NARUC

Summer Committee Meetings

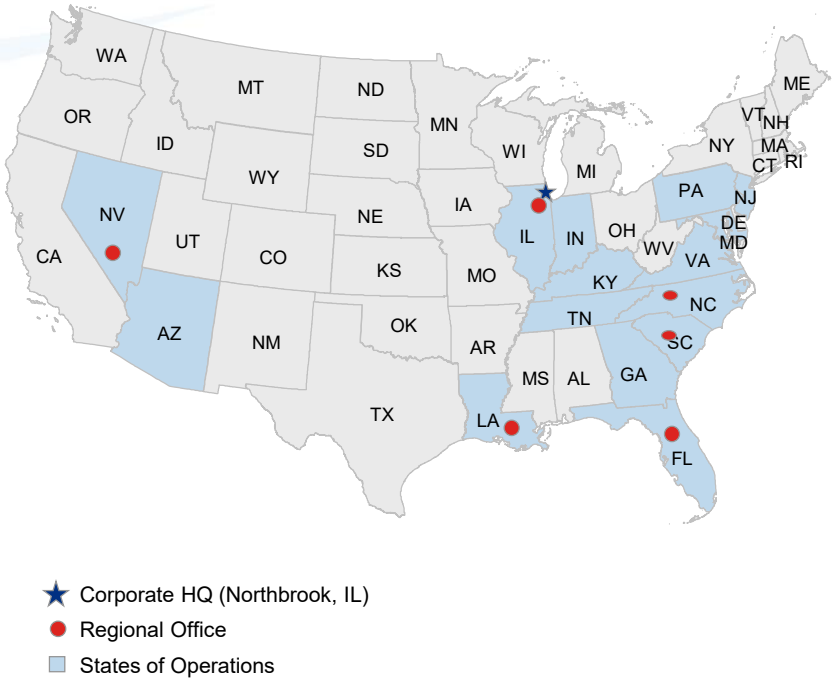
Committee On Water

Lead in Drinking Water

Summer NARUC
Nashville TN
July 25, 2016
Lisa Sparrow

Company Overview

Business Overview	
Year Founded	▪ 1965
Water Infrastructure	▪ ~ 350 water plants ▪ ~ 600 storage tanks ▪ ~ 800 wells ▪ Over 2,400 miles of mains
Wastewater Infrastructure	▪ ~ 150 treatment plants ▪ 22 MGD treatment capacity ▪ Over 1,300 miles of mains
Reuse Infrastructure	▪ 12 public access plants ▪ ~ 6 MGD treatment capacity
U.S. State Presence	▪ 15



Utilities, Inc.®

Regulatory History of Controlling Lead Levels in Water

- The Lead Ban (1986): A requirement that only lead-free materials be used in new plumbing and in plumbing repairs.
- The Lead and Copper Rule (1991): A regulation by EPA to minimize the corrosivity and amount of lead and copper in water supplied by public water systems. The rule enacted lead and copper sampling by public water systems.
- The Reduction of Lead in Drinking Water Act (2011): Revising the definition of lead free by lowering the maximum lead content of the wetted surfaces of plumbing products from 8% to a weighted average of 0.25%.

Lead and Copper Rule

- National Primary Drinking Water Regulation (NPDWR) promulgated June 7, 1991 - Minor Revisions Jan 12, 2000 and Short Term Revisions October 7, 2007
- Addresses corrosion of lead and copper in drinking water primarily from service lines and household plumbing
- Tap sampling results (90^{th} percentile) are compared to an Action Level (AL)
  - —Lead 15 ppb, Copper 1.3 ppm
- Exceedance of AL triggers a treatment technique (optimized corrosion control)
- Maximum Contaminant Level Goals (MCLG)
  - —Lead 0 ppb, Copper 1.3 ppm

Lead and Copper Rule – Sample Collection Method

Review of Monitoring Requirements – Sample Collection Method

- First-draw
- 6-hour standing time
- One-liter volume
- System or residents can collect
- Samples are taken from kitchen/bathroom taps

Lead and Copper Rule – Long Term Revisions

- EPA is to publish the proposed rule for public comment in 2017 and the final rule in 2019.
- EPA's primary goals in revising the Lead and Copper Rule Long-Term Revisions are to:
  - —Improve the effectiveness of the corrosion control treatment in reducing exposure to lead and copper, and
  - —Trigger additional actions that equitably reduce the public's exposure to lead and copper when corrosion control treatment alone is not effective.

