

2022 DRINKING WATER NEEDS ASSESSMENT

State Water Resources Control Board

ABOUT

The purpose of the Needs Assessment is to (1) **identify communities** in California that are failing or at risk of failing to have access to safe drinking water; (2) **estimate the cost** implementing solutions for these communities; and (3) **identify affordability challenges** that may pose as barriers to implementing these solutions. White papers, presentations, public feedback received, and webinar recordings can be found on the State Water Board's [Needs Assessment](#) webpage.

DROUGHT-RELATED ENHANCEMENTS

In response to stakeholder feedback after the release of the 2021 Needs Assessment, the State Water Board focused its refinement efforts on better identifying challenges and needs associated with drought, the risk assessment:

- Added new source capacity risk indicators to the Risk Assessment for public water systems: 'Source Capacity Violations' and 'Bottled or Hauled Water Reliance.'
- Worked in partnership with the Department of Water Resources (DWR) to develop a new combined Risk Assessment for state small water systems and domestic wells that utilizes both the Aquifer Risk Map (water quality risk) and DWR's Drought Risk Vulnerability Tool.
- Conducted a targeted drought infrastructure cost assessment for implementation of SB 552 requirements for small water systems.

ADDITIONAL ENHANCEMENTS

The State Water Board has made several other enhancements to all three components of the 2022 Needs Assessment.

- The Risk Assessment for public water systems was expanded to include medium-size water systems with service connections between 3,300 and 30,000 or a population served up to 100,000. This expanded inventory aligns with the expanded State Water Board funding eligibilities for medium-size systems.
- The Risk Assessment for public water systems removed 5 risk indicators and added new indicators, including: 'Constituents of Emerging Concern,' 'Income,' 'Operating Ratio,' and 'Days Cash on Hand'.
- New Affordability indicators were added for the Risk Assessment and Affordability Assessment utilizing data from the 2021 Drinking Water Arrearage Payment Program: 'Percent Residential Arrearages' and 'Residential Arrearage Burden.'
- Socio-economic analyses related to the Risk and Affordability Assessments were performed. The State Water Board identified where Failing: HR2W list and At-Risk communities are experiencing high pollution burden or poverty and quantified the percent of non-white customers served.

2022 RISK ASSESSMENT RESULTS

As of January 2022 there were 346 water systems on the Failing: HR2W list. The 2021 Risk Assessment correctly predicted approximately 77% of the water systems that were on the list in 2021. The 2022 Risk Assessment has the same predictive power as in 2021, but approximately 100 fewer water systems are on the list allowing for more targeted engagement

System Type	Total Systems Analyzed	At-Risk
Public Water Systems	3,066	508 (17%)
State Smalls Water Systems		
Water Quality Risk Only	1,132	631 (50%)
Drought Risk Only	1,267	321 (25%)
Combined Risk	1,271	378 (30%)
Domestic Wells		
Water Quality Risk Only	160,995	92,635 (30%)
Drought Risk Only	312,023	90,974 (29%)
Combined Risk	312,162	64,176 (21%)

2022 DROUGHT INFRASTRUCTURE COST ASSESSMENT

In September 2021 the Governor approved Senate Bill (SB) 552¹ which requires small water systems (15 – 2,999 connections) and K-12 schools to meet new drought infrastructure resiliency measures. The State Water Board has conducted a targeted Drought Infrastructure Cost Assessment for the 2022 Needs Assessment. The results are summarized below.

Drought Requirement ²	# Small Systems	Range Total in \$ Millions
Monitor Static Well Levels	1,213 (46%)	\$1- \$5
Back-up electrical supply	1,872 (71%)	\$122 - \$490
Back-up source: new well or intertie	895 (34%)	\$956-\$3,823
Meter all service connections	1,275 (48%)	\$123 - \$491
TOTAL:	2,634	\$1,202 - \$4,809

2022 AFFORDABILITY ASSESSMENT RESULTS

The Affordability Assessment identifies community water systems that serve disadvantaged communities (DAC/SDAC) that must charge their customers' fees which exceed the affordability threshold established by the State Water Board in order to provide adequate safe drinking water. The State Water Board identified 69 (5%) DAC/SDAC water systems that had a high affordability burden, 175 (12%) with a medium affordability burden, and 311 (22%) with a low affordability burden.

¹ Senate Bill No. 552, Section 10609.62, Chapter 245: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB552

² CalWARN membership is free and is not included in this table. The SB 552 requirement for fire flow was excluded from this analysis due to a lack of asset and local fire flow requirement data.