State Water Resources Control Board

It Lacks the Urgency Necessary to Ensure That Failing Water Systems Receive Needed Assistance in a Timely Manner

July 2022
Dear Governor and Legislative Leaders:

Our audit of the State Water Resources Control Board (State Water Board) focused on the board’s efforts to help provide Californians with safe drinking water. Nearly a million Californians face possible long-term, negative health outcomes—including an increased risk of liver and kidney problems, as well as cancer—because they receive unsafe drinking water from a failing water system. The State Water Board reported that more than 370 such systems, providing water to more than 920,000 people, were not meeting water quality standards as of December 2021. More than two-thirds of these systems are located in disadvantaged communities with significant financial need.

The State Water Board has funding available to help these failing systems improve the quality of their drinking water. Nonetheless, the board has generally demonstrated a lack of urgency in providing this critical assistance. In fact, the time necessary for water systems to complete applications for funding and for the State Water Board to approve and award that funding nearly doubled from 17 months in 2017 to 33 months in 2021.

The State Water Board’s lack of goals and metrics for its application process has likely contributed to this lengthening time frame and has inhibited the board’s ability to identify aspects of its review process that it could improve. The longer the board takes to fund projects, the more expensive those projects become. More importantly, delays increase the likelihood of negative health outcomes for Californians served by the failing water systems.

Because failing water systems often lack the expertise to plan and implement water improvement projects, the State Water Board provides them access to contracted technical assistance providers. However, it has yet to implement metrics to gauge the overall performance of these providers and to ensure that the water systems receive timely assistance. Further, the board needs to develop a plan to ensure that its staff and its contracted providers do not duplicate their outreach efforts, thus wasting limited resources.

Respectfully submitted,

MICHAEL S. TILDEN, CPA
Acting California State Auditor
## Selected Abbreviations Used in This Report

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWSRF</td>
<td>Safe Drinking Water State Revolving Fund</td>
</tr>
<tr>
<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
</tr>
<tr>
<td>MCL</td>
<td>maximum contaminant levels</td>
</tr>
<tr>
<td>SADW</td>
<td>Safe and Affordable Drinking Water</td>
</tr>
<tr>
<td>SAFER</td>
<td>Safe and Affordable Funding for Equity and Resilience program</td>
</tr>
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Summary

Results in Brief

California is one of the most prosperous states in the country, and yet, fundamental inequities still exist, including access to safe drinking water. In fact, nearly a million Californians lack access to safe drinking water because they receive water from systems that do not meet water quality standards. The State Water Resources Control Board (State Water Board) regulates the operation of roughly 7,400 drinking water systems throughout the State and disburses federal and state assistance to help them improve their water quality. As of December 2021, the State Water Board reported that more than 370 water systems were classified as failing water systems because they exceeded the maximum contaminant levels for safe drinking water. These failing water systems provide water to more than 920,000 people. Nearly 240 of these water systems have been failing for at least three years, and more than 150 have been failing for five years. Further, for 2022, the State Water Board’s data show that an additional 432 water systems serving more than 1 million people are at risk of failing.

The State Water Board has demonstrated a lack of urgency to provide needed assistance to failing water systems. The State Water Board provides funding and other assistance to water systems for drinking water projects that address or prevent public health risks. However, over the last five years, the average amount of time it took for water systems to complete their applications for these funds, and then for the State Water Board to review them and award funding, has nearly doubled from an average of 17 months in 2017 to 33 months in 2021. A key reason for this trend is that in recent years, because of a change in state law, the State Water Board’s focus has shifted to helping smaller, potentially less sophisticated, water systems. According to State Water Board staff, working with a greater number of smaller water systems has increased its application processing times. Even so, our survey of water systems and observations from our review of a selection of applications indicate that the State Water Board’s cumbersome application process, and its lack of sufficient communication and follow-up with water systems, are also contributing factors to funding delays. Further, the State Water Board has no performance goals or metrics for measuring and improving its processes for reviewing applications and executing final project plans and agreements in a timely manner. The longer the State Water Board takes to fund projects, the more expensive the projects become and, more importantly, the greater the likelihood of negative health outcomes for Californians served by failing water systems.

Audit Highlights . . .

Our audit of the State Water Board’s efforts to help provide Californians with safe drinking water highlighted the following:

» More than 370 of the State’s water systems, serving nearly a million Californians, exceed the maximum contaminant levels for substances that are harmful to human health.
  • More than 150 of these systems have been failing for at least five years.
  • Hundreds of additional water systems are currently at risk of failing.

» The State Water Board has not prioritized the processing of water systems’ funding applications so that the systems can improve their water quality.
  • Over the past five years, the average length of time for water systems to complete their applications and receive funding nearly doubled, from 17 months to 33 months.
  • The State Water Board has not established performance goals or metrics related to its cumbersome application process.

» Although the State Water Board provides water systems with technical assistance to plan their improvements and apply for funds, it has not adequately monitored the performance of the technical assistance providers with which it contracts.

» The State Water Board needs to better ensure that its staff and its contracted providers do not duplicate each other’s outreach efforts.
Because failing water systems often lack the technical expertise to plan and implement water improvement projects, the State Water Board offers access to technical assistance providers that provide project development and assistance with funding applications, among other services. However, the State Water Board does not sufficiently monitor the performance of its providers or track which providers can take on additional assignments. For example, the State Water Board assigned a high-priority technical assistance project for South Kern Mutual Water Company to one of its providers in December 2019. However, the State Water Board did not recognize until 10 months later that the provider had not performed work on the project, and eventually the State Water Board had to assign the project to another provider. Implementing measures to gauge technical assistance providers’ workload and performance would help the State Water Board ensure that failing water systems are receiving needed assistance in a timely manner.

The State Water Board is making efforts to implement outreach programs to water systems and the public to help ensure that they are aware of concerns with their drinking water and are informed of assistance the State may provide if their systems need financial or technical assistance. For instance, in March 2022, the State Water Board completed an outreach strategy that focuses on improving community engagement to help failing water systems return to compliance. However, as the State Water Board increases its outreach efforts, it needs to better ensure that its efforts are efficient. For example, although it contracted with one of its technical assistance providers for more than $9 million to conduct outreach to water systems at risk of failing, the provider conducted outreach to several water systems that were already receiving technical assistance, thus duplicating the efforts of other technical assistance providers. The State Water Board agreed that it will amend the agreement with the provider to ensure that the provider does not waste time conducting outreach to water systems already receiving technical assistance.

Agency Comments

Although the State Water Board disagreed with certain report conclusions, it generally agreed with our recommendations and stated it would work to implement them.
Recommendations

The following are the recommendations we made as a result of our audit. Descriptions of the findings and conclusions that led to these recommendations can be found in the Audit Results section of this report.

Legislature

To provide transparency and accountability in the State Water Board’s efforts to assist failing water systems, the Legislature should amend state law to require the State Water Board by June 2023 to include its timeliness goals and its performance in comparison to those goals in the annual expenditure plans and reports it already submits to the Legislature. The Legislature should also require the State Water Board to include in those reports a list of drinking water project applications that have exceeded the board’s timeliness goals and a brief description of the reasons for delays, its strategies for overcoming those delays, and its estimated time to execute funding agreements.

State Water Board

To minimize the prolonged periods during which Californians suffer without safe drinking water, the State Water Board should do the following by January 2023:

- Streamline its application process by eliminating the need to submit unnecessary application documents and financial information.

- Review and revise its credit review process, including the creation of a limited credit review process for grant-funded projects.

- Develop a process to fast-track urgent water projects, particularly for failing water systems affecting a large number of people or serving a disadvantaged community. One option for doing so would be to use state-only funding that is not subject to federal requirements.

- Establish expectations for how quickly its staff will review initial applications, communicate to water systems about the need for additional information or revisions, and wait for water systems to respond before reaching out to determine the cause of application delays. In addition, the State Water Board should document and measure staff adherence to these expectations and make adjustments to its review and communication processes as necessary.
• Establish and implement a process for project managers and staff to document their communications with water systems.

• Develop metrics and performance benchmarks for key phases of the application and funding processes, including the number of days it should take to execute a funding agreement after it receives a complete application. It should also review recent past applications in light of these new metrics to identify common reasons for delays—including an increase in consolidation projects—and develop processes to overcome these delays.

• Determine whether to change the way it assigns staff to projects, including whether to dedicate staff to working only on applications or on monitoring projects under construction.

• Obtain input from its advisory group on the development and execution of staff expectations, metrics, and benchmarks related to its application and funding processes.

To increase transparency in the funding process and make its online search tool more useful to water systems applying for funding, by January 2023 the State Water Board should update its online search tool for funding applications to include the following:

• A description of the additional information the State Water Board needs from the water system to continue processing its application.

• Any deadlines the State Water Board has issued to the water system to provide additional information.

• The cause of any prolonged delays in the process, including the need for reviews by external parties.

• The date the State Water Board expects to complete its reviews and award funding to the water system.

To ensure that it has sufficient staff to process funding applications in a timely manner, by July 2023 the State Water Board should evaluate its progress in meeting its performance goals and assess whether its current staffing levels are sufficient. If the State Water Board finds that it needs additional staff to meet its goals or to prevent a backlog of applications, it should request additional funding from the Legislature to meet its staffing needs.

To ensure that it effectively manages technical assistance projects and oversees technical assistance providers’ performance, by January 2023 the State Water Board should establish performance metrics and time frames for its review of technical assistance
providers’ deliverables to verify that the providers have addressed water systems’ needs in an appropriate and timely manner. The State Water Board should include its metrics and performance expectations in all of its technical assistance provider agreements.

To ensure that it is maximizing the number of water systems that are aware of available technical assistance and funding options, including failing water systems and water systems serving disadvantaged communities, the State Water Board should immediately amend the contract with its current outreach provider to coordinate with the State Water Board to ensure that the provider does not work with systems already receiving technical assistance. The State Water Board should also develop a plan by January 2023 to avoid future outreach work that duplicates the efforts of its providers or of its staff.

To address the funding gap identified in its needs assessment report, the State Water Board should immediately work with the Legislature, and with federal agencies to the extent possible, to request the resources necessary to ensure that water systems can meet drinking water standards, including repairing or improving water treatment technologies, consolidating water systems, and providing technical assistance.
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Introduction

Background

State law established a policy in 2013 that every person has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (safe drinking water). In 2014 state law transferred the responsibility for administering safe drinking water programs from the California Department of Public Health to the State Water Resources Control Board (State Water Board). The State Water Board’s mission is, in part, to enhance the quality of California’s water resources and drinking water and to ensure proper water resource allocation and efficient use. The State Water Board consists of five board members, each appointed to a four-year term by the Governor and confirmed by the Senate. Additionally, there are nine regional water quality control boards, each of which consists of seven members also appointed by the Governor and confirmed by the Senate. Along with its regional board offices, the State Water Board had approximately 2,500 authorized positions for fiscal year 2021–22.

California’s drinking water comes from surface water, such as rivers, or water obtained from underground. Households receive their water from different types of water systems, as described in the text box. Public water systems, most often supplied by surface water or groundwater, generally provide drinking water to large cities, regional water suppliers, small housing communities, businesses, and schools, among other customers. In contrast, some residents, typically single-family homeowners, may receive drinking water from domestic wells supplied by groundwater.

Federal and State Water Quality Standards

The State Water Board’s Division of Drinking Water implements and enforces the federal and state Safe Drinking Water Acts, monitors drinking water quality, and issues permits to the roughly 7,400 public water systems throughout the State. The State Water Board establishes maximum contaminant levels (MCLs) for more than 100 substances that are harmful to human health. It must set these MCLs at levels that are at least as stringent as those adopted by the U.S. Environmental Protection Agency (EPA) and must
review its MCLs at least every five years to account for changes in technology or treatment techniques that permit materially greater protection of public health, or new scientific evidence that indicates that substances may present a materially different risk to public health than was previously determined. The State Water Board set the current MCLs in 2018 and expects to update them in early 2023.

Federal and state laws require public water systems to annually report on the level of contaminants in the drinking water. These water systems must notify their consumers and the State Water Board when their drinking water has exceeded any of the MCLs. This notification must include a clear and understandable explanation of the nature of the contaminant, its potential adverse health effects, steps that the water system is taking to correct the violation, and whether alternative water supplies should be used. The Division of Drinking Water’s 25 district offices monitor public water systems’ compliance with drinking water standards by reviewing and evaluating analytical results of the water samples collected by the water systems. When a water system exceeds MCL standards, the Division of Drinking Water may take enforcement actions, including fines if necessary.

Californians who rely on drinking water systems that exceed MCLs are at risk for serious health complications. Figure 1 shows common contaminants cited in the State Water Board’s 2020 Annual Compliance Report and the risk those contaminants may pose from long-term exposure. For example, the report identified that 70 public water systems exceeded the MCLs for arsenic, which can cause skin damage or circulatory issues and may increase an individual’s risk of cancer. Another commonly found contaminant in water is nitrate, which can result from fertilizer or sewage runoff and is particularly dangerous for infants under 6 months of age.

California is experiencing a historic drought across the State, which led the Governor to proclaim a statewide state of emergency in October 2021 and issue an executive order in March 2022 ordering state agencies to draft proposals for mitigating the effects of the drought. Over time, droughts will lower the level of water in reservoirs and groundwater basins. A study by the U.S. Geological Survey concluded that a reduction in the level of groundwater is associated with worsening groundwater quality. The study found that contaminants present due to agricultural activity in California’s Central Valley have penetrated to depths commonly accessed for public drinking water. During drought conditions, precipitation is often not sufficient to maintain water levels and meet demand. These drought conditions can increase the rate at which contaminated surface water is drawn down to levels accessed for public drinking water, further reducing water quality levels.