What's Happening in Industry Rules

- Sampling
  - —Increasing flushing times for residents after a lead exceedance
  - —Updated sampling instructions to not flush prior to the six-hours standing time
- Post Results
  - —Quicker notification of lead exceedances to the sampling resident
  - —Follow-up with site exceedances to encourage service line or premise plumbing replacement
- General Utility Action Items
  - —Notify residents of water main repair that may result in sediment possibly containing lead
  - —Reevaluate sampling sites to ensure obtaining highest risk for lead leaching
  - —Follow-up on consumer complaints as timely as possible

Educating the Public

- **Lead Consumer Notice** informs the sampling customer of their individual results
- **Annual Consumer Confidence Reports** includes specific EPA educational language about lead and is sent to all customers
- **Public Education** is sent to all customers when a system exceeds the 90th percentile for lead. The notice includes:
  - Explanation of lead health effects
  - Potential sources of lead
  - Steps consumers can take to reduce exposure
  - The actions the utility is taking to correct the issue

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A Coordinated Approach to Reduce Potential Lead Exposure

Walter Lynch
Chief Operating Officer
American Water

NARUC Summer Meeting
July 25, 2016

American Water Overview

- Heritage dates back to 1886
- Largest U.S. water and wastewater services provider
- 15 Million people served
- 1,600 Communities in 47 states and parts of Canada
- 3.2 Million regulated customers
- 6,700 Employees

The Dominant Player in the Water Industry

We manage more than 370 individual water systems across the country

Every day we operate and manage:

- **48,000** miles of distribution and collection mains
- **81** surface water treatment plants
- **81** dams
- **100** wastewater treatment facilities
- **500** groundwater treatment plants
- **1,100** groundwater wells
- **1,200** treated water storage facilities
- **1,400** pumping stations

Mitigating Potential Lead Exposure

- What can the **Utility** do?
- What can the **Customer** do?
- How can the **Regulators** help?

Mitigate Lead Exposure

in Drinking Water

- Treat
- Monitor
- Find
- Replace
- Flush
- Educate

A Coordinated & Reasonable Approach is Essential

- Advance beyond the current situation
- A variety of stakeholders urge a more proactive approach
- Collaboration and customer education are necessary components
- Ratemaking treatment must support mitigation efforts

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Flint Fallout: Is Mandatory Lead Pipe Replacement on the Horizon?

