



Trusting the Tap: Upgrading America's Drinking Water Infrastructure
Subcommittee on the Environment and Climate Change
of the Committee on Energy and Commerce
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Congress included historic investments in the nation's water infrastructure as part of the Bipartisan Infrastructure Law (BIL). The Environmental Policy Innovation Center (EPIC) applauds this bipartisan commitment to repairing and upgrading our water infrastructure. We also appreciate the opportunity to provide this testimony to inform Congress's continued scrutiny of federal and state efforts to ensure clean, safe, reliable, and affordable water for all.

The Environmental Policy Innovation Center (EPIC) is a nonprofit start-up focused on water infrastructure and conservation issues. EPIC's mission is to uplift and advance policy ideas that dramatically increase the speed and scale of environmental improvements. Ensuring the equitable distribution of water infrastructure financing and expediting the replacement of lead service lines are key areas of focus for EPIC (see this [report on the allocation of Drinking Water State Revolving Funds](#) and another on [how to replace lead service lines faster](#)).

EPIC offers key take-aways from our work on federal and state water infrastructure policy for how congressional oversight of the BIL's investments in state Drinking Water State Revolving Funds (SRFs) can ensure the full realization of Congress's intent to enable all communities to implement needed water infrastructure projects. We also highlight additional steps Congress should consider to further this aim.

Building on Congress's historic investment in lead service line replacement (LSLR) in the BIL, we ask Congress to take two further steps to ensure that this funding is fully and expeditiously utilized where it is needed most:

- Allow states to use up to 100% of their SRF capitalization grant for LSLR as grants or principal forgiveness.
- Ensure that the formula for allotting the BIL's LSLR funds to states is revised to match the scale of states' respective lead pipe burdens.

We also urge Congress to keep the following key take-aways in mind as it oversees the BIL's implementation to ensure the full realization of its equity goals:

1. Equitable allocation of principal forgiveness is essential.

- To ensure that all communities can afford to implement needed water infrastructure projects, states need to reform their SRF policies to sharpen how they define disadvantaged communities (DACs) and to prioritize principal forgiveness for communities with the greatest financial hardship.
- States should ensure that principal forgiveness funds are strategically allocated so communities unable to afford loans receive the level of principal forgiveness necessary to enable them to address urgent water infrastructure needs.
- States should award principal forgiveness to prioritized projects according to the severity of their financial hardship.

2. Success hinges on meaningful public engagement.

- EPA and Congress should use the standards set out in the EPA's BIL Implementation Memo for good public review and comment on Intended Use Plans to evaluate states' alignment with Congress' intent to prioritize SRF funds to build equity and resilience.

3. States must invest more in direct technical assistance (TA).

- Congress should exercise a strong oversight role to encourage states' full use of TA set-asides from federal SRF capitalization grants to support DACs.

4. Rapid progress on lead service line replacement is a moral imperative.

- States should use set-asides to inventory lead service lines, since these resources can potentially be allocated more rapidly and can ensure the majority of resources go to actual replacement costs.
- States and water systems should cover the costs of full service line replacement, including private side lead lines, in all lead service line replacement projects. This should include replacement of lead goosenecks, pigtails, and connectors, whether standalone or connected to a lead service line, as well as galvanized steel pipes.
- States should make multi-system applications eligible for State Revolving Fund (SRF) assistance so that entities can self-aggregate to replace pipes under one SRF loan/grant. This would create efficiencies of scale to enable Congress' historic investment in lead service line replacement to go further.
- States and EPA should track costs for inventories and replacement per pipe for each SRF project and to make this information publicly available so that best practices for cost-efficiencies can be identified.

More detail on these recommendations are included below:

1. Equitable allocation of principal forgiveness is essential.

Congress's bipartisan commitment to use water infrastructure funding to advance equity is clearly evidenced by the BIL's requirement that states award 49 percent of supplemental Drinking Water SRF (DWSRF) funds as principal forgiveness to disadvantaged communities. Congress should use its oversight of the BIL's implementation to ensure states distribute SRF funds to realize this goals.

