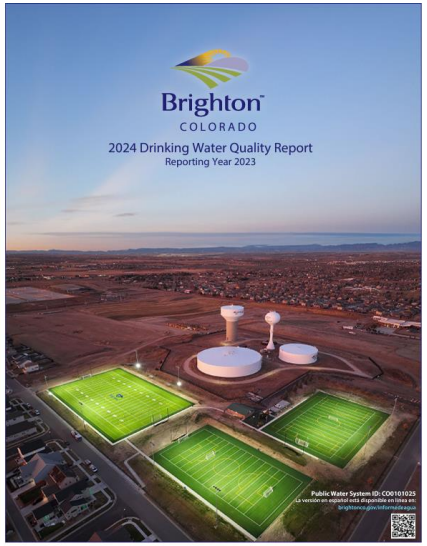
Sherry Scaggiari
Water Quality Compliance Coordinator

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 convenance 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

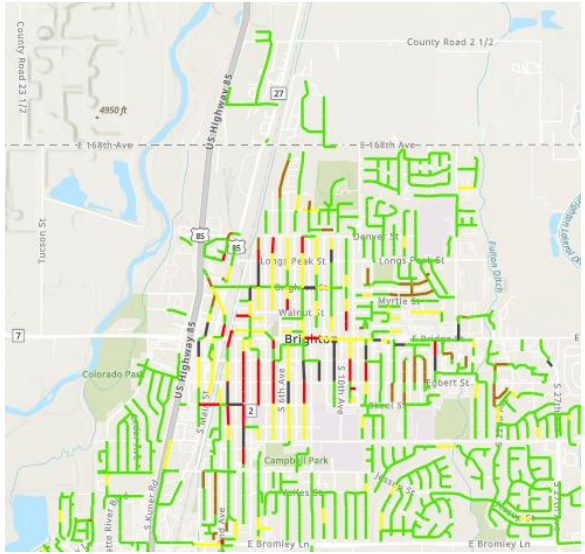
- As the City continues to rapidly grow, we will need to continue to add staff to provide adequate service levels and response times

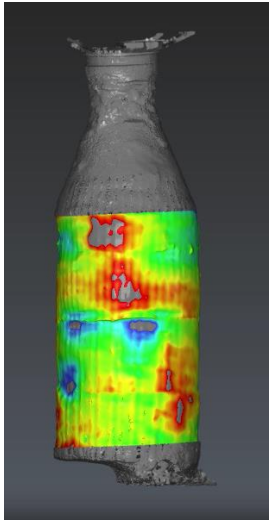
Utilities Maintenance Operations – 2024 Water Statistics

- 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 excercised- 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 attendence
- 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

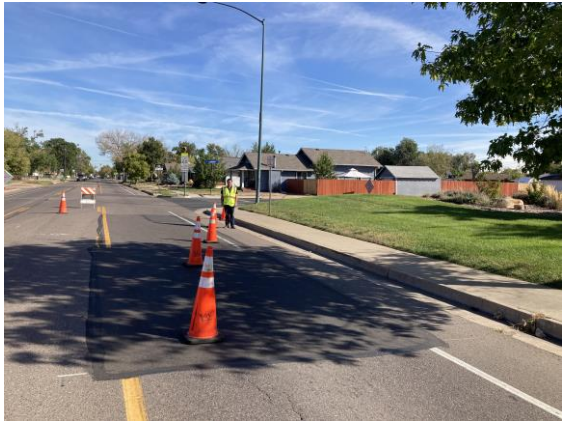
- Project Managers for the City's capital projects from design to construction including the following:
  - ✓ Ken Mitchell to Beebe Draw Pump House Rehab
  - ✓ Lupton Meadows Reservoir Design
  - ✓ Water Master Plan with Future Forecasting
  - ✓ SACWSD Disconnection - Shiraba Park and 112th Ave Water
  - ✓ 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

