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Exhibit Number	:	Cal Adv - #
Commissioner	:	Matthew Baker
Administrative Law Judge	:	Amin Nojan
Public Advocates Office Witness(es)	:	Anthony Andrade

PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

REPORT ON PIPELINE REPLACEMENT, PFAS TREATMENT, SAN JOSE HILLS PLANT AND WATER QUALITY

Suburban Water Systems'
General Rate Case Application 26-01-001
Test Year 2027

San Francisco, California
April 15, 2026

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MEMORANDUM

The Public Advocates Office at the California Public Utilities Commission ("Cal Advocates") examined application material, data request responses, and other information presented by Suburban Water Systems ("Suburban") in Application ("A.") 26-01-001 to provide the California Public Utilities Commission ("Commission" or "CPUC") with recommendations in the interests of ratepayers for safe and reliable service at the lowest cost. This Report is prepared by Mr. Anthony Andrade. Mr. Suliman Ibrahim is Cal Advocates' project lead for this proceeding. Mr. Hani Moussa is the oversight supervisor. Mr. Corwin Hockema is the legal counsel.

Although every effort was made to comprehensively review, analyze, and provide the Commission with recommendations on each ratemaking and policy aspect presented in the Application, the absence of any particular issue from Cal Advocates' testimony connotes neither agreement nor disagreement with the underlying request, methodology, or policy position related to that issue.

Chapter #	Description	Witness
1	Pipeline Replacement	Anthony Andrade
2	PFAS Treatment Projects	Anthony Andrade
3	Water Quality	Anthony Andrade

CHAPTER 1 PIPELINE REPLACEMENT

I. INTRODUCTION

Suburban proposes raising customer rates based on an unreasonable forecast for pipeline replacement. Forecasts for pipeline replacement with an unreasonable replacement rate burden customers. Cal Advocates reviewed Suburban's testimony, sent data requests, and performed relevant research to develop the recommendations in this chapter.

II. SUMMARY OF RECOMMENDATIONS

The Commission should adjust Suburban's proposed Utility Plant-in-Service forecast as follows:

A. The Commission should authorize rates to fund a pipeline replacement rate of 0.66% per year.

The Commission should authorize $20,277,180 in Test Year 2026 and $19,788,780 in Test Year 2027 to fund pipeline replacement projects. Suburban proposes $30,723,000 in 2026 and $29,983,000 in 2027.

III. ANALYSIS

Pipeline is a major component of a water system's infrastructure. A water system uses pipeline to distribute drinking water from its production sources to its customers. Pipeline is often referred to as water mains to distinguish it from smaller-diameter pipes, known as services, that connect individual customer connections to the water system's pipeline. Cal Advocates uses the term pipeline to refer to water mains and not services in this chapter.

Suburban's proposed pipeline project budgets include line items for services, fire hydrants, valves, and other related assets. However, the largest share of the cost of a pipeline replacement project is the cost of replacing the pipeline itself, not the related assets. This is because individual pipeline lengths can extend for hundreds, if not thousands, of feet and conventionally require digging trenches and replacing asphalt on

roads for installation.[1] Therefore, the need for pipeline replacement projects depends heavily on the pipeline's condition. To evaluate the need for pipeline replacement projects, it is necessary to analyze the overall condition of the water system's pipelines and its water loss.

Pipeline replacement rate is the rate at which a water system replaces pipeline per year expressed as a percentage of total pipeline. For example, if a water system has 1,000 miles of pipeline and has a replacement rate of 0.33% per year, then it will replace 3.3 miles of pipeline in one year. There is no universal pipeline replacement rate since each water system replaces pipeline at different rates. This is reasonable because different water systems will have different pipeline break rates and water loss.

Pipeline break rate is a metric used to assess the overall condition of a specific water system's pipeline. Through normal usage and wear of a water system over time, pipeline experiences breaks where drinking water leaks out of the system and is lost. However, it is not reasonable to replace a pipeline solely because it has experienced a break. A pipeline may have its first break during its service life and not experience a second break for decades. Therefore, replacing a pipeline too early may sacrifice years or decades of potential service life.

A. The Commission should authorize rates to fund a pipeline replacement rate of 0.66% per year.

Suburban's pipeline break rate is 13 breaks per 100 miles per year.[2] Based on results from 29 comparable water utilities, a pipeline replacement rate of 0.66% per year is reasonable for Suburban's water systems. Suburban proposes a 1.0% pipeline replacement rate for 2027 and 2028.[3]

Replacing pipeline has trade-offs. If a utility replaces pipeline too late, it can experience more breaks and unnecessarily waste additional water. On the other hand, if a

[1] Direct Testimony of Jorge Lopez on Pipeline Replacements at 10, lines 10 through 14.

[2] Direct Testimony of Jorge Lopez on Pipeline Replacements at 13, lines 9 through 10.

[3] Direct Testimony of Jorge Lopez on Pipeline Replacements at 34, lines 20 through 22.

utility replaces pipeline too early it can risk wasting the remaining service life of a pipeline. There are other factors that water systems may consider, for example, the water loss and the length of service interruptions due to breaks. It is useful to review how other water systems balance the trade-offs and select a replacement rate.

Suburban states that it has conducted studies with HDR, Inc., an engineering consulting firm, as part of its water pipeline renewal program.[4] HDR's Water Main Renewal Technical Memorandum (HDR Report) included a "Replacement Program Benchmarking" to compare Suburban's performance and pipeline replacement to other similar utilities. The HDR Report stated that its benchmarking "will help establish prudent, transparent, and data-driven investment levels to maximize the life of the existing infrastructure."[5] The benchmarking included 25 public water utilities not regulated by the CPUC and four CPUC-regulated water utilities. The HDR Report further stated that:

> Benchmarked utilities were selected because, like SWS, they are in the western region, their customers expect high levels of service relative to other regions, collectively have a similar material composition, and HDR has good confidence that the reported break rates and replacement rates are calculated using a similar basis.[6]

Suburban includes a graph summarizing the data from 29 water utilities in its testimony. The graph plots the pipeline break rate against the pipeline replacement rate. The graphed data for the 29 benchmarked utilities shows a trend that replacement rates and break rates are positively correlated. Cal Advocates adds two more lines to the graph representing Suburban's break rate of 13 breaks per 100 miles per year and a replacement rate of 0.66% per year. As shown by the intersections of these two lines on the following graph, a replacement rate of 0.66% is within the trend of the data for the benchmarked utilities.

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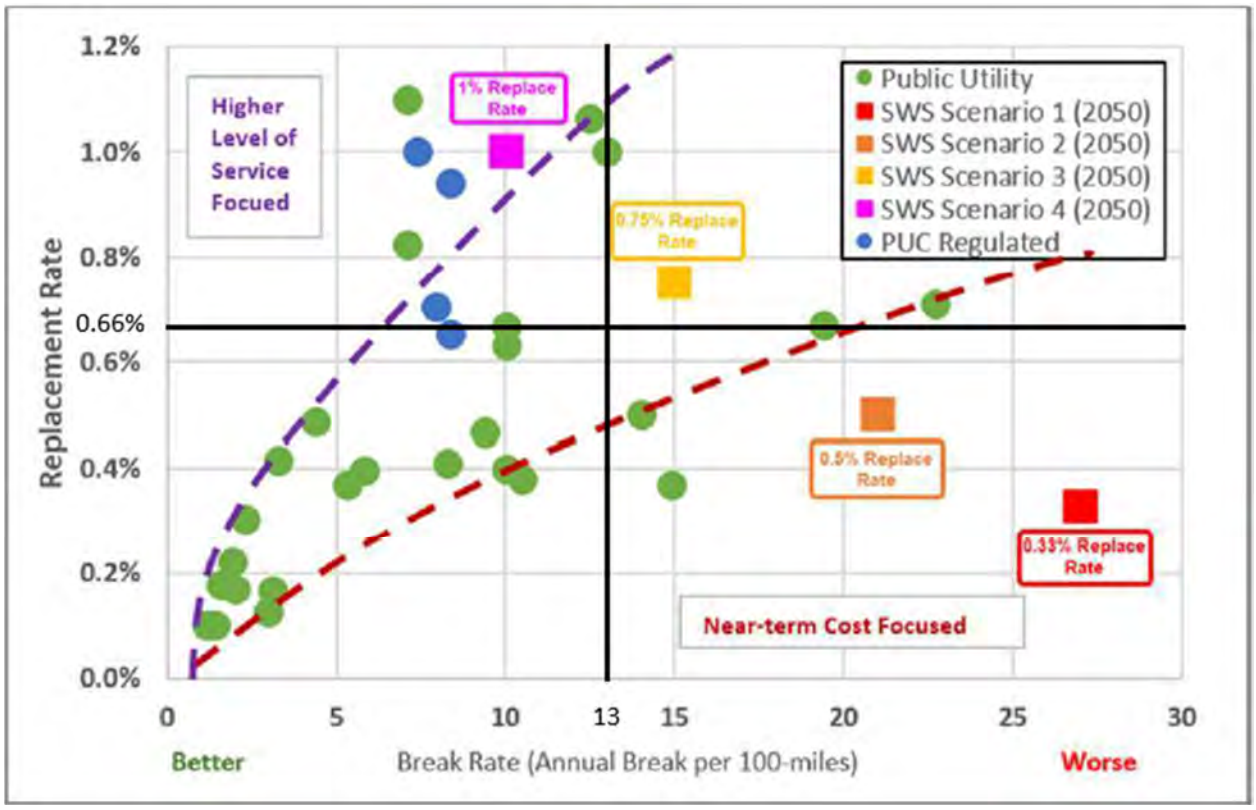
[4] Direct Testimony of Jorge Lopez on Pipeline Replacements at 11, line 23 through 12, line 1.

[5] Suburban's Workpapers Volume IV at 2-13.

[6] Suburban's Workpapers Volume IV at 2-13, footnote 25.

Figure 1: Replacement Rate of 0.66% with Benchmarked Utilities



HDR's effort to find and select comparable utilities is useful because it shows a set of data that HDR believed is reasonable for benchmarking Suburban's performance. Specifically, the utilities are all from the western region of the United States, and HDR is confident that replacement and break rates are calculated on a similar basis. This is important because Suburban states that the same approach for calculating pipeline break rates should be used to have a valid, "apples to apples" comparison.[7] In its testimony, Suburban uses a benchmark of 6.5 breaks per 100 miles per year based on the regional average for utilities in California and Nevada.[8]

Comparing Suburban's break and replacement rates to benchmarked utilities' data provides more insight than comparing only the break rate to an average. Although other

[7] Direct Testimony of Jorge Lopez on Pipeline Replacements at 13, lines 3 through 4.

[8] Direct Testimony of Jorge Lopez on Pipeline Replacements at 14, lines 13 through 16.

utilities in the western United States may have lower break rates than Suburban, many of these utilities accordingly have replacement rates below 0.66% per year. Therefore, the regional average break rate of 6.5 that Suburban refers to does not appear to be the result of utilities actively increasing pipeline replacement to keep break rates low. Showing both the break and replacement rates at once shows that a pipeline replacement rate of 0.66% per year is reasonable for Suburban's level of breaks.

B. The national pipeline break average should be used as a benchmark.

Among the water utilities that HDR selected for its benchmarking is the Los Angeles Department of Water and Power (LADWP). LADWP operates a major water utility in the same Los Angeles County as Suburban. LADWP's pipeline distribution system, which consists of pipeline that is 20 inches or smaller in diameter, is approximately 6,794 miles of pipeline. Although over 30 percent of LADWP's pipeline is more than 80 years old, LADWP plans to achieve a replacement rate of 0.66% per year.[9] LADWP uses the national average of water breaks as a benchmark for its performance. In 2023, LADWP reported an average break rate of 19.4 per 100 miles, which it states is better than the national average of 25 per 100 miles.[10] In its comparison, HDR compares Suburban's break rate of 13 with LADWP's break rate of 19.4, making Suburban and LADWP's break rates an "apples to apples" comparison.[11] Suburban cites a different national average break rate than the 25 breaks per 100 miles cited by LADWP.

Suburban refers to the average break rate of the United States and Canada reported by Utah State University's Water Main Break Rates in the USA and Canada: A Comprehensive Study (USU 2023 Report). The USU 2023 Report's average for the United States and Canada is 11.1 breaks per 100 miles per year.[12] The USU 2023 Report

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[9] Attachment 1-1: 2023-24 LADWP Water Infrastructure Plan at 3.

[10] Attachment 1-1: 2023-24 LADWP Water Infrastructure Plan at 3.

[11] Attachment 1-2: Suburban's Response to Data Request AA9-002, Question 1.a Attachment.

[12] Direct Testimony of Jorge Lopez on Pipeline Replacements at 17, line 17 through 18, line 1.

shows that there is a great variety between regional averages, with multiple regions, such as the Northeast United States which has a break rate of 16.4, being higher than the total average.[13] Suburban's break rate of 13 is lower than multiple regional averages. Even if LADWP's reference to a national average break rate of 25 is not supported by the USU 2023 Report, the national break rate from the USU Report is not significantly different than Suburban's break rate of 13, since there is a large variance between regions.

Maintaining a lower break rate for water systems in California below the national average should only be a concern if there is a water loss problem. HDR, as part of its benchmarking effort, mentions the Partnership for Safe Water's national service-level goal of fewer than 15 water breaks per mile but states that it is a national goal that does not account for the high value of water in the western United States.[14] HDR's statement, immediately after identifying Suburban's break rate of 13 and immediately before discussing its own benchmarking, shows that HDR considers Suburban's break rate of 13 to be below this national service level goal. HDR's benchmarking apparently does not give much weight to nationwide benchmarks. However, before dismissing nationwide benchmarks, especially the national average break rate, because of the regional value of water, the Commission should consider Suburban's low water loss.

C. Suburban's water loss is reasonable for the region.

The California Department of Water Resources (DWR) requires water systems to submit a water loss audit. The water loss audit requires water systems to calculate an Infrastructure Leakage Index (ILI), which can be used to assess the effectiveness of a utility's water loss control program.[15] Suburban reports its five-year average ILI as 1.38 for the San Jose Hills service area and 3.02 for the Whittier-La Mirada service area.[16] The American Water Works Association, which developed the ILI methodology, provides a

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[13] Direct Testimony of Jorge Lopez on Pipeline Replacements at 18, Figure 4.

[14] Suburban's Workpapers Volume IV at ES-ix.

[15] Direct Testimony of Jorge Lopez on Pipeline Replacements at 28, lines 5 through 6.

[16] Direct Testimony of Jorge Lopez on Pipeline Replacements at 33, Table 4.

general guideline for target ILIs. The target ILI for a water system where water resources are costly to develop or purchase is 1.0 to 3.0.[17] Suburban's water loss is within the range for the San Jose Hills service area and very close to the range for the Whittier-La Mirada service area. Suburban describes its water loss as relatively low.[18]

The Commission considered Suburban's low water loss as a factor in the prior GRC, where it denied Suburban's requested capital budget.[19] In the prior GRC, Suburban's proposed capital budget included a 1.0% pipeline replacement rate.[20] In this GRC, Suburban again proposes a 1.0% replacement rate per year.[21] Suburban states that the ILI is not indicative of pipeline condition or the need to replace pipeline.[22] However, the idea of comparing Suburban to a regional benchmark instead of a national benchmark is based on the consideration that water in California is less plentiful than nationwide. For example, HDR excludes a national service goal from its benchmarking because of the high value of water in California.[23] Suburban's ILI shows that its water loss is appropriate for a water system with costly water resources. If Suburban's concern is not water loss and only the pipeline condition and the number of service interruptions, then it is appropriate for the Commission to consider a national benchmark.

D. The actual condition of Suburban's pipeline can be determined by testing.

As Suburban shows, over 40% of its pipeline groups have never experienced a break.[24] Additionally, 25% of all breaks occurred in the same 2% of pipeline groups.[25]

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[17] Attachment 1-3: Guidelines for Setting a Target Infrastructure Leakage Index.

[18] Direct Testimony of Jorge Lopez on Pipeline Replacements at 28, lines 19 through 20.

[19] Decision 24-12-030 at 79 through 80.

[20] Direct Testimony of Jorge Lopez on Pipeline Replacements at 62, lines 3 through 4.

[21] Direct Testimony of Jorge Lopez on Pipeline Replacements at 34, lines 20 through 22.

[22] Direct Testimony of Jorge Lopez on Pipeline Replacements at 34, lines 5 through 7.

[23] Suburban's Workpapers Volume IV at ES-ix.

[24] Direct Testimony of Jorge Lopez on Pipeline Replacements at 54, Figure 19.

[25] Direct Testimony of Jorge Lopez on Pipeline Replacements at 54, Figure 19.

HDR provides forecasted scenarios according to a model that applies Suburban's historical break trends to all of its pipeline to predict the break rate in future years.[26] This approach, however, does not involve directly inspecting the condition of the existing pipeline. Although Suburban has performed Energy Dispersive X-Ray (EDS) testing on 51 samples of its Asbestos Cement pipeline,[27] this is only a portion of the pipeline. The HDR Report states that only a small portion of the pipeline has been tested.[28] Based on the HDR Report's figures, Suburban has performed EDS testing on about 5% of the total pipeline.[29]

Other utilities employ condition assessments and have found it useful to identify remaining service life. In 2014, the Minnesota city of Edina began using acoustic-based condition assessment technology. Previously, the city used maps of historical pipeline breaks to decide on area-wide pipeline replacement projects, but the condition assessment allowed the city to identify pipeline segments within the project with decades of remaining service life.[30] Another example is Fountain Valley, California. Fountain Valley has over 50% of its pipeline made of Asbestos Cement and intends to maximize the life of its assets. By 2021, Fountain Valley had completed acoustic-based condition assessments of 25% of its pipeline.[31]

E. Asbestos Cement Pipeline can have long expected useful lives.

Condition assessments can be useful for determining remaining service life beyond the expected service life. The Mesa Water District (Mesa Water) in Orange

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[26] Direct Testimony of Jorge Lopez on Pipeline Replacements at 18, lines 14 through 20.

[27] Direct Testimony of Jorge Lopez on Pipeline Replacements at 23, lines 15 through 16.

[28] Suburban's Workpapers Volume IV at 4-28 through 4-29.

[29] Suburban's Workpapers Volume IV at 4-29, Table 4-8 has a subtotal of 44 tested miles out of a total of 872 miles.

[30] Attachment 1-4: "Cutting Capital Costs with Pipeline Condition Assessment Tools" Article.

[31] Attachment 1-5: "Condition Assessment Helps Fountain Valley Devise a Proactive Asset Management Plan" Article.

County, California, began a pipeline testing program in 2014 to maximize the life of its pipeline. Mesa Water had 74% of its pipeline made of Asbestos Cement.[32] Contrary to the expected service life of 65 to 105 years, Mesa Water found that its Asbestos Cement pipeline would last an average of 140 years.[33] Mesa Water's testing showed that Asbestos Cement pipeline has a great variance in service life. For this reason, Suburban could continue its pipeline testing to gather more data on the condition before moving forward with its proposed replacement rate. This approach would prevent ratepayers from bearing the financial burden of unnecessarily replacing pipeline that has remaining service life.

F. There is an existing Maximum Contaminant Level for asbestos to account for its effects on health.

Suburban refers to statements from the State Water Resources Control Board's Division of Drinking Water (DDW) that indicate Suburban should prioritize replacement of its existing Asbestos Cement pipeline in reports for Suburban's water systems.[34] DDW's statements, however, do not recommend a specific replacement rate. DDW's statements refer to the "potential risk of asbestos contamination from leaching of the pipes."[35]

The State of California has regulations that limit substances in drinking water, including designated Maximum Contaminant Levels. The Maximum Contaminant Level for asbestos is 7 million fibers per liter.[36] Suburban can test samples for asbestos concentration from taps served by its Asbestos Cement pipeline where it believes

[32] Attachment 1-6: Pipeline Integrity Testing to Assess the Useful Life of Pipeline Infrastructure at 1.

[33] Attachment 1-6: Pipeline Integrity Testing to Assess the Useful Life of Pipeline Infrastructure at 1.

[34] Direct Testimony of Jorge Lopez on Pipeline Replacements at 25, line 2 through 9.

[35] Suburban's Response to Minimum Data Requirements, Attachment No. 63 at 718.

[36] California Code of Regulations, Title 22, Section 64431.

leaching can occur if this is a concern.[37] Detections of asbestos of any level do not currently appear in Suburban's Consumer Confidence Reports.[38]

IV. CONCLUSION

The Commission should authorize rates to fund a pipeline replacement rate of 0.66% per year. The Commission should authorize $20,277,180 in Test Year 2026 and $19,788,780 in Test Year 2027. Suburban proposes $30,723,000 in 2026 and $29,983,000 in 2027. A replacement rate of 0.66% is reasonable based on a comparison of Suburban's break rate with the break and replacement rates of other comparable water utilities that HDR has selected, the average break rate in the United States and Canada, and when Suburban's low water loss is considered. Ratepayers would save $10,445,820 in the 2026 rate base forecast and $10,194,220 for the 2027 forecast if the Commission adopts this recommendation compared to Suburban's proposal of a 1.0% replacement rate.

Suburban should continue its testing program. Other utilities have found success in identifying pipeline in good condition using condition assessments. The Mesa Water District in California found that its Asbestos Cement pipeline could have an average service life of 140 years. Suburban may also test samples for asbestos concentration where it believes leaching is a concern.

[37] California Code of Regulations, Title 22, Section 64432.2.

[38] Suburban Response to MDR, Attachments No. 19 through 36.

LIST OF ATTACHMENTS FOR CHAPTER 1

Attachment #	Title
Attachment 1-1	2023-24 LADWP Water Infrastructure Plan
Attachment 1-2	Suburban's Response to Data Request AA9-002
Attachment 1-3	Guidelines for Setting a Target Infrastructure Leakage Index
Attachment 1-4	"Cutting Capital Costs with Pipeline Condition Assessment Tools" Article
Attachment 1-5	"Condition Assessment Helps Fountain Valley Devise a Proactive Asset Management Plan" Article
Attachment 1-6	Pipeline Integrity Testing to Assess the Useful Life of Pipeline Infrastructure

CHAPTER 2 PFAS TREATMENT

I. INTRODUCTION

Suburban proposes raising customer rates based on an unreasonable forecast for per- and polyfluoroalkyl substances (PFAS) Treatment Projects. Forecasts for Treatment Projects that fail to account for other sources of funding unnecessarily burden ratepayers. Cal Advocates reviewed Suburban's testimony, sent data requests, and performed relevant research to develop the recommendations in this chapter.

II. SUMMARY OF RECOMMENDATIONS

The Commission should adjust Suburban's proposed Utility Plant-in-Service forecast as follows:

A. The Commission should not raise rates again for the Previously Funded but not Built Plant 201 PFAS Treatment Project.

The Commission should deny Suburban's requested $34,639,000 project budget in this GRC's rate base forecast and instead adopt the remaining capital expenditures during the next GRC after the Commission can review completed costs, grants, and other funding received and expected.

B. The Commission should reduce rate base by the cost estimate of the Plant 201 PFAS project adopted in the prior GRC.

The Commission previously increased customer rates to include $21,172,000 for only the construction of the Plant 201 PFAS Treatment Project in 2025 and stated that it would not approve cost recovery if the project was not completed.[39] However, the Plant 201 Treatment Project was not built. The Commission should therefore reduce the rate base by $21,172,000.

[39] Decision 24-12-030 at 104.

C. The Commission should not raise rates for the Plant 804 PFAS Treatment Project because other funding opportunities are available.

The Commission should deny Suburban's requested $2,924,239 in the rate base forecast for the Plant 804 project. The Commission may review the completed costs and any grants that Suburban receives for the Sativa water system in the next GRC to determine the remaining capital expenditures to be added to rate base.

III. ANALYSIS

A. The Commission should not raise rates again for the Previously Funded but not Built Plant 201 PFAS Treatment Project.

The Commission previously increased customer rates to include $21,172,000 to begin constructing the Plant 201 PFAS Treatment Project in 2025.[40] The Commission expected the project to be completed over years 2025 and 2026.[41] Suburban, however, will not complete the project in 2026. Based on Suburban's application in the current GRC, Suburban's forecasts completing the project in 2027.[42]

Cal Advocates staff visited the site of Suburban's Plant 201 PFAS Treatment Project on February 24, 2026 and confirmed that construction had not begun.

[40] Decision 24-12-030 at 102.

[41] Decision 24-12-030 at 103.

[42] Direct Testimony of Jorge Lopez at 227, line 7.

Figure 1: Plant 201 PFAS Treatment Project Site on February 24, 2026

Suburban's testimony attributes the delay of the Plant 201 PFAS Treatment Project to more than one factor, including Suburban's decision to wait for the resolution of its Petition for Modification in 2025, the process to secure construction permits, and the process to apply for grant funding.[43] Regardless of the causes of the delay, the result is the same: Suburban provided a proposed project with a schedule in its previous application, the Commission increased customer rates allowing Suburban to begin collecting costs, and Suburban's customers did not receive the benefits of the completed PFAS Treatment Project.

In the prior GRC, Cal Advocates recommended denying the Plant 201 PFAS Treatment Project. Suburban's rebuttal in that GRC stated that:

[43] Direct Testimony of Jorge Lopez at 120, line 5 through 121, line 3 and at 121, line 20 through 122, line 12.

> Suburban must act now in this General Rate Case (GRC) to install treatment equipment, a multi-year construction and commissioning project, to ensure that it can meet the MCL by the end of 2026.[44]

Suburban additionally stated that:

> Delaying this project that is required to comply with impending USEPA requirements will further increase the project cost and negatively impact Suburban's customers. As the advocate for Suburban's customers, it is baffling why Cal Advocates wouldn't support the immediate commencement of this project to minimize further cost increases.[45]

Suburban did not require raising customer rates to include $21,172,000 for the Plant 201 project in 2025, plus the effect on rates in 2026, because it did not begin construction on the project. Suburban now estimates that it will complete the project in this GRC and that it will spend $671,170 in 2025, $10,210,053 in 2026, and $24,428,881 in 2027.[46]

1. The Commission should remove Previously Funded but Not Built Projects that are requested again from rate base forecasts.

When this previously funded project is eventually completed, used and useful, and provides tangible benefits to ratepayers, Suburban can request authorization to include it in rate base and rates in a future GRC, subject to a prudency review by the Commission.

Ratepayers should not be asked to pay for projects twice before they receive any benefits. In Suburban's 2023 GRC, the Commission included the forecasted cost of this project in rate base and in rates based on the utility's representation that this project would be completed during that rate case cycle. Because rates for test years are based on what projects are included in forecasts, ratepayers pay for the projects even where a

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[44] Attachment 2-1: Application 23-01-001, Rebuttal Testimony of Jorge Lopez, P.E. Excerpt at 64, lines 23 through 26.

[45] Attachment 2-1: Application 23-01-001, Rebuttal Testimony of Jorge Lopez, P.E. Excerpt at 77, lines 9 through 14.

[46] Suburban's Workpapers Volume I at 64.

utility fails to complete them within the forecasted period. Even if the utility completes the project in the following GRC cycle, ratepayers still will have paid twice. Instead of raising rates again in anticipation of the same projects that Suburban previously represented would be completed, the Commission should address the completed plant additions in the next GRC after conducting a reasonableness review of the actual costs.

In the prior GRC, Cal Advocates raised the issue of Suburban re-requesting previously funded but not built projects. The Commission decided to remove the previously funded projects from the prior GRC's rate base forecast but authorized Suburban to submit Tier 3 Advice Letters to add the completed projects, once used and useful, to rate base.[47] The Commission, however, should not use the Advice Letter process for the completed Plant 201 PFAS Treatment Project.

The Advice Letter process lacks transparency and therefore is not an appropriate vehicle to address cost recovery of this project once completed. The Advice Letter process provides a quick and simplified review of utility requests that are not expected to be controversial.[48] It is important that the request not be controversial because this Advice Letter would increase rates in between GRCs without testimony, discovery, or an evidentiary record. If there is a difference between the project's requested budget in this GRC and the potential Advice Letter's costs, Cal Advocates should be given the opportunity to review the reasonableness of the new costs.

The GRC is the regularly scheduled proceeding that requires utilities to notice and inform customers of rate changes. The GRC is a transparent process that includes public participation hearings, serving of testimony, evidentiary hearings, legal briefs, a proposed decision, and a final decision by the Commission. Advice Letters are less transparent and provide little time for Cal Advocates, other parties, and the Commission to conduct a thorough prudency review of a utility's rate increase request. For these reasons, GRCs are

[47] Decision 24-12-030 at 75.

[48] Commission General Order 96-B, at 8.

more appropriate to review capital projects such as the Plant 201 PFAS Treatment Project.

2. The Commission should apply all other sources of funding before raising rates for ratepayers.

Suburban has received millions of dollars from other sources and will likely receive millions more to help offset the Treatment Project's construction. The Commission should make certain that all other sources of funding are exhausted before raising rates. Suburban is currently receiving funds from settlements with several of the largest PFAS manufacturers including 3M, DuPont, BASF, and Tyco.[49] In its testimony, Suburban states that it received the first of the settlement payouts in September 2025 but also states that there will be further payouts over a 10-year period and that the funds are being used to offset legal fees and costs for PFAS projects.[50] In response to Cal Advocates' discovery, Suburban reported that it had received $4,536,493 in 2025 from the settlement and estimated a further $841,515 in 2026.[51] Suburban provided smaller estimates for years 2027 to 2033, but does not know the specific amounts for any year except 2025.[52] Suburban confirmed that settlement payouts could be used to pay capital expenditures.[53] This is important because capital expenditures increase rate base and are paid over the life of the asset.

