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Commissioner	:	<u>Genevieve Shiroma</u>
Administrative Law Judge	:	<u>Jacob Rambo</u>
Public Advocates Office	:	
Witness	:	<u>Timothy Gee</u>



PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

**REPORT ON OPERATIONS AND MAINTENANCE
EXPENSES**

CALIFORNIA AMERICAN WATER COMPANY

General Rate Case Application 22-07-001

Test Year 2024

San Francisco, California
April 13, 2023

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1 **MEMORANDUM**

2 The Public Advocates Office at the California Public Utilities Commission (“Cal
3 Advocates”) examined application material, data request responses, and other
4 information presented by California American Water Company (“Cal Am”) in
5 Application (“A.”) 22-07-001 to provide the California Public Utilities Commission
6 (“Commission” or “CPUC”) with recommendations in the interests of ratepayers for safe
7 and reliable service at the lowest cost. Mr. Courtney Sorensen is Cal Advocates’ project
8 lead for this proceeding. This Report is prepared by Mr. Timothy Gee. Mr. Mukunda
9 Dawadi is the oversight supervisor. Ms. Angela Wuerth and Ms. Emily Fisher are the
10 legal counsel.

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

OPERATIONS AND MAINTENANCE EXPENSES

I. INTRODUCTION

The scope of this testimony is limited to Operations and Maintenance (O&M) expenses (excluding labor) which includes the following items: Purchased Water, Purchased Power, Chemicals, Water Loss Performance Standards, Planning Studies and Maps, and Citizens Acquisition Premium.¹

II. SUMMARY OF RECOMMENDATIONS

Summary Table 1-1 shows Cal Advocates' adjustments to Cal Am's forecasted O&M expenses for Test Year (TY) 2024. Adjustments to accounts such as NARUC Account #704 Purchased Water and #726 Purchased Power reflect more reasonable forecasts based on historical and known cost increases, as these accounts are unreasonably under-forecasted in Cal Am's original projections. Additionally, the Commission should implement a Deceptive Pricing Adjustment as Cal Am continues to under-forecast costs tracked in balancing accounts. Cal Am's under-forecasting of costs in balancing accounts deceptively presents lower rate increases than those Cal Am knows ratepayers will actually experience. Because Cal Am continues this deceptive practice despite having been addressed numerous times in previous General Rate Cases (GRC), the Commission should suspend Cal Am's use of purchased water and purchased power balancing accounts for the instant GRC.

Cal Advocates' proposed adjustments to NARUC Account #744 Chemicals correct Cal Am's erroneous forecasting of chemical costs. Cal Am's errors include incorrect averaging of chemical quantities and inappropriate inclusion of treated purchased water sources into its chemical cost calculations.

¹ Please see Cal Advocates witness Andrew Sweeney's direct testimony for analysis and recommendations pertaining to A&G expense budgets.

Cal Advocates' recommended adjustments to NARUC Account #752 Storage Facilities Expenses address Cal Am's unreasonable forecast of consultant expenses and unnecessary costs related to water leak detection efforts.

Cal Advocates' adjustments to NARUC Account #756 Miscellaneous Expenses reflect the actual spending pattern for Cal Am's planning studies and maps expenses, which has typically been less than the amounts previously authorized and funded by ratepayers for this account.

Other adjustments correct errors in calculating inflation and remove duplicate expenses across numerous accounts and districts.

Table 1-1 – Comparison of Cal Am and Cal Advocates Proposed Budgets

NARUC Account # (a)	O&M expense accounts (b)	Cal Advocates (c)	Cal Am (d)	Difference (c-d)
703	Miscellaneous Expenses	\$622,637.55	\$681,056.25	-\$58,418.70
704	Purchased Water	\$81,996,785.02	\$76,027,775.86	+\$5,969,009.16
704	Deceptive Pricing Adjustment, Purchased Water	-\$6,486,048.42	0.00	-\$6,486,048.42
713	Maintenance of Other Source of Supply Plan	\$645,856.72	\$647,347.33	-\$1,490.62
725	Purchased Power Misc. Expenses	\$701,546.30	\$701,549.55	-\$3.25
726	Purchased Power	\$11,335,551.57	\$10,722,455.52	+\$613,096.05
726	Deceptive Pricing Adjustment, Purchased Power	-\$1,747,002.25	0.00	-\$1,747,002.25
733	Maintenance of Other Pumping Plant	\$228,622.41	\$229,284.46	-\$662.05
742	Operation Labor and Expenses	\$83,816.27	\$89,666.60	-\$5,850.33
743	Water Treatment Miscellaneous Expenses	\$2,354,612.03	\$2,577,621.35	-\$223,009.32
744	Chemicals	\$1,608,874.47	\$1,804,338.02	-\$195,463.55

748	Maintenance of Water Treatment Equipment	\$807,872.76	\$813,695.64	-\$5,822.87
752	TD Storage Facilities expenses	\$2,693.60	\$1,321,603.67	-\$1,318,910.07
756	Miscellaneous Expenses	\$1,734,645.73	\$3,635,338.09	-\$1,900,692.37
761	Maint. Of Transmission and Distribution Mains	\$105,702.53	\$113,211.21	-\$7,508.68
763	TD Maintenance of Services	\$77,524.17	\$78,008.87	-\$484.70
766	Maintenance of Miscellaneous Plant	\$6,264,597.91	\$6,295,479.92	-\$30,882.01
Totals		\$100,338,288.37	\$105,738,432.34	-\$5,400,143.98

III. ANALYSIS

A. NARUC Account #704: Source of Supply – Purchased Water

Despite being tasked with developing a reasonable budget for 2024, Cal Am calculates purchased water expenses using the rates it was charged in 2022—two years earlier. While it escalates most other expenses by anticipated inflation to arrive at a 2024 budget, for Cal Am’s purchased water forecast—which comprises nearly 53 percent of its total expense budget—Cal Am does not forecast any anticipated inflation or cost increases and fails to include the known increases in purchased water costs that have been adopted by water wholesalers or communicated to be in effect for 2024.²

Normally, a utility is incentivized to produce as large a budget as possible because any actual spending less than budgeted expenses would result in additional profit. However, when items are tracked in a balancing account—as is the case with purchased water—this incentive is eliminated as any variance

² \$76,027,776 in Purchased Water costs divided by \$142,658,315 in total expenses approximately equals 53 percent. This total expense figure is derived from Cal Am’s Results of Operations model (ALL_CH04_O&M_RO, Summary of Costs NARUC WS11, Q103) and excludes labor and Service Company costs.

1 between actual and budgeted expenses is either returned or charged to ratepayers.
2 Although the purpose of developing a test year budget (i.e. revenue requirement)
3 is to produce an accurate as possible forecast of revenues and costs in order to
4 provide ratepayers and decisionmakers an understanding of necessary rate
5 changes, Cal Am's under-forecasting of costs tracked in balancing accounts
6 produces a low forecast of rate changes that Cal Am knows it will be able to
7 recoup through surcharges in a subsequent filing with the Commission. The
8 Commission should adopt the following adjustments to Cal Am's purchased water
9 expense forecast based on removing double counted expenses, adhering to
10 historical cost increases, and implementing known and planned future rate
11 changes. First the Commission should make an adjustment to remove double
12 counted costs, which would reduce Cal Am's budget from \$76,027,775.86 to
13 \$75,510,736.60. Second, the Commission should apply historical and known cost
14 increases, which would raise this budget to \$81,996,785.02. Other differences in
15 purchased water expenses resulting from water production estimates are addressed
16 in the testimony of Cal Advocates' witness Herbert Merida.

17 The Commission should also adopt a Deceptive Pricing Adjustment, which
18 would lower Cal Am's budget by \$6,486,048.42. This represents a reasonable
19 calculation of the amount of under-forecasted water supply expense.

20 Also, Cal Am is continuing its practice of requesting artificially low rate
21 changes through under-forecasting costs tracked in balancing accounts in the
22 current GRC even though Cal Advocates has raised concerns about this practice in
23 the past. Therefore, the Commission should suspend the use of balancing accounts
24 for Purchased Water for this GRC cycle.

25 **1. Remove Double Counted Purchased Water**
26 **Expenses for Fruitridge District**

27 Cal Am inappropriately double counted purchased water expenses
28 for the Fruitridge and Monterey-Garrapata Districts. Because Fruitridge and

Monterey-Garrapata are considered part of larger “rollup” districts of Sacramento and Monterey respectively, these expenses are already projected in Cal Am’s purchased water workpaper for Northern and Central Division expenses. The Commission should remove these double counted expenses, which amount to \$517,039.26 for TY 2024.³

2. Commission Should Take Into Account Historical Cost Increases for Projected Purchased Water Expenses

Cal Am’s TY 2024 forecast for purchased water assumes that water rates will not change between 2022 and 2024. This is an unreasonable assumption as 2017-2021 historical data show that overall water costs have steadily increased across all Cal Am districts.⁴ Cal Am’s practice of under-forecasting costs tracked in balancing accounts was first identified in its 2016 GRC.⁵ Because of the protections afforded by balancing accounts, under-forecasting provides a false impression that requested rates are lower than what will actually be experienced by ratepayers. In addition to removing the incentive to control costs, balancing accounts also remove the incentive for Cal Am to accurately forecast expenses because any variance between actual and forecasted is resolved through later surcharges.

In the last GRC, Cal Advocates demonstrated how Cal Am under-forecasted items tracked in balancing accounts to deceptively understate

³ Attachment 2 (Double Counted Purchased Water Expenses): CAW Response Cal Adv TGE 07, under Cal Am Response “a.”, at 5.

⁴ Attachment 3 (2017-2021 Recorded Purchased Water Expenses and Purchased Water Rate Increase Calculations for Test Year 2024): 2022-08-05 A2207001 CAW Response Cal Adv TGI 01.pdf, and snapshot of Cal Adv TGI 01 Q001 Attachment 1 (showing all recorded purchases water expenses data from 2017 through 2021).

⁵ Attachment 4 (Direct Testimony of Anusha Nagesh): *Report and Recommendations on Operations and Maintenance and Administrative and General and Expenses, Labor Expenses, Balancing and Memorandum Accounts and Special Requests #2,3, and 13* from A.19-07-004, at 3-7.

1 ratepayer bill impacts.⁶ Cal Advocates’ analysis showed that surcharges
2 from all balancing accounts comprised 20% on average of Cal Am
3 customer bills, and as high as 53%.⁷ These customer bill impacts were in
4 addition to the rate increases proposed in GRCs.

5 In the current GRC, a reasonable forecast of purchased water costs
6 would incorporate the average annual percent increase in purchased water
7 rates over the entire period for which historical data has been provided
8 (2017-2021). Incorporating the average annual percent increase results in
9 an approximate increase of \$5,428,819 to Cal Am’s forecast for TY 2024.⁸

10 **3. Cal Am Should Have Included All Known** 11 **Increases in Purchased Water Costs**

12 Commission decisionmakers and ratepayers deserve the best
13 estimate of anticipated bill impacts. To achieve this minimal level of
14 transparency, the most reasonable forecasts of costs must be provided in
15 GRCs. This is especially important for items tracked in balancing accounts
16 like purchased water costs, where all known changes in costs should be
17 incorporated into the forecast.

⁶ Attachment 5 (Jayne Parker Testimony from A.19-07-004): A.19-07-004, Report and Recommendations on Rates and Surcharges, Jayne Parker at 1-3.

⁷ Attachment 5 Jayne Parker Testimony from A.19-07-004 at 2.

⁸ Attachment 3 shows calculations for average annual percent increases by expense and by district. Calculations utilize historical 2017-2021 rates, as well as 2022 rates for added accuracy, to calculate average annual percent increase for each expense. The average percent increase is applied for each expense for each year to arrive at TY 2024 rates. For example, an average annual percent increase of 5% is applied to a 2022 rate of \$100 and yields a 2023 rate of \$105. 5% is applied again to \$105 to arrive at a 2024 rate of \$110.25. Exceptions to incorporating this increase apply to expenses that remain unchanged from historical years, or expenses with historical years showing a decreasing trend. These expenses retain Cal Am’s forecast for TY 2024. Additionally, any year-to-year rate changes greater than 100% are ignored in calculating the average annual percent increase for an expense, since these extreme rate changes are unlikely to occur in the future. Rate adjustments for Pure Water Monterey Rate Per AF uses Escalation Factors from Cal Am to estimate TY 2024 expenses as using only two years of available recorded data results in a year-over-year increase of 20%, and it is uncertain whether this magnitude increase is realistic.

