

State Water Resources Control Board

STATE WATER RESOURCES CONTROL BOARD SMALL WATER SYSTEM CAPACITY DEVELOPMENT STRATEGY FOR FYS 2019-2021

Addendum to the 2000 Capacity Development Strategy

DISCUSSION

This document is an addendum to the State Water Resources Control Board's (State Water Board) water system Capacity Development Strategy, which aims to increase the ability of public water system operators, managers, and decision-makers to consistently operate, maintain and manage their public water systems in a manner that protects public health. Although the State Water Board coordinates activities to increase technical, managerial, and financial (TMF) capacity for all public water systems, the State Water Board has recently placed a high priority on small and/or disadvantaged communities which face specific challenges related to their drinking water systems. This addendum places a special focus on these communities' water systems and spans three fiscal years, a time period that coincides with the federally required triennial capacity development report to the governor. As goals change and additional needs are identified, the State's baseline capacity development strategy will be revised and updated.

Small and/or disadvantaged communities face specific challenges related to their drinking water systems. Such communities lack the capital and economies of scale to maintain their water system, to conduct necessary compliance monitoring, to strategically plan for water system improvements, and/or to implement projects that correct violations of drinking water standards. They also often have difficulty obtaining and retaining not only qualified operators, but managers, board members and administrative staff.

The State Water Board makes extensive efforts to support water systems through capacity development. However, the State Water Board also recognizes that the significant responsibility and costs to operate a public water system are often overwhelming for small water systems with poor economies of scale, particularly in financially disadvantaged communities. As a result, the State Water Board highly encourages voluntary consolidation, the joining of two or more water systems, whenever feasible. Prior to having mandatory consolidation tools and strong incentives for voluntary consolidations, the State Water Board documented an average of approximately four consolidations per year. However, since the Legislature provided the State Water Board with stronger tools, over the last two years the State Water Board has consolidated over 100 failing water systems with nearby functioning water systems.

Somewhere between a quarter and a third of small water systems failing to meet drinking water standards are within reasonable piping distance to a larger water system. Many small water systems are surrounded by or adjacent to another larger water system. In places where proximity to a nearby well-managed larger water system is challenging, managerial consolidation can still result in the smaller water system obtaining the benefits from economies of scale. Consolidations are best achieved when voluntarily pursued by the water systems. However, it is often necessary to bring

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them together to discuss consolidation and work through political hurdles and impacts to water rates, particularly if the small system rate is artificially low because they have not been including infrastructure replacement and other emergency reserves in their rate structure. Thus, a large amount of work is needed to assist the consolidation effort even if it is voluntary.

Although the State Water Board has made significant progress in closing the gaps that have led to some communities having unsafe drinking water, significant issues remain. Over 1 million Californians across the state still lack access to safe drinking water at their homes, schools, and businesses. Thanks to the collaborative efforts of the governor, the Legislature and community advocates, there is now a reliable funding source for the next 11 years to address drinking water concerns in communities where drinking water problems have thus far proved challenging to address.

DRINKING WATER CAPACITY DEVELOPMENT STRATEGY

The U.S. Environmental Protection Agency (EPA) has delegated State primacy to the State Water Board for enforcement of the provisions of the federal Safe Drinking Water Act (SDWA), which requires the State to develop a strategy and address the five elements identified in the table below ([Handbook for Capacity Development, pg. 55](#)). Within the State Water Board, the Division of Drinking Water (DDW) oversees enforcement of drinking water standards and requirements of public water systems in California under the SDWA.

SDWA Elements
1 – Methods or Criteria to Prioritize Water Systems
2 – Factors that Encourage or Impair Capacity Development
3 – How the State will use the Authority and Resources of the SDWA
4 – How the State will Establish the Baseline and Measure Improvements
5 – Procedures to Identify Interested Persons

California’s Capacity Development Program strategy is comprised of 10 strategic goals and associated SDWA elements. The following table summarizes the goals and associated elements:

Table 1: Drinking Water Capacity Development Strategic Plan Goals for Fiscal Years 2019 - 2021

No.	Goal	SDWA Element(s)	Implementation
1	Reduce Water System Inventory through Consolidation	3	Ongoing
2	Increase Stakeholder Engagement and Understanding	5	Ongoing
3	Form a Capacity Development Coordination Team	3	1 st Quarter 2020
4	Identify High-Risk Water Systems in Order to Proactively Support Sustainability and Resiliency	1, 3	2 nd Quarter 2020
5	Develop a Tracking System for Prioritizing and Tracking Progress of Projects	1, 4	2 nd Quarter 2020

No.	Goal	SDWA Element(s)	Implementation
6	Evaluate and Expand Efficiency of Technical Assistance Providers' Performance	2	2 nd Quarter 2020
7	Update DDW's Capacity Development Website		2 nd Quarter 2020
8	Enhance the Financial Review of Water Systems During Sanitary Surveys	2	3 rd Quarter 2020
9	Develop a Financial Capacity Tool	2	1 st Quarter 2021
10	Follow-Up on Newly Permitted Water Systems	2	1 st Quarter 2021

Strategic Goal 1 – Reduce Water System Inventory through Consolidation

The State Water Board has identified water systems with under 1000 connections statewide that are candidates for consolidations. Work on these water systems will be prioritized based on a number of factors including, types and numbers of violations, community median household income, and proximity to larger water systems for consolidation. Work will also be done to engage public participation and assist them in understanding their options for a consolidation. DDW is increasing the number of water system partnership and consolidation coordinators to expand this important strategic effort.

