



# Lead Service Lines and Replacement Ordinances

Presentation for West Allis Common Council

May 7, 2024



# Overview

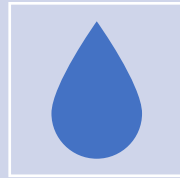
- **West Allis Water System Background**
- **Lead in Drinking Water and Lead Service Lines**
- **Lead Service Line Replacement Ordinances**
- **Discussion**

# West Allis Water System Background

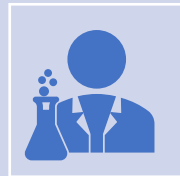
The West Allis Water Utility, part of the City's Public Works Department, provides water to homes, businesses, and other properties in the City of West Allis, serving over 60,000 people, through roughly 20,000 service connections.

West Allis purchases its drinking water from the City of Milwaukee and distributes the water to customers through the City of West Allis's own distribution system.

# West Allis Water Quality



Lead is not found in Milwaukee's source of public drinking water, but lead can enter drinking water when service lines or plumbing materials (i.e., pipes, faucets, fixtures) that contain lead corrode.



To prevent corrosion, the City of Milwaukee adds a food-grade additive, called an orthophosphate corrosion inhibitor. West Allis's tap water quality sampling results demonstrate that the corrosion inhibitor is generally working to keep lead levels below regulatory limits called "action levels" for lead.

# What is the Concern with Lead?



Health



Regulatory Requirements

# Health



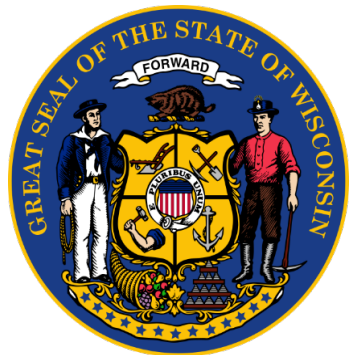
- When people consume lead in drinking water, it may enter their bodies and accumulate over time, resulting in damage to the brain, nervous system, red blood cells, and kidneys.
- Mothers who have had exposure to lead in the past may store lead in their bones. Lead may be released from bones during pregnancy and lactation.
- Young children, infants, and fetuses are particularly vulnerable to the harmful effects of lead. A child's mental and physical development can be irreversibly stunted by overexposure to lead.