1 For example, in Cal Am's LA-Baldwin Hills and LA-San Marino
2 Districts, purchased water providers have documented planned rate changes
3 for the years 2022 and 2023. In the LA-Baldwin Hills, the West Basin
4 Municipal Water District's (West Basin WMD) *2022-2023 Operating*
5 *Budget* shows that the water agency will increase purchased water rates
6 from the current rate of \$1,488 per acre-foot to \$1,500 per acre-foot for July
7 2022, and to \$1,587 per acre-foot for January 2023.⁹ Other West Basin
8 MWD expenses see planned decreases in rates for the years 2022 and 2023,
9 though historical five year data indicate that these rates may still be higher
10 than Cal Am's projections for TY 2024.¹⁰ ¹¹ In Cal Am's LA-San Marino
11 District, the Metropolitan Water District (MWD) documents planned
12 changes to monthly capacity charges, which changes Cal Am's current rate
13 of \$6,687.50 to \$7,422 in 2022, and to \$6,448 in 2023.¹² Cal Am should
14 have incorporated these known cost changes into its proposed budgets.

15 Additionally, in June 2022, the San Diego County Water Authority
16 (SDCWA) approved rate increases of "3.7% for untreated water and of

⁹ Attachment 6: *West Basin Municipal Water District Financial Report* at 66;
<https://www.westbasin.org/wp-content/uploads/2022/08/West-Basin-Operating-Budget-for-Fiscal-Year-2022-2023.pdf>.

¹⁰ Attachment 6: *West Basin Municipal Water District Financial Report* at 70-71. The capacity charge reduces from \$10,025 per cubic foot per second (cfs) in 2022 to \$9,135/cfs in 2023. West Basin MWD multiplies this capacity charge by a customer's 3-year peak of average daily usage (Cal Am's peak is 5 cfs) to yield a customer's capacity charge. This results in a per month capacity charge of \$3,806.24 for 2023 (\$9,135/cfs times 5 cfs, divided by 12 months).

¹¹ Attachment 6: *West Basin Municipal Water District Financial Report* at 69. West Basin MWD Monthly Water Service Charge will decrease to \$6,565 in 2022.

¹² Attachment 33: Metropolitan Water District– Rate Structure Administrative Procedures Handbooks for Fiscal Year 2021-2022 and Fiscal Year 2022-2023 at 13 and at 13 for both handbooks. 2022 capacity charge of \$89,060 yields a monthly rate of \$7,421.67 (\$89,060 / 12 months). 2023 capacity charge of \$77,380 yields a monthly rate of \$6,448.33 (\$77,370 / 12 months).

1 5.2% for treated water” beginning in January 2023.¹³ Member agencies,
2 which includes City of San Diego, Cal Am’s sole purchased water
3 wholesaler in San Diego District,¹⁴ are expected to increase their own water
4 rates to account for the SDCWA rate increases. As of September 2022, the
5 City of San Diego proposed an increase of 3% for all water rates for its
6 customers.¹⁵ Again, Cal Am should have incorporated these increases into
7 its proposed 2024 budgets.

8 Adopting these known cost changes in the LA-Baldwin Hills, LA-
9 San Marino, and San Diego districts results in an additional increase of
10 \$1,056,229 to Cal Am’s forecast for TY 2024.¹⁶

11 **4. Seaside Basin Water Master and Sand City** 12 **Accounting Errors**

13 In Cal Am’s response to Cal Advocates’ Data Request TGE-04, Cal
14 Am admits to several accounting errors in its recorded expenses for Sand
15 City and Seaside Basin Water Master. This led to an erroneous escalation
16 of costs for Test Year 2024 in the Central Division. Cal Am agrees to

¹³ Attachment 7 (San Diego County Water Authority News Release): “Water Authority Adopts 2023 Rates and Charges,” www.sdcwa.org/water-authority-adopts-2023-rates-and-charges; Attachment 8 (SDCWA June Board Packet Notice to the Public): “Adopt the Water Authority’s Rates and Changes for the Year 2023” at 65-66, https://www.sdcwa.org/wp-content/uploads/2021/11/2022_06_23BoardPacketSEC.pdf.

¹⁴ CAW 2022 GRC Final Application, Exhibit B – Volume 1 of 3 (MDR Sections A-F), at 6-5 or p.1449 of 2043.

¹⁵ Attachment 9 (City of San Diego Notice of Public Hearing): “Proposed Increase to Water Rates,” https://www.sandiego.gov/sites/default/files/186151_prop_218_notice_mailer_sept_2022.pdf.

¹⁶ TY 2024 rates for these expenses are calculated using the average annual percent increase based on historical rate changes after the known cost changes are applied to 2022 and 2023 rates. Known 2023 rates are also included in calculating average annual percent increase for these expenses. Refer to Attachment 3 for calculations of the average annual percent increase of historical rate data.

correcting their recorded costs, which results in a reduction of \$78,800 for TY 2024.¹⁷

5. The Commission Should Institute a Deceptive Pricing Adjustment and Suspend Purchased Water Balancing Accounts for this GRC

To protect customers from Cal Am's deceptive and deliberate under-forecasting and resultant surcharges from balancing accounts, the Commission should institute a Deceptive Pricing Adjustment that removes \$6,486,048.42 from Cal Am's 2024 budget. This amount is equal to the amount Cal Am under-forecasted for purchased water. Additionally, the Commission should suspend the use of purchased water balancing accounts for this GRC to send a message to Cal Am that its deliberate lack of transparency and abuse of balancing accounts will not be tolerated.

B. NARUC Account #726 – Purchased Power

Like with Purchased Water, Cal Am produces an unreasonable forecast for 2024 Purchased Power expenses by utilizing the same rates as from 2022. Cal Am deliberately under-forecasts purchased power costs by ignoring any anticipated inflation or other cost increases for power. Cal Am also abuses the use of balancing accounts that track Purchased Power expenses. This eliminates the incentive for Cal Am to produce an accurate forecast that anticipates cost increases for power since the variance between actual and budgeted expenses is returned or charged to ratepayers. The result is a deceptive forecast that produces artificially low rates and allows Cal Am to recoup the difference tracked in balancing accounts via surcharges to ratepayers.

¹⁷ Attachment 10 (Seaside Watermaster and Sand City Corrections): 2022-09-07 A2207001 CAW Response Cal Adv TGE 04, and CAW Response Cal Adv TGE 04 Q002.b Attachment 1, which summarizes Original and Corrected expenses for Sand City and Seaside Basin Water Master.

1 The Commission should adopt the following adjustments based on
2 removing inappropriate double counted expenses and applying historical cost
3 increases for purchased power rates. First, the Commission should make an
4 adjustment to remove double counted purchased power expenses, which reduces
5 Cal Am's forecast from \$10,722,455.52 to \$9,588,549.32. Second, the
6 Commission should apply historical cost increases to this forecast, which results in
7 an increase to \$11,335,551.57. Other differences in purchased power expenses
8 resulting from water production estimates are addressed in the testimony of Cal
9 Advocates' witness Herbert Merida.

10 Like with Purchased Water, the Commission should also implement a
11 Deceptive Pricing Adjustment for Purchased Power, whereby the Commission
12 should lower Cal Am's total recovery from ratepayers by \$1,747,002.25, which is
13 a reasonable calculation of the amount of deliberately under-forecasted power
14 expenses. Since the deliberate abuse of balancing accounts highlighted in Cal
15 Am's deceptive under-forecasting with purchased water expenses also applies to
16 purchased power, the Commission should also suspend the use of balancing
17 accounts for Purchased Power for this current GRC cycle.

18 **1. Removal of Double Counted Purchased Power**
19 **Expenses for TY 2024**

20 Cal Am inappropriately double counted purchased power expenses
21 for several water systems.¹⁸ Cal Am includes expenses from these smaller
22 water systems and groups them with its larger "roll-up" districts in its
23 purchased power workpaper calculations. However, Cal Am double
24 counted expenses for these water systems by projecting a five-year inflation
25 adjusted average based on their recorded expenses from 2017-2021. Doing
26 so double counts what is already included in Cal Am's purchased power

¹⁸ The affected water systems include Monterey – Toro, Monterey – Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview.

workpaper, leading to \$1,133,906.20 in double counted expenses for Test Year 2024. Cal Am acknowledges the double counted expenses and agrees to remove them for all projected years, including TY 2024.¹⁹

2. The Commission Should Adopt Historical Rate Increases for Projected Purchased Power Expenses

Cal Am unreasonably forecasts flat and uniform power rates from 2022 through TY 2024. Historical data from 2017-2021 historical data indicate that overall power costs have steadily increased across all Cal Am districts.²⁰ Like with purchased water, past testimony and current findings indicate an abusive pattern of deliberate under-forecasting for purchased power expenses tracked in balancing accounts.²¹ The extraordinary protections afforded by balancing accounts allow Cal Am to give the false impression of low rates by under-forecasting expenses for TY 2024, knowing that the difference between actual and budgeted purchased power expenses will be paid for by California ratepayers via surcharges.

For this current GRC period, the Commission should adopt an annual increase of 5.74% on the cost per kilowatt hour (\$/KWH) for purchased power. 5.74% represents the average historical annual increase in cost per kilowatt hour rates for recorded years 2017-2021.²²

¹⁹ Attachment 11 (Double-Counted Purchased Power Expenses): 2022-11-30 A2207001 CAW Response Cal Adv TGE 14, at 4-5.

²⁰ Attachment 12 (Purchased Power 2017-2021 Recorded Year Rate Increases): 2017-2020 data from CAW Response Cal Adv TGE 02 Q001 Attachment 1, and 2021 data from workpaper ALL_CH04_O&M_WP_Purchased Power, worksheet tab Purchased Power Details WS-1.

²¹ Attachment 4 (Direct Testimony of Anush Nagesh): *Report and Recommendations on Operations and Maintenance and Administrative and General and Expenses, Labor Expenses, Balancing and Memorandum Accounts and Special Requests #2,3, and 13* from A.19-07-004 at 3-7.

²² Attachment 12 explains calculation for 5.74% annual increase for \$/KWH.

Incorporating an annual increase of 5.74% results in an increase of \$1,747,002 to Cal Am's TY 2024 forecast.

3. The Commission Should Adopt a Deceptive Pricing Adjustment and Suspend Purchased Power Balancing Accounts for this GRC

Similar to purchased water, the Commission should protect customers from Cal Am's deceptive and deliberate under-forecasting and resultant surcharges from balancing accounts by instituting a Deceptive Pricing Adjustment that removes \$1,747,002.25 from Cal Am's budget for TY2024. This amount is equal to the amount Cal Am under-forecasted for purchased power. The Commission also should suspend the use of purchased power balancing accounts for this GRC to signal to Cal Am that its deliberate under-forecasting and abuse of balancing accounts will not be tolerated.

C. NARUC Account #744 - Chemical Expenses

Cal Am calculates chemical expenses by utilizing a three-year historical average of chemical quantities by district and dividing by the three-year historical average total water production in one-hundred cubic feet (CCF) for that same district to arrive at a pounds of chemical per CCF of water figure. Cal Am then takes the pound per CCF number for each chemical and multiplies by the projected total water production for that district to arrive at the projected chemical quantity for each year. The chemical quantity is then multiplied by cost per unit factor to arrive at the annual expenses for that chemical. The cost per unit factor for each unique chemical is based on the current 2022 price, which is then increased by inflation to arrive at the 2024 budget.²³

²³ Direct Testimony of Bahman Pourtaherian at 17-18.

Cal Am committed errors in its forecasting methodology for chemical expenses. These errors include incorrectly excluding years of zero usage for certain chemicals and not distinguishing between pumped and purchased water when calculating total chemical costs. Using Cal Am’s methodology would result in an inaccurate forecast of chemical expenses. Instead, the Commission should adopt a budget that utilizes a five-year inflation adjusted average as Cal Am proposed in its last GRC.²⁴ A five-year inflation adjusted average reduces Cal Am’s forecast from \$1,804,338.02 to \$1,608,874.47. Any other differences in the chemical expense forecast may be the result of differences in water production estimates addressed in the testimony of Cal Advocates’ witness Herbert Merida. Table 1-2 compares Cal Am’s and Cal Advocates’ forecasts for chemicals for TY 2024.

Table 1-2 – Comparison of Cal Advocates’ Recommended and Cal Am Requested Chemicals Budgets for TY 2024

NARUC Account (a)	Cal Advocates Recommended (b)	Cal Am Requested (c)	Cal Adv < Cal Am (b-c)
744 Chemicals	\$1,608,874.47	\$1,804,338.02	-\$195,463.55

1. Erroneous Three-Year Average

California American Water states that “chemical costs were calculated based on three years of average actual chemical usage” for its forecasting methodology.²⁵ However, for several chemicals, Cal Am does not use a three-years average of chemical quantity; instead, Cal Am omits years within the three-year period with zero usage. For example, where a

²⁴ Attachment 13 (2019 Pourtaherian Testimony on Chemical Expenses): Direct Testimony of Bahman Pourtaherian at 19 from Cal Am’s 2019 GRC Application (A.19-07-004).

