Lead Service Line Replacement

Examples of Communities with Replacement Programs

This document summarizes Lead Service Line Replacement (LSLRs) programs of four utilities. These examples highlight the diversity of approaches utilities take to replace lead service lines. *This document is for informational purposes only and is not an endorsement of any particular program or approach.*

Community	Ownership of Service Lines	Service Line Replacement Approach	Company	Website
Washington, DC	Property owner owns entire service line	As part of water main construction DC Water is authorized to replace the portion of a lead service line from the main to the property boundary. To encourage customers to replace the portion of the line on their property at the same time, DC Water will coordinate work and give a discounted price. The utility will also coordinate work and offer a discounted price to eligible property owners who wish to replace their lead service line at any time.	DC Water George Hawkins, GM	https://www. dcwater.com/l ead/default.cf m
Lansing, MI	Utility owns entire service line	Utility has replaced 13,500 lead service lines since 2004. Utility does all work and the cost of the program is incorporated into water rates. Utility uses novel replacement technology that avoids digging trenches.	Lansing Board of Water and Light Angie Goodman and Bill Maier	https://www.l bwl.com/Com munity- Impact/Water -Quality/Lead- Service- Information/
Madison, WI	Utility owns portion of service line from main to property boundary. Customer owns portion of service line from property boundary to connection to premise plumbing.	Madison choose lead service line replacement as its optimized corrosion control technique. Since 2001, utility has replaced all 8,000 known lead service lines. Utility did work. Customers were required to replace their portion of the service line at the time the utility replaced its portion. The utility offered rebates for half the customers cost. Customers refusing to participate would be subject to fines.	Madison Water	https://www.c ityofmadison. com/water/in sidemwu/epa- seeks-details- of-madisons- lead-service- replacement- program

Programs Snapshot:

Boston, MA	Utility owns portion of service line from main to property boundary. Customer owns portion of service line from property boundary to connection to premise plumbing.	Incentive program. Utility offers to do work and offers customer a credit of up to \$2,000 toward the cost of replacing the privately owned portion of the service line. The customer may finance the remainder of their cost interest free over 48 months.	Boston Water and Sewer Commission	http://www.b wsc.org/COM MUNITY/lead/ lead.asp
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Guidance/Informational Documents:

- 1. DC Water Survey of Other Cities' Experience with LSLR https://www.dcwater.com/news/publications/LSLR%20Benchmarking%20survey%20-%20update%20(2).pdf
- American Water Works Association Communicating About Lead Service Lines: A Guide for Water Systems Addressing Service Line Repair and Replacement http://www.awwa.org/Portals/0/files/resources/publicaffairs/pdfs/FINALeadServiceLineCommGuide.pdf
- American Water Works Association Strategies to Obtain Customer Acceptance of Complete Lead Service Line Replacement http://www.awwa.org/Portals/0/files/legreg/documents/StrategiesforLSLs.pdf
- 4. Massachusetts Department of Environmental Protection LSLR Work Notice Form, First http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lslra.pdf
- 5. Massachusetts Department of Environmental Protection LSLR Work Notice Form, Second http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lslrb.pdf
- 6. Massachusetts Department of Environmental Protection LSLR Work Summary Table http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lslrc.pdf
- 7. Massachusetts Department of Environmental Protection Lead Test Result Above Action Level http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lslrd.pdf
- 8. Massachusetts Department of Environmental Protection Lead Test Result Below Action Level http://www.mass.gov/eea/docs/dep/water/approvals/year-thru-alpha/e-thru-l/lslre.pdf
- United States Environmental Protection Agency How to Identify Lead Free Certification Marks for Drinking Water Systems & Plumbing Parts http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100LVYK.txt

Washington, DC

In Washington, DC water service lines are completely owned by the customer, from the water main to the point of connection with premise plumbing. The water utility, DC Water, systematically replaces lead service lines as part of scheduled distribution system or road infrastructure upgrades. The utility assumes responsibility for replacing the portion of lead service lines from the main to the property boundary. They offer incentives to encourage customers to replace the portion of the line on private property. DC Water also works with customers who voluntarily wish to replace their lead service line in areas where there are no distribution system or road infrastructure upgrades underway.