# Regulatory Requirements



## Federal Regulations

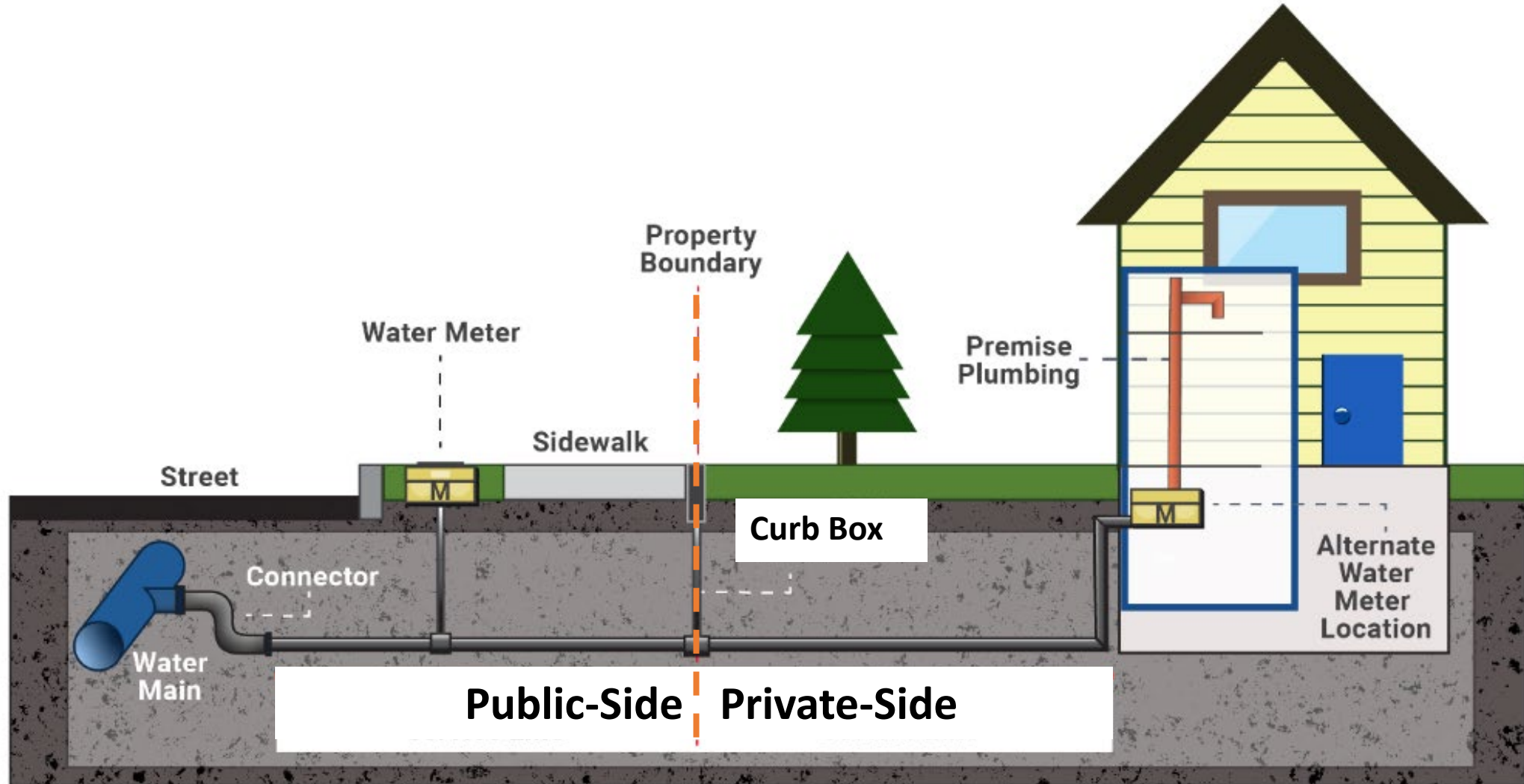
- In 1986, federal drinking water regulations prohibited pipe materials that were not considered “lead free,” and Wisconsin adopted those regulations by association.
- Lead and Copper Rule Revisions (2021) require water systems to prepare and maintain an inventory of service line materials by October 16, 2024.
- Establishing an inventory of service line materials and identifying the location of lead service lines are key steps in getting them replaced.
- Upcoming updates to these regulations (currently in draft form) have the potential to require an annual percentage of full (private- and public-side) lead service line replacements.



## State Regulations

- Wisconsin follows federal drinking water regulations and has some of its own state requirements related to reporting lead service lines and replacements, including through the Public Service Commission (PSC).

# Water Service Lines





# Water Service Lines

- A water service line is a section of pipe that connects a home or business to the water main in the street. Service lines can be made of copper, plastic, galvanized steel, or lead.
- In West Allis, the City owns the water service line from the water main to the shutoff valve that is typically located near the sidewalk in front of the home or business. The customer owns the water service line from the shutoff valve to the water meter inside the home or business.
- In West Allis, there are approximately 7,800 known lead service lines in the water system, ranging in diameter from 3/4-inch to 2-inches.

