

# Lead Reduction Program

**Land Use, Transportation and Infrastructure Committee**

August 22, 2023



## Today's presenters

**Pam Williams**

Community Relations Sr. Specialist



**Meg Trubee**

Public Affairs Manager



# Agenda



- Denver Water overview.
  - Collection system, long-term sustainability.
- History of lead in drinking water.
- Lead Reduction Program.
- Progress to date & what's next.
- Other Denver Water construction.
- Resources & Questions.



Who is Denver Water?



## Denver Water overview


- Established in 1918.
- Serves 1.5 million people (25% of state's population) with less than 2% of water used in the state.
- Water supply comes from Rocky Mountain snowmelt feeding the South Platte and Colorado Rivers.

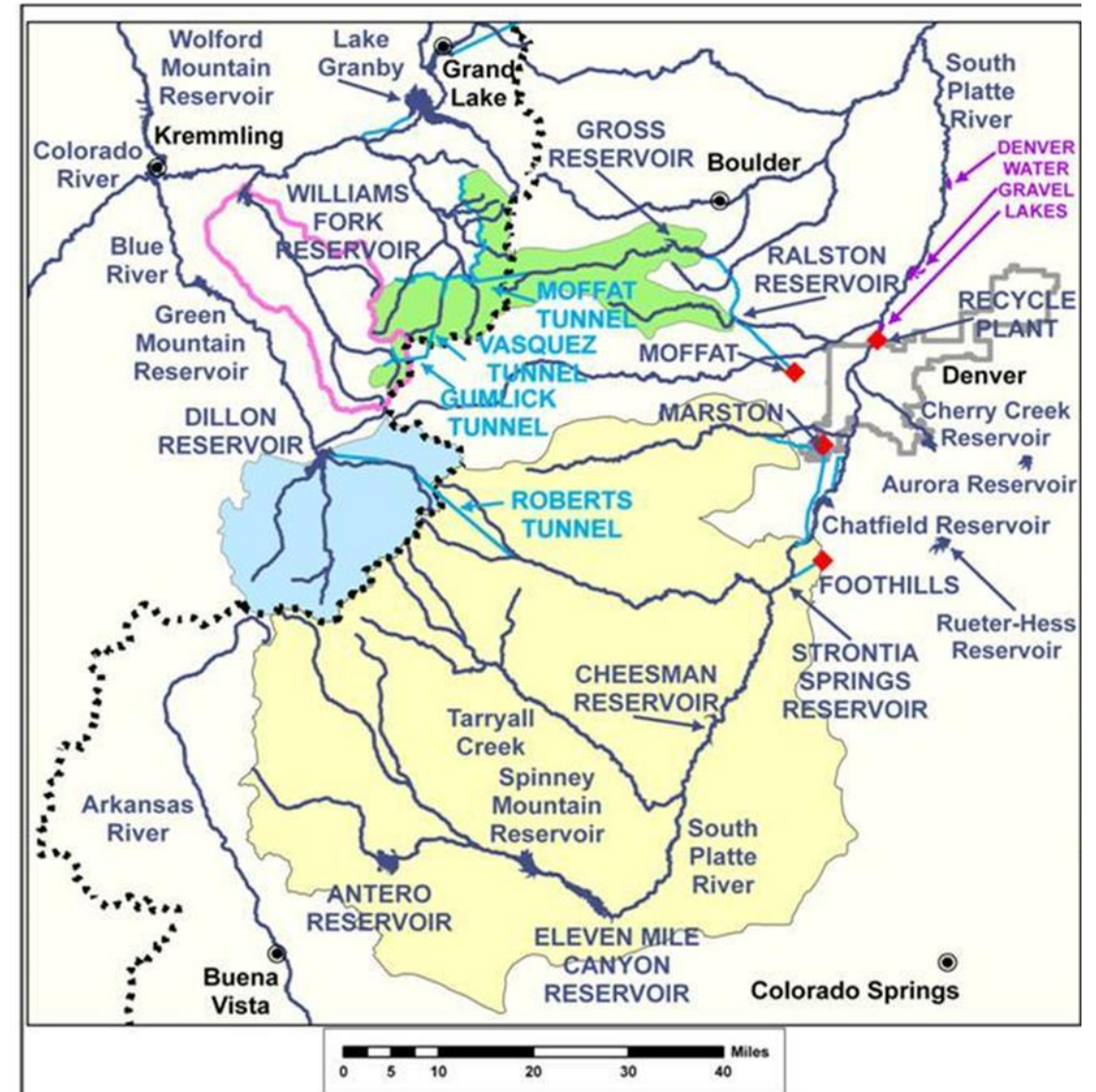




# Denver Water collection system

- Large, complex system that consists of collection, treatment, distribution.
- Water comes from the West Slope and Front Range.
- Water served to our customers is (mostly) surface water.