NARUC 2016 Summer Committee Meetings

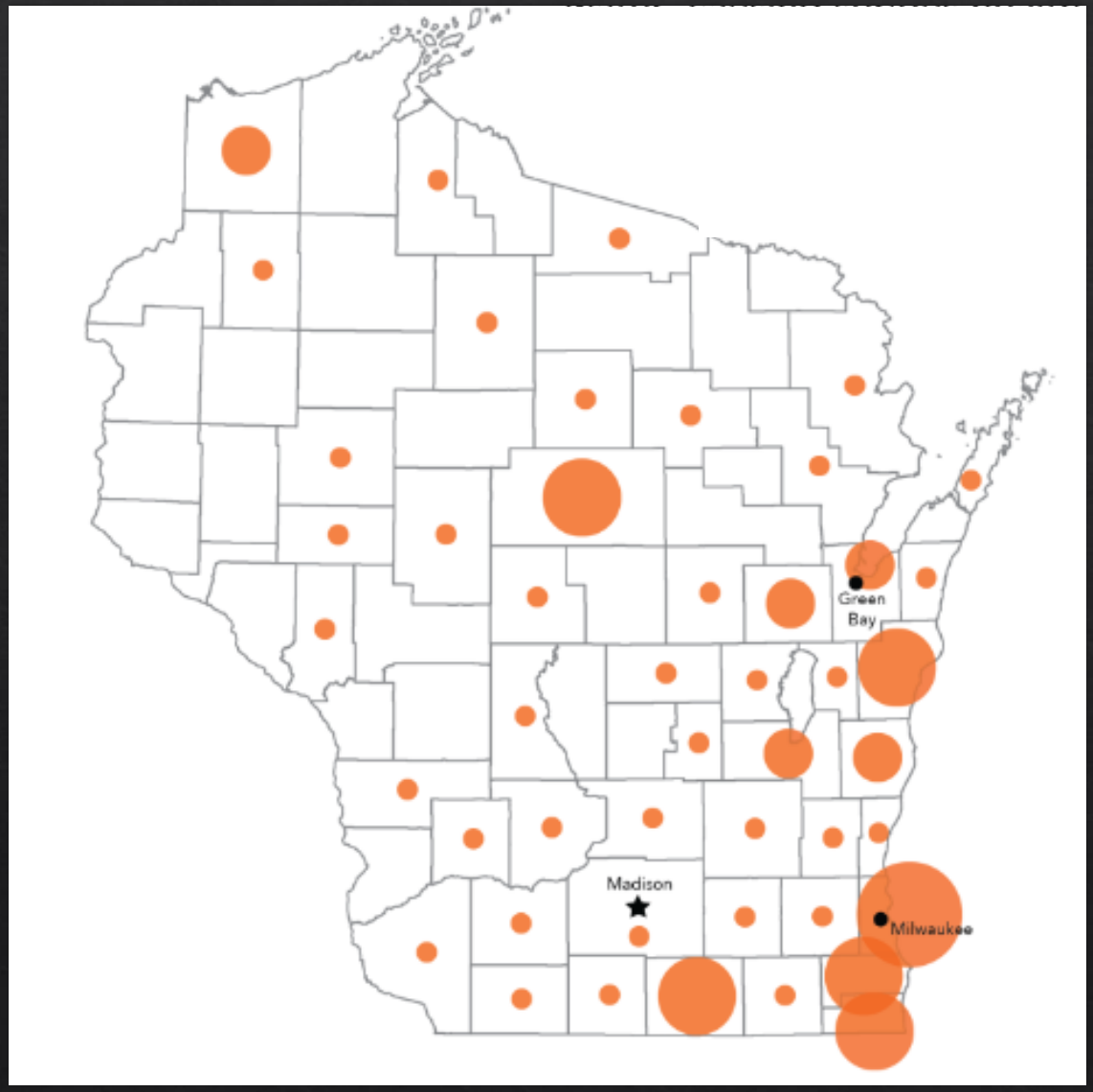
Denise Schmidt, Water Policy Advisor

Public Service Commission of Wisconsin

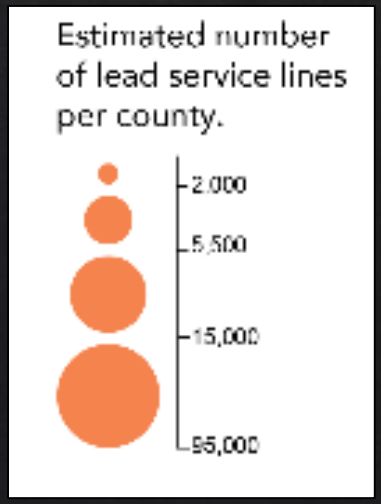
Wisconsin Water Utility Landscape

- 582 water utilities
- 5 privately owned
- 60% have <1,000 customers
- Some with <50 customers

Scope of the Lead Problem in Wisconsin



- **115** Utilities w/Lead in Distribution System
- Estimated **176,000** LSLs
- **3** Utilities Currently Under Consent Decree



Map Source: WI Center for Investigative Journalism

Water Mains

- Report mains separately by pipe material, function, diameter and either within or outside the municipal boundaries.
- Explain all reported adjustments as a schedule footnote.
- For main additions reported in column (e), as a schedule footnote:
  - Explain how the additions were financed.
  - If assessed against property owners, explain the basis of the assessments.
  - If the assessments are deferred, explain.
- Report all pipe larger than 72" in diameter in the 72" category.

