

Appendix C – Comments and Response to Comments Received on the First Federal Register Notice

EPA-HQ-OW-2024-0561-0005: Unleaded Kids



December 28, 2024

Tirzah Glebes and John Towe
Drinking Water Infrastructure Development Division
Office of Ground Water and Drinking Water, 4606M
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Submitted electronically via <https://www.regulations.gov/document/EPA-HQ-OW-2024-0561-0001>

RE: Agency Information Collection Activities; Proposals, Submissions, and Approvals: The 8th Drinking Water Infrastructure Needs Survey and Assessment. Docket ID Number EPA-HQ-OW-2024-0561

Dear Tirzah Glebes and John Towe:

Unleaded Kids appreciates the opportunity to respond to EPA's request for comment on its information collection plan for the 8th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA).

Our comments are focused on assessment of costs to replace all lead service lines (LSLs) of all eligible public water systems in the United States pursuant to Section 1452(h)(2) of the Safe Drinking Water Act (SDWA) codified at 42 U.S.C. § 300j-12.¹

Unleaded Kids is the only national organization focusing on reducing the cumulative impact of all sources of children's exposure to lead. For more information see www.unleadedkids.org.

We encourage EPA to rely on the service line inventory information provided to the agency by states on or before March 31, 2024 pursuant to 40 C.F.R. § 142.15(c)(4)(iii)(D) that was promulgated by the Lead and Copper Rule Revisions (LCRR). The provision requires states to report to EPA "For each public water system, the number of lead, galvanized requiring replacement, and lead status unknown service lines in its distribution system, reported separately."

We understand that EPA does not plan to request a service line for American Indian, Alaska Native Villages, state small CWSs, or NPNCWSs because these systems are not being surveyed as part of the 8th DWINSA. We encourage EPA to use the information provided by the states for these systems pursuant to the LCRR rather than carrying the information previously submitted under the 7th DWINSA.

To obtain cost information, we recommend that EPA include the LSL replacement program costs as part of its questionnaire of states and surveyed public water systems rather than using a separate questionnaire. With the 2024 improvements to the LCR, many systems would have that information in anticipation of the mandate to replace the LSLs by 2037.

For more information, please contact Tom Neltner at tneltner@unleadedkids.org or 317-442-3973.

¹ See <https://uscode.house.gov/view.xhtml?hl=false&edition=2023&req=granuleid%3AUSC-2012-title42-section300j-12&num=0>.

Sincerely,

A handwritten signature in black ink that reads "Tom Neltner". The script is cursive and fluid, with the first name "Tom" and last name "Neltner" clearly distinguishable.

Tom Neltner
National Director
Unleaded Kids
tneltner@unleadedkids.org
317-442-3973

Below is a summary of the December 28, 2024, comments received from Unleaded Kids regarding the Draft Information Collection Request for the 8th DWINSA and the EPA response to each comment.

- *Unleaded Kids encouraged the use of Lead and Copper Rule Revisions (LCRR) data for the 8th DWINSA as the basis to assess the costs to replace all lead service lines (LSLs) as mandated by Section 1452(h) (2) of the Safe Drinking Water Act (SDWA), codified at 42 U.S.C §300j-12 (the AWIA amendments). Unleaded Kids cited 40 C.F.R 142.15(c)(4)(iii)(D) – a section requiring quarterly reporting by states of information related to optimized corrosion control designation – as the basis for the dataset. Because Unleaded Kids referred to the LCRR, the EPA believes Unleaded Kids intended to have referenced 40CFR 141.84(a) Service line inventory and replacement requirements, which requires submittal of an initial inventory to the State by October 16, 2024.*

EPA Response: The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. In the EPA's recent engagements with states and DWINSA state coordinators, the majority of DWINSA state coordinators expressed greater confidence in the LCRR inventory data compared to other options as the best available information for estimating the number of lead service lines to apply to the cost model for the 8th DWINSA.

- *Unleaded Kids encouraged EPA to use for the 8th DWINSA the LCRR inventory information provided by the states for American Indian, Alaska Native Village, non-profit noncommunity water systems (NPNCWS) and small community water systems (CWS) rather than adjusting the information used for the 7th DWINSA.*

EPA Response: The EPA agrees with the commenter and plans to use the LCRR data to estimate lead service line replacement costs for small water systems and Tribal water systems of all sizes. With the water systems submitted LCRR inventory data, the EPA is proposing that the replacement cost as estimated by these counts and the 8th DWINSA cost model will appropriately reflect these water systems' needs. For more information on how EPA is accommodating the specific concerns of small systems, see Supporting Statement A.

- *Unleaded Kids recommended that the EPA collect information on Lead Service Line replacement costs as part of the 8th DWINSA questionnaire rather than using a separate questionnaire.*

EPA Response: The EPA plans to update the DWINSA lead service line replacement cost model to the extent possible. The cost model is based on a per-service-line cost. The EPA is proposing to collect cost data to update the model to the extent possible by gathering project-specific cost information during the survey. The EPA plans to use the LCRR inventory data in lieu of the questionnaire previously used for the 7th DWINSA. Additionally, the EPA may use otherwise available information for cost model development, for example, the Drinking Water State Revolving Fund project database.

EPA-HQ-OW-2024-0561-0006: Vermont Department of Environmental Conservation



Department of Environmental Conservation
Drinking Water and Groundwater Protection Division
1 National Life Drive, Davis Bldg 4
Montpelier, VT 05620-3521
www.dec.vermont.gov/water

Agency of Natural Resources

802-622-4840

February 6, 2025

This document transmits comments from the Vermont Department of Environmental Conservation (DEC) regarding the U.S. Environmental Protection Agency (EPA) plan to submit an Information Collection Request (ICR) for the 8th Drinking Water Infrastructure Needs Survey & Assessment (DWINSA). These comments are in reference to Docket ID Number EPA-HQ-OW-2024-0561.

Recommending the Use of Service Line Inventory Data

The proposed ICR states that EPA does not plan to request service line information for small community water systems (CWS) and non-profit, non-community water systems because these systems are not being surveyed as part of the 8th DWINSA. In Vermont, small CWSs supply more than a third of the drinking water to consumers served by CWSs. A third of the population is a statistically significant amount.

Vermont DEC encourages EPA to utilize the service line inventory information provided to the agency by states that was collected in accordance with the Lead and Copper Rule Revisions (LCRR). These data include quantities for lead, galvanized requiring replacement, and unknown material service lines. The cost to identify unknown materials is a notable infrastructure need for Vermont's small CWSs. The LCRR-mandated data will demonstrate this need, whereas excluding small CWSs from the 8th DWINSA will not emphasize the need to the same level of accuracy.

Furthermore, requesting water systems to submit service line information in another format may generate confusion. The LCRR-mandated inventories are an already available and verified data set. Requesting water systems to respond to the survey with service line information again may muddle the difference between compliance requirements and the DWINSA's request. The potential confusion may increase the technical assistance burden for State DWINSA Coordinators, State Lead & Copper Rule Compliance Specialists, and water systems completing the DWINSA survey.

Amending the Service Line Material Table

Although Vermont DEC recommends the use of already collected service line inventory data, if EPA decides to not follow that recommendation, then an edit should be made to the Information Collection Form.

*To preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health,
for the benefit of this and future generations.*





Within the proposed ICR's supporting documents, Appendix B "Information Collection Form and List Codes" presents the data collection form for the 8th DWINSA. The top paragraph of the Service Line Material Table (Appx. B, p. 11) includes the statement "The total number of service lines reported should be equal to the number of service connections in the system." Vermont DEC recommends that this sentence is deleted.

The definitions of service lines and service connections are not equivalent. 40 CFR 141.2 defines "Service line" as a portion of pipe that connects the water main (or other conduit for distributing water to individual consumers or groups of consumers) to the building inlet or, where a building is not present, the outlet. In contrast, a "service connection" can be defined as each single-family home, each living unit within a condominium, single rental unit, mobile home, store, or other commercial, educational, or industrial establishment, or other living unit which obtains water from a water system. **Multiple service connections within a single building may be supplied water by a single service line.** A typical example is a multi-unit apartment or condominium building.

Removing the statement "The total number of service lines reported should be equal to the number of service connections in the system." from the information collection form would reduce misunderstandings among water systems that complete the survey. Making this change to the collection form would reduce the technical assistance burden of the State DWINSA Coordinators and water systems responding to the DWINSA survey.

Vermont DEC Point of Contact

Bruce King, PE
Infrastructure Sustainability Section Supervisor
and State DWINSA Coordinator
Drinking Water & Groundwater Protection Division
Vermont Department of Environmental Conservation
Bruce.King@Vermont.gov
802-622-4840



Below is a summary of the February 6, 2025, comments received from the Vermont Department of Environmental Conservation (DEC) regarding the Draft Information Collection Request for the 8th DWINSA and the EPA response to each comment.

- *Vermont DEC noted the significant reliance of Vermont's population on small systems and expressed concern over the proposal to not collect service line information from small CWSs and NPNCWSs for the 8th DWINSA. Vermont DEC encouraged the EPA to use LCRR data for these systems.*

EPA Response: The EPA agrees with the commenter and plans to use the LCRR data to estimate lead service line replacement costs for small water systems and Tribal water systems of all sizes. With the water systems submitted LCRR inventory data, the EPA is proposing that the replacement cost as estimated with these counts and the 8th DWINSA cost model will appropriately reflect these water systems' needs. For more information on how EPA is accommodating the specific concerns of small systems, see Supporting Statement A.

- *Vermont DEC encouraged the use of LCRR-mandated inventories for systems that are included in the 8th DWINSA and to not request the same or similar service line information be submitted by systems.*

EPA Response: The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. In the EPA's recent engagements with states and DWINSA state coordinators, the majority of DWINSA state coordinators expressed greater confidence in the LCRR inventory data compared to other options as the best available information for estimating the number of lead service lines to apply to the cost model for the 8th DWINSA.

- *If EPA decides to not follow the recommendation to use LCRR data, then Vermont DEC recommends an edit to the Information Collection Form to remove the statement: "The total number of service lines reported should be equal to the number of service connections in the system." Vermont DEC offered the following as the reason for this recommendation, "Multiple service connections within a single building may be supplied water by a single service line. A typical example is a multi-unit apartment or condominium building."*

EPA Response: The EPA intends to incorporate the LCRR initial inventory summary counts into the 8th DWINSA, so a change to the form to address this comment will not be necessary.

EPA-HQ-OW-2024-0561-0007: Council of Infrastructure Financing Authorities (CIFA)



February 3, 2025

Ms. Tirzah Glebes and Mr. John Towe
Drinking Water Infrastructure Development Division
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency,
1200 Pennsylvania Ave. NW
Washington, D.C. 20460

Dear Ms. Glebes and Mr. Towe,

The Council of Infrastructure Financing Authorities (CIFA), which represents the Drinking Water State Revolving Funds (SRFs) in all 50 states, appreciates the opportunity to provide comments on the proposed Information Collection Request for the 8th Drinking Water Infrastructure Needs Survey and Assessment (EPA ICR Number 7798.01, OMB Control Number 2024-0561).