²⁵ Direct Testimony of Bahman Pourtaherian, at 17.

chemical was deployed in only two out of the three historical years, CAW's methodology omits the year with zero chemical usage, resulting in a two-year average. Similarly, for chemicals with only one year of historical usage, CAW omits the other two years of zero usage and labels the single year historical amount as the "three-year" historical average. Correcting for Cal Am's erroneous averaging results in approximately a \$17,822 reduction.

2. Inappropriate Inclusion of Purchased Water in Forecast Calculations

Cal Am also erroneously forecasts chemical expenses by incorporating a three-years average total water production into its calculations without distinguishing between pumped water and purchased water for Cal Am districts that utilize both sources. Purchased water is typically treated with chemicals before being purchased from wholesaler water agencies. For example, in the Los Angeles District, Cal Am purchases treated water ready for potable use from The Metropolitan Water District of Southern California (MWD) and from the West Basin Municipal Water District (WBMWD).²⁶ ²⁷ In the Sacramento District, Cal Am purchases water from the City of Sacramento, which treats surface water from the Sacramento River at its two water treatment plants before entering its water distribution system.²⁸ The City of Sacramento also delivers

²⁶ CAW 2022 GRC Final Application Exhibit B – Volume 1 of 3 (MDR Sections A-F), Los Angeles County District 2020 Urban Water Management Plan, at 6-11 to 6-12, or at 548 to 549 out of 2043.

²⁷ Attachment 14 (Metropolitan Water District of Southern California Water Treatment) shows of MWD's chemical water treatment process. www.mwdh2o.com/your-water/water-quality-and-treatment/. Retrieved March 11, 2023.

²⁸ Attachment 15 (City of Sacramento 2020 Urban Water Management Plan) at ES-3 or at 20 of 448. <http://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/Sacramento-2020-UWMP---Final-w-Ltr-of-Acceptance.pdf?la=en>.

1 groundwater which is treated on site at its various groundwater wells.²⁹
2 The City of Sacramento’s water distribution system is a single system that
3 delivers “Drinking Water” quality water to both its retail customers and
4 wholesale customers, including Cal Am.^{30 31 32}

5 The evidence clearly demonstrates that Cal Am’s purchased water
6 supply undergoes treatment. Therefore, the per unit cost of purchased
7 water already reflects the application of chemicals by these agencies. By
8 not distinguishing between pumped and purchased water, Cal Am
9 inaccurately forecasts the projected amount of chemicals for water
10 treatment. Correcting Cal Am’s error by excluding purchased water from
11 its chemicals forecast calculation results in approximately a \$177,642
12 reduction.

13 Consequently, the Commission should adopt a 5-year inflation
14 adjusted average to forecast Cal Am’s chemical expenses. The resulting
15 amount would closely approximate corrections to Cal Am’s erroneous
16 forecasts, as well as offer a more reasonable and simpler methodology for
17 predicting chemical costs.

²⁹ Attachment 16 (City of Sacramento Drinking Water Source and Treatment): City of Sacramento Utilities website. www.cityofsacramento.org/Utilities/Water/Water-Quality/Where-Your-Water-Comes-From. Retrieved March 11, 2023.

³⁰ Attachment 15 (City of Sacramento 2020 Urban Water Management Plan) at 4-11 or at 59 of 448. “The City’s distribution system for retail and wholesale customers is a single system and not separated.”

³¹ Attachment 15 (City of Sacramento 2020 Urban Water Management Plan): Table 4-7 Wholesale Demands at 4-7 or p 55 of 448.

³² Attachment 17 (Department of Water Resources Submittal Table 4-1): Snapshot of Excel workbook template for Attachment 15’s Table 4-7. Shows three dropdown choices for water quality treatment levels, which include “Drinking Water”, “Raw Water,” and “Other Non-Potable Water,” demonstrating that the selection of “Drinking Water” in Table 4-7 shows that water delivered to Cal Am is treated. Obtained at Department of Water Resources Water Use Efficiency Data website. https://wuedata.water.ca.gov/public/public_resources/7257642447/FINAL%20Submittal%202020%20UWMP%20Tables%2005.20.2021.xlsx. Retrieved March 11, 2023.

**D. NARUC Account #752: Storage Facilities Expenses
(Water Loss Performance Standards)**

Cal Am is requesting \$3,948,646.58 in operational expenses spread equally across the years 2024-2026, resulting in \$1,316,216 for TY 2024 for expenses related to Water Loss Performance Standards.³³ ³⁴ Water loss performance standards are set by an economic model currently in development by the State Water Resources Control Board (SWRCB) and primarily address real water loss.³⁵ Real water loss specifically refers to physical water loss resulting from systems leakage.³⁶ State water providers enter various inputs, such as number of service connections and leakage volume, into the economic model to provide an individualized water loss standard.³⁷

The Commission should deny the entirety of Cal Am's request of \$1,316,216 for operational expenses related to Water Loss Performance Standards in TY 2024, due to no current agreed upon SWRCB performance standards, the unreasonableness of Cal Am's proposed consultant fees, and the redundancy of existing mains replacement programs and other surveys that already engage in proactive leak detection. These reasons are explained in detail in the sections below.

³³ Direct Testimony of Patrick Pilz, at 35-37, and at Attachment 7.

³⁴ Workpaper ALL_CH04_O&M_WP_Other O&M Exp Adj.xlsb, worksheet tab INPUT Adjustments, cells T99 through T104, and cells U99 through U104. Each year totals \$1,316,216 in expenses.

³⁵ Attachment 18 (Water Loss Performance Standards Draft Regulatory Text): Section 981 Volumetric Water Loss Performance Standards and Section 982. Economic Model, at 8-18.
https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2022/water-loss-regulatory-text-10-14-22.docx

³⁶ Attachment 19 (Fact Sheet on Water Loss Performance Standards) at 1 of 4, Footnote 2. Real water loss is defined as "the physical loss of water from water distribution systems."
https://www.waterboards.ca.gov/conservation/docs/waterlosscontrol/2020/waterlossperformancestandards_factsheet_18november2020.pdf. Retrieved March 17, 2023.

³⁷ Attachment 19 (Fact Sheet on Water Loss Performance Standards) at 4 of 4, Background section.

1 **1. No Agreed Upon Economic Model Set by the**
2 **SWRCB**

3 Cal Am and other urban water providers will have individualized
4 water performance loss standards based on their individual inputs into
5 SWRCB's economic model. However, SWRCB's text of proposed
6 regulations for Water Loss Performance Standards, including the economic
7 model, have yet to be finalized. SWRCB's Draft Regulatory Text for
8 Water Loss Performance Standards was last updated on October 14th,
9 2022.³⁸ The SWRCB last held a board hearing on October 19th, 2022, and
10 released a draft response to various comments and proposed changes to the
11 performance standards.³⁹ There is no indication that SWRCB has finalized
12 either the regulatory text or economic model for the Water Loss
13 Performance Standards. Cal Am's estimates for leak detection is based in
14 part on SWRCB's economic model. Estimating operational expenses for
15 Water Loss Performance Standards without a finalized economic model
16 would be premature and likely to result in an inaccurate forecast.

17 **2. Unreasonableness of Cal Am's Proposed**
18 **Consultancy Costs**

19 Cal Am estimates consultant expenses at \$1,500,000 over three
20 years, bringing annual consulting expenses to \$500,000 in TY 2024. This
21 estimate assumes an expense of \$250,000 for each of Cal Am's six districts
22 over three years.⁴⁰ Cal Am explains that this amount was provided by its

³⁸ Attachment 20: SWRCB Water Loss Website
https://www.waterboards.ca.gov/conservation/water_loss_control.html. Retrieved April 3, 2023.

³⁹ Attachment 20: SWRCB Water Loss Website. Draft response to comments may also be viewed at
https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2022/draft-water-loss-response-to-comments.docx

⁴⁰ Direct Testimony of Patrick Pilz, at 35-37, and at Attachment 7.

1 consultant, E-source, as an estimate based on prior experience providing
2 consulting services for other water agencies and providers.⁴¹

3 Cal Am's estimate is unreasonable for the following reasons. The
4 assumption that each of Cal Am's six primary districts would each yield the
5 same expense is unreasonable given that these service areas vary greatly in
6 size, area, and number of customers. For example, as of 2021, Cal Am
7 serves approximately 21,791 customers in the San Diego District and
8 69,059 customers in the Sacramento District.⁴² Cal Am also states in a data
9 request response that "individual district consulting costs will ultimately
10 vary based on scope and efforts needed to bring each service area into
11 compliance."⁴³ Basing expense estimates on prior consulting experience
12 with other water provider agencies is also unreasonable, as the scope,
13 needs, and circumstances of various providers is also likely to differ
14 greatly. The Water Loss Performance Standards themselves are intended to
15 provide individualized standards based on the unique needs and
16 circumstances of each urban water provider. Cal Am provides no other
17 justification for consultancy expenses other than citing the E-Source
18 estimate. When asked to provide documentation to justify the expense of
19 \$250,000 for each district, Cal Am could not do so.⁴⁴

⁴¹ Attachment 21:2022-12-07 A2207001 CAW Response Cal Adv TGE 15, at 5-6

⁴² The Sacramento District encompasses eight service areas: Sacramento, Meadowbrook, Fruitridge, Hillview, Dunnigan, Dunnigan Wastewater, Geyserville, and Bass Lake. Refer to workpaper All_CH03_REV_RO_Sales-Customers, worksheet tab Rec Customers WS-01 for customer numbers.

⁴³ Attachment 21: A2207001 CAW Response Cal Adv TGE 15, at 5-6

⁴⁴ Attachment 21: A2207001 CAW Response Cal Adv TGE 15, at 4-6

1 **3. Adequacy of Cal Am’s Current Leak Detection**
2 **Efforts**

3 Cal Am currently implements robust mains improvement and
4 replacement programs in its service areas, making Cal Am’s request for
5 additional expenses related to leak detection for water loss performance
6 standards redundant. The implementation of these main replacement
7 programs is based on Cal Am’s Condition Based Assessments (CBA). A
8 primary purpose of a CBA is to “identify water mains that need
9 rehabilitation and/or replacement.”⁴⁵ Leak and breakage history is a key
10 evaluation criterion in the main replacement CBA, indicating that Cal Am
11 already performs routine proactive leak detection through CBAs.⁴⁶ For
12 example, as cited in the testimony of Cal Advocates’ witness Sari Ibrahim,
13 Cal Am cancelled its Ventura St. Charles Oaks Apartments Main
14 Replacement project, citing an inspection that demonstrated the existing
15 main’s adequacy.⁴⁷

16 **4. Cal Am’s Reported Average Water Loss Falls Well**
17 **Below the State Average**

18 Cal Am’s current and historic water loss data also show that Cal
19 Am’s current efforts and budget adequately support robust and proactive
20 leak detection. As part of requirements set by “Minimum Data
21 Requirement II.E.3. – Water Loss Audit,” Cal Am already provides annual
22 water loss audit data for each of its stand-alone water systems across Cal

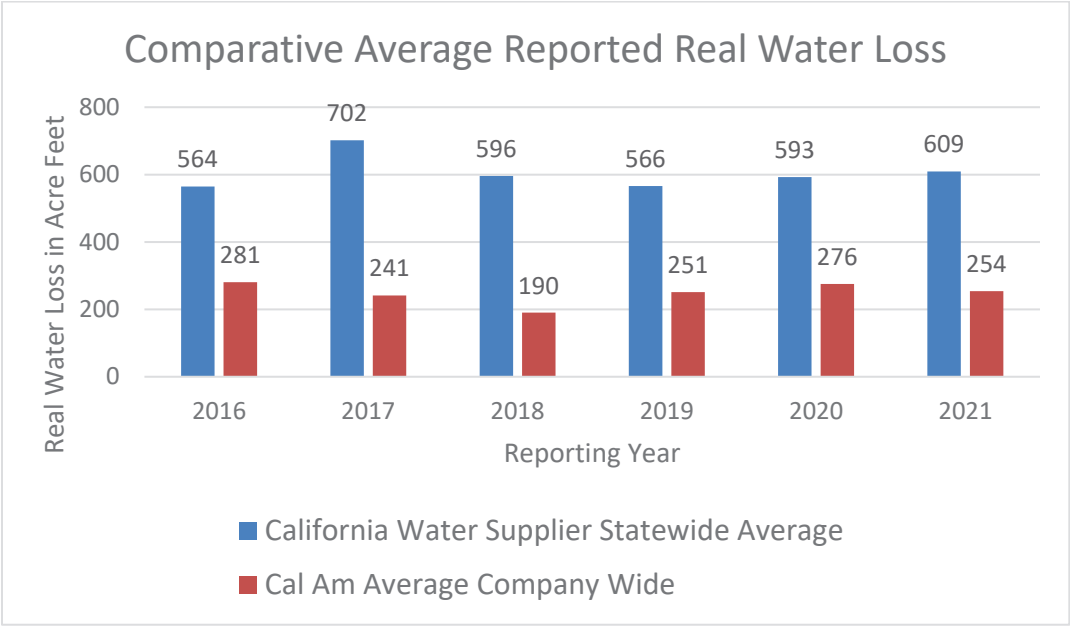
⁴⁵ Attachment 22: Cal Am Los Angeles County District 2019 Condition Based Assessment (Redacted), Section 1 Existing System, attached as part of the redacted public version of California American Water 2019 Los Angeles Country District Comprehensive Planning Study, p. 942 of 1495.

