

2024

# Analysis of State Revolving Fund Plans to Implement the Bipartisan Infrastructure Law

A Review of State Revolving Fund Federal Fiscal Year 2022  
Intended Use Plans

U.S. ENVIRONMENTAL PROTECTION AGENCY

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# 1 Introduction

The Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF) programs provide financial assistance—below-market interest rate loans and additional subsidy—to address public health and water quality challenges in communities across the country. Within broad parameters to advance compliance with Safe Drinking Water Act (SDWA) and the Federal Water Pollution Control Act (“Clean Water Act” (CWA)), state SRF programs, herein “states”, have flexibility in how they accept applications, prioritize projects, establish financial terms, engage the public, and other practices to administer their programs. States target financial assistance toward projects that address their specific needs and support their goals.

In November 2021, Congress passed the Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act, which appropriates \$43 billion to SRF programs between Federal Fiscal Years (FFY) 2022 and 2026. The unprecedented amount of funding in the capitalization grants, along with the requirements and recommendations tied to BIL funds, necessitated modifications to SRF program administration. The U.S. Environmental Protection Agency (EPA) issued guidance on implementing the SRF provisions in BIL in March 2022 through the [memorandum](#) “Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law”. This memorandum explains the requirements, EPA priorities, and key practices to incorporate BIL provisions into SRF programs while reaffirming state flexibility in program administration.

The EPA reviewed FFY 2022 Intended Use Plans (IUPs) to gain insights about how states planned to implement their SRF programs to meet the mandatory requirements and make progress towards the priorities in the memorandum. Regulations for both SRF programs require that IUPs be prepared annually, made available for public comment, and submitted to the EPA prior to the award of a capitalization grant. Among other items, the IUP must describe SRF policies and goals, contain a list of projects eligible to receive financial assistance and types of assistance to be provided, and establish criteria and methods for the selection of projects and distribution of funds. The EPA awards capitalization grants after ensuring that the CWSRF and DWSRF IUPs meet respective program regulations.

This report shares information about state plans from the initial year of BIL implementation to establish a benchmark in time. IUPs are fundamentally planning documents that do not describe all practices of SRF programs and that information from an early snapshot in time may not reflect the full extent of the work states had planned to respond to the BIL. The EPA continues to support states to achieve their BIL implementation goals and will review subsequent IUPs to track progress over time.

## 1.1 Topics of Analysis

This analysis covers five key priorities in the EPA’s March 2022 SRF BIL Implementation Memorandum:

- **Refine state SRFs to build the pipeline of projects:** Sound administration advances the goals of the SRF programs. The EPA reviewed administrative practices that make SRF programs transparent and accessible, establish a pipeline of projects, and promote maximum utilization of funds, while maintaining flexibility to meet state-specific water needs.
- **Increase investment in disadvantaged communities (DACs):** The BIL requires that DACs benefit equitably from the financial assistance awarded through the SRFs. In addition to mandatory additional subsidy awarded to DACs, the EPA reviewed several key practices that improve disadvantaged communities’ access to SRF funds.

- **Support resilience and One Water innovation:** The EPA encouraged states to use the significant increase in funding to improve resilience to all threats, including those posed by climate change, natural disasters, bioterrorism, and cyber-attacks.
- **Make rapid progress on lead service line replacement (LSLR):** The BIL dedicates \$15 billion to address the public health risk and long-standing equity challenge posed by lead service lines (LSLs). The EPA recommended key practices to make rapid progress in identifying and fully replacing LSLs.
- **Address per- and polyfluoroalkyl substances (PFAS) and emerging contaminants (ECs):** The EPA recognizes that addressing emerging contaminants—and the potential cost—is a tremendous challenge for communities. The BIL provides \$5 billion to the SRFs to reduce human exposure to ECs, particularly PFAS. States must distribute these funds as forgivable loans or grants to ensure these projects are affordable.

## 1.2 Purpose, Methods, and Scope

This report provides background, key practices, and findings about how states planned to make progress toward the key priorities noted in the March 2022 SRF BIL Implementation Memorandum. It is not, nor intended to be, a comprehensive evaluation of SRF implementation processes, practices, or outcomes. The information establishes a benchmark against which progress can be reviewed over time. It may help the EPA and states identify and discuss potential issues and opportunities to support states as they distribute BIL funds and manage the SRF programs during and beyond BIL spending.

The review included information readily available within state FFY 2022 IUPs (as of July 21, 2023)<sup>1</sup> and on SRF program websites (as of August 30, 2023)<sup>2</sup>. A total of 49 DWSRF General Supplemental (GS) IUPs, 35 DWSRF EC IUPs, 33 DWSRF LSL IUPs, 49 CWSRF GS IUPs, and 29 CWSRF EC IUPs were reviewed. SDWA §1452(b) and 40 CFR 35.3555, and CWA §606(c) and 40 CFR 35.3150, set forth the requirements for information that states must include in DWSRF and CWSRF IUPs, respectively; beyond these requirements, states have significant latitude in the extent of information and level of detail provided in their IUPs.

The review considered a consistent set of approximately 60 questions about the five key priorities. Simplifications to standardized answers were necessary to summarize the information across the country. However, standardized answers fail to capture the nuances and wide variation of the 102 programs. To the extent possible, this report includes examples in the text to illustrate the range of activities across states and highlight practices not reflected in the standardized answers. The scope of this analysis is limited to IUPs and state websites. If these sources do not explicitly answer a question, the recorded response is “information is not provided.” Answers to questions about state practices and projects that states intended to fund may be unclear, incomplete, or included in different documents. While IUPs may not include all details about the SRF program, IUPs are the primary public planning document for SRFs and should therefore include key information about the program. Since any unclear or incomplete information in IUPs or the website is carried through, the review may indicate where future revisions and inclusion of missing information would improve the clarity of

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<sup>1</sup> Two DWSRF and two CWSRF IUPs were not available as of July 21, 2023, and were not included in this analysis. In addition, two DWSRF programs were excluded from the utilization and the fundable list analyses (Section 2.3). One DWSRF program did not provide state match and did not include BIL appropriations in its Sources and Uses table or fundable project list. One DWSRF IUP did not include BIL 2022 funds in its IUP, which excludes it from appropriation-specific questions. This IUP was reviewed for the accessibility and DAC analyses.

<sup>2</sup> Some state websites are updated frequently, and this analysis of websites was based on a snapshot in time, approximately during the month of August 2023.

IUPs. Initial analyses were checked for quality assurance. The EPA shared the data with states, provided an opportunity to comment, and addressed comments from states by correcting errors before finalization.

## 2 Refine State SRFs to Build the Pipeline of Projects

This section provides information on three administrative aspects of state SRFs: transparency and accessibility, building the pipeline of projects, and fully utilizing funds.

### 2.1 Transparency and Accessibility

Transparency and accessibility can improve access to, and engagement with, SRF programs. Clear descriptions of funding priorities and decisions help potential borrowers understand the program, develop materials to apply for assistance, and implement capital projects. The SRF website is often the first place potential borrowers and the public look to learn about the program. The goal is to provide clear, quick access to important documents and processes, such as the IUP and public comment process. Information should be available in an electronic format. Packaging IUPs as a single, searchable PDF for different BIL appropriations and using common terminology, such as “State Revolving Fund” rather than, or in addition to, other specific terms, makes it easier for the public to find information. Accessibility is especially important for communities with limited technical, managerial, and financial (TMF) capacity.

#### 2.1.1 Key Practices

The EPA identified seven key practices that support transparency and accessibility, and reviewed IUPs and state websites to determine whether states employed these practices:

- The IUP, Annual Report, and most recent financial audit are available and easily accessible on the SRF website.
- The IUP and accompanying documents are combined in a single, searchable PDF.
- The IUP is available and accessible beyond the public comment period.
- The state website uses the term “State Revolving Fund” on its webpage to facilitate findability.
- The state provides information about the public comment process in its IUP and on its website.
- The state offers multiple ways to provide public comment (e.g., via a public meeting or email).
- The IUP includes details about the public comments received and how those comments were addressed.

#### 2.1.2 Findings

##### *Accessibility of IUPs, Annual Reports, and Financial Audit Reports on SRF Websites*

Figure 1 and Figure 2 show the online availability of SRF program documents. Overwhelmingly, IUPs were easily accessible online across states and programs. Nearly all states linked IUP documents within one or two clicks of the main DWSRF and the CWSRF webpages.<sup>3</sup> Most states posted Annual Reports online: 32 states included a publicly available DWSRF Annual Report on their SRF website and 29 states included a publicly available CWSRF Annual Report on their SRF website (within two clicks of the main page). Financial audits were the most difficult to find; fewer than half of states had audits available through the website or internet searches. Making Annual Reports and financial audits, which describe program outcomes and practices, more accessible can provide a more complete picture of the SRF program than an IUP.

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<sup>3</sup> Three IUPs were unavailable online as of July 21, 2023. The IUP may not have been completed by July; states had until Sept 30, 2023, to apply for and receive the FY22 grant award. While not included in the IUP analysis, these states were included in the analysis of program websites.

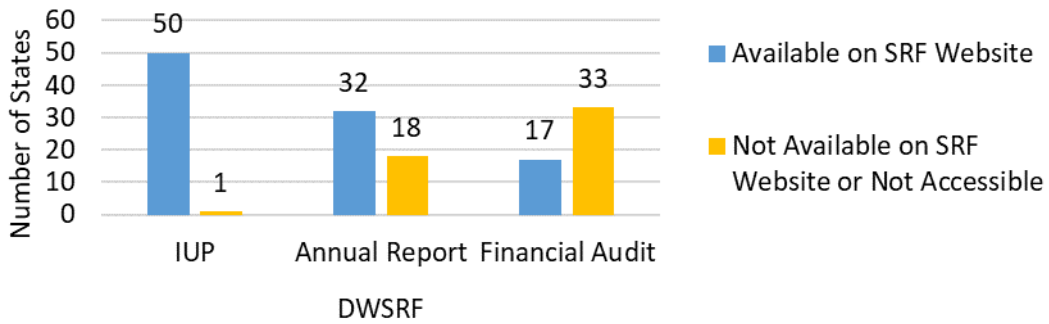


Figure 1. Online availability of DWSRF programmatic documents.

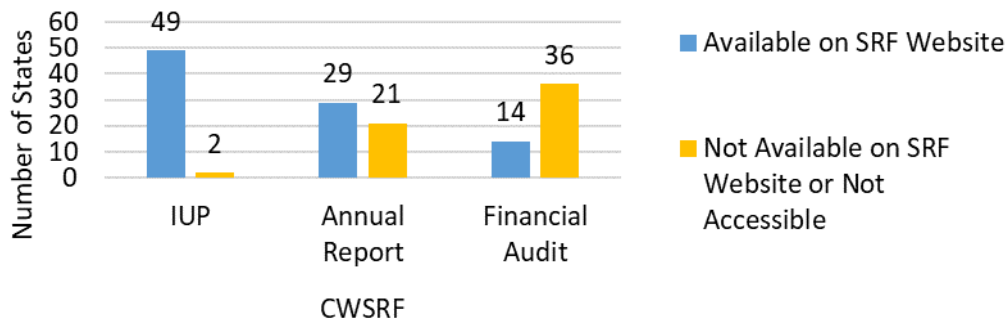


Figure 2. Online availability of CWSRF programmatic documents.

#### Accessibility and Packaging of IUPs and Supporting Documents

Figure 3 shows how IUPs and their supporting documents were organized. Some IUPs include appendices or attachments with information about applications submitted, project priority point criteria, project costs, set-aside uses, additional subsidy distribution, processes for public participation, or other details. IUPs with supporting documents in a single PDF were easier to navigate. About half of the DWSRF and CWSRF programs (26 and 29, respectively) consolidated all their IUP documents into one file. Twelve DWSRF programs and eight CWSRF programs organized supporting documents as separate files in the same location on their website. While less convenient than a single file, these supporting documents were still relatively easy to find. Eleven DWSRF and 12 CWSRF programs reference supporting documents in their IUP that were located in different locations or not found. Some of these documents are critical to help the public understand the operations and management of SRF financial assistance programs.