The Drinking Water SRFs are the nation's premier programs for funding infrastructure that provides safe and affordable drinking water to hundreds of millions of households and small businesses in communities around the country. Since the program was established in 1997, the state-run subsidized loan programs have used \$24 billion in federal funding to generate more than \$57 billion in financial assistance for more than 20,000 projects, 70% of which were in communities with populations of 10,000 or less.

The Drinking Water Needs Survey and Assessment (Needs Survey) is used to determine the amount of annual and supplemental federal funding provided to the SRFs, territories, tribes and Washington, D.C. for drinking water infrastructure. To ensure confidence in the integrity of the allotment formula, the methodology for collecting and analyzing data in the Needs Survey must be clearly understood by recipients, Congress and the public.

Since 2023, CIFA, on behalf of the Drinking Water SRFs, has expressed concerns about the data quality and methodology of the lead service line questionnaire in 7th Needs Survey, which was used to develop the allotment of one-time federal funding for lead service line inventories and replacement in the Infrastructure Investment and Jobs Act (IIJA) – the largest appropriation in the history of the SRFs. To date, no Drinking Water SRF has been able to replicate the number of lead lines calculated by U.S. Environmental Protection Agency (EPA) to determine their state's allocation of federal funding.

On January 17, 2025, EPA announced plans to reopen the 7th Needs Survey to incorporate data from lead service line inventories which water systems were required to submit to states by

October 1, 2024, under the Lead and Copper Rule Revisions.¹ The updated 7th Needs Survey, the second revision within 18-months, will be used to adjust the amount of federal funding in the IJA that Drinking Water SRFs receive for lead service line inventories and replacement for fiscal years 2025 and 2026.

Since EPA has decided to retroactively incorporate inventory data into the 7th Needs Survey, it appears likely that EPA has already made the decision to use inventory data for the 8th Needs Survey. CIFA urges EPA to work closely with states to determine how this data is incorporated into the 8th Needs Survey.

CIFA also cautions EPA not to raise expectations about the availability or quality of data in the inventories. While likely better than the data provided by the previous lead questionnaire, most inventories still have a significant number of lines of unknown material. Providing a better understanding of how EPA calculates these unknowns would strengthen confidence in the fairness of the allotment formula for federal funding.

Using the inventories would eliminate EPA's current practice of accepting and encouraging various methodologies for estimating the number of lead service lines based on best professional judgement. The inventories provide a level playing field for data collection, which would also strengthen confidence in the fairness of the allotment formula for federal funding.

To ensure a robust data collection, CIFA urges EPA to explain – before data collection on the 8th Needs Survey begins – how the data on lead lines will be incorporated into the allotment formula after the one-time federal funding for lead service line inventories and replacement ends in 2026, including:

- Will the methodology require a weight of evidence for lead service line replacement projects as required for all other projects? Or will EPA continue to have different documentation standards for lead service lines, as was the case for the 7th Needs Survey?
- If project documentation isn't required, how will the number of lead service lines factor into the allotment formula?

Thank you again for the opportunity to provide comments on the ICR for the 8th Needs Survey. CIFA looks forward to supporting the efforts of the SRFs to successfully implement the next Need Survey.

Sincerely,



Angela Knecht
CIFA President

Digitally signed by Angela
Knecht
Date: 2025.02.03 14:13:25
-05'00'

¹ 2025 Update to the 7th DWINSA and Approach for Fiscal Years 2025 and 2026 Infrastructure Investment and Jobs Act Lead Service Line Replacement Allotments

About CIFA

CIFA is a national not-for-profit organization of the Clean Water and Drinking Water State Revolving Funds (SRFs), the nation's premier programs for funding water infrastructure that protects public health and the environment.

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- EPA Region 10: Maryanna Peavey, Idaho Department of Environmental Quality
- Affiliate: Neil Flanagan, Jefferies

Below is a summary of the February 3, 2025, comments received from the Council of Infrastructure Financing Authorities (CIFA) regarding the Draft Information Collection Request for the 8th DWINSA and the EPA response to each comment.

- *CIFA encouraged the EPA to work with states to develop the best approach to utilize LCRR lead service line data for the 8th DWINSA. CIFA noted that there may be LCRR data availability and data quality issues and there are concerns with how the anticipated significant number of unknown lines will be addressed. CIFA urged state engagement and transparency in the EPA's approach to LSL replacement calculations and determining how they will be incorporated into the DWSRF allotment formula.*

EPA Response: The EPA held a DWINSA workgroup call on March 27, 2025, to summarize comments received on the 8th DWINSA ICR first Federal Register Notice related to lead service lines and to gather timely, actionable feedback on lead service line considerations for the 8th DWINSA. The workgroup call covered four aspects: using LCRR inventories or survey responses; if using the LCRR inventory, whether a census or DWINSA statistical sample should be used; approaches to address services lines of unknown material; and approaches for collecting lead service line replacement costs. Polling questions were used to obtain input and supporting rationale for the expressed opinions. In the March 27, 2025, call with DWINSA state coordinators, the majority indicated that LCRR census data will represent a more complete service line inventory dataset, encompassing data from systems that will not be surveyed in the 8th DWINSA. The quality of the LCRR initial inventory data is supported by EPA's Guidance for Developing and Maintaining a Service Line Inventory (August 2022). This guidance includes an optional inventory template for water systems, states, and Tribes to use or adapt to create their own inventory. The EPA used this feedback in revisions for this Information Collection Request and will continue to maintain transparency for 8th DWINSA implementation.

- *CIFA indicated their support for use of the LCRR Inventory data for the 8th DWINSA as a way to provide a national dataset with consistent quality control measures across all states.*

EPA Response: The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. In the EPA's recent engagements with states and DWINSA state coordinators, the majority of DWINSA state coordinators expressed greater confidence in the LCRR inventory data compared to other options as the best available information for estimating the number of lead service lines to apply to the cost model for the 8th DWINSA.

- *CIFA asked the EPA to share its approach to lead service line replacement projects for the DWSRF Base allotments. In particular, CIFA requested information on the project documentation standards to be applied to lead service line replacement projects.*

EPA Response: The EPA plans to update the DWINSAs lead service line replacement cost model to the extent possible. The cost model is based on a per-service line cost. The EPA is proposing to collect cost data to update the model to the extent possible by gathering project-specific cost information via the project table on the survey form. The EPA plans to use the LCRR inventory data in lieu of the questionnaire previously used for the 7th DWINSA. The proposed approach includes collecting project-specific cost information, similar to other types of projects, via the project table that can be used to update the 8th DWINSA's cost model. Additionally, the EPA may use otherwise available information for cost model development, for example, the Drinking Water State Revolving Fund project database.

EPA-HQ-OW-2024-0561-0008: Blue Conduit



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Tirzah Glebes and John Towe
Drinking Water Infrastructure Development Division
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1200 Pennsylvania Ave. NW
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Submitted via regulations.gov

RE: Agency Information Collection Activities; Proposals, Submissions, and Approvals: The 8th Drinking Water Infrastructure Needs Survey and Assessment. Docket ID Number EPA-HQ-OW-2024-0561

Our organization, [BlueConduit](#), uses machine learning to work with North American water systems to find and replace lead service lines (LSLs). We are working with more than 300 cities across the United States, all of which are actively engaged in LSL identification and replacement projects. Accordingly, we have a deep understanding of the ways in which cities manage water infrastructure challenges. Many of our tools and methods, which utilize machine learning algorithms, were developed at the University of Michigan based on our work with the LSL replacement team in Flint, Michigan (FAST Start Team), where we helped guide the nation's largest LSL replacement program. Our research has been published in peer-reviewed academic publications and has [won machine-learning research awards](#).¹ Our work in Flint has also received [considerable media attention](#) and has led us to provide counsel to policy makers on service line inventory and replacement. We collaborated with the Association of State Drinking Water Administrators (ASDWA) on a [white paper](#) about data science principles for LSL

¹ "KDD 2018 Announces Best Paper & Other Awards"
<https://medium.com/syncedreview/kdd-2018-announces-best-paper-other-awards-4835ab8475a4>

inventory and replacement.² These principles informed the Michigan Department of Environment, Great Lakes, and Energy's (EGLE) [guidance](#) on how drinking water systems can create complete service line materials inventories without physically verifying every service line.³

We welcome the opportunity to bring insights from our work and offer the following input on EPA's proposed information collection request. Our comments focus on EPA's solicitation of feedback on "alternative suggestions to reduce burden and obtain the best quality information to estimate the cost to replace the nation's LSLs, including potentially using Lead and Copper Rule Revisions (LCRR) service line inventory information assessments of LSL replacement needs"⁴ pursuant to Section 1452(h)(2) of the Safe Drinking Water Act (SDWA) codified at 42 U.S.C. § 300j-12.⁵

The primary aim of our recommendations is to better align LSLR funding with needs, to ensure that states with more lead pipes receive a fair share of funding as quickly as possible. At the same time, our recommendations aim to minimize the administrative burden on water systems, states, and the EPA through efficient use of data that is already being compiled or is otherwise readily available.

The Lead and Copper Rule Revisions (LCRR), promulgated under the first Trump Administration, requires states to compile and report to EPA service line inventory data.⁶ We strongly recommend that EPA use this data to inform the LSL needs assessments required by the SDWA. It is also critical that EPA revise its allotment formula to align state and local incentives for expeditious and efficient lead service line replacement to ensure that states with more lead pipes receive a proportion of funding as quickly as possible. Specifically, we encourage EPA to:

- 1) Directly employ inventory data to produce more reliable cost assessments,

² "Principles of Data Science for Service Line Inventories and Replacement Programs." Association of State Drinking Water Administrators. September 2020.

<<https://www.asdwa.org/wp-content/uploads/2020/09/ASDWA-BlueConduit-White-Paper-on-Data-and-LSL.pdf>>

³ "Complete Distribution System Materials Inventory Overview." Michigan Department of Environment, Great Lakes, and Energy. March 2021.

<https://www.michigan.gov/documents/egle/egle-complete-distribution-system-materials-inventory-overview_720142_7.pdf>

⁴ EPA, 8th DWINSA ICR: Part A, p. 9.

⁵ 42 U.S.C.A. § 300j-12.

⁶ 40 C.F.R. § 142.15(c)(4)(iii)(D). See also 88 FR 4198, 4198 (stating that the rule was promulgated on January 15, 2021).

reduce duplicative efforts in data collection, and avoid unnecessary steps to estimate state-level LSL counts.