Distribution System or Road Infrastructure Projects

Each year, DC Water replaces lead service pipes in conjunction with scheduled infrastructure upgrades. These construction projects include water main replacements, emergency repairs and District Department of Transportation (DDOT) projects. During these projects, DC Water replaces water service pipes in public space, including the replacement of any existing lead service pipes, and will offer to coordinate the replacement of the water service pipe on private property, at the owner's expense. Property owners are strongly encouraged to take advantage of this opportunity to replace the portion of a lead pipe on their private property.

In Washington, DC the entire water service pipe is owned by the property owner. However, under certain conditions such as construction projects, DC Water is authorized to repair, maintain or renew the portion of the service pipe in public space. Maintenance of the portion of the service pipe on private property is the exclusive responsibility of the property owner. To encourage a full lead pipe replacement, DC Water offers homeowners the opportunity to replace their private side lead service pipe at a special rate. The rates offered by DC Water often result in savings on permitting and work coordination with the contractor. Property owners may wish to get estimates from other contractors. The DC Water contractor rate is **\$100 per foot of pipe replaced on private property, plus \$500 to connect inside the home**. As an example, for a property owner having 20 feet on private property in front of their house, the total cost would be \$2,500 (20 feet x \$100 = \$2,000 + \$500 = \$2,500. There may be exceptions to these rates in the case of unusual plumbing situations. Payment options are available for homeowners to pay for lead pipe replacement on private property.

- Full payment to DC Water prior to work;
- Full payment after the work is completed;
- Four monthly payment installments to DC Water

Source: https://www.dcwater.com/lead/construction_projects.cfm

Voluntary Replacements

DC Water customers who voluntarily (not mandated by DC law or regulation) choose to replace their lead service pipe can participate in DC Water's voluntary lead service pipe replacement program. DC Water will coordinate the replacement of the lead service pipe in public space with individual property owner's replacement of the service line in private property. Property owners interested in replacing a lead service pipe can work with DC Water to replace the entire pipe on public and private property. If a property owner meets specific requirements and agrees to pay for lead service pipe replacement on private property, DC Water will coordinate and replace the portion in public space at the same time. The same special DC Water contractor rate of **\$100 per foot of pipe replaced on private property, plus \$500 to connect inside the home is available for voluntary replacements**.

Source: https://www.dcwater.com/lead/pipe_replacement.cfm

Eligibility Requirements:

- 1. The individual requesting the replacement is the property owner. Information is verified by the Office of Tax and Revenue real property records. Owners of recently transferred or sold property may need to submit documentation of ownership to DC Water Customer Service.
- 2. Street location is not planned or scheduled for a capital improvement project that would include future lead service replacement work. If a project is planned, customers will be eligible for lead service pipe replacement during the upcoming capital improvement work.
- 3. Street location is not included in the District Department of Transportation's (DDOT) Asset Management List. Streets on this list are suspended and ineligible for any type of construction project including a lead service pipe replacement for a five year moratorium period. A lead service replacement may be reconsidered when the moratorium expires.
- 4. DC Water records indicate the water service pipe is lead in public space and the property owner confirms a lead service pipe material on private property. If records indicate the service pipe is "unknown" or "not verified" in public space, an inspection must confirm the material is lead. The customer must provide documentation to confirm a lead service pipe on the private property (i.e. photos, plumber's or home inspection report, or other documents of qualified professional statement).
- 5. Property owner hires a private plumber or the DC Water contractor to perform the lead service pipe replacement on private property. A private plumber must obtain an approved permit and coordinate replacement with the DC Water contractor. A property owner may hire the DC Water contractor and negotiate the terms of the replacement with the contractor. DC Water does not endorse or require the use of DC Water contractors for private property replacement.
- 6. If a property is undergoing renovation, the property owner may not be eligible to participate in DC Water voluntary lead service pipe replacement program. Properties are not eligible if the DC Construction Codes requires an upgrade to the existing water service pipe. In this case, property owners may be required to perform and finance the entire water service pipe replacement in private and public space.

