The Texas Drinking Water State Revolving Fund and Clean Water State Revolving Fund: An Analysis (with Recommendations) of the Emerging Contaminants 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

For the first phase of this project, we want to thank our partner, Janet Pritchard, from the Environmental Policy Innovation Center (EPIC), for providing a template for conducting the equity analyses, training our consultants, and reviewing each of the state outputs. We also want to thank our individual consultants who conducted analyses of SRF programs within their states:

- 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

PolicyLink is grateful to the Robert Wood Johnson Foundation for supporting this project.

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. In Texas, the Texas Water Development Board (TWDB) administers the two SRF funding programs. The TWDB and the Texas Commission on Environmental Quality (TCEQ) collaborate through an interagency 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 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 state-defined "disadvantaged communities" (or "DACs"). One hundred percent of the Emerging Contaminants funds appropriated through IIJA must be provided for eligible projects through principal forgiveness or grants. Moreover, 25% of the DWSRF funds received by states for emerging contaminants must be provided to projects DACs or public water systems serving less than 25,000 persons.[4]

Over the last decade, Texas has faced significant challenges related to emerging contaminants, particularly from the activities of the oil and gas industry and military installations. One of the most notable issues is the use of perfluoroalkyl and polyfluoroalkyl substances (PFAS), also known as "forever chemicals," due to their persistence in the environment and the human body.

A study conducted by public health watchdogs found that more than 40,000 pounds of PFAS have been injected into over 1,000 fracked oil and gas wells across Texas.[5] This large-scale use of PFAS in the fracking process is =especially concerning due to the chemical's ability to persist in the environment and its potential health risks, including links to birth defects, cancer, and other serious diseases. The prevalence of PFAS is notably high in Texas, attributed to the state's extensive fracking activities compared to other regions.

Additionally, the problem of PFAS contamination extends to areas surrounding military bases. In Texas, communities near several military sites have discovered that their groundwater is heavily polluted with PFAS. This contamination is a result of the use of firefighting foams at these bases.[6] It's estimated that nearly half a million Texans live within three miles of sites where groundwater has been deemed extremely contaminated with PFAS. These chemicals have been linked to a range of health issues, including cancer, liver damage, and infertility. In some parts of Texas, like near the former Reese Air Force Base in Lubbock, PFAS water contamination levels are significantly above the EPA's recommended threshold.

Recommendations

The widespread use of PFAS and the resultant contamination present a critical environmental and public health issue in Texas. It raises concerns about the long term impacts on the ecosystem, public health, and the quality of water resources in the state. To help address these issues it is essential that Texas efficiently and effectively utilizes its DWSRF and CWSRF EC funding to help reduce PFAS contamination across the state.

Set Aside 25% of Funds for Disadvantaged Communities (DACs) under the Clean Water State Revolving Fund (CWSRF) Emerging Contaminants Program (EC) Program

As noted above, 25% of DWSRF EC funds must go toward projects benefiting DACs. There is no similar requirement under the CWSRF EC Program. However, states are encouraged to direct more of their CWSRF and DWSRF EC funds to DACs, which may be the most vulnerable to the impact of emerging contaminants in their water, while at the same time the least equipped to mitigate and remediate these risks. Under the Texas DWSRF and CWSRF EC Program IUPs, there was no mention of funds set aside for disadvantaged communities besides the federal DWSRF requirement. To target high-need areas effectively, we recommend allocating at least 25% of CWSRF and DWSRF funds specifically for DACs.

Improve DAC Definition by Decreasing Annual Median Household Income (AMHI) Threshold

For the previous recommendation to properly allocate resources, the DAC definition must also be improved. Under the SFY 2023 EC IUPs for both the DWSRF and CWSRF, an entity is considered an eligible disadvantaged community if it:

- May have emerging contaminants;
- Fifty-one percent or more of the proposed project beneficiary area based on household connections has an Annual Median Household Income (AMHI) 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; and
- The unemployment rate for the project beneficiaries is greater than 50% of the state unemployment rate or the population has declined or the utility is a small system with 25,000 or fewer connections for the applicable utility service.

In combination with the 100% principal forgiveness and strict in/out rating criteria where all DACs regardless of level of disadvantage are provided 30 project rating points, this definition of DACs essentially eliminates the prioritization of disadvantaged communities since it is overly broad. We understand the need for prompt fund distribution, but suggest refining the DAC definition for emerging contaminants programs to target highly disadvantaged areas.

This can be accomplished by decreasing the AMHI threshold from 150% down closer to the general DWSRF and CWSRF thresholds of 75%. We also recommend removing the 51% requirement for project beneficiary areas to meet the AMHI threshold. We do, however, suggest that the project beneficiary area be kept as the geographic scope when calculating AMHI for the project. Defining the geographic scope in this way will allow disadvantaged subpopulations within larger areas to address their emerging contaminants.

Use Technical Assistance (TA) Set-asides from the Drinking Water State Revolving Fund (DWSRF) and CWSRF General Funds to help educate communities about the CWSRF EC program

Due to a lack of demand, $1,077,040 from the CWSRF emerging contaminants program is proposed to be transferred to the DWSRF FFY 2022 emerging contaminants program—leaving a total of $3,196,960 in the CWSRF program. Through the CWSRF emerging contaminant program, Texas can address emerging contaminants in our water resources through wastewater, stormwater, and nonpoint sources. The lack of demand for the CWSRF emerging contaminants program is likely due to insufficient knowledge about emerging contaminants in wastewater, stormwater, and nonpoint sources. However, due to the need to protect our source waters and water resources, which provide habitat for wildlife and serve as the waters in which we swim, fish, and recreate, we strongly recommend the TWDB increase its outreach efforts to communities to increase participation in this funding source. Importantly, the TWDB should use set-aside funds under the DWSRF and CWSRF general programs for these efforts. This will make the most efficient use of resources, as it will take the set-asides from other programs that are not composed of 100% principal forgiveness.

