

North Central Texas Council of Governments

LCRR (Lead and Copper Rule Revisions) 101 and Ideas on How Water Systems Can Start Preparing

**NCTCOG Webinar
May 25, 2022**

*Prepared in cooperation with the
Texas Commission on Environmental Quality
and U.S. Environmental Protection Agency*

Elena Berg, NCTCOG
eberg@nctcog.org



www.nctcog.org/WaterResources

Procedures for Webinar

- ▶ The webinar is being recorded and will be posted to NCTCOG's website under the green banner called "Webinars" here:

<https://www.nctcog.org/envir/natural-resources/water-resources>

- ▶ If you submitted an RSVP for this webinar, you will receive an email with the presentation slides, and eventually, a link to the recording. If you did not RSVP and would like these webinar materials, please email eberg@nctcog.org.
- ▶ Please keep your microphone on mute until the Question-and-Answer period at the end of each presentation.
- ▶ Thank you!

Webinar Agenda

- ▶ **LCRR 101**

- ▶ Laura Higgins, TCEQ

- ▶ **Plans and Preparations for LCRR Compliance - Large utility perspective**

- ▶ Stacy Walters, City of Fort Worth

- ▶ **Open Discussion: What is your water utility doing to prepare?** *Input from small utilities*

- ▶ **Preparations for LCRR Public Outreach and Risk Communication**

- ▶ Mary Gugliuzza, City of Fort Worth

- ▶ **Wrap-Up**

Speaker Introduction

Laura Higgins

- ▶ Team Leader, Lead and Copper Monitoring Team
- ▶ Texas Commission on Environmental Quality (TCEQ)

Lead and Copper Rule Revision (LCRR) General Overview



Laura Higgins

*TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER SUPPLY DIVISION*

Outline



- Background
- EPA's Intent to Strengthen LCR
- Overview of the LCRR
- Next Steps



Background

- LCR originally published in 1991.
- A treatment technique regulation requiring action to reduce exposure.
- To keep lead from entering the water, systems must treat water using certain chemicals to reduce corrosion.

EPA's Intent to Strengthen LCR



- Goal to proactively remove lead service lines and more equitably protect public health.
- EPA 2021 review of LCRR (2020)
 - Implement two-prong approach:
 - **LCRR** effective now
 - **LCRI** (Lead and Copper Rule Improvements) under development

Lead and Copper Rule Revision Overview



- LCRR strengthens the LCR to better protect children and communities
- The rule aims to:
 - Goal 1. Get the lead out
 - Goal 2. Empower communities
 - Goal 3. Better protect children



Get the Lead Out (Goal 1)

- Target sampling lead service lines
- New tap sampling procedures (i.e., 5th liter)
- Systems with higher levels will sample more frequently
- Triggering Actions to Reduce Lead Exposure Earlier
 - Find and fix approach
 - Flexibility for small systems

LCRR Goal 1



- Triggering Actions to Reduce Lead Exposure Earlier
 - Find and fix approach
 - Flexibility for small systems