 Treatment plants



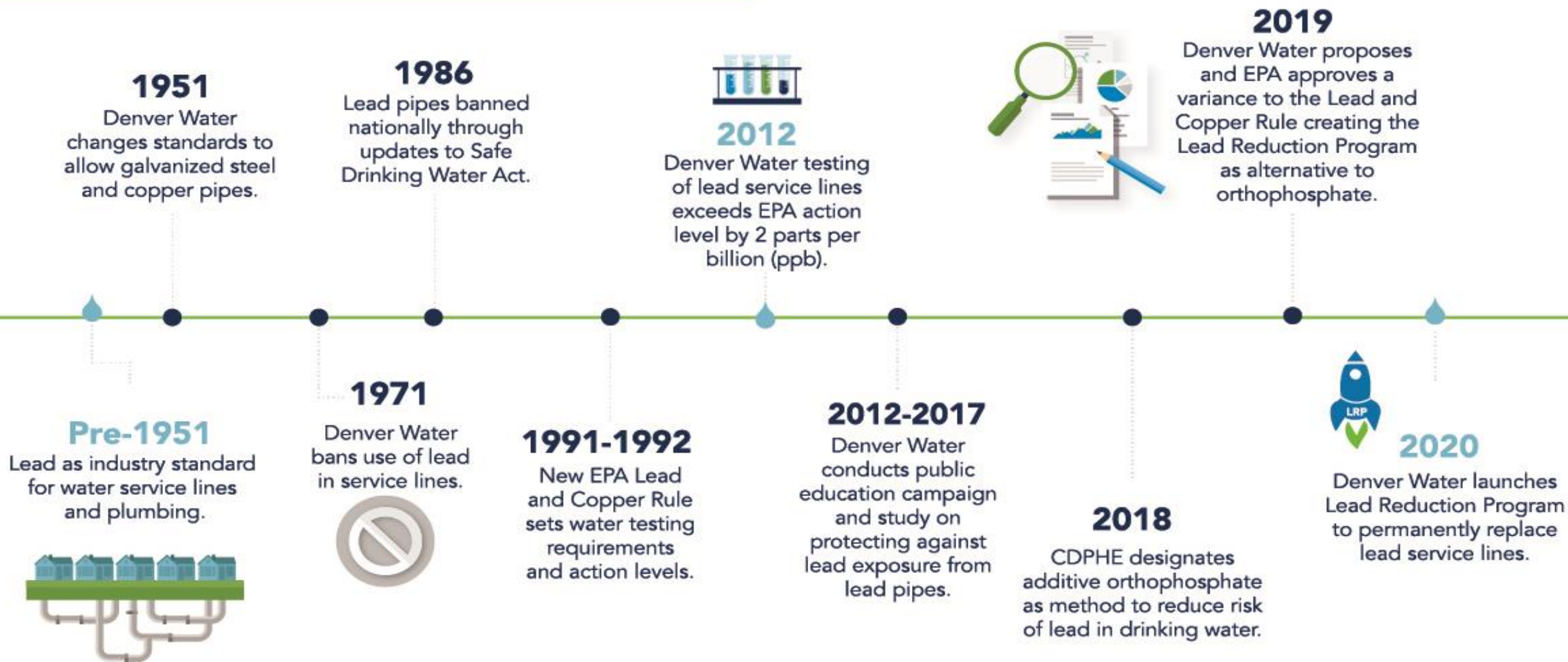
# Long-term water sustainability



- **Conservation and efficiency**
  - A leader in conservation since early 2000s.
  - Evolving from conservation to water efficiency.
- **Water reuse**
  - Recycled water program reduces demand on potable water.
- **New supply**
  - Help prevent shortfalls during droughts.
  - Provide environmental benefits to area rivers and streams.



# A HISTORY OF LEAD IN DRINKING WATER





# Where is the lead?



# Lead Reduction Program

Year 4.