- 2) Adjust the allotment formula for LSL funds to
 - a) Justify determinations for best appropriate estimates where lead status unknown service lines remain
 - i) Artificial Intelligence datasets, such as those created by [LeadOutMap.org](https://leadoutmap.org), are capable of producing justifiable estimates to reconcile the amount of lead service lines among “unknown” to support resource allocation decisions.
 - ii) These datasets employ external data, such as average age of housing stock and characteristics from similar communities, to inform more accurate LSL estimates where existing inventories list service line material as unknown or unreported.

Thank you for considering these comments. We would welcome the opportunity to discuss them further with you.

Sincerely,

BlueConduit

Below is a summary of the February 19, 2025, comments received from BlueConduit regarding the Draft Information Collection Request for the 8th DWINSA and the EPA response to each comment.

- *BlueConduit encouraged the EPA to utilize the inventory service line data collected as part of the LCRR to produce data that can be used without the need to estimate state-level LSL counts and to minimize burden for data collection. BlueConduit's comments were directed at LSLR funding. BlueConduit's comments also referred to "lead service line needs assessments required by the SDWA."*

EPA Response: The results of the 8th DWINSA will not be available in time to influence the remaining Infrastructure Investment and Jobs Act Lead Service Line Replacement (LSLR) allotments. The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. In the EPA's recent engagements with states and DWINSA state coordinators, the majority of DWINSA state coordinators expressed greater confidence in the LCRR inventory data compared to other options as the best available information for estimating the number of lead service lines to apply to the cost model for the 8th DWINSA. The EPA proposes that the result of the LCRR inventory data with the 8th DWINSA's cost model will address the SDWA requirement.

- *BlueConduit recommended the EPA adjust the allotment formula for LSL funds utilizing technologies available that can provide supplementary information, such as Artificial Intelligence datasets, to help fill in data gaps for service lines with an unknown material designation.*

EPA Response: The results of the 8th DWINSA will not be available in time to influence the remaining Infrastructure Investment and Jobs Act Lead Service Line Replacement (LSLR) allotments. However, the EPA plans to use the LCRR data to identify lead service line replacement projects for the 8th DWINSA. The quality of the LCRR initial inventory data is supported by EPA's Guidance for Developing and Maintaining a Service Line Inventory (August 2022). This guidance includes an optional inventory template for water systems, states, and Tribes to use or adapt to create their own inventory. Beyond the list of acceptable methods for service line identification specified in the LCRR, additional sources and new technologies that can be used to aid in determining service line material may be employed if approved or required by the state. Water systems may use the age of the service line and the date of the applicable lead ban to categorize service lines because such records fall under the sources of information that systems must review as described in § 141.84(b)(2)(ii). Water systems may use any sources that are or previously have been approved or required by their States. Water systems may use predictive modeling, machine learning, and other statistical modeling applications if they are approved or required by the States. The States are best suited to determine methods, beyond those specified by the EPA, that are appropriate for a system.

EPA-HQ-OW-2024-0561-0009: Association of Metropolitan Water Agencies (AMWA)



**ASSOCIATION OF
METROPOLITAN
WATER AGENCIES**

LEADERS IN WATER

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amwa.net

February 11, 2025

Benita Best-Wong
Acting Assistant Administrator
Office of Water
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

SUBMITTED ELECTRONICALLY

RE: EPA-HQ-OW-2024-0561, Agency Information Collection Activities; Proposed Information Collection Request; Comment Request; The 8th Drinking Water Infrastructure Needs Survey and Assessment

Dear Assistant Administrator Best-Wong,

The Association of Metropolitan Water Agencies (AMWA) is pleased to comment on EPA's Proposed Information Collection Request for The 8th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA). AMWA represents the largest publicly owned drinking water systems in the United States. AMWA member utilities each serve over 100,000 customers and collectively provide safe drinking water to over 160 million people. As large public water utilities, AMWA members focus on ensuring the long-term sustainability of their utilities by serving their unique customer bases with clean, affordable drinking water, with financial support informed by the results of the DWINSA.

Continual investment in water system infrastructure is essential for providing clean water and protecting public health. The Association supports the collection of updated information through an 8th DWINSA to ensure that infrastructure funding needs are up to date and adequately assessed. AMWA has been pleased with the historical representation of large systems in these surveys and appreciates the opportunity for continued representation of members. In addition to

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expressing support for infrastructure investment, AMWA also seeks to provide comment on how methods can be strengthened to more accurately encompass the potential costs of infrastructure investments that utilities will incur in the coming years.

Most prominently, the DWINSA serves to “estimate the capital improvement needs of drinking water systems eligible to receive Drinking Water State Revolving Funds (DWSRFs).” The DWSRF provides affordable financing for drinking water infrastructure projects, minimizing ratepayer burdens. The DWINSA identifies where funding is needed and is used as the basis for the formula that governs the distribution of DWSRF funds to states and territories. Without the DWINSA data, EPA would lack information necessary to best determine how to allocate DWSRF funds among states and territories, potentially resulting in less funding being available where it is needed most. By generating this state-by-state water infrastructure needs data, DWINSA facilitates targeting federal and state funding for high-priority water infrastructure projects around the nation.

Well-informed infrastructure investment is essential for providing clean water and protecting public health.

Drinking water infrastructure plays a vital role in safeguarding public health and ensuring that all communities have access to safe, clean water. Many water systems are aging, with pipes and treatment facilities that are well beyond their intended lifespan. Infrastructure needs must be continually reassessed as systems age so that water systems can prepare for the costs of repairs and maintenance. The DWINSA provides an evaluation of both the overall cost of infrastructure needs and the ideal allocation of funding on a state-by-state basis.

Data for the 7th Drinking Water Infrastructure Needs Survey and Assessment, which was collected in 2021, found the nation’s 20-year drinking water infrastructure needs to be just below \$625 billion¹. Of this total, \$235 billion – or 37% – came from drinking water systems serving more than 100,000 people. This information is critical both to understand to which states appropriate proportions of DWSRF funds should be directed, and how the needs of the nation’s largest water systems compare with those serving smaller numbers of people.

Other reports produced by water sector stakeholders have identified similarly significant water infrastructure investment needs. A 2024 report by the Value of Water Campaign² identified a \$91 billion gap between the nation’s water infrastructure needs and spending – and found that if left unaddressed, could grow to more than \$2 trillion by 2043. This stark difference between necessary funding and the amount spent highlights the importance of ongoing cost assessment to

¹ Environmental Protection Agency, “7th Drinking Water Infrastructure Needs Survey and Assessment.” 2023, https://www.epa.gov/system/files/documents/2023-04/Final_DWINSA%20Public%20Factsheet%204.4.23.pdf

² The Value of Water Campaign, “Bridging the Gap: The Power of Investment in Water.” 2024, <https://uswateralliance.org/wp-content/uploads/2024/05/Bridging-the-Gap-The-Power-of-Investment-in-Water-Fact-Sheet.pdf>.

ensure that utilities have the means to properly update and maintain infrastructure. The 8th DWINSA will incorporate up-to-date data and will therefore help to further refine the gap between infrastructure needs and spending.

New regulatory expenses and emerging obligations should be taken into account when assessing funding needs.

EPA has promulgated several new drinking water regulations since the 7th DWINSA, including mandates related to per- and polyfluoroalkyl substances (PFAS) and lead service line replacement, creating unparalleled regulation-driven costs in an abbreviated timeline. In previous iterations of DWINSA, EPA's estimates only included the costs of maintaining current levels of service and did not incorporate new regulatory expenses.

Accurate information is critical for use in estimating future costs of regulation. In EPA's 2024 final rule for the Lead and Copper Rule Improvements³, EPA repeatedly cited the DWINSA survey as the most accurate cost model for lead line replacement, despite additional analyses provided by CDM Smith⁴ and others. With DWINSA continuously referenced in regulatory analyses, it is vital that the full breadth of lead line replacement experiences is incorporated. AMWA recommends that EPA take advantage of the service line inventories submitted to primacy agencies in October of 2024, and leverage this existing data into a comprehensive estimation of lines requiring replacement and ease the duplicative reporting burdens on systems.

For the 8th DWINSA, increased emphasis on the costs of simultaneous compliance and immediate capital improvements should be included to best encapsulate the costs incurred by water systems. While the rules themselves annualize these costs over 35 years and do not incorporate costs of concurrent regulation, the cost to ratepayers is felt in the near-term and should be taken into account in this survey.

Conclusion

In summary, AMWA is supportive of the 8th DWINSA as a means to highlight the investments necessary to maintain water infrastructure, and to guide EPA on development of the formula to appropriately allot DWSRF funds among the states and territories. The Association is eager to continue to support EPA's efforts to promote completion of the survey by our member utilities and to ensure that the data collected is as comprehensive as possible.

³ Environmental Protection Agency, "National Primary Drinking Water Regulations for Lead and Copper: Improvements (LCRI)." 2024, <https://www.federalregister.gov/documents/2024/10/30/2024-23549/national-primary-drinking-water-regulations-for-lead-and-copper-improvements-lcri>

⁴ American Water Works Association (AWWA), "Comment on National Primary Drinking Water Regulations for Lead and Copper: Improvements." 2024, <https://www.regulations.gov/comment/EPA-HQ-OW-2022-0801-2024>

Assistant Administrator Benita Best-Wong
February 11, 2025
Page 4 of 4

Thank you for your consideration of these comments. For more information, please contact Erin Phillips, AMWA's Government Affairs Associate, at phillips@amwa.net.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Dobbins". The signature is fluid and cursive, with a long horizontal stroke at the end.

Thomas Dobbins
Chief Executive Officer
Association of Metropolitan Water Agencies

CC: Jennifer McLain, Director, Office of Ground Water and Drinking Water
Kirsten Anderer, Water Infrastructure Technical Support

Below is a summary of the February 11, 2025, comments received from Association of Metropolitan Water Agencies (AMWA) regarding the Draft Information Collection Request for the 8th DWINSA and the EPA response to each comment.

- *AMWA urged the EPA to incorporate into the DWINSA the cost of new regulatory actions and emerging obligations that may lead to water system infrastructure expenses. AMWA's comments included the statement: "In previous iterations of DWINSA, EPA's estimates only included the costs of maintaining current levels of service and did not incorporate new regulatory expenses."*

EPA Response: The EPA disagrees with the comment that the DWINSAs did not incorporate new regulatory expenses. Since the first DWINSA in 1995, the EPA has included estimates of the capital costs of proposed and recently promulgated regulations that applied at the time of each survey. The capital costs were allotted at the state level if supported by contaminant occurrence data or other criteria such as the number of surface water treatment plants in each state. If the capital costs could not be fairly distributed amongst the states, the costs from the economic analyses were added to the national total. If projects to address a contaminant were already planned and implemented by systems regardless of the regulatory schedule, such as for per- and polyfluoroalkyl substances (PFAS), they were included on a system-by-system basis and the costs from the economic analyses were not used. This approach captured these emerging needs while preventing double-counting of needs and ensuring all states had equivalent opportunity to have their projects included. Capturing 20-year needs for obtaining or maintaining compliance through additional treatment, treatment facility rehabilitation, replacement of deteriorated pipe, and other projects is inherent to the projects accepted for the DWINSA because they are in furtherance of the public health objectives of the Safe Drinking Water Act. Projects for new treatment to address PFAS were accepted as part of the 7th DWINSA and will be accepted for the 8th DWINSA if they meet the documentation standards. Lead service line replacement projects were also accepted for the 7th DWINSA and will be included in the 8th DWINSA using the LCRR service line inventory data.