Improve Project Rating Criteria

Another key policy choice that impacts which communities will receive funding is how projects are prioritized. The following recommendations aim to prioritize projects that benefit vulnerable populations and to streamline potentially redundant rating criteria.

Provide DAC Project Rating Points on a Sliding Scale

Currently, all DACs receive the same 30 project priority rating points. This does not prioritize areas most in need, especially with the current DAC definition. We strongly recommend providing more priority rating points to areas that exhibit higher levels of disadvantage. For example the higher the unemployment rate and lower AMHI a community has, the more project rating points should be provided to that community.

Add Additional Project Rating Criteria for Vulnerable Populations

Numerous subpopulations are particularly vulnerable to PFAS exposure. The EPA has identified children, pregnant parents, and some industrial workers as particularly vulnerable subpopulations. While we are not aware of statewide data on the second two of these subpopulations, the ACS collects data on the percentage of persons under 18 years of age. We believe that prioritizing communities with large populations under 18 years of age will better target communities most at risk to PFAS exposure, and therefore those that will benefit most from the Emerging Contaminants programs.

Additionally, as noted above, distance from former and current military sites correlates with PFAS exposure due to the use of firefighting foam on bases. We recommend adding a rating criterion for proximity to military bases to prioritize high exposure areas. The TWDB should also consider rating projects based on distance from oil and gas drilling sites, as it has been reported that there is wide use of PFAS in oil and gas drilling.[7] Over the past decade, according to a report by the Physicians for Social Responsibility, oil and gas companies in Texas have pumped at least 43,000 pounds of PFAS into more than 1,000 fracked oil and gas wells across the state.[8] Additional rating criteria aiming at prioritizing projects in other vulnerable communities should also be considered. Note that these project rating criteria should be provided on a sliding scale basis, with more priority rating points provided to projects with more vulnerability.

Streamline Rating Criteria 6 to 8 to Eliminate Redundancy and Potential Over-Prioritization of Small and Rural Projects

Up to three rating criteria prioritize rural or small systems. This includes the following criteria:

- Disadvantaged Community or Small System – 30 points;
- A rural project based on population – 10 points; and
- System size based on connection – up to 15 points.

While prioritizing projects in small/rural systems is important, over prioritizing these communities could result in putting other communities that are unable to pay for projects addressing emerging contaminants at too great a disadvantage. Therefore, the TWDB should consider streamlining rating criteria 6 through 8. Below are two available options to streamline these rating criteria.

Option 1
For example, rating criteria six, should only consider DACs, then rating criteria seven could consider rural projects based on population OR system size based on connection. This would look like the following:

- Disadvantaged Community – 30 points; and
- A rural project based on population OR a small system based on the number of people served or system size based on connections – 15 points.

Option 2
Alternatively, Rating criteria seven could stay as is, and criteria six and eight could be combined to look like the following:

- Disadvantaged Community – 30 points;
- A rural project based on population – 10 points; and
- Small systems based on the number of people served (fewer than 25,000 people) OR system size based on connection – up to 15 points.

While both of these options eliminate redundancies in prioritizing small systems, Option Two gives points separately for both small and rural projects.

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 EPA's March 2022 BIL implementation Memo, Attachment 1 at Section III.B. and III.D. Available at: https://www.epa.gov/system/files/documents/2022-03/combined_srf-implementation-memo_final_03.2022.pdf

5 *Texas Tribune*, Amal Ahmed, "Thousands of Pounds of "Forever Chemicals" Have Been Injected into Texas Oil and Gas Wells, Study Finds" (March 27, 2023). Available at: https://www.texastribune.org/2023/03/27/texas-fracking-oil-gas-wells-pfas-report/

6 *Texas Observer*, Christopher Collins, "Nearly 500,000 Texans Live In Communities With Contaminated Groundwater. Lawmakers Aren't Doing Much About It" (June 19, 2019). Available at: . https://www.texasobserver.org/nearly-500000-texans-live-in-communities-with-contaminated-groundwater-their-lawmakers-arent-doing-much-about-it/

7 *Texas Tribune*, Thousands of Pounds of "Forever Chemicals" Have Been Injected into Texas Oil and Gas Wells, Study Finds."

8 Dusty Horwitt, J.d., Barbara Gottlieb, and Gary Allison, Physicians for Social Responsibility, *Fracking with "Forever Chemicals" in Texas: Oil and Gas Companies Used PFAS in Texas Wells,Extent of Use Obscured by Six Billion Pounds of "Trade Secret" Chemicals* (February 2023). Available at: https://psr.org/wp-content/uploads/2023/02/fracking-with-forever-chemicals-in-texas.pdf.

PolicyLink

Lifting Up What Works®

Headquarters
1438 Webster Street
Suite 303
Oakland, CA 94612
t (510) 663-2333

policylink.org
Facebook: /PolicyLink
Twitter: @policylink
Instagram: @policylink