<table>
<thead>
<tr>
<th>Common Contaminants in Drinking Water and Their Sources</th>
<th>Potential Health Effects From Long-Term Exposure Above the MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nitrate</strong>: Runoff from fertilizer use or sewage; erosion of natural deposits</td>
<td>- Infants could become seriously ill and, if untreated, may die</td>
</tr>
</tbody>
</table>
| **Arsenic**: Erosion of natural deposits, runoff from orchards or glass and electronics production wastes | - Skin damage  
- Circulatory problems  
- Increased risk of cancer |
| **Combined uranium**: Runoff from fertilizer use or sewage; erosion of natural deposits | - Increased risk of cancer  
- Kidney toxicity |
| **Total trihalomethanes**: Runoff from fertilizer use or sewage; erosion of natural deposits | - Liver and kidney problems  
- Central nervous system problems  
- Increased risk of cancer |
| **Total haloacetic acids**: Runoff from fertilizer use or sewage; erosion of natural deposits | - Increased risk of cancer |
| **Fluoride**: Water additive that, at safe levels, promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories | - Bone disease (pain and tenderness of the bones)  
- Children may get mottled teeth |
| **Microbiological contaminants**: Human and animal fecal waste | - Short-term effects: Gastrointestinal illness, such as diarrhea, vomiting, and cramps  
- Legionnaire’s Disease, a type of pneumonia |
| **E. coli**: Human and animal fecal waste | - Short-term effects: Gastrointestinal illness, such as diarrhea, cramps, nausea, and headaches  
- Special health risk for infants, young children, and people with severely compromised immune systems |
| **DBCP (1,2-Dibromo-3-chloropropane)**: Runoff from soil fumigant | - Reproductive difficulties  
- Increased risk of cancer |

Source: The State Water Board and EPA reports.
Funding Sources for Safe Drinking Water Projects

From July 2016 through December 2021, the State Water Board’s Division of Financial Assistance awarded about $1.7 billion in loan and grant funding for water infrastructure projects—such as constructing water sources, distribution systems, and treatment facilities—and for technical assistance to water systems. For example, it awarded $406 million to projects in fiscal year 2020–21 and $296 million for projects in the first two quarters of fiscal year 2021–22. As Table 1 shows, the State Water Board awarded roughly half of all loans and grants—$852 million of the nearly $1.7 billion awarded between July 2016 and December 2021—to systems serving disadvantaged or severely disadvantaged populations.1

Table 1
Distribution of Grant and Loan Funding Among Water Systems Serving Disadvantaged and Nondisadvantaged Populations, July 2016 Through December 2021
(Dollars in Millions)

<table>
<thead>
<tr>
<th>POPULATION TYPE</th>
<th>PROJECT TOTAL</th>
<th>LOANS</th>
<th>GRANTS</th>
<th>TOTAL FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small severely disadvantaged</td>
<td>185</td>
<td>$27</td>
<td>$353</td>
<td>$380</td>
</tr>
<tr>
<td>Large severely disadvantaged</td>
<td>4</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Small disadvantaged</td>
<td>59</td>
<td>3</td>
<td>81</td>
<td>84</td>
</tr>
<tr>
<td>Large disadvantaged</td>
<td>8</td>
<td>321</td>
<td>42</td>
<td>363</td>
</tr>
<tr>
<td>Subtotals for Disadvantaged Populations</td>
<td>256</td>
<td>$371</td>
<td>$481</td>
<td>$852</td>
</tr>
<tr>
<td>Nondisadvantaged</td>
<td>41</td>
<td>808</td>
<td>12</td>
<td>820</td>
</tr>
<tr>
<td>Totals</td>
<td>297</td>
<td>$1,179</td>
<td>$493</td>
<td>$1,672</td>
</tr>
</tbody>
</table>

Source: State Water Board financial data.
Note: Does not include $119 million the State Water Board awarded to entities other than water systems, including funding to technical assistance providers.

The State Water Board relies on funding from several sources to make these awards to water systems and support its safe drinking water programs. For fiscal year 2021–22, federal and state funding available for drinking water programs totaled $1.4 billion. Of that amount, $650 million, or 46 percent, came from a State General Fund appropriation for water system infrastructure. Another $330 million, or 23 percent, came from the Safe Drinking Water State Revolving Fund (DWSRF), and $240 million, or 17 percent, was from state general obligation bonds, as Table 2 shows. The remainder of its funding is from the Safe and Affordable Drinking Water (SADW) Fund, described below, and additional appropriations from the State General Fund.

1 State law defines disadvantaged communities as those with a median household income that is less than 80 percent of the statewide annual median household income, and severely disadvantaged communities as those with a median household income of less than 60 percent of the statewide average.
Table 2
Planned Availability of State Water Board Funding for Drinking Water Programs
Fiscal Year 2021–22

<table>
<thead>
<tr>
<th>FUNDING SOURCE</th>
<th>AMOUNT (MILLIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State General Fund</strong></td>
<td></td>
</tr>
<tr>
<td>• Grants for drinking water projects.</td>
<td>$650 (46 percent)</td>
</tr>
<tr>
<td>• Grants for water system administrators and for addressing issues related to drought and certain contaminants.</td>
<td>$63 (5 percent)</td>
</tr>
<tr>
<td><strong>DWSRF</strong></td>
<td></td>
</tr>
<tr>
<td>The DWSRF, funded by federal and state funds, is designed to provide low-interest loans and grants to public water systems for drinking water infrastructure projects.</td>
<td>$330 (23 percent)</td>
</tr>
<tr>
<td><strong>General Obligation Bonds</strong></td>
<td></td>
</tr>
<tr>
<td>Propositions 1 and 68 provide grants and loans for public water system infrastructure projects as well as for operating and maintenance expenses, and technical assistance. Proposition 84 provides grants to fund urgent or emergency actions to ensure the availability of safe drinking water by, among other activities, providing alternative water supplies—including bottled water—where necessary to protect public health.</td>
<td>$240 (17 percent)</td>
</tr>
<tr>
<td><strong>SADW Fund</strong></td>
<td></td>
</tr>
<tr>
<td>State law established the SADW Fund in 2019 to provide, in part, a long-term, continuous source of funding for the operation and maintenance of drinking water systems. Grants and loans from this fund prioritize disadvantaged communities.</td>
<td>$130 (9 percent)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,413</td>
</tr>
</tbody>
</table>

Source: Federal and state laws and State Water Board planning documents and expenditure plans.

The DWSRF—federally funded with a 20 percent state match—is one of the State Water Board’s sources of funding for drinking water projects. This fund provides access to low-interest loans and some grants. The interest rates for these loans were 1.7 percent in 2017, and 1.2 percent in 2021. To assist water systems serving disadvantaged communities and public school districts that cannot afford project costs, State Water Board policy requires it to provide these water systems additional financial assistance, such as principal forgiveness, interest-free loans, and extended loan repayment periods.

The State Water Board also has access to funding from state bonds and from other special funds. For example, Proposition 84 (approved by voters in November 2006) provides loans and grants that fund projects to assist local public agencies in meeting the long-term water needs of the State and infrastructure projects for small community drinking water systems, among other projects. Propositions 1 (approved by voters in November 2014) and 68 (approved by voters in June 2018) fund grants and loans for public water system infrastructure projects, the operating and maintenance expenses of existing water systems serving disadvantaged communities, and technical assistance to water systems serving disadvantaged communities. Further, in 2019 state law established the SADW Fund, discussed in more detail below, which provides a continuously appropriated source of funding.
for the operation and maintenance of drinking water systems, with priority given to systems serving disadvantaged communities, among other purposes. The State Water Board may also use these funds to provide technical assistance to water systems.

### Loan and Grant Application Process

Water systems are often eligible for funding from several sources. They may apply for funding to assist in the planning and design or construction of new infrastructure projects, or for operation and maintenance of existing infrastructure. Planning and design projects include evaluating alternative sources of drinking water, conducting treatment pilot studies, drilling test well holes, preparing environmental documents, and developing final plans and specifications. The intent of such funding is to prepare for project construction. Eligible construction projects include construction of new infrastructure, such as water sources, distribution systems, and treatment facilities, or replacing aged infrastructure. A project is ready for construction when it has plans and specifications detailed enough for potential developers to create bids for the work, has completed environmental studies, and has obtained all necessary permits and approvals. Water systems may apply for financial assistance for both the design and the construction phases of their projects.

Rather than requiring water systems to submit multiple applications for different sources of funding, the Division of Financial Assistance’s process is to match water systems’ needs to funding sources, including determining whether to use state or federal funds for loans and grants. Applications for funding require water systems to provide the State Water Board with general project information, as well as information about the project’s technical and environmental aspects. The application must also include information about the water system’s ability to repay the loan for the project.

Further, the State Water Board provides support and technical assistance to water systems that need assistance with the application process. Once a water system submits an application, a Division of Financial Assistance project manager reviews it for completeness and contacts the applicants to obtain any missing information. Following its reviews of the project submittals, the State Water Board determines the amount and source of funding to award the water system. It then drafts a financing agreement for the projects. Figure 2 shows the steps the State Water Board takes in reviewing project applications.
Figure 2
The State Water Board’s Process for Reviewing Funding Applications

WATER SYSTEM NEED
A water system applies for financial assistance to get a project ready for construction, or to build, install, or replace water infrastructure.

APPLICATION REVIEW
The water system submits an application for financial assistance. Division of Financial Assistance reviews the application for completeness, then performs a due diligence review on each of the four application packets.*

PROJECT SUBMITTAL REVIEW
Division of Financial Assistance staff conduct technical, environmental, and financial reviews of the project submittal.

GENERAL
Project description, estimated schedule, and funding requested.

TECHNICAL
Details on water system facilities and impact of project.

ENVIRONMENTAL
California Environmental Quality Act documents and exemptions, and federal environmental forms.

FINANCIAL
Water rate study, projected annual operations and maintenance costs, financing amount, and requested terms.

FINANCING APPROVAL
Division of Financial Assistance determines whether the project can be best financed through grants, loans, or other funds.

MASTER FILE AND DRAFT FUNDING AGREEMENT
Division of Financial Assistance compiles the project’s master file. It then creates a draft funding agreement between the State Water Board and the water system.

MASTER FILE AND FINAL AGREEMENT REVIEW
Legal and management review for approval.

FINAL AGREEMENT
The Division of Financial Assistance and the water system sign the agreement.

WATER SYSTEM PROJECT AWARD
The water system is awarded funding to design a solution to mitigate a water quality issue, or it is awarded funding to build, install, or replace water infrastructure.

Source: State Water Board procedure manual and website.

* This due diligence includes determinations of whether the proposed project provides the desired water quality improvements, is consistent with permits, complies with federal and state environmental requirements, and, if for a loan, whether the water system has the ability to repay its financial obligations.
The State Water Board prioritizes funding for the projects in the highest-priority categories and readiness to proceed. For certain projects, federal law requires that, to the maximum extent practicable, the State Water Board prioritize funding for projects that address the most serious risks to human health, are needed to comply with federal drinking water standards, and assist water systems most in need based on a per-household basis of its customers according to state affordability criteria. State law also requires the State Water Board to prioritize funding for certain projects that consolidate multiple water systems into one system (consolidations). The State Water Board ranks the projects and assigns each one a priority category based on these requirements.

### Technical Assistance Program

Because some small, disadvantaged communities may lack the capability to address their water systems’ project development, the State Water Board provides funding to these communities and access to technical assistance providers. Technical assistance services include needs assessments, water quality testing, project development, and assistance with funding applications, among others. The text box describes types of assistance the State Water Board may provide.

Proposition 1, which voters approved in November 2014, provides up to $25 million for technical assistance to address, in part, the State’s deteriorating water infrastructure. In response to Proposition 1, the State Water Board contracted with nonprofit organizations and state universities to provide technical assistance to water systems. As of February 2022, the State Water Board had contracted with nine such organizations. These providers must submit to the State Water Board a work plan for each assignment describing the nature of the work they will perform for the water system and the cost of providing the services, and must submit quarterly program reports and invoices for payment. Between fiscal years 2018–19 and 2020–21, the State Water Board approved funding for 601 technical assistance projects for 481 water systems. In December 2021, the State Water Board published a request for qualifications to identify potential new providers. As of June 2022, it approved five new technical assistance providers and is evaluating six other provider proposals.

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**Examples of Technical Assistance Services**

**Prevention efforts:** Projects that help water systems identify potential issues, such as leak detection, or that assess the technical, managerial, and financial capabilities of water systems serving disadvantaged communities.

**Assessment efforts:** Projects that help water systems address compliance issues, for example, by testing water quality or preparing engineering reports. Also help to complete funding applications for projects.


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2 The State Water Board will also require its existing technical assistance providers to reapply under the request for qualifications once their current agreements expire, or if their scope of work changes.
Water System Needs Assessment

In 2019 state law established the SADW Fund and directed the State Water Board to create an annual expenditure plan for the fund. The expenditure plan, in part, prioritizes funding for disadvantaged communities served by public water systems. Further, state law requires the expenditure plan to be based on a needs assessment, which the State Water Board annually conducts to identify the overall resources needed to bring failing water systems—those that are out of compliance with or that consistently fail to meet state and federal safe drinking water standards—into compliance with drinking water standards and prevent water systems that are at risk from failing, including public water systems, state small water systems, and domestic wells. The assessment consists of three primary components, as shown in the text box.