- *AMWA noted the importance of accurate and comprehensive lead service line replacement cost data from the DWINSA, as it has been the data cited in economic analysis for other regulatory actions (i.e., the 2024 Lead and Copper Rule Improvements). AMWA emphasized the importance of using "the full breadth of lead line replacement experiences" in the DWINSA cost models.*

EPA Response: The EPA plans to update the DWINSA lead service line replacement cost model to the extent possible. The cost model is based on a per-service line cost. The EPA is proposing to collect cost data to update the model to the extent possible by gathering project-specific cost information during the survey. The EPA plans to use the LCRR inventory data in lieu of the questionnaire previously used for the 7th DWINSA. Additionally, the EPA may use otherwise available information for cost model development, for example, the Drinking Water State Revolving Fund project database.

- *AMWA recommended the EPA use the LCRR Inventory Data submitted to primacy agencies in October 2024 as the primary source of service line data for the 8th DWINSA.*

EPA Response: The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. In the EPA's recent engagements with states and DWINSA state coordinators, the majority of DWINSA state coordinators expressed greater confidence in the LCRR inventory data compared to other options as the best available information for estimating the number of lead service lines to apply to the cost model for the 8th DWINSA.

- *AMWA encouraged the EPA to increase the emphasis on the costs to water systems for simultaneous compliance and immediate capital improvements.*

EPA Response: Water systems are encouraged to submit projects that capture the full 20-year timeframe addressed by each DWINSA. A comprehensive approach to project identification that addresses all infrastructure assets is recommended in DWINSA technical assistance and instructions, whether the needs are current or anticipated at a future date. Simultaneous compliance and obtaining or maintaining compliance are included as important project identifiers. Because the DWINSA captures projects that are in furtherance of the public health objectives of the Safe Drinking Water Act, simultaneous compliance is an inherent part of the projects reported in the DWINSA. Project funding prioritization is addressed at the state-level through state DWSRF programs, while the DWINSA is intended to capture 20-year needs independent of each projects' timeframe.

- *AMWA expressed support for the 8th DWINSA as a means to highlight necessary water system infrastructure needs and investment, and as a suitable way to distribute DWSRF capitalization grants to states.*

EPA Response: The EPA would like to acknowledge and thank the AMWA's assistance in encouraging participation by their members in the DWINSA.

EPA-HQ-OW-2024-0561-0010: American Water Works Association (AWWA)



American Water Works
Association

Dedicated to the World's Most Important Resource™

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February 11, 2025

Dr. Jennifer McLain
Director
Office of Ground Water and Drinking Water
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

SUBMITTED ELECTRONICALLY

RE: Agency Information Collection Activities; Proposed Information Collection Request;
Comment Request; The 8th Drinking Water Infrastructure Needs Survey and Assessment
(Docket #: [EPA-HQ-OW-2024-0561](#))

Dear Dr. McLain,

The American Water Works Association (AWWA) appreciates the opportunity to comment on the information collection request (ICR) and burden of the Eighth Drinking Water Infrastructure Needs Survey and Assessment (Needs Survey). The Needs Survey is a statutory element of the Safe Drinking Water Act (SDWA) and is critical to the accurate and timely documentation of infrastructure investment needs and fundamental to the allocation of federal funding to state revolving loan fund programs.

AWWA supports the timely development and implementation of the upcoming cycle of the Needs Survey. AWWA encourages EPA to review how it structures and undertakes the next survey instrument in order to develop more accurate estimates of drinking water infrastructure investment needs. At present there is general acceptance that the data collected, and subsequent analysis consistently underestimates the cost of each of the following categories of need:

1. *Renewing existing infrastructure.* EPA has tried to rectify this limitation, but to date, the resulting estimates continue to fall short of those prepared by the sector.
2. *Implementing finalized EPA regulations.* EPA has historically relied on its own cost estimates prepared during drinking water rule development when initial rule implementation is occurring at the time of a Needs Survey data collection. These rulemaking estimates often fall substantially below actual incurred expenses. This failing will be particularly important in the upcoming survey cycle due to the recently finalized Per- and Polyfluoroalkyl Substance Drinking Water Standard (PFAS Rule) and Lead and Copper Rule Improvements (LCRI).
3. *Addressing anticipated but not yet finalized EPA regulations.* EPA will find it challenging to incorporate the infrastructure needs resulting from the upcoming Microbial /

Disinfection Byproducts rulemaking (proposal in 2025; final in 2027). In the near-term system improvements will be focused on a diverse array of actions that will be difficult to accurately capture (e.g., finished water storage improvements, secondary disinfectant boosting, water main re-lining, etc.).

4. *Regulations and guidance from other EPA-administered statutes that also directly impact drinking water infrastructure.* There are likely to be many others, some examples currently likely to drive need include:
 - a. The Comprehensive Emergency Response and Liability Act (CERCLA) hazardous substance designation for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS)
 - b. The Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act Safer Communities by Chemical Accident Prevention (SCCAP) Rule
 - c. Addressing PFAS Discharges in National Pollutant Discharge Elimination System Permits and Through the Pretreatment Program and Monitoring Programs Memorandum.

Other program offices seldom attempt detailed cost estimates of their actions on drinking water infrastructure. These rules will affect the trajectory of drinking water infrastructure option selection (e.g., restrictions on waste stream disposal to sewer will necessitate installation of technologies to reduce and treat those waste streams, water treatment process selection will shift to more expensive technologies as waste disposal options are foreclosed, etc.).

5. *Impacts from federal policies outside of EPA.* Recent changes in federal policy outside of EPA will also influence prior planning estimates water systems and states might have at hand. For example, (1) changes in policies to respond to flooding and/or climate change like the recent re-drawing of floodplain elevations and (2) the cost escalation resulting from the Buy America Build America Act (BABA). Many elements of drinking water systems are located in floodplains, construction standards and hence associated costs of construction are directly linked to floodplain designation. Similarly, BABA requires that projects with federal funding (e.g., drinking water SRFs, etc.) solely purchase domestically manufactured equipment. The upcoming survey will take place during a period when the sector is coming to grips with what this requirement will mean for infrastructure construction costs.

While several of the above challenges have been an ongoing concern in multiple prior Needs Surveys more recent developments warrant particular attention in the upcoming needs survey:

1. A precise and accurate state-specific estimate of service lines that will require replacement due to the LCRR / LCRI. The Seventh Needs Survey was not designed to support the distribution of lead service line replacement funds on a state-by-state basis and as a consequence EPA's state-specific estimates and subsequent SRF funding

allocations lacked credibility. As of October 2024, water systems subject to the LCRR have prepared inventories. EPA should utilize the inventories submitted to states and updated system inventories to support the Needs Survey.

EPA can also utilize the survey to better characterize the full cost of service line replacement than the agency employed in the LCRI rulemaking. The attached analysis prepared by CDM Smith illustrates how to estimate the likely cost of service line replacement more completely. EPA will also need to make a conservative estimate of how many unknown service lines will ultimately be replaced as a function of the LCRI and associated regulatory conservatism (e.g., definition of galvanized requiring replacement service lines).

2. A reasonable estimate of risk and resiliency investments, particularly investments to meet cybersecurity threats. Under America's Water Infrastructure Act, water systems serving more than 3,300 persons will be preparing updated risk and resiliency assessments and response plans in 2025. These assessments and plans are confidential information, but water systems can use these documents to provide the agency with more generalized responses to inform the Needs Survey. EPA cannot present a report to Congress on drinking water infrastructure needs without a credible estimate of all of the infrastructure investments identified through AWIA planning.

With respect to cybersecurity EPA will also need to incorporate an approach to characterizing SRF-eligible expenses that are not physical assets but rather software, software services, and other similar elements of modern cyber-"infrastructure."

The survey instrument needs considerable revision, including pilot testing, prior to deployment. The current ICR envisions foregoing review and evaluation of the survey instrument and data collection process. Repeating prior Need Survey instrument (questionnaire) approaches are unlikely to address the above challenges. It will be necessary to view, revise, and pilot the survey instrument and evaluate the states' ability to support the modified instrument. Here again, the Seventh Needs Survey and the agency's difficulty estimating the number of lead and galvanized requiring replacement service lines that must be replaced under the LCRI illustrates where the prior survey instrument and data collection process impacted the utility of the resulting data.

EPA's proposal to abbreviate the Needs Survey will result in poor data and lead to inappropriate decisions. EPA is proposing to undertake an abbreviated Needs Survey that will only characterize the needs of larger water systems and then use that information to estimate the need for all systems. This is a particularly inappropriate cycle for EPA to not estimate the needs of smaller systems. As noted above, the PFAS Rule and LCRI as well as the non-SDWA federal actions will have significant impacts on small systems. It is also worth noting that with the last several years of Infrastructure Investment and Jobs Act (IIJA) funding many systems including smaller systems took the opportunity to better analyze their infrastructure needs and consequently may be better prepared to inform the upcoming survey.

EPA should re-evaluate the Needs Survey's statistical design to better assure it provides the data intended and can be used to address needed questions. AWWA has recommended re-evaluation of the Need Survey's statistical design in comments on prior Needs Survey ICRs. Even in cycles when the Needs

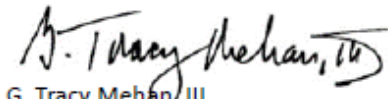
Survey captures data from large and small systems the survey sample set is small relative to the total number of water systems in the United States. As a consequence, stratification of the data is limited which in turn has implications for the agency's ability to extrapolate from the sample. Ultimately the survey results are used to estimate state-specific needs rather than total national costs. Consequently, the survey design should be revised toward that end.

EPA should consider an updated Community Water System Survey. While not specifically related to the Needs Survey ICR, it is important to note that EPA has not conducted the Community Water System Survey since 2006. As a consequence, EPA can at best adjust the results of cost formulas based on the prior CWSS to present day using generic inflation indices. The lack of more recent CWSS data means that the upcoming Needs Survey data cannot be evaluated relative to anticipated costs either as a means of (1) the agency's extrapolation of the Needs Survey data or (2) improving on the analysis or water infrastructure needs EPA presents to Congress. Given the substantial regulatory burden placed on water systems over the past five years, the agency should update the fundamental basis for the cost curves in its economic analyses by conducting a new CWSS at its earliest opportunity.