Furthermore, Suburban has been awarded $1,750,000 in grant funding from the San Gabriel Valley Water Quality Authority (WQA).[54] In response to discovery, Suburban confirmed that its Results of Operation (RO) Model does not reflect the WQA

[49] Direct Testimony of Jorge Lopez at 123, line 1 through 8.

[50] Direct Testimony of Jorge Lopez at 123, line 8 through 14.

[51] Attachment 2-2: Suburban's Response to Data Request (DR) AA9-001, Question (Q). 3.c.

[52] Attachment 2-2: Suburban's Response to DR AA9-001, Q. 3.c.

[53] Attachment 2-2: Suburban's Response to DR AA9-001, Q. 3.a.

[54] Direct Testimony of Jorge Lopez at 121, line 8 through 14.

grant but that Suburban will reduce the total project cost upon receiving the award.[55] Suburban's rate base forecast is unreasonable because it contains Suburban's forecasted costs for the PFAS Treatment Project but disregards the forecasted funding from sources like grants. This would result in overstated rates because Suburban would be collecting rates calculated with forecasted project costs but missing other funding that offsets the costs. Including the estimated expenditures in 2025, Suburban would have incurred an estimated $2,232,813 in costs for the Plant 201 project as of the end of 2025.[56] The settlement payout from 2025 alone exceeds this cost.

The largest source of other funding is the Drinking Water State Revolving Fund (DWSRF). Suburban states that it has applied for up to $25 million in grant funding from the DWSRF.[57] DWSRF awards loans with principal forgiveness for 50% of eligible costs for water systems with over 25,000 served customers.[58] The Whittier-La Mirada service area has over 120,000 customers and therefore falls in this category. Suburban states that the consultant that aided Suburban in applying for the grant is optimistic that the application will be successful.[59] Suburban nevertheless states that national politics or the state budget could end the program.[60]

Suburban's concerns about the program are not sufficient reasons to avoid forecasting the DWSRF award. The DWSRF has been providing water systems with financial assistance since 1996. As of the November 2025 update, Suburban's Plant 201 project appeared on the DWSRF's Fundable List.[61] The Fundable List is a subset of projects that applied for the DWSRF grants that the State Water Resources Control Board

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[55] Attachment 2-2: Suburban's Response to DR AA9-001, Q. 2.

[56] Attachment 2-2: Suburban's Response to DR AA9-001, Q. 2.

[57] Direct Testimony of Jorge Lopez at 121, lines through 14.

[58] Attachment 2-4: State Water Resources Control Board Emerging Contaminants Funding at 1.

[59] Direct Testimony of Jorge Lopez at 122, line 10 through 12.

[60] Direct Testimony of Jorge Lopez at 122, line 13 through 16.

[61] Attachment 2-5: Updated 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Fundable List at 2.

may approve for funding provided the projects meet all eligibility requirements.[62] Golden State Water Company, another class-A water utility regulated by the Commission, similarly has a project on the Fundable List.[63] The Plant 201 Treatment Project's placement on the Fundable List shows that the grant is likely.

Suburban states that it could not apply for the DWSRF grant until the Commission's decision authorizing the project.[64] Suburban refers to a statement from the DWSRF Intended Use Plan (IUP): "CPUC-regulated entities must obtain applicable CPUC approvals as may be required for any of the transactions contemplated in the funding agreement."[65] This does not state that the Commission needs to add a utility's proposed cost estimate to rate base before a utility applies. What the DWSRF IUP does recognize, however, is that CPUC rules ensure that grant funds benefit ratepayers by excluding grant funded assets from rate base.[66] As a result, the Commission should reject a rate base forecast in this GRC that includes costs that can be paid for with grant funds.

B. The Commission should reduce rate base by the cost estimate of the Plant 201 PFAS project adopted in the prior GRC.

The Commission previously increased customer rates to include $21,172,000 to begin constructing the Plant 201 PFAS Treatment Project in 2025. The Commission stated:

> The $21.172 million budget authorization for plant 201 PFAS upgrades is approved only for this purpose and cost recovery of any of this amount will not be approved if the project is not completed and used and useful for customers.[67]

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[62] Attachment 2-3: Suburban's Response to DR AA9-001 Q. 4.c Attachment at 17.

[63] Attachment 2-5: Updated 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Fundable List at 2.

[64] Direct Testimony of Jorge Lopez at 121, line 15 through 19.

[65] Attachment 2-3: Suburban's Response to DR AA9-001 Q. 4.c Attachment at 19.

[66] Attachment 2-3: Suburban's Response to DR AA9-001 Q. 4.c Attachment at 38, footnote 32.

[67] Decision 24-12-030 at 104.

Since 2025 was the second test year for rate base in the prior GRC, the adopted rate base forecasts for both 2025 and the 2026 attrition year were increased according to the attrition calculation.[68] In total, customer rates were increased to include $21,172,000 for the Plant 201 project in the prior GRC. The Commission stated that the budget authorization for the Plant 201 project was approved only for this purpose and that it would not approve cost recovery if the project was not completed and used and useful to customers.[69] As of April 2026, the project is not complete. The project will not be complete or used and useful in 2026 according to Suburban.[70] Without an adjustment to rate base, the Commission's decision that it only approved a budget authorization for the Plant 201 Treatment Project only would have no effect. Therefore, the Commission should remove the full budget authorization of $21,172,000 from rate base.

C. The Commission should not raise rates for the Plant 804 PFAS Treatment Project because other funding opportunities are available.

Suburban proposes the PFAS Treatment Project at Plant 804 for the Sativa water system. The Sativa water system is a small water system in an area identified as a disadvantaged community and Suburban could instead pursue grant funding for the project. In this GRC, the Commission should deny Suburban's requested $2,924,239 in the rate base forecast. The completed costs and any grants that Suburban receives for the Sativa water system can be reviewed in the next GRC to determine the remaining capital expenditures to be added to rate base.

[68] Decision 04-06-018 at 15, footnote 6.

[69] Decision 24-12-030 at 104.

[70] Direct Testimony of Jorge Lopez at 21, Table shows construction year up to 2028 although Suburban's Workpapers Volume I at 64 show capital expenditures up to 2027.

1. The Sativa water system is a good candidate for the DWSRF for Emerging Contaminants (DWSRF EC) and the Small or Disadvantaged Communities (EC-SDC) grant.

The DWRSF EC program focuses on addressing emerging contaminants, including PFAS, in drinking water. The EC-SDC grant program has complementary funding for water systems serving small and/or disadvantaged communities with a population of less than 10,000. The Sativa water system serves a population of 4,339.[71] Suburban states that the Sativa water system is located in an area identified as a disadvantaged community.[72] The Infrastructure Investment and Jobs Act of 2021 (IIJA) was the single largest investment in safe drinking water that the federal government has ever made.[73] Between 2022 and 2025, the federal government allotted $701.6 million to California's State Water Resources Control Board (SWRCB) to fund the DWSRF EC and EC-SDC grant programs.[74] Even if Sativa does not qualify for the EC-SDC grant, the DWSRF EC can provide up to a loan principal forgiveness equal to 100% of project costs for water systems with populations less than 25,000.[75]

The benefit of the DWSRF EC program for populations less than 25,000 is more cost-effective than the benefit for larger systems. In response to discovery, Suburban stated that it completed the scope of work for Sativa's proposed Plant 804 PFAS Treatment Project in late 2025 and has not applied for EC-SDC or DWSRF funding. Suburban further stated that it is evaluating options and may choose not to pursue grant funding.[76] Suburban's response cites project delays due to the grant application process

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[71] Suburban's Response to MDR at 786.

[72] Direct Testimony of Carmelitha Bordelon at 6, lines 22 through 23.

[73] Attachment 2-6: 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Excerpt at 2.

[74] Attachment 2-6: 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Excerpt at 8, Table 2: Breakdown of Funding Availability for Projects.

[75] Attachment 2-4: State Water Resources Control Board Emerging Contaminants Funding at 1.

[76] Attachment 2-2: Suburban's Response to DR AA9-001 Q.6 and 4.d.

and additional costs for complying with the grant's requirements, such as requiring that at least 55% of project component costs be sourced domestically.[77]

The Commission should consider that the DWSRF EC benefits outweigh these disadvantages. For water systems with less than 25,000 and/or systems serving disadvantaged communities, it may fund up to 100% of project costs.[78] The SWRCB's Emerging Contaminants Fundable List already includes three projects for the California Water Service Company, another class A investor-owned utility regulated by the Commission, that have an estimated grant amount equal to estimated total project costs.[79]

2. The Sativa water system is a good candidate for the Water Replenishment District of Southern California's PFAS Remediation Program.

Alternatively, Suburban's proposed Plant 804 is eligible for the Water Replenishment District of Southern California's (WRD) PFAS Remediation Program. WRD, the management agency for the Central and West Coast Groundwater Basins, established $60 million for the PFAS Remediation Program in 2020.[80] In response to discovery, Suburban confirmed that its Plant 804 project was eligible for the program, but Suburban has opted not to pursue the grant because of the program's provisions.[81]

Suburban describes the first provision as requiring Suburban to reimburse WRD for the awarded grant after Suburban receives funds from PFAS-related litigation, such as settlements with PFAS manufacturers. Suburban states that it would need to release PFAS-related claims against WRD and commit to not take any positions that could result in WRD being liable. Finally, Suburban stated that it would be required to maintain a

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[77] Attachment 2-2: Suburban's Response to DR AA9-001 Q.6 and 4.d.

[78] Attachment 2-3: State Water Resources Control Board Emerging Contaminants Funding at 1.

[79] Attachment 2-5: Updated 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Fundable List at 2.

[80] Attachment 2-7: WRD PFAS Remediation Program.

[81] Attachment 2-2: Suburban's Response to DR AA9-001, Q.5.a.

minimum groundwater production for 20 years, which is a long-term obligation and would result in consequences if not met.[82]

Suburban's concern about a 20-year production obligation is inconsistent with Suburban's testimony supporting the Plant 804 Treatment Project. In its testimony, Suburban states that Suburban's customers would save $176 million by maintaining the well at Plant 804 for the life of the proposed treatment system instead of purchased water.[83] If Plant 804's well is to provide $176 million in savings, then it should be expected to maintain a minimum production for 20 years.

Other class A water utilities regulated by the Commission have accepted grants from the WRD PFAS Remediation Program. WRD shows that California Water Service Company had executed a funding agreement with WRD for $4.2 million in June 2022, while San Gabriel Valley Water Company had executed an agreement for $4.0 million in August 2022.[84] These grants allow utilities to avoid shifting the cost of PFAS treatment projects to customers. That is, capital expenditures for these treatment projects are paid for by the grant rather than through customer rates. If Suburban prefers to avoid the WRD program's provisions, the Commission should ensure that ratepayers do not bear the financial burden. For example, Suburban could pay for the Plant 804 Treatment Project's cost of $2,924,239 directly from the manufacturer settlement funds without increasing rate base.

Suburban states that WRD's assessments do not fund WRD's PFAS Remediation program because the program is funded by loans, and federal and state grants.[85] Although the PFAS Remediation Program is funded by multiple sources, WRD states that its Replenishment Assessment includes $12 per acre-foot for the PFAS Remediation

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[82] Attachment 2-2: Suburban's Response to DR AA9-001, Q.5.a.

[83] Direct Testimony of Jorge Lopez at 325, lines 10 through 15.

[84] Attachment 2-8: WRD PFAS Remediation Program Status of Projects.

[85] Attachment 2-2: Suburban's Response to DR AA9-001, Q.5.c.

Program.[86] WRD's Replenishment Assessment is a water supply expense.[87] Therefore, Suburban's customers are paying for the PFAS Remediation Program without the benefit of the grants in exchange.

Whether it is the DWSRF EC or WRD PFAS Remediation Program, the Commission should not raise rates on customers when Suburban could alternatively fund this project with a grant.

IV. CONCLUSION

The Commission should adjust Suburban's proposed Utility Plant-in-Service forecast by removing the forecasted cost for the Plant 201 Treatment Project, removing $21,172,000 from rate base, and removing the forecasted cost for the Plant 804 Treatment Project.

The Commission should deny Suburban's requested $34,639,000 project budget in this GRC's rate base forecast and instead adopt the remaining capital expenditures during the next GRC after the Commission can review completed costs and grant and other funding received and expected.

The Commission should reduce rate base by the $21,172,000 that the Commission increased rate base by when it authorized a budget exclusively for the Plant 201 PFAS project in the prior GRC.

The Commission should not raise rates for the Plant 804 PFAS Treatment Project in the Sativa water system because other funding opportunities are available. The Commission may review the completed costs and any grants that Suburban receives for the Sativa water system in the next GRC to determine the remaining capital expenditures to be added to rate base.

[86] Attachment 2-9: WRD Updated 2025 Engineering Survey and Report Excerpt at 2.

[87] Suburban's Workpapers Volume II at 103, line 39.

LIST OF ATTACHMENTS FOR CHAPTER 2

Attachment #	Title
Attachment 2-1	Application 23-01-001, Rebuttal Testimony of Jorge Lopez, P.E. (Excerpt)
Attachment 2-2	Suburban's Response to Data Request AA9-001
Attachment 2-3	Suburban's Response to DR AA9-001 Q. 4.c Attachment (Excerpt)
Attachment 2-4	State Water Resources Control Board Emerging Contaminants Funding
Attachment 2-5	Updated 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Fundable List
Attachment 2-6	2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan (Excerpt)
Attachment 2-7	WRD PFAS Remediation Program
Attachment 2-8	WRD PFAS Remediation Program Status of Projects
Attachment 2-9	WRD Updated 2025 Engineering Survey and Report (Excerpt)

CHAPTER 3 WATER QUALITY AND SPECIAL REQUEST NO. 3

I. INTRODUCTION

Suburban's water quality for the San Jose Hills, Whittier-La Mirada, and Sativa service areas meet the applicable state and federal water quality.

II. SUMMARY OF RECOMMENDATIONS

The Commission should approve Special Request No. 3 by finding Suburban's water systems in compliance with all water quality standards.

III. ANALYSIS

Cal Advocates reviewed Suburban's Service Area Operations, Reports and Enforcement Actions by the State Water Resources Control Board Division of Drinking Water (DDW), and Future Water Quality Regulations.

A. Service Area Operations

Suburban's two main service areas include San Jose Hills and Whittier-La Mirada.[88] Suburban operates its water systems under permits from DDW. DDW regulates California's public drinking water systems and oversees a variety of drinking water-related activities.

Suburban's facilities include six public water systems within two services areas as listed in the table below. The total population served is approximately 300,000.[89] Most of Suburban's service area is located within Los Angeles County, with the exception of small areas located in unincorporated portions of Orange County.[90]

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[88] Suburban's Results of Operations for Test Years Ending December 31, 2027 and 2028, and Attrition Year 2029 at 3-6.

[89] Suburban's 2020 Urban Water Management Plan at 1-7.

[90] Suburban's 2020 Urban Water Management Plan at 1-7.

Table 3-1: Suburban's Water Systems and Water Supply

Service Area	Water System	No. of Connections 2024[91]	Groundwater Production 2024 (AF)[92]	Purchased Water 2024 (AF)[93]
San Jose Hills	San Jose Hills	42,314	6,761.52	14,984.63
	Glendora			
	Covina Knolls			
Whittier-La Mirada	Whittier	32,080[94]	11,556.85	5,876.32
	La Mirada			
	Sativa	1,321[95]	278.95	97.28[96]
	Total	75,715	18,597.32	20,958.23

Suburban's water supply comes from groundwater production and purchased water. The 2024 water supply data for each service area are summarized in the table above. Wells in the San Jose Hills service area extract groundwater from the Main San Gabriel Basin. Wells in the Whittier-La Mirada service area extract groundwater from both the Main San Gabriel Basin and the Central Basin.[97] Suburban's San Jose Hills service area has four active wells, and Whittier-La Mirada service area has 9 active wells for a total of 13.[98] Suburban's Sativa water system has two active wells, which are included in Whittier-La Mirada's total of 9.[99]

In addition, Suburban purchases water imported by the Metropolitan Water District of Southern California (MWD), a regional water wholesaler, through three of

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[91] Suburban Results of Operations at 4-5 and 4-6.

[92] 2024 Annual Report of Suburban Water Systems, D-1 Attachment; Acre Feet (AF).

[93] 2024 Annual Report of Suburban Water Systems, D-1 Attachment; Acre Feet (AF).

[94] Cal Advocates calculated Whittier and La Mirada connections, groundwater production, and purchased water by subtracting Sativa system data from the Whittier-La Mirada service area data.

[95] Suburban Results of Operations at 4-8.

[96] 2024 Annual Report of Suburban Water Systems, D-1 Attachment; Acre Feet (AF).

[97] Suburban's Results of Operations at 3-8 and 3-12.

[98] Suburban's Results of Operations at 3-8 and 3-12.

[99] Suburban's Results of Operations at 3-12.

MWD's member agencies. MWD imports water from the Colorado River and from the State Water Project. Suburban also purchases water from other agencies that supply imported water, groundwater, and surface water.[100]

Water produced at the well sites in both service areas is disinfected with sodium hypochlorite or sodium hypochlorite and ammonia.[101] The storage tanks are also chlorinated with calcium hypochlorite as required by system conditions. In the San Jose Hills service area, water from sources of varying quality is blended at Plant 121 to achieve the desired water quality.[102] Plant 409 in the Whittier-La Mirada service area has an oxidation/coagulation and pressure filtration treatment facility to remove substances that cause the water to have color from well water to comply with water quality regulations. Suburban installed additional equipment to remove arsenic at Plant 409.[103]

B. DDW Drinking Water Enforcement Actions

Suburban's response to Minimum Data Requirements (MDR) Item G.5 indicates that it received one water quality citation from DDW in 2022 and one citation in 2023.[104] Cal Advocates reviewed Suburban's 2022 Coliform Rule and 2023 Backflow Preventer Citations in the prior GRC.

1. 2022 Total Coliform Rule Citation

DDW issued a Revised Total Coliform Rule Monitoring Violation for the San Jose Hills water system in July 2022. This citation was given for "sampling at an incorrect location per the California Revised Total Coliform Rule treatment technique monitoring requirements" in the San Jose Hills water system. DDW determined that Suburban failed to comply with primary drinking water standards pursuant to California Health and

[100] Suburban's 2020 Urban Water Management Plan at 3-1, 3-4 and 3-7.

[101] Suburban's Results of Operations at 3-11 and 3-14.

[102] Suburban's Results of Operations at 3-11 through 3-12.

[103] Suburban's Results of Operations at 3-14.

[104] Suburban's Response to MDR at 23, Item G.5.

Safety Code, Section 116555(a)(1) and California Code of Regulations, Title 22, Section 64422(b).[105]

To comply with the Revised Total Coliform Rule, a water system must collect and analyze water samples for total coliform bacteria. If collected samples are positive for total coliform bacteria, then water systems must collect a repeat sample set within 24 hours of being notified of the positive results. Specifically, Title 22 requires that a water system collect bacteriological samples for total coliform analysis according to a bacteriological sample siting plan (BSSP) that has been approved by the State Water Resources Control Board.[106]

Suburban did not comply with the Revised Total Coliform Rule because it did not collect its repeat sample set from sites identified by its approved BSSP. DDW states that a laboratory notified Suburban that two of its routine samples were positive for total coliform bacteria on April 19 and April 26, 2022. On each of those same days, Suburban collected three repeat samples. The six total repeat samples were all negative for total coliform bacteria. However, out of the six sites that Suburban chose for the repeat samples, two were not identified by the approved BSSP. Consequently, DDW determined that Suburban failed to comply with the appropriate drinking water standards.[107]

Suburban has completed the directives set by DDW's 2022 citation. DDW directed Suburban to notify all persons served by the water system of the violation and to provide on-going training to staff responsible for overseeing compliance with monitoring and reporting and collecting samples.

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[105] Suburban Response to MDR, Attachment No. 37. Citation No. 04_07_22C_004.

[106] Suburban Response to MDR, Attachment No. 37. Citation No. 04_07_22C_004.

[107] Suburban Response to MDR, Attachment No. 37. Citation No. 04_07_22C_004.

2. 2023 Backflow Preventer Testing Citations

DDW issued citations to four of Suburban's water systems in July 2023.[108] DDW issued these citations because Suburban tested some, but not all, of its backflow prevention assemblies for the year 2022. The four affected water systems were San Jose Hills, Glendora, Whittier, and La Mirada.

Public water systems may be physically connected to other sources or systems containing liquids, gases, or other substances that are not from an approved drinking water supply. The undesired or unintended flow of these liquids, gases, or substances into a public water system is known as "backflow."[109] The State of California prohibits backflow under normal operating conditions.[110] Drinking water regulations require that water systems protect their supply from backflow by installing and maintaining prevention assemblies or "backflow preventers."[111] Water systems are required to test all backflow preventers at least annually.[112] Out of all backflow preventers, DDW found that Suburban had only tested 46% in San Jose Hills, 25% in Glendora, 52% in Whittier, and 50% in La Mirada during the year 2022.[113] Therefore, DDW determined that these four water systems failed to comply with water quality standards.

DDW directed Suburban to take several actions in response to these violations. Among other actions, Suburban had to assure DDW that it had tested all the affected systems' backflow preventers by December 31, 2023. By February 13, 2024, Suburban had to submit a testing status report and an inventory of all backflow preventers to DDW. Suburban also had to disclose these violations in the 2023 Consumer Confidence Reports.

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[108] Suburban Response to MDR, Attachments No. 44 through 47. Citation No. 04_07_23C_014 at 3.

[109] California Environmental Protection Agency's Cross-Connection Control Policy Handbook at 2. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/2025/cross-connection-control-policy-handbook.pdf.

[110] California Health and Safety Code § 116555(a)(2).

[111] California Code of Regulations, Title 17 § 7584.

[112] California Code of Regulations, Title 17 § 7605(c).

[113] Suburban Response to MDR, Attachments No. 44 through 47. Citation No. 04_07_23C_014 at 3.

DDW also directed Suburban to submit a plan to DDW on September 1, 2023 that ensured that all backflow preventers are tested at least annually.[114]

Suburban has completed the directives set by DDW's 2023 citations.[115] Suburban included a copy of the citations in the Minimum Data Requirements as required by the Rate Case Plan.

C. Water Quality Reports

Cal Advocates reviewed the most recent DDW Sanitary Survey Reports for Suburban's water systems.[116] Cal Advocates reviewed the most recent DDW Sanitary Survey Reports for Suburban's water systems. Table 3-2 below shows the dates of the most recent reports. The reports evaluate elements of each water system.

Table 4-2: Most Recent DDW Sanitary Survey Reports[117]

Water System	System No.	Report Date
San Jose Hills	1910205	October 17, 2024
Glendora	1910046	November 20, 2025
Covina Knolls	1910200	October 29, 2025
Whittier	1910174	December 16, 2024
La Mirada	1910059	September 5, 2024
Sativa	1910147	October 7, 2025

The reports conclude that all systems can provide a continuous supply of safe, wholesome, and potable water to customers. In the reports, DDW includes lists of deficiencies and recommendations that the systems should address. Items that are common among Suburban's water systems include recommendations to annually test each backflow device and flush each dead-end blow-off.

[114] Suburban Response to MDR, Attachments No. 44 through 47. Citation No. 04_07_23C_014 at 3.

[115] Suburban Response to MDR, Attachments No. 48 through 52.

[116] Suburban Response to MDR, Attachments No. 53 through 65 and 73 through 77.

[117] Suburban Response to MDR, Attachments No. 53 through 65 and 73 through 77.

As required by California Health and Safety Code §116470, every public water system should annually prepare a Consumer Confidence Report (CCR) and mail/deliver a copy of the report to each customer. The CCR is based on data collected during, or prior to, the previous calendar year. The report includes information on source water, levels of any detected contaminants, compliance with drinking water regulations, and educational information. The CCR is also known as the "annual drinking water quality report." In the 2022 to 2024 water quality reports for each of Suburban's water systems, Suburban stated that the drinking water was in full compliance with all applicable county, state, and federal drinking water regulations in the previous year.[118]

D. Future Water Quality Regulations

In its response to MDR Item G.8, Suburban discussed several Maximum Contaminant Levels Limits (MCLs) that may be set or revised within the next five years and the potential impact on Suburban's operations.[119] Of the future water quality regulations that Suburban discusses, the sections most related to proposed treatment systems are for PFOA and PFOS and manganese regulations.

1. Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS)

On October 29, 2025, SWRCB revised Notification Levels (NLs) to 4 parts per trillion (ppt) for PFOA and PFOS. At the same time, SWRCB retained the Response Level (RL) at 10 ppt for PFOA and 40 ppt for PFOS.[120] SWRCB has been issuing monitoring requirements to potentially vulnerable water systems. On April 10, 2024, the United States Environmental Protection Agency (US EPA) announced a final MCL of 4 ppt for PFOA and PFOS.[121] Water systems would have three years, until 2027, to

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[118] Suburban's Response to MDR G.4, Attachments No. 19 through 36.

[119] Direct Testimony of Michael De Ghetto at 7, lines 7 through 10.

[120] "Drinking Water Notification Levels." SWRCB website. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/NotificationLevels.html.

[121] "Final PFAS National Primary Drinking Water Regulation." US EPA website.

complete initial monitoring and five years, until 2029, to implement solutions to reduce PFOA and PFOS if they are exceeding the MCLs.[122] SWRCB retained the NL of 3 ppt and revised the RL to 10 ppt for another substance, Perfluorohexane Sulfonic Acid (PFHxS), on October 29, 2025.[123]

In 2025, the US EPA announced that it would postpone the MCL compliance date to 2031.[124] As of April 2026, the US EPA has not released its proposed rule postponing the MCL. However, the Commission should be aware that proposed and final rules postponing the MCL compliance date may be forthcoming.

Since 2019 Suburban has been testing four of its wells at Plant 201 in the Whittier-La Mirada service area. Suburban found that the four wells exceeded the PFOA, PFOS, and PFHxS NL and PFOA RL. Subsequently, DDW issued a blending plan and permit amendment for Suburban's Whittier water system. Suburban states that the blended water from Plant 201 has PFOA, PFOS, and PFHxS levels between the NL and RL.[125]

SWRCB issued a monitoring order for Suburban's Sativa water system on October 28, 2022. SWRCB required monitoring for PFOA and PFOS at Sativa's Well 3 and Well 5. Suburban detected PFOS and PFHxS above the NL at Plant 804's Well 3 in its Sativa water system. Suburban could not sample Plant 803's Well 5 while the manganese treatment plant construction is ongoing.[126]

Cal Advocates discusses its recommendations regarding Suburban's proposed PFAS treatment systems at Plant 201 and Plant 804 in Chapter 2 of this Report.

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https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas.

[122] "Final PFAS National Primary Drinking Water Regulation." US EPA website. https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas.

[123] "Request to Establish Public Health Goal (PHG) for Perfluorohexane Sulfonic Acid (PFHxS)". https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/2025/phg-request-pfhxs.pdf.

[124] "EPA Announces It Will Keep Maximum Contaminant Levels for PFOA, PFOS." US EPA website. https://www.epa.gov/newsreleases/epa-announces-it-will-keep-maximum-contaminant-levels-pfoa-pfos.

[125] Direct Testimony of Michael De Ghetto at 14, lines 4 through 8.

[126] Direct Testimony of Michael De Ghetto at 16, lines 12 through 17, line 2.

2. Manganese

There are both primary water quality standards for manganese that are health-based and secondary water quality standards that are based on the appearance and odor of drinking water. SWRCB currently has a health-based NL of 500 parts per billion (ppb) and RL of 5,000 ppb.[127] SWRCB proposed revising the NL to 50 ppb and the RL to 200 ppb on September 4, 2025.[128] SWRCB has a secondary MCL for manganese of 50 ppb. Suburban states that three of its wells would be near or above the revised manganese NL or RL if adopted. However, this includes Sativa's Well 5 where a manganese treatment plant construction is in progress.[129]

Cal Advocates discusses its recommendations regarding Suburban's proposed manganese treatment system at the Sativa Water System's Well 5 in the Cal Advocates Report on Plant Projects for Whittier-La Mirada and Sativa Systems, Chapter 2.

E. Special Request No. 3 Recommendation

Based on its review, Cal Advocates recommends that the Commission should approve Suburban's Special Request No. 3.

IV. CONCLUSION

Cal Advocates reviewed Suburban's MDR responses and Direct Testimony, DDW Citations and Sanitary Survey Reports, Consumer Confidence Reports, and SWRCB's databases, and concludes that Suburban's six water systems meet the applicable state and federal water quality.

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[127] "Revised Proposed Notification and Response Level Issuance." SWRCB website. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/2025/manganese-nl-issuance-proposed-2025.pdf.

[128] "Revised Proposed Notification and Response Level Issuance." SWRCB website. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/2025/manganese-nl-issuance-proposed-2025.pdf.

[129] Direct Testimony of Michael De Ghetto at 37, lines 12 through 38, line 3.

APPENDIX A

Qualifications of Witness

QUALIFICATIONS AND PREPARED TESTIMONY
OF
ANTHONY ANDRADE

Q.1 Please state your name, business address, and position with the California Public Utilities Commission ("Commission").

A1. My name is Anthony Andrade, and my business address is 320 West 4th Street, Suite 500, Los Angeles, California 90013. I am a Utilities Engineer in the Water Branch of the Public Advocates Office.

