

ATTACHMENT D1: SUPPLEMENTAL GAP ANALYSES FOR THE SAFE AND AFFORDABLE DRINKING WATER FUND (SADWF)

Attachment to the State Water Resources Control Board
2021 Drinking Water Needs Assessment

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/needs/2021_needs_assessment.pdf

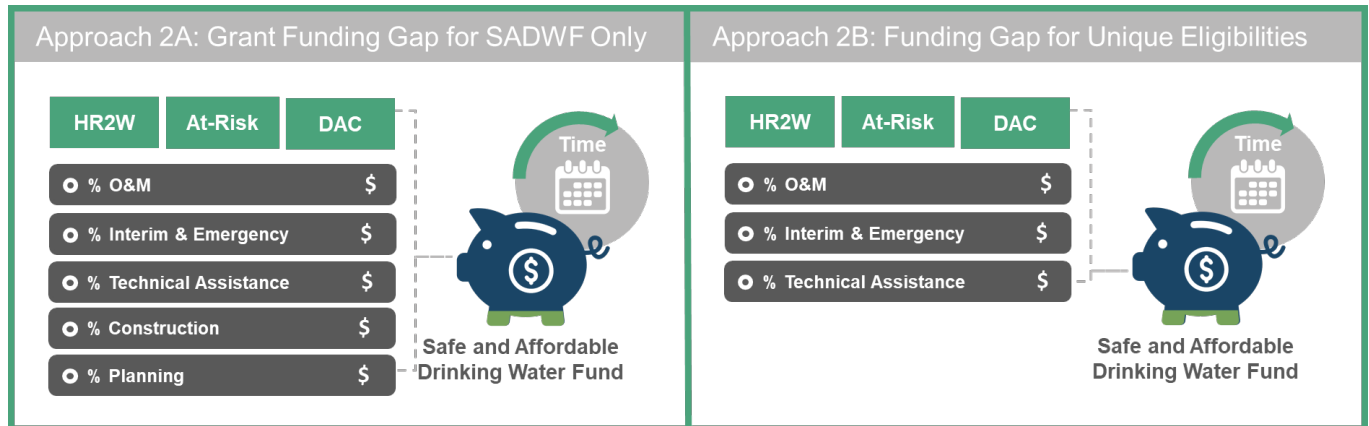
GAP ANALYSIS OF THE SADWF ONLY

A second funding gap analysis approach estimated the potential funding gap specifically for the Safe and Affordable Drinking Water Fund (SADWF). This analysis of the SADWF was conducted two different ways (Figure D1.1). First, in Approach 2A, a gap analysis was conducted for only the funding needs of small DAC/SDAC systems and domestic wells in DAC census tracts and compared that to the available SADWF funding.¹ Second, in Approach 2B, an even smaller subset of funding needs was analyzed to examine only those DAC/SDAC costs that are only eligible for SADWF funding and not eligible for any other State Water Board long-term funding source. That small subset of costs was then compared to the funding available from the SADWF.

Appendix D details the approximate proportion of grant funding allocations employed in Approaches 2A and 2B for Year 1 through Year 5.

¹ Small DAC/SDAC systems are prioritized in the 2020-21 SADWF FEP.

Figure D1.1: Gap Analysis Approaches 2A and 2B



APPROACH 2A: SADWF GAP ANALYSIS WITH CONSTRUCTING AND PLANNING PROJECTS INCLUDED

This approach analyzes the potential funding gap for the SADWF based on the target expenditures outlined in the 2020-21 FEP for small DAC/SDAC systems and domestic wells only. Table D1.1 provides a summary of the number of small DAC/SDAC systems prioritized for SADWF funding in Year 1.

Table D1.1: Total Number of Small DAC and SDAC Systems in Year 1 that Qualify for Grant SADWF Assistance

Economic Status	HR2W	At-Risk PWS	At-Risk SSWS	At-Risk Domestic Wells
DAC	53	157	308	27,361
SDAC	192	244	109	N/A

Table D1.2 shows the total estimated grant need for only small DAC and SDAC systems in Year 1. The estimated grant needs for each system type were distributed into the four priority SADWF expenditure categories: Emergency/Interim Assistance, Technical Assistance, O&M Support, and Construction & Planning. The Construction and Planning category has the greatest grant funding need across all water system categories, totaling \$1.55 billion, which represents 86% of the total Year 1 estimated SADWF grant need for small DAC/SDAC systems and domestic wells only. The total estimated grant need for small DAC/SDAC systems and domestic wells only in Year 1 is \$1.8 billion, which is 73% of the total grant needs identified in the Cost Assessment.

