

Fact Sheet

DIVISION OF DRINKING WATER

Sustainability



Sustainability & Public Water Systems

Implementation of the 2020 Safe Drinking Water Plan (2020 Plan) focuses on recommendations necessary to achieve compliance with the Safe Drinking Water Act, in recognition that safe drinking water is fundamental to the health of all communities in California. The 2020 Plan contains recommendations for public water systems and are grouped in the four thematic areas of Sustainability, Equity/Human Right to Water, Emergency Preparedness, and Program Action. This factsheet includes background information and recommendations for the Sustainability theme.

Sustainability means using resources in a way that meets our present needs without compromising future needs. In this context, sustainability refers to the ability of [public water systems](#) to sustain operations and maintenance and meet all legal requirements and safe drinking water standards for the long term. Common obstacles to water system sustainability can include: small water systems lacking the cost advantages of larger systems (economies of scale); low-income households facing water rate affordability issues; limited or no rainy day funds; treatment for new contaminants; lack of

back-up water sources to prepare for instances of well failures, climate change impacts, and emergency response demands.

Approximately 50% of California's community water systems serve fewer than 100 connections. These small water systems are likely to face long-term sustainability challenges. Small water systems lack economies of scale and are unable to spread costs among customers making it hard to put funds aside for future infrastructure improvement needs. As a result, they are unable to afford adequate staff and don't generate the revenue needed for to maintain or replace infrastructure (such as pipes, storage tanks, and aqueducts) as it reaches the end of its working lifespan. Small water systems tend to lack adequate technical, managerial, and financial (TMF) capacity. Participating in water partnerships, particularly consolidations and regionalization, can offset these challenges. Consolidation is the joining of two or more water systems and often includes a smaller water system being absorbed into a larger one. Regionalization involves the consolidation of multiple water systems into one entity to share costs.

Legislative Efforts to Increase the Sustainability of Public Water Systems

- SB 88 (2015) Grants the State Water Board authority to mandate certain water systems consolidate when a water system consistently fails to provide an adequate supply of safe drinking water in a disadvantaged community.
- SB 1263 (2017) Prevents the creation of new unsustainable water systems. Requires new domestic water supply applicants to demonstrate the ability to meet technical, managerial, financial, and source capacity (having enough water to supply customer demands).
- SB 200 (2019) Modified a section of SB 1263 to authorize the State Water Board to deny the permit of a proposed new public water system if the board determines that consolidation is a feasible alternative.



Unsustainable Water Systems

A lack of technical, managerial, and financial capacity is more common in small water systems than in large water systems. Small water systems often cannot afford full-time paid management staff, attract board members with utility experience, or implement water rates that account for the costs of infrastructure replacement.

Technical Capacity

- Most small water systems rely on contract operators or volunteers.
- More complex systems, including those with the need for water treatment, require a higher level of operator certification. Rural communities often have limited access to certified operators making it more difficult to hire.

Managerial Capacity

- Managerial capacity includes setting budgets, increasing fees to support the operation and maintenance of the water system, hiring and retaining qualified staff, ensuring regulatory compliance, developing capital improvement plans, and overall management of the system.
- Small water systems tend to lack managerial capacity compared with larger water systems.
- Some small water systems, such as mutual water systems, are often governed by volunteer boards and are unable to attract or retain new board members as aging board members retire. Without a sufficient number of board members, these small water systems are unable to function properly.

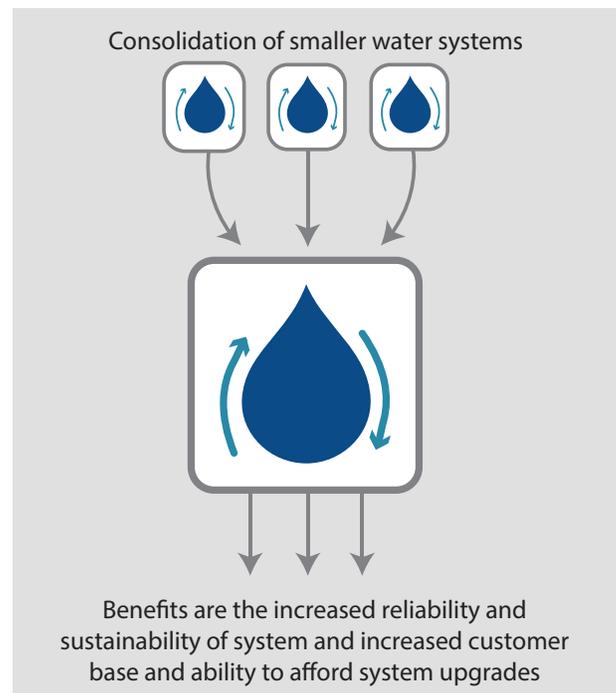
Financial capacity

- The most important element of sustainability for water systems is funding. Small water systems lack adequate funding due to their small customer base. As a result, there is less money for improvements to the system for emergencies or for long-term planning.
- Some water systems are barely able to cover current expenses, and so they are not able to plan for future needs such as replacing old pipelines, drilling new wells, etc.

Top Three Sustainability Recommendations

The 2020 Safe Drinking Water Report identified [19 recommendations for sustainability](#). Below are the top three recommendations:

1. Increase financial capacity requirements. This may include developing asset management plans (or similar documents) and requirements to increase rates to meet asset management plan conditions and provide for adequate reserves, accounting policies, and insurances.
2. Promote consolidation and utilize administrator programs, wherever feasible and appropriate, including in transient non-community and non-transient non-community water systems. Consolidation is not limited to full physical consolidation of drinking water treatment and delivery systems but may include technical, managerial, financial and/or physical arrangements between water systems.
3. Expand mandatory consolidation authority. This authority would apply to all public water systems under 500 service connections that have exceeded a primary MCL for longer than three years, not just those that serve disadvantaged communities.



For additional information on equity and the human right to water, visit:

[Office of Sustainable Water Solutions | California State Water Resources Control Board](#)

[SAFER Drinking Water Program | California State Water Resources Control Board](#)

[Water and Sustainable Development | United Nations \(UN\)](#)

[2020 Safe Drinking Water Plan- Chapter 8, Sustainability of California's Drinking Water Systems](#)

For questions regarding emergency preparedness, contact:

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