Q2. Please summarize your education background and professional experience.

A2. I received a Bachelor of Science Degree in Mechanical Engineering from the University of California--Riverside in 2018.

I have been with the Public Advocates Office – Water Branch since 2018. As a witness for Cal Advocates, I have previously provided testimony regarding Utility Plant-in-Service, Depreciation, and Rate Base in San Gabriel Valley Water Company (SGVWC)'s 2022 GRC (A.22-01-001) and Liberty Utilities (Apple Valley Ranchos Water Company) and (Park Water Company)'s 2021 GRC (A.21-07-003 et al). I have also provided testimony regarding Utility Plant-in-Service in Golden State Water Company's 2020 GRC (A.20-07-012) and Suburban's 2023 GRC (A.23-01-001), and Water Quality in SGVWC's 2019 GRC.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for the testimony on Pipeline Replacement, PFAS Treatment, San Jose Hills Plant, and Water Quality.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

APPENDIX B

Supporting Documents

INDEX LIST OF ATTACHMENTS FOR APPENDIX B

Attachment #	Title
Attachment 1-1	2023-24 LADWP Water Infrastructure Plan
Attachment 1-2	Suburban's Response to Data Request AA9-002
Attachment 1-3	Guidelines for Setting a Target Infrastructure Leakage Index
Attachment 1-4	"Cutting Capital Costs with Pipeline Condition Assessment Tools" Article
Attachment 1-5	"Condition Assessment Helps Fountain Valley Devise a Proactive Asset Management Plan" Article
Attachment 1-6	Pipeline Integrity Testing to Assess the Useful Life of Pipeline Infrastructure
Attachment 2-1	Application 23-01-001, Rebuttal Testimony of Jorge Lopez, P.E. (Excerpt)
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Attachment 2-8	WRD PFAS Remediation Program Status of Projects
Attachment 2-9	WRD Updated 2025 Engineering Survey and Report (Excerpt)

Attachment 1-1: 2023-24 LADWP Water Infrastructure Plan

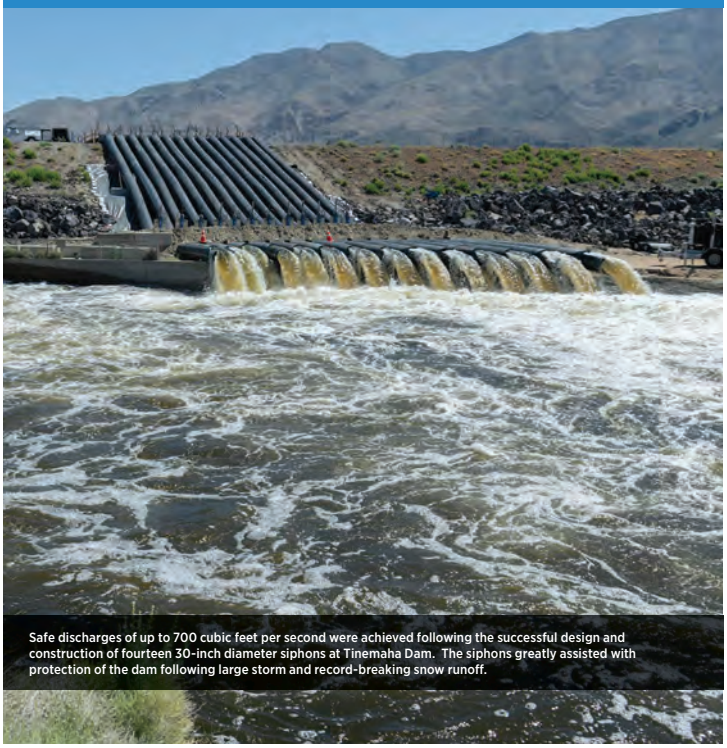
2023-24

LA DWP

Water Infrastructure Plan

Introduction

The Los Angeles Department of Water and Power (LADWP) maintains a vast Water System with about 7,341 miles of mainlines and trunk lines, along with related infrastructure and storage facilities that are critical to delivering high quality water to Los Angeles residents and businesses. The Water Infrastructure Plan (WIP) describes infrastructure accomplishments and goals that are a part of LADWP's $6.3 billion five-year water system capital plan. All major water infrastructure components are evaluated through the ongoing Asset Management (AM) Program to systematically manage assets to achieve the lowest cost of ownership, including capital, operations and maintenance costs. The AM Program data and analysis is continuously being improved and refined.



Safe discharges of up to 700 cubic feet per second were achieved following the successful design and construction of fourteen 30-inch diameter siphons at Tinemaha Dam. The siphons greatly assisted with protection of the dam following large storm and record-breaking snow runoff.

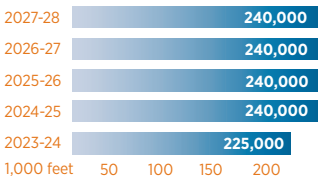
Distribution Mainline

Distribution mainlines (pipes 20 inches or less in diameter) constitute the backbone of LADWP's water distribution system. There are approximately 6,794 miles of mainline throughout the City of Los Angeles. Over 30% of LADWP's mainlines are over 80 years old. LADWP has set goals to ramp up the replacement of aging water distribution mainlines to achieve an anticipated life cycle of 150 years.

2022-23 Achievements

- Installed over 209,904 feet of mainline pipe.
- Installed 75,504 feet of earthquake resilient pipe, exceeding the goal of 52,800 feet from FY21-22 through FY23-24.
- Achieved an average leak rate of 19.4 leaks per 100 miles, better than the national industry average of 25 leaks per 100 miles. (Water Research Foundation, 2017)

Mainline Replacement Goals



Long-Term Goals

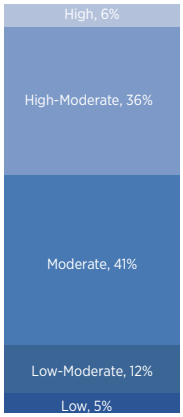
- Replace 225,000 feet of mainline pipe in 2023-24 and up to 240,000 feet per year by 2024-25.
- Reduce distribution life cycle costs, including capital and operations and maintenance costs.

Prioritizing Mainline Replacements

Based on LADWP's analysis, about 6% of LADWP's water distribution mainlines are classified as a high priority for replacement. The factors considered include:

- Leak history (number and type of leaks, time between leaks).
- Age of pipe (design and construction method used at time of installation).
- Soil conditions (corrosiveness, hillside, landslide, fault line, and liquefaction potential).
- Risk of service interruption and community disruptions.
- Coordination with planned projects by Streets LA and other Water System improvement projects.

Mainline Replacement Priority



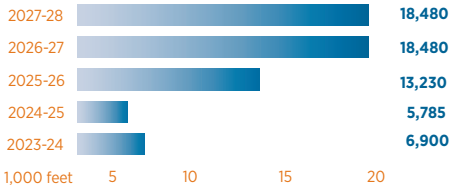
Trunk Lines

Trunk lines are pipes greater than 20 inches in diameter, and provide the transmission capacity to move large amounts of water around the city – from reservoirs and tanks to smaller distribution mainlines. There are approximately 547 miles of transmission pipelines throughout the City of Los Angeles. Prioritization for trunk line replacement is similar to the process for mainlines, taking into account leak history, soil conditions, and pipe age, along with other factors.

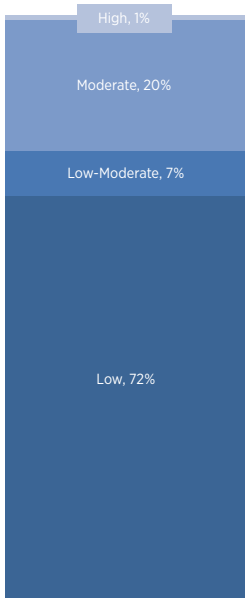
2022-23 Achievement

Replaced 15,660 feet of trunk line pipe, exceeding target.

Trunk Line Replacement Goals



Trunk Line Replacement Priority

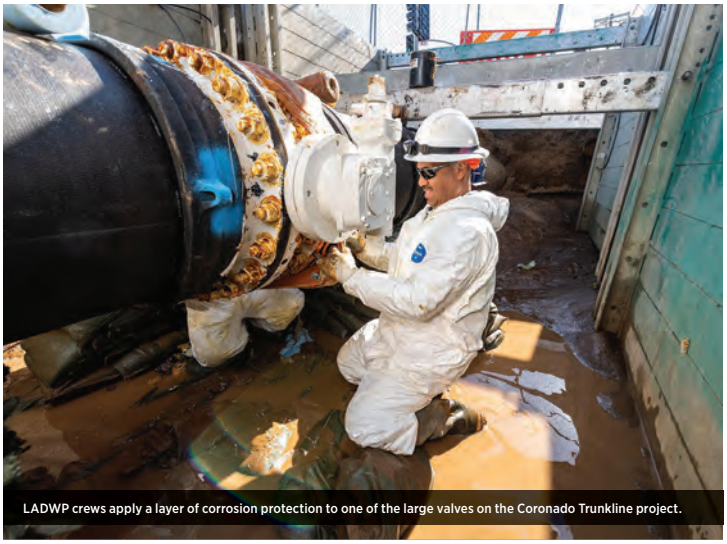


2023-24 Goal

Replace 6,900 feet of trunk line, including a portion of City Trunk Line North, with new earthquake resilient pipe.

Long-Term Goals

- Accelerate design and construction of trunk line projects to replace high-risk trunk lines.
- Continue the corrosion protection program.
- Continue pipe replacements required to meet drinking water regulatory compliance.
- Enhance trunk line resilience through the use of earthquake resilient pipe.
- Continue to work with stakeholders to raise awareness about projects in their communities and minimize impacts due to construction.
- Identify and implement mitigation measures as needed during construction.



LADWP crews apply a layer of corrosion protection to one of the large valves on the Coronado Trunkline project.

Large Valves

LADWP has over 2,800 large valves (16 to 144 inches in diameter) in the Water System network. Large valves are flow control devices that are critical for Water System operations. In addition to valves replaced under other Water System improvements, LADWP continues to replace at least five large valves per year as part of the Large Valve Replacement Program. There are currently 28 valves identified for replacement. LADWP's plan is to continue with the targeted Large Valve Replacement Program that strategically prioritizes replacements of large valves in the Water System based on operational needs, water shutdown and valve availability.

2022-23 Achievement

Replaced eight large valves, ranging in size from 16-inch to 36-inch.

2023-24 Goal

Replace five large valves as part of the Large Valve Replacement Program, along with additional large valve replacements under other Water System improvements.

Long-Term Goals

- Continue to maintain and update a complete list of broken and difficult to operate valves.
- Continue the periodic valve exercise program to minimize valve damage and extend the valves' useful life.
- Continue the installation and renewal of large valves in conjunction with trunk line construction projects.
- Continue the large valve vault assessments and rehabilitations.

The Kittridge Water Tanks located in West Hills can each hold 10-million gallons of water.

In-City Reservoirs and Tanks

Within the Los Angeles basin, LADWP operates ten major active reservoirs and over 107 smaller storage facilities, all of which create operational flexibility to balance water supplies and customer demands.

Eagle Rock, Elysian, Lower Franklin No. 2, Green Verdugo, Santa Ynez, Upper Stone Canyon, and Lower Van Norman Bypass are protected with a floating membrane or roof; Headworks East and Headworks West are buried structures; and Los Angeles Reservoir utilizes shade balls and ultraviolet (UV) disinfection.

Additionally, the following six large reservoirs are no longer in-service but contain non-potable water for emergency use: Encino, Upper Hollywood, Lower Hollywood, Ivanhoe, Silver Lake, and Lower Stone Canyon.

Similar to the in-city reservoirs, storage tanks provide the needed daily and emergency supplies for the community. Steel and concrete storage tanks have capacity ranging from 9,000 gallons to 30 million gallons, and their typical useful life is 60 years and 100 years, respectively.

Objectives for in-city reservoirs and tanks include:

- Preserve water quality and structural integrity.
- Replace floating covers based on a 20-year useful life or earlier if needed due to deterioration and damage, or as required by the Division of Drinking Water.
- Retrofit or replace tanks based on condition assessment of structural and mechanical elements, materials, and safety seismic stability.
- Maintain dam safety surveillance on reservoirs as required by the Division of Safety of Dams.
- Continue inspection and maintenance program for reservoirs and tanks.

The floating cover on the Eagle Rock Reservoir provides added protection to L.A.'s drinking water.

The floating cover on the Green Verdugo Reservoir adjusts as needed to the changing water levels.

2022-23 Achievements

- Placed Headworks West Reservoir in-service.
- Completed installation and obtained final approval by the California Department of Water Resources, Division of Safety of Dams for the Green Verdugo Floating Cover Replacement Project.

2023-24 Goals

- Place Green Verdugo Reservoir in-service.
- Complete Headworks Reservoir West commissioning.

Long-Term Goals

- Construct De Soto Tank.
- Replace Elysian Park Tank.
- Replace Solano Reservoir.

Pump Stations

There are 86 pump stations that pump water to customers or storage tanks at higher elevations in the city. Pump station maintenance objectives include:

- Preventing service disruptions.
- Maintaining operations during construction or replacement.
- Minimizing operational costs.
- Reducing repair costs through appropriate preventative maintenance.

2022-23 Achievement

Replaced or rehabilitated 20 pumps and motors, exceeding the 12 planned for the fiscal year.

2023-24 Goal

Replace or rehabilitate 12 pumps and motors.

The new pumping units 1 and 6 at the Penstock Pump Station in Granada Hills help increase reliability, redundancy and capacity of water supply.

Pressure Regulator and Relief Stations

There are 351 regulator and relief stations that control water pressure by adjusting for changes in flow and accommodating customer peak usage. Maintenance objectives include:

- Preventing service disruptions.
- Maintaining system operations during construction.
- Minimizing life cycle costs.

2022-23 Achievements

- Retrofitted 13 regulator stations.
- Replaced two regulator stations and headers.

2023-24 Goals

- Retrofit eight regulator stations.
- Evaluate existing regulator station replacement to meet structural requirements and operational needs.
- Replace two regulator stations and headers.

The Villa Woods Regulator Station in the Pacific Palisades area serves as a supply and pressure regulating station.

Water Meter Replacement Program

LADWP maintains over 7,300 large meters (3 inches and larger) and approximately 700,000 small meters (2 inches and smaller). Accurate metering is necessary to fully account for water use by all customers as well as quantify water loss within the distribution system. Since completing the cycle for large meter replacements, LADWP has focused on replacing small meters, which constitute the vast majority of the Water System's meter inventory.

The industry average life cycle of a small meter is 20 years, before wear and tear on its moving parts cause loss of measuring accuracy. Over the next five years, LADWP plans to ramp up to a replacement cycle of 20 years.

2022-23 Achievement

Replaced approximately 30,500 meters.

2023-24 Goal

Replace 34,000 meters.

Priorities for Water Meter Replacement

- Increase to a long-term replacement rate of 34,000 meters per year.
- Continue to explore and evaluate new meter technologies.
- Achieve at least 80% completion rate for repair or replacement of stuck or defective meters within 30 days after the service order is released by the Field Investigations Group.

Small Meter Replacement Goals	fiscal year
34,000	2027-28
34,000	2026-27
34,000	2025-26
34,000	2024-25
34,000	2023-24

Los Angeles Aqueduct (LAA) Reservoirs & Dams

There are nine reservoirs and dams along the LAA, beyond the city limits. We evaluate and maintain the integrity of these dam structures by conducting site-specific stability studies. We also maintain a reservoir surveillance program, as required by the California Department of Water Resources, Division of Safety of Dams.

2022-23 Achievements

Responded successfully to high runoff and emergency repairs as a result of record snow pack, two major rain storms and unprecedented Tropical Storm Hilary.

- Bishop and Independence spreading basins were reconditioned and/or realigned for spreading of over 400,000 AF in order to capture runoff in the Owens Valley and prevent flooding.
- Successfully designed and constructed fourteen 30-inch diameter siphons at Tinemaha Dam, to increase discharges of up to 700 cubic feet per second and protect the dam following large storm events.
- Increased capacity of Long Valley Reservoir by modifying height of spillway temporarily, which prevented flooding of facilities and communities downstream.
- Completed construction of Phase 1 (Relocate New Cactus Flat Road) and nearing completion of Phase 2 (Re-align a portion of LAA) for North Haiwee Dam No. 2 Project.

2023-24 Goals

- Install new power poles and upgrade electrical supply as part of the Long Valley Dam Emergency Outlet Tunnel Stem and Operator Project.
- Evaluate alternatives for the Grant Lake Outlet Valve Replacement and Spillway Modification Project, which will allow for controlled release of water to the Lower Rush Creek.
- Begin construction of Phase 3 (New Embankment Dam) for the North Haiwee Dam No. 2 Project.

Long-Term Goal

Design and build a sedimentation facility at Fairmont Reservoir to meet long-term water quality requirements for water supplied through the LAA and east branch of the State Water Project.

Los Angeles Aqueduct (LAA) System

There are approximately 300 miles of LAA tunnels, open channels, covered channels, and sag pipes that convey water from the Eastern Sierra and Owens Valley to Los Angeles. Our objective is to maintain operations through in-place refurbishment of the entire LAA system.

2022-23 Achievements

- Repairs were made following storm damage from flood waters and debris in surrounding mountains and canyon.
- Successfully completed emergency repairs of the LAA after two breaches occurred resulting from extreme weather events.
- Over 100 culverts repaired or reconstructed.
- Constructed 20 temporary measuring stations.
- Constructed 30 new diversion structures for spreading.
- Completed temporary repairs of over 20 overhead structures.
- Completed construction of Long Pond Diversion Structure for spreading in Independence area.
- Completed installation of valving to divert excess water through the Maclay Highline from the Second LAA to capture in spreading grounds in the San Fernando Valley.
- Completed design and procurement of a reusable forming system to produce and install precast concrete box culverts, expediting replacement of culverts, overheads, and bridge structures.

Long-Term Goals

- Replace an average of three miles of original top on the covered channels annually.
- Complete the exterior recoating of five miles of sag pipe.
- Design mitigation for a San Andreas Fault rupture at the Elizabeth Tunnel.
- Replace Tinemaha Dam Outlet Structure Control Gate to improve dam safety.
- Replace aged and failing water diversion and measurement infrastructure along the Aqueduct System at the rate of 5 to 10 facilities per year.
- Re-drill and replace groundwater wells in the Owens Valley averaging two per year.
- Complete construction of Bishop Bypass Intake Structure Replacement.
- Complete design and replacement of Bishop Creek North/South Split Structure.
- Complete Long Valley Rockfall Mitigation Study.

2023-24

To view this report online, please scan the QR code

LA DWP

Water Infrastructure Plan

Attachment 1-2: Suburban's Response to Data Request AA9-002

Suburban Water Systems
1325 N. Grand Ave. Ste. 100, Covina, CA 91724-4044
Phone: 626.543.2500, Fax: 626.331.4848
SuburbanWaterSystems.com

March 24, 2026

To: Anthony Andrade
Utilities Engineer

Suliman Ibrahim
Project Lead

Corwin Hockema
Attorney for Public Advocates Office

Re.: Responses to A.26-01-001, Public Advocates Office DR AA9-002 (Pipeline Replacement)

Dear Mr. Andrade et al.,

Attached is the information you requested in writing for Suburban's Total Company General Rate Case.

Sincerely,

/s/Carmelitha Bordelon

Carmelitha Bordelon
Vice President, Regulatory Affairs & Finance

Responses to A.26-01-001, Public Advocates Office

DR AA9-002 (Pipeline Replacement)

1. In the Direct Testimony of Jorge Lopez on Pipeline Replacements, pages 11-12, Suburban states that HDR, Inc., an engineering consulting firm, prepared the Water Main Renewal Technical Memorandum included in Suburban's Workpapers Volume IV. On pages 34-36 of the same Testimony, Suburban shows that HDR assessed the replacement rates and breaks per mile for 25 utilities. This data is summarized by Figure 8 on page 36.

   a. Please provide an Excel spreadsheet that contains the data graph shown on Figure 8. Please also include the data used to make the Figure 8 graph with any excel formulas, such as the formulas used to create the dashed lines for "higher level of service focused" and "near term cost focused," intact.
   Response:
   Please see the Excel file entitled "DR AA9-002_1.a.Benchmarking.xlsx."

   b. If not already included in the response to Question 1.a. above, provide a list of the 25 utilities assessed by HDR that identifies the replacement rate and breaks per mile data specific to each named utility in Microsoft excel format.
   Response:
   The requested information is in the Excel file included with the response to question 1.a.

2. Suburban discusses the Infrastructure Leak Index (ILI), which it states is a metric used by the American Water Works Association (AWWA) to assess the effectiveness of a utility's water loss control programs in the Direct Testimony of Jorge Lopez on Pipeline Replacements, pages 28-34. Suburban refers to Suburban's ILI score of 0.736 that Decision 24-12-030 referred to during the prior GRC on page 32.

   Suburban states that "After the GRC, review of Suburban's AWWA Water Loss Audit data submitted to the California Department of Water Resources (DWR), the basis for the above comments in the GRC decision, was found to be erroneous" and that Suburban will resubmit the corrected numbers to the DWR to amend the records by the end of 2025 on page 35, lines 5-8. Suburban's Table 4 on page 33 summarizes revised ILI for the San Jose Hills and Whittier / La Mirada service areas for years 2020 to 2024.

   a. Please explain how Suburban previously calculated the ILI scores that had an average of 0.736 and why this was erroneous.
   Response:
   Suburban did not calculate the Infrastructure Leakage Index (ILI) score of 0.736 referenced in Decision 24-12-030. This value was calculated by Public Advocates Office in its "REPORT ON PIPELINE REPLACEMENT, DEPRECIATION

RESERVE & EXPENSE, RATE BASE & EARLY RETIREMENTS AND SATIVA PIPELINE PROJECTS", August 14, 2023, Table 1-3 on page 7.

Errors occurred in the reported consumption data when Suburban submitted the Water Audit Data Reports to the California Department of Water Resources for the period before 2025. Customer consumption data from meter readings was double-counted, resulting in an artificially reduced ILI value. Suburban did not identify this error until 2025.

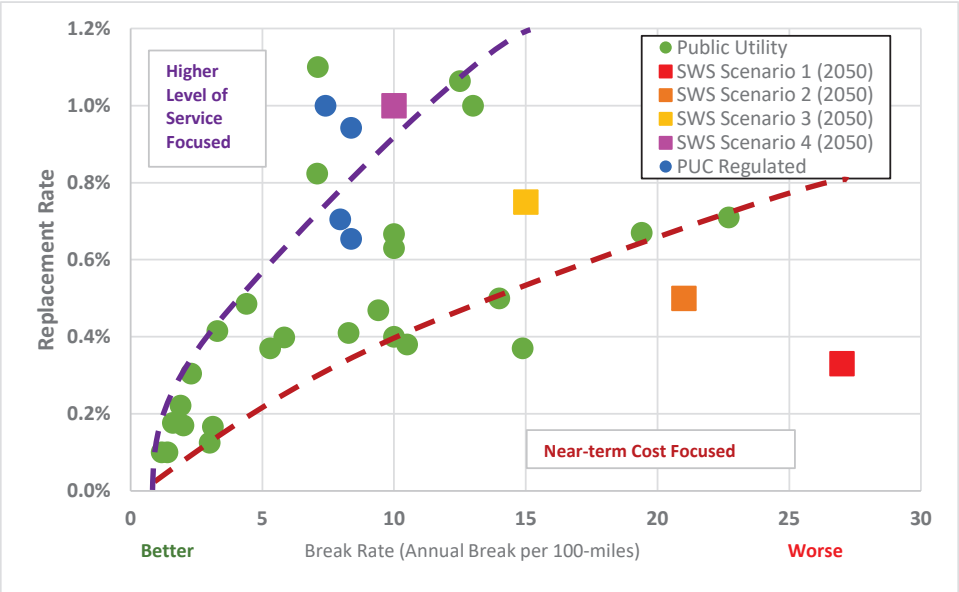
b. Provide the calculations that Suburban used to determine the revised ILI scores in Table 4.
Response:
To obtain a more accurate Infrastructure Leakage Index (ILI), Suburban revised both production and consumption data from 2025. The revised data was entered into the latest version of the AWWA Water Audit Software to recalculate the ILI. It should be noted that the revised ILI does not represent a final value, as multiple factors may affect the ILI score. In the recalculation, the only modifications made were to production and consumption inputs. Accordingly, the data presented in Table 4 on page 33 of the Direct Testimony of Jorge Lopez on Pipeline Replacements (November 3, 2025) should be considered draft data. Beginning on line 8 of the Direct Testimony should state "The corrected data in Table 4 provides the revised ILI score and more accurately represents the results of Suburban's water loss control program.

Please see the Excel file titled "DR AA9-002_2.b.ILI Calculation.xlsx" for the calculation of revised ILI scores.

Please see the Excel files below for the draft revised Water Audit Report for both SJH and WLM from 2020 to 2024 using AWWAs Water Audit Software.

- DR AA9-002_2.b._Draft Revised_ILI 2020_SJH.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2021_SJH.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2022_SJH.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2023_SJH.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2024_SJH.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2020_WLM.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2021_WLM.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2022_WLM.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2023_WLM.xlsx
- DR AA9-002_2.b._Draft Revised_ILI 2024_WLM.xlsx

c. Provide the documentation that Suburban submitted to DWR to amend its record regarding ILI.
Response:
As of this time, Suburban has not submitted the updated Water Audit Report to DWR.



Benchmarked Utilities

Los Angeles DWP
Santa Cruz, CA
Contra Costa WD, CA
San Juan WD, CA
Suburban Water, CA
Padre Dam MWD, CA
Helix Water District, CA
San Diego, CA
San Dieguito, CA
Vista Irrigation District, CA
Rainbow MWD, CA
Carlsbad, CA
Vernon, CA
Mesa Water District, CA
Buena Park, CA
Riverside, CA
Long Beach, CA
Sweetwater, CA
East Bay MUD, CA
Bellevue, WA
Hillsboro, OR
Eugene, OR
Denver Water, CO
Westminster, CO
Phoenix, AZ

0.375

Status	Utility/Entity	Performance	Investment	Years to Replace		
AC	VID (Current)	8.3	244	0	0.4%	
AC	Helix Water District	5.8	251	0	0.4%	
AC	Mesa Water	3.0	800		0.1%	
AC	EBMUD	22.7	222		0.7%	need to update these values
AC	CCWD (2040)	14.9	270		0.4%	
AC	Padre Dam Municipal Water District	3.1	600	0.00%	0.2%	
AC	Buena Park	1.4	1000	0.00%	0.1%	
AC	City of San Diego	7.1			1.1%	
AC	Santa Cruz	10.0	150	0.00%	0.7%	
AC	Carlsbad	1.6	567	0.00%	0.2%	
Metallic	RMWD	14.0	200		0.5%	
Metallic	LADWP	19.4	250	0	0.67%	
mETALLIC	Denver	10.5	263		0.4%	
Mixed	City of Phoenix	10.0	250	0	0.4%	
AC	Vernon	2.0	588	0	0.2%	
SWS	LVMWD (Current)					
sws	LVMWD (2055)	5.3	#REF!		0.37%	
		1.2	1000		0.1%	
	Long Beach	3.3	241		0.4%	
	Bellevue, WA	7.1			0.8%	state database shows an average of 204 water main breaks per year between 2016 and 2011; website states they have been replaceing 1% per year since 2013 and are looking to extend that renewal level through 2020
Class A	Region 2 of Golden State Water Company					state database shows an average of 306 water main breaks per year between 2016 and 2011 (exclude 2014 which is double averag); PUC approved 32 miles of replacement over three year perod from 2016-18. 2011 report says they operate 895 miles of system
Class A	San Dieguito	2.3	328		0.3%	
	SWS					
	Riverside	12.5	94		1.1%	
	San Juan Water District	1.9	450.9761388		0.2%	
	SWA Historic	4.4	206		0.5%	
						removed hillsboror and eugene
	San Diego County Average	6.0				
	Westminster, CO	9.4			0.47%	
	San Jose Water					
miles	Oceanside	10.0			0.63%	
	San Francisco PUC	13.0			1%	
$M/mi	SWS Scenario 1 (2050)	27.0			0.33%	
	SWS Scenario 2 (2050)	21.0			0.50%	
	SWS Scenario 3 (2050)	15.0			0.75%	
	SWS Scenario 4 (2050)	10.0			1%	
	Golden State (2018-2022)	8.365284071			0.9%	
	Golden State (2024-2026)	8.365284071			0.7%	
	San Jose Water	7.4			1.0%	
	Cal Water	7.956461751			0.7%	

Attachment 1-3: Guidelines for Setting a Target Infrastructure Leakage Index

Guidelines for Setting a Target Infrastructure Leakage Index (ILI)

(without a full economic analysis of leakage control options*)

Once data has been entered into the Water Audit Worksheet, the performance indicators are automatically calculated. The Water Loss Control Committee of the American Water Works Association provided the following table to assist water utilities in gauging an approximate infrastructure leakage index that is appropriate for their water system and local conditions. The lower the amount of leakage and real losses that exist in the system, the lower the infrastructure leakage index will be.