⁴⁶ Attachment 22: Cal Am Los Angeles County District 2019 Condition Based Assessment (Redacted), Section 2 Main Replacement Methodology, 2.3.8 Break/Leak History, attached as part of the redacted public version of California American Water 2019 Los Angeles Country District Comprehensive Planning Study, at 950 and 959 of 1495.

⁴⁷ Refer to the Testimony of Cal Advocates’ witness Sari Ibrahim.

Am’s six districts.⁴⁸ Figure 1-1 below compares Cal Am’s annual average real water losses to the annual statewide average of all reporting California water suppliers.⁴⁹ The data clearly shows that Cal Am’s real water loss figures are already well below the statewide average. In 2021, Cal Am reported a company-wide average of 254 acre-feet of real water loss for its water systems, far lower than the statewide average of 609 acre-feet. The data shows similar disparities across the years 2016-2021. The data demonstrates that Cal Am’s current leak detection efforts are robust and adequate. Therefore, Cal Am’s request for additional leak detection expenses for water loss performance standards is redundant and imprudent.

Figure 1-1: Cal Am Average Real Water Loss and Statewide Average Real Water Loss



⁴⁸ Cal Am’s 2022 GRC Application, Exhibit B Vol. 1 of 3 MDR Sections A-F for MDR II.E.3 – Water Loss Audit, at 366 of 2043.

⁴⁹ Water audit data was obtained from Water Loss Audit Reports data hub at the Water Use Efficiency Data (WUEdata) website maintained by Department of Water Resources. https://wuedata.water.ca.gov/awwa_export. Retrieved March 12, 2023.

1 **E. NARUC Account #756 - Miscellaneous Expenses**

2 NARUC Account #756 Miscellaneous Expenses includes expenses related
3 to Planning Studies, Comprehensive Planning Studies (CPS), and System Maps.
4 Each of these three items are broadly referred to as “planning studies and system
5 maps costs” both in Cal Am’s literature and in this testimony.⁵⁰ Cal Am planning
6 studies proposed outside of CPS are hereby referred to as “individual planning
7 studies.” Cal Am sums up expenses for planning studies, CPS studies, and
8 systems maps to yield total expenses for each year. Cal also estimates planning
9 studies and map expenses for Escalation Years 2025 and 2026, with many
10 individual planning studies slated to begin in those years.⁵¹ Lastly, Cal Am
11 proposes splitting all planning studies and system maps expenses for 2024 through
12 2026 into equal amounts across these three years to arrive at its planning studies
13 and maps budget of \$2,283,100 for TY 2024.⁵²

14 The Commission should limit Cal Am’s request for individual planning
15 studies to 40% of proposed expenses due to past underspending for individual
16 planning studies expenses. The Commission should also adopt a five-year
17 inflation adjusted average for maps expenses due to a consistent pattern of
18 underspending dating back to Cal Am’s 2016 GRC. Lastly, the Commission
19 should disallow the entirety of Cal Am’s proposed expenses related to CPS
20 studies, due to the planning length of already completed CPS studies and the
21 ability of Cal Am’s in house engineers to complete future CPS studies. These
22 reductions also affect Cal Am’s estimates for 2025 and 2026, which in turn affect
23 TY 2024 estimates due to Cal Am’s proposal to equally split these expenses across

⁵⁰ Direct Testimony of Ian Crooks, Section XVI. Planning Studies and System Maps, at 241-248.

⁵¹ Direct Testimony of Ian Crooks, at 247-248, Planning Studies and System Maps Costs.

⁵² Direct Testimony of Ian Crooks, at 247-248 and Workpaper ALL_CH04_O&M_WP_Other O&M Exp Adj.xlxb, worksheet tab INPUT Adjustments, cells T27, U27, T35, U35, T43, U43, T55, U55, T63, U63, T71, U71, T79, and U79.

1 2024 through 2026. This reduces Cal Am's planning studies, CPS, and system
2 maps forecast for TY 2024 from \$2,283,100 to \$645,931.26, a reduction of
3 \$1,637,168.74. The Commission should also reduce NARUC Account #756
4 expenses by an additional \$198,394.89 due to duplicate expenses already
5 accounted for in Cal Am's forecast for Planning Studies and Maps expenses. The
6 Commission should also reduce Cal Am's budget by \$65,128.74 due to an
7 averaging error in Cal Am's forecasting in several Cal Am Districts as explained
8 in Section F: Averaging Error in Cal Am Forecasting, of this testimony. In sum,
9 these adjustments reduce Cal Am's overall forecast for NARUC Account #756
10 expenses from \$3,635,338.09 to \$1,734,645.73.

11 **1. The Commission should limit Cal Am's request for**
12 **individual planning studies to 40% of proposed**
13 **expenses due to past underspending.**

14 Cal Advocates sampled various Cal Am individual planning studies
15 expenses from then Test Year 2021, which amounted and reviewed to
16 \$2,272,250 of approved expenses. Cal Am spent only \$911,843, or 40%
17 overall, of the approved \$2,272,250 for this sample. For example, the Los
18 Angeles Well Plan Study and Ventura Water Storage Tank Seismic Study
19 spent 9% and 25% of their allocated approved expense amounts
20 respectively. Only one study, Cal Am's company-wide study on portable
21 generators, met its approved expense amount for 2021. Table 1-3 below
22 shows the specific 2021 studies sampled and compares their approved
23 spends to Cal Am's actual recorded expenses for these specific planning
24 studies.

Table 1-3 –2021 Expenses Comparison for Sampled 2021 Individual Planning Studies ⁵³

District & Study	Authorized (a)	Invoiced (b)	Difference (b-a)
Monterey SCADA Master Plan	\$222,250	\$89,500	-\$132,750
Los Angeles Tank Seismic Assessment	\$500,000	\$198,567	-\$301,433
Los Angeles Well Master Plan	\$150,000	\$13,431	-\$136,569
Ventura Water Storage Tank Seismic Study	\$700,000	\$172,975	-\$527,025
Ventura Integrated Water Supply	\$550,000	\$230,000	-\$320,000
CAW Corporate Portable Generator Power Shutoff Study	\$150,000	\$207,370	\$57,370
Total	\$2,272,250	\$911,843	-\$1,360,407

Invoices from the sampled studies also show that Cal Am contracted for planning studies well below the amounts approved by the Commission for then Test Year 2021. Invoices for Cal Am’s Ventura Water Storage Tank Seismic Study show that Cal Am contracted this study for \$376,598 when it received Commission approval for \$700,000.⁵⁴ Similarly, Cal Am’s Ventura Integrated Water Supply (IWS) study received Commission approval for \$550,000, but Cal Am contracted this study for \$320,000.⁵⁵ The difference between the Commission’s authorized amounts and Cal

⁵³ Attachment 23: 2022-10-07 A2207001 CAW Response Cal Adv TGE 11 showing actual expenses for the studies sampled in the data request at 5-7.

⁵⁴ Attachment 24: 2022-10-07 A2207001 CAW Response Cal Adv TGE-11 Q002 Attachment 4 (Ventura Seismic Tank Assessments Spend).

⁵⁵ Attachment 25: 2022-10-07 A2207001 CAW Response Cal Adv TGE-11 Q002 Attachment 5 (IWS Master Plan Ventura Spend).

1 Am's contract amounts for these two studies results in \$503,402 of pure
2 profit at California ratepayers' expense.

3 These facts demonstrate a pattern of purposeful underspending well
4 below amounts authorized by the Commission. It is reasonable to conclude
5 that Cal Am's proposed budget estimates for these planning studies exceed
6 the necessary cost of their execution. Based on findings that Cal Am spent
7 only 40% of its approved budget for these sampled planning studies, the
8 Commission should only allow Cal Am to recover 40% of expenses for its
9 proposed specific planning studies other than CPS for TY 2024. This
10 reduction also applies to all individual planning studies that are scheduled
11 to begin in the 2025 and 2026 Escalation Years since Cal Am proposes
12 splitting planning studies costs equally across all three years in the GRC
13 period. This reduces Cal Am's budget for individual planning studies by
14 \$360,600, from \$601,000 to \$240,400 for TY 2024.

15 **2. Cal Am Underspending for Maps Expenses**

16 Cal Am demonstrates a consistent pattern of underspending for its
17 mapping and GIS expenses dating back to its 2016 GRC. Recorded data
18 from years 2017 through 2021 show that Cal Am spent \$140,263 on
19 systems maps expenses, or 19.87% of Cal Am's proposed total for Test
20 Years 2018 and 2021.⁵⁶ Table 1-4 below shows both Cal Am's projected
21 and actual maps expenses for this period.⁵⁷ Cal Am explains its lack of
22 spending in 2020 and 2021 by citing extenuating circumstances from the

⁵⁶ Attachment 26: 2022-12-21 A2207001 CAW Response Cal Adv TGE 16. Snapshot of CAW Response Cal ADV TGE 16 Q001 a-f Attachment 1 showing recorded maps expenses for 2017-2021

⁵⁷ Data breakdown for projected maps expenses: 2018 data from Attachment 27: Decision 18-12-021, Decision Adopting the 2018, 2019, and 2020 Revenue Requirement for California-American Water Company, Section 7.7., at 64; 2019 through 2021 data from Attachment 28 (Projected Maps Expenses 2018-2021) showing "Attachment B-6 For Settlement Planning Studies and Mapping" as found in California-American Water Company Notice of Updated Settlement Agreement for A.19-07-004.

COVID-19 pandemic.⁵⁸ However, Cal Am’s projections and the Settlement Agreement from its 2019 GRC show no projected maps expenses for 2019 and 2020. Additionally, Cal Am spent just \$10,825 of its approved \$327,080 for maps expenses in TY 2018. This closely matches Cal Am’s spending for TY 2021, which shows a spend of \$10,663 compared to a Commission approved amount of \$378,900, showing that Cal Am’s underspending in 2021 is not due to the pandemic, but rather is in line with Cal Am’s historical spending for maps expenses. The Commission uncovered similar issues with Cal Am’s 2016 GRC. Cal Am was unable to provide satisfactory support for its 2012 and 2015 maps expenses, and the Commission subsequently ruled that Cal Am reduce its maps budget by 50%.⁵⁹ Cal Am repeats this pattern of underspending for maps expenses for this current GRC.

Consequently, the Commission should adopt a 5-year inflation adjusted average of recorded 2017-2021 maps expenses, which lowers Cal Am’s TY 2024 forecast from \$473,600 to \$36,531.26, a reduction of \$437,068.74. This amount provides a more reasonable approximation of TY 2024 expenses based on Cal Am’s actual spending for maps expenses.

Table 1-4 – Cal Am Maps Expenses for 2018-2021

Expense Type	TY 2018	2019	2020	TY 2021	Total
Projected	\$327,080	\$0	\$0	\$378,900	\$705,980
Actual	\$10,825	\$118,775	\$0	\$10,663	\$140,263

⁵⁸ Attachment 26: 2022-12-21 A2207001 CAW Response Cal Adv TGE 16 at 6-8.

⁵⁹ Attachment 27: Decision 18-12-021, Decision Adopting the 2018, 2019, and 2020 Revenue Requirement for California-American Water Company, Section 7.7., at 62-64.

1 **3. The Commission Should Remove all CPS Expenses**
2 **for this GRC**

3 The Commission should remove all expenses related to
4 Comprehensive Planning Studies for this GRC, totaling \$806,166.67 for
5 TY 2024, due to the planning length of already completed CPS studies and
6 the adequacy of Cal Am’s in-house engineers and resources to carry out
7 CPS studies.⁶⁰ Generally, Cal Am’s CPS studies forecast customer needs
8 and projections as far as the year 2035 for the purpose of providing
9 recommendations for capital improvements and projects.⁶¹ These facts
10 demonstrate that Cal Am’s already completed CPS adequately cover an
11 ample period of time up to the year 2035.

12 Additionally, Cal Am employs the services of various consultants to
13 assist with and perform activities related to the completion of CPS,
14 resulting in recommendations for new capital projects. However, the
15 decision on whether these projects proceed with construction is made by
16 Cal Am’s pay-rolled engineers. As shown in Minimum Data Requirement
17 II.D.5 – Plant Improvements Authorized But Not Built, many of these
18 capital projects arising from CPS recommendations have been cancelled.⁶²
19 This suggests that Cal Am’s own engineers are capable of carrying out
20 functions and needs of CPS studies to determine the necessity of capital
21 projects. Therefore, should Cal Am execute additional CPS studies for this
22 GRC, any labor, surveying, and other CPS-related activities for CPS

⁶⁰ Cal Am proposes \$2,418,500 in total CPS costs but spreads these costs evenly across years 2024-2026, resulting in \$806,166.67 for TY 2024. See Testimony of Ian Crooks, at 247-248, Planning Studies and System Maps Costs.