Table D1.2: Approach 2A Year 1 Total Estimated SADWF Small DAC/SDAC Grant Need (\$ in Millions)

Water System Category	Yr. 1 Emergency/Interim Assistance	Yr.1 Technical Assistance	Yr. 1 O&M Support ²	Yr. 1 Construction & Planning	Total Yr. 1 Need
HR2W	\$59	\$8	\$17	\$548	\$632
At-Risk PWS	\$7	\$16	<\$1	\$752	\$775
At-Risk SSWS & Domestic Wells	\$135	N/A ³	\$1	\$254	\$390
TOTAL:	\$201	\$24	\$18	\$1,554	\$1,797

Table D1.3 illustrates the Year 1 funding needs and SADWF funding gap. The gap analysis assumes approximately \$137 million in SADWF grant funding availability in Year 1.⁴ The Year 1 grant estimated eligible funding need is \$1.8 billion and the funding gap after utilizing the SADWF is \$1.65 million.

Table D1.3: Approach 2A Small DAC/SDAC SADWF Funding Gap Analysis Results

Water System Category	Total Yr. 1 Funding Availability ⁵	Total Yr. 1 Funding Gap
HR2W	\$53	\$573
At-Risk PWS	\$59	\$710
At-Risk SSWS & Domestic Wells	\$25	\$365
TOTAL:	\$137	\$1,648

Gap Analysis Approach 2A estimated the cumulative SADWF grant funding needs for small DAC/SDAC systems 5-years into the future. Table D1.4 provides a summary of the cumulative 5-year estimate of small DAC/DAC systems prioritized for SADWF funding. Table D1.5 shows the total estimated cumulative 5-year need by SADWF expenditure category. The total 5-year

² O&M costs were modeled for long-term solutions for HR2W list systems and for At-Risk systems and domestic wells that could be part of a consolidation project for HR2W list systems.

³ Technical Assistance (TA) was not modeled for At-Risk SSWSs and domestic wells.

⁴ Year 1 SADWF funding availability includes \$130 million from new SADWF appropriations, reduced by \$16 million for Administrator and State Water Board staff costs, and an added \$27 million from fiscal year 2020-21 carryover.

⁵ Appendix D of the 2021 [Drinking Water Needs Assessment](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/needs/2021_needs_assessment.pdf) details the approximate proportion of grant funding allocations employed in Approach 2A for Year 1 through Year 5. The proportions are based on target expenditures outlined in the 2020-21 FEP for small DAC/SDAC systems and domestic wells. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/needs/2021_needs_assessment.pdf

estimated SADWF grant funding needs for small DAC/SDAC systems only is \$2.77 billion. This represents 85% of the total estimated 5-year grant needs for *all* interim and long-term solutions modeled in the Cost Assessment.

Table D1.4: Cumulative 5-Year Number of Small DAC and SDAC Systems that Qualify for SADWF Grant Assistance

Economic Status	HR2W	At-Risk PWSs	At-Risk SSWSs	At-Risk Domestic Wells
DAC	85	249	308	27,361
SDAC	249	380	109	N/A

Table D1.5: Approach 2A 5-Year Cumulative Estimated SADWF Small DAC/SDAC Grant Need (\$ in Millions)

Water System Category	5-Yr. Emergency/Interim Assistance	5-Yr. Technical Assistance	5-Yr. O&M Support	5-Yr. Construction & Planning	5-Yr. Total Need
HR2W	\$99	\$14	\$108	\$937	\$1,158
At-Risk PWS	\$12	\$25	<\$1	\$1,180	\$1,217
At-Risk SSWS & Domestic Wells	\$139	N/A	\$5	\$254	\$398
TOTAL:	\$250	\$39	\$113	\$2,371	\$2,773

Table D1.6 summarizes the estimated 5-year cumulative SADWF funding gap for small DAC and SDAC systems. Based on the gap analysis assumptions, the estimated cumulative 5-year SADWF funding needs are \$2.77 billion and the estimated funding availability is \$593 million. The estimated 5-year cumulative SADWF funding gap for only DAC/SDAC water systems and domestic wells is thus \$2.18 billion.

Table D1.6: Approach 2A Small DAC/SDAC SADWF 5-Year Cumulative Gap Analysis Results (\$ in Millions)

Water System Category	Total 5-Yr. Funding Availability ⁶	Total 5-Yr. Funding Gap
HR2W list	\$229	\$929
At-Risk PWS	\$256	\$961
At-Risk SSWS & Domestic Wells	\$108	\$290
TOTAL:	\$593	\$2,180

APPROACH 2B SADWF GAP ANALYSIS WITH CAPITAL NEEDS EXCLUDED

The purpose of this analysis is to assess the potential funding gap for the SADWF that specifically focuses on the fund’s unique funding eligibilities. For this approach, all refined estimated construction and planning needs that are associated with HR2W list and At-Risk PWS systems were *removed* from the funding analysis.⁷ This analysis assumes these costs may be either fully or partially covered by other State Water Board funding programs. Therefore, this analysis is a narrow look at a subset of the grant-eligible funding needs for small DAC/SDAC systems and does not represent the full funding needs to successfully implement interim and long-term solutions for these systems.