Target Infrastructure Leakage Index Range	Financial Considerations	Operational Considerations	Water Resources Considerations
1.0 - 3.0	Water resources are costly to develop or purchase; ability to increase revenues via water rates is greatly limited because of regulation or low ratepayer affordability.	Operating with system leakage above this level would require expansion of existing infrastructure and/or additional water resources to meet the demand.	Available resources are greatly limited and are very difficult and/or environmentally unsound to develop.
>3.0 - 5.0	Water resources can be developed or purchased at reasonable expense; periodic water rate increases can be feasibly imposed and are tolerated by the customer population.	Existing water supply infrastructure capability is sufficient to meet long-term demand as long as reasonable leakage management controls are in place.	Water resources are believed to be sufficient to meet long-term needs, but demand management interventions (leakage management and water conservation) are included in the long-term plan.
>5.0 - 8.0	Cost to purchase or obtain/treat water is low, as are rates charge to customers.	Superior reliability, capacity, and integrity of the water supply infrastructure make it relatively immune to supply shortages.	Water resources are plentiful, reliable, and easily extracted.
Greater than 8.0	Although operational and financial considerations may allow a long-term infrastructure leakage index greater than 8.0, such a level of leakage is not an effective use of water as a resource. Setting a target level greater than 8.0 other than as an incremental goal to a smaller long-term target is discouraged.		
Less than 1.0	If the value of the infrastructure leakage index for your system is 1.0 or less, two possibilities exist: 1) You are maintaining your leakage at low levels in a class with the top worldwide performers in leakage control; or 2) A portion of your data may be flawed, causing your losses to be greatly understated. This is likely if you calculate a low value but do not employ extensive leakage control practices in your operations. In such cases, it is beneficial to validate the data by performing field measurements to confirm the accuracy of production and customer meters or to identify any other potential sources of error in the data.		

*Note: This table offers an approximate guideline for setting leakage reduction targets. The best means of setting such targets include performing economic assessments of various loss control methods. However, this table is useful if such assessments are not possible or a preliminary target is desired.

Attachment 1-4: “Cutting Capital Costs with Pipeline Condition Assessment Tools” Article

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BREAKING UP WITH THE 'BREAK MAP':

Cutting Capital Costs with Pipeline Condition Assessment Tools

By David Stewart Jones

UTILITIES RELYING ON "break map" historical data of pipeline leaks and failures to make pipeline replacement decisions are moving to survey-level pipeline condition assessment tools and technologies to cut capital costs.

Water resources and city services go back to the early history of the Minnesota city of Edina, a "first-ring" suburb of Minneapolis founded in the 1850s. Named after the local water-powered Edina Mill, the community in the 1920s was divided in conflict between residents demanding more city services and those committed to maintaining Edina's rural character, causing part of the town to secede. Today, the residential neighborhoods of a reunited Edina have retained the bucolic charm of a small town — but with efficient city services and proactive public works management of a much larger city.

Serving a population of almost 50,000 residents, many of Edina's roads and water pipelines are "first-cycle" infrastructure built during the 1950s and 1960s, and now nearing the end of their service life. For decades, Edina's public works department made pipe replacement decisions based on service life estimates and a "break map" history of locations of pipeline breaks and leaks. Area-wide replacement of miles of expensive water main pipe was standard procedure until Edina discovered the cost-saving benefits of pipeline condition assessment technology in 2014.

"We planned on spending somewhere between $800,000 to $1 million on water main replacement on that first project, but performing non-invasive condition assessment testing on our existing pipe enabled us to cut that cost in half," says Chad Millner, director of engineering for the Edina Engineering Department. "Based on our break map data, we would have replaced the entire water main system in that area, but our condition assessment testing revealed that we only needed to replace about a third of the water main. The rest could probably make it for another few decades or until it was time to do another infrastructure replacement cycle — so we applied the cost savings to additional condition assessment testing."

Acoustic-based Condition Assessment Technology

Consulting engineers retained by the Edina Engineering Department used Echologics ePulse condition assessment technology to determine the structural integrity of Edina's 8- and 10-in. ductile iron or cast-iron water mains. Nondestructive and nonintrusive, the acoustic-based ePulse technology enables utilities to assess the condition of water mains without taking mission-critical pipelines out of service.

"The ePulse technology is a proven condition assessment and leak detection tool that measures the remaining average wall thickness of water mains," says consulting engineer Dave Hutton with Short Elliott Hendrickson (SEH), an engineering firm working for Edina. "This makes ePulse technology an outstanding tool that helps utilities to extend their capital programming. Identifying older water mains that are still capable of an additional 20 or 30 years of service life is a proactive way to avoid premature and unnecessary replacement, saving capital dollars that can be applied to other projects."

The ePulse technology involves inducing low-frequency acoustic pressure waves measured by sophisticated acoustic sensors connected to exterior pipe appurtenances or the pipe itself. The pressure waves cause the pipe wall to "flex" on a microscopic level, affecting the speed of the pressure wave detected by the acoustic sensors.

Thicker pipe walls are more resistant to this pipe flexing, causing the pressure wave to travel faster, indicating a pipe wall in good condition. Deterioration and corrosion resulting in a thinner pipe wall causes the acoustic pressure wave to travel measurably slower, identifying worn pipe and sections in danger of failure and in need of replacement. Applying advanced algorithms to the captured acoustic data enable

measuring the average minimum wall thickness, which is compared to the original thickness of the pipe determine the average percentage of wall loss.

The first-year capital savings convinced the Edina Engineering Department to make condition assessment testing part of its ongoing pipeline maintenance program, typically deployed before initiating annual street reconstruction projects scheduled for summer months. Condition assessments have revealed pipelines with as much as 50 percent wall thickness loss, and may have contributed to Edina avoiding catastrophic water main failures for the past few years. Edina has adopted a policy of automatic replacement of any pipes with 30 percent or more pipe-wall loss in any given test section (typically between 300 and 600 ft long), because even marginally reduced pipe wall integrity creates substantial risk of broken water mains from ground movement caused by frost during severe Minnesota winters.

"Condition assessment data gives us an accurate picture of the overall status of our water distribution system, and is now a critical factor in deciding where to strategically spend our capital dollars," says Edina's Chad Millner. "We immediately recognized its value when we were testing this technology a few years ago, and now our city council also recognizes the real bottom-line benefits of using condition assessment technology — especially in these days of limited utility budgets."

Noninvasive "survey-level" technologies like ePulse condition assessment are gaining popularity with utilities as an economic alternative to high-resolution inspections than using expensive technologies that require removing pipelines from service, or inserting devices and equipment into an active pipeline. Budget cutting as a result of water conservation measures, reduced revenues, and other economic factors are compelling both large and small utilities and municipalities to seek new ways to maintain their water distribution systems at less cost.

"Utilities are grappling with aging water distribution infrastructures coming to the end of their service lives, but their real challenge is making diligent choices as to which pipelines they are going to replace — and when," says Michael Livermore, Echologics regional sales manager. "Utilities today simply cannot afford to operate without the vital decision-making information delivered by advanced pipeline condition assessment technology. It's no longer merely an option — it's a necessity."

"Smaller municipalities and utilities are embracing this technology simply because it gives them a big advantage for a very small cost," says Dave Hutton of SEH. "Yes, you spend a little money up-front for the condition assessment testing, but you save more money on the back end by avoiding replacement costs. It's like those car-repair TV commercials many years ago that said, 'Pay me now — or pay me later.'"

David Stewart Jones is a freelance writer and researcher based in Toronto, Ontario, Canada.

Attachment 1-5: “Condition Assessment Helps Fountain Valley Devise a Proactive Asset Management Plan” Article

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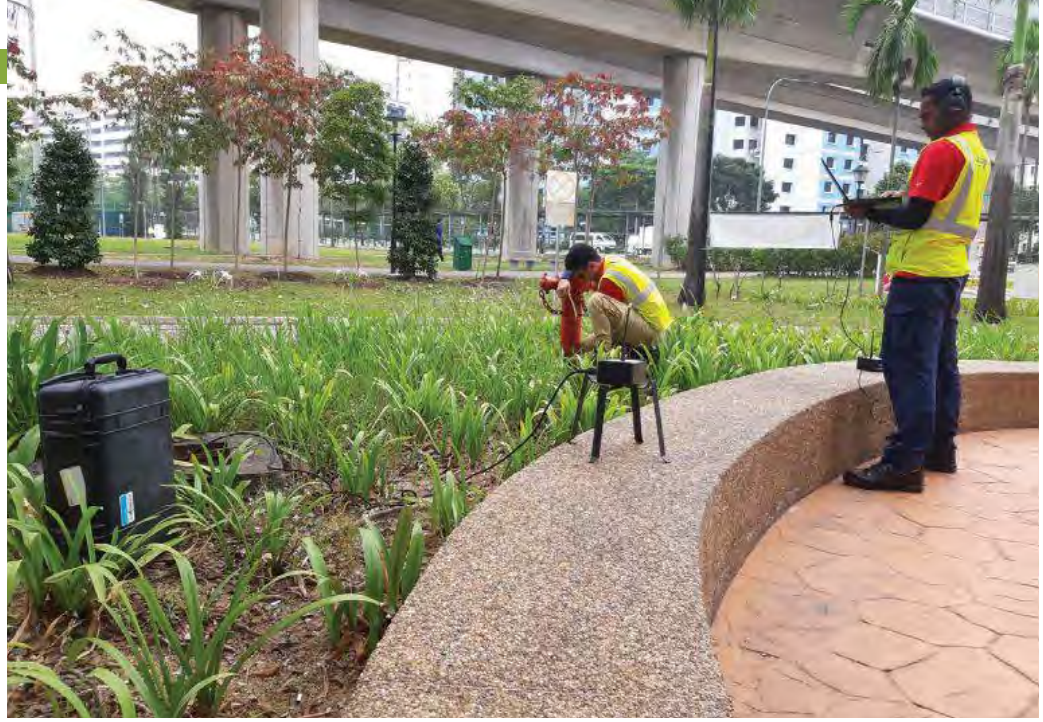
Condition Assessment

Helps Fountain Valley Devise a Proactive Asset Management Plan

By Ken Malone



The City of Fountain Valley, California, supplies its 55,000 residents with a blend of groundwater sourced from six city wells and one imported water connection originating from Northern California and the Colorado River. The City owns and operates two 5 million-gallon reservoirs, 202 miles of distribution piping and 17,131 service connections.

Located in Southern California, Fountain Valley has endured its fair share of droughts and consequently, water conservation is at the heart of the City's operations. In 2017, the City contracted with Echologics LLC, a subsidiary of Mueller Water Products (NYSE: MWA), to help with rolling out a five-year comprehensive condition assessment program. Approximately 43.4 miles of cement mortar-lined and coated steel, and asbestos cement pipes were tested in the first four phases of the program. The team has just completed phase five with 10.7 miles of 6-in. to 10-in. diameter asbestos cement distribution mains within residential neighborhoods.

"We were looking for hard evidence on our pipe condition in four key areas so that we could integrate the condition assessment data into our existing asset management program to increase confidence of the decision-making matrix. We also wanted to have a baseline for all other mains to better plan for maintenance and ensure we maximize the life of our assets," said Joseph Macias, Water Distribution Supervisor for the City of Fountain Valley.

Using the ePulse condition assessment technology, Echologics field technicians tested 123 pipe segments during phase five to determine the average remaining structural wall thickness. The technology uses acoustic wave propagation to identify sections of pipelines with reduced structural stiffness and estimate the average remaining structural strength or wall thickness of a pipeline. Non-invasive and non-intrusive, this technology enables rapid inspection of large areas of a water distribution network without removing the pipelines from service, avoiding service interruptions, pipeline dewatering/cleaning, or costly excavations.

By inducing low-frequency acoustic pressure waves inside pipelines, the ePulse technology measures the pressure waves using sophisticated acoustic sensors connected externally to the pipe or appurtenances, then analyzing the acoustic data to determine pipe condition. The pressure waves cause the pipe wall to "flex" at a microscopic level, affecting the speed of the pressure wave detected by the acoustic sensors.

The technology combines acoustic data with pipe material information to calculate its current hoop thickness. In the testing of asbestos cement mains, the mean remaining structural (effective) hoop thickness is the final deliverable. The pipe's material, internal diameter, and modulus of elasticity are all critical variables in this calculation. The percentage of hoop thickness loss is calculated by comparing the measured thickness to the design thickness.

Table 1 below summarizes the condition assessment results and the remaining life service of the 123 pipe segments that were tested.

In the 6 percent of the segments in good condition, there was less than a 10 percent loss in original average wall thickness. Most pipes were in moderate condition, with a 10 percent to 30 percent loss in original average wall thickness. Unfortunately, 24 percent were in poor condition with over 30 percent loss in original average wall thickness. There were also two segments that did not yield any results due to acoustic wave propagation challenges, which can be caused by PVC repairs, worn or loose fittings, leaks, severely degraded pipe and

General Information	*Segment Count*	*123*
	Length Tested (ft)	*56,399 ft (10.7 miles)*
Condition Qualitative Category	*Good Segments*	*7 (6%)*
	Moderate Segments	*84 (68%)*
	Poor Segments	*30 (24%)*
	No Result Segments	*2 (2%)*
Condition Remaining Service Life (RSL)	*RSL Exceeded*	*28*
	RSL Less than 10 yrs.	*14*
	RSL Between 10-50 yrs.	*54*
	RSL Over 50 yrs.	*25*

Table 1: Summary of ePulse® Pipe Condition Assessment Results

large air pockets.

"We imagined most of the segments tested would fall under the moderate condition category and were pleased to find that to be true. With approximately 75 percent of our mains tested having 10 years or more service life, we know we have adequate time to plan for replacement," said Macias.

Once the remaining pipe wall thickness is known, another Echologics technology, EchoLife, is used to determine the remaining life of service. These calculations consider water pressure and external loading conditions. To account for water pressure, field technicians record operating pressure within the system using fire hydrants at ePulse test sites. The measured pressure plus a surge pressure of 50 PSI with a safety factor of 2 are used for the EchoLife calculations. The external load is calculated using the Marston equation plus H-20 traffic load with a safety factor of 2.5. These assumptions were confirmed with Fountain Valley to ensure it meets their operational parameters. A detailed table of assumptions can be found below in Table 2.

Turning Data into Action

The utilization of evidence-based condition assessment data is a proactive approach to asset management. It can extend the lives of water mains by distinguishing those that are merely old from those that are truly impaired and allow asset managers to prioritize limited renewal budgets to the assets that require it the most. The City may also consider pipe rehabilitation as an option to reduce costs associated with water main replacement.

For pipes that are in good condition, the common industry practice is to perform follow-up condition assessment testing in approximately 10 years depending on the consequence of failure to allow measurement of the rate of change of condition with time.

Pipes that are in moderate condition, should be monitored according to the criticality of the main. The utility may also consider some of the following options:

- For mains without an internal lining, cleaning and lining can often extend the life of moderate condition mains as well as adding cathodic protection.
- Regularly scheduled, traditional leak detection surveys. This is a relatively inexpensive option capable of finding many leaks within a system. However, this method can be labor intensive and may not prevent catastrophic failures on high consequence pipelines.
- A permanent leak monitoring system, like the EchoShore-DX can find most leaks on a pipeline including small leaks that are not easily picked up with traditional listening devices. The system can check for leaks nightly to detect and notify the City of small leaks before they turn into catastrophic failures.
- A follow-up condition assessment survey to measure the rate of decay in five years depending on the consequence of failure. A desktop analysis, such as PipeRank may be utilized to prioritize which pipes have the highest likelihood of failure to determine the best candidates for future condition assessment surveys.

For pipes that are in poor condition, depending on the loading condition, these pipes are at higher risk of experiencing leaks and catastrophic failures and should be addressed as soon as possible. In most cases, pipe segments that fall within this category have reached or are close to the end of their useful life. Actions such as structural lining, slip-lining, and/or full replacement should be investigated as a likely immediate requirement. Continuous leak monitoring, cathodic protection and/or cleaning and lining will most likely not offer tremendous value or extend the life of the water main in a cost-effective manner.

It is important to note that structural pipe condition is one of many factors in evaluating a pipe's suitability for service but should not be the only consideration used in replacement and deferral decisions. Other important factors that should be considered may include pipe-loading conditions, hydraulic capacity of the pipe, road repair/renewal schedules, the consequence of pipe failure, customer complaints, rate of decay, etc.

"My team and I collectively decided it is in our best interest to move forward with at least two more phases of the assessment. The additional phases, if approved by Council, will give us a complete snapshot of our system health, and help identify areas in need of future improvement. The City is currently replacing transmission mains identified in earlier phases to be in poor condition or with limited remaining service life" concluded Macias.

Ken Malone is a regional manager for Mueller in water management solutions and has been in the water industry for more than 25 years.

Table 2: EchoLife® AC Assumptions

Pipe Information	Estimate or Assumption	Source
Soil Density	120 lbs/ft^3 (conservative)	Construction Guide for Soils & Foundations. Ricard G. Ahlvin, Vernon Allen Smoots. Page 76, Section 12.3: Dry Density
Bedding Type	Class C: Granular - lightly compacted bedding (conservative). Load Factor - 1.5	Annual Book of ASTM Standards 2003. Section 4: Construction. Author: American Society for Testing & Materials. Page 8
Pipe Depth	2-6 ft	Measured on site by Echologics
Surge Pressure	50 psi	Assumed based on phase 1-4 projects
Safety Factor on Pressure	2	Pumping Station Design: Revised 3rd Edition. Garr M. Jones, Robert L. Banks. Section 4-6, Asbestos Cement Pipes; Available Sizes & Thicknesses. Page 4.24
Safety Factor on External load	2.5	Buried Pipe Design Third Edition. A.P. Moser & Steven Folkman. Table 5.3, Page 252
Rupture modulus of AC	5000-6000 psi. 5000 psi is most conservatuve and has been used	Buried Pipe Design Third Edition. A.P. Moser & Steven Folkman. Table 5.1, Page 248
Tensile strength of AC	3000-4000 psi. 3000 psi is most conservative and has been used	Buried Pipe Design Third Edition. A.P. Moser & Steven Folkman. Table 5.1, Page 248

Attachment 1-6: Pipeline Integrity Testing to Assess the Useful Life of Pipeline Infrastructure

Pipeline Integrity Testing to **Assess the Useful Life of Pipeline Infrastructure**

Karyn Igar, Phil Lauri, Paul Shoenberger, David Spencer, Dan Ellison, and Amy Omae

Key Takeaways

Mesa Water District found that a condition-based program was a better option than age-based estimates to determine the remaining useful life of its pipelines.

Asbestos–cement pipe was the primary focus of the testing program.

Mesa Water estimates that it will avoid spending $231 million in unnecessary pipe replacement over the next 30 years.

Mesa Water District provides potable water service to approximately 110,000 people through 317 miles of water main pipelines in Orange County, Calif. While some of its active pipelines were installed as early as 1926, the vast majority of Mesa Water's pipeline infrastructure is asbestos–cement pipe (ACP) that was installed after 1950.

Mesa Water is governed by a five-member elected board of directors that has adopted a "perpetual agency" philosophy, focusing on cost-effectively sustaining long-term service levels. As the distribution system continues to age and deteriorate, investments will be made to maintain desired levels of service. To better understand the cost implications, Mesa Water developed an age-based renewal estimate in 2013. Using local unit cost and industry average-age-based useful-life assumptions grouped by pipeline material, Mesa Water estimated that it would need $300 million of renewal work over the next 30 years. Historically, Mesa Water pipelines have performed well, with a break rate of 4.5 breaks per 100 miles per year (approximately three times better than the AWWA recommended service level). Therefore, it was believed that substantial portions of the system still had significant remaining useful life (RUL). Implementing an age-based renewal program was neither affordable nor a prudent alternative. So, in 2014, Mesa Water adopted a policy to develop a pipeline testing program to maximize the useful life of its existing pipeline infrastructure. This program seeks to

- estimate the RUL of Mesa Water's pipelines on the basis of measured pipeline properties rather than an age-based estimate,
- identify specific pipes that require replacement, and
- continuously refine the testing program to maximize value to ratepayers.

After several years of investigation and testing, the initial goals of this program were accomplished. Because 74% of the system was ACP, it was the initial focus of the Pipeline Integrity Program and is the focus of this article. The Pipeline Integrity Program included extensive system analysis, nondestructive and destructive testing, and data analysis to better understand the system's pipe deterioration rates and mechanisms. This information would help Mesa Water estimate RUL, make near-term renewal decisions, and develop more prudent long-term infrastructure investment budgets.

Through this program it was found that, on average, Mesa Water ACP will last approximately 140 years, which is twice as long as industry average useful-life tables indicate. (According to AWWA's Buried No Longer report, average useful life for ACP is 65–105 years.) By evolving from an age-based approach to a condition-based program that allows older pipe in good condition to continue to operate, it is estimated that $231 million of unnecessary pipe replacement will be avoided over the next 30 years. This will allow Mesa Water to cost-effectively sustain long-term service levels and avoid unneeded rate increases.

Through this program it was found that, on average, Mesa Water ACP will last approximately 140 years, which is twice as long as industry average useful-life tables indicate.

Path to Achieving Goals of the Pipeline Integrity Study

Before it developed the Pipeline Integrity Program, Mesa Water had pilot-tested the Echologics e-Pulse method for pipeline condition assessment and found it was a good screening tool for ACP. As shown in Figure 1, the acoustic velocity method uses a sound wave traveling through a known material for a known distance to measure the structural thickness of the material. The original and existing wall thicknesses are used to estimate the percent of the original wall thickness remaining and the RUL.

Pipes were prioritized for testing on the basis of break history and age. Ninety pipe segments were tested. More than one-third of the pipes tested had an RUL of 10 years or less. This did not align well with institutional knowledge and the performance of ACP at Mesa Water. There are known limitations to applying this technology when a repair has been performed or the original wall thickness is not known. Therefore, Mesa Water committed to a destructive testing program to verify the condition of the ACP compared with the acoustic test results.

Between 2013 and 2017, Mesa Water used its pipe integrity data to identify and test 29 destructive samples on 23 pipelines. To perform the destructive testing, ACP samples of pipe, approximately 8 ft long, were collected as part of a planned shutdown. Locations for destructive testing were identified and prioritized on the basis of acoustic test results and potential impact on the community.

Mesa Water was surprised by the crush test and hydrostatic test results. Even though the acoustic test results showed significant wall loss and limited useful life, crush testing showed that all of the segments tested would meet new pipe criteria for crush strength. The hydrostatic

failure test showed that for 14 of the 17 samples tested, the segments were capable of withstanding greater than 450 psi, or three times the design pressure for Pressure Class 150 water pipe.

To better understand these results, Mesa Water collaborated with the research team that had recently published Water Research Foundation (WRF) Project 4480, *Development of an Effective Management Strategy for Asbestos Cement Pipe,* because the team had encountered similar findings. Mesa Water found that crush tests and hydrostatic tests don't necessarily measure the most common failure trigger in ACP (bending due to ground movement). For this failure mechanism, the effective structural remaining wall thickness is the key measurement. To accurately measure this, it's important to understand how ACP corrodes.

Corrosion of Asbestos–Cement Pipe

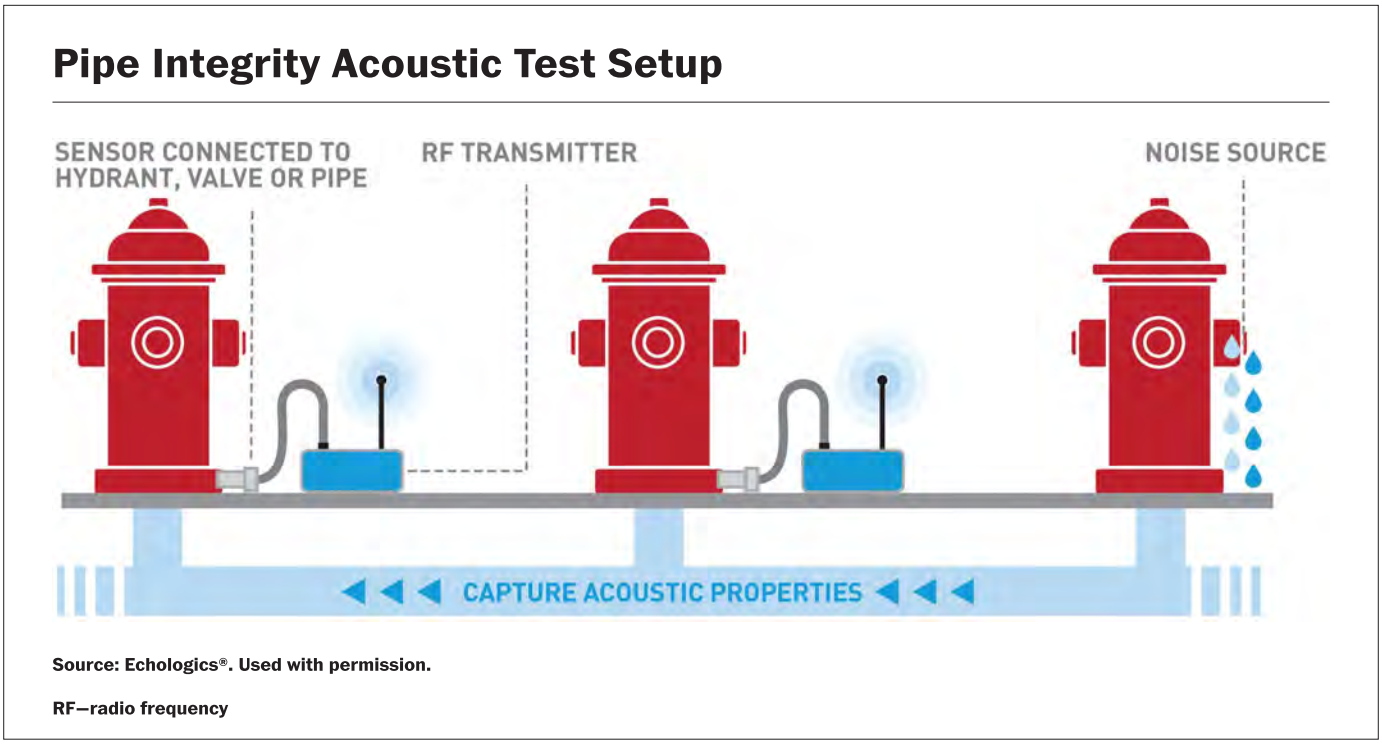
The corrosion of ACP follows a two-step process, documented in WRF Project 4480:

- Step 1—conversion of free lime ($Ca(OH)_2$) to calcium carbonate ($CaCO_3$)
- Step 2—calcium dissolution and transport

The first step involves the conversion of free lime to calcium carbonate. This step can be measured by spraying phenolphthalein stain (i.e., conducting a stain test) on a freshly exposed cross section of the pipe wall. The portion of the pipe wall that turns purple is uncarbonated, while the portion that is unstained is carbonated. The image (top) in Figure 2 shows a pipe that has been recently tested, where the left side is the inner portion of the pipe wall and the right side is the outer portion of the pipe wall.

Carbonation starts at the inner and outer wall surfaces. Over time it progresses toward the center of the pipe wall, which is typically uncarbonated. In ACP and other nonreinforced concrete applications, carbonation itself does not weaken the pipe. In fact, studies (such as *Study on Effect of Carbonation on the Properties of Concrete* by Bhunia et al. 2013) in nonreinforced concrete actually show a minor strengthening effect after carbonation. However, carbonation in ACP is a precursor to corrosion.

In step two of the ACP corrosion process, if the environment allows for calcium carbonate to be dissolved and carried away; calcium then leaches from the calcium–silicate–hydrate and other cement products in the concrete

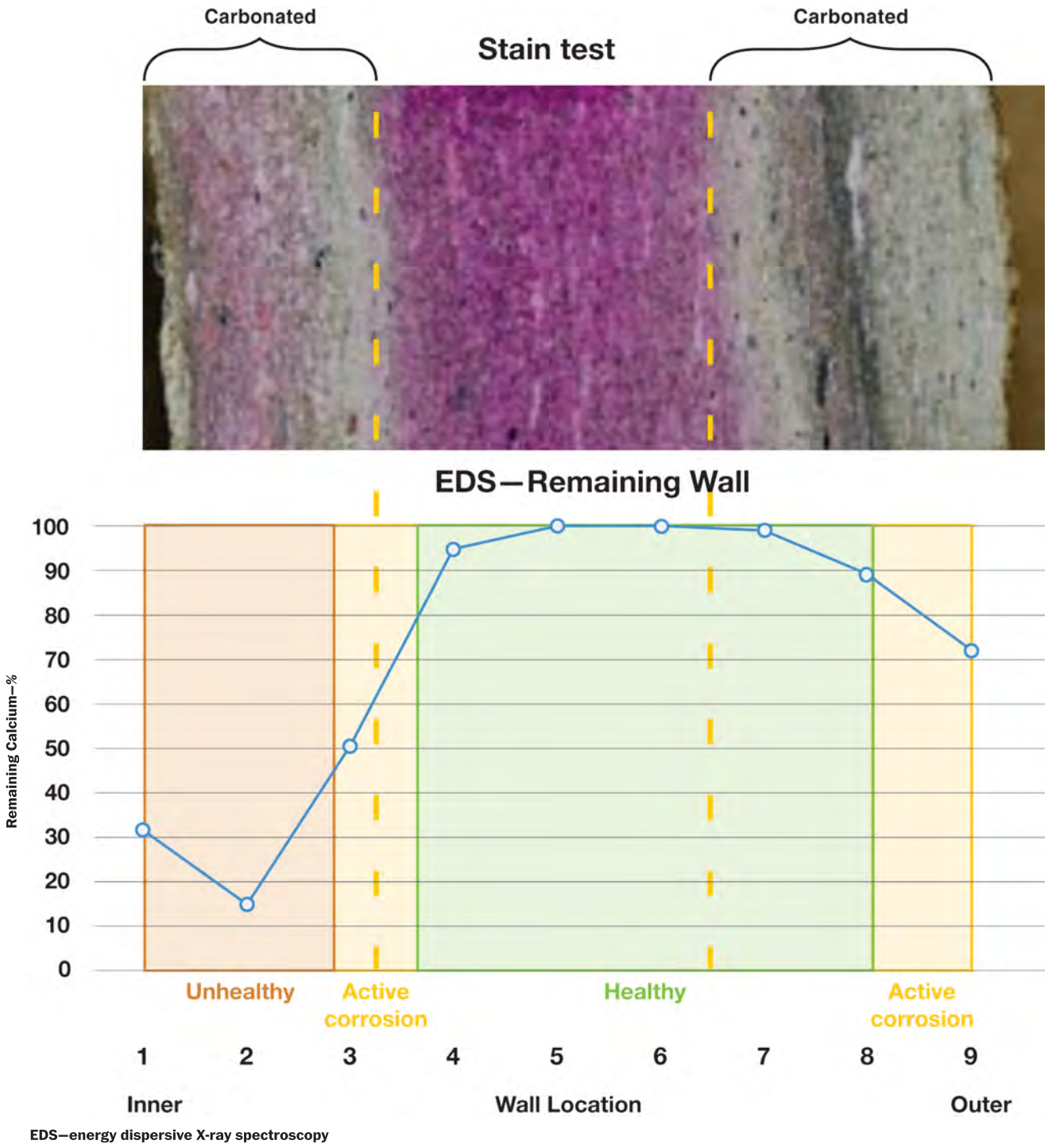


Source: Echologics®. Used with permission.