⁶¹ Attachment 29: California American Water 2019 Los Angeles County District Comprehensive Planning Study (Redacted), describing Cal Am’s 2035 planning benchmarks in Executive Summary at 22 of 1495, and in Section 2 Comprehensive Planning Process, at 133-134 of 1495.

⁶² 2022 GRC Exhibit B Vol. 1 of 3 MDR Sections A-F for MDR II.D.5 – Plant Improvements Authorized But Not Built, p. 338-348.

1 expenses can be adequately covered by Cal Am’s own in-house engineering
2 team.

3 **4. Removal of Double Counted Expenses Related to**
4 **Plannings Studies, CPS Studies, and Maps**
5 **Expenses**

6 Cal Am double counted planning studies expenses in the districts of
7 Dunnigan, Geyserville, Meadowbrook, Fruitridge, and Hillview. Cal Am
8 forecasts its expenses for Planning Studies and Maps by using specific
9 adjustments for individual planning studies and CPS studies, Urban Water
10 Management Plan (UWMP), Risk and Resilience Assessment (RRA), and
11 maps expenses. However, Cal Am employs an inflation-adjusted, five-
12 years recorded average to forecast TY 2024 expenses for these districts.
13 This forecast duplicates what is already included in Cal Am’s specific
14 adjustment forecast for two reasons: 1) the 2020 and 2021 recorded
15 expenses for these districts are composed primarily of UWMP, RRA, and
16 planning studies expenses upon which Cal Am’s specific adjustments
17 forecast are based, and 2) these districts’ expenses are already “rolled-up”
18 into the Sacramento District. Sacramento District’s forecast for planning
19 studies and maps expenses already include these sub-districts’ expenses.
20 Therefore, the Commission should remove these duplicate expenses from
21 all projected years including TY 2024. This results in a \$198,394.89
22 reduction for TY 2024.

23 **F. Cal Am Averaging Error in Forecasting**

24 Cal Am commits a significant averaging error in its forecasting
25 methodology that affects various NARUC Accounts for various Administrative
26 and General and Maintenance and Operations expenses. This error led to Cal Am
27 inflating its forecasted TY 2024 expenses in the districts of Rio Plaza, Fruitridge,
28 and Hillview by an additional \$381,876.78 for NARUC Accounts pertaining to

1 Maintenance and Operations.⁶³ The Commission should remove the \$381,876.78
2 in inflated expenses. The sections below detail Cal Am’s averaging errors and
3 how to correct them in each of the three affected districts. For the averaging
4 error’s effects on A&G expenses, refer to the testimony of Cal Advocates Office
5 witness Andrew Sweeney.

6 **1. Rio Plaza District**

7 Cal Am acquired and assumed operational control of Rio Plaza
8 Water Company in 2019.⁶⁴ Cal Am does not incorporate recorded data into
9 its 5 years of recorded data for acquired systems until it assumes
10 operational control. This results in three years of recorded data from 2019-
11 2021 for Rio Plaza. Rio Plaza’s TY 2024 forecast for various expenses
12 should be based on a three-year inflation adjusted average of recorded
13 expenses from 2019 through 2021. However, Cal Am commits an
14 averaging error by dividing the sum of its recorded expenses by two years
15 instead of three. This results in increased TY forecasts that are inflated by
16 as much as 67%. The Commission should remove these inflated expenses
17 from TY 2024 by correcting this averaging error to reflect a true three-years
18 average of recorded expenses.

19 **2. Fruitridge District**

20 Cal Am acquired and assumed operational control of the Fruitridge
21 Vista Water Company in 2020.⁶⁵ TY 2024 forecasts for various Fruitridge

⁶³ The NARUC Accounts affected include 703, 713, 725, 733, 742, 743, 748, 752, 756, 761, 763, and 766.

⁶⁴ Attachment 30: American Water Press Release - “California American Water Acquires Rio Plaza Water Company.” <https://www.amwater.com/press-room/press-releases/california/california-american-water-acquires-rio-plaza-water-company>. Retrieved March 11, 2023.

⁶⁵ Attachment 31: American Water Press Release - “California American Water Acquires the Operating Assets of the Fruitridge Vista Water Company.” <https://www.amwater.com/press-room/press->

1 expenses should be based on a two-year inflation adjusted average of
2 recorded expenses from 2020 through 2021. However, like with Rio Plaza,
3 Cal Am commits an averaging error by dividing the sums of its two-year
4 recorded expenses by one year instead of two. This results in an increased
5 TY forecast that is inflated by as much as double the appropriate forecast.
6 The Commission should remove these inflated expenses from TY 2024 by
7 correcting this averaging error to reflect a true two-year average of recorded
8 expenses for Fruitridge District.

9 **3. Hillview District**

10 Cal Am acquired and assumed operational control of the Hillview
11 Water Company in 2020.⁶⁶ TY 2024 forecasts for various Fruitridge
12 expenses would be based on a two-year inflation adjusted average of
13 recorded expenses from 2020 through 2021. As before, Cal Am also
14 commits an averaging error by dividing the sums of its two-year recorded
15 expenses by one year instead of two, inflating its TY forecast by as much as
16 double. The Commission should remove these inflated expenses from TY
17 2024 by correcting this averaging error to reflect a true two-year average of
18 recorded expenses for Hillview District.

19 **G. Double Counted Amortization of Tank Painting Expenses** 20 **in NARUC Account #766 Maintenance of Miscellaneous** 21 **Plant**

22 Like double counted expenses for purchased water, purchased power, and
23 planning studies, Cal Am also double counted \$5,722 in expenses related to the
24 amortization of tank painting projects in NARUC Account #766. Cal Am

[releases/california/california-american-water-acquires-operating-assets-fruitridge-vista-water](https://www.amwater.com/press-room/press-releases/california/california-american-water-acquires-hillview-water-company). Retrieved March 11, 2023.

⁶⁶ Attachment 32: American Water Press Release “California American Water Acquires Hillview Water Company.” <https://www.amwater.com/press-room/press-releases/california/california-american-water-acquires-hillview-water-company>. Retrieved March 11, 2023.

1 projected a 5-year inflation adjusted increase for amortization of tank painting
2 projects in the Rio Plaza, Geyserville, and Hillview service areas, which double
3 counts costs that are calculated in Cal Am's separate amortization workpaper. The
4 Commission should remove the \$5,722 of double counted expenses.

5 **IV. CONCLUSION**

6 Cal Am's deceptive under-forecasting of Purchased Water and Purchased Power
7 expenses from 2022 through TY 2024 is unrealistic and allows Cal Am to blatantly abuse
8 balancing account surcharges to recover an increasingly larger share of revenue outside
9 of base rates set by the Commission. The Commission should implement realistic rates
10 that adhere to historical cost increases and planned future rate changes. The Commission
11 should also institute Deceptive Pricing Adjustments to deny Cal Am recovery of the
12 amounts it deliberately under-forecasted, which are \$6,486,048.42 for purchased water
13 expenses, and \$1,747,002.25 for purchased power expenses. Lastly, the Commission
14 should suspend Purchased Water and Purchased Power balancing accounts for this GRC
15 period due to Cal Am's continuous abuse of these accounts.

16 Cal Am's forecasting methodology for chemical expenses results in an inaccurate
17 budget due to averaging errors and the inappropriate inclusion of pre-treated purchased
18 water in its chemical cost calculations. The Commission should instead adopt a five-year
19 inflation adjusted average for chemical expenses, reducing Cal Am's forecast from
20 \$1,804,338.02 to \$1,608,874.47. Returning to a five-year inflation adjusted average
21 results in a more accurate and reasonable forecast for chemical expenses.

22 Due to the lack of a current agreed upon economic model from the State Water
23 Resources Control Board, the unreasonableness of Cal Am's consultancy expenses, and
24 the adequacy of Cal Am's current proactive leak detection, the Commission should deny
25 Cal Am's request for \$1,316,216 in operational expenses related to the Water Loss
26 Performance Standards. Cal Am's proposal for these operational expenses are
27 unreasonable and would be duplicative of its current leak detection efforts.

1 The Commission should address Cal Am’s consistent pattern of underspending for
2 its individual planning studies and maps-related expenses by reducing these budgets by
3 \$360,600 and \$437,068.74 respectively. The Commission should also deny Cal Am’s
4 request for \$806,166.67 for CPS studies, due to the planning length of completed CPS
5 studies and the adequacy of Cal Am’s own engineering teams to conduct any future CPS
6 studies.

7 Lastly, the Commission should correct various forecasting errors for TY 2024
8 expenses that arise from double counting of projected expenses or from erroneous
9 averaging of recorded expenses across several NARUC accounts. These errors either
10 double count expenses already accounted for in Cal Am’s separate workpaper
11 calculations, or they erroneously overinflate projected expenses due to using the incorrect
12 number of years for averaging recorded expenses. Correcting these errors would prevent
13 overpayment of expenses by California ratepayers. Therefore, the Commission should
14 remove \$1,855,062.35 in double counted expenses and \$381,876.78 in erroneously
15 averaged expenses.⁶⁷

⁶⁷ Duplicate expenses comprise of \$517,039.26 from Purchased Water, \$1,133,906.20 from Purchased Power, \$198,651 from Planning Studies, and \$5,722 from Amortization of Tank Painting.

Attachment 1: Qualifications of Witness

QUALIFICATIONS AND PREPARED TESTIMONY OF Timothy Gee

Q.1 Please state your name and address.

A.1 My name is Timothy Gee.

Q.2 By whom are you employed and what is your job title?

A.2 I am employed by the Public Advocates Office at the California Public Utilities Commission. I am a Public Utilities Regulatory Analyst I.

Q.3 Please describe your educational and professional experience.

A.3 I graduated from the School of Global Policy and Strategy at UC San Diego with a Master of Public Policy degree. I graduated with a specialization in Program Design and Evaluation. I also previously held federal positions at the Department of Health and Human Services Office of Inspector General and at the Department of State.

Q.4 What is your area of responsibility in this proceeding?

A.4 My primary area of responsibility relates to Maintenance and Operations expenses, excluding labor. These include expenses related to purchased water, purchased power, chemicals, and various miscellaneous expense related to maintenance and operations.

Q.5 Does that complete your prepared testimony?

A.5 Yes, this completes my testimony.

Attachment 2: Double-Counted Purchased Water Expenses

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capitol Mall, Suite 630
Sacramento, CA 95814
Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE-07
Company Number: Cal ADV TGE 07 Q001
Date Received: September 6, 2022
Date Response Due: September 20, 2022
Subject Area: Purchased Water Fruitridge

DATA REQUEST:

1. Please refer to the Excel workbook titled "ALL_CH04_O&M_RO," for the following questions.
 - a. In tab "Escalated Costs WS5" in the above referenced workbook, row 8553, columns O through S, show escalated expenses for Purchased Water in the Fruitridge district. These cells show projected amounts of \$482,630; \$501,452; \$516,997; \$532,611; and \$532,611 for the years 2022, 2023, 2024, 2025, and 2026 respectively. In the Excel workbook "ALL_CH04_O&M_WP_Purchased Water," in worksheet tab "SAC," cells H42, I42, J42, and K42 show Fruitridge projected purchased water expenses of \$1,047,774.70; \$1,047,774.70; \$1,047,774.70; and \$1,047,774.70 for years 2022, 2023, 2024, and 2025, respectively. Please answer the following:
 - i. Please explain why the Fruitridge purchased water expenses in workbook "ALL_CH04_O&M_RO" are not the same as the Fruitridge purchased water expenses in workbook "ALL_CH04_O&M_WP_Purchased Water."
 - ii. If these expenses are not duplicative of each other, please explain why the Fruitridge purchased water expenses in workbook "ALL_CH04_O&M_RO" are not calculated and included in workbook "ALL_CH04_O&M_WP_Purchased Water."
 - b. In tab "Y_OM Data Rec WS1" in workbook "ALL_CH04_O&M_RO", cell N8553 shows a 2021 recorded year expense of \$447,875 for Purchased Water in the Fruitridge district and is hardcoded.
 - i. Please provide the underlying for formula or calculation that supports the \$447,875 recorded amount.

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

- ii. Please provide in an Excel format the various expense items and their individual costs that make up the total amount of \$447,875.
- iii. Please also provide contracts, invoices, and other documentation that support \$447,875. Please also identify the specific page numbers in the contracts, invoices, and other documents that support the amount of \$447,875.