Table D1.7: Approach 2B Year 1 Total Estimated SADWF Small DAC/SDAC Grant Need (\$ in Millions)

Water System Category	Yr. 1 Emergency/Interim Assistance	Yr. 1 Technical Assistance	Yr. 1 O&M Support	Yr. 1 Construction & Planning	Total Yr. 1 Need
HR2W	\$59	\$8	\$17	N/A	\$84
At-Risk PWS	\$7	\$16	<\$1	N/A	\$23
At-Risk SSWS & Domestic Wells	\$135	N/A	\$1	\$254	\$390
TOTAL:	\$201	\$25	\$18	\$254	\$497

⁶ Appendix D details the approximate proportion of grant funding allocations employed in Sub-Analysis A for Year 1 through Year 5. The proportions are based on target expenditures outlined in the 2020-21 FEP for small DAC/SDAC systems. However, the total cumulative 5 Year Funding Availability by water system category in this column does not directly match these proportions due to the redistribution of surplus funds between categories for the purposes of the analysis.

⁷ Refer to Appendix D for the exact Year 1 target SADWF expenditure percentages and Year 2-5 percentages utilized in Approach 2B of the gap analysis.

Table D1.8 illustrates the Year 1 funding needs and SADWF funding gap after the construction and planning capital costs for small DAC/SDAC HR2W list and At-Risk PWSs have been removed. The estimated Year 1 grant-eligible funding need is \$497 million and the estimated funding gap is \$360 million.

The gap analysis assumptions for Approach 2B indicate that by fully allocating all projected SADWF funding towards the fund’s unique funding eligibilities only, some Year 1 estimated funding needs may be fully met for certain categories (i.e. At-Risk PWS technical assistance and O&M support, etc.). **However, it is important to highlight that sub-category funding gaps are directly influenced by the target expenditures outlined in the 2020-21 FEP. Category gaps for systems and solutions may shift if target expenditures change.**

Table D1.8: Approach 2B Year 1 Small DAC/SDAC SADWF Funding Gap Analysis Results

Water System Category	Total Yr. 1 Funding Availability	Total Yr. 1 Funding Gap
HR2W	\$84	\$0
At-Risk PWS	\$23	\$0
At-Risk SSWS & Domestic Wells	\$30	\$360
TOTAL:	\$137	\$360

Approach 2B estimated the cumulative SADWF grant funding needs (limited to the SADWF’s unique eligibilities) for small DAC/SDAC systems 5-years into the future. Table D1.9 shows the total estimated cumulative need by SADWF expenditure category. The total 5-year estimated SADWF grant funding needs for small DAC/SDAC systems is \$670 million.

Table D1.9: Approach 2B 5-Year Cumulative Estimated SADWF Small DAC/SDAC Grant Need (\$ in Millions)

Water System Category	5-Yr. Emergency/Interim Assistance	5-Yr. Technical Assistance	5-Yr. O&M Support	5-Yr. Construction & Planning	5-Yr. Total Need
HR2W	\$106	\$14	\$108	N/A	\$228
At-Risk PWS	\$12	\$25	<\$1	N/A	\$37
At-Risk SSWS & Domestic Wells	\$146	N/A	\$5	\$254	\$405
TOTAL:	\$264	\$39	\$113	\$254	\$670

Table D1.10 summarizes the 5-year cumulative SADWF funding gap. Based on the gap analysis assumptions, the cumulative 5-Year available SADWF funding is estimated to be \$593 million. The 5-year cumulative estimated grant funding gap is \$77 million.

Table D1.10: Approach 2B Small DAC/SDAC SADWF 5-Year Cumulative Analysis Results (\$ in Millions)

Water System Category	Total 5-Yr. Funding Availability ⁸	Total 5-Yr. Funding Gap
HR2W list	\$228	\$0
At-Risk PWS	\$37	\$0
At-Risk SSWS & Domestic Wells	\$108	\$77
TOTAL:	\$593	\$77

The gap analysis assumptions for Approach 2B indicate that by fully allocating all projected SADWF funding towards the fund’s unique funding eligibilities only for small DAC/SDAC systems may shrink the funding gap for these specific costs over time. This is because some annual estimated funding needs may be fully met for certain categories (i.e. emergency/interim assistance, technical assistance, etc.). **However, it is important to highlight that the successful implementation of interim and long-term solutions for small DAC/SDAC systems would require funding available to meet each system’s full portfolio of funding needs. This analysis excluded the construction/planning needs for small DAC/SDAC HR2W list and At-Risk PWS.** Therefore, this analysis illustrates the potential capacity of the SADWF to meet some future construction and planning needs for small DAC/SDAC systems. Although the results of Approach 2A indicate a large funding gap will remain.

⁸ For Approach 2B, based on the proportion of funding available relative to the funding needed, the cumulative total 5-year funding availability for HR2W list and At-Risk PWS water systems is able to match the cumulative 5-year cumulative funding need. All surplus funding available was therefore applied to meet the funding need for At-Risk SSWS and domestic wells.