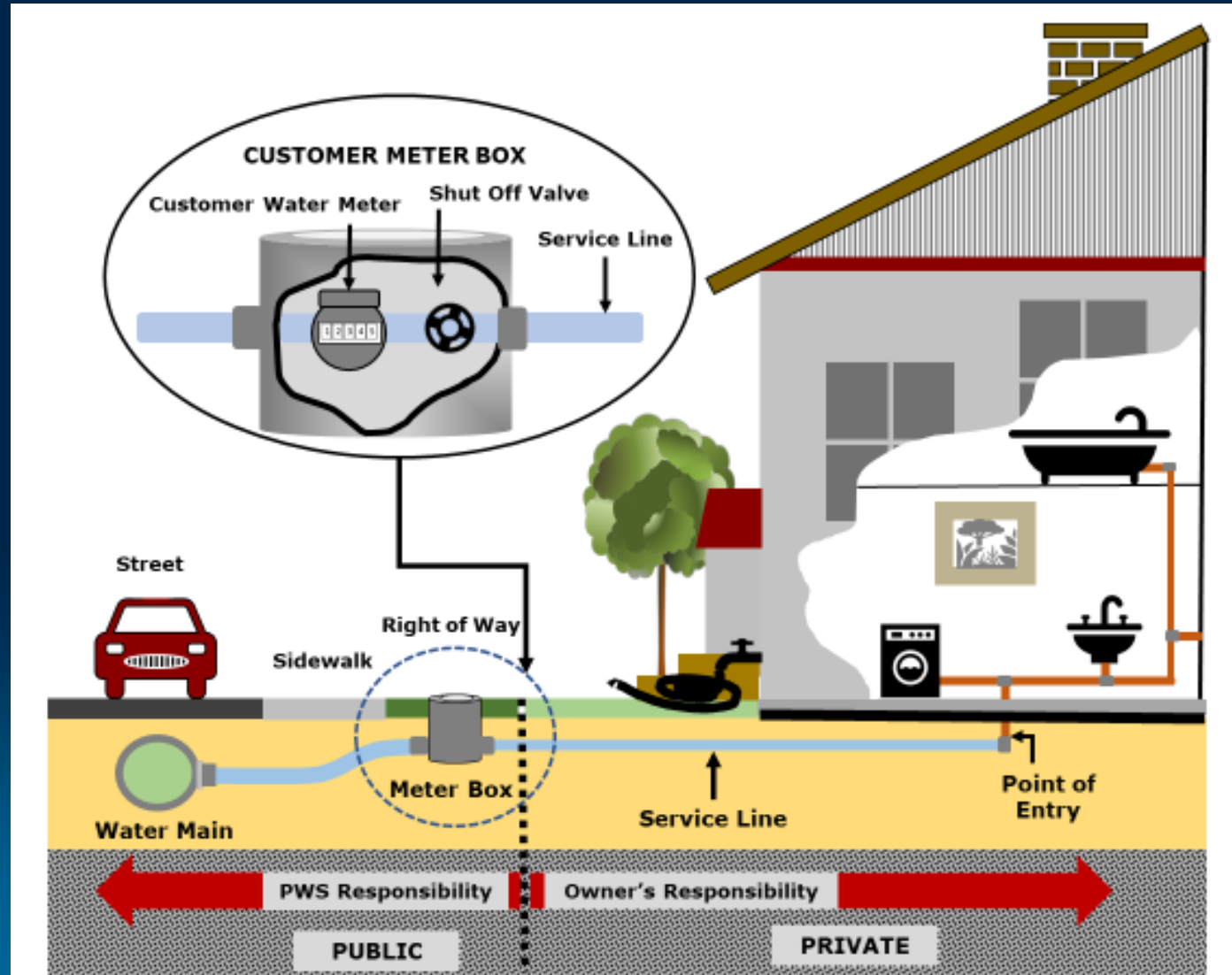


Lead Service Lines (Goal 1)

Replacing More Lead Service Lines (LSLs)

- The LCRR defines a lead service line as:
“ a portion of pipe that is made of lead, which connects the water main to the building inlet. A lead service line may be owned by the water system, owned by the property owner or both. For the purposes of this subpart, a galvanized service line is considered a lead service line if it ever was or is currently downstream of any lead service line or service line of unknown material. If the only lead piping serving the home is lead gooseneck, pigtail, or connector, and it is not a galvanized service line that is considered a lead service line, the service line is not considered a lead service line. For purposes of §141.86(a) only, a galvanized service line is not considered a lead service line.”

PWS Service Line Graphic





LSLs Replacement (Goal 1)

Replacing More Lead Service Lines

- Develop service line **inventory**
- **New trigger level**
 - Systems >10 ppb required to set an annual goal for replacing lead service lines
 - Systems >15 ppb required to fully replace a minimum of 3% of known potential lead service lines annually



Service Line Inventories

- 40 CFR §141.84 – All water systems must develop an inventory
- 40CFR §141.84(a)(2)- the inventory must include all service lines regardless of ownership status (e.g., where service line ownership is shared, the inventory would include both the portion of the service line owned by the water system and the customer-owned portion of the service line).

Service Line Inventories: WHO and WHEN



- WHO: Required for all community and non transient, non community water systems
- WHEN: Submitted to TCEQ by **October 16, 2024**
 - Required once for non-lead systems
 - Required annually or triennially for all others
 - With system's CCR (First due July 1, 2025)

DON'T WAIT!