The 2021 needs assessment examined more than 2,700 public water systems, identifying more than 600 such systems at risk of failing to provide an adequate supply of safe drinking water. Together, these systems serve 400,000 people. The State Water Board also reviewed state small water systems and domestic wells and identified more than 600 state small water systems and 80,000 domestic wells at a high risk of accessing groundwater that does not meet drinking water standards. Some examples of the solutions identified by the State Water Board include consolidation of smaller water systems into larger ones, contaminant treatment, providing bottled water, and technical assistance. We discuss later in this report a gap between the estimated cost of the solutions to address the water system needs and the available funding to implement those solutions.

The State Water Board has made several enhancements to the 2022 needs assessment, such as expanding the inventory of water systems assessed for risk, revising indicators in the risk and affordability assessment components, and incorporating risk indicators with a drought-related focus. For the 2022 needs assessment, the State Water Board has changed its risk assessment to refine its ability to predict which water systems are most at risk of failing. It has also refined its efforts to better identify challenges associated with drought conditions. For instance, in 2022 the State Water Board included data on water systems’ reliance on bottled and hauled water because they are unable to meet water demand use with available water sources either because of water quality or capacity.

### Primary Components of a Needs Assessment

- **Risk assessment:** Identifies large and small water systems that may be at risk of failing to provide an adequate supply of safe drinking water, with a focus on certain water systems and K–12 schools.
- **Cost assessment:** Estimates the funding needed for the SADW Fund for the next fiscal year based on anticipated needs and available funding.
- **Affordability assessment:** Identifies certain water systems that serve disadvantaged communities that must charge fees in excess of the affordability threshold established by the State Water Board in order to supply, treat, and distribute potable water that meets federal and state drinking water standards.

Source: State Water Board’s 2021 Drinking Water Needs Assessment.
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Audit Results

Nearly a Million Californians Lack Access to Safe Drinking Water

Nearly a million Californians face possible long-term, negative health outcomes—including an increased risk of liver and kidney problems, as well as cancer—because they receive unsafe drinking water from a failing water system. At the direction of its board, in 2017 the State Water Board began compiling a list of failing water systems with uncorrected drinking water quality violations. According to a branch chief in the Division of Drinking Water, prior to 2017, the State Water Board monitored water systems that violated safe drinking water standards but did not compile a list of these systems. Since 2017 the total number of failing water systems the State Water Board identified has remained higher than 300, as Table 3 shows. To better align with state law, in 2021 the State Water Board expanded the criteria for its list of failing water systems to include those that fail to properly treat drinking water, as well as those that fail to properly monitor and report their drinking water quality. The State Water Board also added new criteria for E. coli violations. While the number of failing water systems identified each year has varied, on average the State Water Board has added about 70 new water systems to its list of failing water systems and has removed about 50 systems that resolved their water quality problems each year. In total, from January 2017 through December 2021, it identified 560 individual failing water systems.

Table 3
Since 2017 the Number of Water Systems Classified as Failing Each Year Has Remained Above 300

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL NUMBER OF FAILING WATER SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>308</td>
</tr>
<tr>
<td>2018</td>
<td>386</td>
</tr>
<tr>
<td>2019</td>
<td>368</td>
</tr>
<tr>
<td>2020</td>
<td>337</td>
</tr>
<tr>
<td>2021</td>
<td>418</td>
</tr>
</tbody>
</table>

Source: State law and State Water Board data on failing water systems.

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3 The State Water Board’s list of failing water systems only includes water systems with 15 or more service connections used by yearlong residents, or those that regularly serve at least 25 yearlong residents, and water systems that serve schools and day-care facilities and have 15 or more service connections or regularly serve at least 25 people daily at least 60 days out of the year. The list does not include state small water systems and domestic wells.
Although the State Water Board identified a total of 418 failing water systems in 2021, 371 failing water systems remained on the State Water Board’s list at the end of December 2021. Most of the people served by these failing water systems resided in eight counties in the Central Valley, and San Bernardino and Imperial counties, as Figure 3 shows. These failing water systems provide water to more than 920,000 people, as Table 4 shows. Moreover, nearly 240 of these water systems have been failing for three years or more, and more than 150 have been failing for five years. For example, the St. Anthony Mobile Home Park (St. Anthony) water system in Riverside County has been on the State Water Board’s list of failing water systems since April 2017 and has been providing its 340 residents with unsafe drinking water contaminated with arsenic since at least 2012. Recent media interviews with St. Anthony residents reported smelly, foamy water and instances of children’s skin peeling while taking a shower. In 2016 the State Water Board awarded St. Anthony $251,000 for a planning project to address its arsenic contamination, and in 2019 St. Anthony applied for $1 million in construction funding. However, Riverside County ordered St. Anthony to permanently consolidate its operations with the Coachella Valley Water District (Coachella) by December 31, 2022, and the State Water Board is currently reviewing Coachella’s application for a $24 million consolidation project with St. Anthony. In the meantime, St. Anthony residents are using water filters, hauling water in buckets, or buying bottled water if they can afford it.

Communities with the greatest financial need often receive their drinking water from systems that are failing or at risk of failing. Specifically, of the 371 water systems identified as failing as of the end of December 2021, the State Water Board identified that 250 (67 percent) were serving disadvantaged communities with a total of more than 775,000 residents. For example, the Caruthers Community Services District (Caruthers), which serves a disadvantaged community of about 2,500 people in Fresno County, has been working with the State to find ways to address arsenic contamination since at least 2010. According to a 2018 report from the University of California, Davis, residents of disadvantaged communities who rely on unsafe drinking water not only bear the health consequences of using unsafe water but also typically pay more for that water and must purchase more expensive bottled water for drinking and cooking purposes.

Of the 371 water systems identified as failing as of the end of December 2021, the State Water Board identified that 250 (67 percent) were serving disadvantaged communities with a total of more than 775,000 residents.

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4 According to state law, a disadvantaged community is a community with a median household income that is less than 80 percent of the statewide annual median household income. For example, in 2020 a California community considered disadvantaged would have a median household income below $63,000.
Figure 3
Of the 920,000 Californians Served by Failing Water Systems, the Majority Are in the Central Valley

![Map of California with counties highlighted to indicate the number of people served by failing water systems in each county.]

**Number of People in Each County Served by Failing Water Systems**

<table>
<thead>
<tr>
<th>PER COUNTY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>60,001 to 200,000</td>
<td>66%</td>
</tr>
<tr>
<td>20,001 to 60,000</td>
<td>23</td>
</tr>
<tr>
<td>10,001 to 20,000</td>
<td>6</td>
</tr>
<tr>
<td>1,001 to 10,000</td>
<td>4</td>
</tr>
<tr>
<td>1 to 1,000</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Percentages show the share of the statewide total population served by failing water systems for each category. For example, 66 percent of the people served by failing water systems live in the five counties indicated in dark red.

Source: State law and State Water Board data on failing water systems.

Note: Only includes water systems with 15 or more service connections used by yearlong residents, or those that regularly serve at least 25 yearlong residents, and water systems that serve schools and day-care facilities and have 15 or more service connections or regularly serve at least 25 people daily at least 60 days out of the year. Does not include state small water systems and domestic wells. Data as of December 31, 2021.
Table 4
Hundreds of Failing Water Systems Have Been Providing Unsafe Drinking Water for Years

<table>
<thead>
<tr>
<th>AMOUNT OF TIME IN FAILING STATUS</th>
<th>NUMBER OF FAILING SYSTEMS</th>
<th>POPULATION AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>82</td>
<td>158,600</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>23</td>
<td>69,900</td>
</tr>
<tr>
<td>2 to 3 years</td>
<td>28</td>
<td>10,700</td>
</tr>
<tr>
<td>3 to 4 years</td>
<td>71</td>
<td>436,600</td>
</tr>
<tr>
<td>4 to 5 years</td>
<td>12</td>
<td>9,100</td>
</tr>
<tr>
<td>5 years or longer</td>
<td>155</td>
<td>237,400</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>371</strong></td>
<td><strong>922,300</strong></td>
</tr>
</tbody>
</table>

Source: State Water Board data on failing water systems, as of December 31, 2021.

In addition, in 2022 the State Water Board’s data shows that 432 water systems serving more than 1 million people are at risk of failing to meet state and federal water quality standards (at risk), and nearly 280 of those at-risk systems (65 percent) serve disadvantaged communities. More than 85 percent of the people served by at-risk water systems in 2022 are located in the Central Valley, Los Angeles County, and inland parts of Southern California.

Restoring failing water systems to compliance, or preventing future problems in an at-risk water system, can involve a significant cost. The State Water Board estimated it would cost nearly $10.3 billion over a five-year period to implement interim and long-term water quality solutions. However, the State Water Board also estimated a $4.5 billion gap between the funds available and those needed to address water quality, as we discuss later in this report. Water systems that serve small or disadvantaged communities may not have the financial means or expertise to address their present or future water quality problems, causing more Californians to rely on unsafe drinking water or depend on bottled water for longer periods of time. To address this issue, the State Water Board provides funding and other assistance that can help failing water systems return to compliance. However, as we describe in the next section, the State Water Board has not ensured that water systems receive funding in a timely manner.
The State Water Board Has Demonstrated a Lack of Urgency to Provide Needed Assistance to Failing Water Systems

Although the State Water Board has funding available to help failing water systems, it has not made processing applications a priority. The resulting delays have slowed the ability of water systems to address poor water quality. Over the last five years, the average amount of time it took for water systems to complete their applications, and then for the State Water Board to review them and award funding, was about two years. Further, for 55 of the nearly 300 projects approved during that time, the process took three years or longer. These lengthy delays in providing needed assistance put Californians’ health at risk and increases the amounts that water systems will eventually need to spend to correct water quality problems. Moreover, these funding delays are getting worse. As Table 5 shows, in 2017 the average time between the State Water Board’s initial acceptance of a water system’s application and its final execution of the funding agreement was 17 months; in 2021 this same process averaged 33 months, or almost twice as long. Although the State Water Board is aware that the steps in the funding process shown in Table 5 are taking longer to complete, it has not made adequate efforts to measure and minimize these delays.

Table 5
Water Systems and the State Water Board Are Taking Significantly Longer, on Average, to Complete Applications and Funding Agreements

<table>
<thead>
<tr>
<th>PROJECTS FUNDED IN:</th>
<th>2017 (MONTHS)</th>
<th>2021 (MONTHS)</th>
<th>INCREASE IN MONTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Time to Complete Application and Funding Agreement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average time from initial application to executed funding agreement.</td>
<td>17</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>Application Submission</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average time for water systems to complete the applications for projects.</td>
<td>9</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Application Review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average time for the State Water Board to review and approve the complete application.</td>
<td>3</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Contract Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average time for the State Water Board to approve financing and draft, review, and execute the funding agreement.</td>
<td>5</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: State Water Board data.
Addressing these delays is important to ensure that Californians have access to safe drinking water and will become more imperative in the coming years. The State Water Board received $650 million in increased funding for drinking water projects in fiscal year 2021–22. This new funding is a significant investment in California residents’ health and well-being, and distributing that funding efficiently is necessary to meet the goals of the investment. Moreover, California is experiencing a persistent drought that is likely to worsen drinking water quality— and availability— and could lead to the need for additional funding for the State’s drinking water programs.

Water Systems Take a Long Time to Complete Funding Applications, in Part Due to Complex Application Requirements and a Lack of Timely Communication From the State Water Board

Water systems often struggle to complete their applications for financial assistance and frequently take years to do so. In part, these struggles are due to delays caused by the water systems themselves. However, the State Water Board is also responsible for a portion of these delays due to its cumbersome application process and lack of timely communication with the water systems. The average amount of time for water systems to complete their applications increased from nine months in 2017 to 16 months in 2021, as shown in Table 5. According to the section chief for the DWSRF (section chief), when water systems first submit application documents, they are often incomplete, and the State Water Board must request additional information from the water systems to meet state or federal requirements before it accepts their applications.