Thank you for the opportunity to inform the agency's deliberations in preparing for the eighth cycle of the Needs Survey. If you have any questions regarding this correspondence or if AWWA can be of assistance in some other way, please contact Adam Carpenter at (202) 326-6126 or acarpenter@awwa.org.

Best regards,

FOR THE AMERICAN WATER WORKS ASSOCIATION



G. Tracy Mehan, III

Executive Director of Government Affairs

cc: Tirzah Glebes, EPA/OW/OGWDW/DWID
John Towe, EPA/OW/OGWDW/DWID

Who is AWWA?

The American Water Works Association (AWWA) is an international, nonprofit, scientific and educational society dedicated to providing total water solutions assuring the effective management of water. Founded in 1881, the Association is the largest organization of water supply professionals in the world. Our membership includes more than 4,000 utilities that supply roughly 80 percent of the nation's drinking water and treat almost half of the nation's wastewater. Our 50,000-plus total membership represents the full spectrum of the water community: public water and wastewater systems, environmental advocates, scientists, academicians, and others who hold a genuine interest in water, our most important resource. AWWA unites the diverse water community to advance public health, safety, the economy, and the environment.

Below is a summary of the February 11, 2025, comments received from American Water Works Association (AWWA) regarding the Draft Information Collection Request for the 8th DWINSA and the EPA response to each comment. Attachment A to AWWA's comments, *"Final Report – Considerations when costing lead service line identification and replacement, CDM-Smith, November 2022"* can be found in the docket EPA-HQ-OW-2024-0561 at regulations.gov.

- *AWWA encouraged the EPA to review how it structures and undertakes the DWINSA survey instrument and asserted that the data collected for the DWINSA and the analysis of this data underestimates the cost of renewal of existing infrastructure.*

EPA Response: The 8th DWINSA uses a statistical sample designed around a precision target of 95 percent confidence that the true need for each state lies within an interval of plus or minus 15 percent of the estimated need (see Supporting Statement Part B for details). This general approach has been used throughout recurring cycles of the DWINSA to effectively and efficiently balance the burden of data collection with the intended use of the information. Because the DWINSA is used to allocate funds to state DWSRF programs, only DWSRF-eligible projects are included in the survey. This eliminates projects intended to accommodate future growth or are primarily for fire protection, although these are also typical needs of water systems and area often reported in other studies. The focus of the DWINSA is infrastructure needs in furtherance of the public health objectives of the SDWA. To thoroughly capture DWSRF-eligible projects based on each surveyed system's needs, the EPA highly recommends an inventory approach to capture new, replacement, or rehabilitation projects for every asset. The vast majority of survey respondents use this approach. The stratified random sample statistical approach to the survey results and the exceptional response rate (over 97%) further contribute to the validity of the findings.

- *AWWA encouraged the EPA to evaluate costs associated with regulatory compliance, particularly for recently promulgated rules such as the PFAS Rule and the Lead and Copper Rule Improvements (LCRI) where the Economic Analyses for the regulations are typically used. AWWA asserted that actual compliance costs are more than the costs reported in the Economic Analyses.*

EPA Response: For the 8th DWINSA, the EPA plans to receive project submissions for capital projects related to PFAS, and lead service line replacement estimates are proposed to be based on the LCRR initial service line inventories. Therefore, the EPA is not proposing to use capital costs from these rules' Economic Analyses for the 8th DWINSA. The EPA recognizes the cost of SDWA compliance is inherent to the capital costs that ensure safe and reliable supplies of drinking water. The DWINSA requests respondents to code their projects based on the regulatory need, enabling a view at the need associated with specific regulations (see Appendix B, List of Codes and survey form for reference).

- *AWWA encouraged the EPA to take into consideration anticipated infrastructure needs based on future regulatory compliance as part of reporting infrastructure needs for the 8th DWINSA. AWWA provided the upcoming Microbial/Disinfection Byproducts rulemaking (proposal in 2025; final in 2027) as an example.*

EPA Response: The SDWA requires that the EPA examine the evolving needs for infrastructure improvements and maintenance at public water systems through the DWINSA on a four-year cycle. Infrastructure needs related to future rule revisions under development will likely be captured under future DWINSA efforts.

- *AWWA noted that other, non-SDWA regulatory statutes that impact drinking water infrastructure such as the Comprehensive Emergency Response, Compensation, and Liability Act (CERCLA), the Risk Management Programs under the Clean Air Act, the Safer Communities by Chemical Accident Prevention (SCCAP) Rule, the PFAS Discharges in National Pollutant Discharge Elimination System Permits and through the Pretreatment Program and Monitoring Programs Memorandum, and the Build America Buy America Act (BABA) requirements should be considered as part of the DWINSA.*

EPA Response: The SDWA requires that the EPA examine the evolving needs for capital improvement projects at public water systems through the DWINSA on a four-year cycle. Respondents can submit any project they deem required that meets the DWINSA's documentation standards and is a DWSRF-eligible capital improvement project.

- *AWWA expressed support in favor of using the initial LCRR service line inventory data to determine the need for lead service line replacement.*

EPA Response: The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. In the EPA's recent engagements with states and DWINSA state coordinators, the majority of DWINSA state coordinators expressed greater confidence in the LCRR inventory data compared to other options as the best available information for estimating the number of lead service lines to apply to the cost model for the 8th DWINSA.

- *AWWA encourages the EPA to utilize the 2022 CDM Smith report on "Considerations when Costing Lead Service Line Identification and Replacement to estimate LSLR unit cost" to develop a cost model that reflects what they believe is the full cost of lead service line replacement. The CDM Smith report was submitted as Appendix A to this comment and can be found in the docket.*

EPA Response: As was noted in the [Economic Analysis](#) for the Final Lead and Copper Rule Improvements (LCRI), the EPA used the 7th DWINSA as cost model inputs to the LCRI Economic Analysis (EA) to estimate unit costs of lead service line replacement. While the EPA acknowledges the effort of the 2022 CDM Smith report, the EPA also notes that the findings may not be nationally representative compared to what the EPA could gain from collecting updated cost information from the 8th DWINSA's surveyed water systems and other available resources like the Drinking Water State Revolving Fund project database.

- *AWWA commented that EPA will need to estimate the cost of replacing service lines of materials that are currently unknown.*

EPA Response: The EPA proposes to use the LCRR initial inventory summary counts and updated cost model to estimate the number of lead and galvanized requiring replacement service lines at the state level. The EPA will continue to maintain transparency for 8th DWINSA implementation and estimations via its coordination with the DWINSA Coordinator Workgroup.

- *AWWA encouraged the EPA to consider projects for SRF-eligible water system cybersecurity resilience; projects that are not physical assets but rather relate to software and services and other components of cyber “infrastructure.”*

EPA Response: Cybersecurity projects that facilitate a water system's compliance with National Primary Drinking Water Regulations or significantly further the health protection objectives of the SDWA are DWSRF-eligible. The DWINSA accepts projects to implement capital improvements for cybersecurity. Examples include the installation of cyber-related infrastructure, which may include upgrading information technology and operational technology. SCADA projects, for which cybersecurity upgrade investments are assumed to be included, are DWINSA-accepted projects.

- *AWWA commented that the EPA needs to undertake revision and pilot testing of the DWINSA survey instrument and data collection process. They noted that this process is important in light of AWWA's other comments for revisions to the DWINSA data collection and in light of the service line inventory data collected as part of the 7th DWINSA.*

EPA Response: As stated previously, the EPA plans to use the Lead and Copper Rule Revisions initial inventories in lieu of the questionnaire previously used for the 7th DWINSA. In general, the data collection instrument to be used for the 8th DWINSA is generally the same form as used for the past four DWINSAs. The DWINSA form and data collection process were pilot tested initially and again each time significant changes were proposed. Additionally, changes to the survey instrument are not anticipated to alter the process by which states and water systems support the survey. The EPA also engaged and solicited feedback from the DWINSA Coordinator Workgroup when formulating the supplemental questions.

- *AWWA encouraged the EPA to include small systems as part of the 8th DWINSA. AWWA noted that recent regulatory actions such as the LCRI will have significant impact on small systems. AWWA also expressed that with recent funding opportunities, many small systems may have taken the opportunity to better analyze their infrastructure and should therefore be offered the opportunity to include this data as part of the 8th DWINSA.*

EPA Response: EPA acknowledges the importance of thoroughly capturing current capital infrastructure needs for small and rural systems. Therefore, for the 8th DWINSA, EPA will re-survey the 7th DWINSA small systems (those serving 3,300 or fewer people) via phone to collect updated capital improvement project information and will engage key stakeholders, including AWWA, to better understand and incorporate the differential in infrastructure costs faced by small community water systems. EPA will use LCRR inventories for all small systems to

estimate lead service line replacement needs. For more information on how EPA is accommodating the specific concerns of small systems, see Supporting Statement A.

- *AWWA also expressed concern that the statistical validity of the sampling methodology, particularly the resulting number of sampled water systems based on the stratification of the data, limits capture of state-specific needs rather than total national costs.*

EPA Response: The 8th DWINSA is designed to achieve a desired level of precision for state-level estimates of total infrastructure needs. Because it would be prohibitively expensive to collect information from every system, the EPA collects information about the infrastructure investment needs from a sample of Community Water Systems. All large CWSs are sampled as well as a state-level statistically significant sample of medium CWSs. The sample is randomly selected, which ensures that it is representative and unbiased. Algorithms that have been tested, validated, and published are used to select the random samples. A stratified random sample is used to capture the diverse needs of public water systems. Systems are divided into several categories, and the sampling approach selected for each maximizes the data quality objectives of the survey while remaining within the survey's budget. This approach proposed here has been peer-reviewed as implemented in past DWINSA cycles. The approach is fully documented in Part B of the Supporting Statement.

- *AWWA encouraged the EPA to conduct an updated Community Water System Survey as a means to evaluate and update the anticipated water infrastructure costs.*

EPA Response: Thank you for the feedback. The comments in this section are beyond the scope of this Information Collection Request for the 8th DWINSA.

EPA-HQ-OW-2024-0561-0011: Environmental Policy Innovation Center (EPIC)



February 11, 2025

Tirzah Glebes and John Towe
Drinking Water Infrastructure Development Division
Office of Ground Water and Drinking Water, 4606M
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460
Submitted via regulations.gov

RE: Agency Information Collection Activities; Proposals, Submissions, and Approvals: The 8th Drinking Water Infrastructure Needs Survey and Assessment. Docket ID Number EPA-HQ-OW-2024-0561

EPIC (Environmental Policy Innovation Center) appreciates the opportunity to respond to EPA's request for comment on its information collection plan for the 8th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA).