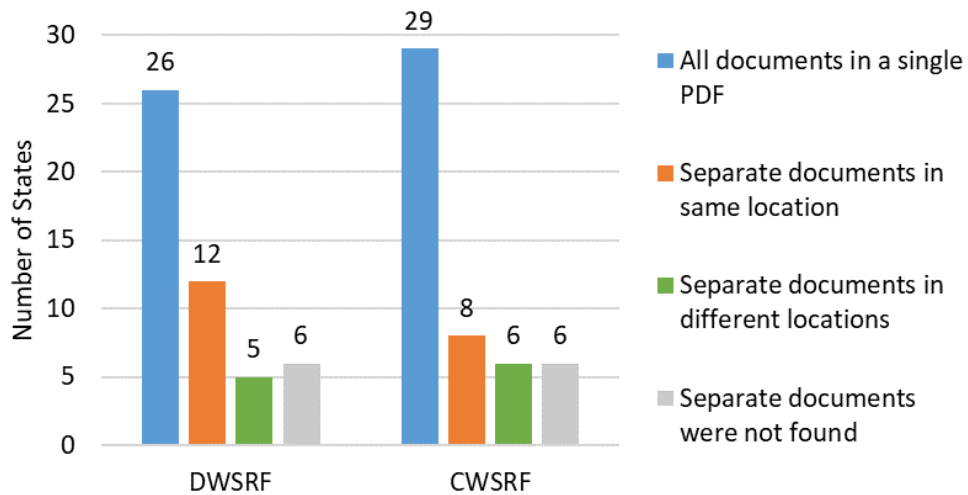


Figure 3. The organization and location of state DWSRF and CWSRF IUPs and accompanying documents.

#### Accessibility of IUPs Beyond the Public Comment Period

Most programs posted their IUPs online beyond the public comment period, as indicated by the large number of states where both current and past IUPs are available online (Figure 4). This practice offers the opportunity to track how policies change over time.

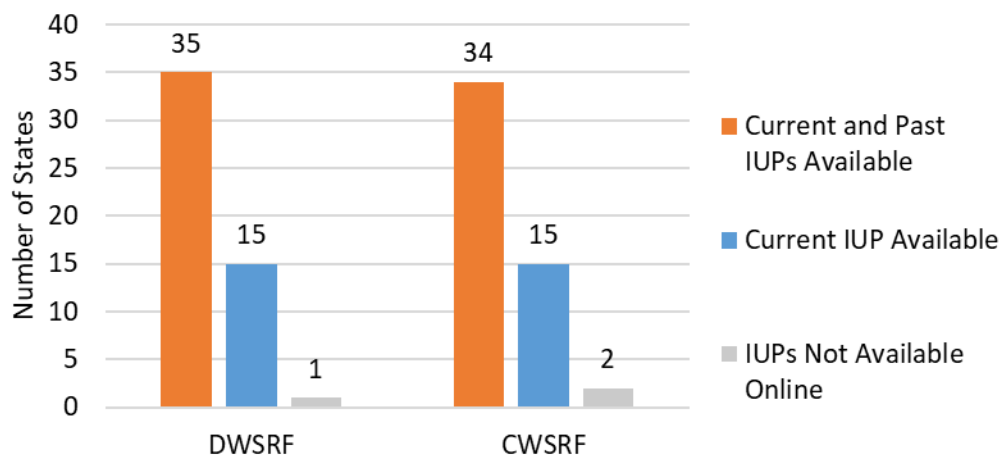


Figure 4. Online availability of CWSRF and DWSRF IUPs

#### Using the Terminology “State Revolving Fund” and Online Searchability

Most states used the term “State Revolving Fund” on their CWSRF and DWSRF websites. Forty-five state DWSRF programs and 42 state CWSRF programs used the term exclusively or in conjunction with another term on their website. Not using the term “State Revolving Fund” may make information about the programs more difficult to find.



### Information on the Public Comment Process

Per regulations, states are required to provide an opportunity for public comment on IUPs and include information about the public comment process in DWSRF<sup>4</sup> IUPs or submit information to the EPA with the CWSRF IUP<sup>5</sup>. Figure 5 shows most states provided information about the public comment process—such as how and when to comment—in both their IUPs and websites (11 for DWSRF and CWSRF) or in their IUPs (32 for DWSRF and 33 CWSRF).

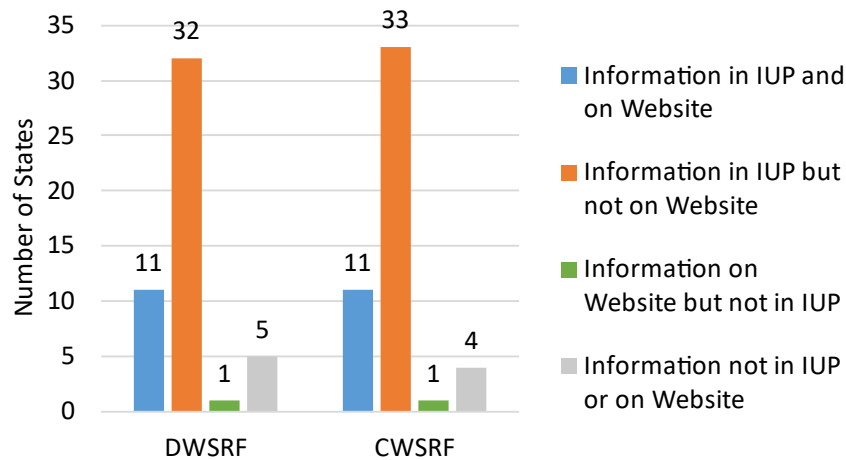


Figure 5: Availability of information about public comment dates and processes online and in IUPs.

### Multiple Ways to Provide Public Comment

There are multiple ways that the public could comment on IUPs, including during public meetings, via email, through an online form, or by physical mail. As shown in Figure 6, 15 DWSRF programs and 10 CWSRF programs had multiple ways to provide public comments according to their program websites when reviewed for analysis. However, since many states may not include information on the process outside the public comment period, it is important to note that the lack of information online may simply reflect the timing of this review rather than state practices on accepting comments.

<sup>4</sup> DWSRF: 40 CFR § 35.3555 Intended Use Plan (IUP). (b) Public review requirements. A State must seek meaningful public review and comment during the development of the IUP. A State must include a description of the public review process and an explanation of how it responded to major comments and concerns. If a State prepares separate IUPs (one for Fund monies and one for set-aside monies), the State must seek public review and comment during the development of each IUP.

CWSRF: 40 CFR §35.3150 Intended Use Plan (IUP). (a) Purpose. The State must prepare a plan identifying the intended uses of the funds in the SRF and describing how those uses support the goals of the SRF. This Intended Use Plan (IUP) must be prepared annually and must be subjected to public comment and review before being submitted to EPA.

<sup>5</sup> CWSRF: The 1988 Initial Guidance for [Clean Water] State Revolving Funds states that, “Submitted along with the IUP must be a summary of the procedures allowing public comment and review of the IUP and the results of that process.”

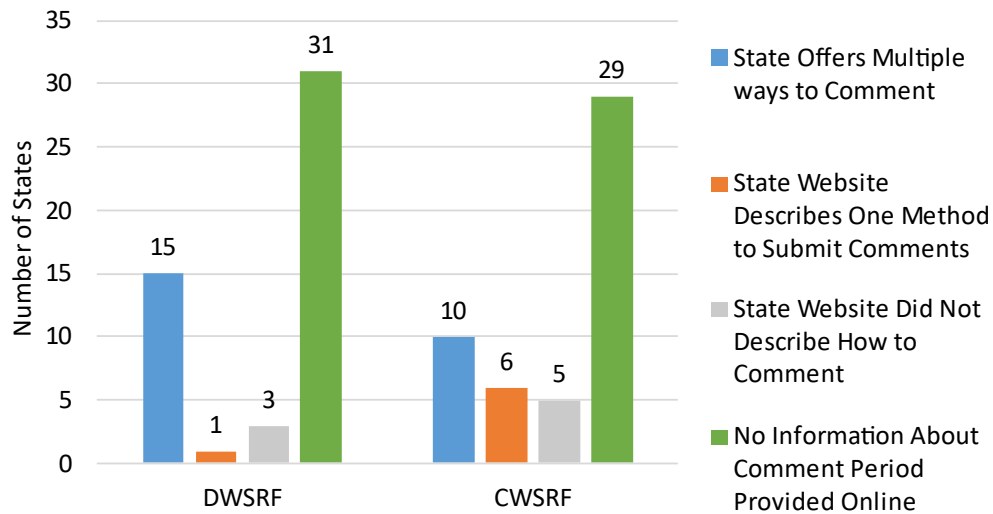


Figure 6. The number of program websites that specified multiple or single ways to comment on the IUP.

#### Public Comment Process: Receiving and Addressing Comments

DWSRF regulations and CWSRF guidance discuss how public comments should be addressed in IUPs.<sup>6</sup> As shown in Figure 7, about half of both programs (17 DWSRF IUPs and 23 CWSRF IUPs) provide information on the public comment process, the number received, or how these were addressed. The level of detail varied across states. Some states provided details about how the public comments affected the final IUP, which provides transparency and demonstrates a high degree of responsiveness. For example, North Carolina provides detailed responses to comments in their IUP (see page 10). About half of both programs (23 DWSRF IUPs and 20 CWSRF IUPs) did not include any information on public comment.

<sup>6</sup> **DWSRF:** 40 CFR § 35.3555 Ibid. **CWSRF:** Initial Guidance for [Clean Water] State Revolving Funds Ibid.

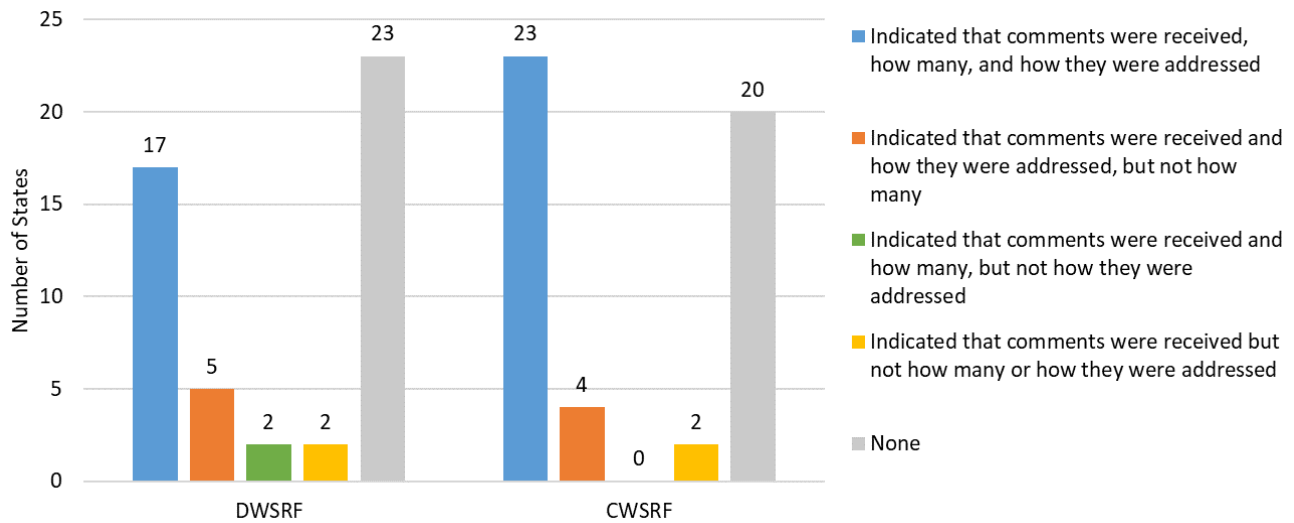


Figure 7. Number of state DWSRF and CWSRF IUPs that included information about the public comments received and how they were addressed.

### Good example: Level of Detail in North Carolina’s IUP on Public Comments

North Carolina’s DWSRF and CWSRF IUPs included 52 and 49 comments, respectively, and provided a detailed response to each. The CWSRF IUP describes their process as follows: *“Comments, questions and responses are below. The public comments and considerations for adjusting the Priority Rating System were presented to the Authority on July 14, 2022. The Authority voted to approve a final Priority Rating System for wastewater projects, as shown in this Intended Use Plan. Other edits in the Intended Use Plan based on public comments are noted below.”* For example, in response to the comment in the CWSRF IUP: *“does the 2022 BIL money...in the projected funds table include specific reserves for [EC] issues?”* North Carolina responded *“The table in Section 4 was unclear [and] now...identifies funds from the 2022 BIL [GS] allotment. Does not include...BIL [EC] funding.”*

## 2.2 Building the Pipeline of Projects

A sufficient pipeline of projects is necessary to obligate available SRF funds to secure water quality and public health benefits in communities through investment in infrastructure. With more funding from the BIL, states can increase the number of projects and the amount of assistance through the SRF. Key practices to build the pipeline of projects include offering financial assistance for pre-development and pre-construction and making the application process easier. The SRF BIL Implementation Memorandum includes several ideas to reduce the burden of applying for assistance, including more flexible timelines. These practices are especially helpful for DACs that may otherwise struggle to develop the designs and complete applications for SRFs.