Each state has broad discretion over how it defines disadvantaged communities (DACs) as well as other policies in its Intended Use Plan (IUP) that determine how principal forgiveness is allocated. This discretion should be exercised to serve the equity goals of the BIL.

We are encouraged by EPA's commitment to actively work with states to ensure disadvantaged communities benefit "to the maximum extent possible" from federal investment in water infrastructure, as indicated in the agency's [Memorandum on the Implementation of the Bipartisan Infrastructure Law \(BIL\) to invest in water through the Clean Water and Drinking Water State Revolving Funds](#) ("BIL Implementation Memo") released in early March. EPA emphasized that, to achieve the BIL's equity and resilience goals, states will need to evaluate and revise state policies that determine how principal forgiveness is allocated and indicated its intention to support states in these efforts by:

- Aligning EPA guidance, assistance, and oversight to achieve the BIL's bipartisan equity and resilience goals.
- Encouraging states to use their flexibility to reach DACs.
- Encouraging states to revise their definitions of DACs, affordability criteria, and ranking criteria, and providing guidance on the kinds of policy reforms states should consider.
- Affirming that neighborhoods or census tracts within a larger water system can be considered as DACs eligible for principal forgiveness from the BIL.
- Building states' capacity to understand how these issues can be addressed.
- Exercising robust oversight over states' utilization of supplemental SRF funding from the BIL, particularly in reviewing state Intended Use Plans (IUPs).

To fulfill Congress' intent that these historic investments in water infrastructure benefit disadvantaged communities, so that no community is left behind, state SRF policies must ensure that communities which are otherwise unable to finance needed drinking water infrastructure projects receive principal forgiveness and other assistance sufficient to enable these projects. **To ensure that all communities can afford to implement needed water infrastructure projects, states need to reform their SRF policies to both sharpen how they define DACs and to prioritize principal forgiveness for communities with the greatest financial hardship.**

The following comments highlight concerns relating to how states prioritize their distribution of principal forgiveness.

Caps on Principal Forgiveness

Many states include low caps on the amount of additional subsidy each applicant can receive, in an effort to distribute principal forgiveness funds across as many communities in the state as possible. This may take the form of a low flat cap (e.g. a maximum \$500,000 per community per year, regardless of community size or project costs) or a percentage of project costs (e.g. 20 percent). **While a desire to distribute principal forgiveness broadly may be understandable, states should instead ensure that principal forgiveness funds are strategically allocated so that communities unable to afford loans receive the level of principal forgiveness necessary to enable them to address their water infrastructure needs.**

Ranking

State project priority lists (PPLs) prioritize projects for SRF assistance based on the severity of the water quality concern. State DAC criteria assess community capacity to pay for needed water infrastructure projects. **To achieve the BIL's equity objectives, states should award principal forgiveness to projects on the PPL according to their DAC scores, rather than their ranking on the PPL.** Projects ranking high on the PPL for communities that can afford to finance projects with SRF loans would still be prioritized for loan assistance. But without sufficient levels of principal forgiveness, communities with the highest DAC scores may be unable to afford needed water infrastructure projects.

Ranking projects and principal forgiveness separately allows each ranking system to do what it does best, without conflation. PPLs identify projects that address the most severe and important water quality concerns. DAC scores to identify communities unable to implement needed projects without substantial additional subsidies.

2. Success hinges on meaningful public engagement.

Community residents must be involved in project planning, design, and construction. Meaningful engagement is grounded in trust, with active outreach, clear communications, shared information, and support to build relationships with the community and develop an understanding of their needs. [Lessons](#) from the allocation of American Recovery and Reinvestment Act (ARRA) funds show that “early and frequent communication among stakeholders, with regularly scheduled meetings and webinars that began before ARRA was even passed, helped to form solid working relationships.”