EPIC is a nonprofit organization whose mission is to build policies that deliver spectacular improvements in the speed and scale of environmental progress. EPIC's water work focuses on innovative policies that eliminate disparities across water systems and build public trust in water supplies. EPIC has deep expertise analyzing State Revolving Fund (SRF) data, with particular focus on Infrastructure Investment and Jobs Act (IIJA) funding for lead service line replacement (LSL) replacement. EPIC has dedicated significant time, thought, and resources to provide analysis that contributes to utilizing SRFs to achieve faster and more efficient lead service line replacement in communities where SRF support could be most beneficial.

We welcome the opportunity to bring insights from our work and offer the following input on EPA's proposed information collection request. Our comments focus on EPA's solicitation of feedback on "alternative suggestions to reduce burden and obtain the best quality information to estimate the cost to replace the nation's LSLs, including potentially using Lead and Copper Rule Revisions (LCRR) service line inventory information assessments of LSL replacement needs"¹ pursuant to Section 1452(h)(2) of the Safe Drinking Water Act (SDWA) codified at 42 U.S.C. § 300j-12.² In section I, we outline the background and legal framework for this Information Collection Request (ICR). In section II, we offer specific recommendations on how EPA should use service line inventory data to inform LSL needs assessments. In section III, we offer specific recommendations on how EPA should improve needs assessments and corresponding allotment distribution methods.

¹ EPA [8th DWINSA ICR Part A](#) p. 9.

² [42 U.S.C. § 300j-12](#)

The primary aim of our recommendations is to better align LSLR funding with needs, to ensure that states with more lead pipes receive a fair share of funding as quickly as possible. At the same time, our recommendations aim to minimize the administrative burden on water systems, states, and the EPA through efficient use of data that is already being compiled or is otherwise readily available.

The Lead and Copper Rule Revisions (LCRR), promulgated under the first Trump Administration, requires states to compile and report to EPA service line inventory data.³ We strongly recommend that EPA use this data to inform the LSL needs assessments required by the SDWA. We also urge EPA to take advantage of the 8th DWINSA to further improve its needs assessment through the collection of relevant supplementary data. It is also critical that EPA revise its allotment formula to align state and local incentives for expeditious and efficient lead service line replacement to ensure that states with more lead pipes receive a fair share of funding as quickly as possible. Specifically, we encourage EPA to:

- 1) Directly employ inventory data to produce more reliable cost assessments, reduce duplicative efforts in data collection, and avoid unnecessary steps to estimate state-level LSL counts.
- 2) Include survey questions to solicit information on factors considered in LSLR cost estimations, to enable improved cost assessments and more straightforward comparisons on project costs.
- 3) Adjust the allotment formula for LSL funds to
 - a) account for inventory completeness in a manner that will reinforce, rather than counter, incentives to improve service line inventories, and
 - b) employ external data, such as average age of housing stock, to inform more accurate LSL estimates where existing inventories list service line material as unknown or unreported.

Thank you for considering our views. Our detailed comments follow below.

I. Background and legal framework

The SDWA provides essential federal support for the water infrastructure that keeps our water safe to drink. To ensure this support goes where it is needed, EPA conducts the Drinking Water Infrastructure Needs Survey and Assessment (DWINSA). DWINSA lays the foundation for EPA to understand drinking water infrastructure needs — including lead service line replacement — and proportionally allocate billions in funding. Though EPA administers DWINSA, it requires the efforts of states and many public water systems to capture the nation's drinking water infrastructure needs accurately and reliably.

³ [40 C.F.R. § 142.15\(c\)\(4\)\(iii\)\(D\)](#). See also [86 FR 4198](#), 4198 (stating that the rule was promulgated on January 15, 2021).

EPA's design of DWINSA determines, in part, how well the assessment fulfills this mission. To assess needs and allocate funds, EPA often must collect data from states and water systems, but this collection effort is limited by data availability, state and water system capacity, and EPA's need for standardized reporting and data. In light of these limitations, EPA has augmented survey data with other data, which is often collected from states and water systems through other mechanisms, as well as use of models to produce better assessments and reduce the data collection burden for states and water systems. For the first time, EPA is conducting DWINSA with a reliable, standardized, and state-based source of information about the prevalence of lead service lines (LSLs) available: LSL inventories completed by water systems and reported to states, with states compiling the data and reporting it to EPA.⁴ Utilities, states, and EPA are conducting these inventories as required by the LCRR. Through the use of reported inventory data, EPA could reduce the survey burden for water systems and states, avoid duplicative data collection, and improve the integrity and usefulness of LSL replacement needs assessments.

Federal statutes require EPA to "assess" LSL replacement costs as the basis for its funding allotment⁵ and to avoid duplicative or useless data collection.⁶ This section will review SDWA and Paperwork Reduction Act (PRA) requirements pertaining to EPA's assessment and EPA's proposed DWINSA survey.⁷ Based on this review, we encourage EPA to rely on LSL inventory data in its DWINSA assessment and to use its survey to collect additional data regarding cost factors comprising estimates of per-pipe replacement costs which will help EPA to more accurately assess LSL replacement needs and to align its allotment of funds with needs.

A. EPA must assess state LSL replacement costs under the SDWA and avoid duplicative, burdensome data collection under the PRA.

The SDWA requires EPA to allot funding based on a "formula that allocates to each State the proportional share of the State needs identified in the most recent survey conducted pursuant to subsection (h)."⁸ Subsection (h), titled the "Needs survey," requires EPA to "conduct an assessment

⁴ [86 FR 4198](#), 4200 ("EPA's final rule requires that all water systems complete and maintain a LSL inventory and collect tap samples from homes with LSLs if lead is present in the distribution system."); [86 FR 4198](#), 4237–38 (stating that the final rule "retained" most of the proposed rules reporting requirements including that "the water system would be required to submit to the state an inventory of service lines"). The LCRR required states to report the inventory information to EPA. Codified as [40 C.F.R. § 142.15\(c\)\(4\)\(iii\)\(D\)](#) (requiring States to report for each water system "the total number of lead service lines, galvanized requiring replacement service lines, lead status unknown service lines, non-lead service lines, lead connectors, and connectors of unknown material in its inventory" separately).

⁵ [42 U.S.C. § 300i-12\(h\)\(2\)](#); [42 U.S.C. § 300i-12\(a\)\(1\)\(D\)](#).

⁶ [44 U.S.C. § 3506\(c\)\(3\)\(A\)-\(B\)](#); [5 C.F.R. § 1320.5\(d\)\(1\)](#).

⁷ EPA identifies three sources of statutory authority that govern the 8th DWINSA—the "Needs survey" through which SDWA funding is allocated. The authorities are: 1) Paperwork Reduction Act (PRA) - 44 U.S.C. 3501 et. seq.; 2) SDWA 1452(i)(4); 3) SDWA 1452(h). EPA, [8th DWINSA ICR: Appendix B - Information Collection Form and List of Codes](#), 3 and EPA, [8th DWINSA ICR: Supporting Statement B](#), 1. This comment focuses on PRA and SDWA 1452(h). [1452\(i\)\(4\)](#) directs EPA to "prepare surveys and assess the needs of drinking water treatment facilities to serve Indian Tribes including an evaluation of the public water systems that pose the most significant threats to public health" in consultation with the Director of the Indian Health Service.

⁸ [42 U.S.C. § 300i-12\(a\)\(1\)\(D\)](#).

of water system capital improvement needs of all eligible public water systems.”⁹ The statute sets out two LSLR-related requirements for EPA: 1) to “include an assessment of costs to replace all lead service lines” and 2) as part of this assessment, “describe separately” the costs of replacing the public water system owned portions of the service line and the costs to replace any “remaining portions.”¹⁰ Under its “Needs survey” authority to assess eligible water system needs, EPA conducts DWINSA.¹¹

Beyond the SDWA, the Paperwork Reduction Act (PRA) applies generally to federal data collection efforts.¹² This act and related regulations require, among other things, that data collection is not “duplicative” of information otherwise reasonably accessible to the agency and has “practical utility.”¹³ “Practical utility” is defined in the statute as “the ability of an agency to use information, particularly the capability to process such information in a timely and useful fashion.”¹⁴ In addition to these requirements, the agency collecting the information must also attempt to reduce the burden on the respondents and on itself.¹⁵

Under these authorities, EPA must assess the overall costs to replace lead service lines and costs based on ownership. In collecting data to aid in this assessment, EPA must not duplicate other collection efforts, must collect useful information, and must attempt to reduce data collection burdens on respondents and itself.

B. EPA can leverage LSL inventories to better meet its statutory duties to assess state LSL replacement needs and avoid duplicate data collection.

In its 8th DWINSA proposal, EPA plans to collect LSL data that is unnecessary under the SDWA and may conflict with PRA data collection duties. EPA must assess the LSL replacement costs as the basis for its allotment, but should not collect data already contained in the LSL inventories.

Under the PRA, EPA should not collect LSL data, like LSL counts, that was previously collected as part of state LSL inventories. In its survey form, EPA asks multiple questions related to service line materials, including the number of “service lines that contain:” “lead pipe,” “lead connectors,” “galvanized pipe,” “unknown materials,” and the “total number of service lines.”¹⁶ The proposed survey form acknowledges that this information is duplicative of what water systems and states

⁹ [42 U.S.C.A. § 300j-12\(h\)\(1\)](#). See also [42 U.S.C.A. § 300j-12\(h\)\(2\)](#) (requiring that the assessment from (h)(1) also assess LSLR costs); EPA, [8th DWINSA ICR: Part A](#), 2 (“The EPA is conducting this DWINSA pursuant to its authority under Sections 1452(h) and 1452(i)(4) of the SDWA, as amended by America’s Water Infrastructure Act (AWIA) of 2018”).

¹⁰ [42 U.S.C.A. § 300j-12\(h\)\(2\)](#).

¹¹ EPA, [8th DWINSA ICR: Part A](#), 2 (“The EPA is conducting this DWINSA pursuant to its authority under Sections 1452(h) and 1452(i)(4) of the SDWA, as amended by America’s Water Infrastructure Act (AWIA) of 2018”).

¹² 44 U.S.C. 3501 et. seq. “minimizes the paperwork burden” for entities and individuals “resulting from the collection of information by or for the Federal Government.” [44 U.S.C.A. § 3501](#).

¹³ [44 U.S.C. § 3506\(c\)\(3\)\(A\)-\(B\)](#); [5 C.F.R. § 1320.5\(d\)\(1\)](#).

¹⁴ [44 U.S.C. § 3502\(11\)](#).

¹⁵ [44 U.S.C. § 3506\(c\)\(3\)\(C\)](#); [5 C.F.R. § 1320.5\(d\)\(1\)](#).

