

US EPA's 2021 Revised Lead & Copper Rule

Board of Public Utilities Meeting

January 19, 2022

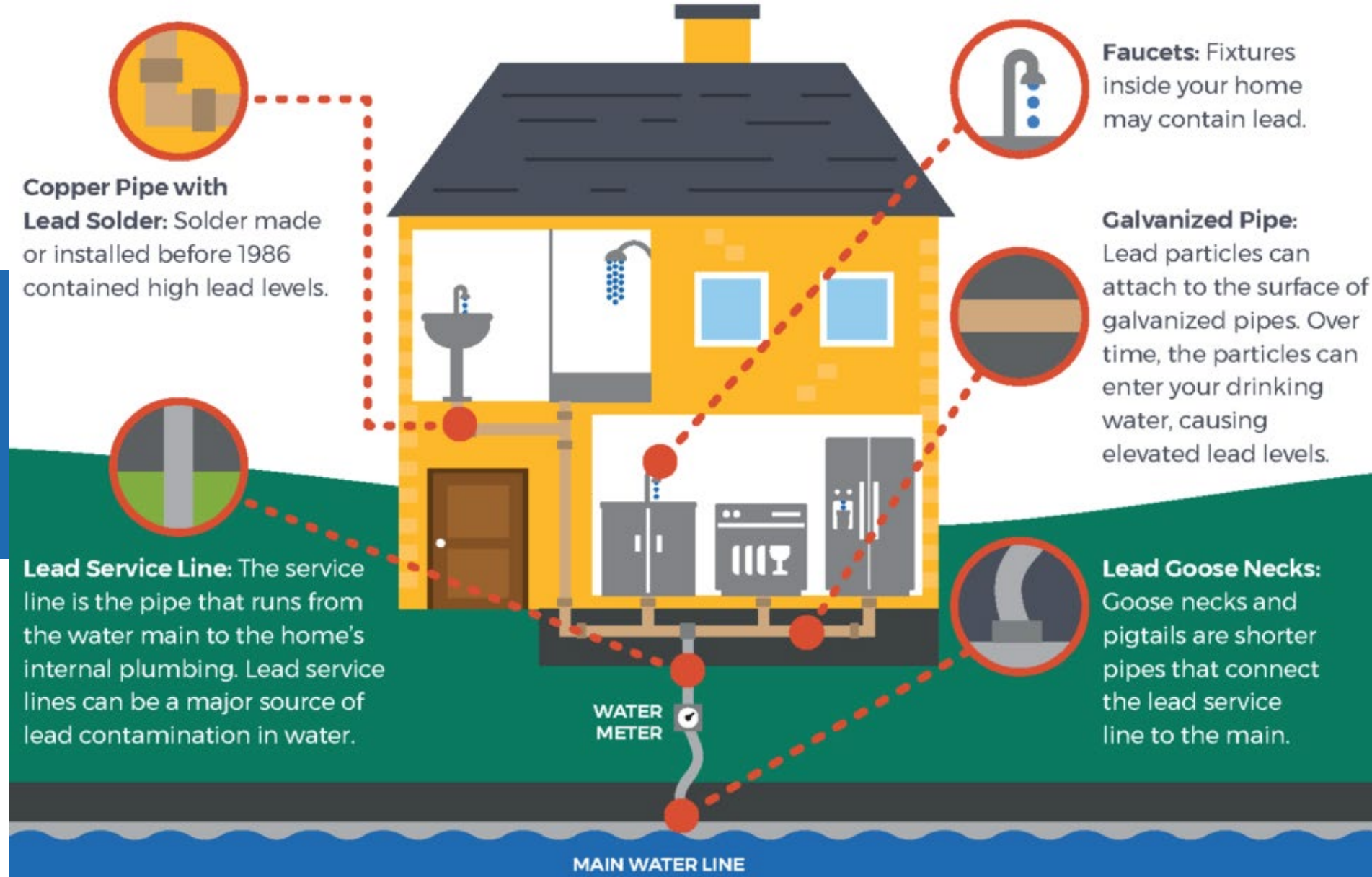
Tony Llamas – Water Quality Supervisor

Lead and Copper in Drinking Water



- Lead and copper are naturally occurring
- The **primary source** of lead and copper is from corrosion of household plumbing fixtures
- EPA maximum contaminant level goal of zero
- Compliance for lead and copper is at the customer's tap

Sources of Lead in drinking water



EPA's Sources of Lead in Drinking Water Infographic; 2017

Lead & Copper Rule (LCR) - 1991



Established in 1991 to control lead and copper in drinking water.