For the 15 projects we reviewed in detail, we identified nine projects in which the application took more than one year to complete. As Figure 4 shows, lengthy delays occurred in both the initial submission of applications and in the water systems’ completion of the remaining parts of the application. As we describe in the examples below, the State Water Board could not have avoided all of these delays. However, the extensive back and forth in the application process led to delays, some of which were due to the complicated nature of the process—something both the State Water Board and the water systems acknowledge. In other cases, timelier communication by the State Water Board with water systems could have surfaced concerns earlier in the process and avoided some delays.
Figure 4
For Various Reasons Many of the Water System Applications We Reviewed Were Significantly Delayed

APPLICATION SUBMISSION PERIOD FOR SELECTED DRINKING WATER PROJECTS

- Yosemite Unified School District: The State Water Board was slow to respond after Yosemite failed to complete a necessary merger agreement with a nearby water system.
- Santa Nella County Water District: Santa Nella did not immediately complete its application after the amount of grant funding it was eligible for declined. Changes to State Water Board policy further delayed the application.
- Lukins Brothers Water Company: Lukins Brothers first undertook a planning project, which delayed the completion of its application for construction funding.
- Herlong Public Utility District: The State Water Board required Herlong to revise its financial and environmental application documents but could not show why Herlong took so long to do so.
- Arvin Community Services District: The State Water Board directed Arvin to drill test wells as part of a planning project, which delayed Arvin's application, although the State Water Board could not show why it waited six months to direct Arvin to do so.
- Jackson Valley Irrigation District: Jackson Valley experienced delays while completing a merger agreement with a nearby mobile home park, then updated its financial documents.
- City of Manteca: The State Water Board's technical assistance provider failed to submit necessary financial documents.
- Mountain Empire Unified School District: The State Water Board took over a year to deem the environmental documents in Mountain Empire's application complete.
- Jubilee Mutual Water Company: Jubilee waited five months to submit financial documents, then submitted them over a six-month period.
- Bridgeport Public Utility District
- Caruthers Community Services District
- Waukena Joint Union Elementary School District
- Lakeside Joint School District
- Los Angeles County
- City of Hughson*

Source: State Water Board data.
Note: For applications that took more than one year to complete, we provide some of the key reasons for the delays.
* The California Department of Public Health originally approved a $6.6 million loan to the city of Hughson for its construction project in December 2013. However, Hughson did not proceed with its project and instead submitted a new application for grant funding to the State Water Board in August 2016. The State Water Board deemed Hughson's new application complete on the day the city submitted it.
For example, the application for funding that the Yosemite Unified School District (Yosemite) submitted took nearly three years to complete. In May 2015, Yosemite applied for funding to address uranium and other contaminants in the water supply for its high school. In January 2016, a nearby water system agreed to provide water to the high school. However, according to the project file, in August 2017 the State Water Board determined that Yosemite had not taken the actions needed to move the project forward. In particular, Yosemite had not finalized an agreement with the nearby water system to serve its high school. The project file does not indicate what follow-up the State Water Board conducted between January 2016 and August 2017 or why the State Water Board took a year and a half to raise its concerns. Once the State Water Board identified the lack of progress, it was able to move the application forward. It gave Yosemite two months to develop an action plan, and in November 2017 communicated with the district about the information that was missing. The State Water Board accepted the first part of Yosemite’s completed application in January 2018. As indicated in Figure 4, Yosemite completed the remaining parts of the application a few months later.

The application from the Santa Nella County Water District (Santa Nella) also took nearly three years to complete, much of which can be explained by some extraordinary circumstances. Santa Nella—a water system serving a disadvantaged community in Merced County—submitted application documents requesting funding for a new well, storage tanks, a treatment plant, and pipelines to consolidate with another system in October 2017, after the State Water Board identified it as a failing water system. However, in February 2018 Santa Nella returned to compliance with the State’s drinking water standards and was no longer classified as a failing water system, which reduced the amount of grant funding for which it was eligible. The State Water Board’s project manager indicated that, because of this change in status, Santa Nella expressed some misgivings regarding moving forward with the project. As a result, the project became a lower priority for State Water Board funding. Even so, Santa Nella did not withdraw its application. In November 2018, the State Water Board informed Santa Nella that it would have to update its application, given that it was no longer classified as a failing water system, and effectively placed the project on hold. In April 2019, Santa Nella submitted a revised application, but—because of changes to the State Water Board’s policy that affected how much funding it was eligible for—did not complete all parts of its application until August 2020. In another instance, Lukins Brothers Water Company (Lukins Brothers) also took a significant amount of time to submit its initial application documents for construction funding. However, as we describe in Figure 4, Lukins Brothers first undertook a
planning project that delayed the completion of its initial application but ultimately allowed it to quickly finalize the rest of its application documents for the construction project.

In contrast, several water systems shown in Figure 4 were able to submit their initial application documents quickly, but the State Water Board took a significant amount of time to deem those applications complete and could not fully explain the delays. For example, it took two and a half years for the State Water Board to deem the application by the Herlong Public Utility District (Herlong) complete after it accepted Herlong’s initial application. According to the State Water Board project manager for the project—which involved the replacement of failing 60-year-old asbestos-concrete pipes from a water system with which Herlong had merged—Herlong was slow to respond to the State Water Board’s requests and submit the additional parts of its application. The State Water Board project manager said that Herlong’s representative told him it had other priorities at the time. However, the project manager could not specify what those priorities were and could not recall the details of the conversation—which he said took place in 2017 or 2018—or provide any documentation of his discussion with Herlong. Although not quite as long, we found similar delays and a similar lack of documentation explaining delays by the State Water Board and by water systems for many of the other projects shown in Figure 4.

Our survey of failing water systems revealed two likely reasons for the lengthy application process: the complicated nature of the applications and a lack of communication from the State Water Board. Regarding the complexity and length of the State Water Board’s application process, multiple respondents to our survey of failing water systems said the process had too many “hoops” and too much “red tape.” One also referred to the process as “a nightmare” and said “no one...can decipher what is required.” Others suggested that the State Water Board needs to streamline or simplify the process. One noted that its water system did not have the technical expertise to complete the documentation and questioned why it was being “held to the same requirements as larger municipalities with the resources and ability to...complete needed grant applications.” One respondent said that the water system “will likely abandon the application due to the time frame proposed for award.” According to the respondent, the timeline of more than one year from application to awarding of funds will not allow the water system to meet its deadlines to address the water contamination it is experiencing. Finally, one respondent concluded that the State Water Board “has not demonstrated any urgency” in providing funding.

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5 Appendix A includes a summary of responses to selected survey questions.
The State Water Board acknowledged that its application may be more complicated than necessary and that there may be opportunities to streamline the process for some applicants. For example, the State Water Board currently requires grant recipients to submit much of the same financial information as it requires of loan recipients, including their financial statements, budgets, and information about their debt, even though it is not necessary for the State Water Board to assess a grantee’s ability to repay the funds. State Water Board policy allows the deputy director of the Division of Financial Assistance (deputy director) to approve a limited credit review for grant-funded projects on a case-by-case basis, and as of April 2022 the deputy director said he is working on how to waive the credit review requirements for certain categories of projects, although he was not specific as to what those categories might be. Further, the application process is driven largely by federal requirements, including federal prevailing wage laws, rules requiring the use of iron and steel products produced in the United States, and rules encouraging the use of disadvantaged business enterprises, among others. However, with the recent increases in state funding that the State Water Board can use for grants, there may be additional opportunities to streamline the application and review process for projects that will receive state-only funding.

In addition, the State Water Board could look to other states for ways to streamline its application process. According to an April 2022 report from the EPA on best practices for funding drinking water projects, several states have recently taken actions to streamline the drinking water funding process. One such state is Colorado, which undertook a systematic process improvement program that significantly reduced the time it takes Colorado to process applications by reducing the amount of incomplete and incorrect information on applications, limiting the reworking of documents, and establishing deadlines and timelines for application submittals, all issues that we identified in our review of the State Water Board. According to the deputy director, the State Water Board is already implementing changes to streamline its application process and is continuing to review the process to determine where else it can be simplified. For example, according to a status document the State Water Board provided to us, it recently established a preapplication process to better assist water systems with their applications and connect them to technical assistance providers. Further, it has begun assigning planning projects to its technical assistance providers, eliminating the need for some small water systems to apply for grant funding for planning. The State Water Board has also begun eliminating the need for certain environmental documents for projects receiving state-only funding. However, the status document indicates that its effort to update its application process—which it hoped to complete by August 2022—is behind schedule, and does not include a new estimated completion date.
Respondents to our survey of failing water systems also commented on the lack of communication or follow-up from the State Water Board regarding the status of their applications. For example, the Chatom Union School District, in Stanislaus County, stated that there were long periods during which there was no communication from the State Water Board about the status of its funding application, and that it took two years from the time it submitted its application to obtain a funding agreement. According to the Del Oro Water Company, it applied for a planning grant in 2018 but, in its response to our survey in February 2022, it indicated having not received any communication from the State Water Board regarding its application and its merger with the East Niles Community Services District.

Because the State Water Board sets no schedules or deadlines for submitting the required application documents, when a water system does not respond to the State Water Board’s requests, the project managers we spoke with said they simply have to move on to other projects. In addition, the State Water Board’s policy prioritizes monitoring funding already in place over reviewing applications. In 2020 the State Water Board began working with more small water systems serving disadvantaged communities as part of its Safe and Affordable Funding for Equity and Resilience (SAFER) program. According to the State Water Board, the SAFER program is designed to ensure that Californians who lack safe, adequate, and affordable drinking water receive it as quickly as possible, and that the water systems serving them establish sustainable solutions. The branch chief for the Office of Sustainable Water Solutions (branch chief) indicated that these smaller water systems tend to need more assistance in completing their applications and are slower to respond to the State Water Board’s requests for documents and information. Further, project managers we spoke with at the State Water Board said that water systems sometimes view these requests as intrusive and do not understand them. The branch chief said that the State Water Board asks smaller water systems to fill out a preapplication form so that the State Water Board can evaluate their eligibility for grants, as well as to determine whether the systems could benefit from technical assistance. Nevertheless, the survey responses strongly point to a need for the State Water Board to improve communication with the water systems about the status of their funding applications. Later in this report, we discuss the State Water Board’s technical assistance and outreach efforts, two avenues it could use to improve communication.

A statutorily required advisory group has also indicated that the State Water Board needs to communicate more often with water systems about the status of their funding applications and intervene when applications are delayed. The 2019 law that created the SADW Fund requires the State Water Board to consult with an advisory group
composed of specific representatives regarding its annual fund expenditure plan that, among other purposes, explains how it plans to spend drinking water funds. At its August 2021 meeting, most advisory group members agreed that the State Water Board needed more transparency in its funding process, and some members recommended that the State Water Board identify and intervene when applications experience overly long delays.

According to the deputy director, the State Water Board has begun working on a process improvement program and intends to develop some performance metrics, including a metric for the time it should take for water systems to complete their applications once they start them. The deputy director also said that to increase transparency the State Water Board created an online search tool on its public website in November 2017 for applicants to review the status of their projects and that each month it posts an updated list of drinking water projects the State Water Board has funded. However, providing a search tool and posting monthly updates are no substitute for direct communication with project applicants about what information the State Water Board needs from them before it can review their funding applications. For example, the online search tool will show an applicant whether the State Water Board has received its application, but it does not give any indication of what additional information the State Water Board may be waiting for, nor does it provide an estimate of when the State Water Board expects to approve the application. The deputy director said that the State Water Board intends to work on identifying communication gaps and opportunities for improvement, but he was unable to provide any specifics on these improvements or when the State Water Board would make them.

**Absent Clear Goals and Metrics, the State Water Board Has Allowed the Average Time It Takes to Finalize Its Application Reviews and Funding Agreements to More Than Double**

The State Water Board is taking much longer to review completed applications and execute funding agreements than it did several years ago. We identified no state or federal requirements in the law governing the DWSRF or the SADW Fund prescribing how long this process should take. Until fiscal year 2019–20, the State Water Board’s goal was to award funding for 95 percent of eligible projects within nine months of receiving a completed application. Although the State Water Board did not consistently meet this nine-month goal, in 2017 the State Water Board did average eight months to review completed applications and award funding for projects. However, by 2021 the amount of time the State Water Board took to review applications and award funding had more than doubled to 17 months, as indicated earlier in Table 5.
We reviewed 15 projects in detail to better understand the delays in the State Water Board’s application review stage and its financing approval and funding agreement (contract development) stage. As Figure 5 shows, lengthy delays can occur in both processes, and we identified eight projects for which the total time to complete these two processes was more than one year. Sometimes the delay is the result of steps the water system takes that are outside the State Water Board’s control. For example, the application review process for the Caruthers arsenic treatment facility project lasted from December 2016 to August 2018. Caruthers was in the midst of a project to construct a new well—which the State funded in 2013—when it started its application for construction funding for the treatment facility in January 2016. According to the State Water Board project manager, Caruthers had to wait for the water quality results from the new well before it could complete the design and specifications for its new treatment system. Because the new well took longer to complete than expected, Caruthers did not submit its final technical documents for review until July 2018, and the State Water Board completed its review the following month in August 2018.

In another case, the State Water Board took more than two years to complete and execute a funding agreement with Los Angeles County, due in part to changes the county requested and also in part to the State Water Board’s cumbersome approval process. Los Angeles County submitted its initial application in March 2019 and asked for multiple revisions to the project cost in the agreement after it discovered that the work it needed to perform to repair a failed water system was more extensive than it originally believed. According to State Water Board files, Los Angeles County began construction in July 2019 using its own funds. In September 2019 the State Water Board sent funding agreement documents to Los Angeles County, which the county signed. However, the State Water Board did not request from Los Angeles County an important legal document required with the agreement, which prevented the State Water Board from executing the agreement. The State Water Board was still waiting for that document when Los Angeles County requested a funding increase in January 2020. The State Water Board tentatively approved the funding increase in February 2020, but it did not fully approve the increase until March 2020. Then in August 2020, Los Angeles County reversed course and rescinded its request for the additional funds. Once again the State Water Board took two months to approve the change, which it did in October 2020.
Figure 5
Delays Occurred in Both the State Water Board’s Application Review and Contract Development

Application Review and Contract Development Periods for Selected Drinking Water Projects

Caruthers Community Services District
- Delays in constructing a new well led to delays in Caruthers submitting final plans for its treatment system.

Los Angeles County
- The State Water Board did not inform Los Angeles about the requirement for an important legal document. Los Angeles then asked for multiple cost revisions, which led to delays.

Herlong Public Utility District
- The State Water Board took 14 months to resolve questions about Herlong’s eligibility for grant funding after Herlong applied for both drinking water and wastewater funds.

Jubilee Mutual Water Company
- The State Water Board was slow to complete its environmental review because it had to consult with the U.S. Fish and Wildlife Service regarding endangered species and the State Historic Preservation Office.

Yosemite Unified School District
- The State Water Board was late to realize that portions of the project were ineligible for funding and needed to be redesigned.

Mountain Empire Unified School District
- The State Water Board had extended technical review and unexplained delays during contract development.

Lakeside Joint School District
- The State Water Board was late to inform Lakeside that it needed to submit its plans to the Division of the State Architect for approval.

