



Lead & Copper Rule Revision

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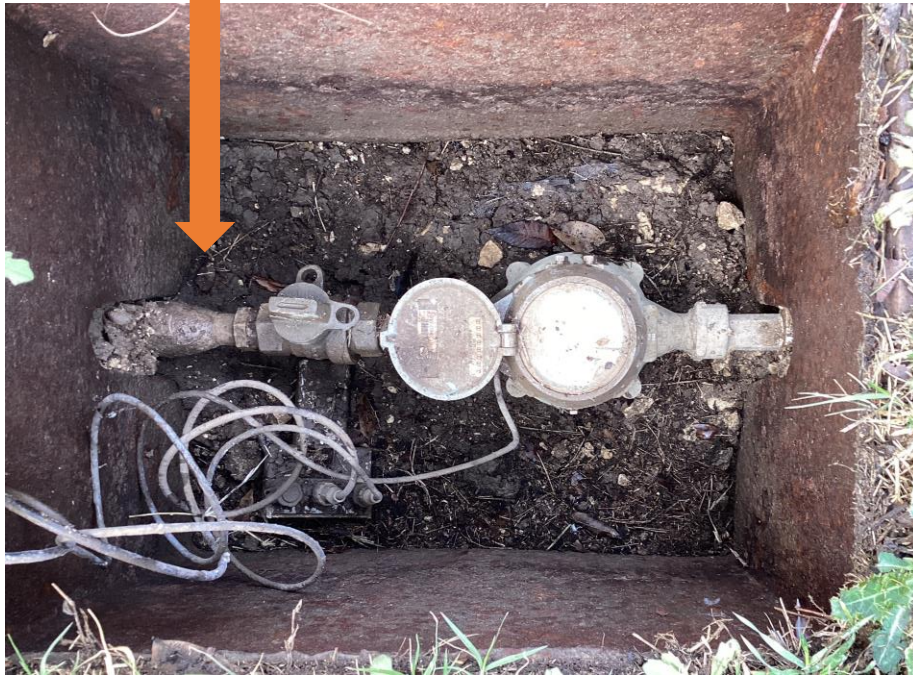
June 20, 2023

CONTENT

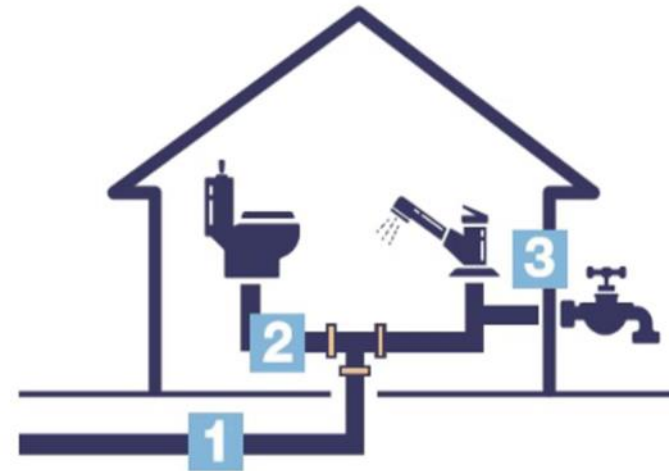
- Sources of Lead in Drinking Water
- Current Lead & Copper Management
- Lead & Copper Revised Rules
- Service Line Inventory
- The App and Dashboard
- What happens when lead is found?
- Communication
- Schools & Daycares
- Funding for Service Line Replacement
- Key Points
- Questions

Sources of Lead in Drinking Water

Service Lines



Other Sources



1. Lead service lines
2. Copper pipe with lead solder
3. Faucets

Current Lead & Copper Management



Corrosion Control Plan

- Corrosion Inhibitors
- Monitoring
 - pH
 - Alkalinity
 - Dissolved inorganic carbon
 - Hardness
 - Dissolved oxygen
 - Oxidation-reduction potential
 - Ammonia
 - Chloride
 - Sulfate
 - Natural organic matter
 - Iron
 - Manganese
 - Aluminum



Corrosion Control Plan

- Replacing lead service lines as found
- Testing for lead at various locations throughout the City
- Notifying customer's when lead pipes or their water has tested above 15PPB