CAL-AM'S RESPONSE

- a. The Fruitridge expense in the "ALL_CH04_O&M_RO" tab "Escalated Costs WS5" is a duplicate expense. In the 100-Day Update California American Water will remove the purchased water projected amounts of \$482,630; \$501,452; \$516,997; \$532,611; and \$532,611 for the years 2022, 2023, 2024, 2025, and 2026 respectively.
- b. See response below
 - i. \$447,875 is comprised of \$447,264.03 City of Sacramento invoices for calendar year 2021 and \$610.72 of accrued water purchases.
 - ii. See CAW Response Cal Adv TGE 07 Q001.b Attachment 1.
 - iii. See CAW Response Cal Adv TGE 07 Q001.b Attachment 2 - Fruitridge Invoices. Pages numbers from invoices are referenced in CAW Response Cal Adv TGE 07 Q001b Attachment 1.

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capitol Mall, Suite 630
Sacramento, CA 95814

Response Provided By: Joey Chen
Title: Senior Rates & Regulatory Analyst
Address: California American Water
520 Capital Mall, Suite 630
Sacramento, CA 95814

Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE 14
Company Number: Cal ADV TGE 14 Q001
Date Received: November 16, 2022
Date Response Due: November 30, 2022
Subject Area: Purchased Power

DATA REQUEST:

The following questions pertain to NARUC Account #726 Purchased Power projected expenses for the years 2022 through 2026 as found in Excel workbooks "ALL_CH04_O&M_RO" and "ALL_CH04_O&M_WP_Purchased Power."

1. Snapshot #1 below is a subset of expenses for NARUC Account #726 Purchased Power as found in tab "Escalated Costs WS5" from Excel workbook "ALL_CH04_O&M_RO." For reference, these expenses can be found in "Escalated Costs WS5" and correspond to the Cal Am Districts Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview respectively. The projected amounts for years 2022 through 2026 for these districts do not appear in Cal Am's separate workbook for calculating purchased power expenses, specifically "ALL_CH04_O&M_WP_Purchased Power." Furthermore, these districts are also considered to be part of larger "rollup" districts, which include the Monterey, Los Angeles, and Sacramento districts, whose expenses are included in "ALL_CH04_O&M_WP_Purchased Power."

- a. Please explain why these purchased power expenses for the Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview districts are not included in workpaper "ALL_CH04_O&M_WP_Purchased Power." If these expenses are not duplicative of expenses from "ALL_CH04_O&M_WP_Purchased Power," please explain their exclusion from "ALL_CH04_O&M_WP_Purchased Power." Please also explain why Cal Am chose to escalate these expenses

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

on a 5-year recorded average based on 2017 through 2021 recorded expenses.

Snapshot #1

District #	District Name	SAP Account #	SAP Account # Description	NARUC #	Attrition Year	Projected Amounts Escalated				
						Estimated 2022	Estimated 2023	Test Year 2024	Escalation Year 2025	Attrition Year 2026
1548	Monterey - Toro	51510012	Purchased Power - Pumping	726	N	71,431.00	74,216.81	76,517.53	78,828.36	78,828.36
1549	Monterey - Garrapata	51510012	Purchased Power - Pumping	726	N	46,395.22	48,204.64	49,698.98	51,199.89	51,199.89
1562	Dunnigan WW	51510012	Purchased Power - Pumping	726	N	13,271.76	13,789.36	14,216.83	14,646.18	14,646.18
1564	Geyserville	51510012	Purchased Power - Pumping	726	N	19,597.15	20,361.44	20,992.65	21,626.63	21,626.63
1565	Meadowbrook	51510012	Purchased Power - Pumping	726	N	112,347.38	116,728.93	120,347.52	123,982.02	123,982.02
1557	Rio Plaza	51510012	Purchased Power - Pumping	726	N	35,254.23	36,629.15	37,764.65	38,905.14	38,905.14
1566	Fruitridge	51510012	Purchased Power - Pumping	726	N	301,157.99	312,903.16	322,603.15	332,345.77	332,345.77
1567	Hillview	51510012	Purchased Power - Pumping	726	N	459,074.63	476,978.54	491,764.88	506,616.18	506,616.18

CAL-AM'S RESPONSE

1. Purchased power expenses for the Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview districts are duplicative of expenses from "ALL_CH04_O&M_WP_Purchased Power" file and were inadvertently included in the RO Model. The RO Model should be adjusted to remove year 2022-2026 forecasted purchase power expenses from "ALL_CH04_O&M_RO", worksheet "ORA Adj to Escalated Costs WS8" in Rows 1838, 2192, 5378, 6086, 6440, 8210, 8564, and 8918 for Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview districts.

**Attachment 3: 2017-2021 Recorded
Purchased Water Expenses and Purchased
Water Rate Increase Calculations for Test
Year 2024**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$55,771,300 or 18.71% in the year 2024, by \$19,565,300 or 5.50% in the year 2025, and by \$19,892,400 or 5.30% in the year 2026.

A.22-07-001
(Filed July 1, 2022)

**CALIFORNIA-AMERICAN WATER COMPANY'S RESPONSE TO
PUBLIC ADVOCATES OFFICE'S DATA REQUEST TGI 01**

Sarah E. Leeper
Nicholas A. Subias
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Attorneys for California-American Water Company

Dated: August 5, 2022

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capital Mall, Suite 630
Sacramento, CA 95814
ORA Request: A2207001 CAL ADV DATA REQUEST # TGI-01
Company Number: Cal ADV TGI 01 Q001
Date Received: July 22, 2022
Date Response Due: August 5, 2022
Subject Area: Purchased Water

DATA REQUEST:

1. Please provide all missing recorded historical data from 2017 through 2021, for which said data exists for proposed years 2022 to 2026 and are unique to each district and represented in each worksheet in the "ALL_CH04_O&M_WP_Purchased Water" workpaper. These include the districts of Monterrey (Central), Ventura, San Diego, Sacramento, Larkfield, LA-San Marino (including East Pasadena), LA-Rio, LA-Duarte, Bellflower, Warring, and LA-Baldwin Hills. This data should include, but is not limited to, rates and fees, past percentages of purchased water, water master fees, and other purchased water costs unique to each district.
 - a. The requested data applies to the following worksheet tabs in the "ALL_CH04_O&M_WP_Purchased Water" workpaper: LACBH, WARR, LABELL, LACDU, RIO, LACSM, LKD, SAC, SDC, VEN, and CEN. For each worksheet tab, please provide missing data for columns C, D, E, F, and G, which represent recorded years 2017 through 2021. The requested data corresponds to equivalent data found in columns H, I, J, and K for forecast years 2022 to 2025 for each worksheet tab.

CAL-AM'S RESPONSE

Please refer to Cal Adv TGI 01 Q001 Attachment 1 for the required information. Attachment 1 does not incorporate information for Warring or Bellflower as these systems have not yet been acquired at the time of the Application filing. Further, recorded information for acquisitions acquired during the 5-year recorded period are incorporated based on when California American Water assumed operational control of the related systems.

LA BALDWIN HILLS**Purchased Water Rates - Purchased**

	2017	2018	2019	2020	2021
West Basin Municipal Water District (per AF)	\$ 1,332.00	\$ 1,354.00	\$ 1,385.00	\$ 1,405.00	\$ 1,449.00

Purchased Water Rates - Pumped

West Basin MWD Capacity/Reservation Charges (per month)	\$ 2,035.00	\$ 2,251.00	\$ 1,980.00	\$ 2,346.00	\$ 3,786.00
West Basin MWD Monthly Water Service Charge(per month)	\$ 1,340.00	\$ 623.00	\$ 2,227.00	\$ 6,030.00	\$ 7,405.00
Central Basin Watermaster Administrative Body Service Fee	\$ 3,839.59	\$ 3,879.80	\$ 3,770.92	\$ 3,552.75	\$ 3,117.25
Central Basin Assessment (per AF)	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.52	\$ 0.53
Central Basin Membership Dues	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00
Water Replenishment District (per AF)	\$ 318.00	\$ 339.00	\$ 365.00	\$ 382.00	\$ 394.00

LA DUARTE**Purchased Water Rates - Pumped**

	2017	2018	2019	2020	2021
Main San Gabriel WaterMaster Administration Assessment Fee (per AF)	\$ 15.00	\$ 15.00	\$ 17.00	\$ 17.00	\$ 17.00
Main San Gabriel WaterMaster RDA Fee (per AF)	\$ 70.00	\$ 105.00	\$ 140.00	\$ 175.00	\$ 175.00
Main San Gabriel Basin Watermaster In Lieu Fee (per AF)	\$ 10.00	\$ 10.00	\$ 10.00	\$ 8.00	\$ 8.00
Replenishment Water Assessment (per AF)	\$ 898.00	\$ 934.00	\$ 958.00	\$ 980.00	\$ 1,002.00
San Gabriel Valley Water Assoc Assessment (Annual)	\$ 11,178.43	\$ 14,922.27	\$ 16,835.00	\$ 16,081.72	\$ 16,406.00
San Gabriel River Water Committee (monthly)	\$ 2,927.85	\$ 2,927.85	\$ 2,927.85	\$ 2,927.85	\$ 2,927.85
City of Monrovia - 4' Meter Monthly Standby Fee (Monthly)	\$ 77.58	\$ 459.27	\$ 518.98	\$ 557.90	\$ 599.74
San Gabriel Basin Water Quality Authority (Bi Annual)	\$ 18,245.00	\$ 18,245.00	\$ 21,894.00	\$ 21,894.00	\$ 21,894.00

LA SAN MARINO**Fixed Charges - Purchased**

MWD Capacity Charge (per month)	\$ 4,866.67	\$ 5,292.50	\$ 5,375.00	\$ 5,500.00	\$ 6,687.50
MWD Readiness to Serve Charge (per month)	\$ 2,851.78	\$ 2,791.48	\$ 2,315.96	\$ 2,973.79	\$ 2,892.00

Fixed Charges - Pumped

City of South Pasadena Meter Charges (3 meters) (Bi-Monthly)	\$ 673.74	\$ 1,018.92	\$ 797.70	\$ 1,631.27	\$ 1,233.51
Raymond Basin Management Fee (Annual)	\$ 45,558.00	\$ 45,708.00	\$ 45,708.00	\$ 45,709.00	\$ 68,675.00
Savannah Memorial Park Leased Rights (AF)	\$ 782.10	\$ 808.20	\$ 862.20	\$ 792.00	\$ 812.00
San Gabriel Basin Water Quality Authority (Bi-Annual)	\$ 39,843.50	\$ 39,843.50	\$ 47,812.20	\$ 47,812.20	\$ 47,812.20
San Gabriel Valley Water Assoc Assessment (Annual)	\$ 11,178.43	\$ 14,922.27	\$ 16,835.00	\$ 16,081.72	\$ 16,406.00

Volumetric Charges Rates - Purchased

MWD - San Marino Tier 1 (per AF)	\$ 979.00	\$ 1,015.00	\$ 1,050.00	\$ 1,078.00	\$ 1,104.00
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Volumetric Charges Rates - Pumped

Replenishment Water Assessment (per AF)	\$ 898.00	\$ 934.00	\$ 958.00	\$ 980.00	\$ 1,002.00
Main San Gabriel WaterMaster RDA (per AF)	\$ 70.00	\$ 105.00	\$ 140.00	\$ 175.00	\$ 175.00
Main San Gabriel WaterMaster In Lieu Assessment (per AF)	\$ 10.00	\$ 10.00	\$ 10.00	\$ 8.00	\$ 8.00
Main San Gabriel WaterMaster Administration Assessment (per AF)	\$ 15.00	\$ 15.00	\$ 17.00	\$ 17.00	\$ 17.00

RIO PLAZA**Extraction Rates - Rio Plaza**

	2017	2018	2019	2020	2021
Fox Canyon - Reserve Free (per AF)			\$ -	\$ -	\$ 20
Fox Canyon - Sustainability Fee (per AF)			\$ 11	\$ 14	\$ 14
Fox Canyon - Extraction Charge(per AF)			\$ 6	\$ 6	\$ 6
United Water			\$ 273	\$ 273	\$ 320

LARKFIELD**Sonoma Rates**

	2017	2018	2019	2020	2021
Rate Per AF	\$ 1,133.47	\$ 1,201.27	\$ 1,258.55	\$ 1,328.65	\$ 1,374.10
Meter Charge	\$ 180.00	\$ 180.00	\$ 180.00	\$ 180.00	\$ 180.00

SACRAMENTO**Purchased Water Fix Rates**

	2017	2018	2019	2020	2021
City of Sacramento - Arden, Rosemont, Suburban (per month)	\$ 487	\$ 2,750	\$ 2,620	\$ 7,578	\$ 10,127
City of Sacramento - Fruitridge (per month)	\$ -	\$ -	\$ -	\$ 501	\$ 501
Placer County Meter Standby	\$ 1	\$ 16	\$ 17	\$ 19	\$ 18
Placer County Renewal/Replacement CHG	\$ 14	\$ 13	\$ 14	\$ 15	\$ 15