### 2.2.1 Key Practices

The EPA reviewed three practices states employ to build a pipeline of projects:

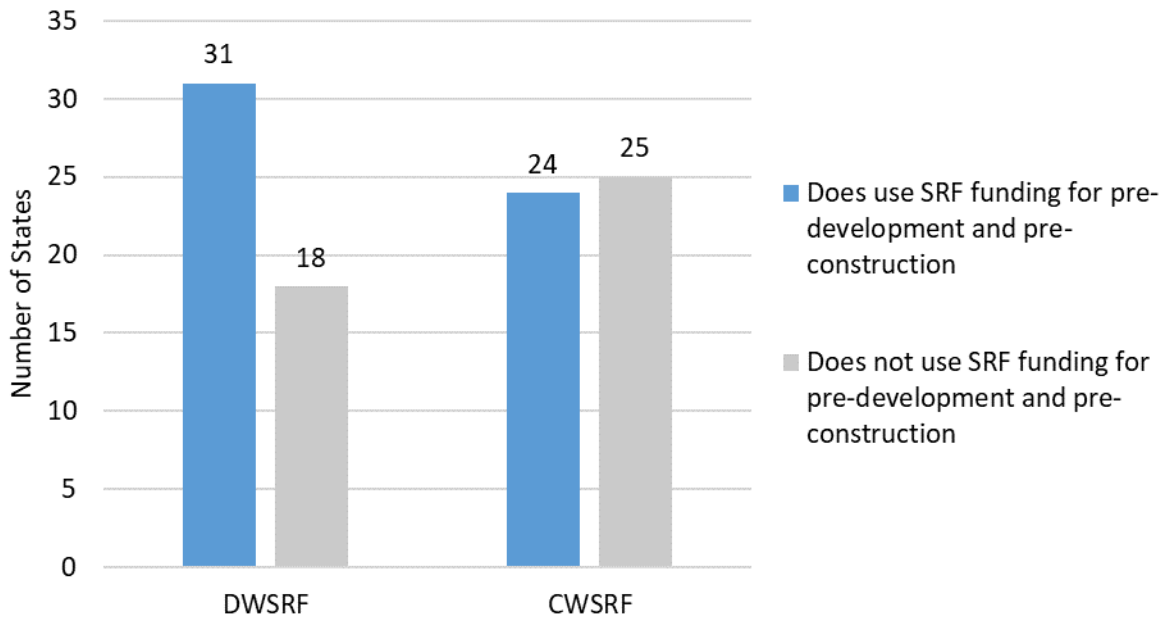
- The state offers pre-development and pre-construction funding to seed project development.

- The state accepts applications on a frequent basis (at least more than once per year).
- The state has updated its application process to reduce the burden of the loan application process.

### 2.2.2 Findings

#### *Pre-Development and Pre-Construction Funding*

The EPA encourages states to use funds strategically to further BIL priorities and help communities develop projects ready to proceed to construction. States can use loan funds, administrative fees, set-asides, and technical assistance funds for project development activities. Over half of DWSRF programs and nearly half of CWSRF programs describe the availability of funding for pre-project planning in their IUPs (Figure 8), where pre-development and pre-construction activities included engineering reports, design, and environmental reviews. Some states limited this assistance to small or disadvantaged communities while others offered this assistance to any eligible entity. Some states only offer pre-construction funding retroactively upon or in conjunction with a construction loan. While these activities are categorically eligible under the SRFs, most states did not indicate whether they provide funding for pre-development or pre-construction activities in their IUPs. However, it is important to note that states may support project development by other means that are not described in their IUPs.



*Figure 8. Number of states whose DWSRF and CWSRF IUPs specified use of pre-development and pre-construction funding to seed project development.*

#### *Information on the Application Process*

The EPA reviewed IUPs for information on states’ application processes. While many IUPs do not provide detailed information about how an applicant should apply for SRF funding, a few clearly explained how frequently applications would be reviewed and the IUP would be updated. Figure 9 shows the number of states with a rolling, quarterly, semi-annual, or annual schedule for accepting applications.<sup>7</sup>

<sup>7</sup> The application cycle was categorized as “undefined” for three DWSRF programs and one CWSRF program whose IUPs provided unclear, incomplete, or complex information about their application processes that did not allow for a clear answer to this question. For example, one state’s DWSRF IUP indicated that the due date depends on the “type of application,” and another state’s DWSRF IUP indicated that applications can be submitted during regularly scheduled board meetings.

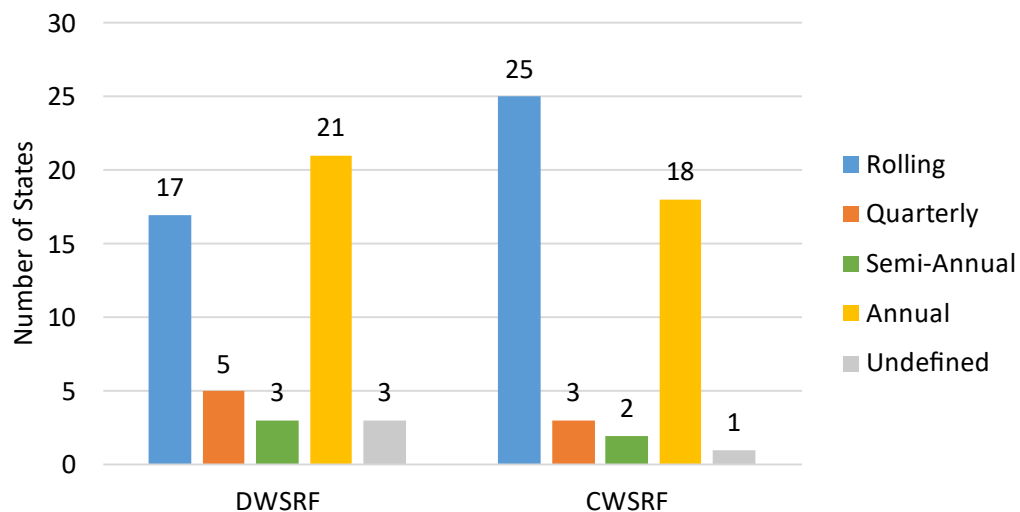


Figure 9. State funding application schedule as described in IUPs.

#### Updates to the Application Process or Policies to Reduce Burden of the Process

Five DWSRF IUPs and five CWSRF IUPs described improvements to their application processes, including plans to actively reach out to municipalities to provide application assistance, removal of some application requirements, and accepting applications on a rolling basis. It is important to note that many states had already taken steps to reduce the burden of their application process or were pursuing improvements not discussed in the IUP.

### 2.3 SRF Fund Utilization

Identifying projects and their estimated costs to utilize all funding available in the state’s SRF is critical. The metrics that characterize historical progress from loan signing through construction are also important. Under the SDWA §1452(b)(3)(B), states are required to include a list of projects eligible for DWSRF assistance and a fundable list of those that they expect will be assisted. Under the CWA §606(c)(1), states must list publicly owned treatment works construction projects that they intend to fund on a fundable list in their IUP. The states must also include in the IUP any nonpoint source projects and activities that the state expects to fund from its CWSRF. For both programs, the total amount of anticipated assistance for projects on the fundable list should be commensurate with all sources of funding available including the capitalization grant(s) for which the state has applied, state match, and all other sources of funds (i.e., principal and interest repayments, leveraged bond proceeds, etc.). Since the fundable list reflects a plan of projects the state intends to fund through its SRF program, it is important to note that the final list of projects funded within the following year can change as loans progress through the award process.

#### 2.3.1 Key Practices

The EPA reviewed four key practices to support fund utilization:

- The “sources” portion of the Sources and Uses table includes separate line items and values for all the program’s sources. At a minimum, each state program should list the following: SRF fund balance, base capitalization grant, BIL General Supplemental, LSL Supplemental (if applicable), EC Supplemental (if applicable), state match for applicable appropriations, and loan repayments.
- The total “uses” in the Sources and Uses table equals or exceeds the total “sources.”

- The total “uses” in the Sources and Uses table equals or exceeds the combined capitalization grants plus state match.
- The combined estimated funding amounts for projects on the fundable list equals or exceeds the total “uses” (less total set-asides in the DWSRF) in the Sources and Uses table.

For this analysis, each state program was considered in its entirety: the base appropriation, General Supplemental, EC, and LSL (for DWSRF) appropriations were reviewed together, regardless of whether they were in combined or separate IUPs. It is important to note that answering the above questions inherently involves some parsing, so the findings do not necessarily point to an underlying fund utilization issue. The organization, contents, and level of detail provided on program funds, uses, and fundable projects varied across states.<sup>8</sup> The differences in Sources and Uses tables likely reflect differences in program implementation and further highlight the limitations of a standardized analysis across non-standardized programs.

### 2.3.2 Findings

#### *Capturing All of the Program’s Sources in the Sources and Uses Tables*

There are statutory, regulatory, and policy requirements for states to identify the uses of all sources of funds in the SRF. While a table is not explicitly required under statutes and regulations, EPA, and state SRF program managers have found that a table format is the most efficient, effective, and transparent way to display SRF top-line “sources and uses” data. The majority of states (34 DWSRF and 36 CWSRF) had separate line items and values for all sources in their Sources and Uses table. The remaining states (nine DWSRF and eight CWSRF) grouped their state match, SRF program balance, or loan repayments in some combination that precluded further analysis. Over half (30 DWSRF and 32 CWSRF) of the programs clearly included the typically expected sources within their IUPs Sources and Uses table (Figure 10), including: SRF balance, base capitalization grant, BIL General Supplemental, LSL Supplemental (if applicable), EC Supplemental (if applicable), state match for applicable appropriations, and loan repayments.<sup>9</sup> The states that did not clearly itemize all expected fund sources often excluded the fund balance over from the previous year or state match.

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<sup>8</sup> Every state has a unique organizational structure and classification system and provided dissimilar information about program activities and project fundable lists. For example, Sources and Uses tables did not consistently separate out appropriations; Sources and Uses tables were sometimes combined, sometimes located pages apart from each other, and sometimes not in a table at all but were embedded in various locations throughout the text; and some project priority lists did not consistently include such basic information as the project cost and the appropriation under which each project was to be funded.

<sup>9</sup> This utilization analysis includes funding from base and BIL appropriations unless states did not include their base appropriation in their BIL-specific IUPs. For these states, the analysis answered questions based on the BIL appropriations. Two states did not include their base cap grant in their DWSRF or CWSRF BIL IUPs. A Sources and Uses table could not be identified in five DWSRF IUPs and four CWSRF IUPs, or the IUP included a table that was not organized in such a way to easily answer this question.

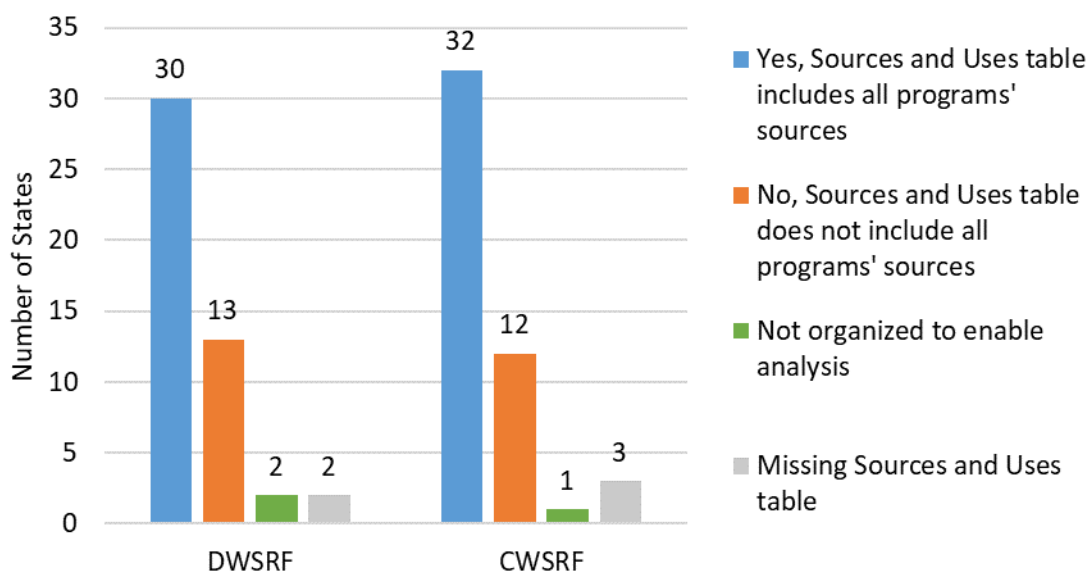


Figure 10. Number of states' DWSRF and CWSRF Sources and Uses tables that included all the programs' sources.