			Number of Feet					
Pipe Material (a)	Main Function (b)	Diameter (inches) (c)	First of Year (d)	Added During Year (e)	Retired During Year (f)	Adjustments Increase or (Decrease) (g)	End of Year (h)	
Other Plastic	Distribution	1	100				100	1
Other Plastic	D						100	2
Other Plastic	D						320	3
Asbestos-Cement (Transite)	D						1,971	4
Asbestos-Cement (Transite)	D						5,942	5
Other Metal	D						371	6
Other Plastic	Distribution	6	579				579	7
Asbestos-Cement (Transite)	Distribution	8	2,153				2,153	8
Lead	Distribution	8	2,678				2,678	9
Other Meta	Distribution	8	10,192				10,192	10
Other Plastic	Distribution	8	3,450				3,450	11
Other Metal			3				2,583	12
Other Metal			3				4,343	13
Total Within Municipality			2				34,782	14
Total Utility			34,782				34,782	15

Pipe Material (a)

Lead

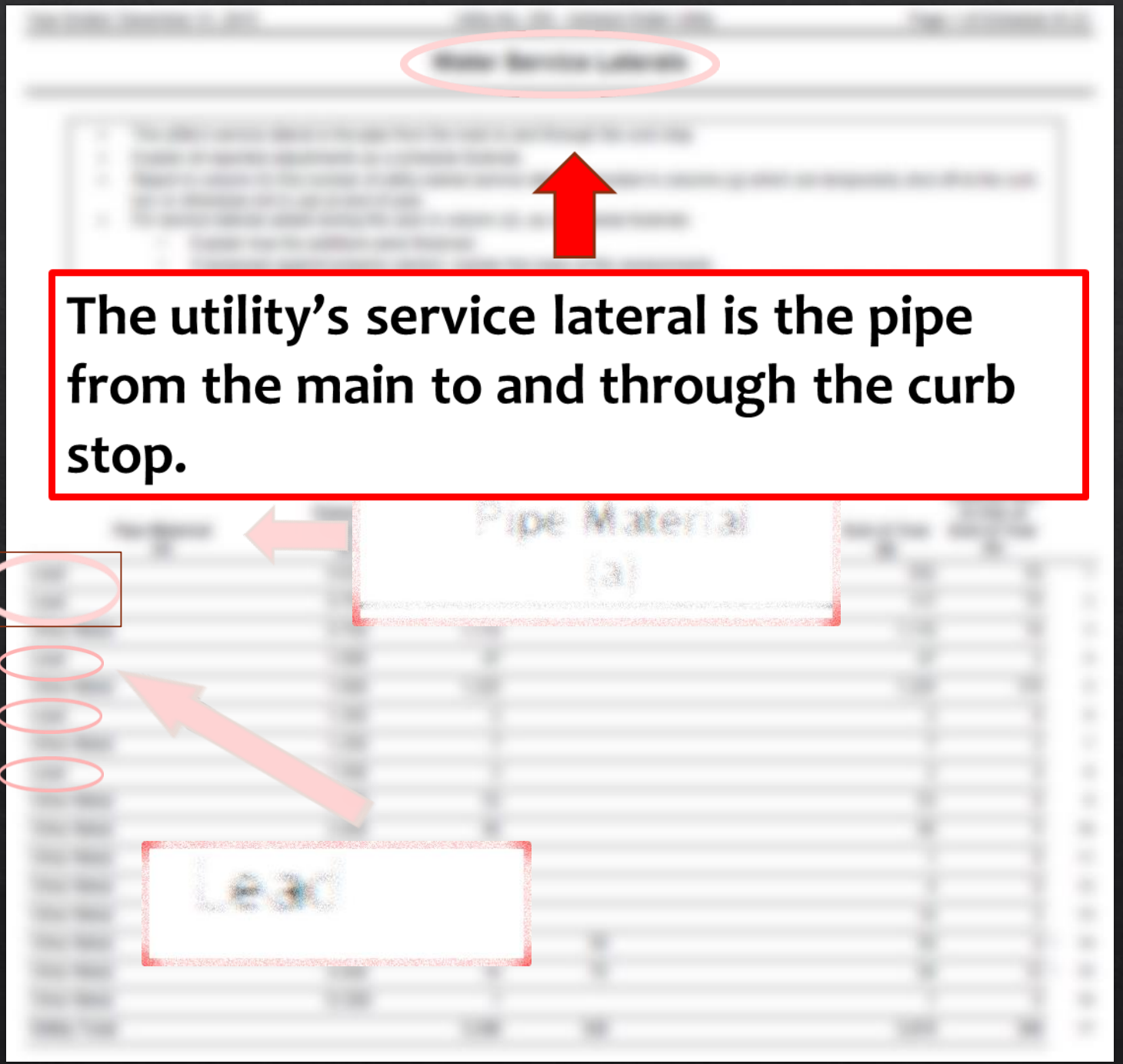
Water Service Laterals

- The utility's service lateral is the pipe from the main to and through the curb stop.
- Explain all reported adjustments as a schedule footnote.
- Report in column (h) the number of utility-owned service laterals included in columns (g) which are temporarily shut off at the curb box or otherwise not in use at end of year.