¹⁶ EPA, [8th DWINSA ICR: Appendix B - Information Collection Form and List of Codes](#), 11-12.

collected for LSL inventories under the Lead and Copper Rule Revisions (LCRR)¹⁷, specifically asking if the inventory is the source of the information reported.¹⁸ As this comment will outline, not only is it unlikely that the collection of this survey data results in useful data on LSL counts, but it will likely lead to less reliable LSL count estimates. Moreover, water systems, states, and EPA will need to spend time and resources responding to questions on service line numbers and reviewing corresponding responses and analyzing data. This increases the burden of the survey for EPA, states, and water systems.

EPA has emphasized its numerous efforts to reduce the burden of the 8th DWINSA in the spirit of the PRA,¹⁹ and EPA can further these efforts by relying directly on the service line inventories instead of asking systems for redundant data. Such an approach will avoid duplicative data collection, create a less burdensome process for EPA and respondents, and result in more useful LSL counts for assessment and allotment purposes.

Fortunately, SDWA only requires EPA to assess LSL needs; EPA is not required to survey water systems and states about LSL counts. As the name—the Drinking Water Infrastructure Needs Survey and Assessment—suggests, the survey and assessment are distinct, though related processes. Since the 1st DWINSA, EPA has always relied on a variety of tools and data sources apart from the survey to produce a reliable assessment. EPA has: implemented data review based on SDWIS data;²⁰ modeled missing survey data;²¹ and used SDWIS data in calculations to estimate state needs.²² Leveraging inventory data is consistent with EPA's history of augmenting and improving DWINSA with new techniques, tools, and data and consistent with its duty to assess, but not survey, needs.

The next sections will show that inventory data provides a better estimate of LSL counts and composition and that EPA can leverage this and other non-survey data to improve its assessment processes. To augment this existing data, EPA has the opportunity to use the survey to collect cost factor information that will be valuable in assessing LSL replacement needs, and, ultimately, allotting funds to states based on these needs.

¹⁷ Codified as [40 C.F.R. § 142.15\(c\)\(4\)\(iii\)\(D\)](#).

¹⁸ EPA, [8th DWINSA ICR: Appendix B - Information Collection Form and List of Codes](#), 12.

¹⁹ EPA, [8th DWINSA ICR: Supporting Statement B](#), 3–4 (discussing EPA's efforts to "reduce the burden" and ensure the "feasibility" of the survey); EPA, [8th DWINSA ICR: Part A](#), 4 (describing EPA's efforts to "identify" and avoid duplication).

²⁰ OIG, [Inadequate Execution of the 7th DWINSA Lead Service Line Questionnaire Led to Flawed Data Being Used to Allot Lead Service Line Replacement Funds](#), Report No. 25-E-0002, Oct. 21, 2024, 11 (describing EPA's verification process for the 7th DWINSA which "mainly consisted of two data quality checks: one to determine whether the total number of service lines reported by each system aligned with the number of total connections in the EPA's *Safe Drinking Water Information System*, and one...").

²¹ EPA, [8th DWINSA ICR: Supporting Statement B](#), 4 (stating EPA has used cost models since the 1st DWINSA).

²² EPA, [7th Drinking Water Infrastructure Needs Survey and Assessment](#), 44 (describing the calculation of the total number of LSL connections in the 7th DWINSA where EPA derived the "number of connections from the federal version of the 2019 *Safe Drinking Water Information System* (SDWIS Fed)").

II. EPA should rely on inventory data as the basis for allotment distribution

We strongly recommend that EPA use service line inventory data submitted by states as required by the LCRR to estimate state-level LSL counts that form the basis of EPA's allotment of lead service line replacement funds appropriated through the IIJA, and not solicit additional data on LSL counts through the 8th DWINSA survey. Employing inventory data would not only produce more reliable cost assessments, but also reduce the burden of duplicative efforts in data collection and avoid unnecessary steps to estimate state LSL counts as explained below.

A. Inventory data will improve LSL estimate reliability

Because DWINSA survey responses are only collected from a sample of water systems across the country, data must be extrapolated and manipulated (via sample weights) to obtain statewide LSL estimates.²³ However, these estimates are affected by the number and quality of responses, requiring EPA to take measures that “maximize response rates, response and processing accuracy, and minimize non-sampling error.”²⁴ Conversely, inventory data must be submitted by all water systems nationwide. Therefore, system-level inventories can easily be aggregated to produce more accurate and transparent state-level LSL estimates without the need for additional data manipulations. Such manipulations, in this instance, would only create additional administrative burdens without improving the accuracy of the estimates.

An added benefit of the service line inventory data is that it must be updated annually as required by the Lead and Copper Rule Improvements (LCRI),²⁵ as opposed to the DWINSA survey which is administered every four years. More frequent updates are likely to better reflect shifting needs as systems move forward in their LSL replacement efforts, thus enabling EPA to distribute IIJA LSLR funding more effectively and fairly. This is particularly relevant given the recent LCRI ten-year mandate to complete LSL replacement.

B. Employing inventory data avoids redundancy and increases assessment efficiency

Making use of the LCRR inventory data would also reduce redundant data collection efforts and avoid unnecessary steps to assess LSL replacement needs which would ultimately alleviate administrative burdens, in accordance with the goals of the PRA (See section IB above).

Since the 7th DWINSA, EPA has included supplemental questions on service line materials to assess needs and allot the IIJA LSLR funding accordingly. This approach to estimating LSL needs was reasonable at the time, given that the survey was administered prior to the LCRR inventory deadline.²⁶ However, now that initial inventories are available and must be regularly updated by all

²³ EPA, Office of Water. 2023. [Drinking Water Infrastructure Needs Survey and Assessment: 7th Report to Congress](#), 43–45.

²⁴ EPA, 8th DWINSA ICR: Appendix B - Information Collection Form and List of Codes, 13.

²⁵ 40 CFR § 141.80 et seq. As revised November 20, 2024.

²⁶ Codified as 40 C.F.R. § 141.84(a)(1).

water systems nationwide (including survey respondents), gathering data on service line materials through the 8th DWINSA would be redundant.

Additionally, EPA can significantly streamline the process to determine state allotments from IJA LSLR funds by directly employing service line inventory data. EPA currently determines LSLR allotments by using 7th DWINSA responses to estimate state-level LSL counts. This is done by multiplying the proportion of reported LSLs²⁷ by the total number of service connections in the state as documented in the Safe Drinking Water Information System (SDWIS) database. State-level estimates are further adjusted by applying this same proportion of reported LSLs to the number of reported lines of unknown material and unreported lines²⁸ to account for missing material information. LSLR allotments are then calculated based on the proportional share of each state's estimated LSLs relative to the national total to determine the state allotment²⁹. Figure 1, below, illustrates these steps.

²⁷ Note that this proportion was multiplied by a sampling weight for large and medium systems to ensure these numbers were representative of different system sizes. See US EPA, Office of Water. 2023. [Drinking Water Infrastructure Needs Survey and Assessment: 7th Report to Congress](#), 43.

²⁸ *Ibid* pp. 42–45.

²⁹ *Ibid* p. 23. Also see EPIC (2024) [Mapping out IJA's Lead Service Line Replacement allotment process: From assessing infrastructure needs to funding](#).

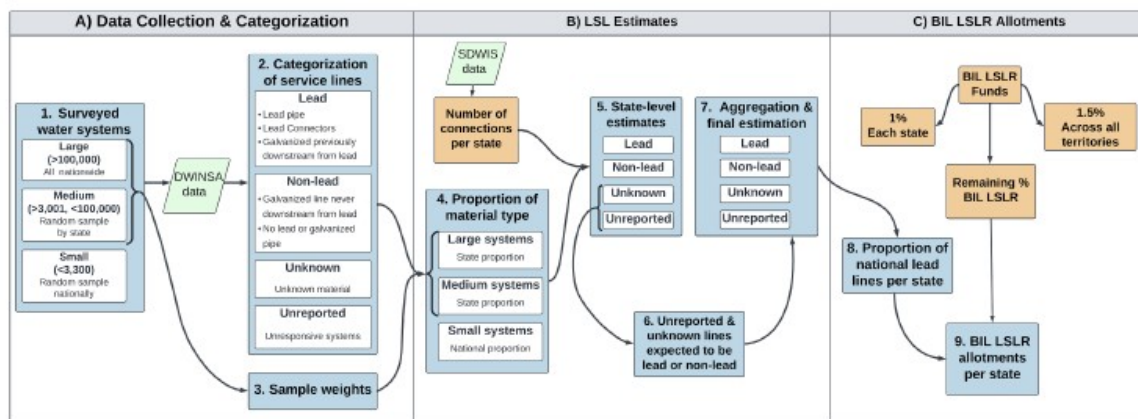


Figure 1. Diagram showing the steps involved in EPA's process to distribute state LSLR allotments under the 7th DWINSA based on survey responses.³⁰

³⁰ Blue boxes represent each of the steps involved in the allotment process, green polygons represent data sources, and orange boxes represent external data or processes. EPA could streamline the assessment process by employing service inventory data to determine state-level estimates, removing the need for steps 1–4.

EPA could simplify the assessment process by determining state-level LSL counts directly from LCRR inventory data, without the need for the additional calculations outlined above. In other words, determining state-level LSL counts directly from LCRR inventory data would enable EPA to dispense with steps 1-4 in Figure 1.

III. EPA should collect additional data on LSL inventory and replacement costs

We support EPA's efforts to continue gathering information on inventory methods and replacement costs in the 8th DWINSA. EPA's proposed service line materials questionnaire³¹ includes questions on methods employed (e.g., historical records, material inspection, general assumptions) to determine LSL numbers if not relying on their LCRR inventory to do so. However, given that inventory accuracy largely depends on the methodology used, we encourage EPA to collect this data for all surveyed systems. This will help to identify major inventory gaps that may still exist.

EPA also proposes to collect information on estimated LSLR costs along with supporting documentation for such estimates³² in the DWINSA Project Table.³³ However, given the large discrepancies in reported LSL replacement cost estimates³⁴, we recommend EPA include questions to identify the factors considered (e.g., construction, permitting, labor, administrative) in such cost estimations, including length of service line³⁵ which is currently excluded.³⁶ Including information on specific cost factors, rather than simply summary cost estimates, will enable improved cost factor analysis and more straightforward comparisons on project costs to better align funding and needs. Collecting this additional data would enable EPA to reflect the actual costs incurred by water systems more accurately, thus improving its LSL costs assessment.

IV. EPA should consider additional variables when determining LSL allotments

The purpose of DWINSA is to distribute SRF allotments based on assessed needs. Therefore, it is equally important to consider how the collected survey data is used in corresponding allotment formulas to ensure that states "receive financial assistance commensurate with state needs as soon as possible."³⁷ When allotted grants are declined by states, unclaimed or unused funds can be redistributed to states with higher needs through the DWSRF reallocation process.³⁸ However,

³¹ EPA, [8th DWINSA ICR, Appendix B - Information Collection Form and List of Codes](#), 11-12.

