

Primer of Senate Bill 552: Drought Planning for Small Water Suppliers and Rural Communities

Prepared by



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GLOSSARY

Community water system: A public water system that serves at least 15 service connections used by yearlong residents or regularly serves at least 25 yearlong residents of the area served by the system, as defined in Section 116275 of the Health and Safety Code (Water Code §10609.51 subd. (a)).

County Drought Advisory Group: A state agency and stakeholder group that developed recommendations on which Senate Bill 552 was based.

Domestic well: A groundwater well used to supply water for the domestic needs of an individual residence or a water system that is not a public water system and that has no more than four service connections, as defined in Section 116681 of the Health and Safety Code (Water Code §10609.51 subd. (k)).

Drought and water shortage risk vulnerability tool: The water shortage vulnerability tool that Department of Water Resources developed to implement Chapter 10 (commencing with Water Code §10609.40) of Part 2.55 (Water Code §10609.51 subd. (i)).

Non-transient, non-community water system: A public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year, as defined in Section 116275 subd. (k) of the Health and Safety Code. Example of this includes a school (Water Code §10609.51 subd. (g)).

Public water system: A system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily for at least 60 days out of the year (Health and Safety Code §116275 subd. (h).)

Rural community: A community with fewer than 15 service connections or regularly serving less than 25 individuals daily at least 60 days out of the year, including domestic wells (Water Code §10609.51 subd. (j)). In other words, rural community in this law covers all water systems or domestic wells for human consumption that are not a public water system.

Small water supplier: A community water system serving 15 to 2,999 service connections, inclusive, and that provides less than 3,000 acre-feet of water annually (Water Code §10609.51 subd. (k)).

State small water system: A system for the provision of piped water to the public for human consumption that serves at least five, but not more than 14, service connections and does not regularly serve drinking water to more than an average of

25 individuals daily for more than 60 days out of the year as defined in Section 116275 (n) of the Health and Safety Code (Water Code §10609.51 subd. (m)).

State smalls. Abbreviated form of state small water system.

Urban water management plan: A plan required per California Water Code §10610 et seq. for publicly and privately owned urban water suppliers that provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail or wholesale cost for municipal purposes.

Water shortage contingency plan: A document required per California Water Code §10617.5 for publicly and privately owned urban water suppliers that incorporates the provisions detailed in California Water Code §106329(a).

Water shortage vulnerability tool: The drought and water shortage risk scoring of small water suppliers and rural communities, and the interactive webtool to explore the information, developed as part of the Department of Water Resources County Drought Advisory Group process (Water Code §10609.42 subd. (a)).

ACRONYMS AND ABBREVIATIONS

§	Section
CDAG	County Drought Advisory Group
DWR	California Department of Water Resources
ENP	emergency notification plan
ERP	emergency response plan
NTNC	non-transient, non-community water system
SB	Senate Bill
State Water Board	California State Water Resources Control Board
WSCP	water shortage contingency plan

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INTRODUCTION

This primer summarizes a 2021 drought planning legislation, referred to as Senate Bill (SB) 552 (Reg. Session 2021-2022, Stats. 2021, ch. 245). In September 2021, SB 552 was signed by Governor Newsom and enacted into law.

SB 552 includes new responsibilities and requirements at both the state and local levels to help small water suppliers and rural communities reduce their risk of inadequate water supply during a water shortage event. As the first step in implementing the provisions of SB 552, the California Department of Water Resources (DWR) and the California State Water Resources Control Board (State Water Board) prepared this primer to summarize the roles, responsibilities and requirements for state agencies, small water suppliers and schools, and counties for implementing SB 552.

BACKGROUND

Recognizing the challenges experienced in the 2012-2016 drought in California and potential increased frequency and severity of droughts under climate change, the Legislature passed Assembly Bill 1668 and SB 606 in 2018 to establish a new framework for long-term water use efficiency and conservation in California.¹ Among other things, this framework included new requirements to strengthen local drought resilience for urban water suppliers² and directed DWR to collaborate with stakeholders and the State Water Board to develop recommendations for improving drought planning of small water suppliers and rural communities, which vary widely in supply source reliability and organizational capacity and can be highly vulnerable to water shortages during droughts.