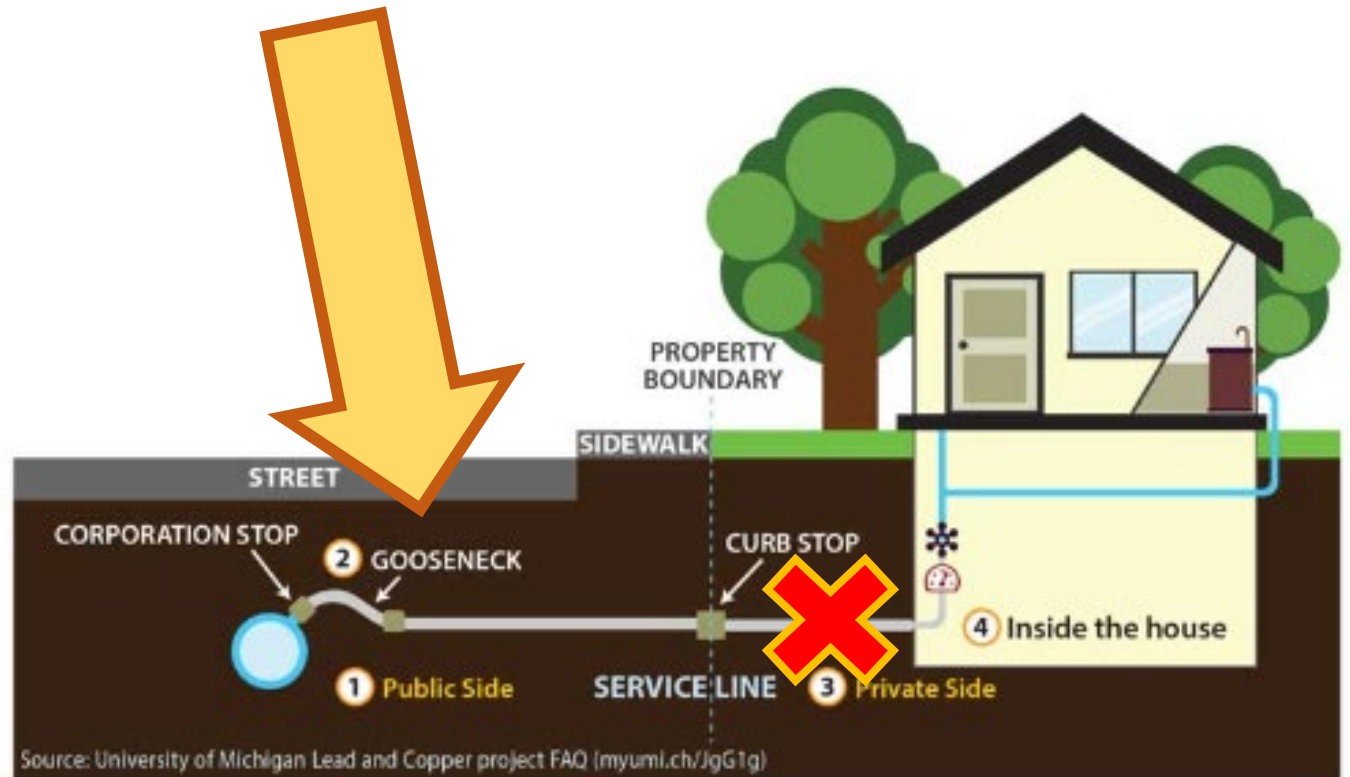
- Requirements for distribution system treatment techniques
- Sampling parameters and requirements
- Requires utilities to act if a percentage of samples exceeds thresholds

Santa Rosa Water has a reduced testing requirement from EPA of every three years due to low lead and copper measurements.