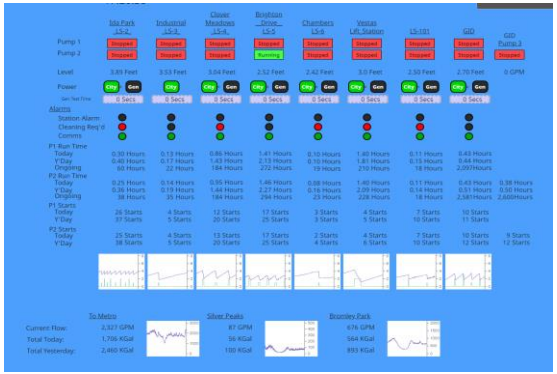
- Operations
  - ✓ 1 Chief Plant Operator
  - ✓ 6 Water Treatment Plant Operators (A-D)
- Maintenance
  - ✓ 1 Water Treatment Maintenance Supervisor
  - ✓ 5 Plant Mechanics
  - ✓ 1 Assistant Plant Mechanic
- SCADA
  - ✓ 1 Controls System Technician

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 Protocalls and Equipment
- Lockout Tag Out Equipment
- CPR Training
- Updating Safety Signage

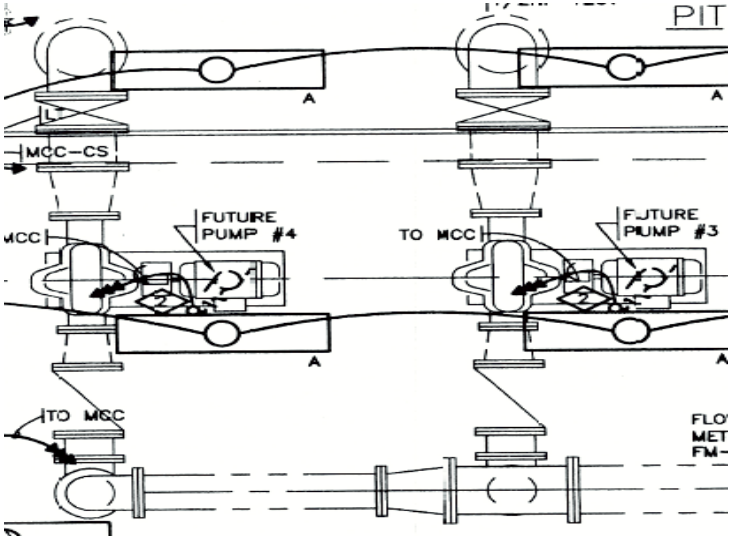
RO Water Treatment Facility

Water Treatment Plant Update

Future Projects

5.0 MG Storage Tank Roof

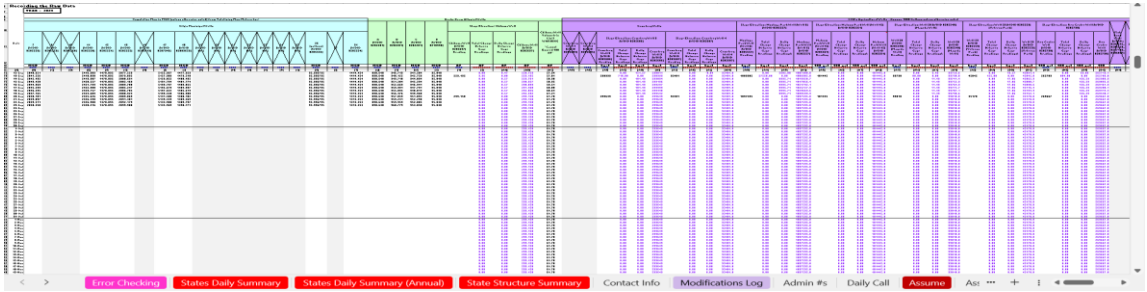
North Storage Pumps



Water Resources

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

