The Texas Drinking Water State Revolving Fund:
An Analysis (with Recommendations) of the Lead Service Line Replacement (LSLR) Program

Preface

The State of Water Infrastructure

Water infrastructure in the United States is aging and in need of replacement, and many systems are already failing. Estimates suggest $1.25 trillion ($625 billion for Drinking Water infrastructure and $630 billion for Clean Water infrastructure) is needed over the next 20 years to invest in wastewater, stormwater, and drinking water systems. Inadequate investments in water infrastructure has a significant negative impact on the health and well-being of communities, and disproportionately impacts low-income communities and communities of color.

The Bipartisan Infrastructure Law (BIL), passed in November of 2021, was the single largest federal investment in water infrastructure to date. Of the $55 billion to be administered by the Environmental Protection Agency (EPA), $43 billion is being distributed through the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) over Federal Fiscal Year (FFY) 2022-2026. Although 49% of these funds must be distributed to "disadvantaged communities" as grants or forgivable loans (rather than loans that need to be repaid), communities with the greatest need still face several barriers in accessing these funds. Interventions to address these barriers include reforms to State Revolving Fund (SRF) policies that determine how SRF funds are allocated to communities within each state.

Why and How This Project Came to Be

In early 2023, PolicyLink started its three-year "Southern State Revolving Fund (SRF) Analysis and Advocacy Project" to help ensure equitable implementation of BIL SRF funds and base SRF programs in the South. In focusing on the South, we recognized that the racial and economic disparity in clean and affordable water is particularly pronounced there and that there was a need for strong community-based advocacy.

This project consists of two main phases:

- **Phase I: Analyses of DWSRF and CWSRF Across Seven Southern States.** In early 2023, PolicyLink partnered with the Environmental Policy Innovation Center (EPIC) to train and support policy analysts across seven southern states (Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas) to conduct equity analyses of each state's Clean Water and Drinking Water State Revolving Fund. These analyses are being used to inform advocacy in Years 2 (2024) and 3 (2025) of the project.

- **Phase II: Community-Based-Organization (CBO) Led Advocacy Across Four States**. Of the seven states, PolicyLink selected four states—Alabama, Louisiana, Tennessee, and Texas—for Phase II (supporting CBO-led SRF Advocacy). These represent two states from EPA Region 4 (Tennessee and Alabama) and two states from EPA Region 6 (Louisiana and Texas). PolicyLink selected a cohort of 16 CBOs (4 CBOs per state) to undergo SRF advocacy training (administered by River Network) and supports them in their state and regional SRF advocacy efforts.

This document is part of the larger series of SRF program analyses (Phase I deliverables) developed by individual consultants, with guidance from PolicyLink and the Environmental Policy Innovation Center (EPIC).

To learn more about the project and/or to access other material related to the state analyses, please see the project site.

Acknowledgments

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- Alabama: Victoria Miller and Cindy Lowry, Alabama Rivers Alliance
- Arkansas: EPIC
- Louisiana: Rebecca Malpass, The Water Collaborative of Greater New Orleans
- Mississippi: Dr. Christine Curtis, Grow Where You're Planted
- Oklahoma: EPIC
- Tennessee: Grace Stranch and Anne Passino, Harpeth Conservancy
- Texas: Danielle Goshen, National Wildlife Federation

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Introduction

In 2021, the U.S. Congress passed the Infrastructure Investment and Jobs Act (IIJA) also known as the Bipartisan Infrastructure Law (BIL), allocating $50 billion over five years to the EPA's existing State Revolving Fund (SRF) programs, consisting of the Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF).[1] Funds available under the IIJA have represented a massive opportunity for Texas to transform its water infrastructure landscape—with an estimated $2.9 billion provided to improve drinking water and wastewater systems.[2] These funds are distributed to the states for local agencies to administer. The Texas Water Development Board (TWDB) administers the two SRF funding programs in Texas. However, the TWDB and the Texas Commission on Environmental Quality (TCEQ) execute an inter-agency contract governing the use of certain DWSRF capitalization grant funds for set-aside activities.[3]

The TWDB articulates how it intends to administer the SRF program through annual Intended Use Plans (IUPs). Contained within the IUPs is specific information about eligible project types; eligible applicants; the types of funding and financing available; project rating or prioritization; and funding available for technical assistance, among other key policy decisions. With the addition of the Emerging Contaminants (EC) and Lead Service Line Replacement (LSLR) Program under IIJA, the TWDB has created three IUPs under the DWSRF and two different IUPs under the CWSRF, each covering individual programs. The IUPs for each program can be found below.