State: Lead Service Line Inventory

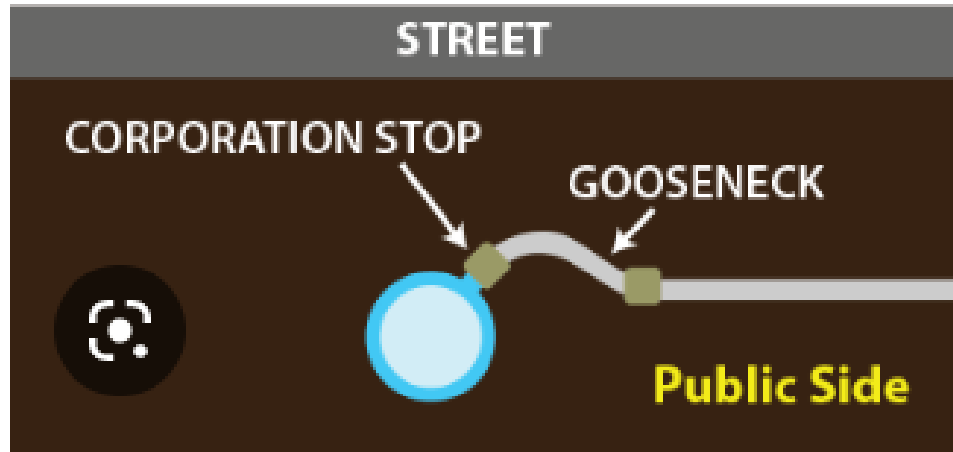
California SB 1398 (2016) & SB 427 (2017)

- Required public water systems by July 1, 2018 to:
 - Compile an inventory of known lead service lines in use
 - Identify areas that may have lead service lines in its distribution system



Compliance with SB 1398 & SB 427

- Prior to 1940, water laterals were threaded galvanized straight pipe with a lead gooseneck to connect the straight pipe to the water main
- Replaced over the years with either Copper or Polyethylene pipe
- Results of the 2018 inventory, no lead goosenecks were found
- Cast iron water mains installed prior to 1940 show that they were connected to copper water service lateral piping



State Requirements - Lead Testing in Schools



California Assembly Bill 746 (2017)

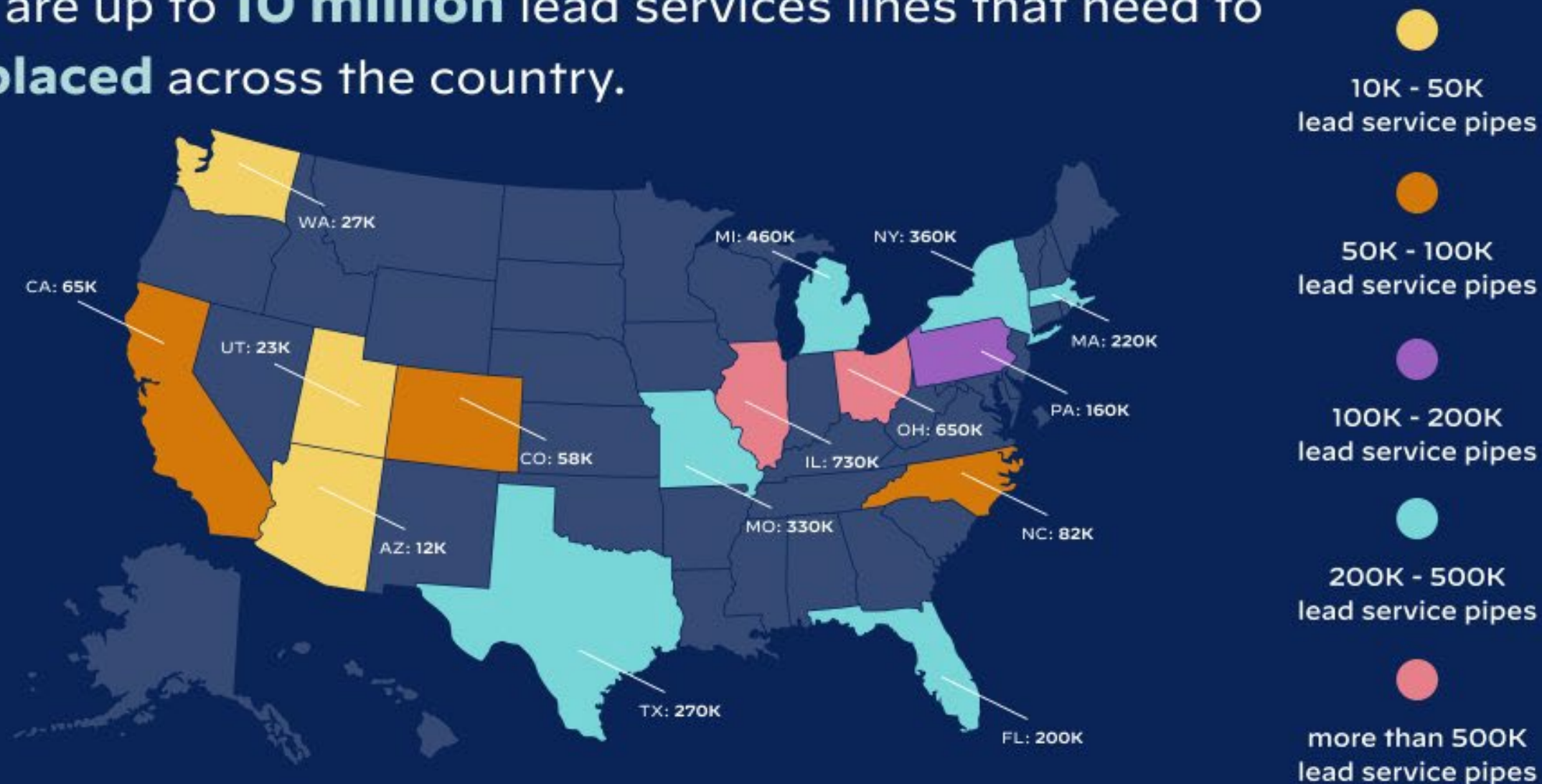
- Public water systems were required to test the water for lead at all K-12 **public schools** constructed prior to January 1, 2010
- Testing was required to be completed by the water systems before July 1, 2019. Sampling results made public.