[EPA's BIL Implementation Memo](#) emphasizes several important practices to facilitate meaningful public engagement in SRF implementation, including:

- Developing relationships with residents and organizations in disadvantaged communities. As noted, it is especially important to “reach beyond traditional stakeholder organizations and engage neighborhood and other organizations.” EPA continues with a helpful list of suggestions including “neighborhood associations, environmental organizations, environmental justice organizations, and public health groups, that represent a broad spectrum of community interests and extend beyond those on existing mailing lists and traditional participants in the SRF process.” States can look to those organizing around adjacent aims - such as labor, housing, or immigration - to extend the reach of SRF programs.
- Establishing a sound process and clearly explaining components of the Intended Use Plan to be reviewed and commented on by the public. States must explain the state disadvantaged community definition and affordability criteria. We strongly agree that states should “(1) assure that the public has the opportunity to understand official programs and proposed actions, and that the state fully considers the public’s concerns; (2) assure that the state does not make any significant decision on any SRF activity without consulting interested and affected segments of the public; (3) assure that the state action is as responsive as possible to public concerns; (4) encourage public involvement in implementing the SRFs; (5) keep the public informed about significant issues and proposed project or program changes as they arise; (6) foster a spirit of openness and mutual trust between the state and the public; and (7) use all feasible means to create opportunities for public participation, and to stimulate and support public participation.”

EPA and Congress should use these standards for what constitutes good public review and comment on IUPs to evaluate the state's alignment with Congress' clear intent that the SRF funds appropriated in the BIL be prioritized to build equity and resilience.

3. States must invest more in direct technical assistance.

Technical assistance (TA) to communities that lack the financial, managerial, and technical capacity to access the SRF program reduces the burden that such communities must shoulder, by helping SRF applicants complete needs assessments, engage stakeholders, develop project plans, and complete applications. Congress has recognized this need by allowing each state to set aside up to 27% of its Drinking Water SRF capitalization grants for technical assistance. Historically, however, states [do not fully utilize these set-asides](#).

Proactive TA is fundamental to ensure a more equitable distribution of SRF awards. EPA's BIL Implementation Memo underscores the need for direct technical assistance (TA) for communities that “lack the financial, managerial, and technical capacity to access the SRF

program” and emphasizes the importance of grants and predevelopment funds to disadvantaged communities for planning and design. Development costs are a significant barrier to communities. TA support is vital to help DACs assess which problems to tackle, meaningfully involve the community in decision-making, develop projects, complete paperwork, and submit applications. We strongly agree with the EPA’s guidance that states should “offer and expand pre-development and pre-construction funding to seed project development for small and disadvantaged communities.”

Congress should exercise a strong oversight role to encourage states’ full use of TA set-asides from federal SRF capitalization grants to support DACs. Without proactive efforts, the neediest communities will likely be left out.

4. Rapid progress on lead service line replacement is a moral imperative.

Quickly deploying the \$15 billion appropriated in the BIL for the “identification, planning, design, and replacement of lead service lines” is crucial.

Inventorying Lead Service Lines

Since many of the 11,000 communities across the country with lead service lines do not know how many or where their lead lines are, it becomes difficult to move forward and finance lead service line replacement. Many communities EPIC works with do not know the final count - or importantly price tag - on lead service line replacement, which often becomes a barrier to applying for funds and conducting the necessary planning. We support EPA’s emphasis, in its [BIL Implementation Memo](#), on lead service line identification, through inventories, as part of the mandate under the Lead and Copper Rule Revisions. **EPA’s direction to states to use set-asides to inventory lead service lines is also well-advised, since these resources can potentially be allocated more rapidly and can ensure the majority of resources go to actual replacement costs.**

Mandatory Replacement of the Entire Lead Service Line

EPA’s BIL Implementation Memo says that “Any project funded under this appropriation involving the replacement of a lead service line must replace the entire lead service line, not just a portion, unless a portion has already been replaced or is concurrently being replaced with another funding source. To address household affordability concerns to minimize adverse health effects, we encourage states to fund the private portion of service line replacement at no additional cost to the homeowner.” By replacing “encourage” with “mandate,” this language could have been much stronger, and ultimately, more equitable. Without a clear and unequivocal mandate to fund private side lead service line replacement with these appropriations, we believe that there is a risk of a slowed rate of replacement in disadvantaged communities—and homeowners who cannot afford to replace pipes on their own may ultimately be left out. **It would be a mistake for states and water systems to not cover the costs of full service line replacement, including private side lead lines, in any lead service line replacement project.** Litigation is already ongoing for jurisdictions that are not covering full costs, such as in Providence, RI.