- Drinking Water State Revolving Fund
  - SFY 2024 General Program IUP
  - SFY 2023 (FFY 2022) Lead Service Line Replacement Program
  - SFY 2023 (FFY 2022) Emerging Contaminants Program
- Clean Water State Revolving Fund
  - SFY 2024 General Program IUP
  - SFY 2023 (FFY 2022) Emerging Contaminants Program

While states are given significant leeway in administering SRF funds, there was a particular focus through IIJA on the use of these funds to benefit DACs. The DWSRF LSLR program mandates that states allocate at least 49% of the funds toward projects in DACs through principal forgiveness.

Lead is a powerful neurotoxin capable of causing permanent damage. The Centers for Disease Control and Prevention highlight that no level of lead exposure is considered safe for children.[4] Even minimal exposure in children can lead to brain and nervous system damage, learning disabilities, reduced height, impaired hearing, and damage to blood cells. In adults, exposure can result in cardiovascular diseases, negative reproductive effects, kidney damage, and other detrimental health consequences.[5] Despite these recognized hazards, daily exposure to lead still affects millions of Americans due to lead pipes in their drinking water systems.

While lead has not been considered a big issue in Texas, recent reports from the EPA have indicated that Texas is the fourth highest state in the nation for projected lead service lines (7.05% of lines).[6] Therefore, the quick identification and replacement of lead lines in Texas is urgent.

Recommendations

The following policy recommendations are additional ways Texas can improve its LSLR DWSRF program to incentivize the quick and equitable replacement of lead service lines and to increase program transparency and accessibility

Improve Policies for Disadvantaged Communities (DACs)

Under the Texas DWSRF LSLR IUP, only projects that meet the DAC requirements are eligible for funding. Therefore, DAC eligibility is a major driver for communities to apply for funding under the LSLR DWSRF program. The following recommendations will help refine DAC policies under the LSLR program to help ensure areas most in need are prioritized for principal forgiveness.

Set Aside 25% of Funding for More DACs
Under the draft IUP, an entity is considered an eligible disadvantaged community if it:

- may have lead service lines within the distribution system, and
- 51% or more of the proposed project beneficiary area based on household connections has an Annual Median Household Income (AMHI) level that does not exceed 150 percent of the state's AMHI level. The state AMHI from the U.S. Census 2017-2021 American Community Survey (ACS) five year estimate is $67,321; therefore the AMHI of the proposed project beneficiary area must not exceed $100,982.

While we were not able to get a complete dataset for the 2017-2021 American Community Survey (ACS) five year estimates for Texas cities, using the 2018 ACS 5-year dataset, we identified 95 cities in Texas that had an AMHI over $100,982. Looking at the AMHI of U.S. Census Bureau Cities, we estimate that this would exclude less than 10% of cities from accessing principal forgiveness—meaning that more than 90% of all cities in Texas would qualify as disadvantaged communities under this definition.

Due to the urgency to replace all lead service lines in Texas, we understand why the TWDB has cast such a broad net for DACs under the LSLR program. This is especially the case for the first year of funding under this new program and while only DACs are only eligible for funding under the DWSRF LSLR IUP.

While we understand the need to disburse funds under this new program in a timely manner, we believe that there still should be a greater focus on disadvantaged areas. Since the current definition is so broad, we are concerned that disinvested and underinvested vulnerable areas may continue to lose out on funding for LSLR replacement. Therefore, we suggest setting aside at least 25% of funds for areas that meet a more strict DAC criteria. This criterion could align more closely with the general CWSRF and DWSRF programs' definitions of DACs, utilizing the 75% AMHI.