# Five components of the Lead Reduction Program



**pH Adjustment**



**Inventory Map**



**Filter Program**



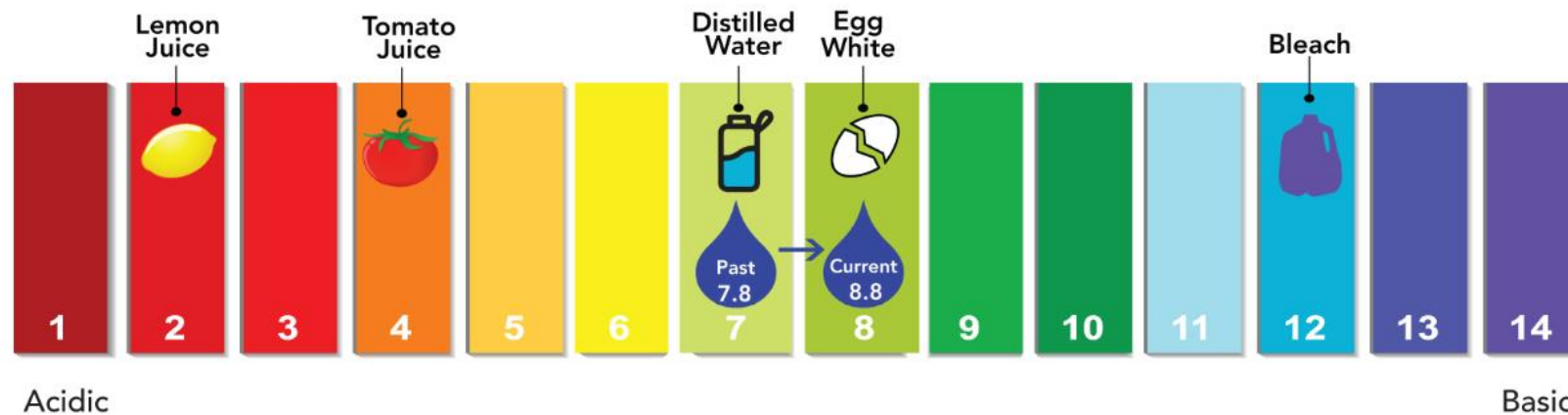
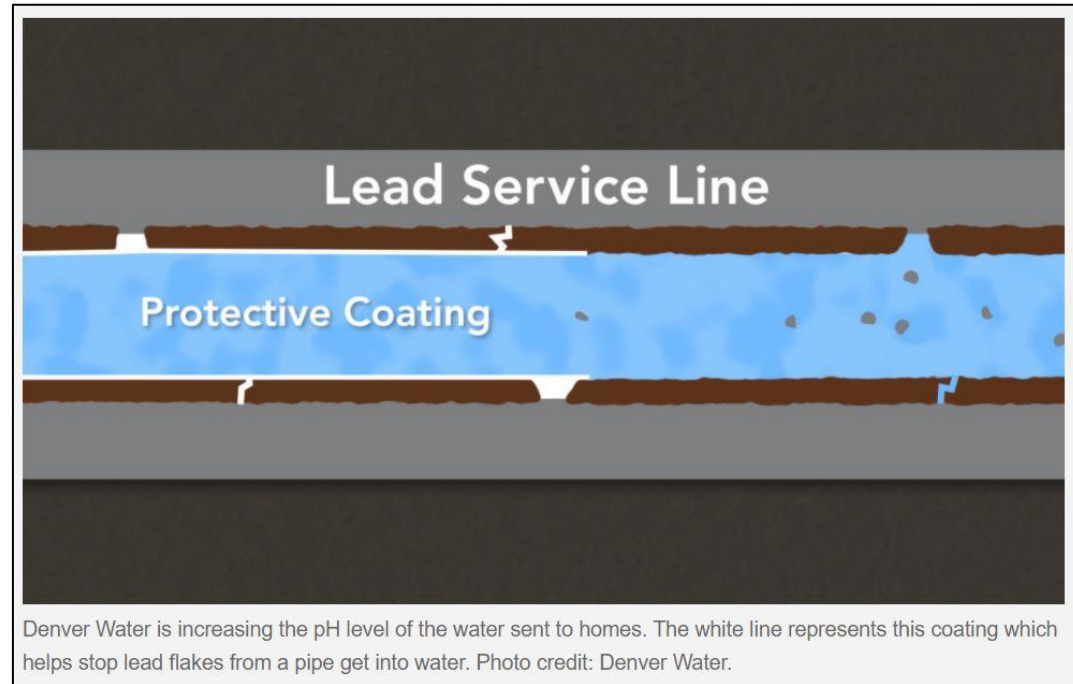
**Lead Service Line  
Replacement**



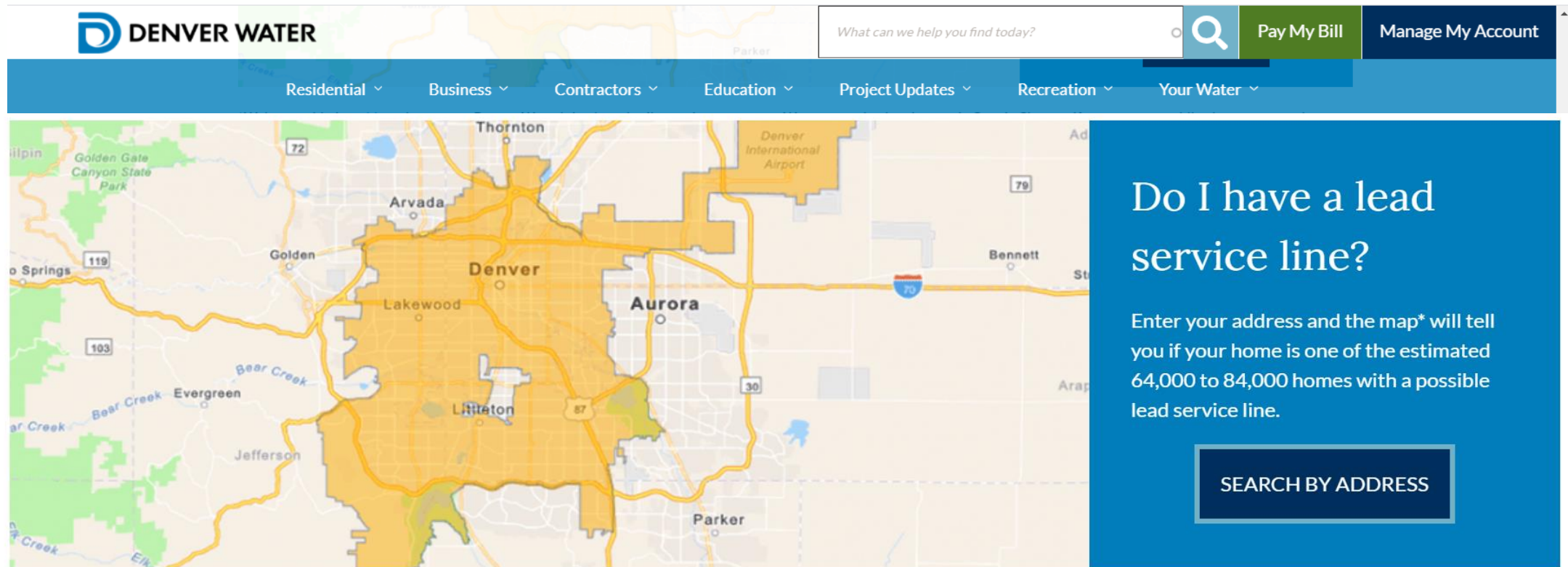
**Communication,  
Outreach & Education**