Service Line Inventory Sources of Information



- Construction and plumbing codes, permits, and existing records
- Distribution maps, drawings, capital improvement or master plans
- Historical records on each service connection and meter installation
- Inspections and records of distribution system



Service Line Inventory: WHAT

- Non-lead Only Systems

- Record review checklist
- Service line material category table
- Certification of completion

- Lead, GRR, an/or Unknown Systems

- Street address
- Second identifier (account, meter #)
- Service line material
- Service line installation date
- Source of verification

Empowering Communities (Goal 2)



Homeowners will learn about elevated levels of lead in their home or system sooner

- 40 CFR § 141.31(d)(2)
 - For a lead action level exceedance, public water systems must provide public notice as soon as practicable, but not later than 24 hours after the public water system learns of the violation or exceedance.

Public Notification (Goal 2)



Water systems will also notify homeowners and building owners about opportunities to replace lead service lines, including information about financial assistance programs

- Utility Side vs Customer Side



Better Protect Children (Goal 3)

Better protect children at schools and childcare facilities

- The LCRR includes the following definitions related to schools and childcare facilities:
 - “**Child Care Facility** means a location that houses a licensed provider of child care, day care, or early learning services to children, as determined by the State, local, or tribal licensing agency.”
 - “**School** means any building(s) associated with public, private, or charter institutions that primarily provides teaching and learning for elementary or secondary students.”
 - “**Elementary School** means a schools classified as elementary by state and local practice and composed of any span of grades (including pre-school) not above grade 8.”

Testing in Schools and Childcare Facilities (Goal 3)



- Community systems will now be required to test at school and childcare facilities.
- These facilities must conduct testing once over a five-year period (20% of facilities each year).



Testing in Schools (Goal 3)

- After five years, these schools and childcare facilities.
 - will continue receiving annual outreach; and
 - will have the opportunity to be tested for lead by the system on request.
- Secondary schools can request testing at anytime.



Next Steps

- Water systems must comply with previous LCR (as codified in the July 1, 2020 CFR) until the LCRR Compliance Date: **October 16, 2024**
 - **LSL Inventories are due by this date**
- TCEQ will issue guidance for the LCRR following guidance from EPA
- EPA will begin to develop the LCRI
 - Intends to promulgate prior to October 16, 2024

Timeline



- ❖ January 15, 2021 – Final LCRR Published
- ❖ January 20, 2021 – Presidential Executive Order 13990 to review rules (including LCRR)
- ❖ Spring – Fall 2021 – EPA executive order review of LCRR and extensive public engagement
- ❖ June 16, 2021 – Final LCRR republished without changes with effective date of December 16, 2021
- ❖ December 16, 2021 – EPA announces no changes to LCRR and new LCRI
- ❖ Early 2022 – EPA is expected to provide more information on LCRI
- ❖ Summer 2024 – Publication of LCRI
- ❖ October 16, 2024 – Compliance date of LCRR



What else to work on NOW

- Complying with the current LCR
- Read the LCRR
- Inventory
- Proactive Replacement
 - End goal, get ahead of the game
 - Funding options
- Corrosion Control



Additional Resources

For more information, please see the links below:

- EPA website:
 - www.epa.gov/ground-water-and-drinking-water/review-national-primary-drinking-water-regulation-lead-and-copper
- Next Steps for the Lead and Copper Rule:
 - www.epa.gov/system/files/documents/2021-12/lcrr-review-fact-sheet_0.pdf
- EPA Press Release:
 - www.epa.gov/newsreleases/epa-announces-intent-strengthen-lead-and-copper-regulations-support-proactive-lead

Contact Us



Laura Higgins

- Laura.Higgins@tceq.texas.gov

Lead and Copper Rule Program

- PWSLCR@tceq.texas.gov
- LCRR@tceq.texas.gov

Questions?