Increase the amount of principal forgiveness for more disadvantaged communities up to 100%

In addition to narrowing the definition of disadvantaged communities moving into the remaining four years of IIJA funding for LSLR, the TWDB should implement a sliding scale for principal forgiveness, aligning with each community's level of disadvantage. Currently, if an eligible entity's AMHI is $100,000, it will receive the same financing (51% principal forgiveness, 49% loan) as a community whose AMHI is $30,000. This will likely result in many communities not being able to utilize the SRF program for lead service line replacement when they are not able to repay loan financing.

While we recognize the need to replace *all* lead service lines, we believe that the principal forgiveness should be prioritized in areas most unable to pay for replacement. We therefore recommend implementing a sliding scale approach, where areas of higher disadvantage are eligible for larger percentages of principal forgiveness.

Further, a disadvantaged community should not be turned away from project funding if they are unable to repay loans. Without any possibility of 100% forgivable loans, we are concerned that the most underresourced communities will continue to not be able to invest in necessary lead service line replacement programs. To address this, we recommend that the TWDB prioritize principal forgiveness based on the level of disadvantage, with the highest amount of principal forgiveness, up to 100%, provided to the most disadvantaged communities where loan repayment acts as a barrier to accessing DWSRF funds.

Use of Set-asides for Lead Service Line Replacement (LSLR) Inventories

The EPA has urged states to use LSLR set-aside funds to complete LSL inventories. Moreover, the Lead and Copper Rule Revisions require that all water systems complete LSL inventories by October 16, 2024. Without inventories, projects are likely not eligible as a DAC, and they may not know if they have lead service lines within their distribution system. Replacement projects are also highly prioritized through project rating, as entities that have identified lead service lines as part of their system get the most amount of points available under the rating (25 points). Therefore, if a system has not undergone an inventory, it will likely not be prioritized for funding and eligible for favorable financing. This means that historically underinvested communities, that are likely underresourced, are at risk of losing out on the LSLR opportunity under the SRFs in Texas.

However, states can use set-asides to provide technical assistance to local water systems to help them identify LSLs. Federal regulations allow states to set aside up to 31% of the capitalization grant funds for purposes other than financing construction projects for water systems. Texas is currently only utilizing roughly 4% of its set-asides under this program and is not utilizing it for LSLR inventory projects. We strongly recommend that Texas utilize the rest of the set-asides under this program to aggressively provide technical assistance to communities to help with LSLR inventories. Notably, in doing this, communities will not need to repay set-aside funds and LSLR construction projects will be provided with a more attractive loan-to-principal forgiveness ratio. Instead of providing $49 in principal forgiveness for every $51 loaned, $49 in principal forgiveness can be issued for every $20 loaned, with the remaining $31 provided through set-asides for inventories and other activities that could lead to more cost efficient LSLR projects.[7]

Improve Project Rating Criteria

In addition to identifying entities eligible for principal forgiveness, another key policy choice that impacts which communities will receive funding is how projects are prioritized. We are encouraged to see the TWDB use a factor of AMHI to provide points to disadvantaged areas based on a sliding scale. Instead of providing flat project rating points for all projects that have a certain AMHI, this method aims to prioritize areas that are most disadvantaged over other communities that may be more able to pay for LSLR projects.

While we appreciate this criteria, the following recommendations aim to further prioritize projects that result in rapid LSLR and ones that are aimed at supporting projects in areas with vulnerable populations.

Incentivize rapid replacement of LSLR through rating criteria providing points on a sliding scale

The current project rating scheme biases projects that have already identified lead service lines. But as noted above, we think that projects to identify LSLs should be prioritized for set-aside funds. Therefore, the rest of the funding should be utilized for projects that have already identified lead service lines. This means that most, if not all, projects would receive 25 points for identifying lead service lines, limiting the criterion's usefulness.