# Corrosion control treatment - pH



# Lead service line inventory



The screenshot shows the Denver Water website interface. At the top, there is a navigation bar with the Denver Water logo on the left and a search bar with the placeholder text "What can we help you find today?". To the right of the search bar are two buttons: "Pay My Bill" and "Manage My Account". Below the navigation bar is a blue horizontal menu with several categories: "Residential", "Business", "Contractors", "Education", "Project Updates", "Recreation", and "Your Water". The main content area is split into two parts. On the left is a map of the Denver area, with the city limits highlighted in orange. The map shows various suburbs including Thornton, Arvada, Golden, Lakewood, Aurora, Littleton, Jefferson, and Parker. On the right is a blue sidebar with the heading "Do I have a lead service line?". Below the heading is a paragraph of text: "Enter your address and the map\* will tell you if your home is one of the estimated 64,000 to 84,000 homes with a possible lead service line." At the bottom of the sidebar is a button labeled "SEARCH BY ADDRESS".

# Is it really lead? Service line investigations

Denver Water must use a variety of methods to confirm a service line contains lead before scheduling replacement.



## RECORDS REVIEW

Properties built pre-1951 are likely to have lead service lines. These properties are included in the Lead Reduction Program.

Denver Water reviews documentation to check for previous service line replacement (from main to building).

If existing documentation does not provide clear evidence of service line material, additional investigation is required.



## WATER TEST RESULTS

Denver Water provides free water test kits for collecting/returning water samples for analysis. Test results can indicate presence of lead and the location (or source of the lead), including service line, interior plumbing, etc.



## INSIDE VISUAL OBSERVATION

Field crews conduct an interior inspection of the service line where it enters the building to verify material type.



## OUTSIDE VISUAL OBSERVATION

Field crews dig to uncover and inspect the service line material underground. This process can include digging two or more small holes for inspection.



## Filters – what and when to use

When do I need to use the water pitcher filter?



Use it to filter water used for drinking (including making tea and coffee), cooking (particularly when making foods like rice, beans and soup) and preparing infant formula.



ARE YOU A RENTER?  
DID YOU RECENTLY MOVE IN?

• If you didn't get a **FREE** water pitcher and filter from Denver Water, contact us at 303-893-2444 or [lead@denverwater.org](mailto:lead@denverwater.org).



ARE YOU A LANDLORD OR  
PROPERTY MANAGER?

• If you have a tenant moving in, make sure they have a **FREE** water pitcher and filter by contacting Denver Water at 303-893-2444 or [lead@denverwater.org](mailto:lead@denverwater.org).



[denverwater.org/Filter](https://denverwater.org/Filter)  
[denverwater.org/Filtro](https://denverwater.org/Filtro)

# Lead service line replacement

- Estimated 64,000-84,000 lead service lines.
- Work areas identified through use of planning model with weight towards equity and logistics constraints/opportunities.
- Increased data accuracy every year hence planning is done annually.
- Help customers understand the process through strong and ongoing communications and outreach.



# Communication, outreach & education – strategies

- Traditional communications.
- Outreach tailored to our diverse population.
- Targeted outreach to specific audiences including renters.
- Community engagement.
- Ambassador Program.
- Learn by Doing.



**Denver Water**  
Published by Hootsuite • November 24 at 10:03 AM •  
This Thanksgiving, cook with love.  
Visit [denverwater.org/Lead](https://denverwater.org/Lead) to learn more.



 [DenverWater.org/Lead](https://denverwater.org/Lead)

 DENVER WATER  
LEAD REDUCTION PROGRAM



# Communication, outreach & education – tactics

- Newsletters.
- Direct mail.
- Robocalls.
- Emails.
- Community meetings.
- Community email lists.
- Social media.
- Media pitches.
- Bill inserts.
- Door to door.
- Website.
- Brand journalism.

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Español

**INFOGRAPHIC** LA DE MENOR CONSUMO DE AGUA ES

En los meses de invierno o Navidad, cuando los negocios están cerrados y la gente viaja.

 Día de menor consumo de agua	89 millones de galones en el invierno de 2020
 Día promedio en invierno	104 millones de galones
 Día de mayor consumo en verano	180 millones de galones en el verano de 2020

**El consumo constante durante el invierno proporciona información valiosa**

Cuando dejamos de regar durante los meses fríos, Denver Water descubre tendencias interesantes en cuanto al consumo del agua dentro de las viviendas.

March 16, 2021 | By: TAP Staff

**NEWS ARTICLE** PEACE ON EARTH



**La apreciación por el Programa de reducción de plomo es profunda**

Niños asombrados, árboles rescatados y otras historias de la comunitarias detallan de la gran iniciativa de salud pública de Denver Water.