*Total "Uses" in the Sources and Uses Table Equal or Exceed the Total "Sources"*

EPA encourages states to plan for slightly more assistance than their sources to account for projects that may be delayed or dropped. As shown in Figure 11, overall, 28 DWSRF programs and 27 CWSRF programs planned their uses to either exceed or equal their available sources. Three DWSRF programs and two CWSRF programs planned their uses to be less than but within \$10 million<sup>10</sup> of their sources.<sup>11</sup> While sources of funds are fairly straightforward to accurately quantify, estimation of uses involves greater uncertainty. States employ different strategies to estimate their use of funds, ranging from estimates based on actual fundable projects to remaining funds after removing other planned uses. Since SRF programs only disburse funds after costs are incurred (typically months or years after loan signing), states can make loans based on cash available today in addition to anticipated future cash flows (e.g., from repayments and interest) in the near term. If uses are significantly below sources, programs will not utilize their funds efficiently and miss out on protecting public health and water quality.

<sup>10</sup> Sources and uses rarely, if ever, exactly equal each other. Ten million dollars was selected (roughly a medium size project) to gauge whether sources were "close" to uses or, if greater than \$10 million dollars, there was a significant shortfall.

<sup>11</sup> Eleven DWSRF and seven CWSRF programs' IUPs either lacked a Sources and Uses table or the information was not organized in a way that allowed for this comparison to be made.

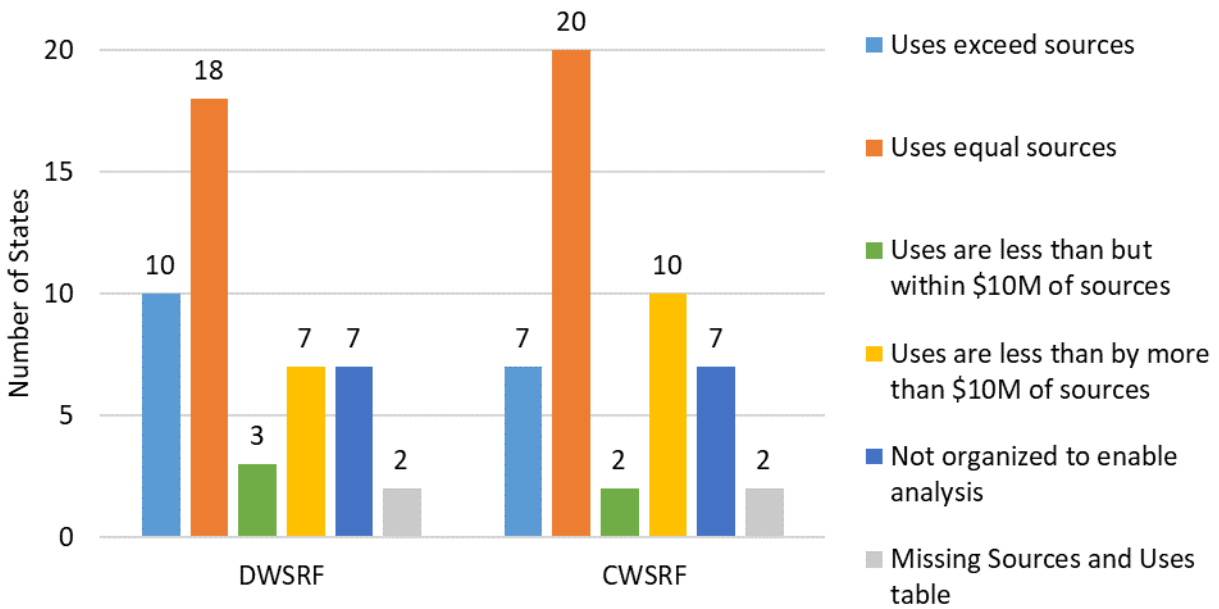


Figure 11. Comparison of state’s differences of the total uses from the total sources for DWSRF and CWSRF.

*Project Fundable List Amounts Equal or Exceed the Total “Uses” in the Sources and Uses Table*

As shown in Figure 12, 22 DWSRF and 22 CWSRF programs estimated total funding amounts for projects on the fundable lists equaled or exceeded the total uses (minus set-asides) listed in the Sources and Uses table. Eight DWSRF and 16 CWSRF programs listed total estimated funding amounts for projects on the fundable list that are less than the total uses (minus set-asides for DW).

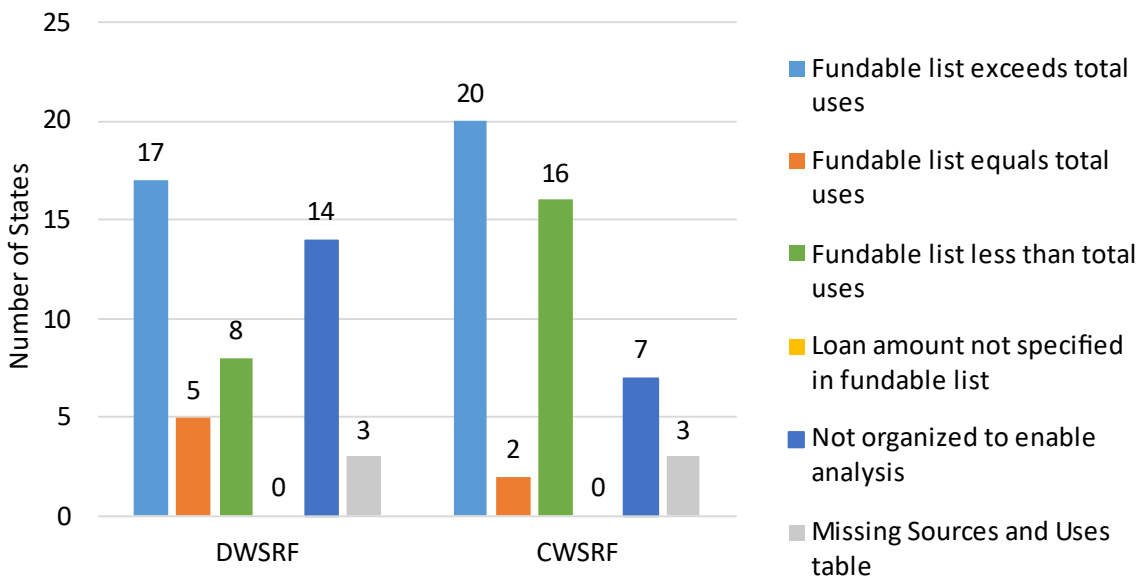


Figure 12. State’s total combined estimated funding amounts for DWSRF and CWSRF projects on the fundable list compared to the total uses (minus the total set-asides) in their Sources and Uses tables.



### 3 Increase Investment in Disadvantaged Communities

A primary goal of the BIL is to ensure that DACs benefit equitably from SRF assistance. Under the SDWA, each state defines what constitutes a disadvantaged community in their state. Similarly, under the CWA, each state establishes its own “affordability criteria,” based on income, unemployment, population trends, and other information deemed relevant. By these means, both the SDWA and CWA recognize the importance of addressing disparities and providing equitable access to clean, reliable, and affordable drinking water for communities, particularly those that are historically underserved or disadvantaged. For simplicity, this document uses “disadvantaged community,” or DAC, to refer to communities that meet either a state’s DWSRF DAC definition or a state’s CWSRF affordability criteria. DACs often include communities with environmental justice concerns, communities of color, or small, low-income, or indigenous communities. Disadvantaged communities across the United States—in urban, suburban, and rural areas—often face significant challenges and lack the resources to make investments to improve their water infrastructure.

To address disparities in access to safe, affordable water and wastewater services, the BIL mandates states allocate funds for DACs. For the DWSRF, 49 percent of DWSRF GS funding and the DWSRF LSL funding must be provided as grants and loan forgiveness to DACs. Similarly, all DWSRF EC funding must be awarded as grants and loan forgiveness, with at least 25 percent of these funds allocated to DACs or communities serving 25,000 or fewer people. For the CWSRF, 49 percent of funds from the CWSRF GS funding must be allocated as grants and loan forgiveness to three types of communities: those meeting the state’s affordability criteria; those not meeting the affordability criteria but seeking additional subsidy to benefit individual residential ratepayers; and those implementing processes, materials, techniques, or technologies that promote water or energy efficiency, mitigate stormwater runoff, or encourage sustainable project planning, design, and construction.

State DWSRF definitions of DAC or CWSRF affordability criteria can exclude some communities that need additional support. The EPA’s SRF BIL Implementation Memorandum identified examples of specific DAC definitions or affordability criteria that can pose potential barriers to DACs successfully accessing funding from SRFs, including:

- Definitions solely based or contingent upon an “unaffordable” rate, such as water utility rate-to-household income ratios, fail to account for other important dimensions of inequity.
- Definitions based solely on population or that include population as a determining factor can bias inclusion towards or against urban or rural communities. In the past, some definitions of DAC excluded more populous communities perhaps to focus on the challenges smaller communities face that make it difficult for them to fund infrastructure projects.

Even when they do meet DAC criteria, DACs face other barriers to access to SRF funding. The EPA recommends that states assess their priorities, policies, and practices to identify barriers and amend them accordingly. For example, the EPA recommends that states provide technical assistance to help DACs develop projects, give priority points to DACs while ranking projects, and/or offer additional subsidies to DACs to address some of these challenges. Additional subsidies are critical for increasing infrastructure funding for DACs that could not otherwise finance projects because of the debt burden. States can offer additional subsidization in the form of principal forgiveness, negative interest loans, and grants.<sup>12</sup> States that want to preserve the most flexibility for reaching all disadvantaged communities should avoid capping the amount of additional subsidy that can be awarded for a given project or recipient.

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<sup>12</sup> The SDWA requires DWSRF programs to provide between 12 and 35 percent of annual base capitalization grants as additional subsidy to communities qualifying as disadvantaged. Under the CWA, CWSRF programs must provide between 10 and 30 percent of the annual base capitalization grant as additional subsidy to specific communities or types of projects. In addition, annual Congressional appropriations frequently include further requirements for additional subsidy.

### 3.1.1 Key Practices

The EPA reviewed eleven key practices to make progress toward the goal of increasing investment in DACs:

- The fundable list identifies the DACs that will receive funding.
- The fundable list shows that 49 percent of the DWSRF GS and DWSRF LSLR funding is planned as grants and forgivable loans to DACs. (BIL requirement).
- The fundable list shows that 49 percent of funds provided through the CWSRF GS Funding is planned as grants and forgivable loans to communities meeting the specified assistance recipients or project types. (BIL requirement).
- The state has evaluated its DAC definition or is in the process of doing so.
- The state has modified how it defines DACs or affordability criteria.
- The DWSRF DAC definition is not based solely on community population size or density, an “unaffordable” rate, or project cost.
- The CWSRF affordability definition includes each of the following practices: income, unemployment data, and population trends.
- The state supports DACs or small systems through technical assistance.
- The state gives priority points to DACs in its project priority ranking list.
- The criteria for distribution of additional subsidy rely solely on meeting a DAC or affordability definition or using additional considerations to allocate additional subsidy, such as ranking or points systems, or those that assess levels of need.
- The presence and level of caps on the amount of additional subsidy that may go to each borrower or project.

### 3.1.2 Findings

#### *Identifying DACs Receiving Funding on the Fundable List*

Allocating additional assistance to DACs is a statutory requirement for both the CWSRF and DWSRF programs. About half of the fundable lists identified which projects served DACs. The analysis was limited when the IUPs (21 DWSRF-GS, 17 DWSRF-LSL, and 23 CWSRF-GS) either did not identify which applicants were DACs or did not provide the information necessary to answer the questions in the fundable list (Figure 13).