During the development of recommendations, DWR organized a County Drought Advisory Group (CDAG) with diverse stakeholders and collaborated closely with the State Water Board and the Office of Environmental Health Hazard Assessment. DWR, through collaboration with CDAG and state agencies, identified small water suppliers and rural communities that are vulnerable to drought and at risk of water shortage

¹ For a comprehensive overview of this landmark legislation, please see California Department of Water Resources, and California State Water Resource Control Board. 2018. "[Making Water Conservation A California Way of Life: Primer of 2018 Legislation on Water Conservation and Drought Planning Senate Bill 606 \(Hertzberg\) and Assembly Bill 1668 \(Friedman\).](#)" *Legislative Summary*.

² An "urban water supplier" is defined as a supplier, either publicly or privately owned, providing potable water for municipal purposes either directly at retail or indirectly at wholesale to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually (Water Code §10617).

and developed recommendations for how to improve drought preparedness through water shortage contingency planning. Figure 1 shows the disaster risk management framework that was used in the collaboration to guide the recommendation development. A Water Shortage Vulnerability Tool was also developed during the process to promote awareness and understanding of the potential water shortage risks for small water suppliers and rural communities.

DWR submitted the recommendation report, [Small Water Systems and Rural Communities Drought and Water Shortage Contingency Planning and Risk Assessment](#), to the Legislature and Governor Newsom in Spring 2021. Referred to as the 2021 Recommendation Report, it includes the findings and recommendations to support improving drought preparedness. This 2021 Recommendation Report has two parts: [Part I](#) addresses drought and water shortage contingency planning recommendations; and [Part II](#) presents a methodology of drought and water shortage vulnerability assessment and risk scoring. DWR's recommendations became the basis of SB 552.



Source: Small Water Systems and Rural Communities Drought and Water Shortage Contingency Planning and Risk Assessment: Part 1 - Recommendations for Drought and Water Shortage Contingency Plans (DWR 2021).

Figure 1. Disaster Risk Management Framework

NEW REQUIREMENTS FOR LOCAL AGENCIES, COUNTIES, AND STATE GOVERNMENT

SB 552 adds requirements that address gaps in local and state water management for drought resiliency and water shortage preparedness in recognition that, “No one should go without running water during a drought.” (Water Code §10609.50, subd. (e).) These new requirements are expected to improve the ability of small water suppliers and rural communities to improve drought planning and water shortage preparedness, resulting in reduced vulnerability during droughts or during other catastrophic events that impact water supply.

Meeting SB 552’s requirements for improving drought resilience and contingency response during water shortages will require the following:

- **Drought Resilience Planning:** Take actions now to avoid emergency conditions during future drought and other water shortages to the maximum extent practicable. This includes capacity building, mitigation and other preparation actions, monitoring, forecasting, and reporting.
- **Water Shortage Response Planning:** Create procedures for the event of an expected or unforeseen emergency that can directly improve the ability to manage an emergency water shortage condition.
- **Communication and Coordination:** Improve communication and coordination between local, regional, and state governments and the many types of water users in California.

Small Water Suppliers and Schools Non-Transient, Non-Community Water Systems

SB 552 defines a small water supplier as a community water system serving 15 to 2,999 service connections, and that provides less than 3,000 acre-feet of water per year (Water Code §10609.51 subd. (k)). It considers several categories of small water suppliers: those suppliers with under 1,000 connections, those with 1,000 to 2,999 connections inclusive, and non-transient, non-community (NTNC) water systems that are schools (see Table 1 at the end of this report). Water suppliers providing water to over 3,000 connections are considered “urban water suppliers” and are subject to the Urban Water Management Planning Act (Water Code §10610 et seq.) and other requirements.

All small water suppliers and NTNC water systems that are schools must implement the following drought resilience measures, subject to funding availability:

- a) *No later than January 1, 2023, implement monitoring systems sufficient to detect production well groundwater levels.*
- b) *Beginning no later than January 1, 2023, maintain membership in the California Water/Wastewater Agency Response Network (CalWARN) or similar mutual aid organization.*
- c) *No later than January 1, 2024, to ensure continuous operations during power failures, provide adequate backup electrical supply.*
- d) *No later than January 1, 2027, have at least one backup source of water supply, or a water system intertie, that meets current water quality requirements and is sufficient to meet average daily demand.*
- e) *No later than January 1, 2032, meter each service connection and monitor for water loss due to leakages.*
- f) *No later than January 1, 2032, have source system capacity, treatment system capacity if necessary, and distribution system capacity to meet fire flow requirements (Water Code §10609.62).*

There are additional requirements that are specific for small water suppliers with different numbers of connections, as described below.