Santa Nella County Water District
- The State Water Board was slow to start Santa Nella’s credit review, then delayed completing the draft contract.

City of Manteca

Waukena Joint Union Elementary School District

Arvin Community Services District

Jackson Valley Irrigation District

City of Hughson

Bridgeport Public Utility District

Lukins Brothers Water Company

Source: State Water Board data.
Note: For applications review and contract development that took more than one year, we provide some of the key reasons for the delays.
According to the State Water Board project manager, these requests required additional management approvals at the State Water Board, lengthening the time it took to draft the funding agreement. Nevertheless, even after the State Water Board approved the second cost revision in October 2020, it was not until April 2021, six months later, that it sent the revised funding agreement to Los Angeles County. According to the State Water Board project manager, it took some time after that for Los Angeles County’s general counsel to review and approve the agreement. Los Angeles County finally signed the agreement in August 2021 and the State Water Board executed the agreement in September 2021. Although Los Angeles County contributed to the delays for this project with its multiple requests for cost revisions and the four months it took to review and sign the agreement, the State Water Board did so as well with the four months it took to approve the cost revisions and the six months it took to revise the agreement after the second revision request. But more importantly, if the State Water Board had properly communicated its requirements to Los Angeles County by also requesting the legal document when it sent the original funding agreement in September 2019, it is possible that the entire two-year process that followed could have been avoided. In this case, Los Angeles County chose to use its own funds to proceed with construction without a funding agreement, but small water systems serving disadvantaged communities do not have this luxury, meaning that delays inherent in the State Water Board’s process will result in some Californians going longer without safe drinking water.

In another example, Herlong was simultaneously applying for funding for a drinking water project and a wastewater project, and it planned to construct both at the same time to reduce costs. According to State Water Board files, while the drinking water project was eligible for 100 percent grant funding, the wastewater project was not. Herlong completed its funding application for the drinking water project in December 2019, but the State Water Board placed the project’s credit review on hold until it updated its annual funding policy document to specify the type of projects that were eligible for 100 percent grant funding, which the State Water Board did in June 2020. However, it was not until October 2020 that the State Water Board resolved the questions about Herlong’s eligibility for grant funding and proceeded with its credit review, which it completed four months later, in February 2021. Because of these delays, the project manager indicated the State Water Board had to review some parts of the application twice to ensure that it was still consistent with State Water Board policy. Although the State Water Board may be able to justify waiting for the policy update to complete its reviews, it cannot justify the 14 months total that it took to do so.
Delays also occur during the State Water Board’s contract development process, when it approves financing, drafts funding agreements, and awards funding to water systems. For example, during the contract development process for Yosemite’s water system upgrade project, the State Water Board determined that part of the project was ineligible for federal funds, and the project had to be revised, which delayed the funding agreement by eight months. However, it only took two months to update the plans; the rest of the eight-month delay included two months for the State Water Board to approve moving the project forward and three months for Yosemite to sign the agreement to update the plans.

According to the State Water Board’s project manager for the Lakeside Joint School District (Lakeside) water supply project, the time it took to draft and review the funding agreement was longer than usual because the construction project had to receive additional state approvals. Specifically, because the project was on school property, it required review and approval from the Division of the State Architect (State Architect) within the Department of General Services, which reviews plans for construction projects at K–12 public schools to ensure that they comply with California codes. Lakeside submitted plans to the State Architect in August 2017, which the State Architect approved six months later in February 2018. It was not until June 2018—four months after the State Architect’s approval—that the State Water Board completed the agreement and awarded the funding to Lakeside. During that time, project costs increased from $400,000 to $700,000, and as a result the State Water Board had to review the water system’s credit twice more before awarding the funding. However, once the State Water Board awarded funding for the project in June 2018, construction bids came in much higher than expected, and the State Water Board determined that it needed to review Lakeside’s credit twice more, in July and September 2018, before it eventually approved $1.6 million for the project.

The State Water Board project managers we spoke with expressed frustration with the contract development process, during which as many as a dozen people—up to and including the deputy director—review the project file and draft funding agreement (draft contract), one person after the next. As we show previously in Table 5, the time it takes the State Water Board to complete this process increased from an average of five months in 2017 to an average of nine months in 2021. In Figure 5 we show how long this process took for the 15 projects we reviewed. As with the other parts of the State Water Board’s review process, there are no schedules or deadlines for how long the contract development process should take, and each reviewer could spend days or weeks reviewing the draft contract. One project manager said that he often has to track down where the draft contract is, identify the concern or cause for delay, and try to
address the issue so that the draft contract can move to the next reviewer. The project manager said that in some cases, he has found that the draft contract has been with a reviewer for several weeks with no evidence of progress, or that the draft contract is waiting for a reviewer who is out of the office to return, and that no one else can review it in that person’s absence. One project manager said the contract development process frequently takes nine months or more to complete, although for high-priority projects it can take less than half that time. Indeed, of the 72 projects with agreements executed in 2021, the contract development process took longer than nine months for 30 projects, or 42 percent.

In addition to delays unique to each project, the State Water Board identified that the consolidation—or merger—of water systems is one potential reason for the increasing time it takes to fund projects. A 2019 change in state law required the State Water Board to prioritize, in part, funding for projects that consolidate multiple water systems into one water system. The branch chief stated that consolidation projects typically take longer to execute because they involve multiple water systems. Several of the projects we reviewed were consolidation projects, including Herlong, Jubilee Mutual Water Company, Yosemite, Santa Nella, the city of Manteca, and Jackson Valley Irrigation District, and all of these projects experienced a long application process, contract development process, or both.

According to State Water Board data, the number of consolidation projects increased from 23 in 2017 to 36 in 2021. Although we acknowledge that the number of consolidation projects is increasing, if the State Water Board believes that these projects inherently take longer to approve, it should identify ways to overcome those delays—including increased staffing or contract personnel—so that water systems can complete their applications and the State Water Board can review them and award funding in a timely fashion.

Although each of the projects we reviewed—and the causes for its delays—was unique, they all point to a larger and more fundamental issue: the State Water Board’s process for awarding funding to failing water systems lacks urgency. According to the deputy director, until recently the State Water Board required applicants to complete all parts of the funding application for both planning and construction projects, regardless of the source of funding. However, as the deputy director, the branch chief, project managers, and respondents to our survey all acknowledged, small water systems serving disadvantaged communities often struggle to complete these applications, and a respondent to our survey questioned why they were held to the same standards as larger water systems.
According to the project managers we spoke with and State Water Board policy, helping water systems with their applications is a lower priority than most of their other duties. The State Water Board’s solution to this problem has been to assign more technical assistance providers to help water systems complete their applications, but as we describe in the next section, it is unclear if that technical assistance is speeding up or delaying the process. For at least one project we reviewed—the city of Manteca’s school water supply project—the application was held up for more than a year because the technical assistance provider submitted some documents that were incomplete, and never submitted other documents at all.

Further, the State Water Board’s application review process is prone to errors, confusion, and inconsistencies. As we previously describe, the application is cumbersome, with several parts and many requirements. According to the section chief, when an application is received, the assigned project manager has to identify which specific documents the water system needs to submit—for example, which technical or financial documents—and identify any missing items. However, according to the branch chief, sometimes the project manager may not identify missing documents until after the application has been deemed complete, which creates delays. The branch chief also stated that when water systems change their plans, the review process is delayed because the State Water Board has to request new information from the water systems and review their application documents again. As we describe previously, several of the projects we reviewed were delayed during the application review process by incomplete or missing documents, or by changes to the projects.

Moreover, as we describe previously, the State Water Board splits its application into four parts, and different people review the different parts. According to the State Water Board, having applications with multiple parts allows the reviews to happen concurrently, and water systems can submit documents related to the different parts in any order. However, according to the section chief, staff will sometimes delay completing their reviews—even if the application is complete—if other parts of the review are not done, or if they expect there might be changes to the project, thus defeating a significant part of the purpose of splitting the application into four parts. One project manager we spoke with explained that when the scope of a project is clear and does not change, the State Water Board can complete its reviews quickly. However, when the project scope is unclear or changes, the State Water Board requires the water system to submit new technical documents, which often leads to cost changes and the need for new environmental and credit reviews, setting up a process in which changes lead to more changes, causing further delays and additional work for State Water Board.
Board staff. Several of the projects we reviewed were delayed because staff had to review the applications more than once. The April 2022 EPA report on best practices identified excessive reworking of documents as one of the factors that contributes to excessive staff time in processing funding applications.

The State Water Board needs to overhaul and simplify its funding process. While the State Water Board has a responsibility to ensure that drinking water funds are spent appropriately, it also has a responsibility to ensure that all Californians have access to safe drinking water, and its process is not adequately balancing those two needs. We spoke to the assistant deputy director of the Division of Financial Assistance (assistant deputy director) and the branch chief about ways that the State Water Board might change its funding process. For example, the assistant deputy director suggested the possibility of having a different process for simpler projects and assigning staff to projects based on their areas of expertise. We also asked whether allowing staff to focus just on applications or just on monitoring projects during construction would allow for a greater degree of specialization and could speed up the application process, because a staff member dedicated to applications would not have to shift attention to project monitoring. The assistant deputy director said the wastewater program used to be organized that way, with different staff working on different stages of each project—from planning and design to construction to operations—and that the State Water Board might consider that option for the drinking water program. He further said the State Water Board intends to look at these and other ideas during the coming fiscal year—when it also intends to implement new performance metrics and benchmarks—with the goal of implementing a streamlined funding process by July 2023. Until the State Water Board streamlines its funding process to eliminate its inherent delays and establishes a sense of urgency, Californians served by failing water systems will continue to wait longer than necessary for safe drinking water.

The State Water Board’s Lack of Goals and Metrics Contributes to Delays in Processing Funding Applications

The State Water Board’s lack of goals and metrics for the length of time it should take to fund projects contributes to its lack of urgency for approving applications and inhibits its ability to identify areas of the review process that it could improve. As noted above, until 2020, the State Water Board had a goal of getting 95 percent of applications through funding in nine months. It no longer has this goal, but the deputy director agreed that such a benchmark would be helpful in assessing the nature and extent of delays. According to the deputy director, the State Water Board eliminated...
this performance metric after its transition to the State’s new accounting system in 2019, which he stated slowed the State Water Board’s processing of applications. Although we acknowledge that the new accounting system has caused challenges for many agencies, the implementation of the new accounting system does not justify eliminating a goal that is directly tied to the public good of providing safe drinking water to all Californians. Defining how long each step in a process should take is critical to performing work within time constraints, because such time frames help an organization identify areas for improvement and lessen the potential for a backlog of applications awaiting review.

However, even if the State Water Board successfully streamlines its application process, it could have a growing backlog of applications awaiting review. As we note previously, the State Water Board identified hundreds of failing and at-risk water systems in 2021. Many of these water systems may be eligible for the millions of dollars in increased funding the Legislature recently appropriated, which could result in an increased backlog of funding applications for the State Water Board to review. According to the branch chief, the State Water Board has discussed implementing a goal for the number of applications each project manager should complete in a year, but it has not yet done so. The branch chief said the State Water Board will consider this idea as part of the goals and metrics it hopes to develop by the end of 2022.

If the State Water Board were to set a goal for how long it should take to process applications, as well as how many applications its project managers should be able to process in a year, it could determine the associated staffing levels it needs to meet those goals.

If the State Water Board were to set a goal for how long it should take to process applications, as well as how many applications its project managers should be able to process in a year, it could determine the associated staffing levels it needs to meet those goals. It could then justify requests for additional resources if it believes it needs them. Otherwise, the number of funding applications for drinking water projects is likely to grow, which will increase the amount of time the State Water Board takes to process applications. In fact, in a December 2021 review of the State Water Board’s administration of its programs, the EPA expressed concern that as the work increases with the addition of new supplemental funding programs, the State Water Board’s staff will be unable to satisfactorily support the needs of the programs. The EPA recommended that the State Water Board reassess staffing levels and hire appropriately. It is important to note that the EPA was concerned only with the State Water Board’s administration of federal funds; given that the same staff members also work with state funds, which are also increasing, this reassessment of staffing is even more critical.

Since May 2020, State Water Board policy has included a list of metrics that the State Water Board intends to develop goals for, including the time from the start of an application to its
completion, and the time for a complete application to result in a funding agreement. The deputy director agreed that establishing benchmarks would help the State Water Board identify ways to improve the efficiency, timeliness, and transparency of its application process. He further stated that he intends to have different metrics depending on the type of project—construction or planning—and whether it will be funded by a loan or a grant. The branch chief indicated that during the summer of 2022 the State Water Board will begin developing performance targets and metrics to track key milestones for each project in order to identify which projects may be experiencing delays. She also stated that the State Water Board will begin to track staff performance and workload to determine whether the State Water Board has a sufficient number of staff reviewing funding applications. The deputy director indicated that the State Water Board could begin using such metrics by December 2022. However, developing these metrics and others has been included in State Water Board policy for two years, and the State Water Board has not yet implemented them. Further, the State Water Board did not have an estimated date for when it expected to implement them until we suggested that it establish one. The two years during which the State Water Board failed to develop these metrics is yet more lost time that has contributed to the delays for vulnerable Californians dependent on failing water systems.