#### *Fundable List Displays 49 Percent of Funding Planned as Grants and Forgivable Loans to DACs*

Most states met the statutory requirement for dedicating 49 percent of funding as grants and forgivable loan funds to DACs according to the project priority lists. However, a handful of states did not identify sufficient funding for DACs to meet the requirements of the specific BIL appropriations (five DWSRF GS, four CWSRF GS, and four DWSRF LSL) in their fundable list (Figure 13).<sup>13</sup>

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<sup>13</sup> Two DWSRF GS IUPs and one CWSRF GS IUP did not include a fundable list for these appropriations. These states are categorized under “Other.”

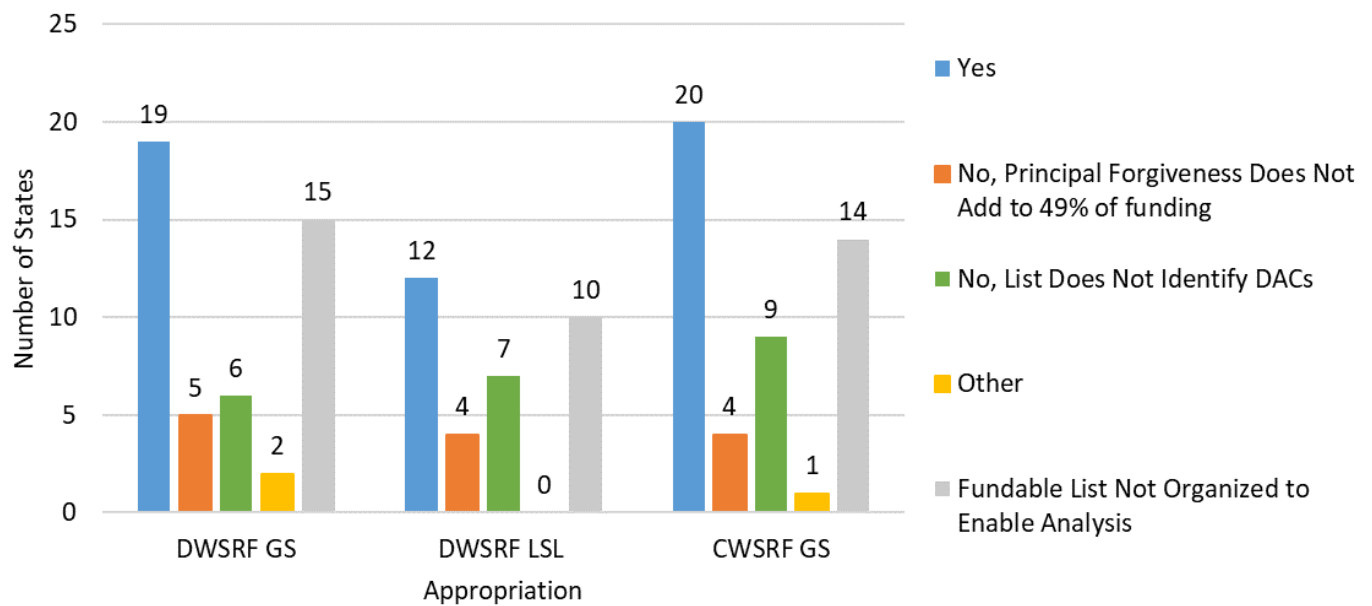


Figure 13. Number of states with fundable lists that indicate the state plans to meet the BIL requirements to distribute DWSRF or CWSRF funding to DACs as grants or principal forgiveness.

#### Evaluating and Revising DAC Definitions and Affordability Criteria

Most states (33 DWSRF and 26 CWSRF) indicated in their IUP that they evaluated their DAC definitions or affordability criteria. Of these, 29 DWSRF programs and 20 CWSRF programs revised their DAC definitions or affordability criteria in their FFY 2022 IUPs from those previously in use (Figure 14).<sup>14</sup> DWSRF programs commonly modified their DAC definitions by adjusting thresholds of existing metrics to be more inclusive of communities (e.g., raising the median household income (MHI) threshold or raising the size limit of the community served). Many programs also added new metrics to their definitions, typically socioeconomic measures such as MHI, the poverty rate, or the unemployment rate. One CWSRF program added a metric to categorically include all non-profit manufactured home communities. While the effect of these revisions will not be known until after they have been in place for several years, many could likely expand eligibility to more communities. Some states likely evaluated their DAC definition and decided it was sufficient and did not require revisions.

<sup>14</sup> Definitions of “disadvantaged community” in DWSRF IUPs were compared against definitions found in the previous years’ (FFY 2021) IUPs. Affordability criteria in the CWSRF IUPs were compared against criteria collected from available IUPs in January 2022, which would have likely predated the release of draft FFY 2022 IUPs.

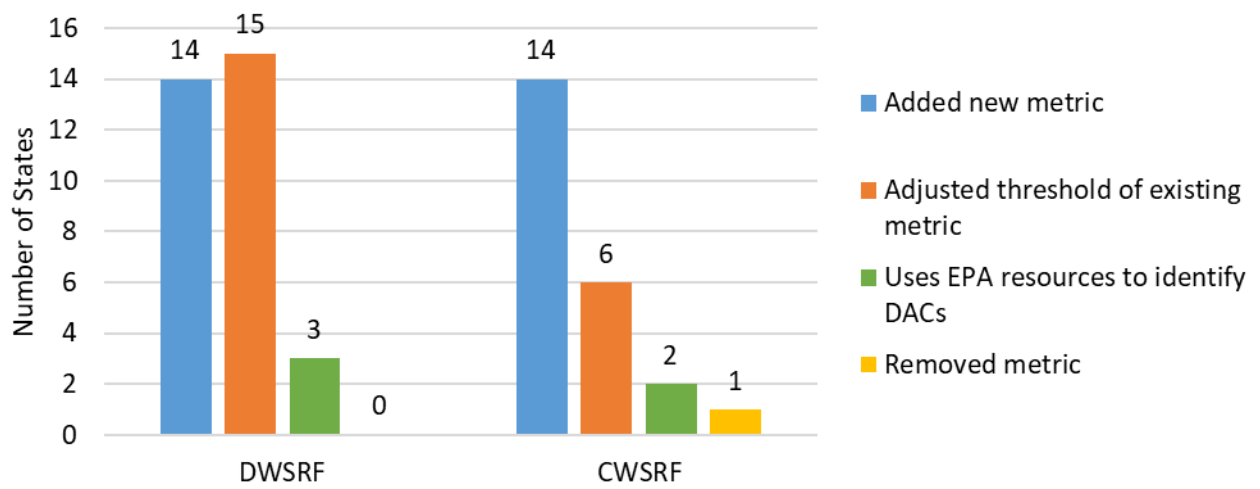


Figure 14. Types of revisions made to DAC definitions and affordability criteria in FFY 2022 DWSRF and CWSRF IUPs. Figures sum to more than 49 states because some states made more than one type of revision.

## Profiles of DWSRF Disadvantaged Community Definitions and Changes

### *North Carolina: Allowing Local Communities to Make the Case for Disadvantaged*

North Carolina revised its DAC definition from one that used multiple indicators benchmarked to statewide averages, to one that is not strictly defined and invites communities to argue for their inclusion based on consideration of a broad range of potentially relevant factors. The definition reads:

*The targeted project area will be determined a “disadvantaged area” based on factors that shall include affordability of water and sewer service rates relative to the income levels of residents in the disadvantaged area, median household income, poverty rates, property values, and/or employment rates .... Additional factors that may qualify the targeted project area as disadvantaged, such as but not limited to demographic, historical, cultural, linguistic, socioeconomic stressors, cost-of-living stressors, or existing contamination factors, may also be considered. **Applicants must provide a narrative in the application to justify the targeted project area as disadvantaged** using the factors above, and may use maps or other existing sources to document their justification. For example, applicants can demonstrate a targeted project area is a disadvantaged area if it falls within a Potentially Underserved Block Group or Tribal boundary layer in the North Carolina Department of Environmental Quality’s Community Mapping System, or similar state or federal maps. (emphasis added)*

A quantitative definition of “affordability” is retained, in addition to determination of DACs and non-viable systems, to distribute additional subsidy.

### *Ohio: A Specific Threshold in Combination with Other Criteria*

Ohio revised its definition from the FY2022 definition to adjust benchmarks and allow for three of four benchmarks to be met rather than all four. This change reduces exclusion of potential DACs that just miss the cutoff for one of the criteria.

*A disadvantaged community candidate is a Public Water System (PWS) serving less than 10,000 people, contains a nominated project with demonstrated health related factors and meets any three of four socio-economic benchmarks:*

*Socio-Economic benchmarks:*

- 1. Median Household Income (MHI) less than or equal to statewide average (program value  $\leq$  \$58,116)*
- 2. Individuals with income below 200 percent of poverty level greater than or equal to statewide average (program value  $\geq$  30.4 percent)*
- 3. Unemployment Rate greater than or equal to statewide average (program value  $\geq$  5.3 percent)*
- 4. Water and sewer rates compared to MHI greater than or equal to statewide benchmark (program value  $\geq$  2.5 percent)*

### *Kansas: New, More Expansive Definition*

Kansas’ revised DAC definition removed population as a limiting factor, added new metrics, and allows for a sub-community to qualify as a DAC rather than the entire water system area.

2021 definition: *[A]ny municipality that serves a population of 150 or less.*

2022 definition: *A public water supply system that serves a population of 150 or less...OR a municipal public water supply system that has a percentage of population that is below the poverty level which is equal to or greater than the state-wide percentage of population that is below the poverty level (11.4% of the statewide population is below the poverty level for the 2023 IUP)...OR a project area confined and benefiting specific census tracts that have a percentage of population that is below the poverty level which is equal to or greater than the state-wide percentage of population below the poverty level (11.4% of the statewide population is below the poverty level for the 2023 IUP).*

### Potential Barriers in DWSRF DAC Definitions

An analysis of the DWSRF DAC definitions in the FFY 2022 IUPs indicates that 41 states had DAC definitions that do not pose barriers to disadvantaged communities' access to programs, based on elements identified in the SRF BIL Implementation Memorandum. Eight states used definitions with one or more potential barriers including population size or density, an explicit "unaffordable" rate, or project costs as a sole or determining factor for whether a community would qualify as a DAC (Figure 15). Forty-three states used definitions that capture both urban and rural communities, with six states using definitions that capture only rural communities.<sup>15</sup> Seven states had more than one criterion in their definitions, but the definitions required that one or more potential barrier criteria be met in order to qualify as a disadvantaged community.

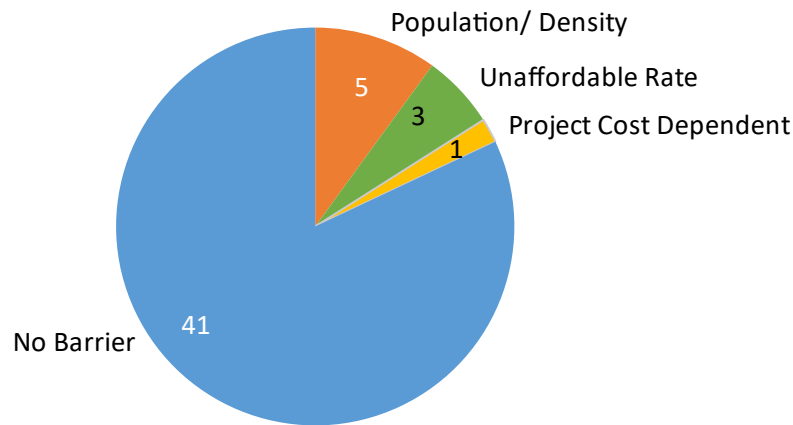


Figure 15. Number of DWSRF programs with a DAC definition that poses a potential barrier to disadvantaged communities, by type of barrier. Figures sum to more than 49 states because one definition included more than one barrier.

### Indicators Included in CWSRF Affordability Criteria

The EPA also reviewed each state's CWSRF affordability criteria to determine if they include the indicators of income, unemployment data, and population trends, as required by the CWA. Most states included each of those factors in their affordability criteria. However, five states did not include one or more of these indicators in their affordability definitions. Forty-six states used definitions that capture both rural and urban communities with only three states using definitions that capture only rural communities.

### Supporting DACs or Small Systems through Technical Assistance

Most states indicated in their IUPs that they will offer support to DACs and small systems through technical assistance. Forty-six DWSRF programs and 34 CWSRF programs specified that they planned to offer technical assistance to DACs and small systems. For the DWSRF programs, this technical assistance was predominantly funded through set-asides. Many CWSRF programs specifically indicated that they will be making use of the new two percent technical assistance allowance under their BIL and/or base allocation.