Lead & Copper Rule Revision

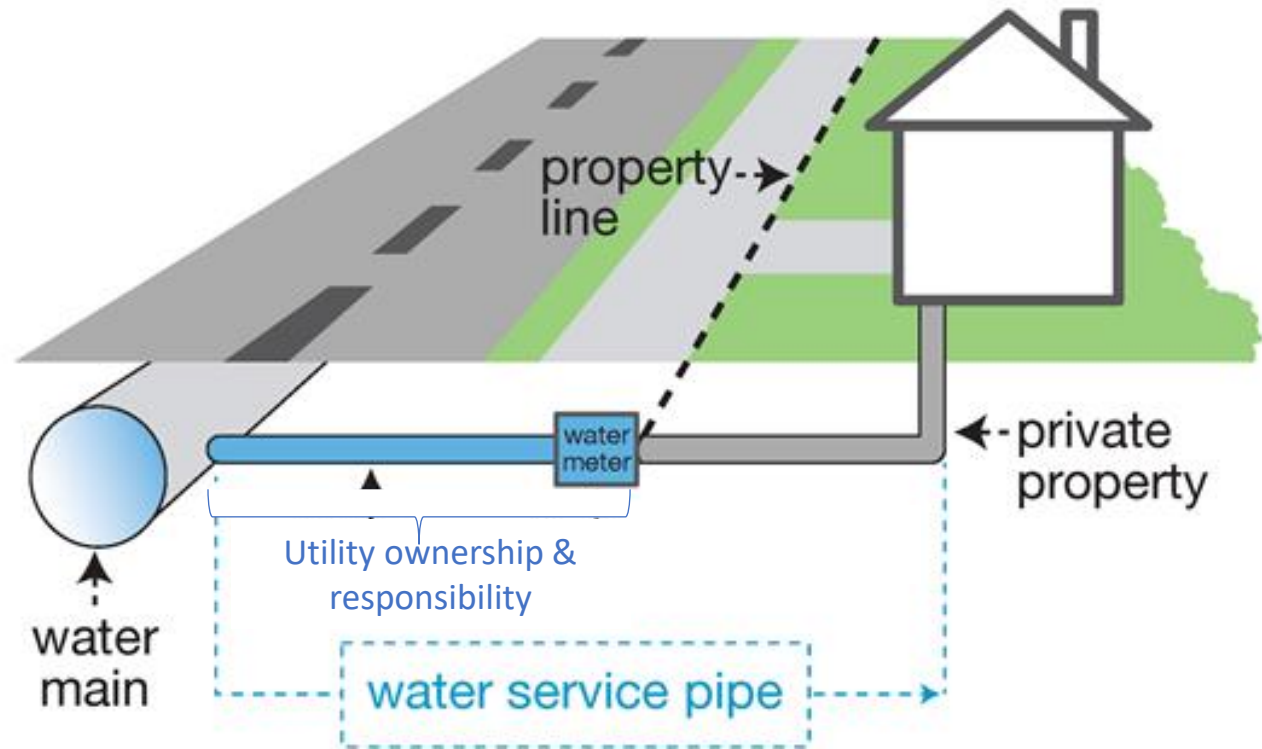
- EPA's new Lead and Copper Rule Revision
 - Updates testing protocols to find sources of lead in drinking water
 - Establishes a lower trigger level to start mitigation earlier
 - Pushes for complete service line replacements
 - Requires testing in schools and childcare facilities
 - Requires water systems to identify and make public the locations of lead service lines (deadline October 16, 2024)



Service Line Inventory

- Determine the material used for City's service line
- Determine the material used for the Customer's service line

