



# Utilizing the DWSRF to Support LCRI Compliance

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# Speakers

- Michael Goldberg, EPA HQ, Lead and Copper Rule Improvements
- Keelan Baldwin, EPA HQ, Drinking Water State Revolving Fund (DWSRF)
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# Agenda

- Lead and Copper Rule Improvements Overview
- Bipartisan Infrastructure Law Drinking Water State Revolving Fund Lead Service Line Replacement (BIL DWSRF LSLR) Overview
- Key Sections of the Implementing Lead Service Line Replacement Projects with the Drinking Water State Revolving Fund memorandum
- Resources and Contact Information

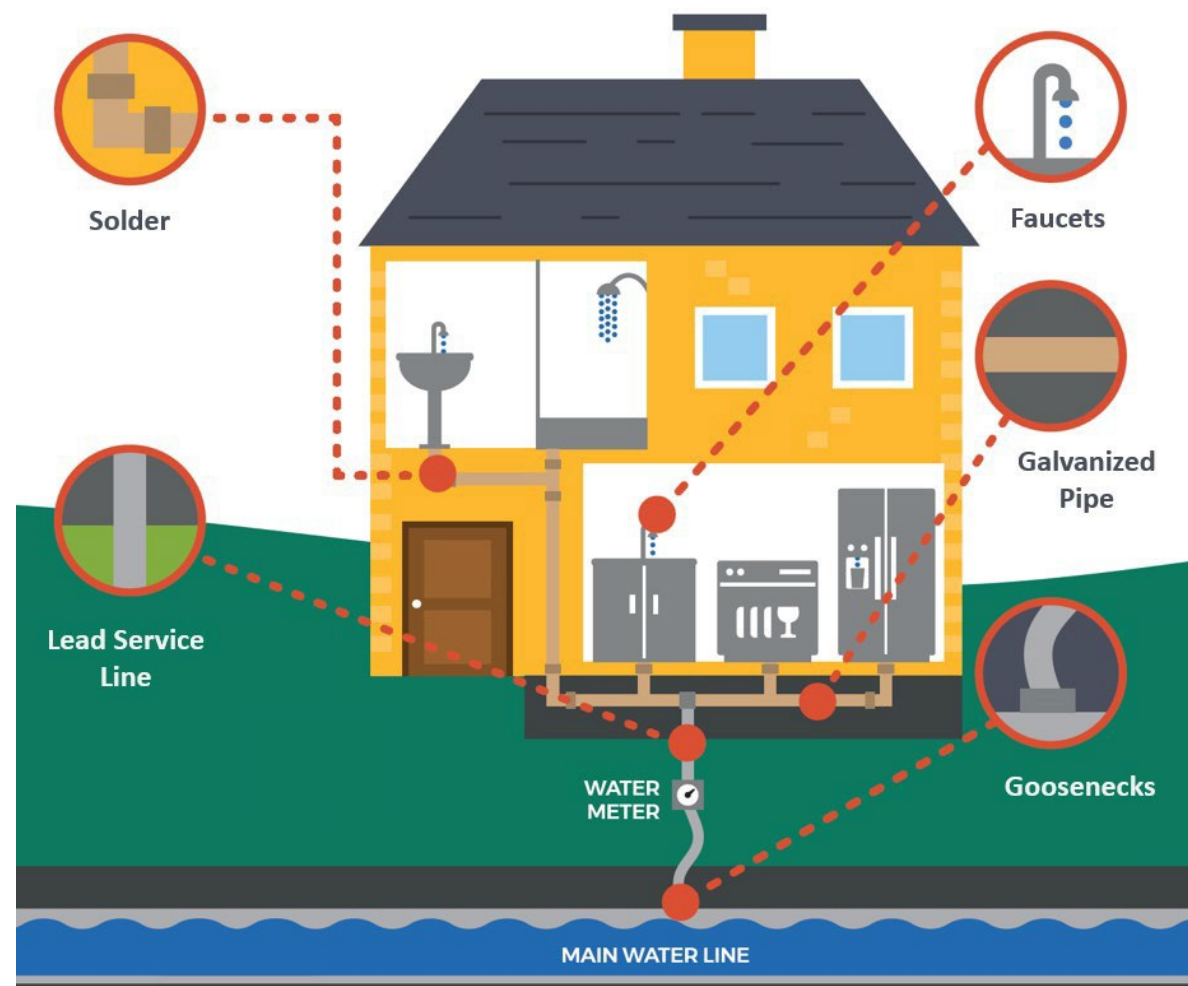




# Final Lead and Copper Rule Improvements

# Lead in Drinking Water

- Lead in drinking water irreparably harms the health of children and adults and disproportionately impacts lower-income communities and communities of color.
- Legacy lead pipes have exposed generations of Americans to health-harming lead and will continue to do so until they are removed.
- EPA estimates that up to 9 million homes are connected to water mains through lead pipes, posing an ever-present risk to American's health and wellbeing.



# Key Messages

- Lead and Copper Rule Improvements (LCRI) strengthens nationwide requirements to protect the public from lead in drinking water. These advancements are commonsense, achievable, and built on actions taken by states and cities.
- The LCRI requires water systems to replace lead services lines within 10 years.
- The final rule establishes additional requirements to better protect communities from lead in drinking water including requirements to,
  - Locate legacy lead pipes,
  - Improve tap sampling,
  - Lower the lead action level,
  - Strengthen public health protection through filter requirements, and
  - Improve communication.



# Key Messages

- The health and economic benefits of the Rule exceed the costs by **more than tenfold**. Investments in removing lead pipes will create good-paying local jobs.
- Thanks to the Bipartisan Infrastructure Law and funding programs like Water Infrastructure Finance and Innovation Act (WIFIA), there has never been more federal funding available to remove lead pipes.
- The Biden-Harris Administration is taking a whole of government approach to get the lead out of our communities, deliver clean water for all, and advance environmental justice.



# Key Provisions in the Final LCRI

- Replace lead services lines within 10 years
- Locate existing lead pipes
- Strengthens tap sampling
- Lowers the threshold for taking action and eliminates the overly complex trigger level