RF—radio frequency

Figure 1

Side-by-Side Stain Test and EDS Results



EDS—energy dispersive X-ray spectroscopy

Figure 2

matrix, strength is lost, and the pipe becomes more susceptible to failure.

The extent of this degradation process can be measured by assessing the remaining calcium (Ca) content using an energy dispersive X-ray spectroscopy (EDS) test. The graph (bottom) in Figure 2 shows the EDS test results for the same sample shown in the image. In this test, calcium content is measured at multiple points (i.e., wall locations) along the thickness of the pipe. At installation, calcium content was relatively uniform across the pipe wall thickness. As the ACP wall corrodes from the inner and outer wall surfaces toward the center of the wall, the calcium content will be significantly lower than the calcium content at the center of the pipe wall.

The remaining calcium content at each wall location is reported as a percentage and calculated as the calcium content at that location divided by the maximum calcium content measured at all locations along the wall. Where the remaining calcium content is high, the pipe should be stronger and less likely to break. Where the remaining calcium content is relatively low, the pipe is weaker and more likely to break. Typically, active corrosion is occurring over a relatively narrow portion of the pipe wall.

Figure 2 orients both tests for a single sample to each other to correlate the results. On the inner portion of the pipe wall, the freshwater conveyed by the pipe is an ideal medium to dissolve and carry away calcium carbonate (step 2 of the corrosion process). As a result, shortly after each layer carbonates (step 1), the pipe corrodes (step 2). This means that stain and EDS tests typically correlate very well to each other on the inner pipe wall. However, on the outer pipe wall, there is not a consistent medium to dissolve and carry away the calcium carbonate. Therefore, carbonation can often penetrate deep into the pipe, but the pipe may not corrode nor lose strength. External carbonation occurs merely from exposure to atmospheric carbon dioxide.

Correlating Acoustic and EDS Test Results

Both the acoustic velocity and EDS test results provide measures of remaining structural wall thickness. Showing test results on 18 different pipes in Mesa Water's system, Figure 3 summarizes the test results and shows reasonable correlation (R^2) for all samples (6–12 inches). However, when three 12-inch samples are excluded in Figure 3, part A, versus part B, the correlation drops significantly.

Research has shown that the condition of ACP varies around the circumference and length of a pipe. Therefore, a perfect correlation should not be expected because EDS measures the condition of a pipe at one location and acoustic tests measure the average condition over the entire segment inspected (typically 300–600 feet). Therefore, EDS testing should be used to estimate useful life and more precisely to measure structural wall thickness at a particular location, while acoustic tests should be used to identify macro-level changes in the relative condition of the pipe over several hundred feet.

The first goal of the Pipeline Integrity Testing Program was to estimate the remaining useful life of Mesa Water's pipelines on the basis of measured pipeline properties rather than an age-based approach.

Pipeline Integrity Study Goals

Goal 1: Estimate Remaining Useful Life

The first goal of the Pipeline Integrity Testing Program was to estimate the RUL of Mesa Water's pipelines on the basis of measured pipeline properties rather than an age-based approach. The destructive testing program for ACP (see the sidebar on page 19) was developed to solve the Schlick failure criterion for critical wall thickness. The critical thickness is the minimum wall thickness required to support the internal and external loads on the ACP. The Schlick failure criterion for ACP is as follows:

$$\frac{F_{SL} * w}{\pi \sigma_r t_{ud}^2 / 3(d+t)^2} + \frac{F_{SP} P}{2\sigma_t t_{ud}/d} = 1$$

where F_{SL} = factor of safety for external loading; w = total exterior loading; σ_r = residual rupture modulus; t_{ud} = undegraded portion of pipe wall thickness (critical thickness); d = inside diameter; t = total pipe wall thickness; F_{SP} = factor of safety for internal pressure; P = internal pressure, in pounds per square inch (kilopascals), that the pipe will withstand when no external load exists; and σ_t = residual tensile strength.

The left side of the equation represents the external loading from traffic and soil loads. The right side of the equation represents the internal forces from static and surge pressures. The residual rupture modulus σ_r is measured from crush tests performed on each sample. The residual tensile strength σ_t is measured from burst tests performed on each sample. The diameter and thickness of each sample were also measured. A safety factor of 1.3 was applied. On the basis of this information, the critical thickness for each sample was calculated by solving the

Schlick failure criterion for t_{ud}, which is the undegraded thickness of the pipe wall necessary to support the internal and external loads. The RUL for each sample was estimated on the basis of the following:

- The original remaining wall thickness at installation, assumed to be the measured wall thickness from each sample
- The measured remaining wall thickness and age at the time of the sample based on EDS testing
- The critical remaining wall thickness (t_{ud}) at failure as calculated using the Schlick failure criterion

For each sample, these three inputs were plotted on a graph of age versus remaining wall thickness. A conservative linear deterioration trend was fit between the original wall

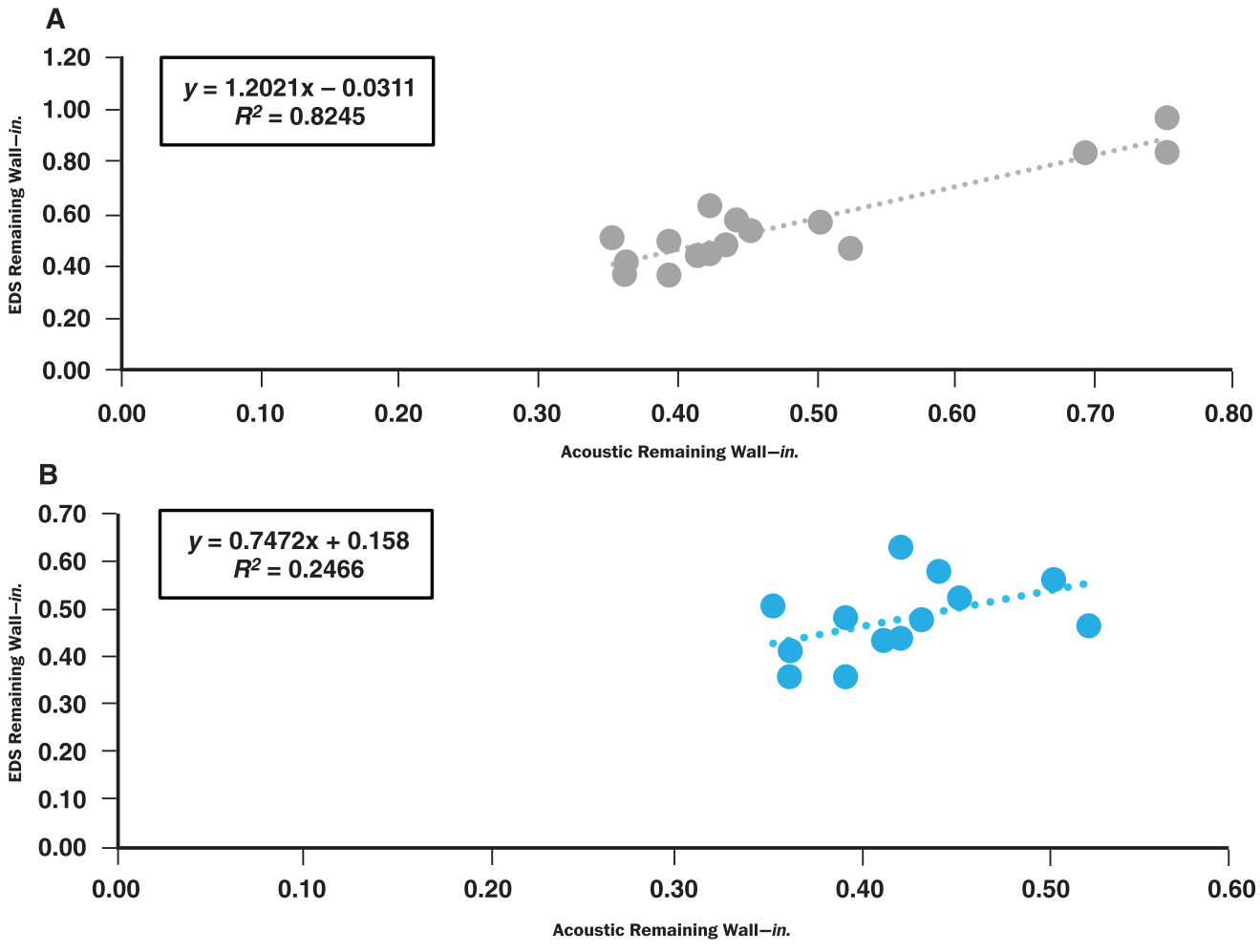


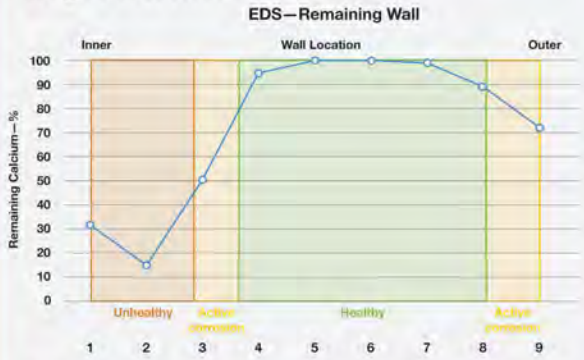
Figure 3

and the measured remaining wall thickness at the time of the sample. The deterioration trend was then extrapolated to the critical wall thickness, as shown in Figure 4. The RUL was estimated as the number of years it would take the deterioration trend to cross the critical wall thickness, shown as the dashed line in Figure 4.

Destructive Tests Initially Performed

Phenolphthalein stain test. This test applies a phenolphthalein solution to a polished asbestos–cement pipe (ACP) wall cross section. The pipe wall that has remaining calcium hydroxide (lime) will turn bright pink, while the degraded wall without calcium hydroxide will not change color.

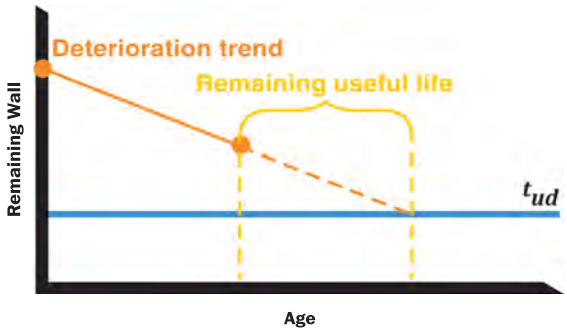
Scanning electron microscopy/energy dispersive X-ray spectroscopy (EDS). EDS uses a focused beam of electrons on a polished pipe wall cross-section sample to assess the chemical composition at several points along the cross section.



Hydrostatic failure test. The hydrostatic failure test is used to assess the pipe's ability to withstand increasing levels of internal pressure until failure occurs.

Crush test. The crush test is used to assess the pipe's ability to withstand increasing levels of external stress (e.g., soil and traffic loading) until failure occurs.

Use of EDS to Estimate Deterioration Trend and Remaining Useful Life



EDS—energy dispersive X-ray spectroscopy

Figure 4

Table 1 summarizes Mesa Water's estimated RUL for its survey. On the basis of the methodology described in the previous section, the average age of the pipes sampled was 57 years. The average estimated RUL was 85 years. Therefore, the average condition-based useful life of the pipes tested at this time was 142 years. This is almost twice as long as the age-based useful life originally estimated in 2013, which estimated that $300 million of pipeline replacement would be needed over the next 30 years. This study helps explain why Mesa Water pipes are still performing relatively well compared with industry average break rates.

While a rapid ramp-up of replacement is not needed in the near future, particular pipes may last significantly shorter or longer than their estimated average useful life. This finding, supported by industry experience, may be due to a variety of factors, including manufacturing quality, installation practices, the aggressiveness of the water conveyed, and variations in loading and stresses.

There are several important limitations to note of the Schlick failure criterion as it's applied to ACP. First, when the pipe is in operation, the internal and external pipe forces counter each other, with the water pressure in the pipe supporting some of the external loads and the compacted soils around the pipe helping the pipe wall hold the internal pressure. Second, neither hydrostatic failure nor external crushing is a typical failure mode for ACP under normal operating conditions. Analysis performed at East Bay Municipal Water District and documented in WRF

Estimated Remaining Useful Life for Survey

Sample Number	Age When Sampled *Years*	Estimated Remaining Useful Life *Years*
1	36	64
2	36	52
3	39	52
4	39	148
7	68	71
8	68	79
9	65	68
10	63	77
11	63	90
13	65	–12
14	42	58
15	60	45
183	64	139
184	64	101
185	64	65
186	64	99
187	66	194
188	62	143
Average	**57**	**85**

Table 1

Project 4480 shows that ACP failures are most likely in areas where the ACP, a brittle material, is forced to flex with soil movement. Finally, in theory, ACP corrosion is believed to slow over time, rather than degrade at a constant rate as it ages. Over the next several years, Mesa Water will address these limitations as it refines its approach for estimating useful life.

Goal 2: Condition-Based ACP Renewal Decisions

Utilities commonly use run-to-failure models that leverage historic break data and other risk factors to make pipe-specific renewal decisions. However, since breaks in its system are rare, Mesa Water sought to develop condition-based renewal decision-making criteria to drive its investment decisions. Of the 18 samples, 17 tested as having significant RUL. However, one sample (sample 13) was tested as being beyond its RUL. The Schlick failure criterion is useful for planning-level RUL estimates, but because of its limitations described in the previous section, the estimated RUL was used as one input in a more holistic decision-making strategy, albeit one with significant weight. Additional data that were considered included break history, external factors, and acoustic test data. Figure 5 illustrates Mesa Water's current renewal decision-making process.

For pipes with significant external factors (e.g., high consequence of failure or an opportunity construction project exists in the area), pipe replacement is typically recommended if the pipe has a break rate higher than 10 per 100 miles per year or no RUL. For pipes without significant external factors, replacement is only recommended if the pipe has both a break rate higher than 10 and no RUL.

If a pipe does not meet these criteria, Mesa Water will continue to operate the pipe and collect EDS data to validate the condition of the pipe whenever it is exposed (e.g., pipe tap, break response, valve replacement); this process is called an opportunity assessment. As it is obtained, new data help determine whether the pipe is still in good condition.

If pipe replacement is recommended, the next step is to determine the boundaries of the replacement project. Delineation of replacement project boundaries incorporate a number of factors:

- Surface features
- Isolation valve locations
- Traffic control
- Appropriate project size to obtain a reasonable unit price
- Customer impacts
- Street-pavement moratoriums
- Pipe condition

Determining the pipe condition along potential replacement project extents can be difficult because EDS testing measures corrosion at a specific point and does not specify how that condition varies along the pipeline. Therefore, Mesa Water is using the acoustic velocity method to estimate the average remaining wall thickness over pipe lengths ranging from 200 to 600 feet in length to support identification of the appropriate replacement project extents.

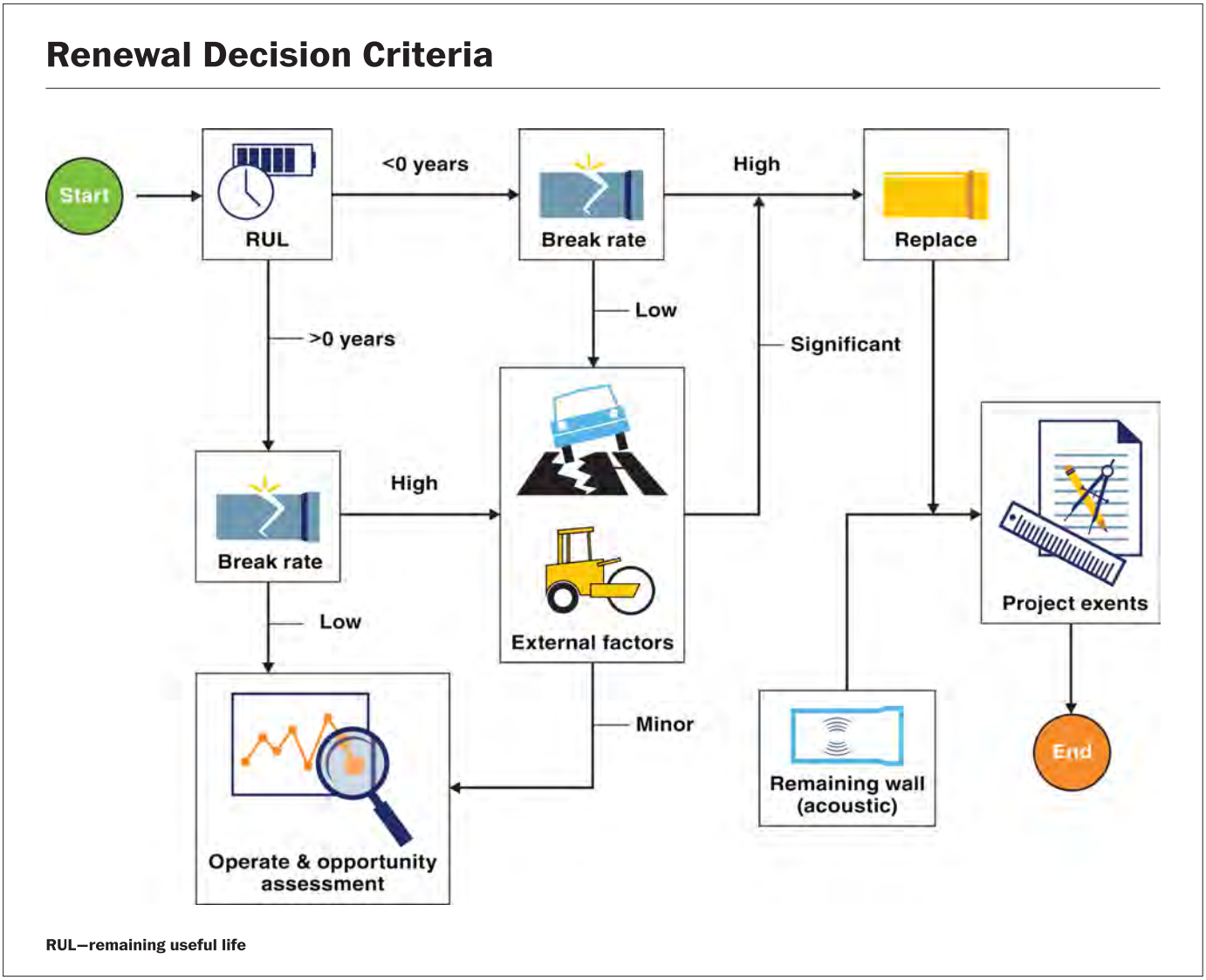
Goal 3: Program Optimization

The third goal of this study was to continuously refine the testing program to maximize value to ratepayers. The acoustic technology is noninvasive, relatively inexpensive, and not disruptive to customers. Mesa Water tested 3 miles of pipe within a work week, at a cost of $90,000, which includes consultants and Mesa Water staff time.

Direct condition assessment of ACP can disrupt customers and is more expensive because the pipe must be isolated and exposed. However, when a pipe is exposed for another reason (e.g., service tap, break, valve replacement, pipe replacement), it provides an opportunity to cost-effectively gather EDS data, since roughly 90% of the cost of testing is in accessing the pipe. When incorporated as part of an opportunity condition assessment program, EDS testing is not disruptive and becomes much less expensive (approximately $500–$1,500 per sample).

EDS and acoustic tests are mutually beneficial. The physical wall thickness (measured during EDS testing) can be used to calibrate acoustic test results and more accurately estimate wall loss.

Conversely, isolated opportunity EDS tests are difficult to extrapolate to surrounding pipes to identify the extents of a project. Therefore, Mesa Water will continue to collect and evaluate acoustic testing and EDS test data to support prudent ACP decision-making. By moving away from proactive crush and hydrostatic burst testing and toward noninvasive and cost-effective EDS and acoustic



RUL—remaining useful life

Figure 5

testing, Mesa Water estimates it will save approximately $100,000 per year.

Mesa Water is also supporting neighboring water agencies by sharing data and lessons learned. It is envisioned that this may result in the development of a multiagency database of testing results that will accelerate continuous improvement of the data collection and interpretation process. Additional risk factors are being evaluated. Following the findings of WRF Project 4480, Mesa Water is evaluating the effect of ground movement resulting from small earthquakes and soil shrink–swell potential.

While the initial focus of the Pipeline Integrity Program has been on ACP, the 44 miles of ferrous material pipe in Mesa Water transmission and distribution system cannot be ignored. While a much smaller fraction by length of the pipeline system, the ferrous material pipelines are the large-diameter transmission backbone of the pipeline system. Nondestructive testing methods for these pipes are being evaluated.

About the Authors

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https://doi.org/10.1002/awwa.1358

Attachment 2-1: Application 23-01-001, Rebuttal Testimony of Jorge Lopez, P.E. Excerpt

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application of Suburban Water Systems (U339W) for Authority to Increase Rates Charged for Water Service by $19,763,961 or 19.79% in 2024, by $6,392,906 or 5.49% in 2025, and by $6,387,993 or 5.20% in 2026.	Application 23-01-001

REBUTTAL TESTIMONY OF JORGE LOPEZ, P.E.

PUBLIC

September 5, 2023

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Advocates fails to acknowledge favorable outcomes of the cost-benefit analysis performed by Suburban.

Cal Advocates also fails to mention this project's ESJ benefits shown in my testimony. The project reduces the carbon footprint of imported water that requires significantly more energy to transport from Northern California or Colorado. This project will also improve reliability in the service area. The most reliable way to protect customers from drought conditions that affect water from the Colorado River and the State project is by producing water locally.

If this project is denied, the expense savings shown in the RO model will need to be removed.

For the reasons above in this rebuttal, Cal Advocates' recommendation to deny this project should be rejected and approval should be given to Suburban to build the Plant 216 Well projects in this rate case to benefit customer financially and ensures they have a safe and reliable source of water supply.

5. P-16: Plant 201 Treatment (2025)

Q17. Do you agree with Cal Advocates recommendation to deny Suburban's request for $21,171,852 in 2025 to start constructing the Plant 201 PFAS Treatment Plant.

A17. No, Suburban does not agree with Cal Advocates' recommendation. The following sections demonstrates that Cal Advocates recommendation fails to address the pending changes to federal United States Environmental Protection Agency's (USEPA)

water quality regulations and their unsafe impact on customers. Cal Advocates recommendation fails to consider urgency to construct a treatment system and avoid degradation of reliability for customers' water supply. Cal Advocates ignored the detailed cost estimate and uses a flawed chart to determine capital costs. Suburban's was diligent in siting the treatment plant and seeking alternative PFAS cost recovery opportunities.

Suburban Compliance with Water Quality Regulations

Starting on Testimony Book 5, page 2-12, line 7 Cal Advocates discusses the USEPA's promulgation of a national perfluoroalkyl and polyfluoroalkyl substances (PFAS) Maximum Contaminant Level (MCL). Cal Advocates' is correct to note that effective date of the USEPA PFAS MCL date is currently projected to be December 2026, three years after the anticipated NPDWR promulgation date of December 2023.

On page 2-12, line 14 Cal Advocates states, "EPA used the word 'anticipated' leaving a chance that if the promulgation of NPDWR does not occur in December 2023, the effective date will be deferred beyond December 2026" and that, "EPA clearly states no actions are required at this time." Cal Advocates interpretation of USEPA's statement that "no actions are required at this time" is dangerously misleading. Suburban must act now in this General Rate Case (GRC) to install treatment equipment, a multi-year construction and commissioning project, to ensure that it can meet the MCL by the end of 2026.

This project is urgently needed to install treatment as soon as possible to provide a safe and reliable supply for Suburban's Whittier / La Mirada customers. The Cal Advocates report does not address the reliability risks that Suburban's customers are currently exposed to that will be remedied when the Plant 201 treatment plant is online.

Water from Suburban's Plant 201 well field is currently blended with Cal Domestic (CD). This has led Suburban to operate in an inefficient manner to reduce PFAS levels and makes us reliant on access to CD water. If CD becomes unavailable, then we cannot use water from Plant 201. Additionally, remaining sources such as the City of Whittier are not sufficient to supply the system's normal operating and emergency needs.

Suburban has worked with a qualified engineering consultant to complete prudent pilot testing and site analysis to select the most cost-effective treatment technology, prepare construction plans and technical specifications for the treatment plant, and is ready to send the project bid for construction. The project is anticipated to take two years to construct and requires the procurement of sophisticated treatment equipment that has long lead times. These lead times are exacerbated now that the USEPA MCL is pending and water purveyors across the country are scrambling to procure this same treatment equipment.

On pages 2-13, line 5 Cal Advocates states, "it is unreasonable for the Commission to consider funding for a project that will

not be required during this GRC cycle". Cal Advocates is demonstrating a shortsighted perspective on what it takes to build multiyear projects in one rate case and deferring this project to the next rate case is detrimental to customers. If Suburban was to defer the construction of the project by waiting for approval in the 2026-2028 GRC period the treatment plant construction would not be completed and operational until the end of 2028, requiring Suburban to cease operation of Plant 201 well field due to exceeding the PFAS MCL for at least three years. Suburban's proposed construction schedule aligns with the published USEPA forecasted effective MCL date. Delaying this project beyond Suburban's proposed construction schedule exposes Suburban to regulatory compliance deficiencies and exposes approximately 120,000 of Suburban's customers in Whittier / La Mirada service area to unnecessary supply availability risk.

Cal Advocates disregard for the urgency to address pending MCL and outlined health risks provided by various agencies is concerning. Cal Advocates is prioritizing deferring costs over the health of Suburban's customers. Cal Advocates does not mention USEPA's drastic Lifetime Health Advisory (LHA) reduction in June 2022 down to 0.02 ppt for PFOS and 0.004 ppt for PFOA as shown in Jorge Lopez's direct testimony, page 402, Line 17, foreshadowing the eventual reduction of the MCL well below the current Response Level. EPA's LHA levels identify levels to protect all people, including sensitive populations and life stages from adverse health effects resulting from exposure throughout their lives in drinking water.

While Suburban has managed to temporarily adjust its operations to avoid violating regulations, it is currently operating above USEPA's revised LHA. Suburban should not wait until the USEPA's MCL is effective before commencing construction of the Plant 201 treatment facility. To ensure that Suburban has the required treatment equipment in place to provide safe water to customers the Commission should disregard Cal Advocates assertion that action is not required at this time, deny Cal Advocates recommendation for Suburban to seek funding in the next GRC, and should instead approve Suburban's request.

Suburban's Proposed Budget is Reasonable

Starting on page 2-13, line 8, Cal Advocates asserts that Suburban's project cost estimate is unreasonable because USEPA's cost model shows significantly lower costs for a treatment system of our size, Suburban's reservoir capacity limits production capacity of Suburban's designed treatment plant, and Yorba Linda Water District constructed a similar treatment plant for cheaper.

Suburban has performed its due diligence siting the treatment plant and choosing the least costly options. Cal Advocates siting recommendation is much more costly. Suburban's site-specific detailed cost estimate provided by a reputable Engineering consultant should not be ignored. Cal Advocates included Figure 2-2 is USEPA's Capital Cost Estimate for PFAS Treatment as a reference to show Suburban's cost estimate is too high. This chart fails to consider Suburban's Plant 201 site-

years ago. This further demonstrates that Cal Advocates use of the USEPA cost curve is invalid.

Delaying the Project

Cal Advocates' recommendation to defer the project is detrimental to customers. Suburban proposed this project in the last GRC with an estimate of $19,670,881. Cal Advocates position in the last GRC was it wasn't needed, and now construction cost inflation has dramatically increased the cost estimate for this project to $42 million. Delaying this project that is required to comply with impending USEPA requirements will further increase the project cost and negatively impact Suburban's customers. As the advocate for Suburban's customers, it is baffling why Cal Advocates wouldn't support the immediate commencement of this project to minimize further cost increases.