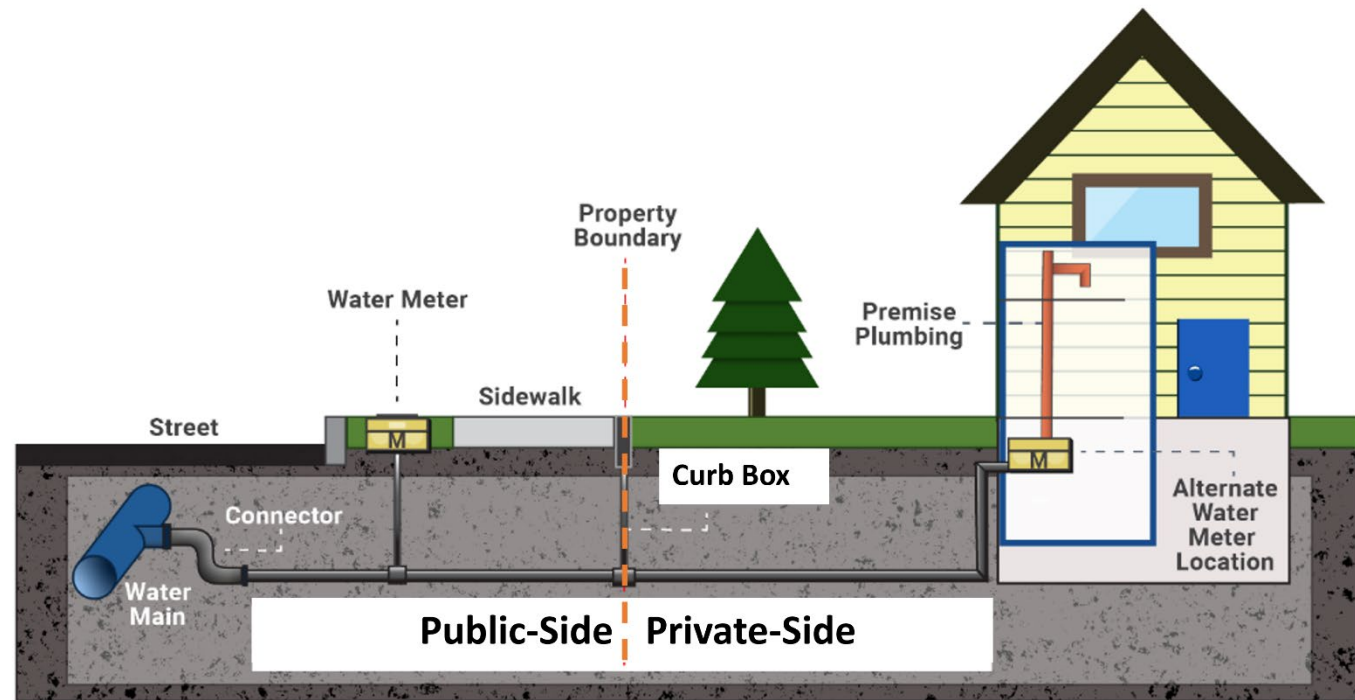


Image Source: EPA

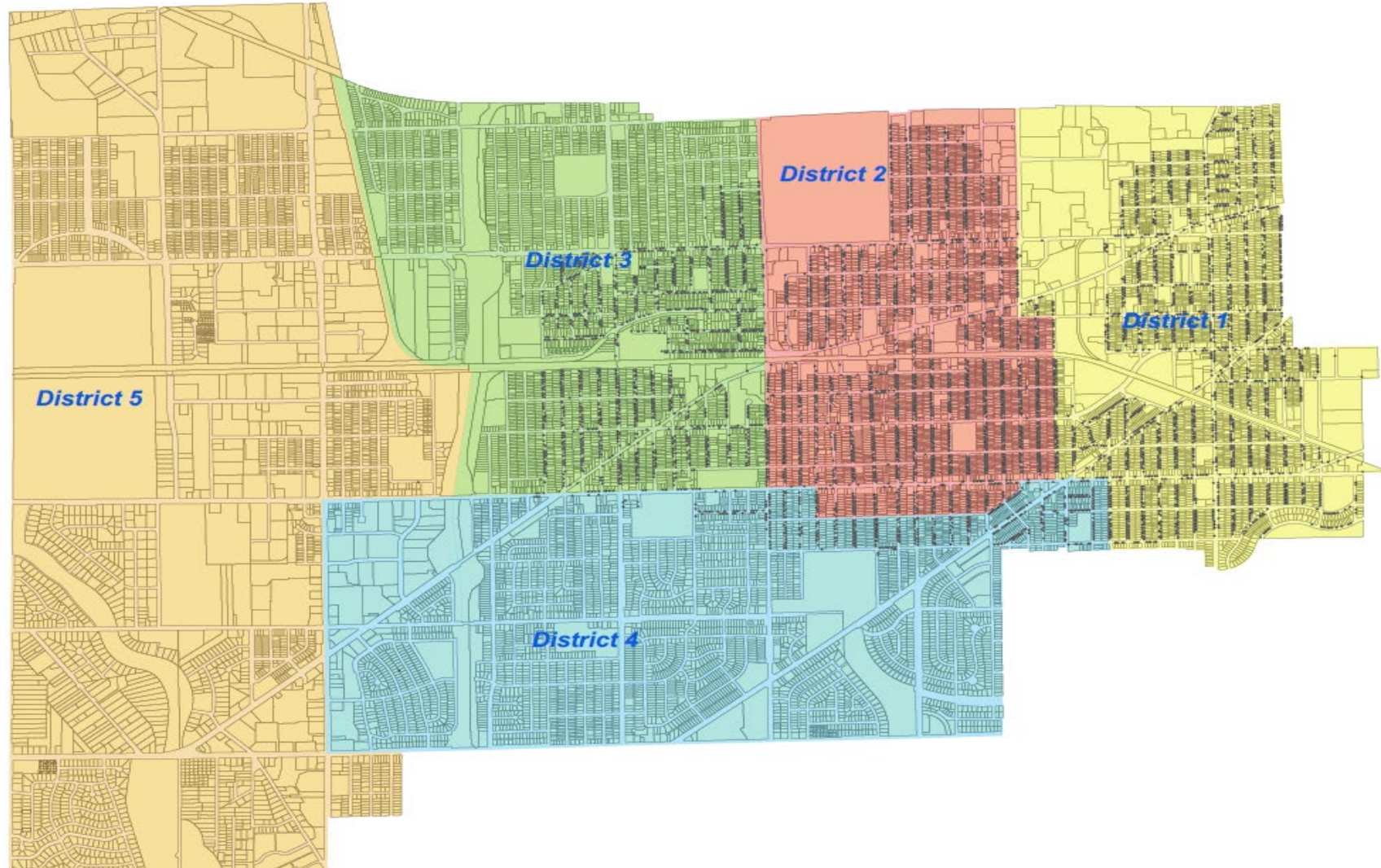
# West Allis Service Lines



Image Source: American Water Works Association

- Based on engineering records, lead service lines were installed in West Allis prior to World War II and up until about 1953.
- In 1966, West Allis changed the plumbing code so that lead was no longer an acceptable material for drinking water service lines.
- West Allis has already identified service line materials for more than 80% of the municipality.
- Some service lines with unknown materials remain, which may contain lead or galvanized piping that is or was downstream of lead piping or connectors. These lines are considered “requiring replacement” because they may be sources of lead.

# Where are Known Lead Service Lines in West Allis?



# Where are Known Lead Service Lines in West Allis?

## Approximate Number of Identified Lead Service Lines by District

- District 1 – 2,540
- District 2 – 2,670
- District 3 – 1,470
- District 4 – 470
- District 5 – <10



Image Source: American Water Works Association

# What is West Allis Currently Doing?



- Determining the service line materials for the remaining ~1,000 service lines of unknown material before the inventory deadline in October of 2024.



- Conducting short-term and long-term construction planning for lead service line replacements.



- Seeking funding for customers to remove their lead service lines at little to no cost.



- Looking into lead service line replacement ordinances that other municipalities have passed.

# WI DNR Funding\*

- WI DNR\* administers the Safe Drinking Water Loan Program.
- The Safe Drinking Water Loan Program provides loans and principal forgiveness on loans for drinking water infrastructure projects.
- WI DNR receives an annual grant from the US EPA, as appropriated by Congress, to support drinking water infrastructure projects.
- As part of the Bipartisan Infrastructure Law (BIL) (effective 2022-2026), Congress appropriated funds specifically for lead service line replacement that WI DNR makes available each year through 2026.