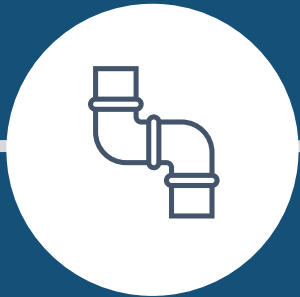
Speaker Introduction

Stacy Walters

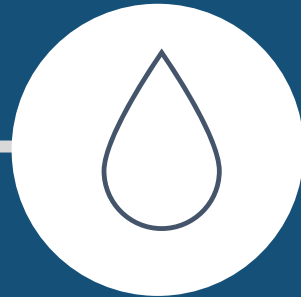
- ▶ Regulatory Administrator
- ▶ City of Fort Worth

Fort Worth's preparations for the LCRR

We focused on four areas for preparing for the LCRR



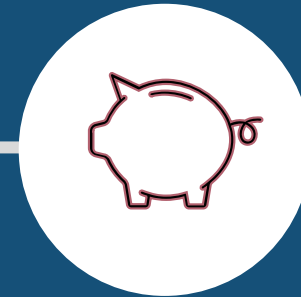
Service Line Inventory



Water Quality

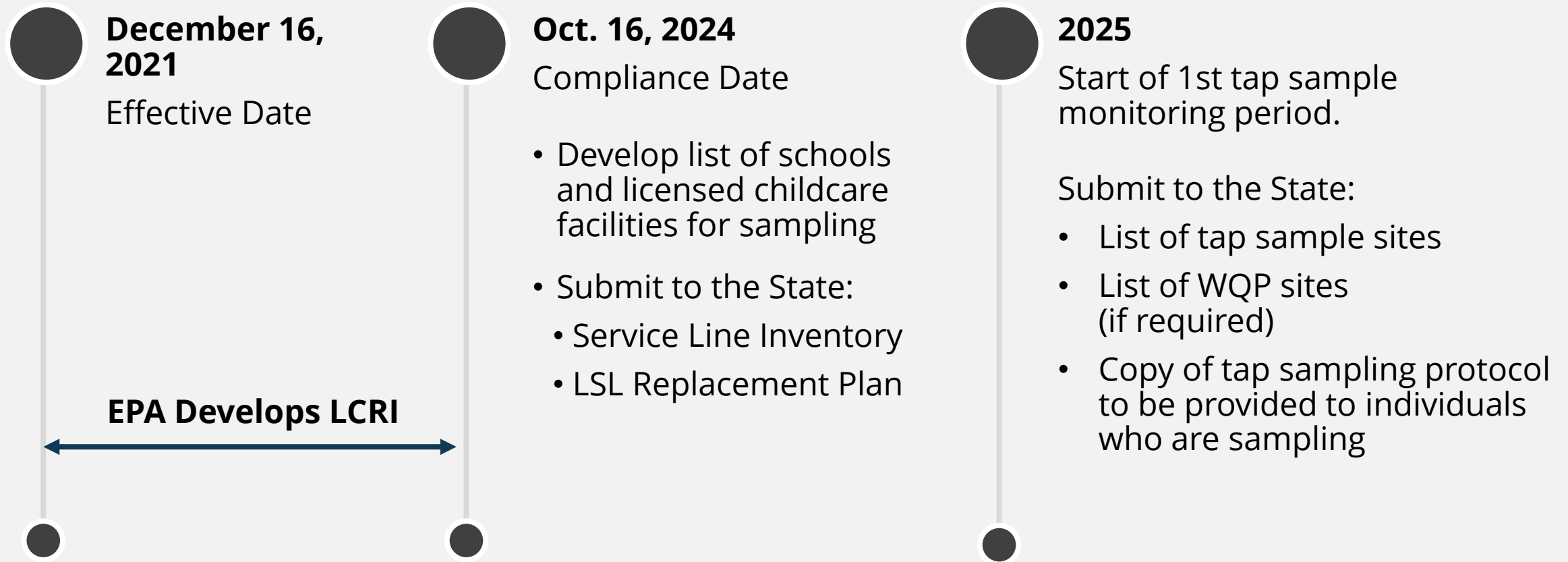


Collaboration

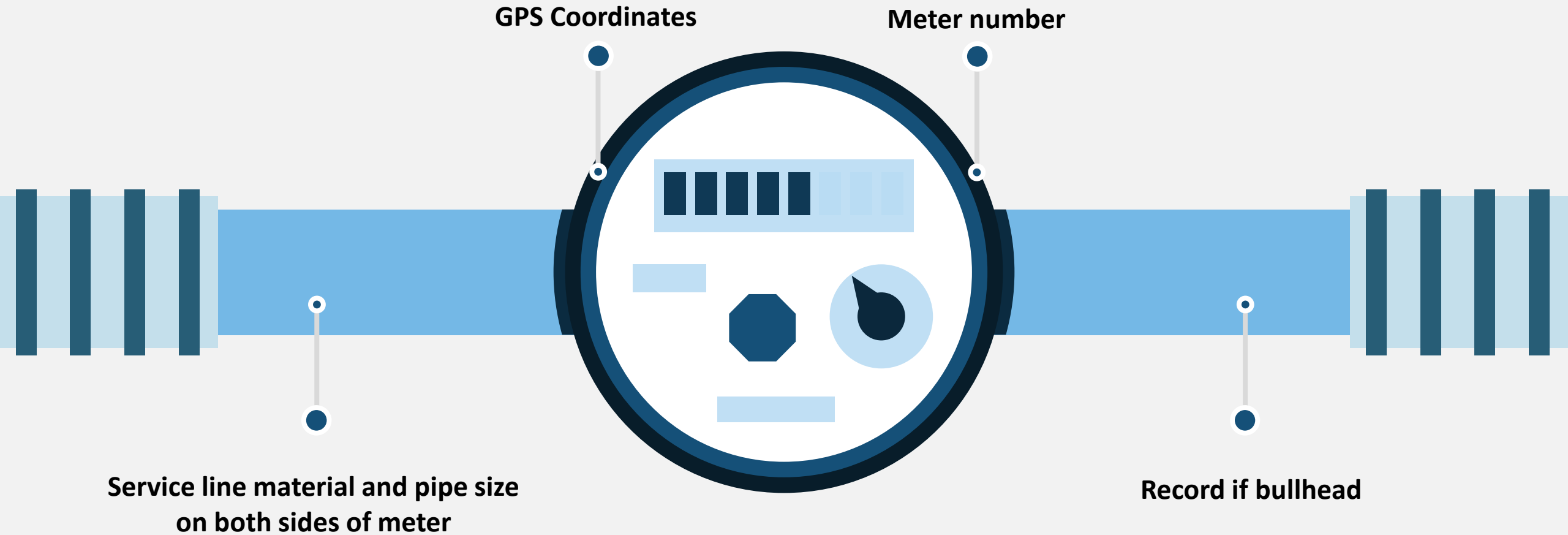


Budgeting

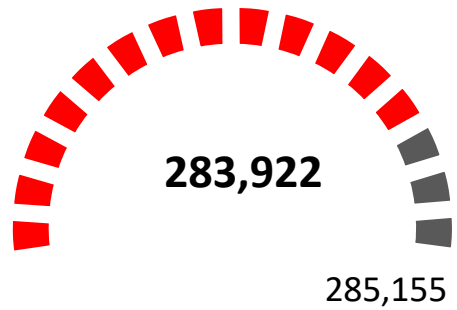
What's the timeline for compliance with the LCRR?



Data collection: approximately 94% complete



Fort Worth started our inventory in 2016



LSL – City
1,833

LSL –
Customer
10

LSL –
Replaced
1,807

Galvanized
requiring
replacement
1,153

We have developed system-wide water quality standards



We conduct proactive monitoring to prepare for more stringent requirements

New 10 ppb trigger level (90th percentile calculation)

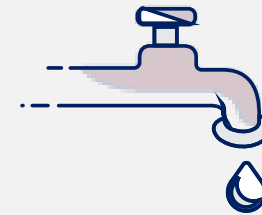


Determine Tier Levels (Tiers 1, 2, 3, 4, & 5)

5th Liter Sampling



Find and Fix (>15 ppb)



Sampling at homes with lead service lines



TEST for copper

TEST for lead



The LCRI may modify some of these requirements

We have developed partnerships for reaching different groups

COLLABORATE

Within Utility

Meter Services

Field Operations

Customer Service

Public Engagement

Capital Delivery

Water IT

Laboratory

Other City Departments

Code Compliance
Consumer Health

Neighborhood Services

Planning and
Development

State Agencies

TCEQ

TEA

TDSHS

Local

County Health
Departments

Schools
(ISDs, Parochial, private,
charter)