Purchased Water Variable Rates

City of Sacramento - Arden, Rosemont, Suburban (per AF)	\$ 606	\$ 553	\$ 600	\$ 518	\$ 614
City of Sacramento - Fruitridge (per AF)	\$ -	\$ -	\$ -	\$ 666	\$ 745
Sacramento County Water Agency (Per AF)	\$ 592	\$ 515	\$ 525	\$ 525	\$ 558
Placer County Water Agency (Per AF)	\$ 549	\$ 174	\$ 174	\$ 179	\$ 179
Sac Suburban (Per AF)	\$ 81	\$ 81	\$ 115	\$ 115	\$ 115
Sac Suburban Water Delivery Charge (Per AF)	\$ -	\$ -	\$ 256	\$ 256	\$ 256

SAN DIEGO**San Diego Rates**

	2017	2018	2019	2020	2021
Rate Per CCF	4.32	4.49	4.54	4.54	4.54
Rate Per AF	1,881.79	1,955.84	1,977.35	1,977.35	1,977.35

VENTURA**Purchased Water Variable Rates**

TOTAL TIER 1 RATE (per AF)

TOTAL TIER 2 RATE (per AF)

Purchased Water Fix Rates

Readiness to Service (per month)

Capacity Reservation Charge (per month)

Total

2017	2018	2019	2020	2021
\$ 1,300	\$ 1,375	\$ 1,423	\$ 1,472	\$ 1,507
\$ 1,394	\$ 1,461	\$ 1,509	\$ 1,559	\$ 1,549
\$ 92,438	\$ 85,879	\$ 85,162	\$ 83,628	\$ 85,357
\$ 81,364	\$ 92,299	\$ 84,040	\$ 76,066	\$ 89,066
\$ 173,802	\$ 178,178	\$ 169,202	\$ 159,694	\$ 174,423

MONTEREY (CENTRAL)**Monterey Rates**

Pure Water Monterey Rate Per AF

2017	2018	2019	2020	2021
0	0	0	2,442	2,808

Calculation of Average Annual Percent Change By Expense

LACBH - LA Baldwin Hills	Rates by Year						Year-to-Year Percent Change in Rates					Avg Annual Change
Rates	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
Baldwin Hills West Basin MWD (per AF)	\$ 1,332.00	\$ 1,354.00	\$ 1,385.00	\$ 1,405.00	\$ 1,449.00	\$ 1,488.00	1.65%	2.29%	1.44%	3.13%	2.69%	2.24%
Water Replenishment District (per AF)	318	339	365	382	394	394	6.60%	7.67%	4.66%	3.14%	0.00%	4.41%
West Basin MWD Monthly Water Service Charge(per month)	1340	623	2227	6030	7405	6565	-53.51%	257.46%	170.77%	22.80%	-11.34%	5.73%

LACBH - LA Baldwin Hills (these items include 2023 rates in calculation)	Rates by Year						
Rates	2017	2018	2019	2020	2021	2022	2023
West Basin MWD Capacity/Reservation Charges (per month)	2035	2251	1980	2346	3786	4194	3806.25
West Basin Municipal Water District (per AF)	1332	1354	1385	1405	1449	1500	1587

Year-to-Year Percent Change in Rates							
Rates	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	Avg Change
West Basin MWD Capacity/Reservation Charges (per month)	10.61%	-12.04%	18.48%	61.38%	10.78%	-9.25%	13.33%
West Basin Municipal Water District (per AF)	1.65%	2.29%	1.44%	3.13%	3.52%	5.80%	2.97%

LACDU - LA Duarte	Rates by Year						Year-to-Year Percent Change in Rates					Avg Annual Change
Rates	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
LAC San Marino Replenishment	898	934	958	980	1002	1058	4.01%	2.57%	2.30%	2.24%	5.59%	3.34%
City of Monrovia - 4" Meter Monthly Standby Fee (Monthly)	77.58	459.27	518.98	557.9	599.74	599.74	492.00%	13.00%	7.50%	7.50%	0.00%	7.00%
San Gabriel Basin Water Quality Authority (Bi Annual)	18245	18245	21894	21894	21894	21894	0.00%	20.00%	0.00%	0.00%	0.00%	4.00%
Main San Gabriel WaterMaster Administration Assessment Fee (per AF)	15	15	17	17	17	17	0.00%	13.33%	0.00%	0.00%	0.00%	2.67%
Main San Gabriel WaterMaster RDA Fee (per AF)	70	105	140	175	175	175	50.00%	33.33%	25.00%	0.00%	0.00%	21.67%

LACSM - LA San Marino	Rates by Year						Year-to-Year Percent Change in Rates					Avg Annual Change
Rates	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
Replenishment Water Assessment (per AF)	898	934	958	980	1002	1058	4.01%	2.57%	2.30%	2.24%	5.59%	3.34%
MWD Capacity Charge (per month)	4866.67	5292.5	5375	5500	6687.5	6687.5	8.75%	1.56%	2.33%	21.59%	0.00%	6.85%
MWD Readiness to Serve Charge (per month)	2851.78	2791.48	2315.96	2973.79	2892	4333	-2.11%	-17.03%	28.40%	-2.75%	49.83%	11.27%
City of South Pasadena Meter Charges (3 meters) (Bi-Monthly)	673.74	1018.92	797.701667	1631.27	1233.51	1304.58	51.23%	-21.71%	104.50%	-24.38%	5.76%	2.73%
Raymond Basin Management Fee (Annual)	45558	45708	45708	45709	68675	68675	0.33%	0.00%	0.00%	50.24%	0.00%	10.12%
Savanah Memorial Park Leased Rights (AF)	782.1	808.2	862.2	792	812	812	3.34%	6.68%	-8.14%	2.53%	0.00%	0.88%
San Gabriel Valley Water Assoc Assessment (Annual)	11178.43	14922.27	16835	16081.72	16406	16406	33.49%	12.82%	-4.47%	2.02%	0.00%	8.77%
LAC San Marino Tier 1	979	1015	1050	1078	1104	1104	3.68%	3.45%	2.67%	2.41%	0.00%	2.44%
Main San Gabriel WaterMaster Administration Assessment Fee (per AF)	15	15	17	17	17	17	0.00%	13.33%	0.00%	0.00%	0.00%	2.67%
Main San Gabriel WaterMaster RDA Fee (per AF)	70	105	140	175	175	175	50.00%	33.33%	25.00%	0.00%	0.00%	21.67%
San Gabriel Basin Water Quality Authority (Bi-Annual)	39843.5	39843.5	47812.2	47812.2	47812.2	56258.34	0.00%	20.00%	0.00%	0.00%	17.67%	7.53%

LACSM - LA San Marino (includes 2023 rate in calculation)	Rates by Year						
Rate	2017	2018	2019	2020	2021	2022	2023
MWD Capacity Charge (per month)	4866.67	5292.5	5375	5500	6687.5	7421.67	6448.33

Year-to-Year Percent Change in Rates							
Rate	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	Avg Change
MWD Capacity Charge (per month)	8.75%	1.56%	2.33%	21.59%	10.98%	-13.11%	5.35%

LKD - Larkfield												
Rates	Rates by Year					Year-to-Year Percent Change in Rates						Avg Annual Change
	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
Larkfield Rate per AF	1133.47	1201.27	1258.55	1328.65	1374.1	1374.21	5.98%	4.77%	5.57%	3.42%	0.01%	3.95%

SAC - Sacramento												
Rates	Rates by Year					Year-to-Year Percent Change in Rates						Avg Annual Change
	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
City of Sacramento - Arden, Rosemont, Suburban (per month)	487	2750	2620	7578	10127	10127	464.72%	-4.72%	189.25%	33.64%	0.00%	9.64%
Placer County Meter Standby	1	16	17	19	18	20	1688.97%	11.17%	6.47%	-2.56%	9.81%	6.22%
Placer County Renewal/Replacement CHG	14	13	14	15	15	16	-7.86%	11.17%	6.48%	-2.57%	9.83%	3.41%
City of Sacramento - Arden, Rosemont, Suburban (per AF)	606	553	600	518	614	614	-8.75%	8.41%	-13.62%	18.59%	0.00%	0.93%
City of Sacramento - Fruitridge (per AF)	0	0	0	666	745	745				11.97%	0.00%	5.99%
Sacramento County Water Agency (Per AF)	592	515	525	525	558	570	-13.15%	2.00%	0.00%	6.39%	2.09%	-0.53%
Placer County Water Agency (Per AF)	549	174	174	179	179	187	-68.25%	0.00%	2.50%	0.00%	4.88%	1.84%
Sac Suburban (Per AF)	81	81	115	115	115	115	0.00%	42.30%	0.00%	0.00%	0.00%	8.46%


SDC - San Diego												
Rates	Rates by Year					Year-to-Year Percent Change in Rates						Avg Annual Change
	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
San Diego Rate per AF	\$ 1,881.79	\$ 1,955.84	\$ 1,977.35	\$ 1,977.35	\$ 1,977.35	\$ 2,003.48	3.94%	1.10%	0.00%	0.00%	1.32%	1.27%


CEN - Monterey (not utilized)												
Rates	Rates by Year					Year-to-Year Percent Change in Rates						Avg Annual Change
	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
Pure Water Monterey Rate Per AF				2442	2808	3486				14.99%	24.15%	19.57%

RIO PLAZA												
Rates	Rates by Year					Year-to-Year Percent Change in Rates						Avg Annual Change
	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	
United Water			272.92	272.92	319.6	319.6			0.00%	17.10%	0.00%	5.70%

Attachment 4: Direct Testimony of Anush Nagesh

Docket:	: A.19-07-004
Exhibit Number	: Cal PA - _____
Commissioner	: Genevieve Shiroma
Administrative Law Judge	: Gerald F. Kelly
Cal PA Witness	: Anusha Nagesh

PUBLIC ADVOCATES OFFICE



**REPORT AND RECOMMENDATIONS
ON OPERATIONS AND MAINTENANCE AND
ADMINISTRATIVE AND GENERAL AND EXPENSES,
LABOR EXPENSES, BALANCING AND MEMORANDUM
ACCOUNTS AND SPECIAL REQUESTS#2, 3 AND 13**

Application 19-07-004

**PUBLIC VERSION
San Francisco, California
February 14, 2020**

775	CA Uncollectible Accounts ⁶	\$1,277,452	\$1,269,674	- \$7,778
774	CA Miscellaneous Customer Accounts Expenses	\$1,440,900	\$1,183,972	- \$256,929
Add	Conservation	0	\$1,315,524	+ \$1,315,524
Add	Leak Adjustments	0	\$1,440,767	+ \$1,440,767
Remove	6% of CAW corporate expenses	0	\$773,676	- \$773,676
	TOTAL⁷	\$98,115,228	\$105,840,109	+ \$7,418,881

1 In addition to the recommended adjustments shown in Table 1-1 above, the
2 Commission should direct Cal Am to develop a systematic approach to identify
3 expenses to be removed from recorded financial data for ratemaking purposes
4 before its next General Rate Case (“GRC”). Cal Am’s continued inability to
5 exclude from its proposed budget costs that are recovered elsewhere demonstrates
6 that its current efforts are inadequate. Adopting a more systematic approach for
7 identifying costs to exclude for ratemaking purposes will reduce the likelihood of
8 ratepayers paying multiple times for the same costs.

9 C. DISCUSSION

10 1) NARUC Account #704: Source of Supply - Purchased Water

11 For TY 2021, Cal Am calculates total purchased water expenses by
12 multiplying either 2018 or 2019 water rates with total forecasted water production

⁶ Cal Am’s 100-day update workpaper “ALL_CH04_O&M_RO” under sheet titled “Summary of Costs - NARUC WS11” in row: 72.

⁷ Attachment 01: list all O&M and A&G accounts reviewed in this chapter, and details Cal Am’s forecast, the Public Advocates Office’s forecast and difference for each account. Refer to row titled: “TOTAL.”

1 for each water wholesaler in all districts except Monterey, which utilizes a recorded
2 five-year inflation adjusted average.⁸

3 Cal Am's TY 2021 purchased water forecast generally assumes no increases
4 in water rates during the period between the time the Application was filed and the
5 test year. Cal Am's assumption is unreasonable because the most recent five years
6 (2014 - 2018) of recorded data show an average increase of 3.69% each year in
7 water rates.⁹ Under-forecasting purchased water rates results in the illusion of a
8 smaller increase in customer rates in the GRC. However, customers later
9 experience, through surcharges, an increase in their bills above the amounts stated
10 on customer notices related to the general rate case.

11 For example, Cal Am tracks the difference between its authorized budget
12 and actual purchased water expense in its Modified Cost Balancing Account
13 ("MCBA").¹⁰ Amounts tracked in the MCBA and other balancing accounts are
14 generally recovered later as surcharges in addition to the rates authorized during a
15 GRC. Cal Am under-forecasting expenses it tracks in balancing accounts, such as
16 the MCBA, provides the Commission and customers with the false impression of a
17 smaller proposed change in water rates. In reality, a lower-than-reasonable forecast
18 will produce a greater difference between the authorized and actual expenses. This
19 larger difference is recorded to the balancing account and appears as surcharges on
20 customer bills, while the illusion of lower "rates" is maintained.