### Providing Priority Points to DACs in Project Priority Ranking List

A majority of DWSRF programs for all GS, LSL, and EC appropriations offered priority points to DACs or to communities that meet other affordability measures (Figure 16). CWSRF programs were not as likely to give priority points to projects for communities that meet their specific affordability definition or other affordability

<sup>15</sup> For both the DWSRF and CWSRF, states that used definitions that capture only rural communities typically did so by limiting eligible communities to populations of 10,000 or fewer people (4 DWSRF programs and 2 CWSRF programs). A few exceptions limited population specifically to numbers such as 3,300 or fewer.

measures, with 26 offering points under the GS and 16 under EC. About one-quarter of the CWSRF programs did not offer priority ranking for systems that meet their affordability definition or other affordability measures. The priority scoring system could not be found for some of the IUPs in both the DWSRF and CWSRF programs.

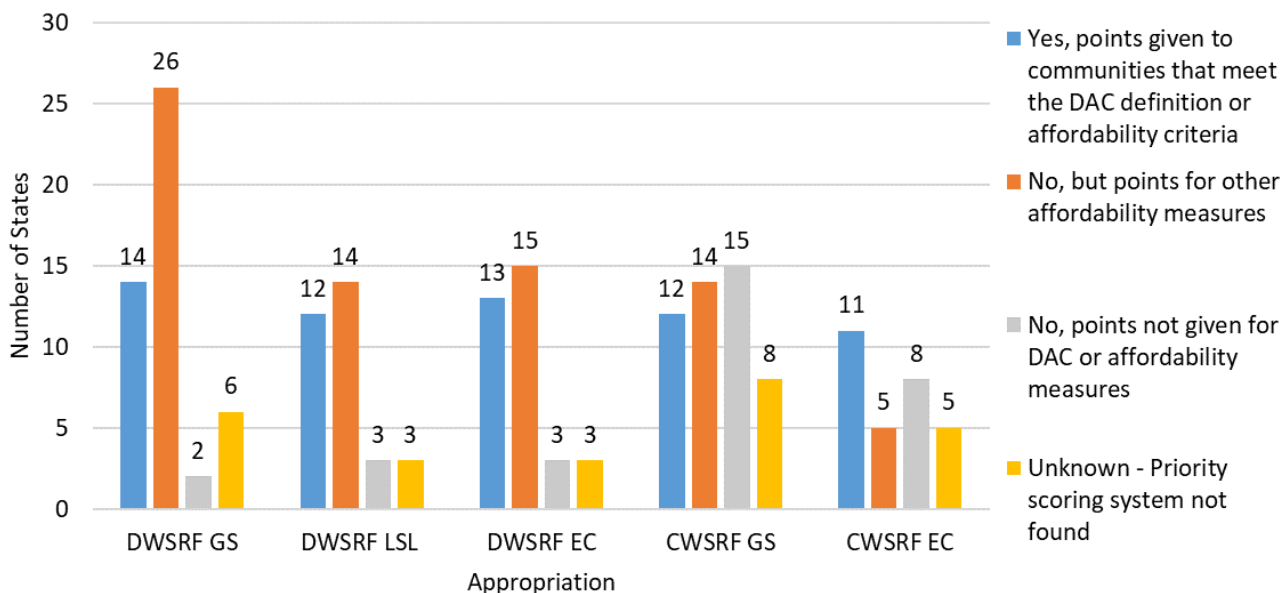


Figure 16. Number of states that give priority points to DACs or based on other affordability measures for the various DWSRF and CWSRF BIL appropriations.

#### Criteria for Distribution of Additional Subsidy

While the BIL appropriations impose some requirements on the awarding of additional subsidy, particularly for DWSRF programs, states still have significant discretion to determine how much and to which projects additional subsidy is awarded. SRF programs most commonly established distribution criteria to award additional subsidization to communities meeting their DAC or affordability definitions, with no further distinction. Sixteen states had criteria to award additional subsidization under the DWSRF-GS appropriation to DACs with no other criteria to prioritize communities, as did 21 states under the DWSRF-LSL appropriation and 22 states under the CWSRF-GS appropriation.<sup>16</sup> Many states used other criteria to make decisions about the distribution of principal forgiveness within a larger group of applicants who also met eligibility requirements for receiving the additional subsidy (e.g., typically, those that are DACs). In some cases, these criteria were embedded in the definition of a DAC (DAC definitions that include some tiering of levels of need or disadvantage), which can then be used to allocate different levels of forgiven principal (orange bars in Figure 17). In other cases, states had criteria to distribute principal forgiveness to communities that met their DAC or affordability definitions, but they used additional criteria, separate from the DAC definition, to prioritize communities or projects (green bars in Figure 17). These additional criteria frequently included affordability (for DWSRF programs), projects that address health risks, size of the community, and project type (often linked

<sup>16</sup> This analysis does not include DWSRF and CWSRF EC appropriations because BIL requires that states award these funds as 100 percent additional subsidy. Instead, these funds were examined based on overall eligibility requirements. Many states (21 DWSRF and 10 CWSRF) did not provide clarifying information about how they plan to distribute EC funds beyond meeting the BIL requirements for those funds. Other states provided some information about how they plan to award EC funds, but the information in the IUPs was difficult to interpret. Ten DWSRF IUPs and five CWSRF IUPs indicated they will award EC funding to only small communities or those that meet the DAC/affordability definitions. Two DWSRF IUPs indicated that projects that address PFAS (not exclusively DACs or small communities) are eligible for EC funding. Thirteen CWSRF IUPs indicated they will award EC funds based on eligible project types, including or exclusively PFAS.

to the state’s project priority list). Some states used a combination of tiered DAC or affordability criteria and other prioritizing criteria to award principal forgiveness (yellow bars in Figure 17). Finally, some states planned to award principal forgiveness to DACs or to communities or projects that met other specific criteria (dark blue bars in Figure 17).

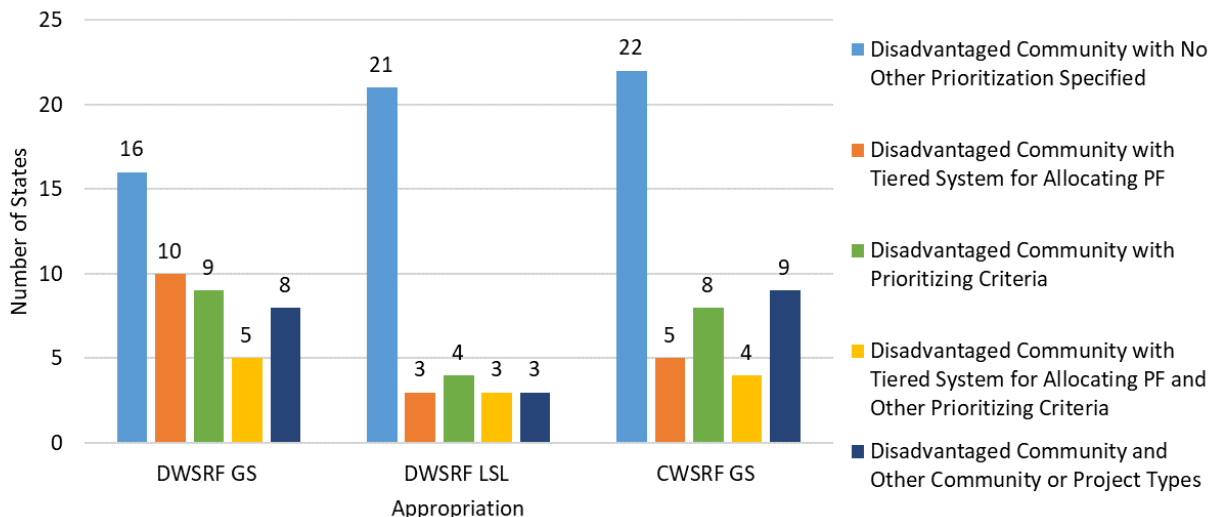


Figure 17. State criteria for distributing principal forgiveness (PF) for DWSRF GS, DWSRF LSL, and CWSRF GS.

#### Presence of Caps on the Amount of Additional Subsidy

It was common for SRF programs to cap the amount of additional subsidy awarded to a given applicant or project, as a percentage of project costs or an absolute value. State IUPs indicated that SRF programs impose caps on the amount of additional subsidy across the BIL appropriations, with the exception of the EC appropriations, which states must award as 100 percent additional subsidy. Figure 18 summarizes the use of caps on additional subsidy for borrowers meeting the DAC or affordability criteria under each relevant BIL appropriation. Most states placed a cap on additional subsidy. Typically, caps took the form of a dollar amount, which varies dramatically across states—from \$650,000 per assistance agreement on the low end, to \$25 million per assistance agreement on the high end. Twenty-two states placed a dollar cap (alone or in combination with another type of cap) on additional subsidization under the DWSRF GS appropriation, and nine states placed a cap as low as \$1 million or less (some states had different caps for different types of projects or applicant). Twenty-three states placed dollar caps on their CWSRF GS appropriation ranging from \$1 million to \$25 million. Five of these programs capped additional subsidization at \$1 million or lower. Several states placed low caps for specific project types, such as non-construction activities and back-up power, and higher or no caps were placed on other project types. States placed caps less frequently under the DWSRF LSL appropriation. Similar to the other programs, the dollar caps varied widely (\$100,000 to \$20 million). Less often, states limited additional subsidization to a percentage of the project cost or loan amount, ranging from 30 percent to 90 percent, but typically between 50 to 75 percent. Several states used a combination of factors to establish a cap on additional subsidization. These were typically the lesser of a dollar amount or percentage of the loan or project cost. In some cases, there was uncertainty in how states applied additional subsidization policies across appropriations. Reviewers documented additional subsidization policies based on the context of the discussion in the IUP.



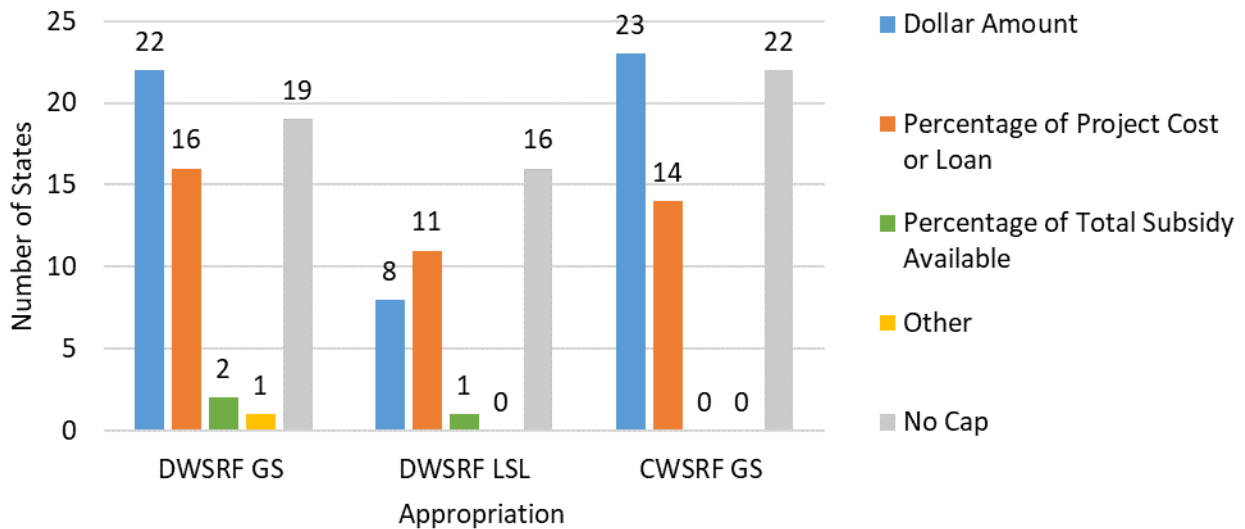


Figure 18: Number of states employing different types of caps on additional subsidization for individual assistance agreements going to DACs or communities meeting affordability criteria for DWSRF GS, DWSRF LSL, and CWSRF GS. Figures sum to more than 49 because some states use more than one type of cap.