It is noted that these requirements and the ones listed below do not apply to small water suppliers and NTNC water systems that are schools that voluntarily choose to comply with the requirements specified in the Urban Water Management Planning Act (Water Code §10620 et seq.) for urban water suppliers. (Water Code §10609.63).

Suppliers with 15 to 999 connections

These suppliers must incorporate drought planning elements (including, but not limited to, drought-planning contacts and standard water shortage levels) into their Emergency Notification Plan (ENP) or Emergency Response Plan (ERP). The ENP or ERP is to be submitted to the State Water Board and updated every 5 years or when significant changes occur (Water Code §10609.60, subd. (c)).

Health and Safety Code §116460 requires all community water systems to have an ENP approved by the State Water Board that describes process and methods for meeting the public notification requirements specified in §116450 to §116485 when any primary drinking water standard is not complied with, when a monitoring requirement is not performed, or when the conditions of any variance or exemption are not complied with. In addition, America's Water Infrastructure Act of 2018 (Public Law 115-270) §2013(b) requires community water systems serving populations

greater than 3,300 to develop or update an ERP that incorporates findings of their risk assessment. Droughts and a wide range of incidents are considered in an ERP. This requirement is not based on number of connections, although the number of connections for a community water system serving a population of 3,300 is approximately 1,000. Therefore, there may be a small number of small water suppliers with less than 1,000 connections who have developed and maintained an ERP.

Subject to funding availability, the State Water Board will offer technical assistance to support water suppliers with less than 1,000 connections in implementing this new requirement for improving drought and water shortage resiliency (Water Code §10609.60, subd. (e)).

Suppliers with 1,000 to 2,999 connections and NTNC systems that are schools

Suppliers in this category must develop, adopt, and maintain on-site an abridged water shortage contingency plan (WSCP) that covers a subset of drought-planning elements included in the plans that urban water suppliers submit as part of their Urban Water Management Plan (Water Code §10609.60, subds. (a) (b)). The first plan must be developed by July 1, 2023, and posted on the supplier's website, if any, or made available upon request. This abridged WSCP must be updated at least every 5 years. (*Ibid.*). The required elements must include:

- 1) *Drought-planning contacts, including all of the following:*
 - a) *At least one contact at the water system for water shortage planning and response and the development of the plan.*
 - b) *Contacts for local public safety partners and potential vendors that can provide repairs or alternative water sources, including but not limited to, local community-based organizations that work with the population in and around areas served by the water system, contractors for drilling wells, vended water suppliers, and emergency shower vendors.*
 - c) *State and local agency contacts who should be informed when a drought or water shortage emergency is emerging or has occurred.*
 - d) *Regional water planning groups or mutual aid networks, to the extent they exist.*
- 2) *Triggering mechanisms and levels for action, including both of the following:*

- a) *Standard water shortage levels corresponding to progressive ranges based on the water supply conditions. Water shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, a fire, and other potential emergency events.*
- b) *Water shortage mitigation, response, customer communications, enforcement, and relief actions that align with the water shortage levels required by subparagraph (A) (Water Code §10609.60, subd. (a)).*

As part of the technical assistance, DWR and the State Water Board will create a template for this abridged WSCP for small water suppliers serving 1,000 to 2,999 service connections and NTNC systems that are schools by December 31, 2022, (Water Code §10609.60, subd. (d)). In addition, subject to funding availability, the State Water Board will offer technical assistance to support NTNC systems that are schools in implementing this new requirement for improving drought and water shortage resiliency (Water Code §10609.60, subd. (e)).

Counties

SB 552 places the drought and water shortage planning responsibility on counties for state small water systems and domestic well communities within the county's jurisdiction (Table 2).

Note that SB 552's language allows for flexibility in how each county implements the new requirements. Plans and response arrangements could be developed by groundwater sustainability agencies that cover the county, in which case the county would need to also formally recognize its agreement and adoption or deference to these plans as part of its compliance with SB 552.