- Supports reducing exposure at home
- Communicating transparently and frequently



# Lead Service Line Replacement

- Where lead service lines are present, they represent the greatest source of exposure to lead in drinking water.
- Water systems will be required to replace lead services lines under their control within 10 years.
- In limited circumstances, additional time for systems with a high proportion of lead service lines will be provided to complete service line replacement.
- Systems must create a service line replacement plan and make it publicly available.
- Lead service line replacement removes the greatest lead in drinking water risk to many communities.



# Locate Existing Lead Pipes

- Knowing where lead pipes are is critical to replacing them efficiently and equitably.
- Water systems are currently required to provide the state with an initial inventory of their lead service lines by October 16, 2024 that must be made publicly available.
- Under the LCRI, all water systems are required to regularly update their inventories and identify the materials of all service lines of unknown material.
  - Systems are required to complete baseline inventories 3 years after the publication date of the LCRI in the *Federal Register*.

# Strengthen Tap Sampling

- Changes to tap sampling requirements, informed by best practices already being used by leading states like Michigan.
- Requires water systems to collect first-liter and fifth-liter samples at sites with a lead service line.
- Systems must use the higher of the two values when calculating the system's 90<sup>th</sup> percentile lead level.





# Lowens the Action Level and Eliminates the Trigger Level

- The LCRI lowers the threshold for taking action, known as the lead action level from 15 µg/L to 10 µg/L
- Eliminates the overly complex trigger level
- When a water system's 90<sup>th</sup> percentile lead sampling result exceeds this level, the system would be required to:
  - Notify the public
  - Install or adjust corrosion control treatment
  - Conduct public education program
- Note that systems must expeditiously replace all lead service lines irrespective of whether or not they exceed the action level

# Supports Reducing Exposure at Home

- Water systems with multiple lead action level exceedances are required to conduct additional outreach to consumers and make filters available to all consumers.
- Water systems must provide filters following disturbances of lead service lines and lead service line replacements.
- The filters must be certified to reduce lead.