We recommend that instead of providing 25 points to projects that have identified lead project service lines, the project rating formula should incentivize projects that would deliver rapid replacement. For example, the TWDB could provide 25 points to projects that ensure 100% line replacement within x number of years. For larger systems where 100% replacement may not be feasible within a quick time frame, 25 points could be eligible for projects that ensure x number of lines (minimum 500) or x% (e.g., 10%), whichever is larger, of the system's LSLs are replaced per year. We recommend that points be provided on a sliding scale, providing more points to projects that ensure the quickest line replacement.

Wisconsin's SRF IUP incentivizes rapid LSLR replacement by offering 20 points for municipalities that are positioned to remove all their remaining LSLs with the submitted project.8 However, this rating criteria puts larger systems at a disadvantage since they have many more lines to replace. While Wisconsin provides 35 points for large systems serving over 50,000 individuals to counterbalance the priority points for rapid replacement, we believe the suggested approach here better prioritizes systems for SRF funding.

Add additional rating criteria aimed at prioritizing projects in vulnerable subpopulations, including the percentage of children under five years of age

We appreciate the TWDB's rating criteria for AMHI, which provides points on a sliding scale, based on AMHI of the project area. Providing more points to areas with lower AMHI will help prioritize areas least able to pay for LSLR. However, we believe additional project rating criteria can help ensure equitable distribution of funds under this program.

Numerous subpopulations are particularly vulnerable to lead exposure. Unfortunately, some of the characteristics of subpopulations are not systematically quantified through American Community Survey data. For example, the CDC has identified pregnant parents and immigrant and refugee children from less developed countries as particularly vulnerable subpopulations. Gathering statewide data on these subpopulations may be difficult and potentially problematic. However, as discussed in the introduction, the need to replace lead service lines is urgent, as lead is a neurotoxin that can damage the brain and cause lifelong developmental and behavioral problems in children.

According to the CDC, children less than six years old are at a higher risk of lead exposure.9 Luckily, the ACS collects data on the percentage of persons under five years of age. We therefore recommend prioritizing communities with large populations under five years of age, to better target communities most at risk. Additional rating criteria aiming at prioritizing projects in other vulnerable communities should also be considered

Notes

1 Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 (2021), available at: https://www.govinfo.gov/app/details/PLAW-117publ58.

2 White House, Fact Sheet: The Infrastructure Investment and Jobs Act Will Deliver for Texas, available at: https://www.whitehouse.gov/wp-content/uploads/2021/08/texas_infrastructure-investment-and-jobs-act-state-fact-sheet.pdf.

3 TWDB, DWSRF Set Aside Contract.

4 CDC, Lead Poisoning Prevention, available at: https://www.cdc.gov/nceh/lead/prevention/default.htm#:~:text=Protecting%20children%20from%20exposure%20to,pay%20attention%2C%20and%20academic%20achievement.

5 EPA, Basic Information about Lead in Drinking Water, available at: https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

6 EPA, 7th Drinking Water Infrastructure Needs Survey and Assessment (April 2023). Available at: https://www.epa.gov/system/files/documents/2023-04/Final_DWINSA%20Public%20Factsheet%204.4.23.pdf

7 EPIC, Janet Pritchard, "State SRF Policies to help Communities Fully Take Up the New Federal Funding for Lead Service Line Replacement" (January 2023). Available at: https://www.policyinnovation.org/blog/setasidefunds.

8 Wisconsin Department of Natural Resources, *State of Wisconsin, Safe Drinking Water Loan Program, Intended Use Plan* (October 25, 2023). Available at: https://dnr.wisconsin.gov/sites/default/files/topic/Aid/loans/intendedUsePlan/SDWLP_SFY2024_IUP.pdf

9 CDC, Childhood Lead Poisoning Prevention, "Risk Factors and Children." Available at: https://www.cdc.gov/lead-prevention/risk-factors/children.html?CDC_AAref_Val=https://www.cdc.gov/nceh/lead/prevention/children.htm

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