Understanding Your Water Service Pipe



Our Process for Service Line Inventory



Using meter cycles and routes



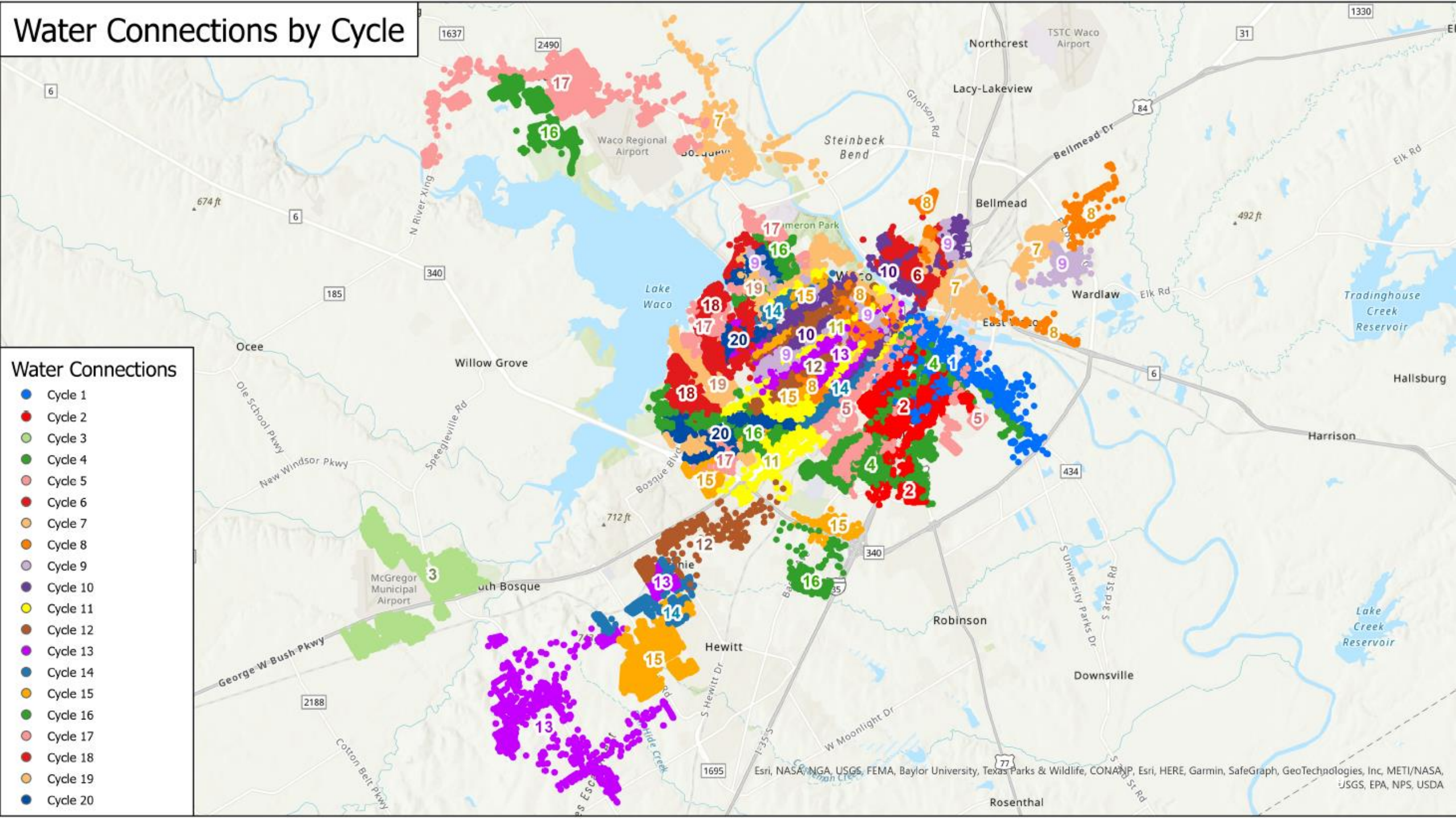
20 Cycles




Started with cycle 1, route 1



Review of tap cards and maps



Service Line Inventory Requirements



**Due October
16, 2024**