The $3 Million Pipe Is Required at Plant 201 Because Plant 216 Is Not A Feasible Treatment Site

Starting on Testimony Book 5, page 2-15, line 15, Cal Advocates incorrectly asserts that the construction of the $3 million pipe can be avoided if the treatment equipment is constructed at Plant 216 instead of Plant 201.

In my direct testimony, starting on page 424, the operation of the Bartolo Transmission Main (BTM) is described from Plant 201 to Plant 224. This Testimony describes several booster pump stations (Plants 208, 207, 205, and 209) that draw water from the BTM and pump directly into the distribution system. Suburban's Whittier water system was designed, constructed, and operated this way from the earliest days of its existence. The

Attachment 2-2: Suburban's Response to Data Request AA9-001

Suburban Water Systems
1325 N. Grand Ave. Ste. 100, Covina, CA 91724-4044
Phone: 626.543.2500, Fax: 626.331.4848
SuburbanWaterSystems.com

March 20, 2026

To: Anthony Andrade
Utilities Engineer

Suliman Ibrahim
Project Coordinator

Corwin Hockema
Attorney for Public Advocates Office

Re.: Response to A.26-01-001, Public Advocates Office AA9-001 (PFAS Treatment) #4c

Dear Mr. Andrade et al.,

Attached is the information you requested in writing via email dated March 20, 2026, for Suburban's Total Company General Rate Case, updated to address Response 4.c.

Sincerely,

/s/Carmelitha Bordelon

Carmelitha Bordelon
Vice President, Regulatory Affairs & Finance

Responses to A.26-01-001, Public Advocates Office

DR AA9-001 (PFAS Treatment)

1. Suburban provides the capital expenditure recorded data and estimates for its proposed PFAS Treatment System project at Plant 201 in its Whittier / La Mirada service area in its Results of Operations (RO) model file "A.26-01-___.xlsx," row 3801. The sum of expenditures in recorded years 2020 to 2024 and estimated year 2025 is $2,233,813. Suburban's cost estimate for estimated year 2026 is $10,210,053 and for Test Year 2027 is $24,428,881. The total for the project is $36,871,747 over all years as shown by Suburban's RO model.

   During Cal Advocates' visit to Suburban's utility plant sites on February 24, 2026, Cal Advocates heard the full project could cost as much as $50 million.

   a. Does Suburban's cost estimate of $36,871,747 account for all capital expenditures necessary to begin PFAS treatment at Plant 201?
   Response:
   All known costs up to December 2025 are included in this filing. The proposed application filed in November 2025 initially included $50 million in costs, which were reduced in the final application based on vendors' actual project bids. Suburban reduced the amount of the request accordingly in the final application submittal in January 2026.

   It is unreasonable to expect that there will be no unexpected additional costs on a project of this complexity and magnitude. It is common engineering practice to include a contingency estimate for expected but unknown costs. However, Cal Advocates has argued, and the Commission has denied water utilities' request for contingency in recent rate cases. For this reason, we did not include a contingency estimate in the budget amount and will instead need to postpone other adopted projects to keep capital spending at adopted levels.

   As an example of unexpected additional costs, Suburban has learned after the filing that additional consultant and construction work will be required to meet SRF Environmental requirements related to the Gnatcatcher. U.S. Fish and Wildlife (USFW) indicated that an Informal Section 7 Endangered Species Act (ESA) consultation will be required to process the mitigation plan and obtain USFW concurrence. The mitigation plan will likely include restoration requirements to offset the habitat loss at a 1:1 ratio.

   b. Please confirm the total for the full cost of the PFAS treatment system at Plant 201.
   Response:
   The total cost requested in this General Rate Case filing is $36,871,747 as shown in the RO Model. The actual cost will likely be higher, see response to question 1.a.

2. Suburban discusses grant funding for its proposed PFAS Treatment System project at Plant 201 in its Direct Testimony of Jorge Lopez, pages 121-122. On page 121, lines 13-14, Suburban

states that the San Gabriel Water Quality Authority (WQA) has awarded $1.75 million in grant funding.

Does Suburban's Results of Operations (RO) model file "A.26-01-___.xlsx," account for the awarded $1.75 million grant from WQA? If yes, please explain how and in what cell the grant is recorded. If no, explain how Suburban proposes to account for this grant.
Response:
No, Suburban's RO Model does not reflect grant funding. Suburban will reduce the total project cost by the amount of the grant upon receipt of the award.

3. Suburban discusses PFAS litigation and settlements in its Direct Testimony of Jorge Lopez, pages 122-124. Suburban states that it received the first settlement payment of $1,182,028.81 on September 1, 2025 and that it expects further payments in 2025 and 2026 as well as payouts over a 10-year period on page 123, lines 7-11. Suburban further states that the settlement funds are received through the Water Contamination Litigation Memorandum Account and that settlement funds are being used to pay lawyer fees and offset project costs for PFAS projects on page 123, lines 11-14.

   a. Can Suburban use all settlement funds net of legal fees and costs that it refers to on page 123 for capital expenditures of its PFAS treatment projects?
   Response:
   Yes.

   b. Is Suburban limited to only using funds from settlements at specific sites such as Plant 201? For example, can Suburban use settlement funds for the proposed PFAS treatment at Plant 804?
   Response:
   No. Settlement proceeds are not limited to a specific location and may be applied to any known sites impacted by PFAS.

   c. Does Suburban have a complete schedule of all the settlement payouts it will receive? If yes, provide that schedule.
   Response:
   No. While Suburban can confirm the amounts received in 2025, Suburban only has estimates for future payments with no guarantee as to what the specific amounts will be or when the additional payments might be received. Below is Suburban's current estimate based on currently available information.

2025	2026	2027	2028	2029	2030	2031	2032	2033	Total
$4,536,493	$841,515	$243,342	$284,587	$255,126	$172,635	$172,635	$149,066	$137,282	$6,792,681

d. Does Suburban have a final total for the settlement payouts it will receive? If yes, provide that total. If no, provide the total of the known payouts.
Response:
See response 3.c. above.

4. In the Direct Testimony of Jorge Lopez, page 121, Suburban states that it has applied for $25 million in grant funding from the Drinking Water State Revolving Fund (DWSRF) for the Plant 201 PFAS Treatment project. On lines 17-19 of the same page, Suburban states that the "conditions of the application prevented Suburban from applying for the grant until the CPUC approved the project in Decision 24-12-030 on December 23, 2024."

   a. On what date did Suburban begin its application for DWSRF grant funding?
   Response:
   Suburban approved an Amendment with Carollo Consulting Engineers for DWSRF funding support on June 11, 2024.

   b. On what date did Suburban make its first submittal as part of its application for DWSRF grant funding?
   Response:
   An informal application submittal was made to the DWSRF program on 12/19/2024. The purpose of the informal submittal was to obtain contact information for the DWSRF Project Manager, who could assist with the application because it is not tailored for Investor-Owned Utilities and DWSRF support was required to complete it.

   The Environmental Application Package was submitted on 6/2/2025. On 12/9/2025, the DWSRF confirmed the application was considered complete and was under review.

   c. Please provide a copy of the conditions of the application for grant funding from the DWSRF that Suburban states prevented Suburban from applying for the grant until the CPUC approved the project, with the specific language of the application conditions that Suburban states prevented Suburban from applying highlighted.
   Response:
   DWSRF loans require applicants to demonstrate financial capacity to repay the loan and to secure funding for the project. Suburban could not demonstrate financial capacity to repay the loan until the commission adopted the project.

   Please refer to second paragraph on page 19 of the document titled "4c. DR AA9-001 2025-26-dwsrf-iup.pdf," which states:

> Recipients will generally be required to submit an opinion of general counsel to the satisfaction of the Office of Chief Counsel, although this requirement may be waived for certain planning or other projects. If applicable for repayable financing, an opinion of bond counsel may also be required. All opinions must be dated on or

after the date that the recipient signs the funding agreement. Templates for these opinions are available on DFA's website and in an appendix to the DWSRF Policy. All recipients of repayable financing and certain non-repayable financing recipients that are private entities will generally be required to provide a resolution authorizing the transaction at closing. CPUC-regulated entities must obtain applicable CPUC approvals as may be required for any of the transactions contemplated in the funding agreement.

d. Can Suburban apply grant funding from the DWSRF to its separate proposed PFAS treatment system at Plant 804?
Response:
No. The grant Suburban applied for is specific to Plant 201 and its customers. Suburban has not yet determined whether it is cost-effective to pursue a separate DWSRF principal forgiveness loan for Plant 804, as the final design has not been completed, and obtaining a grant may introduce additional costs. For example, funded projects must comply with federal laws and executive orders, which can increase construction expenses. Requirements such as Build America, Buy America (BABA) mandate that final products be assembled in the United States, with at least 55% of component costs sourced domestically. Additionally, construction materials, including metals, plastic, and polymer-based products (such as PVC pipe), glass, fiber-optic cable, and drywall, must be 100% manufactured in the U.S., which further raises costs. Furthermore, obtaining a grant will delay the start of construction by up to one year, based on our experience with the Plant 201 project, which will increase costs due to inflation.
The DWSRF Program may reimburse up to 50% of eligible costs for the Plant 804 Project. Based on the total project estimate of $2,924,239, the maximum potential loan amount for Plant 804 would be $1,462,120 ($2,924,239 × 50%). Additional consultants and construction costs may increase the project above $1,462,120 due to the items noted above.

5. Suburban discusses a proposed PFAS treatment system for Plant 804's Well 3 in its Sativa water system in its Direct Testimony of Jorge Lopez, pages 306-331. Suburban proposes a cost estimate of $2,924,239 for Test Year 2028 for this project.

a. Is Suburban's proposed PFAS treatment system at Plant 804 eligible for the Water Replenishment District of Southern California (WRD)'s PFAS Remediation Program? If not, please explain why not.
Response:
Suburban is eligible for WRD's PFAS Remediation Program but has opted to not pursue this potential source of funding due to a legal determination regarding the unfavorable nature of various provisions in the WRD PFAS Remediation Program Participation Agreement (WRD Agreement). In particular, under Section 8.4. of the WRD Agreement, to receive any funds from WRD under the WRD program:
    - If Suburban received any amounts from any PFAS-related litigation (such as the funds from the PFAS manufacturer settlements), Suburban would have to reimburse WRD for any funds received under the WRD Program. ("The Parties

hereby agree that any monies provided by WRD to Pumper pursuant to this Agreement shall be reimbursed (without interest) to WRD from any monetary recovery for PFAS Impacted Well(s) received by Pumper as a result of any litigation. The reimbursement shall be paid to WRD from any such recovery whether via judgment or settlement and it shall be reimbursed from Pumper's net monetary recovery from said litigation…." Section 8.4.C). Thus, this provision forces Suburban to use PFAS settlement funds to first reimburse WRD for the grant funds before being able to use the PFAS settlement funds for treatment.

- Suburban would have to release any PFAS-related claims against WRD and commit to not take any positions that could result in liability to WRD ("Pumper shall not assert claims against WRD in any litigation related to PFAS, or otherwise knowingly take positions that could result in WRD or other Pumpers incurring liability related to PFAS as a result of the position asserted by the Pumper in the Separate Litigation." Section 8.4.B). Suburban would be required to release any such claims and agree to limit the litigation positions in might take even if Suburban ends up not keeping any net amounts from this Program, e.g., if Suburban ends up reimbursing WRD under Section 8.4.C for the full amount of any WRD grant funds received.

Moreover, Section 6 of the WRD Agreement requires Suburban to maintain a minimum Annual Pumping for 20 years regardless of future system conditions, including demand, drought, or regulatory changes. This is a major long-term operational obligation with potential negative financial consequences that could increase customer costs if the 20-year requirement is not met. Enclosed is WRD's template agreement, "DR AA9-001-Q5.a-2440430_PFAS Program Agmt Template.pdf".

b. Has Suburban applied for funding from WRD for the PFAS treatment system at Plant 804? If yes, please explain the status of Suburban's application. If no, please explain why not.
Response:
See response 4.d. above.

c. Do Suburban's expenses include WRD assessments that fund WRD's PFAS Remediation program?
Response:
WRD's assessment cost does not fund WRD's PFAS Remediation Program. The PFAS Remediation program is funded by the Water Infrastructure Finance and Innovation Act (WIFIA), loans and state grants.

6. Did Suburban apply for the Emerging Contaminants in Small or Disadvantaged Communities grant program of the United States Environmental Protection Agency for the PFAS treatment systems at Plant 201 or Plant 804? If yes, please explain the status of Suburban's application. If no, please explain why not.
Response:

The Emerging Contaminants in Small or Disadvantaged Communities (EC-SC) grant targets water systems with populations under 10,000. Suburban's Whittier La Mirada System, served by Plant 201, serves a population of over 120,000. The Plant 201 project is not eligible for this grant. Suburban's scope of work was completed in late 2025 and has not yet applied for EC-SC funding. Suburban will evaluate funding options for Plant 804 prior to beginning construction of the treatment plant, but may choose not to pursue additional funding as noted in response 4.d. above.

7. Besides grant funding from the DWSRF, WQA, WRD, or the Emerging Contaminants in Small or Disadvantaged Communities grant program, has Suburban applied for or is currently planning to apply for grants from other sources for either the Plant 201 or Plant 804 PFAS treatment projects? If yes, please identify those grant programs and provide the status of those applications.

   Response:

   Suburban is not pursuing additional funding for the Plant 201 Treatment Project.

   Suburban will evaluate funding options for Plant 804 prior to constructing the treatment plant; however, it may not be cost-effective to pursue and comply with grant funding that exceeds the benefits, as noted in response 4.d. above. Further, these are competitive processes and there are no assurances that any funds will be awarded.

Attachment 2-3: Suburban's Response to DR AA9-001 Q. 4.c Attachment

CALIFORNIA
Water Boards

STATE OF CALIFORNIA

Drinking Water State Revolving Fund Program and Complementary Programs

Intended Use Plan

STATE FISCAL YEAR 2025-26

STATE WATER RESOURCES CONTROL BOARD | DIVISION OF FINANCIAL ASSISTANCE
1001 I Street | Sacramento, CA 95814 | www.waterboards.ca.gov

CALIFORNIA
Water Boards

STATE OF CALIFORNIA

Drinking Water State Revolving Fund Program and Complementary Programs

Intended Use Plan

STATE FISCAL YEAR 2025-26

(Federal Fiscal Year 2025 Base Program Capitalization Grant and General Supplemental Capitalization Grant)

WITH SUPPLEMENTAL INTENDED USE PLAN

(Federal Fiscal Year 2025 Emerging Contaminants Capitalization Grant, Lead Service Line Replacement, And Additional Supplemental Appropriations For Disaster Relief Act, 2019)

and Guidelines for

The Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1)

The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68)

California Budget Act of 2021 and Budget Act of 2024 Appropriations
and
Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4)

PROP 1
GOVERNOR EDMUND G. BROWN, JR.
WATER BOND 2014
RELIABILITY | RESTORATION | RESILIENCE

PROP 68
State of California
Parks & Water Bond 2018

Approved By: State Water Resources Control Board
Approval Date: August 19, 2025 | Resolution No. 2025-0024

STATE WATER RESOURCES CONTROL BOARD | DIVISION OF FINANCIAL ASSISTANCE
1001 I Street | Sacramento, CA 95814 | www.waterboards.ca.gov

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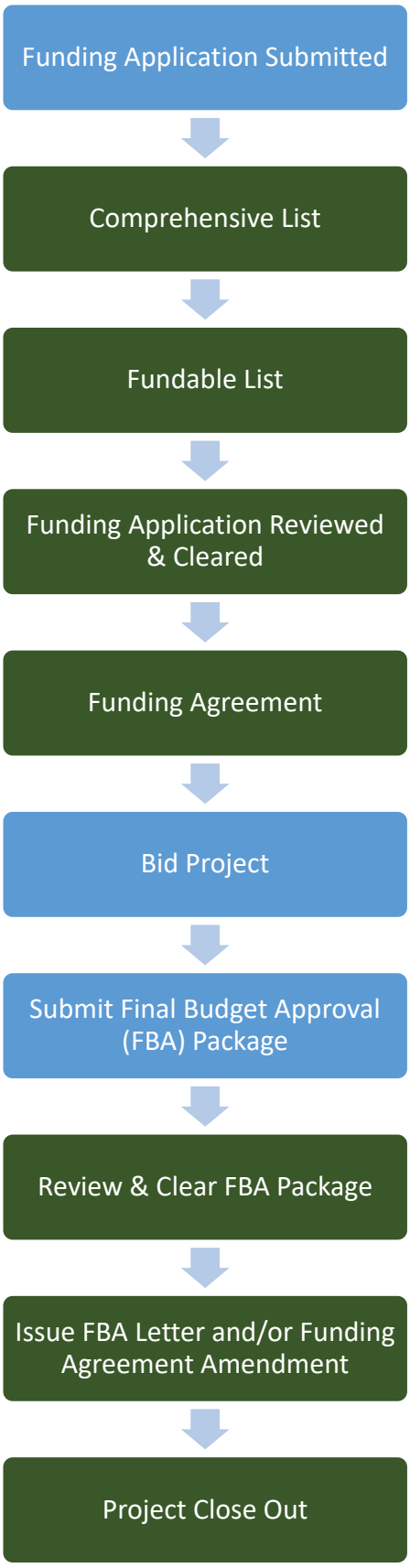
III. GENERAL FUNDING PROCESS



The general process for both grants/PF and repayable loans through the DWSRF Program and its complementary funding sources is outlined below. DFA may also use alternative processes to administer funds, such as EDWG or the Urgent Drinking Water Needs (UDWN) application process (see Section V.A and the FEP for additional information about those programs).

A. Applicant Submits a Funding Application

Using the Financial Assistance Submittal Tool (FAAST), the applicant submits either a Planning/Design or Construction funding application. If planning and preliminary design is already complete, applicants are encouraged to apply for construction financing. Applicants can request reimbursement for planning and design costs associated with a construction project. There are four different packages that are included as part of the application: (1) General, (2) Technical, (3) Environmental, and (4) Financial.

B. Comprehensive List

The Comprehensive List (Appendix B) includes general planning and construction funding requests submitted to the State Water Board as of August 6, 2025, including projects requesting repayable and non-repayable funding. Projects potentially eligible for highly specific federal funding sources, including ASADRA, EC, and LSLR, are shown in their respective Supplemental IUPs instead. Interim solutions are not funded via the IUP (they are administered through the FEP).

Placement of a project on the Comprehensive List does not constitute a commitment to provide financing. DFA may periodically post an updated Comprehensive List on the DWSRF website that will include new applications requesting grant/PF under Section V, or requesting consolidation incentive, for which applications were received by the State Water Board after the development of this IUP.

The Comprehensive List serves to quantify California's drinking water infrastructure near-term demand for state funding. This year's Comprehensive List (Appendix B), which

identifies PWSs seeking financial assistance for specific drinking water infrastructure projects, includes applications totaling more than $ 2.5 billion.

C. Fundable List

This IUP includes the DWSRF Fundable List (Appendix A), which consists of projects that may be funded by the DWSRF base and general supplemental capitalization grants and other complementary funding sources administered under this IUP. The Fundable List is a subset of the Comprehensive List and represents those projects that the Deputy Director of DFA may approve for funding, provided the projects meet all eligibility requirements. The State Water Board's goal is to execute agreements for all eligible projects on this IUP's Fundable List for which there is an appropriate funding source by June 30, 2026. No guarantee can be given that all projects on the Fundable List will receive an executed agreement or that the agreement will be executed by June 30, 2026.

Projects are added to the Fundable List in two ways:

1. Projects that may be eligible for grant/PF under Section V, or eligible for consolidation incentive, will be added to the Fundable List after the Deputy Director or designee deems the application initially complete. This includes projects that may be eligible for partial grant/PF and partial loan. Projects co-funded with funds administered through any supplemental IUP may be added to the Fundable List at the discretion of the Deputy Director after the Deputy Director or designee deems the application initially complete.
2. For all other applications, projects expected to receive a funding agreement in SFY 2025-26 are placed on the Fundable List based on funding priorities discussed in the DWSRF Loan Program section.

Per the DWSRF Policy, the Deputy Director of DFA may bypass a project on the Fundable List if it is determined that the project is not ready to proceed to financing and the Deputy Director may add a project from the Comprehensive List to the Fundable List if (a) the project is expected to proceed to financing and (b) the aggregate funding amount is consistent with the funding capacities determined in this IUP. Projects that may be administered through the Expedited Drinking Water Grant program are designated on the Fundable List by an EDWG project number and will generally be subject to the application requirements set forth in the EDWG Guidelines and EDWG application materials, although EDWG projects considered for DWSRF PF funding may have different application requirements, as necessary to meet DWSRF requirements. DFA will direct applicants to submit the required application materials at the appropriate times. EDWG projects may be added to the Fundable List after DFA invites the applicant to apply, prior to submittal of a complete application. To be placed on the Fundable List, an EDWG applicant generally must have submitted a draft engineering document sufficient to support an initial funding eligibility determination.

The Fundable Lists for emerging contaminants, lead service lines, and ASADRA funding are described and included in the supplemental IUPs for those funding sources.

D. Application Review

Applications are accepted on a continuous basis. After DFA receives an application, a detailed technical, environmental, legal, and financial review is conducted to determine

the applicant's eligibility for DWSRF and associated drinking water funding and to evaluate whether the project, once funded, is sustainable and will be operated and maintained for its useful life.

a) Technical Review

As part of reviewing a funding application, the State Water Board staff will review the engineering reports, plans and specifications (may also come after a construction funding agreement), and the general and technical application packages to determine whether a proposed project is eligible for funding. Staff will also review the documents submitted by the PWS demonstrating the PWS's technical, managerial, and financial capacity to operate and maintain the system. If there are operational or managerial issues with the system, applicants may have to resolve these issues prior to funding or by completion of the project. For example, if the proposed project will require the system to have an operator of a higher classification, the system must demonstrate they will be able to hire or contract with an appropriate operator.

b) Financial Review

The DWSRF Policy and this IUP set forth the review process that the State Water Board undertakes to assess the credit and financial capacity of applicants, in order to evaluate the applicant's financial security to operate and maintain the funded projects over the useful life, as well as to repay borrowed DWSRF monies. For non-repayable planning and certain consolidation project funding, DFA may undertake an alternative financial capacity review, consistent with the statutory and other legal requirements for the funding source to be used (see section XIII.A.3).

c) Environmental Review

The State Water Board will conduct environmental reviews of projects as described in the State Environmental Review Process attached as an appendix to the DWSRF Policy, as may be amended, and as described in Section XIII.H.8 and Appendix G of this IUP. All applicants must provide a completed Environmental Package as part of their DWSRF Planning and Construction Applications. Certain requirements, including compliance with federal environmental cross-cutters, may not be required for state grant-funded projects and projects subject to Tier II environmental review. The State Water Board Environmental Scientist Staff will conduct an initial review to verify that a complete package has been received and identify any missing information. Once all required environmental documents have been received, the State Water Board Environmental Scientist Staff will conduct a thorough review of all items to determine whether 1) sufficient information has been provided to enable the State Water Board to make environmental determinations, 2) consultation(s) are required with relevant state and federal agencies, and/or 3) if any additional information is needed. Note that environmental application requirements may differ for EDWG Funding Program projects.

d) Legal Review

The Office of Chief Counsel assists DFA in reviewing certain application materials. Additionally, certain projects, including all repayable loan projects, go through a "legal consultation" process to finalize the terms of the financial assistance agreement.

E. Funding Agreement

DFA may prepare a funding agreement if funding is available, the project meets eligibility requirements and funding priority criteria, and the project is on the Fundable List.

The State Water Board will consider the requirements associated with all available sources of funds, and pair available funds with projects to achieve the maximum drinking water benefits. In order to provide the best funding package for an applicant, DFA will combine funding sources where appropriate. Depending on an applicant's eligibility for various types of funding, as further described in this IUP, this may include the use of repayable loan funds, PF, grant funds, match financing, other state sources of funds appropriated to the State Water Board, and other state and federal funding sources managed by other agencies to the extent they are available and compatible with the State Water Board's funding, to maximize the financing of drinking water projects. Funding for a project will be based on the applicant's engineering cost estimate.

Recipients will generally be required to submit an opinion of general counsel to the satisfaction of the Office of Chief Counsel, although this requirement may be waived for certain planning or other projects. If applicable for repayable financing, an opinion of bond counsel may also be required. All opinions must be dated on or after the date that the recipient signs the funding agreement. Templates for these opinions are available on DFA's website and in an appendix to the DWSRF Policy. All recipients of repayable financing and certain non-repayable financing recipients that are private entities will generally be required to provide a resolution authorizing the transaction at closing. CPUC-regulated entities must obtain applicable CPUC approvals as may be required for any of the transactions contemplated in the funding agreement.

Funding agreements will have estimated due dates for deliverables. In addition, the Recipient will be required to submit quarterly reports to update their project manager on the project. Recipients should work with their project manager if delays occur. The funding agreement includes information about requesting a time extension if needed, but time extensions are not guaranteed. When considering a time extension, DFA will confirm if the funding source is available beyond the dates in the funding agreement and will consider the Recipient's progress on the project and if they are consistently submitting quarterly reports, as well as loan capacity and loan demand in the case of repayable financing.

F. Pre-Funding Agreement Costs

Costs incurred by a funding recipient prior to the execution of a funding agreement are not guaranteed to be reimbursed.

Planning and design costs incurred prior to the execution of a funding agreement may be reimbursed at DFA's discretion as part of a funding agreement, if an agreement is provided, subject to funding source requirements. DFA will establish an Eligible Work Start Date for planning and design and other pre-construction costs, if applicable.

Table 15: Construction Loan Eligibility for Small DACs/MICs or Expanded Small DACs

Water Rates (%MHI)	Interest Rate	Max. Financing Term[31]
≥ 1.5%	0%	30-40 Years
< 1.5%	½ General Obligation Bond Rate	30-40 Years

In evaluating project eligibility, DFA will consider any relevant contamination-related settlement funds or other sources of funds for the project, including those related to PFAS or 1,2,3- Trichloropropane (1,2,3-TCP), when determining grant/PF eligibility. Pending or unrestricted funds must be allocated in accordance with the terms of any funding agreement with the State Water Board.

Grant/PF Limitations on Private Property

Funding for work on private property generally will be subject to the following limits, in addition to other applicable eligibility criteria, including those set forth in this IUP and those required by the applicable funding source.

- Work on the property of a for-profit mobile home park generally will not be eligible for grant/PF if the mobile home park serves a non-DAC.
- Work on the private property of individual homes generally will not be eligible for grant/PF if the individual homes are located in a community that is a non-DAC. If available MHI data for the community does not appear representative for some or all of the households served by the project, household income verification may be required.
- CPUC-regulated entities, and work on the private property of CPUC-regulated entities, will only be eligible for funding if the applicable CPUC rules[32] and all other eligibility criteria are satisfied.

6. DW Grant/PF Funding Changes and Amendments

For changes to project funding amounts that occur (see Section IV.A for General Project Funding Process) after DFA has completed financial review, DFA will not re-evaluate the Applicant's/Recipient's financial capacity in the following cases:

1. For increases to the project funding amount if all the following are true:

[31] Only DACs can qualify for a 40-year term; MICs are limited to a 30-year term.

[32] Entities regulated by the California Public Utilities Commission (CPUC) must comply with CPUC rules governing the receipt and use of state grant funds, including but not limited to rules that (i) limit enrichment of the owners by excluding PF and grant funded assets from the fair market value of the system in the case of a transfer, and (ii) ensure that PF and grant funds benefit rate payers by excluding PF and grant funded assets from the rate base.

Attachment 2-4: State Water Resources Control Board Emerging Contaminants Funding

Fact Sheet

Emerging Contaminants (EC) Funding

On November 15, 2021, the Bipartisan Infrastructure Law, also known as the Infrastructure Investment and Jobs Act (IIJA) was signed into law. The IIJA provides emerging contaminant (EC) funding through the State Revolving Fund that must be distributed to water systems entirely as forgivable loans (DWSRF EC) and grants (EC-SDC[1]). The goal of this funding program is to address perfluoroalkyl and polyfluoroalkyl substances (PFAS) and other emerging contaminants in drinking water.

Funding Limits

The eligible funding amounts are based on the current EC Supplemental Intended Use Plan (IUP) and are subject to change. Maximum funding amounts are as follows:

- Up to **100%** of costs for eligible activities with **no maximum and no expectation of repayment**[2] – Available to water systems that serve Disadvantaged Communities (DACs) or systems serving a population under 25,000

- Up to **50%** of costs for eligible activities up to **$25M with no expectation of repayment** (forgivable loans) – Available to Water Systems That Serve Non-DACs with a Population Over 25,000

Applicants eligible for PF/grant per the base DWSRF IUP may be eligible for a higher amount according to the criteria in the base IUP. Also, funding may be combined with repayable DWSRF financing to co-fund a project if the applicant qualifies under the base IUP.

How to Apply

Applicant should use the existing DWSRF application process and submit their application to FAAST.

[1] EC-SDC stands for Emerging Contaminants in Small or Disadvantaged Communities Grant
[2] DWSRF EC funding is provided as principal forgiveness (forgivable loans) and EC-SDC funding is provided as grant

Eligible Projects

Eligible projects must address emerging contaminants, with a priority on projects addressing perfluoroalkyl and polyfluoroalkyl substances (PFAS). “Emerging contaminants” include contaminants listed on any of EPA’s Contaminant Candidate Lists (i.e., CCL1 – CCL5 and any future CCL). Example eligible contaminants include PFAS, 1,2,3-TCP, manganese, 1,4-dioxane, etc. Currently, hexavalent chromium is not listed on a CCL.