March 10, 2021 | By: TAP Staff

**NEWS ARTICLE**

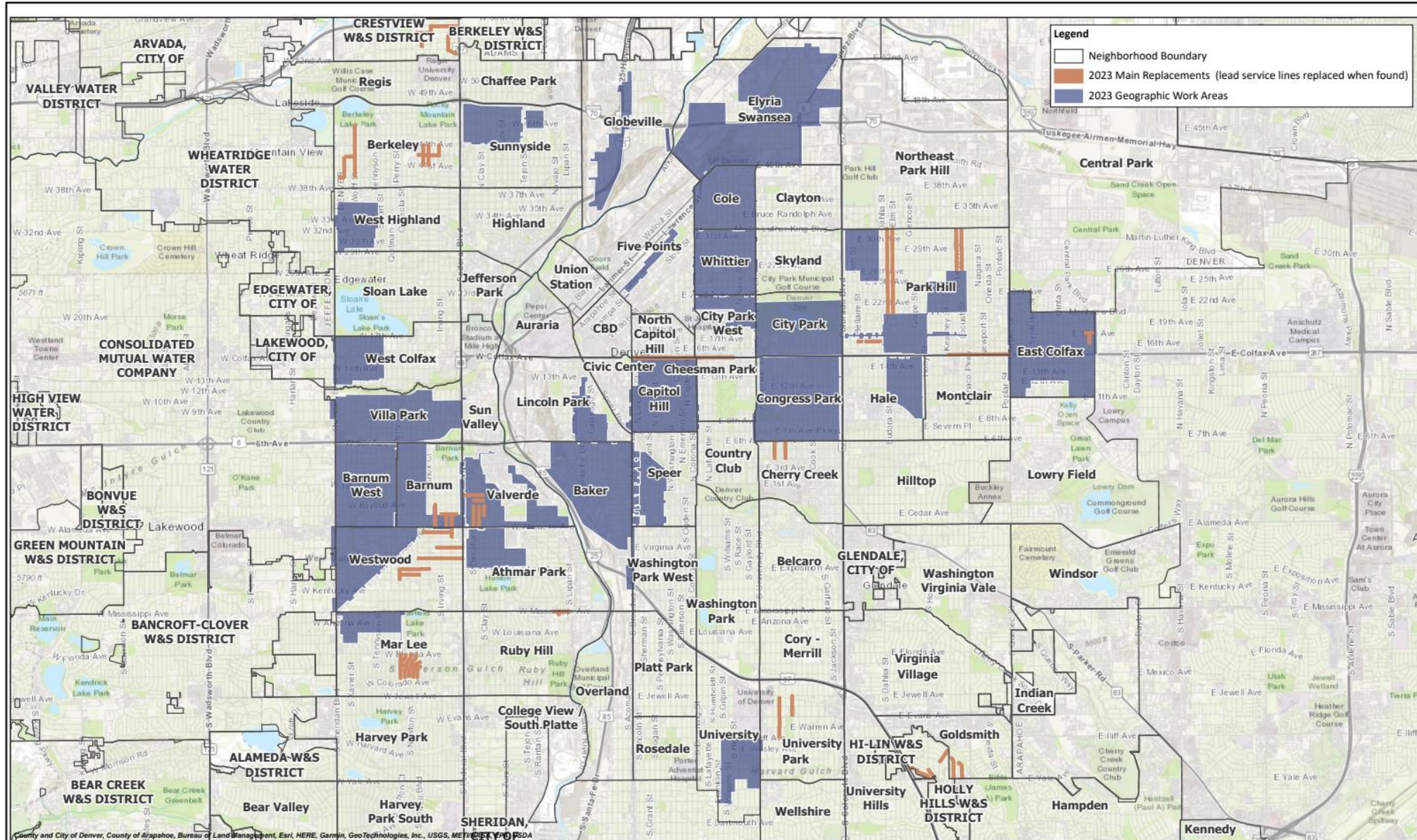


**Programa de reducción de plomo en el 2020**

La iniciativa de salud pública más grande en la historia de Denver Water reemplaza 5,200 líneas de servicio de plomo y logra mucho más ante la pandemia.