**Must have a
searchable
database**

Determining Service Line Material

Potholing the Service



Vacuuming Out the Debris



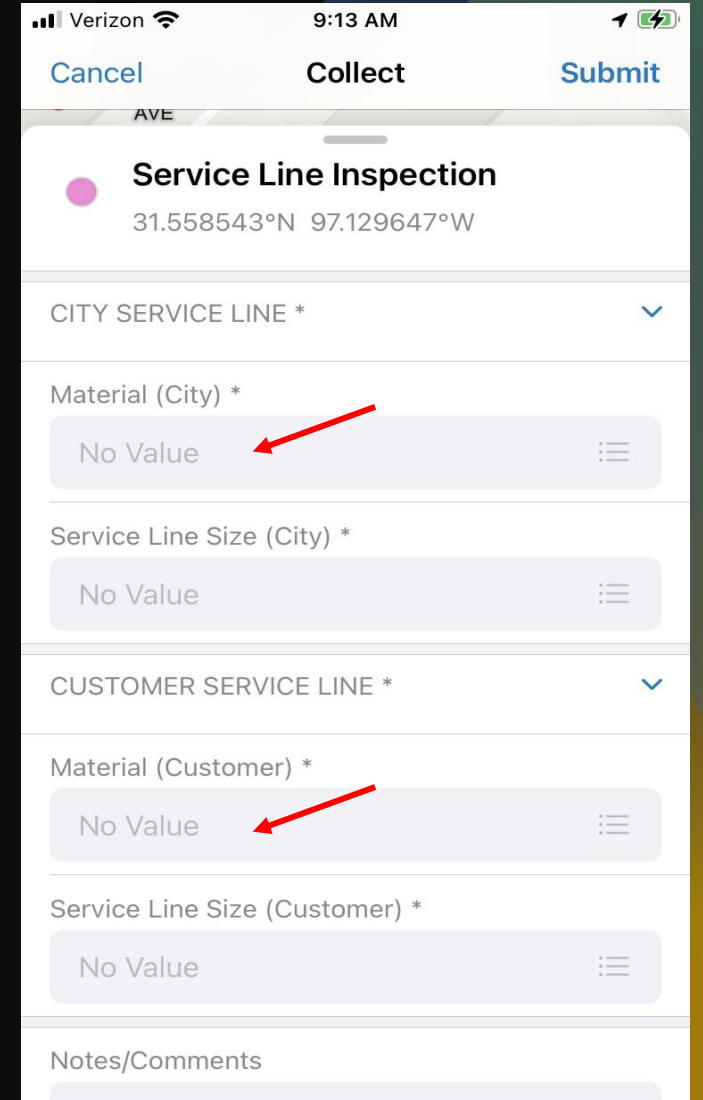
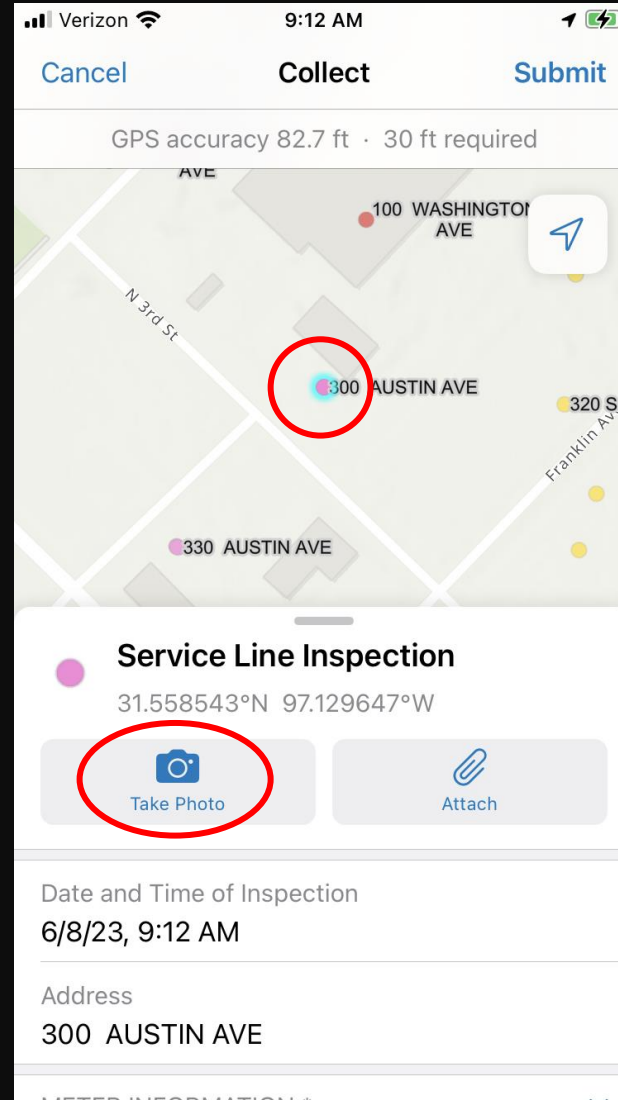
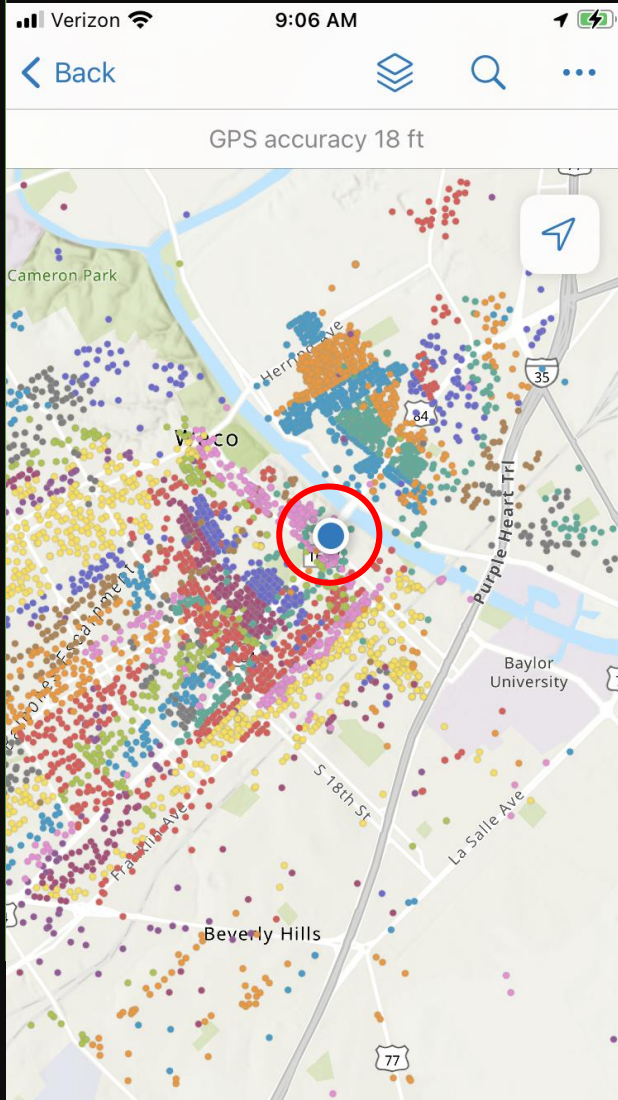
Determining the Material