Expanded Definition of Lead Service Lines

While we had hoped that EPA could expand the definition of lead pipes in the Lead and Copper Rule Revisions to include all connectors and galvanized pipes, as states like [New Jersey](#) have already done, **we are glad to see the replacement of “lead goosenecks, pigtails, and connectors as eligible expenses, whether standalone or connected to a lead service line.”** We [believe](#) that lead connectors and galvanized steel - which can be up to several feet in length - also must be replaced, since they can also pose a danger to drinking water.

Enabling and Identifying Cost Efficiencies

Since many of the 11,000 communities around the country may not have the enormous number of pipes like we see in big cities (e.g. 400,000 lead pipes in Chicago) and may in fact have a much smaller number of pipes, we had hoped to see more guidance in EPA’s BIL Implementation Memo on contract and procurement mechanisms that could make it easier for communities to self-aggregate under one SRF application. **We encourage states to make multi-system applications eligible for SRF assistance so that entities can self-aggregate to replace pipes under one SRF loan/grant. This would create efficiencies of scale to enable Congress’ historic investment in lead service line replacement to go further.**

While EPIC is making plans to try to track the lead service line funding from BIL, we urge EPA to **ask states to track their costs for inventories and replacement per pipe for each SRF project and to make this information publicly available.**

Allowing States to Award 100 Percent of Federal Funding for Lead Service Line Replacement as Principal Forgiveness or Grants

Congress recognized the need to rapidly replace lead service lines by appropriating \$15 billion in supplemental DWSRF funds specifically for lead service line replacement (LSLR) through the BIL. The BIL further requires that 49 percent of these funds be provided to disadvantaged communities (DACs) as principal forgiveness. However, many states have found that LSLR projects can be very difficult to finance without higher levels of subsidy. Indeed, state administrators have expressed concerns about whether they will be able to deploy all of the LSLR funds appropriated in the BIL unless higher levels of subsidy are available, as indicated by testimony from the [Council of Infrastructure Financing Authorities \(CIFA\)](#) and the [Association of State Drinking Water Administrators \(ASDA\)](#) to this hearing. **EPIC strongly agrees that states should be allowed to award up to 100% of their SRF capitalization grant for LSLR as grants or principal forgiveness to pay for inventories of LSLs and replacement of both the public and private side of LSLs (including lead goosenecks, pigtails, and connectors, whether stand-alone or connected to a LSL, as well as galvanized steel that has ever been downstream of a lead pipe).**

Allotting Lead Service Line Funds to States Accordance to their Lead Service Line Removal Needs

Some states have a much higher lead burden than others, as indicated in the table attached as Appendix A. The Safe Drinking Water Act mandates EPA to allot DWSRF funds to states in accordance with their drinking water infrastructure needs as determined by a quadrennial Drinking Water Needs Assessment. The 7th Annual Drinking Water Needs Assessment, which EPA is in the process of compiling, was the first such assessment to include survey questions specific to lead service lines and other water infrastructure that poses a risk of lead exposure through drinking water. Accordingly, **the formula for allocating LSLR funds appropriated in the BIL to states for the years 2023 - 2026 should rely on lead-specific information in the 7th Drinking Water Needs Assessment to allot LSLR funds to states in accordance with their respective lead service line replacement burdens.**

Appendix A

Metropolitan **Planning Council**

LSL Burden vs SRF Allotment

Funding for lead service line replacement should be distributed by estimated national share of lead service lines. As the below table shows, SRF allotment is a bad proxy for lead service line burden. States highlighted in red would receive less under SRF allocation than on a per service line funding model.