³² *Ibid* [List of Codes](#), 1-2.

³³ *Ibid* [List of Codes](#), 5.

³⁴ Betanzo (2024) [Lead Service Line Replacement Costs and Strategies for Reducing Them](#) reports LSL cost estimates costs derived from a literature review to range between \$1,180 to \$19,835. This contrasts with data collected via survey from water systems by Kutzing et al. (2023) ranging from \$7,600 to \$37,000 once non construction costs are accounted for. See Kutzing, S., Murray, N., Sayre, A., and Gawlik, E. (2023) [Planning for Service Line Material Identification and Lead Service Line Replacement Costs](#), Journal of the American Water Works Association, 115(6), 22-33.

³⁵ Kutzing, S., Murray, N., Sayre, A., and Gawlik, E. (2023) [Planning for Service Line Material Identification and Lead Service Line Replacement Costs](#), Journal of the American Water Works Association, 115(6), 22-33.

³⁶ *Ibid* [List of Codes](#), 1-2.

³⁷ US EPA, 2023 [Fact Sheet: 7th Drinking Water Infrastructure Needs Survey and Assessment: 7th Report to Congress](#), 8.

³⁸ [40 CFR § 35.3515\(a\)\(3\)](#) as revised August 7, 2000.

since states have up to two fiscal years to request funds, this reallocation can only happen once the two-year availability period has ended.³⁹ To further reduce the need for reallocations and related administrative burdens, and to ensure LSLR funding can be deployed quickly to the states with highest needs,⁴⁰ we encourage EPA to consider the following:

A. Weigh LSL estimates by inventory completeness to avoid inflated needs assessments

The manner in which unknown and unreported lines are accounted for has considerable impacts on needs assessments, and therefore on allotment distributions. EPA's current methodology adjusts state-level LSL estimates by applying the ratio of reported LSLs to the number of reported unknowns and unreported lines (See section IIB above). While this is a reasonable assumption, EPIC found that doing so disproportionately favors states with incomplete inventories by inflating their LSL estimates.⁴¹ This is particularly true in cases where a few well-inventoried water systems have reported high proportions of LSLs while other inventories across the state remain incomplete.

To avoid unjustly awarding higher allotments to states with high numbers of unknown and unreported lines, we propose EPA consider weighing estimated LSLs by inventory completeness when determining state allotments. One possible way to do this is to weigh estimated LSLs by the ratio of known LSLs to unknown and unreported lines. This would be similar to methodology EPA uses to determine deadline deferrals⁴² under the LCRI.⁴³ This change would also serve to reinforce, rather than counter, incentives for water systems and states to continuously improve their inventory data.

B. Incorporate additional variables in needs assessments to help fill data gaps

Where data gaps resulting from unknown and unreported service line materials remain, we encourage EPA to consider additional variables that are tightly linked to LSL replacement needs (e.g., age of housing stock) to further improve LSL assessments. While the number of LSLs is a good indicator of need in systems that have well-developed inventories, this is not the case for many systems that report a large number of lines with unknown and/or unreported materials.⁴⁴ Though we expect the LCRR inventory data to be more comprehensive than DWINSA LSL data, we note that these are only initial inventories and anticipate their accuracy and completeness to improve over time. Until then, EPA should rely on supplementary data to help fill these information gaps.

³⁹ Ibid.

⁴⁰ See EPIC. 2024. [How far will BIL dollars go in replacing lead lines across the country? An analysis of EPA's Federal Fiscal Year 2024 allotments for lead line replacement?](#)

⁴¹ See EPIC. 2024. [A deep dive into EPA's Lead Service Line Replacement Funding Allotment Formula](#).

⁴² Codified as 40 C.F.R. § 141.84(d)(5)(vi)(A).

⁴³ US EPA. 2024. [Final Lead and Copper Rule Improvements \(LCRI\) Technical Fact Sheet: Deferred Deadlines for Service Line Replacement](#).

⁴⁴ See EPIC. 2024. [Looking for Clues on Lead Service Line Inventories in the 7th DWINSA Update](#).

Lead plumbing was federally banned in 1986⁴⁵, although copper had widely replaced lead as the preferred material for service lines by the mid-1950s.⁴⁶ Therefore, average age of housing stock is a good indicator of whether a lead service line is likely to be present⁴⁷ in a home and could be used to inform needs assessments. In fact, EPA and other federal agencies⁴⁸ have employed age of housing stock and sociodemographic factors to identify risk of exposure to other lead hazards (e.g. paint, soil). For example, the Department of Housing and Urban Development (HUD)⁴⁹ and the CDC⁵⁰ have mapped out areas at high risk of exposure to lead paint based on the percentage of occupied housing units built prior to 1980, along with other sociodemographic and environmental factors using existing U.S. census data.⁵¹

We recommend that EPA develop a similar index and incorporate it into the LSL needs assessment. Such an index would enable EPA to categorize unknown and unreported service lines by their likelihood of being lead lines. This would not only increase the reliability and usefulness of LSL needs assessments but also allow for a more efficient distribution of funds.

Incorporating the recommendations detailed above will make EPA's survey and needs assessment for LSL replacement significantly more robust while minimizing administrative burdens. More accurate needs assessments will, in turn, enable EPA to better align LSLR funding with needs, ensuring that states with the most lead service lines can receive needed financial assistance as quickly as possible. Similarly, better assessments will improve the agency's ability to identify funding gaps and redirect resources accordingly.

Thank you for considering these comments. We would welcome the opportunity to discuss them further with you.

Sincerely,

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⁴⁵ [40 CFR 141.13](#) as revised June 19, 1986.

⁴⁶ See Colorado Department of Public Health and Environment. [Lead in Drinking Water](#). Accessed January 2025.

⁴⁷ See [Lead out Map](#). Accessed January 2025.

⁴⁸ See Unleaded Kids. 2024. [Lead in Water: BlueConduit Maps Potential LSLs](#).

⁴⁹ See US HUD [Deteriorated Paint Index](#). Accessed January 2025.

⁵⁰ CDC (2021) [CDC-ATSDR Lead Exposure Risk Index \(LERI\)](#).

⁵¹ US EPA, Office of Environmental Justice and External Civil Rights. 2024. *Environmental Justice Mapping and Screening Tool: EJScreen Technical Documentation for Version 2.3*, 22.

Below is a summary of the February 11, 2025, comments received from Environmental Policy Innovation Center (EPIC) regarding the Draft Information Collection Request for the 8th DWINSA and the EPA response to each comment.

- *EPIC recommended the use of Lead and Copper Rule Revisions (LCRR) data for the 8th DWINSA as the basis to assess the costs to replace all lead service lines (LSLs). EPIC points to a standardized, state-based dataset and reduction in survey burden for water systems and states as factors that lend a reliable, accurate capture of LSLR need. EPIC also recommended using only LCRR data and not projecting lead service lines from unknown and unreported lines.*

EPA Response: The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. In the EPA's recent engagements with states and DWINSA state coordinators, the majority of DWINSA state coordinators expressed greater confidence in the LCRR inventory data compared to other options as the best available information for estimating the number of lead service lines to apply to the cost model for the 8th DWINSA. The EPA will continue to maintain transparency for 8th DWINSA implementation and estimations via its coordination with the DWINSA Coordinator Workgroup.

- *EPIC encouraged collection of information on LSLR cost estimation factors, such as service line length, to aid in modeling data.*

EPA Response: The EPA is proposing to use the LCRR initial inventory summary counts as the documentation standard to establish a water system's and the overall state's number of service lines needing replacement. Details such as service line length are not part of the LCRR service line inventory dataset, would be burdensome to obtain, and are often unavailable. The EPA also proposes to update the DWINSA lead service line replacement cost model to the extent possible. The cost model is based on a per-service line cost. The EPA is proposing to collect cost data to update the model for project-specific submissions from survey respondents. Additionally, the EPA may use otherwise available information, for example, like from the Drinking Water State Revolving Fund project database.

- *EPIC encouraged the EPA to adjust the allotment formula for LSL funds to account for inventory completeness, and using housing stock or other data sources to identify materials for unknown and unreported lines. EPIC also encouraged the use of the LCRR inventory data to form the basis of EPA's allotment of LSLR funds appropriated through Infrastructure Investment and Jobs Act (IIJA) funding.*

EPA Response: The results of the 8th DWINSA will not be available in time to influence the remaining Infrastructure Investment and Jobs Act Lead Service Line Replacement (LSLR) allotments. However, the EPA plans to use the LCRR data to identify lead service line replacement projects for the 8th DWINSA. The quality of the LCRR initial inventory data is supported by the EPA's Guidance for Developing and Maintaining a Service Line Inventory

(August 2022). This guidance includes an optional inventory template for water systems, states, and Tribes to use or adapt to create their own inventory.

- *EPIC encouraged EPA to use the census of LCRR inventory information provided by the states for American Indian, Alaska Native Village, non-profit noncommunity water systems (NPNCWS) and small community water systems (CWS) rather than adjusting the information used for the 7th DWINSA.*

EPA Response: The EPA agrees with the commenter and plans to use the LCRR data to estimate lead service line replacement costs for small water systems and Tribal water systems of all sizes. With the water systems submitted LCRR inventory data, the EPA is proposing that the replacement cost as estimated with these counts and the 8th DWINSA cost model will appropriately reflect the overall national need.

- *EPIC encouraged the EPA to continue gathering information on inventory methods and replacement costs in the 8th DWINSA, even if LCRR data are used. EPIC also recommended EPA include questions on factors considered in reported replacement costs, such as construction, permitting, labor and administrative costs, and length of the service line. EPIC maintains the information will help identify gaps that remain in inventory completeness and more straightforward comparisons of project costs.*

EPA Response: The EPA agrees with the commenter that there are a number of site-specific circumstances that can impact lead service line replacement costs. The EPA proposes to update the DWINSA lead service line replacement cost model to the extent possible. The cost model is based on a per-service line cost. The EPA is proposing to collect cost data to update the model for project-specific submissions from survey respondents. Additionally, the EPA may use otherwise available information, for example, the Drinking Water State Revolving Fund project database.

- *EPIC recommended that the EPA utilize inventory completeness as a component in estimating LSLs. They offered that the EPA could weigh estimated LSLs by the ratio of known LSLs to unknown and unreported service lines. EPIC advocates that this approach could serve as an incentive for water systems to improve the accuracy of their inventories.*

EPA Response: The EPA plans to use LCRR service line inventory data for the 8th DWINSA to estimate the cost to replace all lead service lines. The EPA considers that the LCRR data will be the best available data at the time of data collection and will minimize the burden on water systems and states to collect and report similar data. The EPA will continue to maintain transparency for 8th DWINSA implementation and estimations via its coordination with the DWINSA Coordinator Workgroup.