The App

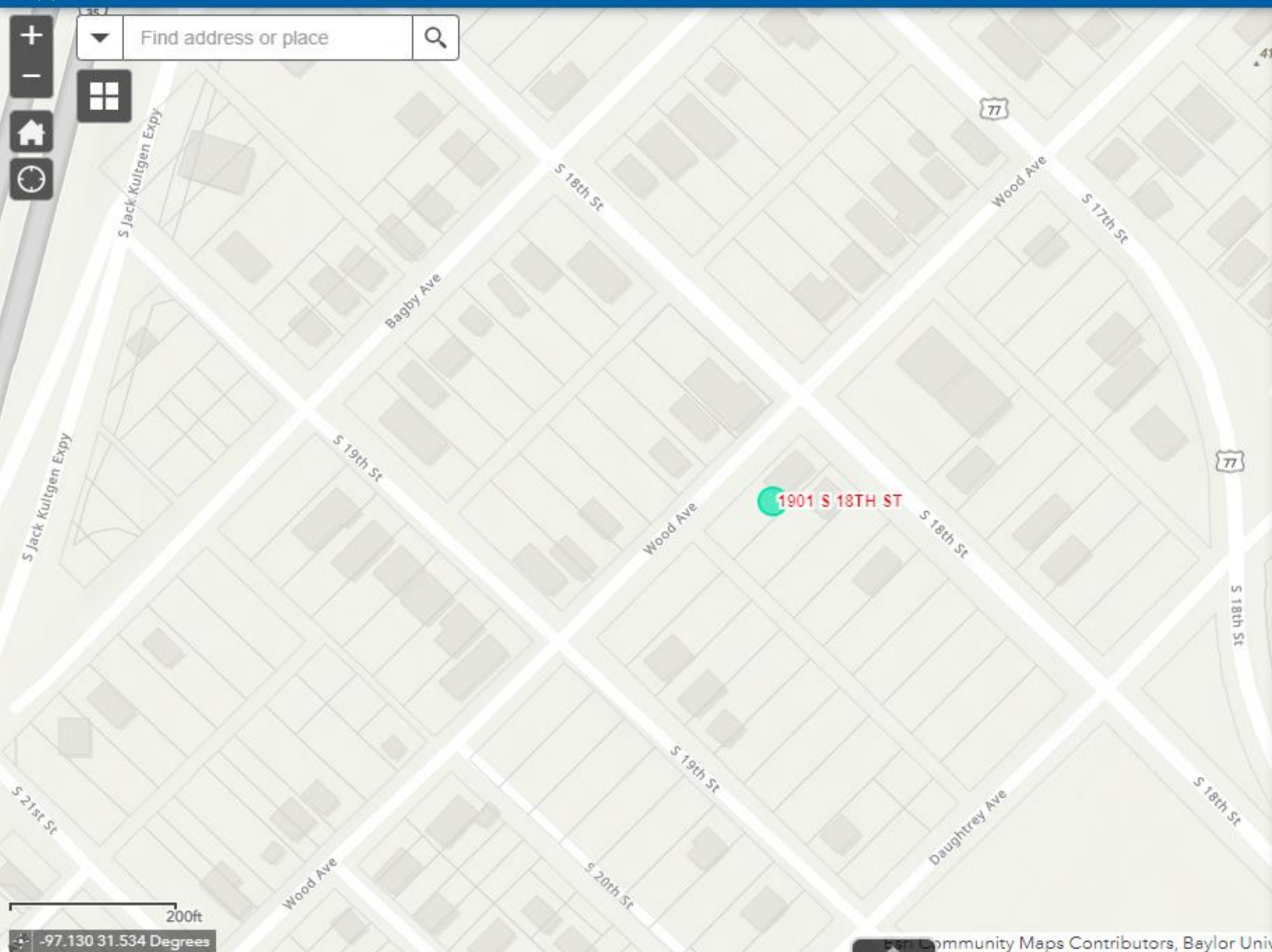


Screenshots from the APP





Find address or place



Service Line Review



0

Status

Management Review

Service Line Size (City)

075

Line Size (Customer)

Other

Other Line Size (Customer)

No connection

Notes/Comments

Needs to be looked at. Off at riser but still dr

Date and Time of Inspection

6/7/2023

1:01:00 PM

Material (City)

Copper

Material (Customer)

Other

Other Material (Customer)

No connection

Correct Meter Size

Close

Save

Results as of June 16, 2023

Number Inspected	Percentage Inspected	Number Remaining	Lead Services Found
12,729	25.27%	37,624	6



The Dashboard

Demonstration of the Dashboard

When Lead Service Lines Are Found

- **Must provide notification to property owner and tenant**
 - **We meet with the resident**
 - Customer signs form acknowledging the meeting and materials received
 - If not able to meet, door hanger is left asking them to contact us
 - If the resident is not the owner, resident receives materials and pitcher, and information is sent via certified mail to the owner
 - All literature and filtered pitcher is sent via certified mail to the occupant if no contact after 10 business days