Strategic Goal 2 – Increase Stakeholder Engagement and Understanding

One of the keys to a successful drinking water program is public and community acceptance and understanding of the program. Public engagement efforts will have components of both outreach and education to communities. DDW will also continue to collaborate with national stakeholders, who provide valuable insight and suggestions which DDW can utilize to greatly improve the capacity development strategy and program.

Strategic Goal 3 – Form a Capacity Development Coordination Team

In order to have an efficient capacity development program, a higher level of collaboration between State Water Board divisions and outside agencies is needed. The DDW coordination team will include members of DDW-Program Management Branch, DDW-Field Operations Branch, Division of Financial Assistance-Technical Assistance, Division of Financial Assistance-Operator Certification, and the Local Primacy Agencies. The team will collaborate regularly to discuss factors that either encourage or impair capacity development and methods of achieving performance goals. This may include planning necessary trainings, reevaluating certified operator requirements, creating criteria to identify and prioritize technical assistance of water systems in need of improving technical, managerial, financial (TMF) capacity, and establishing the best use of technical assistance revenues and resources of the SDWA to achieve performance goals.

Strategic Goal 4 – Identify High-Risk Water Systems in Order to Proactively Support Sustainability and Resiliency

Public water systems that have ongoing violations or may be at risk for future violations based on

historical compliance issues, aging infrastructure, TMF capacity, and/or other risk factors will be identified. The State Water Board was appropriated funding to implement a Needs Analysis on the state of drinking water in California, which will include the following activities:

- Identify community water systems in violation and at-risk,
- Identify state small water systems and domestic wells that are at-risk
- Perform a cost-analysis for interim and long-term solutions for those drinking water systems identified above.

DDW is creating new staffing positions that will be specifically tasked with continuing the important work of identifying and prioritizing at-risk water systems after the initial Needs Analysis is completed.

Strategic Goal 5 – Develop a Tracking System for Prioritizing and Tracking Progress of Projects

DDW, the Division of Financial Assistance, and the Office of Information Management and Analysis will work together to quickly deploy a tracking database tool that will be used for both assisting in prioritizing funding projects and tracking them once they are underway. The tool will help the State Water Board with getting projects funded and completed as well as provide information to the public on the progress of each project. The prioritization schema will assist regulators and TA providers in providing services in an efficient, transparent and effective manner.

Strategic Goal 6 – Evaluate and Expand Efficiency of Technical Assistance Providers' Performance

There is a lack of knowledge regarding how the contracted TA providers are performing. Water system and DDW-Field Operations Branch feedback about technical assistance services. DDW will begin implementing surveys that will allow identification of which activities and/or organizations encourage capacity development most effectively and sustainability. Based on the surveys and input from District offices, DDW will provide suggestions to the technical assistance providers on where to improve their services, marketing and/or activities. DDW will also work with technical assistance providers to help increase attendance to trainings on very important, but less understood topics such as financial capacity.

Strategic Goal 7 – Update DDW's Capacity Development Website

DDW's Capacity Development website will be updated and maintained so that it can be more effectively used by the public and regulators. Additional information regarding asset management will be uploaded to educate water systems and promote more effective asset management.

Strategic Goal 8 – Enhance the Financial Review of Water Systems During Sanitary Surveys

Technical and managerial capacity are simply not possible when the financial capacity is not present. Therefore, more focus will be placed on the financial aspect of TMF. Many small water systems do not realize the precarious nature of their financial position, nor how it impacts their eventual ability to achieve drinking water standards as their infrastructure ages.

DDW's sanitary survey format will be enhanced to include more financial review and data

collection; a financial questionnaire is being developed and will be finalized after the end of a pilot project under development. Financial information can be used in financial analysis, which may help with identifying high-risk water systems. DDW can then work on re-evaluating their TMF criteria and assessment as well as update TMF guidance for water systems. Staff will be provided comprehensive training on how to incorporate financial review into their inspections.

Additionally, the 2019 electronic annual report will include a question regarding asset management plans to obtain information regarding how many water systems are performing this work. It will also help DDW determine which water systems are lacking adequate asset management and could use further training or TA.

Strategic Goal 9 – Develop a Financial Capacity Tool

An initial financial capacity dashboard will be created by the University of North Carolina, Chapel Hill for community water systems between 500 to 3,300 connections as part of the Needs Assessment. This work will be used as a model for potential future development of ways to evaluate financial capacity.

As currently conceived, the tool will include an easy to read visual component for:

- adjusted operating ratio (cost recovery),
- annual water bill (water rates), including an affordability metric,
- comparison of statewide water bills assuming a median usage of 6 hundred cubic feet (HCF) (water rate comparison),
- percentage of water loss (unaccounted for water), and
- compliance status in the HR2W List.

Future work to expand this tool and or include technical and managerial components will be developed based on the outcome of this success of this work.

Strategic Goal 10 – Follow-Up on Newly Permitted Water Systems

DDW will review all water systems that were newly formed and permitted in Fiscal Year 2016-2017 and every fiscal year thereafter to ensure they adequately address all TMF elements that promote long-term sustainability. Each water system will be reviewed four and six years after permit issuance to identify any failures that are consistently occurring and whether these failures could have been prevented. This will allow DDW to modify its procedures as necessary to enhance permitting requirements for future water systems applicants. This will help identify which TMF elements are often overlooked and will identify any need for policy or regulatory change.