#### 4 Support Resilience and One Water Innovation

Water, wastewater, and stormwater systems face threats due to climate change, natural disasters, bioterrorism, and cyber-attacks. The EPA strongly encourages the use of SRF funding for projects that build a system’s resiliency to all threats and hazards and incorporate a One Water approach to solutions. The One Water concept prioritizes the idea that all water has value. Projects that embrace One Water principles will consider how drinking water, wastewater, and stormwater systems interact and may impact each other. These principles are all critical to ensuring safe and abundant clean water for the future.

In its March 2022 SRF BIL Implementation Memorandum, the EPA encourages states to invest in project types that support resilience to threats and hazards, support climate adaptation, and drive toward energy efficient and climate- smart water systems. Resiliency, or the ability for a system to mitigate risk or recover quickly from events, can require significant planning and investment. Foresight is also important in the planning process due to new and emerging threats such as cyber-attacks, which is a growing concern as communities of all sizes switch to digital networks such as supervisory control and data acquisition (SCADA) systems. Climate adaptation is a critical step to ensure that water, wastewater, and stormwater systems can reliably deliver services far into the future. As emitters of methane, nitrous oxide, and other potent greenhouse gases as well as some of the largest energy users in their communities, water and wastewater systems can also have a significant positive impact by taking steps to mitigate climate change.

Actions such as new treatment systems, renewable energy, infrastructure relocation, nature-based solutions, cyber resilience, and consolidation are all eligible under the SRFs and can be undertaken as standalone projects or incorporated into projects with other primary objectives. For CWSRF, and previously under DWSRF, a portion of funding is required (to the extent there are sufficient eligible project applications) to go to projects qualifying as Green Project Reserve, which may include similar elements such as projects that help utilities adapt to climate change, adopt more sustainable solutions to wet weather flows, or reduce energy usage. States can also encourage regionalization, consolidation, or other types of partnerships that improve water quality and public health.

### 4.1.1 Key Practices

The EPA reviewed state IUPs for two key practices:

- The state offers incentives for projects that address climate change resilience, climate mitigation, or cyber resilience. Incentives may include priority points, additional subsidy, support funded through set-asides, and interest rate reductions.<sup>17</sup>
- The state encourages regionalization, partnerships, and nonphysical consolidation through the application process.

### 4.1.2 Findings

#### *Incentives for Projects Addressing Climate Change Resilience/Mitigation or Cyber Resilience*

The policies and practices described in most state IUPs did not often explicitly emphasize addressing resiliency or incorporating One Water concepts. However, some states offered incentives for projects that include climate change resiliency or mitigation, most commonly under the DWSRF and CWSRF GS appropriations (Figure 19). While less common, 24 states offered some type of cyber resiliency incentives (Figure 20).

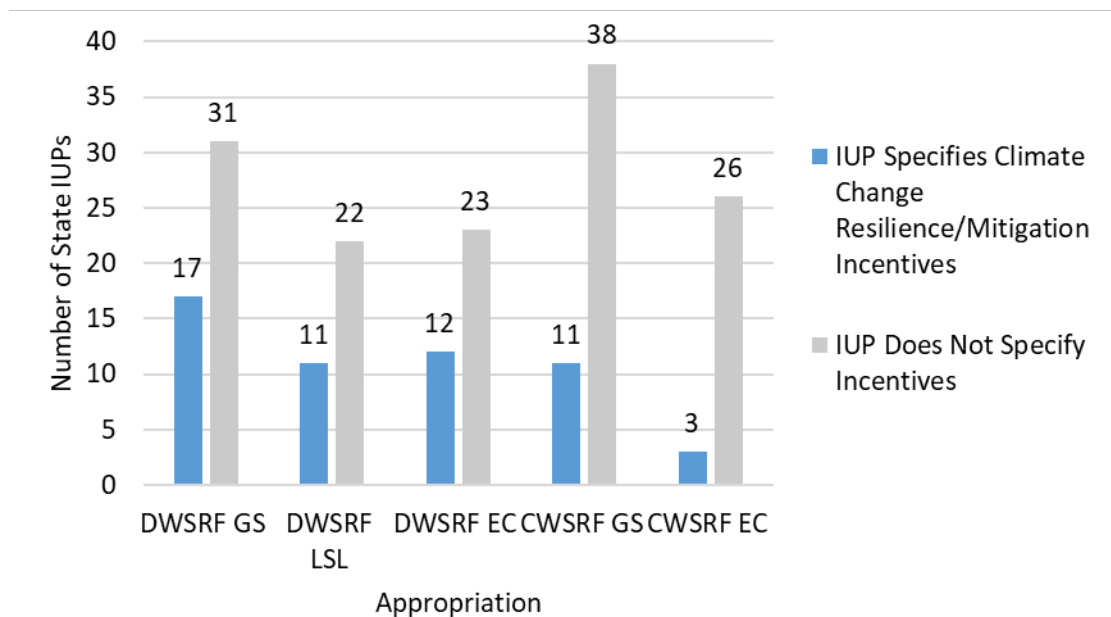


Figure 19: Number of state IUPs that specify incentives for climate change resilience or mitigation projects for the five DWSRF and CWSRF appropriations.

<sup>17</sup> Many states had separate incentives and approaches for funding NPS projects. This analysis does not evaluate states' approaches to incentivizing these types of projects.

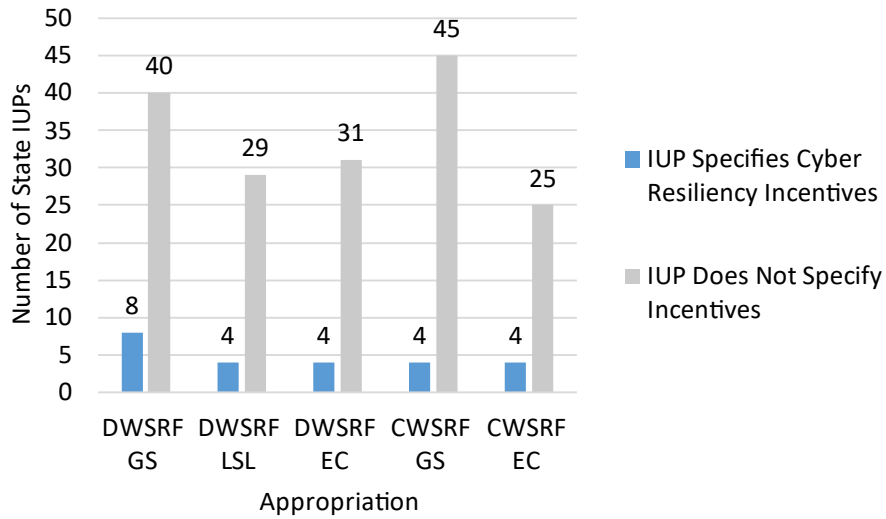


Figure 20: Number of state IUPs that specify incentives for cyber resiliency projects for the five DWSRF and CWSRF appropriations.

Among states that offered incentives for projects that promote climate change resiliency, climate mitigation, or cyber resiliency, it was most common for states to provide priority points to eligible projects. It was much less common for states to use financial incentives, such as additional subsidy or interest rate reduction, or set-aside funds to support projects that include climate change resiliency or mitigation, or cyber resiliency. Figure 21 summarizes the total number of each type of incentive states used across all appropriations. For example, both the Arkansas CWSRF and DWSRF offered a financial incentive for cyber resiliency by providing up to a 0.50 percent interest rate reduction for cybersecurity components.

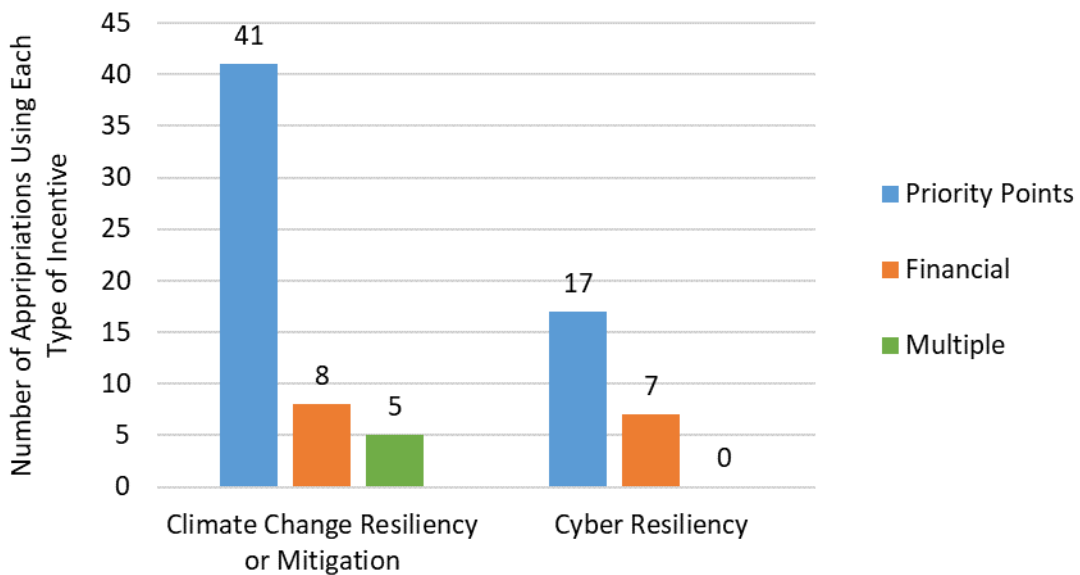


Figure 21: Types of incentives offered for climate change resiliency or mitigation projects and cyber resiliency projects across DWSRF and CWSRF BIL appropriations: General Supplemental, Emerging Contaminants, and Lead Service Line.

Climate change, cybersecurity, and One Water concepts are all complex and challenging issues spanning multiple domains of expertise. They require multi-pronged actions across a broad group of stakeholders over an extended timescale to be effectively addressed. There is no mandatory action state SRF programs must take, but the relative prevalence of incentives found in IUPs may reflect a positive level of engagement on these issues.

*Regionalization, Partnerships, and Nonphysical Consolidation*

Consolidation, regionalization, and other partnerships are tools for state SRF programs to build capacity in the long term while increasing sustainability in the face of climate change and other threats. Many states encouraged regionalization, partnerships, and nonphysical consolidation: over three-quarters of DWSRF programs (38) and over half of CWSRF programs (28) employ some form of incentive for these efforts. Ranking criteria that award points for such projects was the most common incentive (Figure 22). A small number of states offered financial incentives, such as lower interest rates and principal forgiveness. New York encourages regional solutions by asking the community to explain why a regional interconnection should not be pursued. Eleven DWSRF IUPs and 25 CWSRF IUPs did not include any incentives for these types of projects. Projects that advance partnerships are challenging and often require proactive support from SRF programs to be successful.

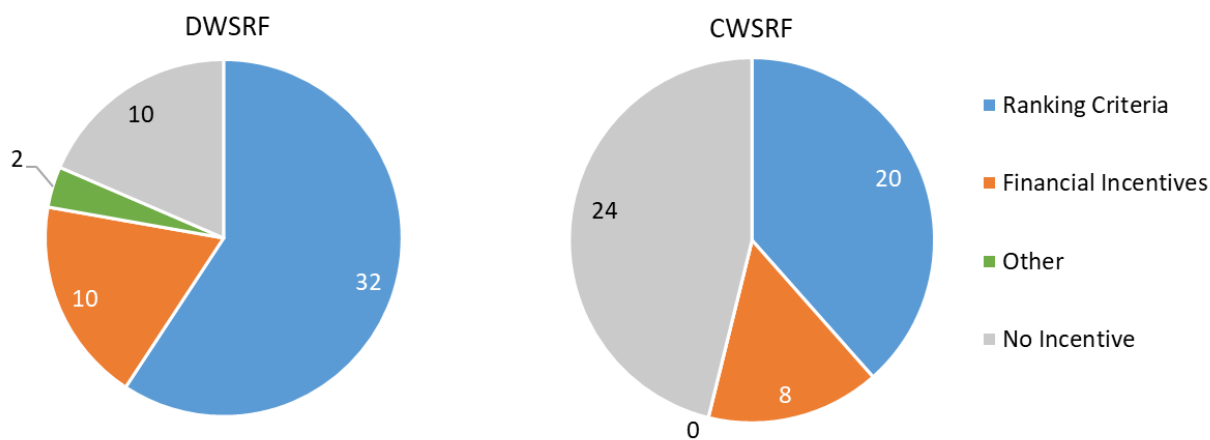


Figure 22. Number of states whose IUPs specified different types of incentives to encourage regionalization, partnerships, and nonphysical consolidation. Figures sum to more than 49 states because some states use multiple incentives.