Licensed child care

Other

Plumbers

Realtors

Social Service
Organizations

Builders and Developers

Equity Issues

Cost impacts of the program



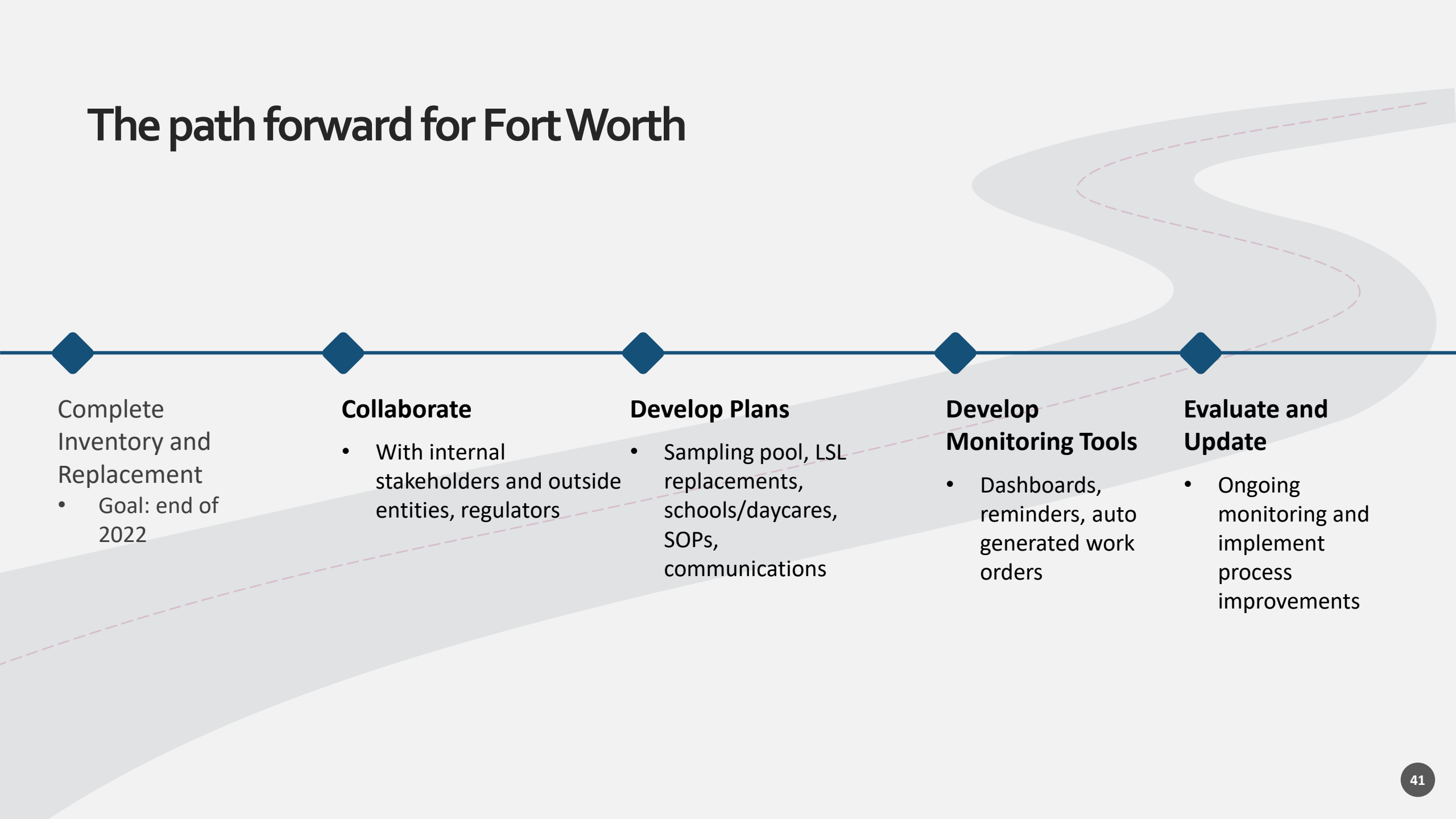
Hired one full-time staff member



Operational costs

- Bottles
- Pitcher/Filters
- Printing/mailing for public outreach
- Gift cards for compliance monitoring participants
- Staff resources for program compliance