March 10, 2021 | By: TAP Staff

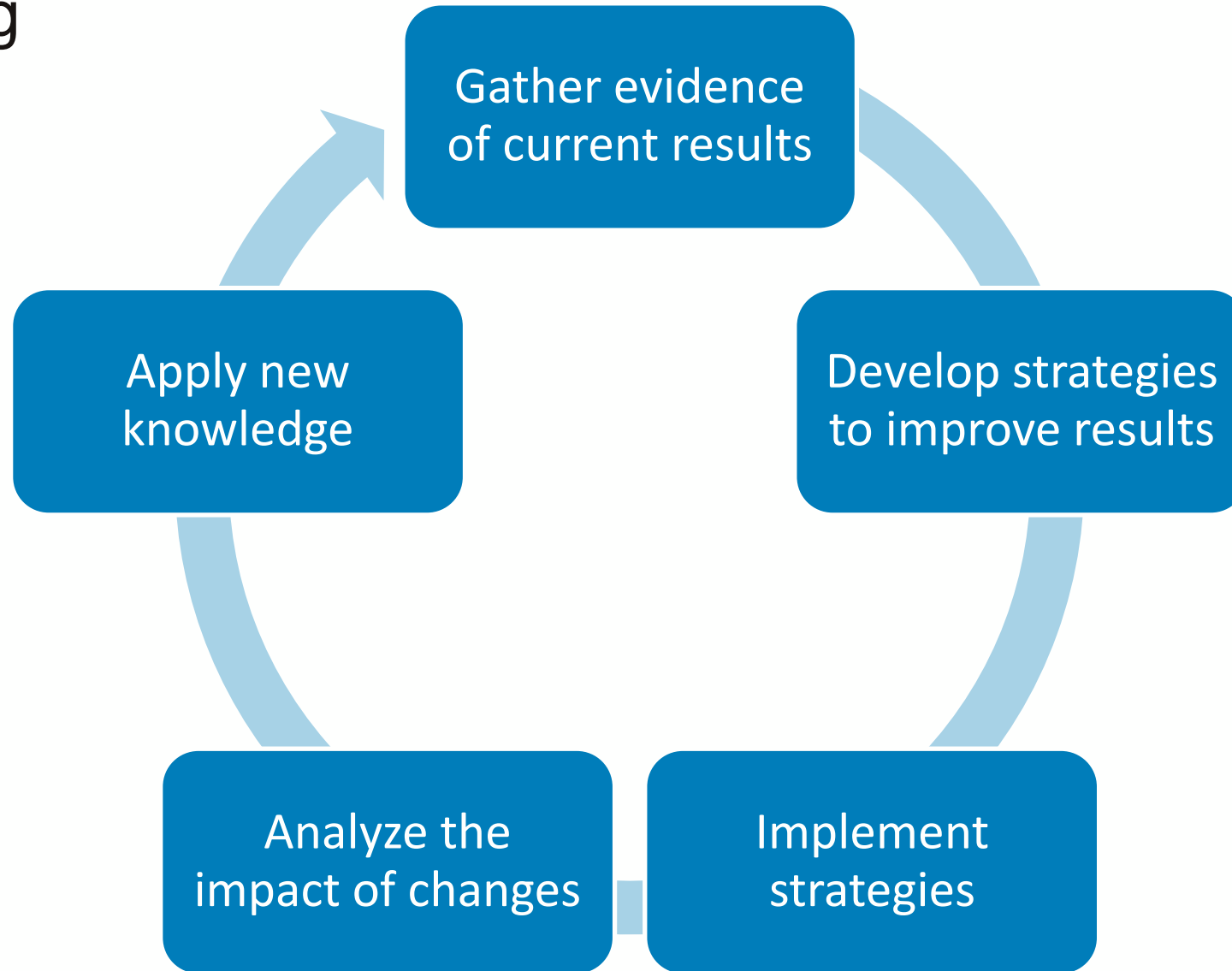




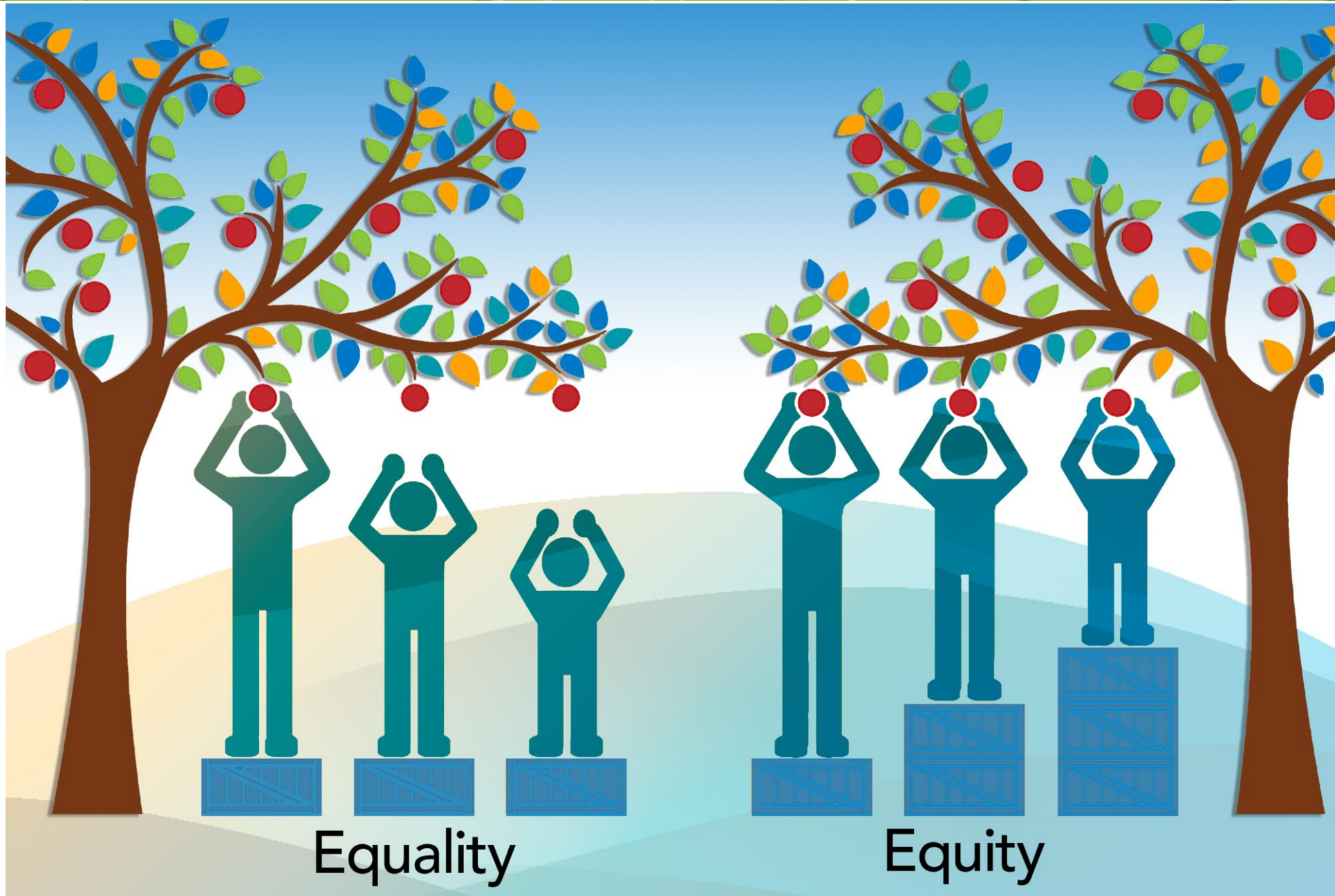
## DENVER WATER LEAD REDUCTION PROGRAM 2023 WORK AREAS

For more detailed information about work in your area, visit [denverwater.org/pipes](https://denverwater.org/pipes).