- For service laterals added during the year in column (d), as a schedule footnote:
  - Explain how the additions were financed.
  - If assessed against property owners, explain the basis of the assessments.
  - If installed by a property owner or developer, explain the basis of recording the cost of the additions, the total amount and the number of service laterals recorded under this method.
  - If any were financed by application of Cz-1, provide the total amount recorded and the number of service laterals recorded under this method.
- Report service laterals separately by diameter and pipe materials.

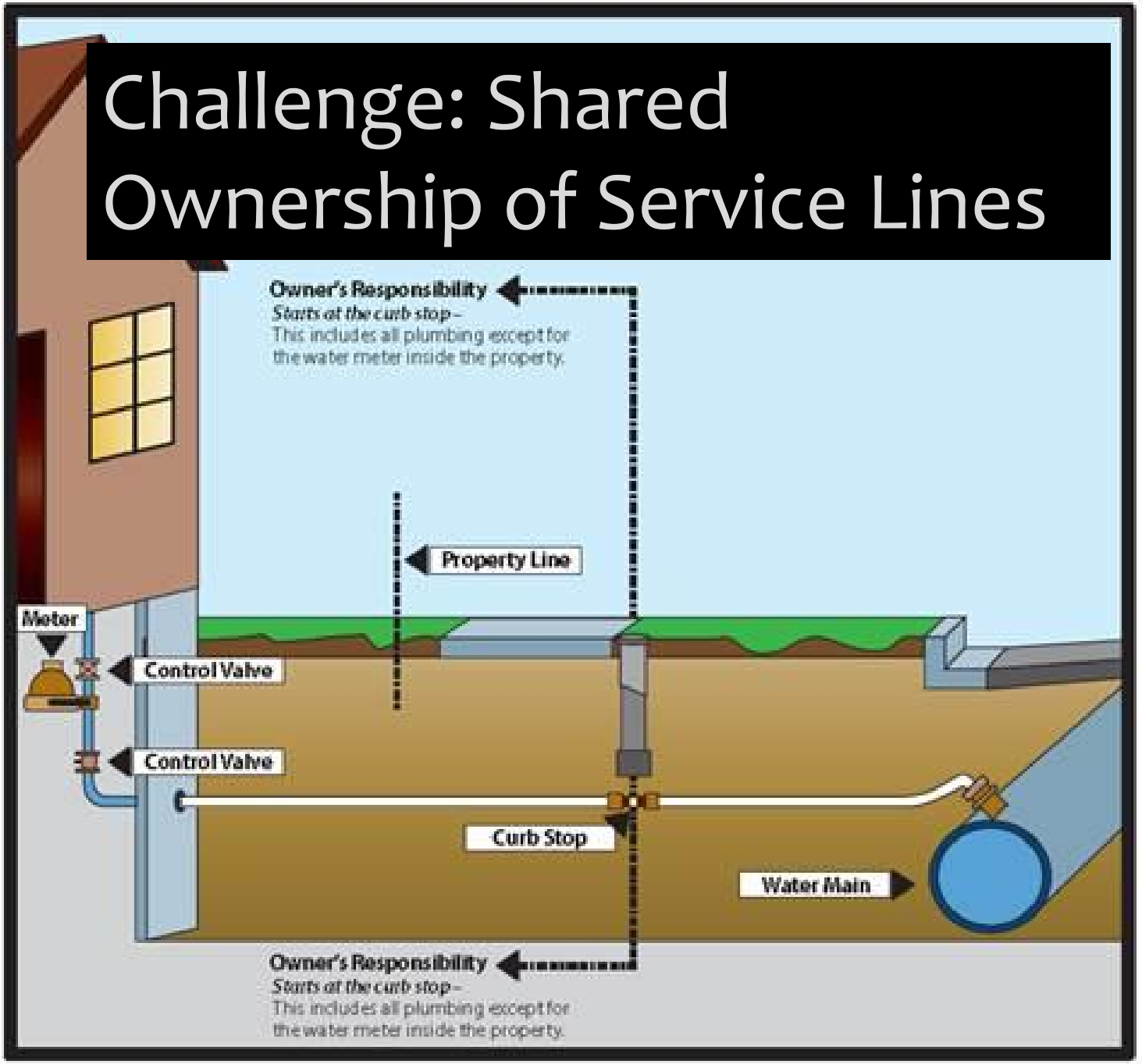
Pipe Material (a)	Diam (b)			End of Year (g)	Utility Owned Service Laterals Not in Use at End of Year (h)	
Lead	0.6			552	53	1
Lead	0.7			117	73	2
Other Metal	0.750	1,110		1,110	19	3
Lead	1.000	47		47	2	4
Other Metal	1.000	1,325		1,325	170	5
Lead	1.250	2		2	0	6
Other Metal	1.250	7		7	2	7
Lead	1.500	2		2	4	8
Other Metal		53		53	0	9
Other Metal	2.000	86		86	5	10
Other Metal				1	0	11
Other Metal				4	0	12
Other Metal				14	2	13
Other Metal			50	59	4 *	14
Other Metal	8.000	18	76	94	12 *	15
Other Metal	12.000	1		1	0	16
Utility Total		**3,348**	**126**	**3,474**	**346**	17