**Delays in Funding Projects Will Lead to Increased Costs and Negative Health Outcomes**

The longer the State Water Board takes to fund projects, the more expensive the projects become and, more importantly, the greater the likelihood of negative health outcomes for Californians served by failing water systems. According to the Department of General Services, the annual inflation rate for construction costs increased from about 1 percent in 2018 to more than 13 percent in 2021 and is expected to continue to increase in 2022. In fact, for the 15 projects we reviewed, we identified nine in which project costs increased during the funding process, including one for which costs increased from $9.6 million in 2017 to $12 million in 2020, or a 25 percent increase during that period.

Further, Californians who rely on drinking water from systems that exceed MCLs are at serious risk for health complications. One of the most common water contaminants affecting failing water systems in California in 2020 was arsenic. According to the EPA, exposure to arsenic in everyday use and drinking water causes skin damage and circulatory problems, and leads to an increased risk of cancer. Californians can decrease some of their exposure to contaminants in water by purchasing bottled water and filters,
but doing so can be expensive, and funding for this option is not universally available. Unfortunately, as noted by firsthand accounts in an April 2022 media report, some disadvantaged Californians simply do not have the means to completely avoid using contaminated water, and many of these people have reported experiencing serious health consequences. The experiences of these Californians in trying to obtain a basic human necessity—safe drinking water—necessitates greater urgency from the State Water Board to process applications and provide the funding water systems need in order to make necessary improvements and repairs to ensure that their customers have safe drinking water.

Moreover, as we describe in the Introduction, California is in the midst of a historic drought, which will only increase the strain on many struggling water systems. For example, water systems that rely on groundwater for their supply may have to drill new wells as aquifers dry up. Other water systems may find that their water quality deteriorates as rain and snowfall decrease, reducing the amount of fresh water entering rivers and streams and seeping into groundwater basins. As their water quality worsens, or their water dries up altogether, struggling water systems will urgently need funding and solutions from the State Water Board. Any delays will expose even more Californians to unsafe drinking water.

Finally, a lack of urgency could delay the distribution of new state funds. The deputy director indicated that the State Water Board is trying to shift away from a mentality in which it views funding as scarce. The Legislature recently appropriated $650 million in increased funding for infrastructure projects for drinking water. Further, the deputy director noted that the State Water Board recently approved changes that could make more projects eligible for grant funding and said it is reaching out to systems currently receiving funding that still have unfunded needs to see whether the State Water Board can provide additional funds. However, the State Water Board’s increasingly long processes for distributing loans and grants will make it harder for it to distribute this new funding in a timely fashion. Until the State Water Board addresses the increasingly long period of time between initial application and actual funding of a project, it will—despite the hundreds of millions in newly appropriated funds—continue to delay addressing critical needs for safe drinking water in communities throughout California.

**The State Water Board Needs to Better Monitor Its Technical Assistance Providers to Ensure That They Are Providing Effective Services**

The State Water Board needs to improve oversight of its technical assistance providers to ensure that they are providing effective services. Because failing water systems often lack the resources to
navigate the process of applying for funding for water projects, the State Water Board provides access to technical assistance providers to help in this process. The State Water Board anticipates needing additional technical assistance providers to expand the types of services and coverage it offers, as well as to better distribute the workload among providers. However, since inheriting the program from the California Department of Public Health in 2014, the State Water Board has yet to ensure that its technical assistance program reduces the time required for water systems to implement drinking water solutions. The State Water Board’s fund expenditure plans reiterate that technical assistance should accelerate the implementation of solutions, particularly for water systems that appear to be struggling to make timely progress toward resolving their drinking water needs. However, in a 2020 report to the Governor, the State Water Board recognized that it lacked knowledge regarding its technical assistance providers’ effectiveness in carrying out their responsibilities. As a result, it established a goal to evaluate provider services, marketing, and activities through water system surveys and input from State Water Board district offices by the second quarter of 2020, so that it could use these results to improve providers’ effectiveness.

In a 2020 report to the Governor, the State Water Board recognized that it lacked knowledge regarding its technical assistance providers’ effectiveness in carrying out their responsibilities.

However, as of April 2022 the State Water Board had still not conducted this survey. According to the supervising engineer of the SAFER drinking water section (SAFER supervisor), the State Water Board has not implemented the survey as intended because it was instead focused on developing the statutorily required needs assessment described in the Introduction and getting more technical assistance providers.

Notwithstanding the importance of these tasks, both rely on having competent providers to address any existing compliance issues or future problems identified through the needs assessment. When asked to rank technical assistance provider performance on a scale from 1 to 10—with 1 being completely unsatisfied and 10 being completely satisfied—61 of our 97 survey respondents ranked technical assistance performance with an average score of 5, indicating a lack of satisfaction with the providers’ performance. As an example of this frustration, one respondent indicated having to tell a technical assistance provider “how to do many parts of [the] standard construction documents and bidding process.” Given these responses, the State Water Board should do more to prioritize evaluating the performance of its technical assistance providers so it can identify areas where providers can improve and determine whether a provider’s performance justifies the amount the State Water Board pays for its services.
In fact, we noted some instances in which the State Water Board could have reduced the amount of time required to restore community drinking water to compliance had it conducted better oversight. For example, the State Water Board assigned as a high priority a technical assistance project for South Kern Mutual Water Company (South Kern) to one of its providers in December 2019. This project was a high priority because South Kern exceeded multiple contaminant levels, among other compliance issues, and was required to consolidate with another water system. However, the State Water Board failed to recognize until 10 months later that the provider had not performed any work on the project. Correspondence between the State Water Board and the provider indicated that there was not enough funding under the provider’s agreement to complete the project and it was waiting for the State Water Board to execute a new agreement before it started work. The State Water Board subsequently reassigned this project to a different provider, but as of June 2022 the project was still ongoing. The State Water Board’s lack of awareness of its technical assistance provider’s status on a project it considered a high priority is unacceptable, especially considering that delays in providing technical assistance projects can also delay access to safe drinking water for residents.

Implementing performance metrics to gauge the performance of technical assistance providers will help the State Water Board oversee the technical assistance program. When the nine current providers submitted proposals in 2016 to provide technical assistance under Proposition 1, they also submitted lists of goals and outcomes they intended to achieve. For example, proposals included working on 25 to 27 projects per year, conducting one public meeting or workshop per month per project, and completing projects on time and within budget. However, according to the branch chief, the State Water Board did not use these goals and outcomes to evaluate provider performance because it considered them to be too general to be useful. Instead, it required providers to develop work plans for each project, which would be more specific to a water system’s needs. The branch chief added that the State Water Board has been developing metrics and should have them finalized by the end of 2022 but reiterated that even without these metrics, staff review detailed quarterly reports and meet with providers monthly to verify that providers are in compliance with their agreements and work plans. These interactions are important for managing individual projects; however, the lack of performance metrics limits the amount of information available to the State Water Board on the program as a whole. For example, such metrics could help the State Water Board identify which of its providers lack the resources to work on new assignments.
Although the State Water Board Is Expanding Outreach to Water Systems, It Needs to Better Monitor These Efforts

The State Water Board conducts various outreach activities to raise awareness about its services, to help water systems identify potential drinking water solutions, and to keep projects on track by proactively identifying potential risks, issues, or delays. Activities can include public meetings, surveys, email blasts, and social media posts, among other activities. However, the State Water Board has not consistently conducted outreach to failing water systems, particularly to those that serve disadvantaged communities. In our survey of failing water systems, 49 of the 97 failing water systems responded that neither the State Water Board nor a technical assistance provider had reached out to discuss potential options to help bring their water system back into compliance. However, recent changes to state law enabled the State Water Board to put more effort into outreach. According to the SAFER supervisor, historically the State Water Board conducted outreach to water systems only when explicitly required under state law—such as communicating with ratepayers and residents when deciding whether to order consolidation of water systems—and it did not specifically target disadvantaged communities for outreach due to a lack of financial and staffing capacity. However, the creation of the SADW Fund and the SAFER program in 2019 made funds available for the State Water Board to perform additional outreach. According to the assistant deputy director of the Division of Drinking Water, the board is increasing its efforts to reach out to disadvantaged communities, including creating a new unit to conduct outreach to isolated rural systems.

As the State Water Board increases its outreach, it needs to better ensure that its outreach efforts are efficient. The State Water Board entered into a four-year agreement for more than $9 million with one of its technical assistance providers to provide services, including outreach to at-risk water systems serving disadvantaged communities, beginning in October 2020. However, this provider appears to be duplicating the efforts of other technical assistance providers. According to a State Water Board senior engineer, the provider indicated that it tries not to conduct outreach to water systems that are already receiving assistance for their water issues from another technical assistance provider. However, we found that eight of the 89 water systems the provider contacted in 2021 were already receiving technical assistance from other providers. The senior engineer stated that the provider contacted these eight water systems to determine whether they were already receiving technical assistance from another provider or needed assistance beyond what they were already receiving. However, the provider charged the State Water Board more than $8,000 for 174 hours to make these contacts. Although not a large amount of money, the
number of hours seems an unreasonable amount of work for such fact-finding at eight water systems. By duplicating these efforts, the State Water Board may not be expanding its outreach to water systems that are unaware of the assistance it provides, particularly those serving disadvantaged communities. The senior engineer said that the State Water Board will amend its agreement to require the provider to develop an outreach plan in advance so that the State Water Board can identify any systems that the provider intends to contact that are already receiving technical assistance.

Further, the State Water Board has recently developed a community outreach strategy. In its 2021 financial expenditure plan, the State Water Board described how increased and early community engagement through workshops and meetings helps keep projects on track by proactively identifying potential risks, issues, or delays and ensuring that proposed long-term solutions have community buy-in. Therefore, in an effort to keep drinking water projects on track, the State Water Board’s Office of Public Participation implemented a new outreach strategy for the SAFER program in March 2022 designed to conduct outreach and engagement activities through partnerships with local experts who have a deep understanding of community needs. The new strategy relies on identifying and entering into agreements with funding partners that will, in turn, identify, manage, and monitor community partners, who will develop and implement outreach and community education activities. The Office of Public Participation anticipates finalizing funding partner master agreements by December 2022 and then beginning the process of identifying the regions and communities in need of engagement. The outreach strategy appears reasonable to accomplish the State Water Board’s goals, provided it carries out the planned community engagement activities. Such outreach is essential to ensuring that communities are aware of concerns with their drinking water, are informed of assistance the State Water Board may provide if their systems need financial assistance, and are engaged with and supportive of any changes that come about as a result of that assistance.
Other Areas We Reviewed

State Water Board Funding for Drinking Water Projects

The State Water Board complied with its processes and applicable funding requirements for drinking water projects, including its processes for prioritizing projects to award funding and the financial terms of those awards. As described in the Introduction, the Division of Financial Assistance ranks completed applications based on their priority and readiness to proceed. It prioritizes funding for projects that address the most serious risk to human health, are needed to comply with drinking water standards, and assist water systems that are most in need on a per-household basis. The State Water Board also ranks a project higher if it benefits a disadvantaged community. To determine whether the State Water Board appropriately prioritized funding, we reviewed 15 projects from 2017 to 2021 that it awarded funds. We determined that the State Water Board properly scored and prioritized the applications for these 15 projects.

We also found that the State Water Board awarded loan repayment terms that are consistent with state and federal law and with its policies. The interest rates for these loans were 1.7 percent in 2017 before increasing to 1.9 percent in 2019 and decreasing to 1.2 percent in 2021. To assist water systems serving disadvantaged communities and public school districts that cannot afford project costs, State Water Board policy requires it to provide these water systems additional financial assistance, such as principal forgiveness, interest-free loans, and extended loan repayment periods. In particular, federal law generally requires that loans be for a period of not more than 30 years after the completion of the project for which the loan was made; however, water systems serving disadvantaged communities may qualify for extended loan terms that span up to 40 years after project completion if the extended loan term does not exceed the expected design life of the project. We reviewed 10 loan projects that were awarded funding between 2017 and 2021 and determined that the State Water Board assigned interest rates and loan repayment terms in accordance with its policies and applicable laws.

The State Water Board generally provides funding to areas of the State that lack access to safe drinking water. We reviewed the State Water Board’s list of failing water systems to identify where Californians lack access to safe drinking water. We also reviewed the funding it provided to benefit people in those areas. As Figure 6 shows, the majority of these failing systems are located in the Central Valley and San Bernardino County. Further, most of the funding for water projects went to counties with large numbers of failing water systems or people served by failing water systems.
For example, more than half of the population served by failing water systems is located in five counties—Los Angeles, Kern, Stanislaus, San Bernardino, and Tulare—and these five counties received 40 percent of the funding awarded.

Additional Funding Is Needed to Help Ensure That Water Systems Can Meet Drinking Water Standards

The State Water Board identified a significant funding gap for drinking water solutions for failing and at-risk water systems. As noted in the Introduction, in 2021 the State Water Board identified more than 600 water systems at risk of failing to provide an adequate supply of safe drinking water to about 400,000 residents. Further, the 2021 assessment estimated that from 2021 through 2025...
there would be a gap of approximately $4.5 billion between funding needs and available loan and grant funding. For example, the State Water Board estimated that eligible failing and at-risk water systems during that time frame would need $3.2 billion in grant funding but that only $1.2 billion would be available, resulting in a $2 billion gap between eligible grant funding needs and available grant funding. In addition, the 2022 assessment estimated that small public water systems and K–12 schools would need between $1.2 billion and $4.8 billion to meet new drought infrastructure requirements, such as having at least one backup source of water supply and an adequate backup electrical supply.

Given the funding gap discussed above, the State Water Board should work with the Legislature—and with federal agencies to the extent possible—to identify solutions to address this funding gap and request the resources necessary to help ensure that water systems can meet drinking water standards. Doing so will further the human right to water the State Water Board has made a priority and will help address poor-quality drinking water as California endures its third consecutive year of dry conditions, resulting in a continuing drought.