Eligible projects and activities may include, but are not limited to:

- Construction of a new treatment facility or upgrade to an existing treatment facility that addresses EC/PFAS.
- Development of a new source (i.e., new/replacement well or intake for a public water system) that addresses an EC/PFAS issue.
- Consolidation with another water system that does not have EC/PFAS present or has removal capability.
- Creation of a new community water system to address unsafe drinking water provided by individual (i.e., privately-owned) wells or surface water sources.
- Planning and design activities.

Eligible applicants include Community Water Systems and Non-Profit Public Water Systems that regularly serve at least 25 of the same persons over six months per year.

Notable federal requirements include Build America, Buy America (BABA) domestic preference, Davis-Bacon prevailing wage, and Disadvantaged Business Enterprise good faith effort.

Additional Resources

- Reach out to DFA-EC-PFAS-Funding@Waterboards.ca.gov if you have questions regarding funding or eligibility under the State Water Board’s EC Funding program.
- Find more information regarding EC funding in the Supplemental Intended Use Plan or on the program website: Emerging Contaminants (EC) and Per- and Polyfluoroalkyl Substances (PFAS) Funding | California State Water Resources Control Board

(*This Fact Sheet was last updated on August 27, 2025*)

Attachment 2-5: Updated 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Fundable List

Updated 2025-26 Emerging Contaminants Supplemental Intended Use Plan Fundable List

(Sort Order: Water System Size <25,000, Degree of Disadvantage, Contaminant, Applicant)

Project Number	District Number	Project Type	Applicant	Project Title / Description	Contaminant	Priority Class	Population	Service Connections	Degree of Disadvantage	Complete Application	Estimated Total Project Costs	Requested Funding	Estimated Maximum PF/Grant Amount	Estimated DWSRF Loan Funding Requested
Water Systems Serving Populations <25,000 and/or Disadvantaged Communities = 34% of Funding Request/ 42% of Estimated Maximum PF/Grant Amount														
5410017-004P	12	Construction	London Community Services District	1,2,3-TCP Compliance Improvements	1,2,3-TCP	C	2,134	431	Small Severely Disadvantaged	No	$1,147,100	$1,147,100	$1,147,100	$0
3301630-001C	20	Construction	Blythe, City of	Hidden Beaches Water System Treatment, Filtration, and Storage Project	Manganese	E	17,358	123	Small Severely Disadvantaged	Yes	$4,617,600	$4,617,600	$4,617,600	$0
1910160-010C	7	Construction	Tract 349 Mutual Water Company	Tract 349 Water Quality Improvement Project	Manganese	E	8,500	920	Small Severely Disadvantaged	No	$11,427,000	$11,427,000	$11,427,000	$0
2410010-001P	11	Planning	Winton Water and Sanitary District	Well 16 Project	Manganese	E	9,745	2,714	Small Severely Disadvantaged	Yes	$495,000	$495,000	$495,000	$0
3701837-001P	26	Planning	Wynola Water District	Wynola Estates Drinking Water Treatment and Supply	Manganese	E	120	74	Small Severely Disadvantaged	Yes	$587,815	$587,815	$587,815	$0
2410018-004C	11	Construction	Santa Nella County Water District	Santa Nella County Water District Surface Water Treatment Plant Improvements	Manganese	E	2,211	671	Small Disadvantaged	Yes	$8,631,699	$8,631,699	$8,631,699	$0
1910108-001C	15	Construction	Bell Gardens, City of	Bell Gardens Water Reservoir Construction Project	PFAS	C	11,437	1,624	Small Severely Disadvantaged	No	$4,205,000	$4,205,000	$4,205,000	$0
0410005-001C	21	Construction	California Water Service Company - Oroville	Oroville District Station 17 & 18 New Well and Treatment	PFAS	C	5,501	3,547	Small Severely Disadvantaged	No	$10,896,895	$10,896,895	$10,896,895	$0
5410009-001C	12	Construction	Pixley Public Utility District	Pixley TCP Treatment Design	1,2,3-TCP	C	4,137	841	Severely Disadvantaged	Yes	$8,342,200	$3,675,200	$3,675,200	$0
1510033-003C	19	Construction	California Water Service Company - Kernville	PFAS Wellhead Treatment Project for Well ARD-W-018-01	PFAS	C	5,501	4,003	Severely Disadvantaged	No	$2,220,180	$2,220,180	$2,220,180	$0
1010039-005C	23	Construction	Caruthers Community Services District	Caruthers Well 5 TCP Treatment	1,2,3-TCP	C	1,620	748	Disadvantaged	Yes	$3,900,000	$3,900,000	$3,900,000	$0
1000316-001C	23	Construction	Kings Canyon Unified School District	KCUSD Water Supply and Treatment Project for Alta, Riverview, and Kings	1,2,3-TCP	C	985	3	Disadvantaged	No	$10,136,844	$10,136,844	$10,136,844	$0
2410004-004C	11	Construction	Livingston, City of	Livingston 1,2,3-TCP Removal Treatment System Project	1,2,3-TCP	C	14,894	72	Disadvantaged	Yes	$27,000,000	$27,000,000	$27,000,000	$0
5010019-001C	10	Construction	Turlock, City of	Well 35 Treatment Project- Emerging Contaminants Funding Application	1,2,3-TCP	C	72,682	19,332	Disadvantaged	Yes	$15,461,000	$15,461,000	$15,461,000	$0
0410002-003C	21	Construction	California Water Service Company - Chico	Chico District Well 071-01 PFAS Treatment	PFAS	C	110,512	30,050	Disadvantaged	No	$9,926,289	$9,926,289	$9,926,289	$0
1910026-013C	22	Construction	Compton-City, Water Dept.	Wells 16, 18 and 19 - Treatment Plants	PFAS, 1,4-Dioxane	C	93,597	14,500	Disadvantaged	No	$23,385,000	$23,385,000	$23,385,000	$0
5010017-002C	5	Construction	Patterson, City of	City of Patterson-Water Well Mitigation for 1,2,3-Trichloropropane Contamination	1,2,3-TCP	C	23,304	7,367	Not Disadvantaged	No	$11,900,000	$11,900,000	$11,900,000	$0
1503475-002C	19	Construction	Western Acres Mutual Water Company	Western Acres Water Company TCP Treatment Design Project	1,2,3-TCP	C	380	110	Not Disadvantaged	No	$366,132	$366,132	$366,132	$0
3500581-001P	5	Planning	Rancho San Joaquin MWC	Filtration System required to remove Arsenic and Manganese	Manganese	E	914	30	Not Disadvantaged	Yes	$200,000	$200,000	$200,000	$0
3500581-001C	5	Construction	Rancho San Joaquin MWC	Design & Construction of an Arsenic and Manganese Removal Treatment System	Manganese	E	914	30	Not Disadvantaged	No	$550,000	$550,000	$550,000	$0
3610005-001C	27	Construction	Lake Arrowhead CSD	PFAS Removal	PFAS	C	7,038	7,927	Not Disadvantaged	Yes	$15,952,000	$15,952,000	$15,952,000	$0
3310025-001C	20	Construction	Norco, City of	PFAS Groundwater Remediation Project	PFAS	C	24,909	3,550	Not Disadvantaged	No	$4,358,050	$4,358,050	$4,358,050	$0
3310033-001C	20	Construction	Santa Ana River Water Company	Well 9 PFAS Removal Project	PFAS	C	5,405	2,075	Not Disadvantaged	No	$2,951,000	$2,951,000	$1,500,000	$0
Subtotal			**23**								**$178,656,804**	**$173,989,804**	**$172,538,804**	**$0**

Updated 2025-26 Emerging Contaminants Supplemental Intended Use Plan Fundable List

(Sort Order: Water System Size <25,000, Degree of Disadvantage, Contaminant, Applicant)

Project Number	District Number	Project Type	Applicant	Project Title / Description	Contaminant	Priority Class	Population	Service Connections	Degree of Disadvantage	Complete Application	Estimated Total Project Costs	Requested Funding	Estimated Maximum PF/Grant Amount	Estimated DWSRF Loan Funding Requested
Water Systems Serving Populations >25,000 and Non-Disadvantaged Communities = 66% of Funding Request/ 58% of Estimated Maximum PF/Grant Amount														
3610012-008C	27	Construction	Chino, City of	State Street Water Treatment Plant	1,2,3-TCP, Perchlorate	C	84,560	22,287	Not Disadvantaged	Yes	$60,000,000	$25,000,000	$25,000,000	$35,000,000
3010001-005C	8	Construction	Anaheim, City of	City of Anaheim Wells 39 and 47 PFAS Treatment Systems	PFAS	C	358,000	62,476	Not Disadvantaged	Yes	$16,600,000	$8,300,000	$8,300,000	$0
3010001-006C	8	Construction	Anaheim, City of	City of Anaheim Wells 48 and 53 PFAS Treatment Systems	PFAS	C	358,000	62,476	Not Disadvantaged	Yes	$18,660,000	$9,330,000	$0*	$0
3310037-011C	20	Construction	Corona, City of	PFAS Removal Project	PFAS	C	150,253	41,861	Not Disadvantaged	No	$11,891,000	$5,945,500	$5,945,500	$5,945,500
1910034-001C	16	Construction	Downey, City of	Northerly Water Supply Treatment Improvements	PFAS	C	109,934	23,398	Not Disadvantaged	No	$50,000,000	$50,000,000	$12,500,000	$37,500,000
1910034-002C	16	Construction	Downey, City of	Southerly Water Supply Treatment Improvements	PFAS	C	109,934	23,398	Not Disadvantaged	No	$60,000,000	$60,000,000	$12,500,000	$47,500,000
3310012-019C	20	Construction	Elsinore Valley Municipal Water District	Canyon Lake Water Treatment Plan Phase 1 Improvements	PFAS	C	121,420	36,817	Not Disadvantaged	Yes	$117,387,000	$25,000,000	$25,000,000	$50,000,000
3010010-002C	8	Construction	Fullerton, City of	City of Fullerton Main Plant Treatment Project Phase 2	PFAS	C	137,367	31,359	Not Disadvantaged	Yes	$11,796,985	$5,898,492	$5,898,492	$0
3010010-003C	8	Construction	Fullerton, City of	City of Fullerton Well 10 PFAS Treatment	PFAS	C	137,367	31,359	Not Disadvantaged	Yes	$8,600,000	$4,300,000	$4,300,000	$0
3010062-001C	8	Construction	Garden Grove, City of	City of Garden Grove Wells 22, 26, and 27 PFAS Treatment Systems	PFAS	C	174,226	34,420	Not Disadvantaged	Yes	$20,000,000	$10,000,000	$10,000,000	$0
3010022-001C	8	Construction	Golden State Water Company	Golden State Water Company West Orange PFAS Treatment Systems	PFAS	C	114,185	28,175	Not Disadvantaged	No	$20,000,000	$10,000,000	$10,000,000	$0
3010053-001C	8	Construction	Huntington Beach, City of	City of Huntington Beach PFAS Treatment Systems	PFAS	C	198,711	55,028	Not Disadvantaged	No	$12,000,000	$6,000,000	$6,000,000	$0
1910090-001C	22	Construction	Monrovia, City of	COM PFAS Treatment System	PFAS	C	37,931	9,425	Not Disadvantaged	No	$10,871,602	$5,435,801	$5,435,801	$0
3010027-002C	8	Construction	Orange, City of	City of Orange Wells 25 and 27 PFAS Treatment Plant	PFAS	C	117,150	35,528	Not Disadvantaged	Yes	$14,156,060	$7,078,030	$7,078,030	$0
3010027-003C	8	Construction	Orange, City of	City of Orange Well 29 PFAS Treatment Systems	PFAS	C	117,150	35,528	Not Disadvantaged	Yes	$6,000,000	$3,000,000	$3,000,000	$0
0110008-001C	4	Construction	Pleasanton, City of	Per- and Polyfluoroalkyl (PFAS) Treatment and Wells Rehabilitation Project	PFAS	C	76,689	22,334	Not Disadvantaged	No	$46,000,000	$31,400,000	$23,000,000	$8,400,000
3010038-005C	8	Construction	Santa Ana, City of	City of Santa Ana Walnut Pump Station PFAS Treatment	PFAS	C	308,189	45,561	Not Disadvantaged	No	$30,000,000	$15,000,000	$15,000,000	$0
1910240-002C	22	Construction	Santa Clarita Valley Water Agency	S6, S7, and S8 Wells PFAS Treatment Facility Improvements Project	PFAS	C	134,541	32,789	Not Disadvantaged	No	$15,136,104	$7,568,052	$7,568,052	$0
4410010-003C	5	Construction	Santa Cruz, City of	Graham Hill Water Treatment Plant Facility Improvements Project (PFAS)	PFAS	C	90,000	24,228	Not Disadvantaged	No	$172,400,000	$25,000,000	$25,000,000	$50,000,000
1910174-001C	7	Construction	Suburban Water Systems	Suburban Water Systems Plant 201 PFAS Treatment System	PFAS	C	123,805	34,720	Not Disadvantaged	No	$42,394,205	$21,197,103	$21,197,103	$0
1910173-001C	7	Construction	Whittier, City of	Whittier Groundwater Treatment System (WGTS) Expansion (PFAS)	PFAS	C	49,954	12,001	Not Disadvantaged	No	$8,000,000	$4,000,000	$4,000,000	$0
Subtotal			**21**								**$751,892,956**	**$339,452,978**	**$236,722,978**	**$234,345,500**
Total Emerging Contaminant Fundable			**44**								**$ 930,549,760**	**$ 513,442,782**	**$ 409,261,782**	**$ 234,345,500**

* Request is above the current maximum funding allowed per system, but can be considered if the per system funding limit is increased

Attachment 2-6: 2025-26 DWSRF Emerging Contaminants Supplemental Intended Use Plan Excerpt

California
State Water Resources Control Board
Division of Financial Assistance

Drinking Water State Revolving Fund (DWSRF) & Clean Water State Revolving Fund (CWSRF)

Infrastructure Investment and Jobs Act – Emerging Contaminants Funding

Emerging Contaminants in Small or Disadvantaged Communities Grant Funding

SUPPLEMENTAL INTENDED USE PLAN

STATE FISCAL YEAR 2025-26

I. BACKGROUND AND PURPOSE

President Biden signed the Infrastructure Investment and Jobs Act (IIJA) of 2021, (P.L. 117-58) on November 15, 2021. IIJA includes $50 billion to the U.S. Environmental Protection Agency (EPA) to strengthen the nation's drinking water and wastewater systems – the single largest investment in clean water and safe drinking water that the federal government has ever made.

The IIJA provides $5 billion through the Clean Water and Drinking Water State Revolving Funds (SRFs) to reduce people's exposure to perfluoroalkyl and polyfluoroalkyl substances (PFAS) and other emerging contaminants (EC) through their drinking water and to help address discharges through wastewater and, potentially, nonpoint sources. This is a unique opportunity to prioritize investment to local communities that are on the frontlines of PFAS contamination and that have few options to finance solutions through traditional programs. The IIJA provides EC funding through the SRFs that must be distributed to communities entirely as forgivable loans and grants.

PFAS are not the only EC that threaten our water supplies and environment. Water projects that address other EC will also be eligible for funding under this program.

The State Water Resources Control Board (State Water Board) intends to apply for the full FFY 2025 DWSRF EC Capitalization Grant of $82,428,000 that is allotted to the California DWSRF and the full FFY 2025 CWSRF EC Capitalization Grant of $15,208,000 allotted to the California CWSRF. In addition, the State Water Board intends to apply for $2,360,000 in reallotted DWSRF FY 2023 IIJA funds that were declined by other states. This Supplemental Intended Use Plan describes the State Water Board's plan for administering the funds in accordance with current U.S. EPA guidance; DFA has the discretion to modify the requirements if allowed by subsequent guidance to be consistent with federal requirements.

II. TRANSFER OF CLEAN WATER STATE REVOLVING FUND

The State Water Board will transfer California's entire $15,208,000 CWSRF EC allocation from the CWSRF program to the DWSRF program. The DWSRF statutes and regulations allow for the transfer of an amount that is up to thirty-three percent (33%) of the amount of the DWSRF capitalization grant from the CWSRF to the DWSRF or vice versa. Therefore, the resulting total amount of available EC supplemental funds for the DWSRF program in SFY 2025-26 will be $99,996,000, including the reallotted DWSRF FY 2023 IIJA funds that were declined by other states.

III. COMPLEMENTARY FUNDING

The IIJA also includes a total of $5 billion in FFY 2022-2026 for the Emerging Contaminants in Small or Disadvantaged Communities (EC-SDC) grant program, which focuses on addressing EC, including PFAS, in drinking water served by public water systems in small communities (population less than 10,000 and unable to incur debt sufficient to finance the project) and/or disadvantaged communities. For FFY 2022 and 2023, U.S. EPA awarded the State Water Board a combined $169,115,000 in federal EC-SDC grant funds; for FFY 2024 $82,961,000 was awarded in federal EC-SDC grant funds to the State Water Board. The state intends to apply for the FFY 2025 EC-SDC allotment, anticipated to be similar to the FFY 2024 amount of $82,961,000. The State Water Board will administer the funds as authorized by Health and Safety Code, sections 116774-116774.1, and provide grants to eligible public water systems with no cost share or match required. The EC-SDC program is intended to complement the DWSRF program and DWSRF EC funding to support disadvantaged communities' and small communities' development of projects to address emerging contaminants in drinking water.

IV. PROGRAM GOALS

The DWSRF EC funds will "address emerging contaminants in drinking water with a focus on perfluoroalkyl and polyfluoroalkyl substances through capitalization grants under section 1452(t) of the Safe Drinking Water Act for the purposes described in section 1452(a)(2)(G) of such Act." The EC-SDC funds will provide grants to public water systems in small and/or disadvantaged communities to address emerging contaminants, including PFAS.

The EC program goals are in concert with the long-term and short-term goals listed in the SFY 2025-2026 DWSRF IUP (Outcomes, Goals, Activities, and Measures), including public health benefits and expeditious use of funds.

V. PROGRAM REQUIREMENTS

A. In General

To receive funding under this EC IUP, projects must meet the eligibility requirements set forth below and established by the applicable funding program. Projects must be included on the EC Fundable List (see Section XII). The Deputy Director of DFA may add to the EC Fundable List any additional eligible projects that request DWSRF EC

funding for which applications are deemed complete.[1] DFA may periodically post an updated Emerging Contaminants Fundable Project List on the DWSRF website that identifies all projects for which complete applications are received by DFA after the development of this Supplemental IUP.

Projects administered under this supplemental IUP will generally be implemented in accordance with the base DWSRF IUP except to the extent inconsistent with this supplemental EC IUP or the applicable funding program requirements. In addition, projects receiving DWSRF EC funds must meet the specific requirements noted in U.S. EPA's March 8, 2022, memorandum "Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law" as modified by the U.S. EPA's May 15, 2025, Memorandum "State Revolving Funds: Back to Basics, Back to Business" and in any other applicable guidance.

Eligible DWSRF EC and EC-SDC projects are not subject to DWSRF priority categories A-F, or the DWSRF PF/grant project type and Failing Status criteria provided in the base DWSRF IUP, but certain guidelines from the DWSRF Policy and IUP regarding eligible costs do apply, at the discretion of the Deputy Director or designee. Certain provisions in the DWSRF IUP, such as limitations on PF/grant funding for work on private property, and limitations on industrial/commercial use, are not applicable to funding administered under this supplemental IUP.

B. DWSRF EC Funding

Under the IIJA and SDWA, one hundred percent (100%) of the EC capitalization grant, net of set-asides taken, must be provided as forgivable loans or grants.[2] Not less than twenty-five percent (25%) of the DWSRF EC funds must be provided to disadvantaged communities or public water systems serving fewer than 25,000 people.

For a project or activity to be eligible for funding from the DWSRF EC Capitalization Grant, it must be otherwise DWSRF eligible. All existing requirements for implementation of the DWSRF program and execution of a DWSRF funding agreement, and the provisions of the DWSRF IUP and DWSRF Policy, apply to projects receiving DWSRF EC Funding as required by the IIJA, unless inconsistent with the IIJA or this supplemental EC IUP. Applicants' EC projects receiving DWSRF EC funds must meet the requirements of the DWSRF program, including all federal cross-cutting

[1] Projects requesting funding through another DWSRF program in addition to EC funding will need to meet the requirements for that other specific DWSRF program. Inclusion on the EC Fundable List is not a guarantee of any other DWSRF funding.
[2] The State Water Board directs that 100% of DWSRF EC project funding be provided as forgivable loans (principal forgiveness).

requirements and Build America, Buy America (BABA) requirements.[3] In addition, projects receiving DWSRF EC funds must meet the current U.S. EPA guidance, and DFA has the discretion to modify the requirements if allowed by subsequent guidance to be consistent with federal requirements. Only costs incurred after November 15, 2021 may be eligible for DWSRF EC funds, and construction costs must not be incurred until after the Division has provided a notice of approval to be eligible for DWSRF EC funds.

C. EC-SDC

The EC-SDC program provides grants to public water systems in small communities (population less than 10,000 and unable to incur debt sufficient to finance the project) and/or disadvantaged communities to address EC/PFAS. EC-SDC projects must be consistent with the workplan (approved by U.S. EPA) for the state's EC-SDC program. Projects receiving EC-SDC funds must meet the requirements of the DWSRF IUP, generally including all federal cross-cutting requirements4 and Build America, Buy America (BABA) requirements, unless otherwise provided in this supplemental IUP or the applicable federal guidance. Projects receiving only EC-SDC funds do not need to satisfy the Davis-Bacon requirements.

Additionally, projects receiving EC-SDC funds are subject to U.S. EPA's grant implementation document, "Implementation Manual for FY 2024 Funding," issued in November 2024, as well as the regulations of the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 CFR Part 200 (the Uniform Grant Guidance), and any other applicable federal rules. The Uniform Grant Guidance is a government-wide framework of specific requirements for federal grants management and is comprised of several parts:

- Subparts B through D set forth the administrative requirements for federal grants, including the requirements for U.S. EPA's management of grant programs before awards are made and the requirements U.S. EPA may impose on recipients.
    - Included within subpart D ("post federal award requirements"; when the U.S. EPA has awarded the grant to a non-federal entity) are several procurement standards, prohibitions, and requirements that grant recipients and subrecipients must follow. Such procurement standards and requirements do not apply when the State Water Board awards repayable financing or principal forgiveness under its DWSRF program.

[3] See Section X.14. Federal Cross-Cutters of the DWSRF IUP for more details on the list of federal cross-cutting requirements. Tier II environmental review as set forth in Appendix F of the DWSRF IUP does not apply to projects that receive DWSRF EC funding.

[4] See Section X.14. Federal Cross-Cutters of the DWSRF IUP for more details on the list of federal cross-cutting requirements. Tier II environmental review as set forth in Appendix F of the DWSRF IUP does not apply to projects that receive EC-SDC funding.

- Subpart E establishes principles for determining the allowable costs incurred by grant recipients and subrecipients. The principles are for the purpose of cost determination only and are not intended to identify the circumstances or the extent of U.S. EPA participation in the financing of a particular project.
- Subpart F sets forth standards for audits of grant recipients. Most relevant to the grant recipients and subrecipients are the provisions that lay out the responsibilities and other requirements of entities being audited.

The EC-SDC funding program is similar to the DWSRF EC funding in many ways; however, there are at least a few key differences between the two funding sources:

- EC-SDC funding is limited only to community water systems and non-profit non-community water systems that serve small and/or disadvantaged communities. The DWSRF EC funding is not limited to systems that serve small and/or disadvantaged communities.
- EC-SDC funding may only be provided as grants, subject to the federal Uniform Grant Guidance; whereas DWSRF EC funding may be provided as principal forgiveness.
- EC-SDC funding may be used to pay for research and testing projects; whereas such projects are not eligible for DWSRF EC funding.
- EC-SDC may only be used to reimburse eligible costs incurred after July 1, 2023; whereas DWSRF EC funding may be used to reimburse eligible costs incurred after November 15, 2021.

VI. ELIGIBLE PROJECTS AND ACTIVITIES

Below is a non-exhaustive list of eligible projects and activities under this supplemental IUP. In addition to satisfying the program requirements discussed above, for a project or activity to be eligible for funding from the DWSRF EC Capitalization Grant and EC-SDC grant, the primary[5] purpose must be to address PFAS or EC in drinking water. Funding for projects with a focus on PFAS will be prioritized. Projects are potentially eligible for DWSRF EC funding if they address any contaminants listed on any of EPA's Contaminant Candidate Lists (i.e., CCL1 – CCL5 and any future CCL).[6] Examples of eligible projects include, but are not limited to:

[5] For the purpose of determining EC-SDC eligible projects, "primary" means the components of the project that address ECs exceed 50% of the total project costs or level of effort.

[6] In accordance with U.S. EPA guidance, if U.S. EPA has promulgated a NPDWR for a contaminant, then a project whose primary purpose is to address that contaminant is not eligible for DWSRF Emerging Contaminants funding, unless the contaminant is

- Construction of a new treatment facility or upgrade to an existing treatment facility that addresses EC/PFAS.
- Development of a new source (i.e., new/replacement well or intake for a public water system) that addresses an EC/PFAS issue [Note: for DWSRF EC funding, water rights purchases must still meet the criteria in the Class Deviation for Water Rights].
- Consolidation with another water system that does not have EC/PFAS present or has removal capability.
- Infrastructure related to pilot testing for treatment alternatives.
- Planning and design for small DACs
- Creation of a new community water system to address unsafe drinking water provided by individual (i.e., privately-owned) wells or surface water sources.
- Connection of private wells to an existing public water system.

Eligible construction projects may include costs for planning and design.

VII. PROGRAM SCHEDULE AND FUNDING APPROACH

The schedule for public comment, application to the U.S. EPA, State Water Board adoption of this EC Supplemental IUP, and award of the EC funds is the same as the schedule for the SFY 2025-2026 DWSRF IUP as presented in the SFY 2025-26 DWSRF IUP.

Applications for funding under this supplemental IUP will be accepted on a continuous basis. Applicants for funding under this supplemental IUP shall follow the existing DWSRF application process. Applicants can refer to the State Water Board's website https://www.waterboards.ca.gov/drinking_water/services/funding/SRF.html and the FAAST portal https://faast.waterboards.ca.gov/ where details of the application and supporting documentation are described in order to complete the DWSRF application. The EC Fundable List in Section XII was developed to determine how best to allocate the EC funds.

Federal rules also require that at least 15 percent (15%) of available DWSRF funding be provided to PWSs that serve less than 10,000 people to the extent that projects for these PWSs are eligible and ready to proceed to a funding agreement (Small Water System Reserve). Based on the anticipated FFY 2025 DWSRF EC awards (including the reallotted DWSRF FY 2023 IIJA funds that were declined by other states), the

PFAS, which is eligible regardless of whether NPDWR has been promulgated. Projects addressing contaminants for which a NPDWR has been promulgated may be eligible for other DWSRF funding.

amount of DWSRF EC available as PF for projects (after set-asides) is $77,337,520 and the minimum available for small water system projects that serve less than 10,000 people is $11,600,628.

The Deputy Director of the Division of Financial Assistance (DFA) is authorized to bypass any project with a complete application if the applicant is non-responsive to DFA's request for information or consultation after notifying the applicant and giving the applicant a reasonable opportunity to respond, and instead to fund any other eligible project on the Fundable List that is ready to proceed to an agreement.

A. Recent Financing Activity

The table below shows recent financing from DWSRF EC and EC-SDC and is inclusive of funds committed through amendments.

Table 1: Number of Executed Agreements and Total Financing per SFY

SFY	Number of Agreements	$ of Agreements (in millions)
2023-24	3	$19.2
2024-25*	9	$81.2

* The numbers for 2024-25 reflect agreements executed as of April 1, 2025.

VIII. FUNDING AVAILABILITY AND TERMS

The State Water Board will provide one hundred percent (100%) of the funding available under this supplemental IUP for eligible PWS as principal forgiveness (PF) or grants in accordance with the limits shown in Table 2 below, consistent with funding source requirements. After reserving $22.7 million for set-aside activities, there will be $77.3 million in FFY 2025 DWSRF EC funds available as PF for projects. IIJA requires that "not less" than twenty-five percent (25%) of the DWSRF EC funds go to DACs or systems with populations less than 25,000.

Table 2: Breakdown of Funding Availability for Projects ($ in millions)

	DWSRF EC (FFY 2022-2024)	DWSRF EC (FFY 2025)*	EC-SDC (FFY 2022-2024)	EC-SDC (FFY 2025)	Total
Total Allotment	**$268.6**	**$100.0**	**$252.1**	**$83.0**	**$703.6**
Set-Asides	$60.2	$22.7	$3.3	$3.3	$89.5
PF/Grant	$208.4	$77.3	$248.8	$79.6	$614.2
Executed Agreements**	$47.7	$0	$52.6	$0	$100.4
Total Funding Available for Projects	**$160.7**	**$77.3**	**$196.1**	**$79.6**	**$513.8**

* Includes $2,360,000 in reallotted DWSRF FY 2023 IIJA funds that were declined by other states.

** Reflects total agreements executed as of April 1, 2025.

The DWSRF EC and EC-SDC funds will be subject to the limits in Table 3. DWSRF EC and EC-SDC funds do not have cost per connection limits, but DFA will review project costs for reasonableness.