Pipe Material (a)

Lead


The utility's service lateral is the pipe from the main to and through the curb stop.

Challenge: Shared Ownership of Service Lines



Water Utility Operating Rules

Service Laterals (continued)

All water service laterals shall be of undiminished size from the street main into the point of meter placement. Beyond the meter outlet valve, the piping shall be sized and proportioned to provide, on all floors, at all times, an equitable distribution of the water supply for the greatest probable number of fixtures or appliances operating simultaneously.

Replacement and Repair of Service Laterals

The service lateral from the main to and through the curb stop will be maintained and kept in repair and, when worn out, replaced at the expense of the water utility. The property owner shall maintain the service lateral from the curb stop to the point of use.

If an owner fails to repair a leaking or broken service lateral from the curb to the point of metering or use within such time as may appear reasonable to the water utility after notification has been served on the owner by the water utility, the water will be shut off and will not be turned on again until the repairs have been completed.

"The service lateral from the main to and through the curb stop will be maintained and kept in repair and, when worn out, replaced at the expense of the water utility. The property owner shall maintain the service lateral from the curb stop to the point of use."

Madison
Water Utility

One city's solution to drinking water contamination? Get rid of every lead pipe

New water service lines are installed by Madison Water Utility

By **Darryl Fears and Brady Dennis**
The Washington Post

MAY 11, 2016, 10:24 AM | MADISON, W

Avoiding A Future Crisis, Madison Removed Lead Water Pipes 15 Years Ago

March 31, 2016 - 5:27 PM ET
Heard on All Things Considered

Madison's LSL Replacement Program: Drivers for Change

Source: https://www.cityofmadison.com/water/insidemwu/epa-looks-to-madison-as-leader-on-lead-pipe-issue

Madison's LSL Replacement Program by the Numbers

- Ordinance passed in 2000
- Replaced > 8,000 LSLs, including 5,600 on property owner's side
- $15.5 million over 11 years
- Requested ratepayer recovery of costs of both utility and private side LSL replacement

Commission's Decision
Docket # 3280-WR-106

- Commission determined utility funds should not be used to provide a direct benefit to "… an exclusive group of private property owners that have lead laterals"