Please refer to the section beginning on page 3 to find the recommendations that we have made as a result of these audit findings.

We conducted this performance audit in accordance with generally accepted government auditing standards and under the authority vested in the California State Auditor by Government Code section 8543 et seq. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on the audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Respectfully submitted,

JOHN BAIER, CPA
Acting Chief Deputy State Auditor, Audits

July 26, 2022
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Appendix A

Results of Our Survey of Failing Water Systems

The Joint Legislative Audit Committee (Audit Committee) requested that we assess the State Water Board’s efforts to help provide Californians with safe drinking water. To gain an understanding of the challenges that failing water systems experience, we surveyed public water systems identified by the State Water Board as failing to meet water quality standards during 2021. We notified these water systems about this survey by email and collected their electronic responses. We excluded more than 100 water systems due to a lack of contact information, lack of a representative available to complete our survey, or lack of response to our contact, among other issues. Of the 300 failing public water systems we surveyed, 97 (32 percent) responded. In Table A we present aggregated responses to selected questions.

We invited the respondents to our survey to provide written comments to give context to selected answers, although only some opted to do so. In the survey, we asked questions on the State Water Board funding and application process and its technical assistance and public outreach. Comments on the State Water Board’s funding and application process were generally negative. Specifically, several water systems responded that the process is very lengthy and takes a significant amount of time for approval. Additionally, several water systems expressed frustration that more grant opportunities were not available to smaller water systems that were unable to afford large-scale infrastructure changes. Comments on the State Water Board’s technical assistance and public outreach were mixed; a number of water systems reported that the technical assistance provided by and communication with the State Water Board was helpful and informative, but some expressed frustration with the State Water Board and its general lack of communication. The results of the survey suggest that the State Water Board could improve its communications with water systems and revise its application and funding process.
Table A  
Water Systems’ Responses to Selected Questions From Our Survey

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<tbody>
<tr>
<td><strong>Questions Regarding State Water Board Application and Funding Process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you aware that the State Water Board has funding available for loans or grants to help bring public water systems into compliance with safe drinking water standards?</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Have you applied to the State Water Board for funding to bring your public water system into compliance with safe drinking water standards?</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Did the State Water Board assist you during the application for funding process?</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>79% of this assistance was sufficient</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Questions Regarding Technical Assistance and Public Outreach</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you aware that the State Water Board contracts with organizations (known as technical assistance providers) to provide technical assistance with tasks such as project coordination, legal assistance, and environmental analysis to help bring your public water system into compliance with safe drinking water standards?</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Has the State Water Board or a technical assistance provider reached out to you to discuss what could be done to help bring your public water system into compliance with safe drinking water standards?</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>85% of this assistance was helpful</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>52%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the State Water Board or a technical assistance provider conducted outreach in the community your public water system serves to discuss issues related to your water system’s water quality or drinking water in general?</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>93% of this assistance was helpful</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>72%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you received technical assistance to help bring your public water system into compliance with safe drinking water standards?</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Did you receive adequate communication from your technical assistance provider?</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Did you receive all the technical assistance you needed?</td>
<td>73%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: Auditor’s survey of failing water systems.

Note: As part of our survey of failing water systems, we excluded more than 100 water systems due to a lack of contact information, lack of a representative available to complete our survey, or lack of response to our contact letter, among other issues.

* Some questions did not receive a 100 percent response rate, and these figures reflect only the responses for each question.
Appendix B

Scope and Methodology

The Audit Committee directed the California State Auditor to conduct an audit of the State Water Board regarding its efforts to help provide Californians with safe drinking water. Table B lists the objectives that the Audit Committee approved and the methods we used to address them.

Table B
Audit Objectives and the Methods Used to Address Them

<table>
<thead>
<tr>
<th>AUDIT OBJECTIVE</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Review and evaluate the laws, rules, and regulations significant to the audit objectives.</td>
<td>Reviewed relevant laws, regulations, and other background materials related to the State Water Board and safe drinking water requirements.</td>
</tr>
</tbody>
</table>
| 2 Evaluate the State Water Board's efforts to ensure that all Californians have access to clean drinking water. Determine where Californians lack clean drinking water and whether the State Water Board has provided adequate funding and assistance to benefit people in those areas. | • Interviewed State Water Board staff, and reviewed State Water Board policies and procedures for awarding infrastructure funding and technical assistance to water systems.  
• Obtained State Water Board data on loans and grants, and data for water systems that consistently failed to meet the State's safe drinking water standards.  
• Reviewed the data to determine where Californians lack safe drinking water and the funding the State Water Board provided to benefit people in those areas. |
| 3 Evaluate the State Water Board's outreach efforts to promote and encourage participation in its program to help ensure Californians' access to clean water. To the extent possible, evaluate the demand for clean water and drinking water from disadvantaged communities throughout California and determine whether the State Water Board's outreach efforts appropriately focus on communities most in need. | • Interviewed State Water Board staff and reviewed board policies and procedures for conducting outreach to water systems.  
• Obtained and reviewed agreements the State Water Board has with technical assistance providers for outreach efforts to determine what metrics it uses to evaluate outreach efforts.  
• Determined that the State Water Board did not conduct outreach specifically to disadvantaged communities served by failing water systems. |

continued on next page …
<table>
<thead>
<tr>
<th>AUDIT OBJECTIVE</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze the State Water Board’s effectiveness in administering the Safe Drinking Water State Revolving Fund, and any related financial assistance programs, by doing the following:</td>
<td>• Interviewed State Water Board staff and reviewed State Water Board policies and procedures for awarding infrastructure funding and technical assistance to water systems.</td>
</tr>
<tr>
<td>a. Evaluate the State Water Board’s processes for awarding financial assistance for infrastructure needed to achieve or maintain compliance with federal and state clean water requirements.</td>
<td>• Obtained data from the State Water Board on loans and grants that it has provided to water systems for the past five years.</td>
</tr>
<tr>
<td>b. Assess the metrics the State Water Board uses to evaluate applications for financial assistance, and determine whether it applies these metrics consistently.</td>
<td>• Analyzed the data to determine the number and types of applications for funding assistance that the State Water Board received and the number and types of drinking water projects that it approved, including the amount of funding awarded, the portion of the funding that consisted of grants or loans, and the loan financing terms.</td>
</tr>
<tr>
<td>c. Evaluate the timeliness and effectiveness of the State Water Board’s processing of applications for financial assistance.</td>
<td>• Determined the portion of drinking water funding that the State Water Board provided to failing water systems and to disadvantaged communities.</td>
</tr>
<tr>
<td>d. Determine whether the State Water Board ensures that recipients of financial assistance use funds in accordance with applicable statutes, State Water Board policies, and best practices.</td>
<td>• Evaluated the timeliness and effectiveness of the State Water Board’s processing of applications for financial assistance.</td>
</tr>
<tr>
<td>e. Analyze data and information from the last five years to determine how effective the State Water Board has been in providing financial assistance to support access to clean water, including the number and types of eligible applicants; the number and types of projects; financing terms, such as interest rate, loan repayment, and principal forgiveness; and any other relevant information.</td>
<td>• Judgmentally reviewed 15 projects that the State Water Board awarded between 2017 and 2021, to determine whether the State Water Board properly used its metrics to evaluate applications and ensured that recipients used the funds in accordance with applicable requirements.</td>
</tr>
</tbody>
</table>

<p>| 5 | Review the technical assistance program that is available to address the water needs of small, disadvantaged communities throughout California to ascertain the following: | • Interviewed State Water Board staff and reviewed State Water Board policies and procedures for providing technical assistance to water systems. |
| a. Whether the technical assistance program has coordinated effectively with other programs to meet the needs of these small, disadvantaged communities. | • Obtained and reviewed the State Water Board’s March 2022 outreach and engagement strategy to determine how the State Water Board intends to work with community partners. |
| b. How many communities have received assistance from the technical assistance program and where they are located. | • Obtained data from the State Water Board on technical assistance projects that it approved between 2017 and 2021. |
| c. Whether the State Water Board has implemented the technical assistance program effectively. | • Analyzed the data to determine the number and types of applications for technical assistance that the State Water Board received and the number and types of projects that it approved. Due to the lack of sufficient data in the State Water Board’s data system, we were unable to determine how many small, disadvantaged communities have received technical assistance. |
| | • Identified the number of technical assistance providers the State Water Board currently uses and reviewed its efforts to increase the number of available providers. |
| | • Reviewed the State Water Board’s policies and project agreements to determine its processes for evaluating technical assistance providers’ performance. |
| | • Reviewed 10 technical assistance projects the State Water Board approved between fiscal years 2018–19 and 2020–21 and determined that the providers generally complied with federal and state funding requirements. |</p>
<table>
<thead>
<tr>
<th>AUDIT OBJECTIVE</th>
<th>METHOD</th>
</tr>
</thead>
</table>
| **6** Assess efforts by the SAFER program to proactively identify, reach out to, and assist water systems in providing an adequate and affordable supply of safe drinking water. | • Interviewed State Water Board staff and reviewed board policies and procedures for conducting outreach to water systems.  
• Obtained and reviewed the State Water Board’s plans to update its affordability assessment and determined how it intends to use this information. |
| **7** To the extent possible, conduct a customer survey of water systems or communities out of compliance with clean water standards to determine why they are out of compliance and whether the State Water Board or the Legislature could make changes to help ensure that all Californians have access to clean water. | To gain an understanding of the challenges that failing water systems experience, we surveyed public water systems identified by the State Water Board as failing to meet water quality standards during 2021. |
| **8** Review and assess any other issues that are significant to the audit. | Interviewed State Water Board staff and reviewed State Water Board processes for identifying water systems at risk of failing to provide safe drinking water and its goals to prevent these systems from failing. |

Source: Audit workpapers.

**Assessment of Data Reliability**

The U.S. Government Accountability Office, whose standards we are statutorily required to follow, requires us to assess the sufficiency and appropriateness of the computer-processed information that we use to support our findings, conclusions, and recommendations. In performing this audit, the primary data and systems we relied on include the following:

**Drinking Water and Technical Assistance Projects**

We used the State Water Board’s project management data to determine the number of drinking water and technical assistance projects, the amounts and types of funding awarded for these projects, dates for project initiation and reviews, and other details of these projects, including the size of the water system and if it served a disadvantaged community. To evaluate these data, we performed electronic testing of the data, interviewed State Water Board personnel knowledgeable about the data, and compared some of the electronic information stored in the system with the information recorded in hard-copy project files for a selection of projects. We determined that these data were not sufficiently reliable due to missing records and inaccuracies. Nevertheless, we used the data, as this was the best source of information for the total population of the State Water Board’s projects. Although this determination may affect the precision of the numbers we present, there is sufficient evidence in total to support our findings, conclusions, and recommendations.
Failing and At-Risk Water Systems

We also relied on the State Water Board’s data on failing water systems and water systems at risk of failing to determine those systems’ location in the State and the population they serve. We performed dataset verification procedures and did not identify any issues. Because we used these data for background or contextual information that does not materially affect findings, conclusions, or recommendations, we determined that a data reliability assessment was not necessary.
State Water Resources Control Board

July 6, 2022

John Baier, CPA
Acting Chief Deputy State Auditor, Audits
621 Capitol Mall, Suite 1200
Sacramento, CA 95814

STATE WATER RESOURCES CONTROL BOARD RESPONSE TO 2021-118 – CONFIDENTIAL DRAFT AUDIT REPORT FOR REVIEW

Dear Mr. Baier,

Thank you for the opportunity to review the California State Auditor’s draft Report 2021-118. The State Water Resources Control Board’s (Board’s) highest priority is advancing the human right to water, and it will work to implement many of the report’s recommendations, where feasible, especially those which build upon preexisting process improvements already underway. My staff and I recognize the attention to detail your staff exhibited during the audit process and your efforts to understand the variety of challenges we are confronting as we work to deliver assistance to the communities most in need. These process improvements and recommendations, when fully implemented, will promote greater efficiency, consistency, and transparency for the Board’s efforts to support communities with providing safe and affordable drinking water to all Californians.

The Board acknowledges that there are improvements that can be made, but respectfully requests an adjustment to the inaccurate title of the report. The Board has demonstrated its urgency by making substantial progress in its Safe and Affordable Funding for Equity and Resilience (SAFER) Program over the past three years to provide safe and affordable drinking water to the many Californians who previously lacked safe water. Since the Governor signed SB 200 (Chapter 120, Statutes of 2019) on July 24, 2019, the SAFER program has:

- Reduced the population impacted by failing water systems from 1.6 million people to 934,000 – a 40% reduction in the first three years of a 10-year program. This means that 650,000 Californians in 120 communities now have access to safe drinking water that they did not have three years ago.
- Responded to frequent drought and water emergencies, providing $50 million in urgent assistance to 9,456 households and 150 water systems experiencing water outages due to drought, contamination, and failing infrastructure.
- Expanded assistance where needed most, by increasing the grant funding committed to primarily small, disadvantaged communities1 by 84% compared to the three fiscal years before the program began. Since July 2019, these communities have received

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1 A disadvantaged community has a median household income of less than 80% of the state median household income. A small, disadvantaged community system serves 3300 or fewer connections or 10,000 or fewer people.

* California State Auditor’s comments begin on page 59.
approximately $700 million in grants to meet interim, urgent drinking water needs, support planning and system assessment through our technical assistance providers, and fund projects that support long-term resilience and address compliance issues.

- Increased funding for critical technical assistance by over 150% compared to the three fiscal years before the program; this assistance has accelerated projects in over 300 small, primarily disadvantaged communities.