State	# LSLs	Total Funding (# LSLs) ¹	Total Funding (SRF Allotment) ²	Change (\$Million)
Illinois	730,000	\$1,791.9	\$565.5	-\$1,226.4
Ohio	650,000	\$1,595.5	\$376.5	-\$1,219.0
Michigan	460,000	\$1,129.1	\$367.5	-\$761.6
New York	360,000	\$883.7	\$612.0	-\$271.7
New Jersey	350,000	\$859.1	\$256.5	-\$602.6
Missouri	330,000	\$810.0	\$264.0	-\$546.0
Indiana	290,000	\$711.9	\$229.5	-\$482.4
Texas	270,000	\$662.8	\$1,176.0	\$513.2
Minnesota	260,000	\$638.2	\$229.5	-\$408.7
Wisconsin	240,000	\$589.1	\$255.0	-\$334.1
Massachusetts	220,000	\$540.0	\$348.0	-\$192.0
Florida	200,000	\$490.9	\$591.0	\$100.1
Iowa	160,000	\$392.7	\$237.0	-\$155.7
Kansas	160,000	\$392.7	\$174.0	-\$218.7
Pennsylvania	160,000	\$392.7	\$462.0	\$69.3
Nebraska	97,000	\$238.1	\$150.0	-\$88.1
Virginia	97,000	\$238.1	\$244.5	\$6.4
Georgia	86,000	\$211.1	\$354.0	\$142.9
North Carolina	82,000	\$201.3	\$460.5	\$259.2
Maryland	74,000	\$181.6	\$274.5	\$92.9
Tennessee	74,000	\$181.6	\$261.0	\$79.4

¹ #LSLs calculated based on estimates from Cornwell, D.A., Brown, R.A. and Via, S.H. (2016), National Survey of Lead Service Line Occurrence. Journal - American Water Works Association, 108: E182-E191. <https://doi.org/10.5942/jawwa.2016.108.0086>. Estimates for each state were derived from the following calculation: (number of estimated lead services lines/total US lead service lines) x \$15 billion.

² [2017 - 2021 Allotment of Federal Funds for States, Tribes, and Territories | US EPA](#). Estimates for each state were derived from the following calculation: (SRF allotment percentage) x \$15 billion.

California	65,000	\$159.6	\$1,323.0	\$1,163.4
Alabama	63,000	\$154.6	\$324.0	\$169.4
Colorado	58,000	\$142.4	\$297.0	\$154.6
Louisiana	56,000	\$137.5	\$225.0	\$87.5
Kentucky	53,000	\$130.1	\$247.5	\$117.4
Oklahoma	48,000	\$117.8	\$213.0	\$95.2
South Carolina	44,000	\$108.0	\$195.0	\$87.0
Connecticut	43,000	\$105.6	\$150.0	\$44.4
Arkansas	40,000	\$98.2	\$225.0	\$126.8
Mississippi	29,000	\$71.2	\$162.0	\$90.8
Washington	27,000	\$66.3	\$334.5	\$268.2
New Mexico	26,000	\$63.8	\$150.0	\$86.2
Utah	23,000	\$56.5	\$150.0	\$93.5
New Hampshire	20,000	\$49.1	\$150.0	\$100.9
Rhode Island	20,000	\$49.1	\$150.0	\$100.9
West Virginia	20,000	\$49.1	\$150.0	\$100.9
Delaware	16,000	\$39.3	\$150.0	\$110.7
Maine	15,000	\$36.8	\$150.0	\$113.2
Oregon	14,000	\$34.4	\$198.0	\$163.6
Arizona	12,000	\$29.5	\$270.0	\$240.5
Montana	10,000	\$24.5	\$150.0	\$125.5
South Dakota	10,000	\$24.5	\$150.0	\$125.5
District of Columbia	8,900	\$21.8	\$150.0	\$128.2
North Dakota	8,200	\$20.1	\$150.0	\$129.9
Vermont	7,400	\$18.2	\$150.0	\$131.8
Wyoming	6,300	\$15.5	\$150.0	\$134.5
Idaho	6,200	\$15.2	\$150.0	\$134.8
Nevada	5,200	\$12.8	\$174.0	\$161.2
Alaska	3,800	\$9.3	\$150.0	\$140.7
Hawaii	2,800	\$6.9	\$150.0	\$143.1