The path forward for Fort Worth



Complete Inventory and Replacement

- Goal: end of 2022

Collaborate

- With internal stakeholders and outside entities, regulators

Develop Plans

- Sampling pool, LSL replacements, schools/daycares, SOPs, communications

Develop Monitoring Tools

- Dashboards, reminders, auto generated work orders

Evaluate and Update

- Ongoing monitoring and implement process improvements



To do list (by Oct. 16, 2024)

1. Develop a SL inventory
2. Eliminate “unknown” SL
3. Prepare website for displaying
4. Develop a LSL Replacement Plan (including Find & Fix protocols)
5. Develop an SOP for disturbances of lead, unknown and galvanized downstream of lead
6. Prepare sampling plan for schools and registered daycares
7. Update sampling pool in accordance with new tiers
8. Revise sampling protocols to meet new requirements
9. Contract with a lab, if no in-house capability
10. Develop public education materials /notifications



Thank you

Stacy Walters
Regulatory Administrator
Fort Worth Water
Stacy.Walters@FortWorthTexas.
gov
817-392-8203

Discussion

What is your water system doing to prepare?



Speaker Introduction

Mary Gugliuzza

- ▶ Media Relations and Communications Coordinator
- ▶ City of Fort Worth



Public Outreach

Lead & Copper Rule
Revisions



Public Outreach



- Inventory
- LSL Replacements
- Disturbances
- Corrosion Control
- Compliance Sampling
- School & Daycare Sampling
- Public Notification



Inventory

Data Availability

- Must include location identifier
- Info in CCR on how to access
- Large systems (>50,000 served) must post on website

Notify

- Customers with LSL, galvanized requiring replacement or unknown
 - Within 30 days of completing inventory
 - Annually until no longer in any of these categories
 - New customers at time service initiated
 - Notification language varies



Compliance Sampling



Individual Test Results

- 30 days if <15 mg/L
- 3 days if ≥ 15 mg/L
- Communicating with occupants of building where tap was sampled



Overall results

- Annual outreach to state and local health departments
- Publicly available within 60 days



Exceedances require outreach

- $>$ trigger level
- $>$ action level
- **AL exceedance = public notification (24 hours)**



Notification to property owners and people at location at least 45 days before planned work will result in LSL replacement;



Must offer to replace private portion, but not required to pay for it

Planned

LSL Replacements - Partial



Notification to customers **before** SL placed back in service:



May experience a temporary increase of lead levels in their drinking water due to the replacement



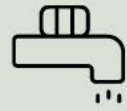
Required language on health effects of lead



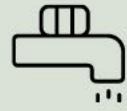
Actions to minimize exposure to lead in drinking water



Procedure for flushing



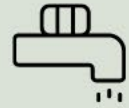
Pitcher filter or POU device with six months of filters



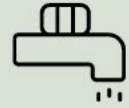
Offer of follow-up tap sample 3 to 6 months after SL replacement

Planned &
Unplanned

LSL Replacements
Partial or Full



When notified customer portion is being replaced and simultaneous replacement cannot be conducted or when find out it was replaced within previous six months:



Notification to customers **before** SL placed back in service:



May experience a temporary increase of lead levels in their drinking water due to the replacement



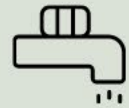
Required language on health effects of lead



Actions to minimize exposure to lead in drinking water



Procedure for flushing



Pitcher filter or POU device with six months of filters

Customer
Initiated

LSL Replacements

Disturbances

Shut off or bypass

(operating a valve on a service line or meter setter, and without conducting a partial or full lead service line replacement)



Replacing an inline water meter, a water meter setter, or gooseneck, pigtail, or connector

Corrosion Control



**America's Water
Infrastructure
Act of 2018**



Annual
Water Quality
Report



Information on
corrosion control efforts



Schools and daycares



Elementary Schools and daycares



Health risks



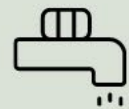
Requirement to sample; proposed schedule



Instructions and 3Ts document



Results and remediation options



Secondary Schools



Health risks




info on how to request sampling



Results and remediation options

Existing outreach materials

Tips for reducing lead in drinking water
Recomendaciones para reducir plomo en el agua potable



FORT WORTH WATER
 fortworthtexas.gov/water/lead
 817-392-4477

How to identify lead pipes
Cómo identificar los tubos de plomo

Needed: screwdriver, Magnet, (wearing gloves), etc. Places a sink, pipe

Tubo de Acero Galvanizado
 Si el área raspada superior se adhiere a la pintura, y el iman permanece gris permanente.