The Information

Provide information on steps the customer can take to reduce exposure

Provide a filtered water pitcher and 6 months of filters

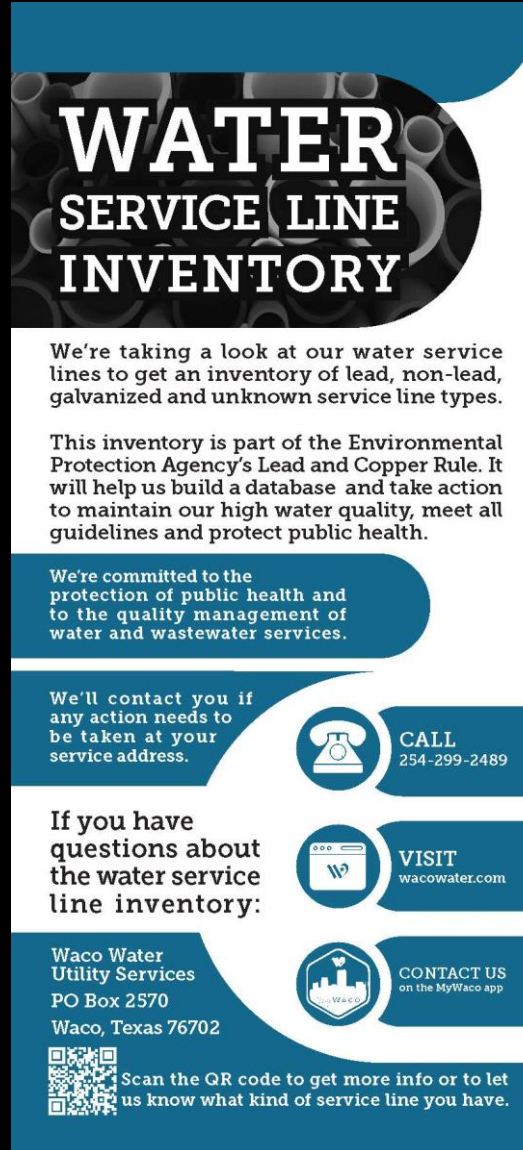
Offer free lead test of the water if lead service line is found

Schedule the service line for replacement

We must wait to replace a lead service line on the public side for 45 days unless it is an emergency.

Communication

- General Information about the Service Line Inventory
- If we find a lead service line and the resident/occupant is not home, we leave a door hanger to contact us
- If we do not hear back from the customer in 10 business days, we mail the literature and filtered pitcher via certified mail



**WATER
SERVICE LINE
INVENTORY**

We're taking a look at our water service lines to get an inventory of lead, non-lead, galvanized and unknown service line types.

This inventory is part of the Environmental Protection Agency's Lead and Copper Rule. It will help us build a database and take action to maintain our high water quality, meet all guidelines and protect public health.

We're committed to the protection of public health and to the quality management of water and wastewater services.

We'll contact you if any action needs to be taken at your service address.

CALL
254-299-2489


IF you have questions about the water service line inventory:

VISIT
wacowater.com

CONTACT US
on the MyWaco app

Waco Water Utility Services
PO Box 2570
Waco, Texas 76702

Scan the QR code to get more info or to let us know what kind of service line you have.



**IMPORTANT
NOTICE**

**WATER
SERVICE LINE
INVENTORY**

The City of Waco is conducting a Lead Service Line Inventory. Our inventory has determined that the city-owned portion of your water service line contains lead and needs to be replaced.

This replacement will involve a temporary interruption of your water service and will require that you flush your pipes.

Please call us as soon as possible, so we can provide you with additional information and further instructions.

We're committed to the protection of public health and to the quality management of water and wastewater services.

CALL
254-299-2489

Waco Water Utility Services
PO Box 2570
Waco, Texas 76702

**ALL
Information
is in Spanish
and English.**

FLUSHING

PIPES TO REDUCE LEAD EXPOSURE

WHAT IS FLUSHING?

Flushing is a low-cost, simple measure to reduce the amount of lead and other materials in your water. Whether or not lead is an issue in your home, flushing your pipes after you haven't used them for a while improves the water quality in general.

HOW TO FLUSH YOUR PIPES

Open the faucet you're planning to use for drinking, cooking or preparing baby formula

If the water hasn't been used recently, flush for **2 minutes**, or until the water gets colder and stays colder. Water that seems warm or hot straight from the tap can contain higher amounts of lead. Run cold water for **15 to 30 seconds** even if there has been recent heavy water use from other taps, like showering or toilet flushing.

Use cold water for drinking, cooking and making baby formula

If you need hot water for tea or formula, start with cold water and heat it on the stove or in the microwave. Fill a pitcher with water after flushing the tap, so you have water handy. Fill your ice trays after flushing, too.

Periodically, clean your faucet strainers to remove lead particles and other sediment

Lead particles and sediment can build up on aerators and strainers. Clean the strainers by soaking them in white vinegar and scrubbing them with a brush. Flush the water lines while the strainer is removed.

Consider using a water filter

If you're concerned about the potential of lead in

Communication

- Flushing protocols
- Information about lead

**ALL Information is in
Spanish and English.**

LEAD

EXPOSURE REDUCTION

Homes or buildings built before 1988 could have interior pipes that contain lead.

You can check interior pipes yourself, hire a licensed plumber, or ask your landlord.

SOURCES OF LEAD

The greatest exposure to lead comes from paint chips or dust, but lead can be found in drinking water in homes or buildings. The City of Waco has removed all known lead service lines. There are a few other sources of lead in drinking water to watch for.

- **Faucets and fixtures**
- **Copper pipe with lead solder**
- **Plumbing connections**

If you suspect that you have lead-containing materials in your home or building, there are steps you can take to minimize your lead exposure.



Replacing lead service lines like this one is part of the City of Waco Action Plan

Run cold water to flush your pipes.

If a faucet hasn't been used in more than six hours, let water run from the tap before drinking or cooking with it. (see included pipe flushing information)

Use cold water for cooking and baby formula.

Avoid drinking, cooking, or preparing beverages like baby formula with hot tap water. It is safe to wash dishes and do laundry. Human skin does not absorb lead in water, so bathing is safe for adults and children.