# Communicating Transparently and Frequently

- Requires more frequent and proactive communications on lead service lines and the system's plans for replacement.
- Requires communities to include clear health language about the dangers of lead in Consumer Confidence Reports and public education materials.
- The Consumer Confidence Reports will also provide information about
  - Testing for lead in schools and child care facilities.
  - Inform consumers where they can find the water system's lead service line replacement plan.
  - The corrosion control efforts the system is taking.

# Benefits and Costs

- EPA estimates that on average, each year after the LCRI is issued it will:
  - Protect up to 900,000 infants from being born with low birthweight, which puts them at risk of longer and more expensive hospital stays after birth.
  - Prevent Attention Deficit Hyperactivity Disorder (ADHD) in up to 2,600 children.
  - Reduce up to 1,500 cases of premature death from heart disease.
  - Prevent up to 200,000 IQ points lost in children.
- There are other avoided health impacts that EPA could not quantify including cancer, reproductive and developmental, immunological and neurological effects.
- The estimated annual benefits of the rule are up to 13 times greater than its estimated annual costs.
  - EPA estimates benefits to be \$13 to \$25 billion per year.
  - EPA estimates the costs to be \$1.5 to \$2 billion per year.



# Available Funding Sources

- There are a number of pathways for systems to receive financial support for lead service line replacement.
  - Low- to no-cost financing through annual funding provided through the Drinking Water State Revolving Fund (DWSRF).
  - Low-cost financing from the Water Infrastructure Finance and Innovation Act (WIFIA) program.
  - Funding may also be available from other federal agencies, state, and local governments.
- Funding through the Bipartisan Infrastructure Law, includes:
  - \$26 billion over five years in drinking water infrastructure funding for lead-related activities.
    - \$15 billion over five years for lead service line replacement activities;
    - \$11.7 billion over five years, \$2.6 announced with LCRI, additional funding to the DWSRF program.
- Water Infrastructure for the Nation Act (WIIN) Grants
  - EPA announced \$35 million for communities to apply directly for removing sources of lead in drinking water, such as lead pipes and reducing lead in drinking water in schools and child care facilities.

# WaterTA

- EPA's water technical assistance (WaterTA), including the Get the Lead Out Initiative, helps disadvantaged communities identify lead services lines, develop replacement plans, and apply for funding to get the lead out.
- This effort is changing the odds for communities that have faced barriers to planning and accessing funding for lead service line replacements.
- Communities seeking to access GLO Initiative resources can request assistance by completing the [WaterTA request form](https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta) on [EPA's WaterTA website](https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta) (<https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta>).

# Resources

- Fact Sheets
  - General Overview
  - General One-Pager
  - Information for states and systems
  - Inventory Validation Requirements
  - Replacement Rate
  - Deferred Deadlines for Service Line Replacement
  - Tap Sampling Protocol
  - Cost-benefit fact sheet
  - Corrosion Control Treatment
- Public Education
- Sampling in Schools and Child Care Facilities
- Small Systems
- Questions and Answers
  - External Q&A
  - Detailed Q&As for states and systems
- Webinar Presentations
  - November 14<sup>th</sup> for the drinking water professional community



EPA's LCRI Website:  
<https://www.epa.gov/ground-water-and-drinking-water/lead-and-copper-rule-improvements>

For questions regarding the LCRI, please send to [LCRI@epa.gov](mailto:LCRI@epa.gov).





# Bipartisan Infrastructure Law Drinking Water State Revolving Fund Lead Service Line Replacement (BIL DWSRF LSLR) Overview

# Eligible Water Systems

- **Who is eligible to use the DWSRF?**
  - Public or Privately\* Owned Community Water Systems
  - Not-for-Profit Non-Community Water Systems (NCWS)
  - For-profit NCWS are not eligible for the DWSRF and thus, are not included in the DWINSA (e.g., certain mobile home parks)
- **Public Water System –Provides water to at least 15 service connections or at least 25 people.**
  - *Community Water System* –A public water system that supplies water to the same population year-round
  - *Not-for-Profit Non-Community Water System* –A public water system that regularly supplies water to at least 25 of the same people at least six month per year (e.g., schools)

For more information on the DWSRF: ([How the DWSRF works](#))