County Drought and Water Shortage Task Force

By January 1, 2022, each county must establish a standing county drought and water shortage task force to facilitate drought and water shortage preparedness for state smalls and domestic wells within the county's jurisdiction (Water Code §10609.70, subd. (a)). Counties must solicit task-force membership from representatives of state and other local governments, including groundwater sustainability agencies (GSAs), community-based organizations, local water suppliers, and local residents.

As an alternative, a county may implement a different process that facilitates drought and water shortage preparedness for state smalls and domestic wells within the county's jurisdiction. The alternative process will provide opportunities for coordinating and communicating with the state and other local governments,

community-based organizations, local water suppliers, and local residents on a regular basis and during drought or water shortage emergencies.

County Drought and Water Shortage Risk Mitigation Plan (Water Code §10609.70)

A county will develop a plan that includes potential drought and water shortage risks and proposed interim and long-term solutions for state smalls and domestic wells within the county’s jurisdiction. The plan may be a stand-alone document or may be included as an element in an existing county plan, such as a local hazard mitigation plan, emergency operations plan, climate action plan, or general plan. The plan must include:

- Potential drought and water shortage risk
- Proposed interim and long-term solutions for state smalls and domestic wells in the county

The plan must consider the following, at a minimum (Water Code §10609.70. subd. (b)):

- Consolidations for existing water systems and domestic wells
- Domestic well drinking water mitigation programs
- Provision of emergency and interim drinking water solutions
- An analysis of the steps necessary to implement the plan
- An analysis of local, state, and federal funding sources available to implement the plan

State Government

SB 552 identifies responsibilities for both the State Water Board and DWR and directs both agencies to work closely together to implement their new roles (Table 3). These responsibilities are designed to support and foster the capacity of small water suppliers and counties to avoid and mitigate drought impacts, and to better prepare for and respond to water shortage occurrences.

Standing Interagency Drought and Water Shortage Task Force

SB 552 directs DWR, in collaboration with the State Water Board and other relevant state agencies, to establish a standing interagency drought and water shortage task force for the State. The purpose and scope of this task force is to facilitate proactive state planning and coordination, both for pre-drought planning and post-drought

emergency response; to develop strategies to enhance collaboration between various fields; and to develop these plans, responses, and strategies in a way that considers all types of water users. The task force membership must include representatives from local governments, community-based organizations, nonprofit technical assistance providers, the public, and experts in land use planning, water resilience, and water infrastructure (Water Code §10609.80., subd. (b)).

Support for Small Suppliers (Water Code §10609.60, subd. (d))

- No later than December 31, 2022, Department of Water Resources and the California State Water Resources Control Board (State Water Board) will create a template for an abridged water shortage contingency plan for small water suppliers serving 1,000-2,999 service connections, inclusive, and non-transient, non-community (NTNC) water systems that are schools in order to assist these entities.
- To the extent that funding is made available, the State Water Board will offer technical assistance to small water suppliers serving fewer than 1,000 service connections and NTNC water systems that are schools to improve drought and water shortage resiliency, including requirements related to the emergency notification or response plan.

Support for Counties

The State Water Board will work with counties, groundwater sustainability agencies, technical assistance providers, nonprofit organizations, community-based organizations, and the public to address state smalls and domestic well community drought and emergency water shortage resiliency needs, including both of the following at a minimum (Water Code §10609.70, subd. (c)):

- Proactive communication to domestic well communities before a drought occurs, such as information on local bottled water and water tank providers
- Funding for installation of basic drought and emergency water shortage resiliency infrastructure, such as well monitoring devices

Water Shortage Vulnerability Tool

SB 552 directs DWR, in partnership with the State Water Board and other state agencies, to maintain and update the drought and water shortage risk vulnerability tool (Water Code §10609.80, subd. (a)).