\*Wisconsin Department of Natural Resources

# WI DNR Funding (cont.)

- In 2022, WI DNR made approximately \$48 million available for lead service line replacement projects.
- In 2023, WI DNR made approximately \$81 million available for lead service line replacement projects.
- Eligible projects include both public- and private-side lead service line replacements and development of the service line inventory (required by the EPA and due October 16, 2024).
- A portion of the funding includes principal forgiveness – a subsidy (no repayment required) based on several socioeconomic factors (e.g., median household income, family poverty percentage) within a municipality or a census tract.

# Lead Service Line Replacement Ordinances

An ordinance is defined by the League of Wisconsin Municipalities as: “A local law of a municipality, enacted by the proper authorities, prescribing general, uniform, and permanent rules of conduct relating to the corporate powers of the municipality.”

A lead service line replacement ordinance requires each **owner** of a property that is serviced by a private-side water service line containing lead to replace that private-side water service line under certain conditions.



# What are Some Benefits of Lead Service Line Replacement Ordinances?



- Many public water systems have implemented lead service line replacement ordinances as a mechanism to overcome issues of ownership, control, and access in order to increase lead service line replacements.
- Partially replacing lead service lines is not considered best practice. Lead service line replacement ordinances can reduce partial replacements, thereby potentially reducing lead exposure.
- These ordinances can reduce the length of time between when the water system removes the public-side lead service lines and customers replace their sides of the lead service line, helping avoid exposure to lead.
- Municipalities enacting a lead service line replacement ordinance can score an extra 10 points on WI DNR funding applications, thereby potentially increasing funding availability, including for homeowners.

# Have Other WI Communities Adopted Lead Service Line Replacement Ordinances?

- YES, many!
- Municipalities can tailor their ordinances to local needs, for example, with additional stipulations related to:
  - Deadlines for required replacement
  - Subsidies towards replacement
  - Financial assistance program
  - Triggers for mandatory replacement (e.g., leak, emergency repair, damaged line)
  - Right of entry to property
  - Potential penalties for non-compliance, up to and including disconnection



# Other DNR and EPA Requirements Relevant for Lead Service Line Replacement Ordinances

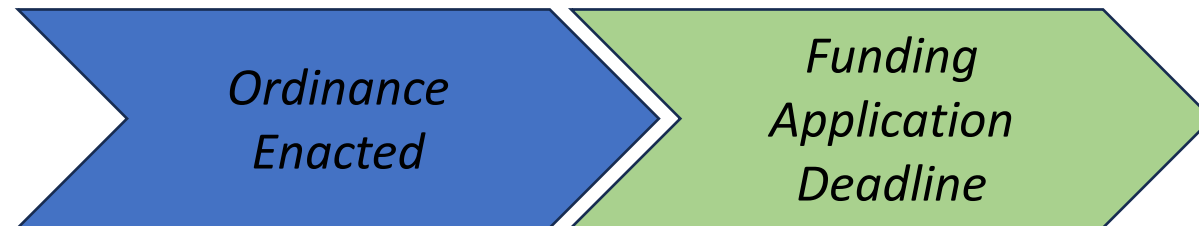
- There are various detailed state and federal requirements that water systems could consider in their ordinances, such as:
  - Notification to customers prior to public-side lead service line replacements
  - Timing of private-side lead service line replacement, once the public-side lead service line has been replaced
  - Provision of mitigation measures (e.g., filters) following lead service line replacements
  - Private-side lead service line replacements within a certain timeframe after notification by the water system and timing of private-side lead service line replacement scheduling following notification



# Timeline Considerations: DNR Funding

If a municipality is applying for fiscal year 2025 WI DNR Safe Drinking Water Loan Program Bipartisan Infrastructure Law (BIL) Lead Service Line Funding and wants to score an additional 10 "points" on its application, an ordinance must be enacted prior to the June 30th, 2024, funding application deadline.

## *WI DNR Funding Timeline*



# Funding and Cost Details in a Lead Service Line Replacement Ordinance



- Municipalities typically include varying cost and funding information in their ordinances, such as general information about responsibilities for payment.
- Potential funding sources for lead service line replacements may include:
  - DNR Funding
    - A lead service line replacement ordinance helps with application scoring.**
  - Outside funding (e.g., Community Development Block Grant (CDBG) funding) may be available for lead service line replacements.

# Questions?