Use alternative water sources or treatment.

If there are confirmed or suspected lead-containing materials in your home or building, you may consider using bottled water or a water filter. Be sure to maintain and replace filter devices as needed.

Remove and clean faucet aerators/screens.

Regularly remove and clean aerator screens located on faucets and remove any particles.

Get your child tested.

Contact the Waco, McLennan County Health District

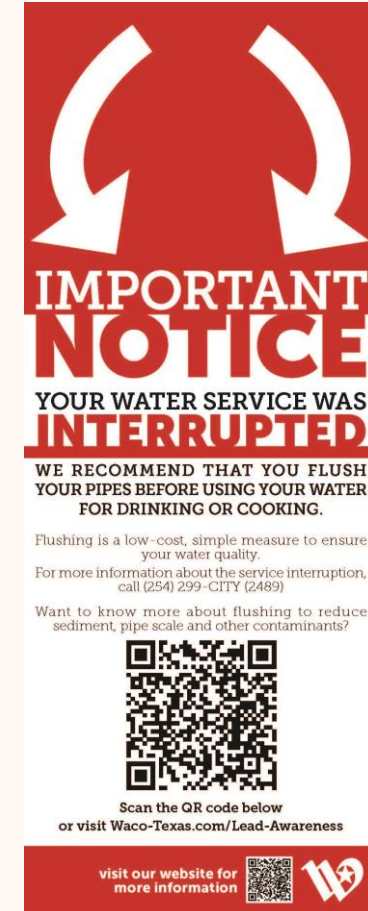
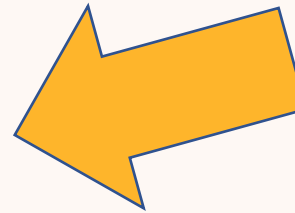
Communication

If we turn your water off **for any reason**, we must:

- Know the service line material, or
- Identify the service line material, or
- Notify to flush

before turning the water back on.

This door hanger notifies the customer that they need to flush if we cannot make that determination at that time.



Website – Lead Awareness

- One website for all lead inquiries
 - Housing, Health, Utilities
 - Directs, via a link, to another webpage with additional information
 - FAQ's
 - EPA's Lead website
 - Future
 - Searchable Map

Lead Awareness

Why is lead important to health?

Lead can impact normal physical and mental development in babies and young children. It can also increase blood pressure in adults.



Exposure to lead can come from a variety of sources, like paint, gasoline and other consumer products. Lead can enter the system through air, food, water, dust and soil. Older homes and businesses are more likely to have lead in paint or plumbing materials.

Most of the lead found in homes comes from lead-based paint, but can also be found in water that travels through lead pipes or in the soil around homes and buildings.

The City of Waco is committed to protecting public health. A number of resources are available to help keep you and your family safe.

Housing & Community Development

Both inside and outside the home, deteriorated lead-based paint can mix with household dust. Children are most at risk because their brains are rapidly developing and they are most likely to touch and eat lead-based paint or soil.

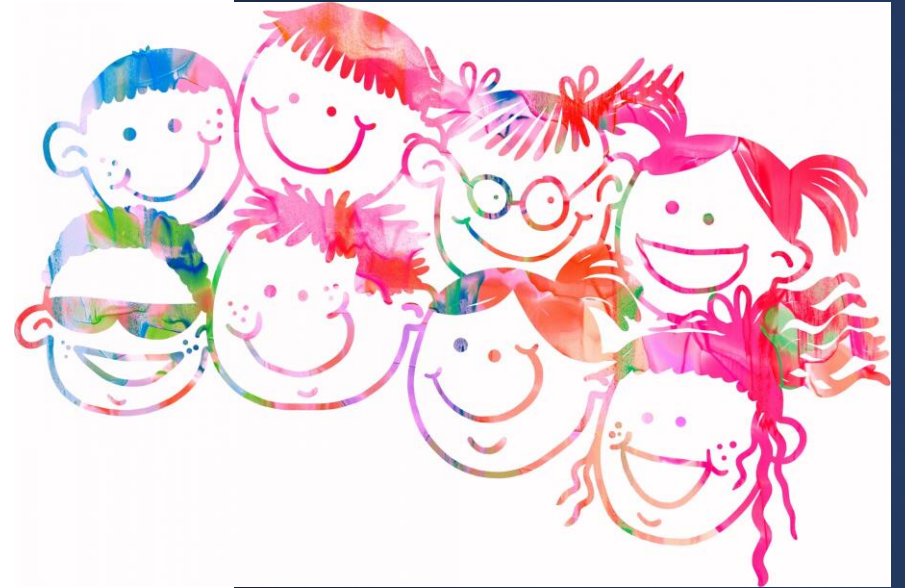
Help is available for some homeowners who want to eliminate dangerous lead-based paint and plumbing materials from their homes.