- 1) *Maintain, in partnership with the State Water Board and other relevant state agencies, the risk vulnerability tool developed as part of the County Drought*

Advisory Group process and continue to refine existing data and gather new data for the tool, including, but not limited to, data on all of the following:

- a) Small water suppliers and NTNC water systems serving a school.*
 - b) State small water systems and rural communities.*
 - c) Domestic wells and other self-supplied residents.*
- 2) Update the risk vulnerability tool for small water suppliers and rural communities periodically, by doing all of the following:*
- a) Revise the indicators and construction of the scoring as more data becomes readily available.*
 - b) Make existing and new data publicly available on the California Open Data internet web portal.*
 - c) In consultation with other relevant state agencies, identify deficits in data quality and availability and develop recommendations to address these gaps (Water Code §10609.80, subd. (a)).*

The CDAG identified over 20 factors to estimate the vulnerability of small water suppliers, domestic wells, and state smalls. DWR will update the scoring and tool as new data becomes available and as the State's understanding of water shortage vulnerabilities evolves. Periodic data updates and new datasets are to be made readily available, including the environmental conditions that affect water shortage vulnerability (i.e., groundwater conditions and climate change projections to name a few), population characteristics that affect social vulnerability, and organizational set-up of water suppliers. DWR will continue to make the data updates publicly available through the California Natural Resources Open Data portal (<https://data.cnra.ca.gov/>), and as an interactive dashboard tool to allow the public to access and explore the data for use in planning, as relevant. This work will be updated in coordination with the Safe and Affordable Funding for Equity and Resilience Program Needs Assessment conducted by the State Water Board.

Table 1. Summary of Small Water Supplier Requirements for Implementation of Senate Bill 552

Task	Summary of Requirement	Community Water Systems 1,000-2,999 Connections	Community Water Systems 15-999 Connections	NTNC Water Systems That Are Schools	Water Code Section
1	Drought Resiliency Measures	Yes	Yes	Yes	10609.62 (a-f)
2	Abridged Water Shortage Contingency Plan	Yes	No	Yes	10609.60 (a)
3	Drought Element added to Emergency Notification or Response Plan	No	Yes	No	10609.60 (b)
4	Annual reporting of water supply condition information to the State Water Board	Yes	Yes	Yes	10609.61 (a)
5	Annual water demand reporting to the State Water Board	Yes	Yes	Yes	10609.61 (b)

Table 2. Summary of County Requirements for Implementation of Senate Bill 552

Task	Summary of Requirement	Timeline to Implement, If Any	Water Code Section
1	Establish a standing county drought and water shortage task force or alternative process that facilitates drought and water shortage preparedness for state small water systems and domestic wells.	January 1, 2022	10609.70 (a)
2	Assess potential drought and water shortage risk.	No mandated timeline	10609.70 (b)
3	Provide emergency and interim drinking water solutions in the county drought and water shortage risk mitigation plan (plan).	No mandated timeline	10609.70 (b)(3)
4	Consider consolidations for existing water systems and domestic wells in the plan.	No mandated timeline	10609.70 (b)(1)
5	Consider domestic well drinking water mitigation programs in the plan.	No mandated timeline	10609.70 (b)(2)
6	Consider an analysis of steps to implement the plan.	No mandated timeline	10609.70 (b)(4)
7	Consider an analysis of local, state, and federal funding sources available to implement the plan.	No mandated timeline	10609.70 (b)(5)

Table 3. Summary of State Agency Requirements for Implementation of Senate Bill 552

Task	Summary of Requirement	Lead Agency	Other Agencies Involved*	Timeline to Implement	Water Code Section
1	Water shortage contingency plan template	State Water Board, DWR	N/A	December 31, 2022	10609.60 (d)
2	Technical assistance for water suppliers with under 1,000 connections	State Water Board	DWR	Ongoing	10609.60 (e)
3	Water supply and program reporting	State Water Board	DWR	Annual; ongoing	10609.61
4	Technical assistance for counties to address systems with under 15 connections and domestic wells	State Water Board	DWR, Governor's Office of Emergency Services (CalOES), Governor's Office of Planning and Research (OPR)	No mandated timeline	10609.70
5	Water shortage vulnerability tool	DWR	State Water Board and other state agencies	Periodically update, no mandated timeline	10609.80 (a)
6	Interagency drought and water shortage task force	DWR	State Water Board, OPR, Department of Fish and Wildlife, CalOES, Department of Food and Agriculture, Tribal representatives, federal agencies, local governments, community-based organizations, others	No mandated timeline	10609.80 (b)

*Participation not necessarily specified in law