Safe Drinking Water Background

Ten years ago, California became the first state to adopt the Human Right to Water, which recognizes that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” In 2019, Senate Bill 200 established the Safe and Affordable Drinking Water Fund to address funding gaps and provide solutions to water systems, especially those serving disadvantaged communities. Small, disadvantaged communities often do not have the technical capacity to run sophisticated treatment systems, the governance or managerial capacity to operate their water systems effectively, or the financial capacity to support growing operation and maintenance costs.

Recognizing the significant challenges in fulfilling the human right to water for Californians in small, disadvantaged communities, the State Water Board created the SAFER Drinking Water Program. To advance solutions, the SAFER program employs a comprehensive approach that includes enhanced data collection, sophisticated data analysis, deployment of multiple funding sources, judicious use of regulatory authorities, innovative outreach and engagement strategies, and robust multi-agency coordination.

From the time that SB 200 was signed in July 2019 through the end of June 2022, the State Water Board has committed grants totaling approximately $700 million for drinking water projects that primarily went to small, disadvantaged communities. The State Water Board also has approved more than $27M for technical assistance work to assist small, primarily disadvantaged, communities. We are managing approximately 200 active drinking water funding agreements and approximately 540 drinking water technical assistance assignments. The total number of planning agreements (either through technical assistance or direct financial assistance) and construction agreements executed has increased from 54 in FY 19/20 to 83 in FY 21/22. This over 50% increase in delivering planning and construction assistance occurred despite the significant challenges that arise when working with water systems that lack experience with managing complex projects.

Since the start of the SAFER Drinking Water Program, we have accomplished a great deal by prioritizing four specific strategies: 1) proactively assessing water systems’ needs and reaching out to failing and at-risk systems directly and through our technical assistance partners; 2) increasing emphasis on regulatory compliance; 3) supporting systems with financial and technical assistance, where needed; and 4) expanding our outreach and community engagement efforts. In addition to the points above, the Board’s SAFER Drinking Water Program has:

- Provided construction funding to over 90 communities, approximately 75% of which went to small, disadvantaged communities.
• Completed consolidations of 73 water systems and the public process to appoint Administrators to 13 water systems.
• Established a Process Improvement Work Group and completed 40 process improvements to streamline application and reimbursement processes.
• Sent over 2,000 letters to water systems informing them of consolidation opportunities, including the grant funding and technical assistance available to support consolidation.
• Held 19 water partnership workshops throughout the state to connect large and small water systems to discuss potential regional consolidation efforts.
• Initiated discussions with 31 tribal water systems and held 55 meetings with tribal representatives.
• Held 12 meetings of the SAFER Advisory Group and an additional 94 public meetings and presentations.

We are especially proud of these accomplishments given the unprecedented disruption to our work caused by the COVID-19 pandemic for the last 27 months, which limited or prevented us from engaging in-person with our colleagues, stakeholders, and impacted water systems; forced unprecedented changes to our workflow and processes; and required onboarding and training of 54 new staff (filling existing and new positions) without the benefit of in-person interaction. The impacts of COVID-19 have been especially acute because the SAFER Drinking Water Program was created just months before the state transitioned to telework.

The COVID-19 pandemic also has had a major impact on the small communities that benefit from our funding and technical assistance. We have had multiple instances of delays due directly or indirectly to the pandemic, such as cost increases related to inflation and/or supply chain problems that require amending agreements to increase budgets; consultants or water systems with key staff out of the office due to COVID-19 health impacts; statewide or county restrictions that limit travel or in-person meetings for required site visits. These delays temporarily required our staff to turn their attention from working on new funding agreements or technical assistance workplans to reviewing and processing amendments. Holding ourselves, our funding recipients, and technical assistance providers accountable is critical; however, determining whether delays are caused by major exogenous events (pandemic; global supply chain problems) versus factors within our collective control has been very challenging.

Audit Recommendations

We have made great strides in improving how we do our work. We believe many of the recommendations provided in the State Auditor’s report build upon the foundation we have created and our culture of continuous improvement. The Board recognizes the report’s recommendations are an opportunity to assess areas for further improvement, and we discuss below the specific recommendations we are seriously considering for implementation. We will continue to evaluate other recommendations not mentioned below and may, where necessary, identify alternative actions that we believe will meet the objectives in a more effective, efficient manner.
Improve Application and Funding Processes

We appreciate the State Auditor’s recognition of the Division of Financial Assistance’s (DFA) dedication to continuous process improvement. This dedication has resulted in 40 completed process improvements with an additional 30 active process improvement efforts underway. The Board supports the audit’s findings to continue streamlining efforts and establish clearer expectations for staff reviewing applications. These efforts are focused on streamlining funding approvals and making it easier for systems to implement projects, such as developing processes for advanced payment. DFA has established procedures and regular meetings to add and prioritize new improvement efforts. These efforts will continue to be a focus for DFA, and key progress will be reported out quarterly as part of the Board’s Executive Director reports.

The Board is also supportive of the suggestions to develop and monitor performance measures for the application process and to gather input from the SAFER Advisory Group on these aspects of the program. As part of these efforts, DFA plans to create a funding dashboard to allow the public and key stakeholders to monitor performance and progress.

The Board understands that the fundamental prioritization/urgency metrics for evaluating progress in funding safe drinking water solutions are the number of solutions provided, the number of systems removed from failing status, and the continued absence of those systems from the failing list. This is why the Board removed the restriction on when funding applications can be submitted and now accepts applications continuously. The Board does not prevent submittal of applications - even when our funding capacity and staff capacity to process applications are exceeded - because projects can be queued and ready to move forward once capacity is available. We have found that the openness of our application process facilitates higher application rates and, ultimately, more funded projects.

Since the drinking water program was transferred to the State Water Board in July 2014, we have seen a significant increase in applications for funding. As reported in the FY 2014/2015 Drinking Water SRF Annual Report, there were 49 projects on the “Fundable List” of projects in the Intended Use Plan; the FY 2017/2018 Drinking Water SRF Annual Report identified 123 projects on the “Fundable List” and the FY 2019/2020 Drinking Water SRF Annual Report identified 250 projects on the “Fundable List.” The increased marketing and outreach the Board has conducted, along with policy changes to invite applications for a wider variety of project types (not just focused on public health projects, as was done previously), have resulted in this significant increase. The increase has far outpaced our capacity and resources to hire new staff, causing longer processing times, but it has also resulted in a substantial increase in financial assistance delivered to communities.

Improve Delivery of Technical Assistance

The Board’s technical assistance programs provide vital support to help small, disadvantaged communities apply for funding and comply with drinking water standards, and California is a national leader in the amount and breadth of assistance we provide. The Board partners with regional and statewide nonprofit organizations, as well as local universities, to work with community water systems to address their most critical technical, managerial, and financial capacity needs. Together, the Board and its technical assistance providers have worked with hundreds of failing and at-risk systems, which are the initial focus of the SAFER Drinking Water Program, and we are significantly expanding those efforts.
Generally, the Board provides a full suite of planning services via technical assistance providers to out-of-compliance small systems. This approach streamlines the funding process because systems do not need to separately apply for a planning grant to complete the planning and design work necessary to support their construction application. Instead, a technical assistance provider can work with the system to complete all planning work and apply for construction funds.

The State Auditor's draft report raises concerns with the performance of technical assistance providers. As discussed in the report, the Board's technical assistance program has been sustained by a group of nine nonprofit providers for several years. These existing providers have shared that they do not have enough capacity to meet increasing demands. Based on new authorities in state law effective last fall that allow the Board to provide funding for technical assistance to additional provider types, DFA staff recently initiated a Statement of Qualifications process to qualify additional providers. As of June 2022, five new providers have been added to the pool of qualified providers, and DFA is working to execute new agreements with them. This will significantly increase the Board's capacity to provide technical assistance.

The report also recommends establishing goals and performance measures for technical assistance providers. The Board is supportive of this recommendation. DFA staff will develop and implement performance measures that will flag delays to determine where intervention may be needed, without creating disincentives for technical assistance providers to request additional time or funding where appropriate. Ultimately, the primary goal is to see that system needs are completely identified and appropriately addressed.

Engaging with communities and water systems

Proactive engagement with water systems and communities is a core aspect of the SAFER Drinking Water Program. The Board supports the audit’s findings to continue expanding the SAFER Drinking Water Program’s outreach and engagement efforts.

The report recommends technical assistance providers develop an outreach plan when first establishing their workplans under SAFER. The Board is supportive of this recommendation. However, in implementing this recommendation, it will be important to allow flexibility for technical assistance providers to develop outreach and engagement plans that are responsive to their community and water system needs. A standardized template for all communities and water systems is not effective or appropriate.

The Board recently launched an outreach and engagement strategy to: increase early community engagement with SAFER; keep local drinking water projects on track; identify potential risks, issues, or delays; build local capacity; and create a path toward equitable and resilient water governance. Through partnering with local trusted groups, we aim to catalyze collaborative solutions in hard-to-reach communities.

In addition to our new outreach and engagement approach, we will continue to convene the SAFER Advisory Group, which provides the State Water Board with advice on many components of the SAFER Drinking Water program. The Advisory Group is composed of up to 19 appointed members that represent public water systems, technical assistance providers, local agencies, non-governmental organizations, the public, tribes, and residents served by community water systems in disadvantaged communities, state smalls, and domestic wells. These meetings are opportunities for public input and are widely publicized and offered with language interpretation services.
Addressing Funding Gaps

The State Auditor’s draft report recommends that the State Water Board work with the Legislature to appropriate the funds required to ensure water systems are meeting drinking water standards. The Administration and the Board has worked with, and will continue to work with, the Legislature to meet critical drinking water infrastructure needs and provide aid to small, disadvantaged communities that struggle to provide their residents with safe, affordable drinking water.

As recognized in the background of the draft report, the Administration, working with the Legislature, has made significant investments in addressing funding gaps for drinking water systems that are out of compliance. The Safe and Affordable Drinking Water Fund appropriates $130 million annually for 10 years to primarily assist small, disadvantaged communities. The Budget Act of 2021 included an additional $650 million for drinking water systems and $400 million in funding to help meet federal match requirements for the State Revolving Funds. This will allow California to access up to $2–$3 billion in federal drinking water funds over the next five years as authorized by the Infrastructure Investment and Jobs Act.

It is also important to recognize that funding for capital improvements and for sustainable operation and maintenance of water systems primarily comes from water systems’ rate payers. Two important strategies for addressing funding gaps are to help water systems establish rate structures that put them on a path toward long-term sustainability and to assist small systems with efforts to consolidate with larger water systems.

The ideas and recommendations expressed in the State Auditor’s draft report align with the SAFER Drinking Water Program’s model of continuous improvement and offer invaluable considerations for our ongoing efforts to ensure that Californians who lack safe and affordable drinking water receive it as quickly as possible, and that the water systems serving those Californians establish sustainable solutions. In addition, the report reflects the collective responsibility that is integral to SAFER’s success: water systems, non-profit organizations, governments, the community advisory board, and other stakeholders working together to develop and implement solutions. Through this collaboration, we uphold California’s Human Right to Water and minimize the disproportionate environmental burdens experienced by some communities by advancing the fair treatment of people of all incomes, races, and cultures.

Sincerely,

Joe Karkoski
Water Boards

Eileen Sobeck
Executive Director
State Water Resources Control Board
Comments

CALIFORNIA STATE AUDITOR’S COMMENTS ON THE RESPONSE FROM THE STATE WATER RESOURCES CONTROL BOARD

To provide clarity and perspective, we are commenting on the response to our audit report from the State Water Board. The numbers below correspond to the numbers we have placed in the margin of the State Water Board’s response.

We stand by the report title. Audit standards require that we base our conclusions on sufficient and appropriate evidence. The evidence we cite in the section starting on page 21 related to the growing length of time the State Water Board is taking to process applications, points to a lack of urgency, as does the board’s lack of goals and metrics related to processing applications, which we describe beginning on page 35. We acknowledge that the State Water Board has made considerable effort to implement the SAFER program. On page 10 of the report we describe the substantial funding the State Water Board has provided to help communities address contaminated drinking water. In Table 1 on page 10 we detail the fact that much of the funding has, indeed, gone to disadvantaged communities. The increasing amount of funding available for safe drinking water, which we discuss on pages 22 and 38, gives the State Water Board an opportunity to make a significant impact on water systems, especially in disadvantaged communities. However, our report demonstrates that the State Water Board’s process for providing this funding is taking far too long and the State Water Board has not made sufficient efforts to address this problem.

We agree that the pandemic may have inhibited the State Water Board’s ability to process applications quickly. Nevertheless, the fact that the time to process applications and fund projects has nearly doubled between 2017 and 2021 means that some Californians will have to spend more time going without safe drinking water. Therefore, we make recommendations on pages 3 and 4 to the State Water Board to streamline its process for funding applications and to establish expectations for how long the process will take.

We appreciate the State Water Board’s policy to allow water systems to apply at any time, even when funding or staff capacity are exceeded. However, as we note on page 36, it is important to recognize that establishing metrics would allow the State Water Board to justify hiring additional staff, a step which would likely help it reduce the amount of time it takes to process applications. Further, as we note on pages 22 and 38, the State Water Board has received hundreds of millions in additional funds for drinking water projects. Getting those funds distributed quickly could also require additional staff.
We do not recommend that the State Water Board create a standardized template for conducting outreach. Instead, as we recommend on page 5, the State Water Board should develop a plan to avoid future outreach work that duplicates the efforts of its providers or of its staff.