[More information about Home Rehabilitation Assistance](#)

Water Utilities

Testing of Schools & Childcare Facilities

- Testing of Schools & Day Cares – After October 16, 2024
- 20% of all elementary (8th grade and younger) and licensed childcare facilities must be tested each year.
 - We are choosing to test all schools and licensed childcare facilities the first year
 - Schools and childcare facilities would have to be tested once every 5 year thereafter
 - Excludes schools and childcare facilities built or all plumbing replaced after January 1, 2014



Schools & Daycares

- Results of testing and public education must be provided to each school/childcare, primacy agency and local or state health department.
- 40 public and private school
- 84 licensed childcare facilities



Testing for Lead In Water

The background features a series of overlapping circles in shades of yellow, olive green, and brown on the right side. A thin vertical green line is positioned to the left of the title. A vertical bar with a blue-to-brown gradient is located on the far right edge of the slide.

Future Decisions

- Responsibility for replacement of service lines on property owner side of the meter?
 - Inventory (How many?)
 - Cost (How much?)
 - Source of Funding
- Testing for lead
 - Completing free of charge if lead is found
 - Others without lead but want water tested?
 - Charge?
 - Full Cost?
- EPA continues to issue rule revisions and guidance which may alter current processes and decisions.

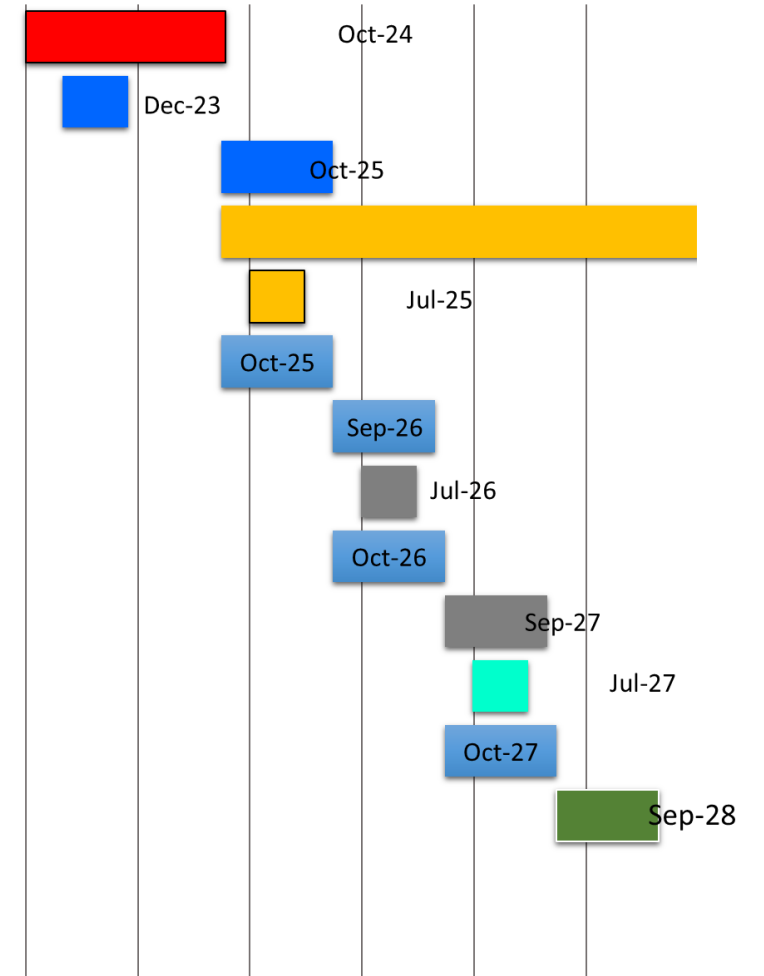
Funding

- Replacing lead lines is expensive for the City and the Customer
 - \$5,000,000 is part of the CIP request in 2024
 - \$6,000 estimated to replace the City service line
 - \$5,000 estimated to replace the Customer's service line
- Many customer's service line are galvanized which could require replacement
 - Additional investigation to determine if the City ever had a lead service line in front of a galvanized line
- City has submitted a preapplication to the Texas Water Development Board for a loan for \$20,000,000 with 51% forgiveness to assist with replacing the required lines for both the City and the customer
 - If approved the City will be asked to submit a full application in July with approval and closing in or after December



Project Schedule

Service Line Inventory
 TWDB Loan Application/Closing
 Testing of Schools/Daycares
 New Testing Criteria for Water
 Annual Notification for Lead or GRR
 Annual Validation of Service Line Inventory
 Annual 20% Testing of Schools/Daycares
 Annual Notification for Lead or GRR
 Annual Validation of Service Line Inventory
 Annual 20% Testing of Schools/Daycares
 Annual Notification for Lead or GRR
 Annual Validation of Service Line Inventory
 Annual 20% Testing of Schools/Daycares



Key Points

CURRENT MONITORING

- **Testing**
- **Monitoring**
- **Corrosion Control Plan**

LEAD & COPPER RULE REVISION

- **Expanded Testing**
- **Service Line Inventory/Replacement**
- **New Action Limits**
- **Testing of Schools & Daycares**

RESOURCES

- **IT, Housing, Health, Communications, Utilities**
- **Texas Water Development Board**
- **EPA**
- **TCEQ**

Questions