Tubo de Cobre
 Si el área raspada superior se adhiere a los tubos de cobre.

Tubo de Plomo
 Si el área raspada superior se adhiere a los tubos de plomo.

Herramientas Necesarias: Desarmador Plano, Imán, Guantes

El acceso a la tubería doméstica: (No tocar tubo de plomo sin usar.)

Facebook: facebook.com/FortWorthWater

Twitter: @FWWater

Instagram: fortworthwater

LinkedIn: fortworthwater

YouTube: fortworthwater

Website: fortworthtexas.gov/water/lead

FORT WORTH WATER

Important: Lead Service Line Replaced
Importante: Reemplazo de Líneas de Servicio de Plomo

In the course of maintenance work, the Water Department replaced the city-owned portion of your service line. This is the line that brings water from the main into to your home.

The city-owned portion that was lead pipe has been replaced with copper pipe. Following the replacement, we flushed your water line to remove air and any particles loosened during the work.

Now you need to take steps within your home to assure the continued safety of your water. It's easy. Just follow the instructions on the inside of this brochure.

Ownership of the service line is shared. The city owns the portion from the main to the meter, including the meter. The property owner owns the portion from the meter to the home.

We have determined your private plumbing coming out of the meter is (circle one):
 Lead Galvanized Steel Other Unknown

Please see the enclosed material for information about the risks and steps you can take to reduce your exposure to lead in drinking water.

If you have any questions, please contact us at the members or email address listed below.

Facebook: facebook.com/FortWorthWater

Twitter: @FWWater

Instagram: fortworthwater

LinkedIn: fortworthwater

YouTube: fortworthwater

Website: fortworthtexas.gov/water/lead

Flushing Instructions
Instrucciones para Purgar Línea de Agua

Manejo y limpie los alrededores de las líneas de agua y permita que el agua corra por unos días o minutos hasta provocar que la acumulación de sedimentos dentro de la tubería se libere.

Hoy

Después de que el agua corra por unos días o minutos hasta provocar que la acumulación de sedimentos dentro de la tubería se libere, por favor, espere un día antes de beber el agua fría antes de beber, especialmente al preparar las bebidas.

2-5

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YouTube: fortworthwater

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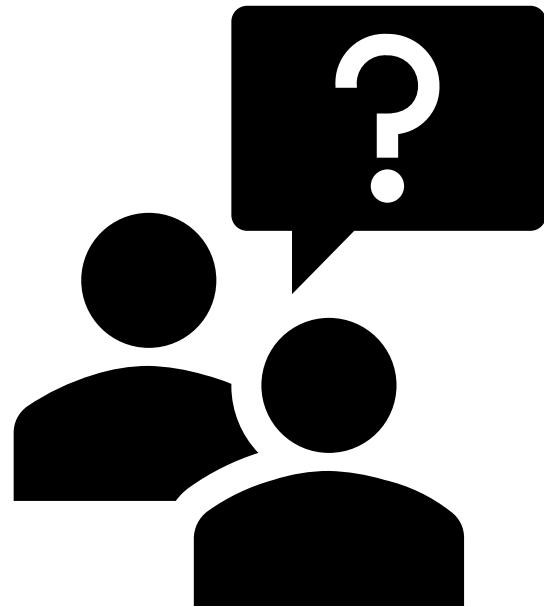


Thank You

Contact Information:

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817-392-8253
mary.gugliuzza@fortworthtexas.gov

Questions?

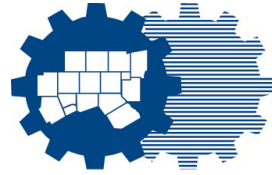


Wrap-Up

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Thank you for attending!

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