*New York: Encouraging Partnerships by Changing Default Approaches*

Instead of using project ranking or financial incentives, New York’s DWSRF program takes a position that where interconnection can address the public health issue, it should be pursued. Loan applicants that decide not to pursue an interconnection alternative when it exists and would address the scope of the project with respect to its priority health ranking must provide a detailed justification demonstrating that the interconnection is a technically, financially, or managerially disadvantageous option. This justification must be found satisfactory to the New York Department of Health.

**5 Make Rapid Progress on Lead Service Line Replacement**

LSLs pose a significant challenge for communities across the country, both in terms of the direct human health effects and in the difficulty in locating, identifying, and replacing the large number of LSLs estimated to still be

in use. The requirements of the Lead and Copper Rule and its revisions aim to protect public health in part by requiring that systems identify and replace LSLs. The BIL appropriated \$15 billion through the DWSRF specifically for the identification and replacement of LSLs. This funding is provided to states without requiring any matching funds. The EPA collaborates with state SRF programs to facilitate the sharing of models and guidance and the development of state capacity to assist local communities in complying with the Lead and Copper Rule and achieving the objectives of the BIL, specifically, to ensure that LSL replacement funding is effectively and equitably deployed. The DWSRF base and general supplemental funding can also be utilized for LSL identification and replacement.

The Lead and Copper Rule Revisions require all water systems to complete initial inventories by October 16, 2024. However, the EPA encourages states to work closely with local water systems to complete LSL inventories sooner and recommends use of technical assistance funds to expedite inventory completion. While inventories are not required to be fully complete before replacement activities begin, doing so enables water systems to understand the extent of LSLs, identify appropriate sample locations for lead compliance monitoring, and develop effective plans for systematic and complete LSL removal.

The EPA further emphasizes the importance of full replacement rather than partial replacement of LSLs. With few exceptions, any project funded under the \$15 billion BIL appropriation for LSLR, as well as other BIL and base capitalization grant funding, must involve the replacement of the entire LSL (both public and privately-owned portions) unless a portion has already been replaced or is concurrently being replaced via another funding source. This requirement aims to address a long-standing equity challenge associated with replacement of privately-owned portions of LSLs and ensures that all residents benefit. States are urged to clearly communicate this requirement to potential applicants of the SRF program.

#### 5.1.1 Key Practices

The EPA reviewed state DWSRF IUPs for an indication of efforts to rapidly replace LSLs by identifying if:

- States plan to use set-asides or other funding to help water systems develop LSL inventories and undertake replacement planning.
- States have applied for and received their BIL LSL replacement grants.
- Fundable lists show that 49 percent of LSL funding is planned as grants or forgivable loans for DACs (BIL requirement).

#### 5.1.2 Findings

##### *Using Set-Asides or Other Funding to Develop LSL Inventories and Replacement Planning*

Some states (14) indicated that they planned to use funds other than the LSL appropriation to provide technical assistance to help water systems develop LSL inventories and undertake replacement planning. States were using a range of funds to support these activities, including the GS appropriation and base cap grant set-asides, and general corpus. For example, two states used local assistance set-aside funding, and three states used GS funding to provide assistance with developing LSL inventories.

##### *Applying for BIL LSL Grants and Fundable List Displays 49 Percent of Funding Planned as Grants or Forgivable Loans for DACs*

Many states (61 percent) applied for the FFY 2022 BIL LSLR grant. Of those, most were fully awarded the grant, three were partially awarded, and one state was conditionally awarded. Twelve DWSRF LSL programs identified in their fundable list that they planned to award 49 percent of funding to DACs as grants or forgivable loans. Eleven DWSRF programs either identified DACs but the funding identified as grants or forgivable loans does not add up to 49 percent, or they did not identify DACs. Some (10) fundable lists were not organized to enable analysis of this question.

## 6 Address PFAS and Other Emerging Contaminants

Emerging Contaminants (ECs) pose a growing concern as the understanding of their presence and potential human and environmental health effects continues to evolve. Emerging contaminants, such as pharmaceuticals, personal care products (PPCPs), pesticides, industrial chemicals, microplastics, and biological contaminants, have the potential to enter surface water and groundwater through various pathways such as runoff, wastewater discharge, or improper waste disposal.

PFAS are a group of synthetic chemicals known for their wide range of industrial and consumer applications, including non-stick coatings, firefighting foam, and water- and stain-resistant fabrics. PFAS have gained significant attention as contaminants, due to their persistence, mobility, and potential adverse effects on human health and the environment.

The BIL allocated \$5 billion through SRFs to mitigate exposure to PFAS and other ECs in drinking water and to address ECs in wastewater systems, nonpoint sources, groundwater, and surface water. This presents a unique opportunity to prioritize investment in local communities that are directly impacted by PFAS or other emerging contaminants and have limited options for financing solutions through traditional means. EC funds must be distributed to communities entirely as principal forgiveness or grants.

### 6.1.1 Key Practices

The EPA benchmarked state IUPs to assess states' planned efforts to support communities in addressing PFAS and other ECs. The review focused on whether:

- The fundable list shows that 25 percent of their DWSRF EC capitalization grant is planned as grants or forgivable loans to DACs or PWSs serving fewer than 25,000 people.<sup>18</sup>
- The IUP indicates the specific contaminants that funded projects address.
- The IUP indicates the state is funding PFAS projects.
- The IUP indicates the state has or intends to transfer EC funds between the CWSRF and DWSRF programs.

### 6.1.2 Findings

#### *The Portion of EC Cap Grants to DACs or Small Systems*

States provided varying degrees of information about DWSRF EC projects. If the state identified projects for small communities (<25,000) or DACs in their fundable list with a project cost, loan amount, or principal forgiveness amount that adds up to 25 percent of their DWSRF EC capitalization grant, this analysis considered this sufficient to demonstrate that they have identified projects to meet the 25 percent requirement. Thirty-three DWSRF programs prepared IUPs to enable them to receive their EC appropriations as of July 2023. Of these states, 31 indicated plans to award 25 percent of their EC capitalization grant as forgivable loans to qualifying communities through their fundable project lists. One state included two projects on its fundable list to meet the requirement to award 25 percent of the EC grant as principal forgiveness to small systems or DACs, but these did not add up to 25 percent of the capitalization grant. One state did not provide information on whether EC projects were in DACs or communities with populations below 25,000.

#### *Identifying Specific Contaminants the Funded Projects Address (PFAS vs Non-PFAS)*

Across both DWSRF and CWSRF programs, 44 IUPs (29 DWSRF and 15 CWSRF) specified the contaminants that the funded projects were addressing. Of the DWSRF IUPs that identified the specific contaminants addressed by specific projects in their fundable list, 23 included projects that specifically addressed PFAS (Figure 23). The relatively greater frequency with which DWSRF programs identified contaminants and PFAS specifically may be

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<sup>18</sup> BIL requirement for DWSRF; the EPA also encourages CWSRF programs to provide the additional subsidy to communities that meet the state's affordability criteria or that do not meet the criteria but seek the additional subsidy to benefit individual residential ratepayers, but does not recommend a specific percentage.

due to the stated focus the BIL DWSRF-EC funding placed on PFAS. It may also be due to the nature of drinking water treatment projects, which provide water for direct public consumption and consequently may be more likely to focus on specific individual contaminants. The project priority lists in six DWSRF EC and 14 CWSRF EC IUPs did not specify what contaminant would be addressed by the projects.

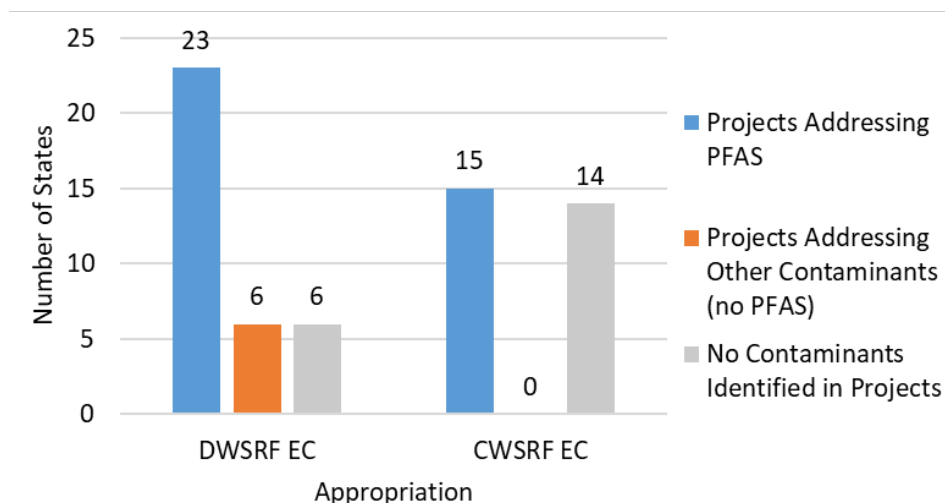


Figure 23: Contaminants addressed by proposed projects in IUP Fundable List for the Emerging Contaminants Cap Grants.

#### Transferring EC Funds Between CWSRF and DWSRF Programs

Thirteen programs indicated that states transferred funds between CWSRF and DWSRF programs. All but one transferred funds from the CWSRF to the DWSRF. This suggests a greater immediate need for EC funds to address drinking water; but does not necessarily reflect that there is no need to address it in wastewater and nonpoint source pollution. Many states may have emphasized drinking water because the presence of ECs in drinking water generates greater public concern, and the strategies through which ECs can be addressed in drinking water are predominantly undertaken by the utility (rather than, for example, an industry or landowner in the watershed), resulting in a relatively straightforward administrative process for applicants. In future years, states may increase their focus on ECs in wastewater, stormwater, and nonpoint sources.

## 7 Summary

This review provides insight into how state DWSRF and CWSRF programs planned to use funds appropriated under the BIL based on FFY 2022 IUPs and websites. While implementation plans vary, states took several steps to meet BIL requirements and priorities of the EPA’s SRF BIL Implementation Memorandum in the initial year of BIL implementation. These include:

- **Building the Pipeline of Projects:** The EPA’s March 2022 memorandum emphasizes the need to develop a robust pipeline of projects to assist through the SRF programs. Many states improved transparency and accessibility, provided pre-development and pre-construction funding to support project planning, and streamlined application processes.
- **Increasing Investment in Disadvantaged Communities:** A central objective of the BIL is the equitable distribution of financial assistance to DACs. This review shows that while most states have revised their DAC definitions and affordability criteria to be more inclusive, barriers to access remain. The review highlights different approaches to distributing additional subsidies, with many states effectively employing practices to ensure assistance reaches the most vulnerable.
- **Supporting Resilience and One Water Innovation:** The significant funding increase under the BIL is intended to enhance resilience to an array of threats, including climate change, natural disasters,

bioterrorism, and cyber-attacks. The review shows that several states incorporated this priority into their SRF programs by offering priority points for projects that address these risks. However, the use of financial incentives for these projects remains limited. Some states are adopting a One Water approach and encouraging regionalization and partnerships to build sustainability.

- **Making Rapid Progress on Lead Service Line Replacement (LSLR):** The BIL's \$15 billion allocation for LSLR represents a significant step toward mitigating the public health risks associated with lead exposure. The review shows state are making good progress to utilize these funds for developing LSL inventories and replacement plans as well as allocating 49 percent of LSLR funding as grants or forgivable loans to DACs.
- **Addressing Per- and Polyfluoroalkyl Substances (PFAS) and Emerging Contaminants (ECs):** PFAS and other emerging contaminants pose an increasing challenge. The BIL allocates \$5 billion to reduce human exposure to these contaminants. The review shows states planned to allocate 25% of EC capitalization grants as grants or forgivable loans to DACs or small public water systems, with a focus on affordability for communities at risk.

Overall, the review provides valuable insights on SRF implementation and progress toward the strategic priorities outlined in the EPA's memorandum in the initial year of BIL. Because the review was based on publicly available information in IUPs and on states' websites, the insights are limited to information that could be found in these resources. While the review does not fully reflect states' activities to meet BIL requirements and the EPA's priorities, it does identify substantial progress and potential opportunities to further the impact of SRF programs in addressing water quality challenges and protecting public health.

This review is important to support continued conversation between the EPA and state SRF programs. The EPA will use this information during conversations with states to ensure the statutory requirements are met as well as determine additional resources the EPA can provide to support states in focusing on the priorities set in program guidance for both BIL and non-BIL SRF dollars.