- Decision upheld in court

- Ultimately, municipal funds were used for replacement activities on private property

National Drinking Water Advisory Council:

"Effective elimination of leaded materials in contact with water and minimization of exposure to lead in drinking water is a shared responsibility. PWSs, consumers, building owners, public health officials and others each have important roles to play."

http://www.awwa.org/Portals/0/files/legreg/documents/NDWACRecommendations.pdf

Wisconsin DNR: $11.8M available to help communities remove old lead service water lines

POSTED 12:32 PM, MAY 26, 2016, BY FOX6 NEWS

- Underlying tenet: If funds are awarded as principal forgiveness, they are not a debt incurred by the municipality, and ratepayer fees are not used on private property
- Must qualify as disadvantaged municipality for PF purposes
- $11.8 million available for SFY 17 projects
- Must result in full lead line replacements

WISCONSIN DEPT. OF NATURAL RESOURCES

PUBLIC SERVICE COMMISSION OF WISCONSIN

WISCONSIN DEPARTMENT OF ADMINISTRATION

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NAWC
National Association of Water Companies

Lead Service Line Replacement Collaborative

NARUC Committee on Water and
Committee on Consumer Affairs
Nashville, Tennessee
July 25, 2016




MOVING WATER FORWARD

Lead and Copper Rule

- US EPA has been looking to revise LCR for years
- National Drinking Water Advisory Council (NDWAC) established LCR Work Group in March 2014 (NAWC participated)
- Work group conveyed final report to NDWAC/EPA in August 2015
- Comprehensive recommendations that NAWC and AWWA support
- Proposed revisions to LCR likely in 2017 and final regulations in 2018

Lead Service Line Replacement Collaborative

- Convened to create a roadmap and tools to support community initiatives to accelerate voluntary LSLR in communities across the United States

- NAWC is on Steering Committee and was part of establishing LSLRC

- Launched May 12, 2016

Collaborative Principles

- Removal of lead service lines provides an opportunity to significantly reduce the risk of exposure to lead in drinking water
- LSL replacement initiatives must be designed to ensure residents are protected during and after removal and work is done in a cost effective manner
- A collaborative, community-based approach, built on contributions from residents, health officers, utilities, community leaders, local elected officials, can help provide the strong foundation needed for successful action

Principles Continued . . .

- Innovative models are needed to find tools, strategies and resources needed to replace LSLs based on latest science and current best practices
- By providing models, it is possible to advance support for initiatives at all levels of government and in different types of communities
- Successful LSL replacement initiatives will take careful planning and time
- This effort is focused on mechanisms to support local action, not on EPA's efforts to revise the Lead and Copper Rule

Members of LSLR Collaborative

- American Public Health Association
- **American Water Works Association***
- **Association of Metropolitan Water Agencies***
- Association of State Drinking Water Administrators
- Blue Green Alliance
- **Children's Environmental Health Network***
- **Clean Water Action***
- **Environmental Defense Fund***
- Justice and Sustainability Associates
- National Center for Healthy Housing
- National Association of County and City Health Officials
- **National Association of Water Companies***
- National Environmental Health Association
- National Rural Water Association
- Natural Resources Defense Council
- **RESOLVE***
- Rural Community Assistance Partnership
- Trust for America's Health
- Water Research Foundation

LSLR Collaborative Intended Products

- Preparing information, tools and models, public engagement and collaboration, funding, and other topics useful for drinking water utilities, public health officials and community leaders
- Providing information on lead service line replacement options that are achievable, cost-effective and safe for residents
- Training, technical assistance and convening or facilitation assistance in forming local, collaborative initiatives
- Capturing and sharing lessons learned in communities
- Developing publicly available measures for local success, including assessing progress in implementing replacement; and
- Providing recognition for successful and innovative community initiatives

Schedule for LSLR Collaborative

- Four work groups underway:
  - Local Community Roadmap
  - Best Practices for LSL Replacement
  - Policies to Accelerate Replacement
  - Pilot Projects Approach
- Initial draft products beginning in summer of 2016
- Final products released by the end of 2016
- Assistance on pilot projects in 2016 and 2017
- Opportunities for shared learning through 2020

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