*\*Some states do not fund private systems/private entities.*

# Available State Revolving Fund (SRF) Funding in the BIL

| Appropriation                              | FY 2022 (\$)  | FY 2023 (\$)  | FY 2024 (\$)  | FY 2025 (\$)  | FY 2026 (\$)  | Five Year Total (\$)  |
|--|---------------|---------------|---------------|---------------|---------------|-----------------------|
| <b>CWSRF General Supplemental</b>          | 1,902,000,000 | 2,202,000,000 | 2,403,000,000 | 2,603,000,000 | 2,603,000,000 | <b>11,713,000,000</b> |
| <b>CWSRF Emerging Contaminants</b>         | 100,000,000   | 225,000,000   | 225,000,000   | 225,000,000   | 225,000,000   | <b>1,000,000,000</b>  |
| <b>DWSRF General Supplemental</b>          | 1,902,000,000 | 2,202,000,000 | 2,403,000,000 | 2,603,000,000 | 2,603,000,000 | <b>11,713,000,000</b> |
| <b>DWSRF Emerging Contaminants</b>         | 800,000,000   | 800,000,000   | 800,000,000   | 800,000,000   | 800,000,000   | <b>4,000,000,000</b>  |
| <b>DWSRF Lead Service Line Replacement</b> | 3,000,000,000 | 3,000,000,000 | 3,000,000,000 | 3,000,000,000 | 3,000,000,000 | <b>15,000,000,000</b> |

# BIL Lead Eligibilities

- **Loan Fund**

- Replacement of lead service lines
- Replacement of lead or galvanized goosenecks, pigtails, and connectors
- LSL inventories\*
- Planning and design for LSLR construction projects\*
- Temporary pitcher filters or point-of-use (POU) devices

- **Set-asides**

- Planning and design for LSLR construction projects\*
- LSL inventories\*
- LSL public outreach, education and training
- Non-routine lead sampling (if not for compliance purposes)
  - Including in schools and child-care facilities

*\*Eligible under both the loan fund and set-asides.*





# Key Sections of the Implementing LSLR Projects Funded by the DWSRF Memorandum

# Applicability of the Memo

The requirements detailed in the memo apply to **all DWSRF sources of funding**, including, but not limited to:

- Base appropriations,
- BIL supplemental appropriations,
- State match funds,
- Bond proceeds,
- Loan repayments,
- Interest earnings, and
- Funds derived from program fees

**Eligibility requirements apply to all assistance agreements signed after August 1, 2024**

# Full LSLR

- For the purposes of this memo, full LSLR is the replacement of a lead service line that results in the entire length of the service line, regardless of service line ownership, meeting the SDWA section 1417 definition of “lead free” after replacement.
- A lead service line that is left in place in the ground but remains out of service may qualify as fully replaced if a new, non-lead service line is installed for use.
- Regulatory definitions and requirements regarding LSLR may be subject to future regulatory changes.

# Programmatic Requirements:

## Stand-alone LSLR

- Stand-alone LSLR projects refers to projects that are solely replacing lead service lines and are not conducting additional construction or activities that would disturb the service line, such as main replacement, meter replacement, or other planned infrastructure projects
- **LSLR projects that are not implemented in conjunction with other planned infrastructure projects must replace the full lead service line (regardless of ownership)**
- In other words, stand-alone partial LSLR is ineligible for DWSRF funding
- The entire length of each property's lead service line must be replaced at the same time except where it is impractical due to access constraints or local requirements that prevent the same organization from completing the full LSLR at the same time. The time between starting and completing full LSLR should be as short as possible and should not exceed three months.



# Programmatic Requirements: LSLR in Conjunction with Planned Infrastructure Projects

- All DWSRF-funded projects involving LSLR implemented in conjunction with other planned infrastructure projects must plan to replace the full lead service line
- States are encouraged to work with assistance recipients to communicate the benefits of LSLR as part of the public notification process for planned work
- **A partial LSLR may only be funded by the SRF where the water system shows all of the following:**
  - that the partial LSLR is done in conjunction with planned infrastructure work
  - that disturbance to that service line is unavoidable because of the planned infrastructure work
  - and that the water system has documented customer refusal showing it cannot gain access to that property to conduct a full LSLR following multiple attempts

# Programmatic Requirements: LSLR in Conjunction with Emergency Infrastructure Repair or Replacement

- Emergency infrastructure repair may necessitate replacement of LSLs
- PWSs must offer to replace the full lead service line when emergency repair and replacement of drinking water transmission and distribution infrastructure can lead to inevitable disturbance of lead service lines
- **In the event of a customer refusal the borrower may use DWSRF funding to pay for partial LSLR of the public lead service lines if full replacement is not possible.**
- For the purposes of oversight and confirming eligibility, state programs must require borrowers to document customer refusals in a manner determined by the state.