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

Brighton℠

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

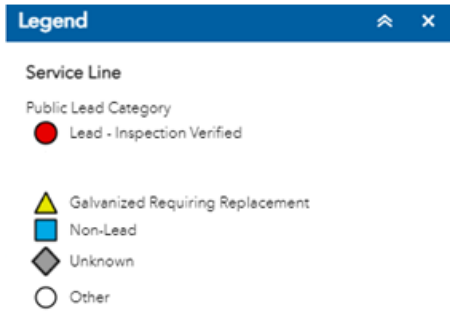
- Inventory report due to Colorado Department of Public Health and Environment on October 16, 2024, outlining the service line materials for each Brighton address
- Notice to all addresses (owner and occupant) that are considered “unknown material” sent by November 15, 2024
- Lead Service Line Replacement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

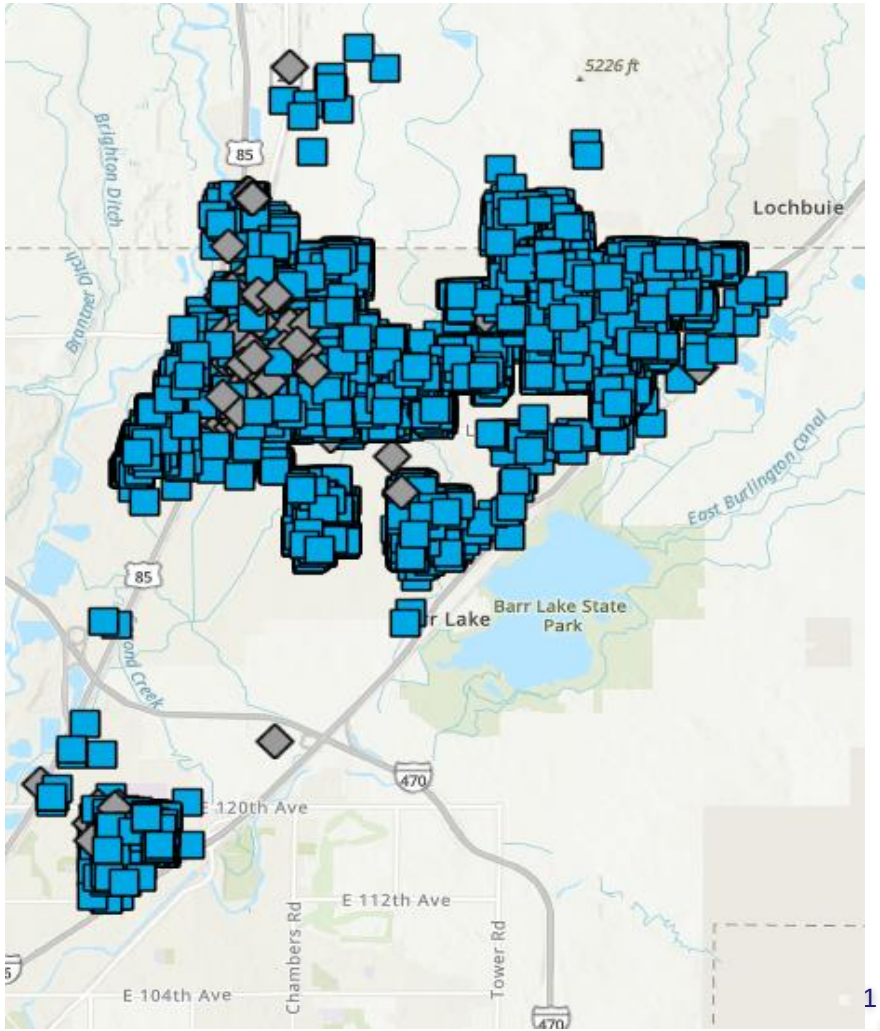
We currently believe we do not have any lead service lines.

Lead Inventory Map

Goes Live October 16, 2024

www.brightonco.gov/lead





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?