Table 3: Maximum Emerging Contaminants PF or EC-SDC per Water System

Type of Community	Percentage of Total Eligible Project Cost	Maximum Amount of DWSRF EC PF/EC-SDC grant[2,3]
DAC Systems and/or Systems That Serve a Population Under 25,000	up to 100%	No maximum
Non-DAC Systems That Serve a Population of 25,000 or greater	up to 50%[1]	$25,000,000

Notes:

1. Funding amount will be determined by DFA based on percentage of project cost and incorporated into the agreement between the State Water Board and Recipient.
2. The Deputy Director of DFA may increase the funding that eligible projects/systems have received under previous EC supplemental IUPs to the current EC supplemental IUP maximum funding amounts.
3. The Deputy Director of DFA may increase the maximum EC PF/EC-SDC grant amount up to $50 million if sufficient additional applications for eligible projects are not complete by March 31, 2026.

The maximum grant/PF limit will be applied on a per public water system basis. Some applicants may have jurisdiction over multiple public water systems and wish to implement a program that will address multiple public water systems within their jurisdiction. Multiple projects proposed by an applicant may be funded, provided that the projects would have otherwise been recommended for funding had they been submitted individually and the per-water system limit has not been exceeded. The State Water Board may enter into a single agreement with an applicant for multiple projects, if it is administratively expedient to do so, or may have separate funding agreements for individual projects (e.g., if the projects have significantly different timelines for completion; or legal issues may hold up one project, but not another). To the extent permitted by statute, the Deputy Director of DFA has the authority to streamline application requirements and structure agreements as appropriate for the purposes of funding programmatic applications. The Deputy Director of DFA may approve modified financial application requirements for projects funded under this supplemental IUP.

The State Water Board may offer DWSRF Base Program or other funding in addition to funding administered under this supplemental IUP to fund EC/PFAS projects or projects that have both EC/PFAS components as well as components that are eligible for Base Program or other funding. To be eligible for DWSRF Base Program funding, projects must also be placed on the Base Program Fundable List in accordance with the provisions of the DWSRF IUP.

DFA will also establish a goal of using at least fifty percent (50%) of the EC Capitalization Grant to fund PFAS projects, with highest priority going to projects addressing PFAS concentrations that exceed the new federal MCL or Division of Drinking Water (DDW) Response Level (consistent with DDW's criteria for evaluating exceedances). Eligible DWSRF EC and EC-SDC projects that protect a greater number of households per dollar may also be prioritized if funding is limited.

Section XII provides a summary table of the EC Fundable List. Currently, the list includes projects from entities for total project costs of $702 million. Based on the current EC Fundable List, DFA will be able to commit one hundred percent (100%) of the EC funds available, after set-asides, to eligible projects. However, DFA anticipates a continued increase in demand as prospective applicants become aware of the funding terms. Table 4 below summarizes the status of applications requesting EC funding.

Table 4: EC Application Funding Request Summary ($ in millions)

	Application Status	No of Applications	Estimated Funding Requested
Population < 25,000 and/or DAC	Complete	0	$0
	Incomplete	23	$147.4
Non-DAC systems serving > 25,000	Complete	6	$86.0
	Incomplete	10	$92.5
Total Requests		**39**	**$326.0**

IX. ADMINISTRATION AND SET-ASIDE FUNDS

The IIJA allows each state to set aside up to thirty-one percent (31%) of its DWSRF EC capitalization grant to support various DWSRF and Division of Drinking Water (DDW) program activities, including (1) the administration of the DWSRF, (2) small water system (SWS) technical assistance, (3) public water system (PWS) supervision by DDW and (4) other technical assistance to PWSs in support of technical, managerial, and financial capacity development. The Set-Asides are especially beneficial to SWSs serving SDACs and DACs.

The IIJA allows each state to use up to four percent (4%) of its CWSRF EC capitalization grant to support administration of the CWSRF.

For SFY 2025-26, the State Water Board will set-aside twenty-six percent (26%) of the 2025 DWSRF EC Capitalization Grant, four percent (4%) of the 2025 EC-SDC, and bank four percent (4%) of the 2025 CWSRF EC Capitalization Grant for set-aside activities as further described below.

Table 5: FFY 2025 DWSRF EC, CWSRF EC, and EC-SDC Set-Aside Budget

Set-Aside Category	Max Allowed	Budgeted from FFY 2025 Grant	Estimate
DWSRF EC*			
Administration	4%	4%	$3,485,920
SWS Technical Assistance	2%	2%	$1,742,960
PWS Supervision	10%	10%	$8,714,800
Other Local Assistance	15%	10%	$8,714,800
FFY 2025 DWSRF EC Set-Aside		**26%**	**$22,658,480**
CWSRF EC			
Administration	4%	0%	$0
EC-SDC			
Administration	4%	4%	**$3,318,440**

* Includes $2,360,000 in reallotted DWSRF FY 2023 IIJA funds that were declined by other states.

The 2025 DWSRF EC Capitalization Grant set-aside work plans will contain information about the specific tasks, contracts and full-time equivalent personnel that will be supported in DFA and DDW by the 2025 DWSRF EC Capitalization Grant set-aside budgets. The Deputy Director of DFA is authorized to submit initial workplans to USEPA Region 9 or otherwise amend existing workplans for DWSRF EC Capitalization Grants. The Deputy Director of DFA may adjust DWSRF EC Capitalization Grant budgets for good cause. The Deputy Director of DFA is also authorized to make grants, enter into contracts, including multi-year contracts, and establish in-kind funding from USEPA to accomplish work covered by the set-aside budgets for the DWSRF EC Capitalization Grants. The Deputy Director of DFA is also authorized to request from USEPA the transfer of any unspent DWSRF EC set-aside funds to DWSRF principal forgiveness for expenditure on eligible DWSRF EC projects.

A. Administration Set-Aside

The Administration Set-Aside may fund the State Water Board's administration of the DWSRF EC program. This may include the review and processing of drinking water funding applications, project management and general oversight of DWSRF construction and planning projects. The DWSRF Administration Set-Aside may also

cover the costs for accounting, legal, budgetary, and general management and oversight of the DWSRF EC/EC-SDC funds.

B. Small Water System Technical Assistance Set-Aside

The SWSTA Set-Aside may fund DFA technical assistance to small PWS applicants with 10,000 or fewer persons to help establish eligibility for DWSRF EC funds and provide other technical assistance necessary for project development.

C. State Program Management Set-Aside

The State Program Management Set-Aside may be used to partially fund DDW's administration of the State Water Board's PWSS program as it relates to ECs. The Set-Aside may provide funds for DDW's inspection, compliance, and monitoring activities related to ECs in accordance with the SDWA and PWSS responsibilities delegated by U.S. EPA.

D. Local Assistance Set-Aside

The Local Assistance Set-Aside may be used for contracts and the personnel costs of DFA and DDW working with PWSs addressing ECs. These contract and staff costs are associated with the State Water Board's implementation of its Capacity Development Strategy and providing direct technical assistance to PWSs in support of this strategy.

X. EC CAPITALIZATION GRANT PAYMENTS AND DRAWS

1. **Federal EC Capitalization Payments**

   Based upon the State Water Board's cash flow for SFY 2025-26, the State Water Board has requested the following federal payment schedule from U.S. EPA for the 2025 EC Capitalization Grant, as detailed in Table 6.

Table 6: 2025 EC Capitalization Grant Payment Schedule*

FFY	Payment Date	Percentage of Cap Grant	Estimated Amount	Description	Site Code **
2025	Award Date	4%	$3,391,520	DWSRF Administration Set-Aside	DD
2025	Award Date	2%	$1,648,560	DWSRF SWS Technical Assistance Set-Aside	DE
2025	Award Date	10%	$8,242,800	DWSRF State Program Management Set-Aside	DF
2025	Award Date	10%	$8,242,800	DWSRF Local Assistance & Other Programs Set-Aside	DG
2025	Award Date	74%	$60,382,240	DWSRF Loan Fund	DA

*Amounts and percentages include the reallotted DWSRF FY 2023 IIJA funds that were declined by other states but do not include the transfer of the FFY 2025 CWSRF EC Capitalization Grant ($15,362,000) to the DWSRF for the sole purpose of funding DWSRF EC eligible projects. The requested payment date for the additional transferred EC funds from the CWSRF is also the award date of the FFY 2025 DWSRF EC Capitalization Grant.
**Site Codes reference the federal accounts in which the various loan and set-aside funds of a capitalization grant are deposited and made available for liquidation by the State Water Board.

2. **EC Federal Draw Schedule and Estimated EC Project Disbursements**

   Section XIII represents the State Water Board's anticipated federal draw schedule of the 2025 EC Capitalization Grant, subject to the timely commitment of available funds to eligible projects and plans for the eligible use of 2025 DWSRF EC set-aside funds per forthcoming workplans.

XI. REPORTING

The State Water Board's DFA will report on EC projects, including project characteristics and milestone information as well as the public water system(s) receiving federal funding, to the U.S. EPA through the Office of Water State Revolving Fund (OWSRF) system and to the U.S. General Services Administration's SAM.gov reporting system.

Attachment 2-7: WRD PFAS Remediation Program

WRD
WATER REPLENISHMENT DISTRICT

PFAS REMEDIATION PROGRAM

A grant program for water purveyors in the Central Basin and West Coast Basin seeking to remediate drinking water wells that have been impacted by per- and polyfluoroalkyl substances (PFAS).

Photo of treatment system that was successfully completed and funded under the WRD PFAS Remediation Program.

PFAS REMEDIATION PROGRAM

HOW DO WATER PURVEYORS APPLY FOR PFAS FUNDING?

Water purveyors may download an initial application from WRD's PFAS Remediation Program website (indicated on the cover of this brochure). Upon submittal of the initial application, WRD shall determine eligibility for grant funding. If eligible, the purveyor shall submit a funding application package for WRD evaluation, which shall include the following:

- WRD's Funding Application Form, which requires the water purveyor to describe the condition of the well(s) impacted by PFAS, historical water quality and production from the well(s), and details regarding the proposed PFAS treatment system project(s), including project schedule and costs,
- Design drawings & construction documents,
- Contracts with design engineering firms, construction contractors, equipment vendors, etc., and
- Other technical and supporting documents that will help WRD evaluate the treatment system design and project costs.

HOW ARE PFAS-IMPACTED WELLS TREATED?

GAC - Granular Activated Carbon

IX - Ion Exchange

RO - Reverse Osmosis

PFAS can be treated by various methods, with the most common ones being ion exchange (IX), granular activated carbon (GAC), and reverse osmosis (RO). These treatment technologies have been accepted by the Division of Drinking Water for the removal of PFAS.

WHAT IS THE COST TO TREAT PFAS-AFFECTED WELLS?

The cost to treat wells affected by PFAS varies based on the level of PFAS contamination, the quantity of water being treated, and the technology selected. In 2021, WRD completed two pilot tests to evaluate the performance and life cycle costs for various IX and GAC media. Results from these pilot tests may aid water purveyors in the design of their PFAS treatment systems. The pilot test reports may be downloaded from WRD's PFAS Remediation Program website.

WHAT ARE PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in a variety of industries around the globe, including the United States, since the 1940s. PFAS has been detected in air, water, wastewater, soil, and within:

- Manufacturing and other facilities (e.g., chrome plating, chemical plants, landfills),
- Animals, including fish, livestock, and humans,
- Airports, refineries, and other sites that use or produce firefighting foam,
- Personal care and household products, e.g. shampoo, cosmetics, carpet, clothing, and non-stick cookware, and
- Drinking water, food, and food packaging.

ARE PFAS IN DRINKING WATER REGULATED IN CALIFORNIA?

Both the U.S. Environmental Protection Agency and State Water Resources Control Board, Division of Drinking Water (DDW) have established health advisory levels or regulatory limits for some PFAS, including perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). To learn more about drinking water regulations pertaining to PFAS, visit: ***https://www.waterboards.ca.gov/pfas/.***

WHAT IS WRD'S PFAS REMEDIATION PROGRAM?

The WRD Board of Directors established the PFAS Remediation Program in August 2020. The Board set aside over $60 million dollars to offer financial and technical support to water purveyors within the Central Basin and West Coast Basin seeking to treat drinking water wells impacted by PFAS. This is one of the first programs in the State of California to award grant funding to treat PFAS-impacted drinking water wells.

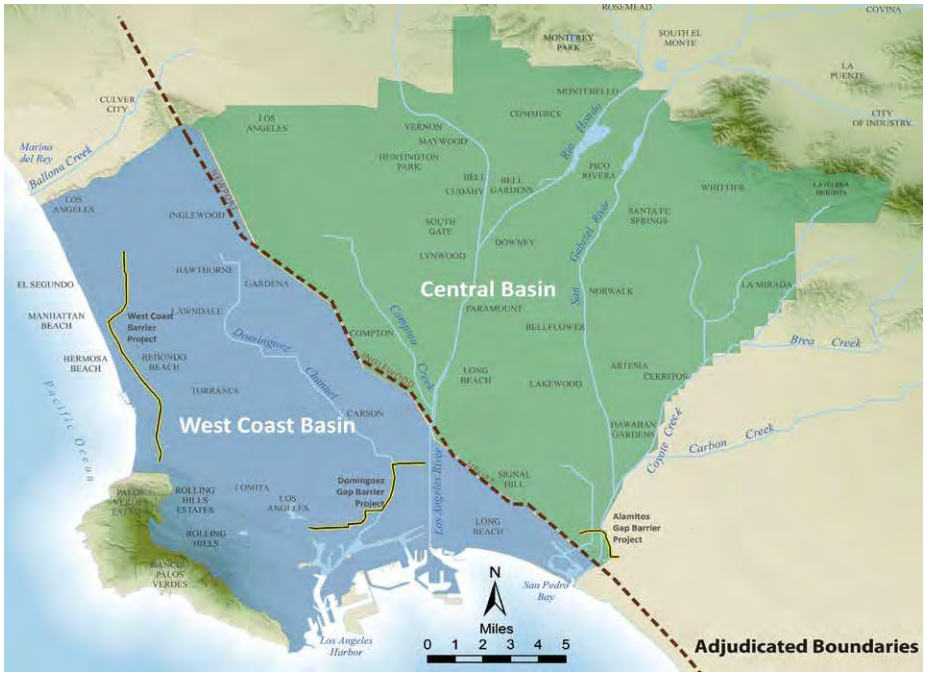
In addition, WRD has been working with regulators and elected officials at the State and Federal level to secure grant funding for PFAS remediation projects. WRD continues to advocate the need to prioritize funding for communities that meet the economic threshold to be considered "Disadvantaged Communities."

WRD Board Members give a tour of a PFAS remediation site in Pico Rivera. From left: State Water Resources Control Board (SWRCB) Chair Joaquin Esquivel, WRD Board Members Joy Langford and Vera Robles DeWitt, SWRCB Board Member Nichole Morgan, and Pico Water District General Manager Mark Grajeda.

IS WRD TAKING OTHER STEPS TO ADDRESS PFAS CONTAMINATION IN THE REGION?

Yes. On November 8, 2021, WRD filed a lawsuit against 3M Company, E.I. DuPont de Nemours, Inc., and other manufacturers of aqueous film-forming foam (AFFF) for their involvement in the manufacture and sale of PFAS that have contaminated groundwater supplies within WRD's service area. WRD is represented by a consortium of law firms with environmental contamination experience, including SL Environmental Law Group and others.

WHO IS ELIGIBLE FOR PFAS FUNDING FROM WRD?



Water purveyors (typically cities and utility companies) in the Central Basin and West Coast Basin that have drinking water wells containing PFAS at concentrations greater than regulatory levels.

WHAT TYPE OF PFAS FUNDING CAN WRD PROVIDE?

Only capital costs associated with the PFAS treatment system are eligible for WRD funding. Water purveyors are responsible for all operations and maintenance costs. Applicants may request WRD to design and construct the PFAS treatment system (referred to as a Turnkey Project) or a water purveyor may design and construct their own PFAS treatment system and seek reimbursement from WRD (referred to as a Funding Support Project).

The funding amount shall be based on the historical production from the PFAS-impacted wells. The final funding amount and award of funding to the purveyor is determined by the WRD Board of Directors. The water purveyor may be required to adopt a Financial Capability Resolution to certify adequate financial reserves to cover all costs in excess of the WRD funding amount.

ARE THERE OTHER KEY REQUIREMENTS FOR PFAS FUNDING FROM WRD?

Upon project completion, the water purveyor is required to submit an annual report to WRD and maintain groundwater production to meet an Annual Pumping Requirement for a minimum of 20 years. This Annual Pumping Requirement shall be determined based on historical production from the purveyor's wells.

WRD has a legacy of treating unwanted substances before they spread in groundwater. For example, WRD's Safe Drinking Water Program (SDWP) and Disadvantaged Communities Program (DAC) offers financial and technical assistance to water purveyors seeking to remediate their wells. Through these programs, WRD has secured millions in State grant funding for well remediation and other water system projects. WRD's PFAS Remediation Program builds on the tremendous success of SDWP and DAC.

Applications are available for download from the WRD PFAS Remediation Program website at: ***https://www.wrd.org/pfas-remediation-program***

For more information, email ***info@wrd.org*** or call (562) 275-4300.

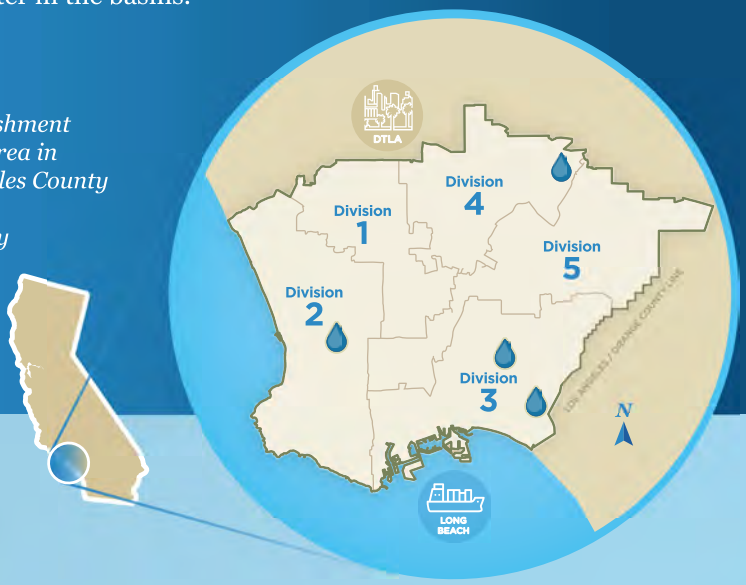
ABOUT WRD

Established in 1959, the Water Replenishment District (WRD) manages the Central Basin and West Coast Basin in southern Los Angeles County, two of the most utilized urban groundwater basins in the nation. Groundwater from these basins provides 50% of the total water supply for four million people within WRD's service area, which includes 43 cities within 420 square miles. WRD is charged with:

- Replenishment of the groundwater basins,
- Protection and cleanup of groundwater against natural and human-made contaminants (such as PFAS), and
- Regular and comprehensive monitoring of the quality and quantity of groundwater in the basins.

The WaterReplenishment District's service area in southern Los Angeles County

= *WRD Facility*



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Attachment 2-8: WRD PFAS Remediation Program Status of Projects

MEMORANDUM

ITEM NO. 4

DATE: **APRIL 14, 2026**

TO: **GROUNDWATER QUALITY COMMITTEE**

FROM: **STEPHAN TUCKER, GENERAL MANAGER**

SUBJECT: **PFAS REMEDIATION PROGRAM UPDATE**

SUMMARY

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals, which include perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), that have been manufactured and used in a variety of industries around the globe and the region since the 1940s. On April 10, 2024, the United States Environmental Protection Agency (EPA) established national drinking water standards for six PFAS, including PFOA, PFOS, perfluorohexane sulfonic acid (PFHxS), perfluorobutane sulfonic acid (PFBS), perfluorononanoic acid (PFNA), and hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX Chemicals). These standards, referred to as Maximum Contaminant Levels (MCLs), are legally enforceable limits in drinking water. PFOA and PFOS have individual MCLs of 4 parts per trillion (ppt), whereas PFHxS, PFNA, and HFDO-DA have individual MCLs of 10 ppt. In addition, a Hazard Index of 1.0 (unitless) was established for mixtures containing two or more of PFHxS, PFBS, PFNA, and HFPO-DA.

All public water systems must monitor for PFAS. Public water systems that have PFAS in drinking water exceeding one or more MCLs must take action to reduce levels of these PFAS and must provide notification to their customers/consumers of the violation.

To assist water purveyors with remediating their PFAS-impacted production wells, the WRD Board of Directors established a $61M PFAS Remediation Program (Program) in 2020 to provide either grants to groundwater pumpers to install their own treatment systems (referred to as Funding Support Projects), or for WRD to design and construct treatment systems for qualified pumpers (referred to as Turnkey Projects). This Program not only restores production from wells that have been shut down due to PFAS contamination, but also prevents the further spread of PFAS in drinking water aquifers.

Thus far, there are 13 pumpers with a total of 38 wells in the Program. Funding Agreements that total $27.3M have been executed with six pumpers. A quarterly update will be provided to the Groundwater Quality Committee regarding the status of the Funding Applications/Agreements and associated pumper projects.

FISCAL IMPACT

None

RECOMMENDATION

For discussion and possible action.

WRD PFAS Remediation Program - Status of Projects

No.	Pumper	Type of Funding Requested	PFAS-Impacted Wells Proposed for Treatment	Quantity of Proposed PFAS Treatment Systems	Estimated Total Project Cost	Program Funding Amount ($1k/AFY)	Executed Funding Amount	Reimbursement to Date	Annual Pumping Requirement (AFY)	3-Year Average Annual Pumping (AFY)	Status
1	Pico Water District	Funding Support	Total of 3 wells: Wells 11, 8, 5A	3	$5.4M	NA	$4.2M	$4.0M	2,765 (entire system)	NA	Funding Agreement executed on 9/23/21. WRD processing monthly reimbursements.
2	City of Commerce	Funding Support	Only 1 well: Well 7-01	1	$2.5M	NA	$2.5M	$0	1,576 (entire system)	NA	Funding Agreement executed on 1/20/22. Pumper preparing reimbursement request.
3	California Water Service Company (Cal Water), East Los Angeles (ELA)	Funding Support	Only 1 well: Well 63-01	1	$4.2M	NA	$4.2M	$0	4,111 (treated well)	NA	Funding Agreement executed on 6/2/22. Pumper reviewing reimbursement request.
4	Montebello Land and Water Company (MLWC)	Funding Support	Total of 7 wells: Wells 7, 8A, 9, 10, 12, 14, 15	1	$11.1M	NA	$6.5M	$0.8M	2,898 (entire system)	NA	Funding Agreement executed on 11/17/22. Pumper received $9.6M from State grant, so WRD was reimbursed $3.9M in Aug 2025. WRD processing monthly reimbursements.
5	La Habra Heights County Water District (LHHCWD)	Funding Support	Total of 4 wells: Wells 8, 9, 10, 11	1	$7.6M	$5M	TBD	NA	TBD	TBD	Funding Application processed by WRD. Pumper considering Annual Pumping Requirement and reviewing Funding Agreement template.
6	City of Compton	Funding Support	Total of 2 wells: Wells 18, 19	1	$9.3M	$3.5M	TBD	NA	TBD	TBD	Funding Application processed by WRD. Pumper considering Annual Pumping Requirement and reviewing Funding Agreement template.
7	South Montebello Irrigation District (SMID)	Funding Support	Total of 3 wells: Wells 3, 5, 8	1	$7.5M	$1.8M	TBD	NA	TBD	TBD	Pumper revising Funding Application for WRD evaluation.
8	City of South Gate	Funding Support	Total of 3 wells: Wells 14, 18, 24	TBD	TBD	TBD	TBD	NA	NA	NA	WRD has not yet received Funding Application from Pumper. Pumper reviewing Funding Agreement template.

WRD PFAS Remediation Program - Status of Projects

No.	Pumper	Type of Funding Requested	PFAS-Impacted Wells Proposed for Treatment	Quantity of Proposed PFAS Treatment Systems	Estimated Total Project Cost	Program Funding Amount ($1k/AFY)	Executed Funding Amount	Reimbursement to Date	Annual Pumping Requirement (AFY)	3-Year Average Annual Pumping (AFY)	Status
9	City of Montebello	TBD	Only 1 well: Well MONT1	1	TBD	TBD	TBD	NA	NA	NA	WRD has not yet received Funding Application from Pumper.
10	City of Bell Gardens	TBD	Only 1 well: Well 1	1	TBD	TBD	TBD	NA	NA	NA	WRD has not yet received Funding Application from Pumper.
11	City of Downey	TBD	Total of 5 wells: Wells 2, 4, 15, 16, 24	TBD	TBD	TBD	TBD	NA	NA	NA	WRD has not yet received Funding Application from Pumper.
COMPLETED PROJECTS											
12	San Gabriel Valley Water Company (SGVWC)	Funding Support	Total of 2 wells: Wells W6C, W6D	1	$4.0M	NA	$4.0M	$4.0M	2,561 (all Central Basin wells)	2,642 (all Central Basin wells)	Funding Agreement executed on 8/18/22. Project and funding by WRD completed in Sep 2022. Pumper preparing Annual Reports.
13	City of Pico Rivera	Funding Support	Total of 5 wells: Wells W1, W2, W3, W4, W5	3	$12.7M	NA	$5.9M	$5.6M	3,444 (entire system)	NA	Funding Agreement executed on 4/7/22. Project and funding by WRD completed in Dec 2025. Pumper to prepare Annual Reports beginning in Aug 2026.
		TOTAL:	38 wells	>15	>$64M	>$10.3M	$27.3M	$14.7M	18,235	2,642	

Attachment 2-9: WRD Updated 2025 Engineering Survey and Report Excerpt

Water Replenishment District

Engineering Survey and Report

2025

March 4, 2025

Updated:
May 15, 2025

WRD
WATER REPLENISHMENT DISTRICT

WATER REPLENISHMENT DISTRICT

MEMORANDUM

DATE: MAY 15, 2025

TO: INTERESTED PARTIES

FROM: STEPHAN TUCKER, GENERAL MANAGER

SUBJECT: UPDATED 2025 ENGINEERING SURVEY AND REPORT

The Water Replenishment District of Southern California ("WRD" or "District") is the groundwater management agency responsible for safe and reliable groundwater in the Central Basin and West Coast Basin in southern coastal Los Angeles County. Groundwater constitutes nearly 50% of the total water demand used by the 4 million residents and businesses in the 43 cities in the WRD service area.

On March 4, 2025, WRD completed an Engineering Survey and Report ("ESR") as required by the California Water Code (Section 60300) to present information on the past, current, and anticipated future conditions in the two groundwater basins within the District's service area. Information is presented on groundwater pumping, groundwater conditions (water levels, overdraft, changes in storage), projects related to groundwater supply and quality, and the amount, sources, and cost of replenishment water needed to balance the annual pumping overdraft.

According to Water Code Section 60305, the ESR must be completed by March of each year. However, the annual Replenishment Assessment ("RA") on groundwater production is not adopted until later in April or May. During the time frame between the March ESR and the adoption of the RA, new and updated information is sometimes received that results in necessary edits to the ESR after adoption of the RA. To document any changes, the District publishes an updated ESR following adoption of the RA. This May 15, 2025 ESR updates and replaces the earlier March 4, 2025 report and contains the latest information on replenishment water sources and costs within the District.

Updated information includes the following:

- Ensuing water year (2025/26) total assessable pumping estimate was revised based on feedback we received from the pumping community from 179,000 acre-feet (AF) to 180,000 AF. Also, extracted stored water and other non-assessable pumping based on current conditions and pumper input is estimated at 31,000 AF. Thus, the total groundwater production for budgeting purposes in the ensuing water year is estimated at 211,000 AF. The total production numbers provided by the pumping community were retained for both the current year (214,000 AF for 2024/25) and the ensuing year (219,000 AF for 2025/26) in the ESR.

- No other significant changes were made to the ESR.

On April 29, 2025, the WRD Board of Directors adopted the 2025/26 RA reflecting an increase of $17 or 3.8% to the RA from $437 to $454 per acre-foot. This amount includes the $12 per acre-foot RA for the PFAS Remediation program. This is slightly lower than the staff estimate provided during the preliminary budget discussions leading up to April 29, 2025 and as documented in the Cost of Service report dated April 15, 2025. The District's Budget Advisory Committee (BAC), an independent group of 13 members from the pumping community who review the District's proposed budget in detail and makes recommendations to the Board of Directors, recommended a total pumping estimate of 211,000 AF with a 0.9% increase to the RA based primarily on lowering the water purchase budget to $38 million versus the $40.5 million budget proposed by WRD. The BAC water purchase recommendation was based on an average of past water purchases with a slight increase using an arbitrary percentage multiplier of 10%. However, what the recommendation did not account for was the known substantial increase in water purchase costs (including surcharges) by the Metropolitan Water District of Southern California (MWD). In fact, these increases are affecting water purchased across the state, not just WRD. The new RA will go into effect July 1, 2025 and will be in effect through June 30, 2026.

My staff and I welcome any comments or questions you may have regarding this updated ESR. Additional copies are available by calling the District at (562) 275-4300 or by downloading it from our web site at http://www.wrd.org. Thank you for your continued interest in groundwater conditions in the WRD Service Area.