# Summary: DWSRF Partial LSLR Programmatic Requirements

- Full LSLR is always the goal of DWSRF investment
- **A partial LSLR may only be funded by the SRF where the water system shows all of the following:**
  - that the partial LSLR is done in conjunction with planned infrastructure work or emergencies
  - that disturbance to that service line is unavoidable because of the planned infrastructure work or emergency
  - and that the water system has documented customer refusal showing it cannot gain access to that property to conduct a full LSLR following multiple attempts
- State DWSRF programs must report the number of partial replacements and how customer refusals were documented to EPA

# Customer Refusals

- Documentation of customer refusals is required to demonstrate eligibility for DWSRF funding
- Best practices consist of the following: a refusal signed by the customer, documentation of a verbal statement refusing replacement, or documentation of no response after multiple attempts to reach the customer regarding full LSLR.
- State programs are required to report the number of partial replacements and the methods for documenting customer refusals to EPA.



# Best Practices:

## Service Line Identification and Public Outreach

- **The memo encourages states to:**
  - Strategically deploy DWSRF set-aside funds to assist service line inventory development. States may use all four set-aside accounts for this purpose
  - Seek ways to reduce administrative burden on both the PWSs and the state programs
  - Conduct well-planned outreach in cooperation with PWSs to maximize customer participation and public health protection

# Best Practices: Planning and Design for LSLR

- **Planning and design are critical to the success of LSLR projects.**
- **States and systems are encouraged to:**
  - Take full advantage of all available authorities to support up-front education and outreach that will increase participation in LSLR initiatives and maximize the public health benefits achieved under the BIL.
  - Prioritize early and robust community engagement, particularly in small and disadvantaged communities
  - Emphasize marketing and communications
  - Use both the set-asides and the infrastructure fund for LSLR planning and design
  - Standard operating procedures (SOPs) and contingency costs should be developed to account for finding unexpected lead service lines

# Best Practices: Affordability

- **DWSRF programs are encouraged to fund the private portion of LSLR projects at no additional cost to homeowners**
- **Nationally, there are two prevalent approaches** to subsidizing the privately-owned portion of lead service lines:
  - Some communities require private property owners to contract directly with pre-approved plumbers and then reimburse
  - Other communities employ a contract vehicle and directly pays all, or a portion, of the incurred costs

# Best Practices: Customer Notification and Risk Mitigation

- DWSRF assistance recipients must comply with all applicable local, state, and federal requirements for customer notification and risk mitigation over the course of LSLR, including any new regulations that are in effect at the time of the work
- **Best practices include:**
  - Provision of POU devices or pitcher filters
  - Provision of information/training to ensure that equipment is used properly
  - Pipe flushing recommendations
  - Tap sampling
  - Installation of dielectric coupling to minimize corrosion



# Resources

## Current:

- [Memorandum: Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law](#)
- [Memorandum: Implementing Lead Service Line Replacement Projects Funded by the Drinking Water State Revolving Fund](#)
- [Fact Sheet: Bipartisan Infrastructure Law, State Revolving Fund Implementation Memorandum](#)
- [Frequent Questions about Bipartisan Infrastructure Law State Revolving Funds](#)
- [Guidance for Developing and Maintaining a Service Line Inventory](#)
- [Water Technical Assistance Programs](#)
- [Water Infrastructure and Capacity Assessment Tool \(Water ICAT\)](#)
- Existing Regulations:
  - [Lead and Copper Rule](#)
  - [Lead and Copper Rule Revisions](#)
  - [Lead and Copper Rule Improvements](#)

# Contact Information

- LCRI questions:
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Thank you!