California Assembly Bill 2370 (2018)

- All licensed childcare facilities are required to test for lead levels in drinking water
- Must be completed by the licensed childcare facilities by January 1, 2023

LEAD SERVICE PIPES IN THE U.S.

There are up to **10 million** lead services lines that need to be **replaced** across the country.



Source: US Presidents Office, 2021



Lead and Copper Rule Revisions 2021 (LCRR)

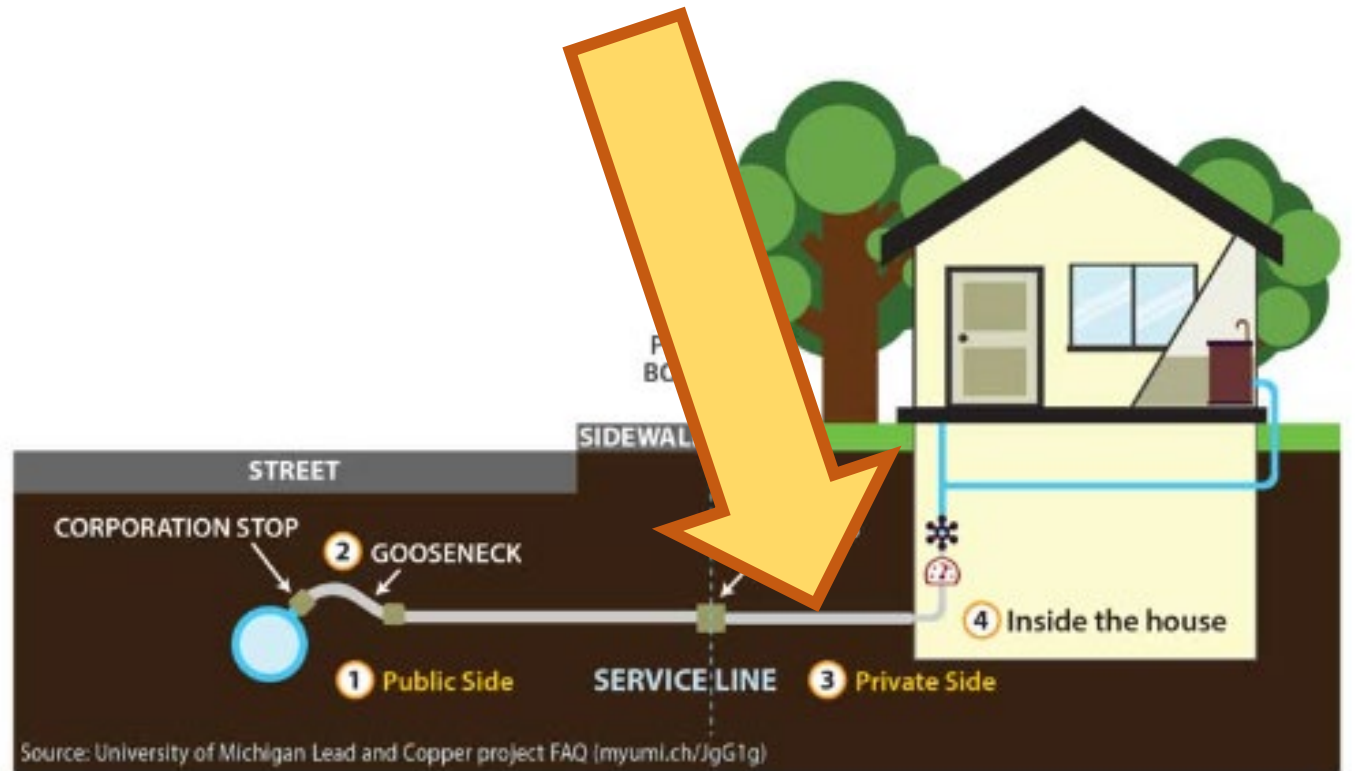
BY OCTOBER 2024:

- Develop a Lead Service Line Inventory:
 - Include customer owned portion of system
 - Establish timeline and schedule for replacement by customer
- Identify **ALL** schools and child-care facilities
 - Develop protocol to test these establishments routinely (20% each year)
- Develop enhanced public communication
- Other changes in sampling routines for lead and copper

LCRR: Lead Service Line Inventory

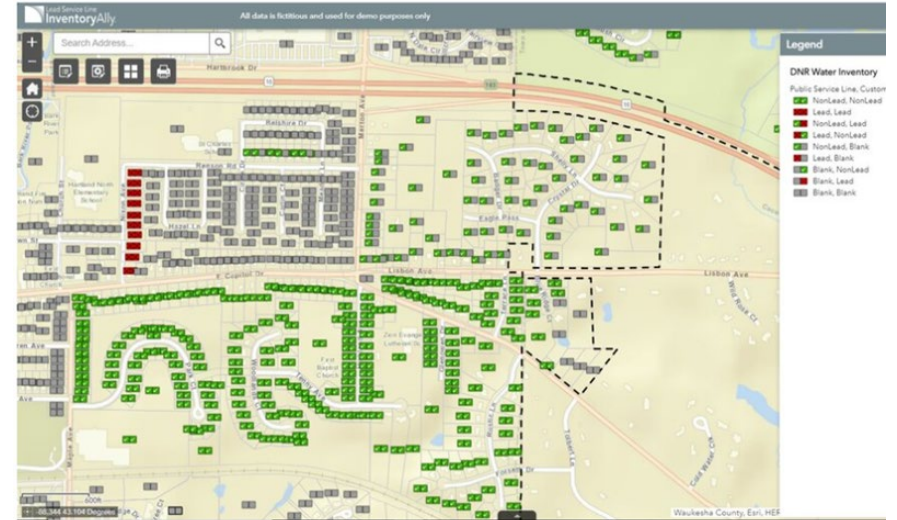
New Regulations (2021)

- Defines “service line” as a pipe, including the water meter, which connects the water main to the building
- Inventory of materials on owner property beyond meter will be required



Compliance Strategy for Service Line Inventory

- Use existing records/codes for elimination of certain service lines
- Staff will map and conduct surveys in areas built prior to 1948
- Complete report by 2024 and make findings available on SRCity.org
- Strategy for informing public and requiring replacement of private lead service lines, if any are found



LCRR: New Regulations for Lead Testing in Schools and Childcare Facilities

- Water systems required to test 20% of facilities every year starting in 2025 with a retest every 5 years.
- Includes public, private, and charter institutions and childcare facilities.
- Results to be shared with facilities and state



Compliance Strategy for Schools & Childcare Facilities

- Identify schools and licensed childcare facilities by Oct. 2024.
- Begin new sampling regime after January 2025
- Revise the list at least once every 5 years
- Address additional staffing, if needed
- Provide timely and accurate communication with facilities



Additional LCRR Compliance Measures



- Develop an implementation plan (internal coordination)
- Achieve compliance with new sampling protocols by 2025
- Revise Lead and Copper Sampling Plan and submit to the state
- Update health effects language in public education and Annual Water Quality Report
- Enhance outreach and Web page content
- Determine if actions are required for lead service lines after data compilation

Questions?