Interaction with Community:

- Informative web pages (<u>https://www.dcwater.com/lead/default.cfm</u>)
- Letter to Customers from General Manager of DC Water posted online (<u>https://www.dcwater.com/lead/LetterToCustomers.pdf</u>)
- Brochure for Tips to Reduce Lead in Drinking Water posted to website (<u>https://www.dcwater.com/news/factsheet/pdfs/TipstoReduceLead.pdf</u>)

Lansing, MI

In Lansing, MI the water utility is governed by the Board of Water and Light (BWL). Lansing is somewhat unusual in that the BWL owns the service lines in their entirety (from water main to connection to premise plumbing). In 2004, the Board of Water and Light's Commissioners approved a proactive plan to remove the known or suspected remaining active lead service lines from it water system. Since 2004, the BWL has spent more than \$42 million dollars removing more than 13,500 lead service lines, and these efforts will continue until all the remaining lead service lines are removed by June 30, 2017.

For the majority of the lead service lines removed, BWL uses a pulling technology they developed in which they excavate at the main and curb stop and fish a cable down the existing pipe attaching a pulling/splitting head and pull the new copper service line where the old service line was. This technique generally avoids digging a trench to the customer's home and reduces the cost of lead service line replacement by about half.

Because BWL owns the service lines, the cost of replacing the service lines is treated like any other capital expense for purposes of rate setting. The line replacement cost is covered out of total utility revenue. Individual property owners requiring a service line replacement do not incur any direct additional expense beyond their normal water bill. The community has generally supported the lead service line replacement initiative.

Source: <u>https://www.lbwl.com/Community-Impact/Water-Quality/Lead-Service-Information/</u>, <u>http://www.wnem.com/story/31225873/lansing-is-model-for-replacing-lead-pipes</u>, and email correspondence.

Interaction with Community:

- General Customer Outreach
 - Beginning in 2004 they developed and distributed brochures and articles in bill stuffers
 - Conducted Open Houses at local schools and community centers
 - Added further recommended customer precautions to the annual Water Quality Report
 - As LSLR continues there is less concern from the general public
- LSLR Notification
 - Letter is sent to LSL address requesting customer to contact BWLfor an appointment. The letter explains the process
 - Letter includes an explanation of the replacement tasks, the need for home access, BWL and customer responsibilities
 - Meet with customer prior to or day of LSLR to explain the process, including follow-up. This helps the customer understand the details.
- Emergency Replacements
 - Used only in special conditions such as service breaks speak with the customer on site.

Source: National Drinking Water Advisory Council - PowerPoint Presentation

Madison, WI

The Madison Water Utility was founded in 1882 and today serves over 250,000 people. The Madison Water Utility chose lead service line replacement as its optimized corrosion control technique. The portion of a service line from the main to the property boundary is owned by the utility and the portion from the property boundary to the connection to premise plumbing is owned by the customer. Madison was the first major city in the country to launch a full lead service line replacement program, replacing over 8,000 services since 2001. The city accomplished this using a twin strategy of incentives to homeowners to replace their portion of the service line and fines for customers refusing to participate.

Customers with lead service lines on their private property were required to replace their portion at the same time the utility replaces its section of the service line. Property owners were notified by mail when their connection was scheduled for replacement and when they needed to hire a licensed plumber to have the work done. Financial incentives were offered in the form of reimbursements of half the homeowner's cost up to \$1,000. Property owners who refused could face significant fines, but just about none did.

Source: http://www.cityofmadison.com/news/madison-water-utility-completes-successful-lead-pipe-replacement-project

Interaction with Community:

https://www.cityofmadison.com/water/insidemwu/epa-seeks-details-of-madisons-lead-service-replacement-program

Boston, MA

The Boston Water and Sewer Commission is the retail water utility serving the City of Boston. The portion of a service line from the main to the property boundary is owned by the utility and the portion from the property boundary to the connection to premise plumbing is owned by the customer.

The Lead Replacement Incentive Program was created to encourage Boston's homeowners to replace the private lead water service at their property. While private water service connections are the responsibility of the owner, the Boston Water and Sewer commission (BWSC) has developed this voluntary program as an incentive to remove the lead from water services in homes. Financial assistance in the form of a credit up to \$2,000 towards the cost of replacement and ability to pay over a 48-month period, interest free, are available to eligible residential homeowners. Homeowners will have the ability to pay for the lead service replacement either:

- In a lump sum payment
- Over a 24-month period as part of the water and sewer bill, interest-free

Source: http://www.bwsc.org/SERVICES/Programs/lead_incentive.PDF

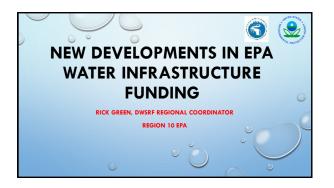
Eligibility:

Boston property owners are eligible to participate in the Lead Replacement Incentive Program if all of the following conditions are met:

- The property is a one- to three- family residential building
- The property is served by two-inch or smaller water service pipe.
- The water and sewer account for the property is active and not delinquent.
- The homeowner agrees to have the work done by BWSC
- The work presents no extraordinary physical or other obstacles. For example, BWSC will not make a repair that requires removal of a porch, stairs, wall, fence, or shrubs.