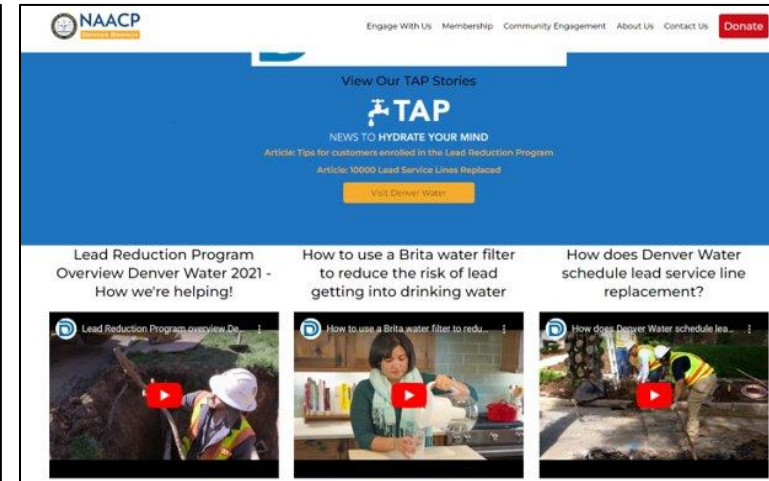
# Learn by Doing













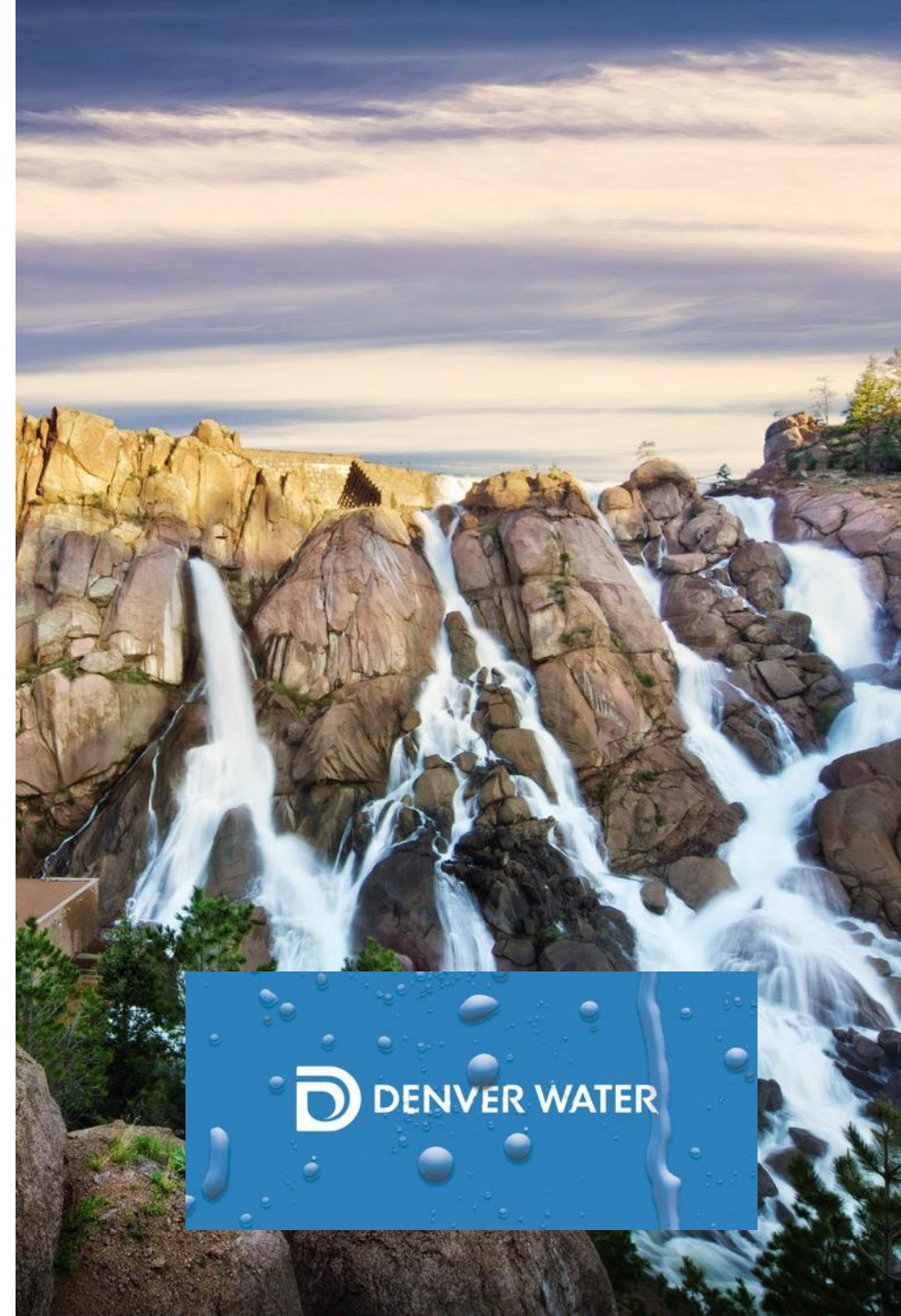
# Ambassador Program Partners





# Lead Reduction Program

## Progress & Plans



 DENVER WATER

## Progress to date

- Over 19,000 lead service lines replaced across City and County of Denver.
- More than 100,000 filter pitchers distributed (to all enrolled customers). Ongoing distribution of free replacement cartridges.
- 83% filter adoption rate.
- Awarded \$76 million in federal funding to accelerate replacements.
- New Variance approved by EPA and CDPHE to continue program.

## What's next

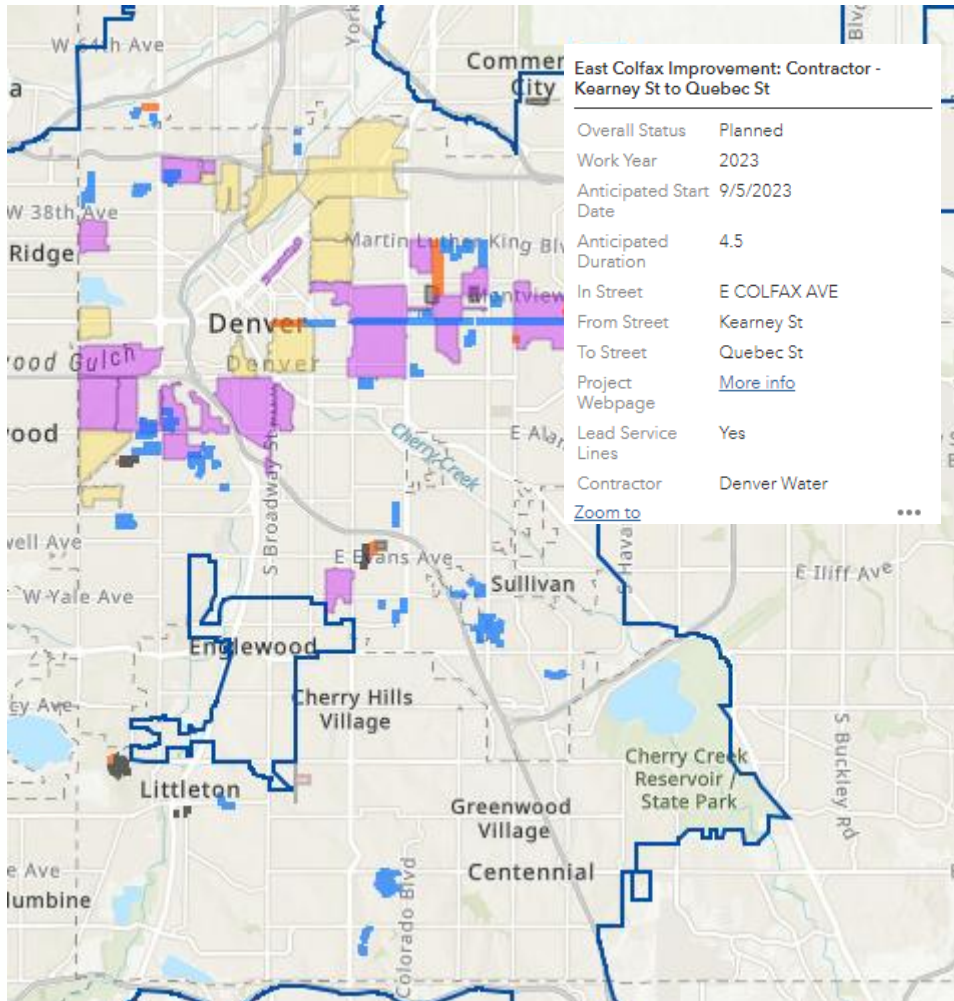
- Goal – 4,477 lead service lines replaced across City and County of Denver *plus* replacing additional lines with federal funding.
- Increase investigations (water tests, potholing) to refine lead service line inventory.
- Continue to distribute replacement filters to all customers in LRP.
- Filter adoption survey.
- Continue to host virtual community meetings.



[denverwater.org/Filter](https://denverwater.org/Filter)  
[denverwater.org/Filtro](https://denverwater.org/Filtro)



# Current Denver Water Construction in the Denver Metro Area



- Denver Water replaces water mains for various reasons, including repairing or avoiding main breaks, replacing corroded pipe, alleviating water quality problems, increasing available hydrant flow and improving area delivery.
- We work closely with DOTI and other city agencies to plan and sequence construction.

Thank you (and resources)

## **Lead Reduction Program website**

**[denverwater.org/Lead](https://denverwater.org/Lead)** (English)

**[denverwater.org/Plomo](https://denverwater.org/Plomo)** (Spanish)

Denver Water newsroom

**[denverwater.org/TAP](https://denverwater.org/TAP)**

Sign up for updates on both.

## **Questions?**

### **About the program**

- [lead@denverwater.org](mailto:lead@denverwater.org)
- 303-893-2444

### **For us?**

- [pamela.williams@denverwater.org](mailto:pamela.williams@denverwater.org)
- [meg.trubee@denverwater.org](mailto:meg.trubee@denverwater.org)