Interaction with Community:

- Informative web pages (<u>http://www.bwsc.org/COMMUNITY/lead/lead.asp</u>)
- Community education materials (<u>http://www.bwsc.org/COMMUNITY/lead/PDF/English_Lead.pdf</u>)

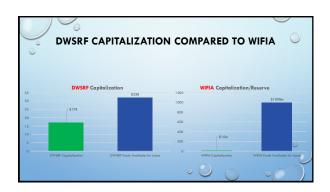




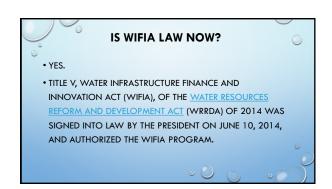


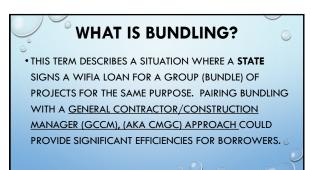






	DWSRF Program	WIFIA
Interest rates	Set by each state, currently 1.5% for WA DWSRF	Tied to U.S. Treasury rates (2.55%)
Loan terms	20 to 30 years	Up to 35 years/useful life (repayment starts 5 years after project completion)
Percent of project funded	100%	Up to 49%
Dollar amount of project funding	A few thousand up to several million	No less than \$5 million for small communities, no less than \$20 million for larger communities
Eligibilities	Source, Treatment, Storage, Distribution	Generally the same as DWSRF, but borrowers are not limited to PWSs
Crosscutters	Yes, but only for equivalency projects	All crosscutters apply to all WIFIA projects
Additional Federal requirements	Davis-Bacon and AIS apply to all DWSRF projects	Direct Federal loans, so Federal procurement applies, as well as AIS and Davis-Bacon

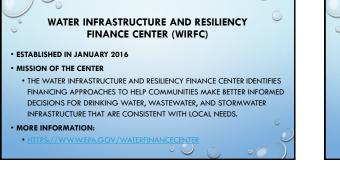








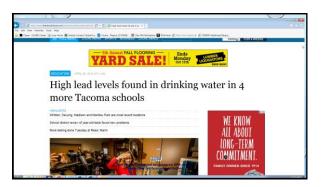


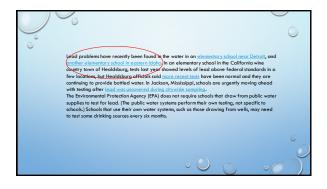








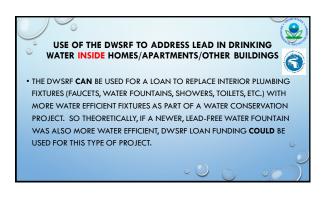




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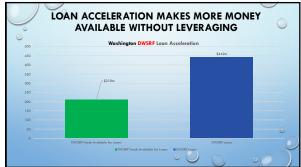




- EXPANDED USE OF DWSRF SET-ASIDES
- USE OF EQUIVALENCY TO EASE BORROWER COMPLIANCE BURDEN
- LOAN ACCELERATION MAKES MORE MONEY AVAILABLE WITHOUT LEVERAGING
- HQ WILLING TO CONSIDER FUNDING DAMS AND RESERVOIRS
- REQUIRED SUBSIDY (AKA PRINCIPAL FORGIVENESS)
- DAVIS-BACON AND AMERICAN IRON AND STEEL (AIS)
- UNLIQUIDATED OBLIGATIONS (ULO)









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	1997-2009 ARRA	30% ceiling 50% floor, no ceiling	0
	1997-2009 ARRA 2010-2011	30% ceiling 50% floor, no ceiling 30% floor, no ceiling	0