⁸ "water rates" refers to purchased water rate Cal Am pays to its water wholesalers. This is identified in Cal Am's workpaper "ALL_CH04_O&M_WP_Purchased Water" for TY 2021; see also Attachment 02: Cal Am's response to Data Request ("DR") ANU 001 Q005b, Cal Am provides corrected numbers for total purchased water for Monterey/central division. Cal Am changed forecast from \$1,159,958 to \$1,147,505 (decrease of \$12,453) in TY 2021 in workpaper "Cal PA ANU 01 Sec 01 Q005 Attachment 1."

⁹ Attachment 03: Cal Am's response to DR ANU 01 Q.002.a in document titled "Cal PA ANU 01 Sec 01 Q002.A - OM Expenses." Any increase beyond 100% is excluded and considered as a one-time increase.

¹⁰ Direct testimony of Jeffrey M Dana, p.7, lines 10-13.

1 To provide a more reasonable forecast of purchased water costs, Cal Am's
2 water rates should be escalated by the average annual percentage increase in
3 purchased water rates experienced over the past five years (2014 - 2018).¹¹

4 To increase transparency and reduce the number and size of likely
5 surcharges, Cal Am should produce reasonable forecasts for all expense items,
6 especially those items afforded the protection of being tracked in balancing
7 accounts. By under-forecasting expenses tracked in balancing accounts, Cal Am
8 masks impacts to customer bills. The Commission should adopt a reasonable
9 forecast of purchased water expenses for TY 2021. Increasing purchased water
10 costs by the average annual percentage increase recorded over the past five years
11 results in a forecast of \$66,037,542 which is \$6,770,951 higher than Cal Am's
12 estimate. Any other differences in total purchased water expenses are the result of
13 different estimates of water demand and production, which are addressed separately
14 by the Public Advocates Office witness, Suzie Rose.¹²

15 **2) NARUC Account #726: Purchased Power**

16 For TY 2021, Cal Am calculates purchased power expenses by multiplying
17 2018 power rates with forecasted power usage and water production for all
18 districts.¹³ Similar to purchased water expenses, Cal Am tracks the difference
19 between the authorized budget and actual purchased power expense in the MCBA,
20 which is generally recovered as surcharges on customer bills.¹⁴

¹¹ Any year-on-year water rate increase of 100% and higher are excluded from the calculated five-year average, as being unlikely to be recurring and are considered as one-time increase.

¹² See Direct testimony of Suzie Rose.

¹³ Cal Am's workpaper "ALL_CH04_O&M_WP_Purchased Power" for Cal Am's calculation of TY 2021 forecasted \$/kwh. "power rates" refers to dollar per kilowatt hour used ("\$/kwh").

¹⁴ Direct testimony of Jeffrey M. Dana, p.7, lines 10 - 13.

1 Cal Am's TY 2021 forecast escalates the 2018 power rates using simple
2 inflation rates.¹⁵ However, recorded data shows an average annual increase of
3 6.42% in power rates, which is at least six times higher than the average inflation
4 rate of 1.05% over the five-years (2014 - 2018) of recorded data.¹⁶ Therefore, only
5 using inflation rates to arrive at a TY 2021 forecast would likely result in under-
6 forecasting purchased power expenses, recording a larger amount in Cal Am's
7 balancing accounts, and later assessing bigger surcharges on customers' bills.

8 To provide a more reasonable forecast of purchased power costs in TY
9 2021, Cal Am should escalate its 2018 power rates by the average annual
10 percentage increase in power rates experienced over the past five years (2014 -
11 2018).¹⁷

12 Forecasting more reasonable purchased power expenses will reduce
13 surcharges between general rate cases and narrow the gap between Cal Am's
14 noticed bill impacts and customers' actual bill impact. Under forecasting expense
15 items that have balancing accounts reduces the transparency of impacts to
16 customer's bills. The Commission should adopt a reasonable estimate for
17 purchased power expenses. Escalating power rates by the average annual
18 percentage increase recorded in the last five years results in a purchased power
19 expense forecast of \$7,807,943 for TY 2021 which is \$117,725 higher than Cal
20 Am's estimate. Any other differences in total purchased power expenses are the

¹⁵ Cal Am's workpaper "ALL_CHJ04_O&M_WP_Purchased Power" under sheet titled "Escalation of Cost Per KWH WS2" in Column J. "power rates" refers to dollar per kilowatt hour used or \$/kwh.

¹⁶ Cal Am's workpaper "ALL_CH04_O&M_RO" under sheet titled "WS5;" see also Cal Am's workpaper "ALL_CH04_O&M_WP_Escalation Factors" under sheet titled "Inflation Rates – ORA." Average inflation rate for recorded years 2014 – 2018 is 1.049%.

¹⁷ Any power rate increase of more than 100% in any one year are excluded from calculated five-year average increase. as being unlikely to be recurring and are considered as one-time increase.

1 result of different estimates of water demand and production, which are addressed
2 separately by the Public Advocates Office’s witness, Suzie Rose.¹⁸

3 **3) NARUC Account #798: Administrative and General (“AG”) Outside**
4 **Services**

5 In TY 2021, Cal Am generally estimates outside services using a five-year
6 (2014 – 2018) inflation adjusted average of recorded data.¹⁹ As detailed below,
7 some of the historical expenses that Cal Am utilized to build its forecast are no
8 longer required, unlikely to be incurred in this general rate case cycle, or
9 miscategorized. Cal Am should remove the following expenses when forecasting
10 an expense budget for TY 2021.

11 Table 1-2 - Comparison of Proposed Budget for Account #798

(a) Cal Am forecast ²⁰	(b) Public Advocates Office forecast ²¹	Difference (b-a)
\$2,532,822	\$2,315,875	- \$216,947

12 **a. Remove recorded costs for Los Padres Dam Long Term Study-**
13 **(SAP Account: 53110016) -**

14 The Commission previously authorized Cal Am to amortize in customer
15 rates the cost of performing a one-time study pertaining to the Los Padres Dam.
16 The budget for this study was placed in customer rates as follows: “\$200,000 in
17 2015; \$350,000 in 2016; and \$450,000 in 2017.”²²

¹⁸ See direct testimony of Suzie Rose.

¹⁹ See direct testimony of Cameron Reed.


²⁰ Cal Am’s workpaper “ALL_CH04_O&M_RO” under sheet titled “Summary of Costs - NARUC WS11” cell: Q79.


²¹ See direct testimony of Cameron Reed for discussion on SAMS software cost estimate of \$131,500 and Tank Inspection cost estimate of \$79,333 in TY 2021.

²² D.15-04-007, Attachment A, pp. 207 - 208.

Attachment 5: Jayne Parker Testimony from A.19-07-004

Docket:	: A.19-07-004
Exhibit Number	: Cal PA - _____
Commissioner	: Genevieve Shiroma
Administrative Law Judge	: Gerald F. Kelly
Cal PA Witness	: Jayne Parker

PUBLIC ADVOCATES OFFICE



**REPORT AND RECOMMENDATIONS
ON RATES AND SURCHARGES**

Application 19-07-004

**San Francisco, California
February 14, 2020**

1

2 **A. INTRODUCTION**

3 Cal Am’s general rate case establishes customers’ base rates for water
4 service for a three-year period. Base rates include the monthly service charge that
5 is assessed for a customer’s meter size and quantity rates that are assessed for the
6 volume of water consumed. Base rates are calculated to meet a utility’s revenue
7 requirement and should provide the basic information necessary to evaluate the
8 impacts of requests made by a utility in a general rate case on customers’ bills.¹
9 However, over the past decade more than one-fifth of Cal Am’s average
10 residential bill has consisted not of base rates, but rather surcharges that are the
11 result of alternative ratemaking mechanisms.²

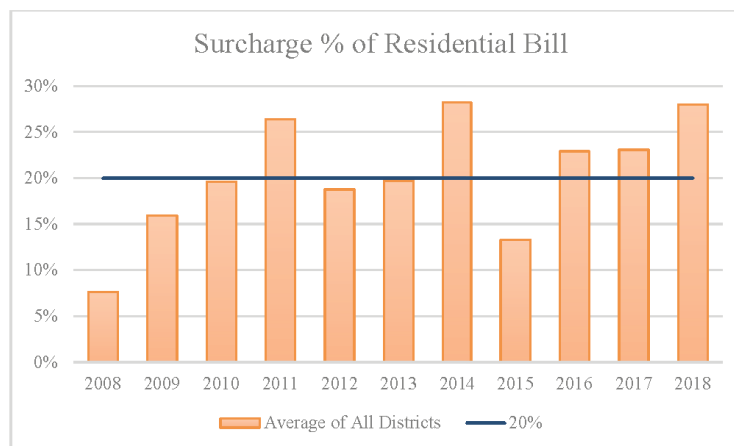
12 As shown below in Figure 1, surcharges have averaged approximately 20%
13 of the total residential bill across all of Cal Am’s districts over the past decade. In
14 Cal Am’s Monterey District, surcharges have totaled as much as 53% of the
15 average residential bill in 2011, 2014 and 2016.³

¹ A “revenue requirement” is the authorized budget that is established to cover both operating costs and provide the utility an opportunity to earn a reasonable rate of return on the property devoted to the business. *The Regulation of Public Utilities*, C.F. Phillips, Jr., 1993

² Alternative Ratemaking Mechanisms (ARMs) or Alternative Revenue Programs (ARPs) “adjust future tariffs (usually as a surcharge applied to future billings) in response to past activities or completed events.” *Revenue for Power and Utilities Companies*, KPMG, US GAAP, 2018

³ See Attachment 2: Monterey District tariff pricing from 2008-2018.

Figure 1: Surcharge Percentage of Residential Bill-Territory Wide



1 The full impact of surcharges over the three-year period that general rate
2 cases establish rates is not known at the time of the general rate case because
3 surcharges can be added to customer bills between general rate cases. For
4 example, Cal Am’s surcharges jumped from being 20% of the average residential
5 bill in 2013 to being 28% in 2014 partly because of surcharges that were approved
6 and added to customers’ bills outside of Cal Am’s general rate case.

7 Surcharges that are approved during a general rate case are not included in
8 the overall revenue increases proposed by the utility.⁴ For example, Cal Am’s
9 current general rate case Application proposes to increase revenue by
10 “\$25,999,900 or 10.60% in the year 2021, by \$9,752,500 or 3.59% in the year
11 2022, and by \$10,754,500 or 3.82% in the year 2023.”⁵ However, none of these

⁴ Cal Am’s proposed revenue increase percentage is calculated as the difference between total revenues at present rates and total revenues at proposed rates, excluding surcharges. See the Public Advocates Office’s Executive Summary and Results of Operations Report.

⁵ Cal Am Final Application 2019 GRC, p. 1.

1 proposed revenue increases include the surcharges that Cal Am is requesting be
2 approved in the general rate case.⁶

3 As of May 31, 2019, Cal Am had an outstanding balance of approximately
4 \$199,000,000 in surcharge accounts, which are known as Memorandum and
5 Balancing Accounts in California.⁷ If Cal Am's outstanding balance of surcharge
6 accounts was collected over the three-year period that is addressed in this general
7 rate case (2021-2023), customer bills would increase by an additional 24.5% on
8 top of the base rate revenue that Cal Am proposes.⁸

9 Surcharge accounts were first created to address unforeseen circumstances
10 and, therefore, be temporary in nature.⁹ However, surcharges for Cal Am's
11 average residential customer have been remarkably persistent over the last ten
12 years. More concerning, the forecasting methodologies and Special Requests
13 proposed by Cal Am in the current general rate case appear deliberately designed
14 to obfuscate the impacts to customer bills by shifting an increasing amount of base
15 rates into surcharge accounts and applying a shareholder return to the account
16 balances.¹⁰

⁶ Refer to the testimony of Mukunda Dawadi for the Public Advocates Office

⁷ Direct Testimony of Jeffrey M. Dana, Attachment 1.

⁸ \$199,252,617 from Cal PA ANU 16 Q005 Attachment 1 / 3 years = \$66,417,539. \$66,417,539 / \$271,241,000 (Sum of the Revenue Requirements for Cal Am's Northern, Southern, Central and Wastewater Districts. See the Public Advocates Office's Executive Summary and Results of Operations Report) = 24.5%.

⁹ Cal. P.U.C., Water Div. Res. W-4294 (Nov. 29, 2001).

¹⁰ Refer to the testimony of witnesses, Anusha Nagesh and Mukunda Dawadi for the Public Advocates Office

Attachment 6: West Basin Municipal Water District Financial Report

2022-2023 OPERATING BUDGET



17140 S. Avalon Blvd. Carson, CA 90746

www.westbasin.org

West Basin Municipal Water District

Reliability Service Charge

When determining the RSC, West Basin considers both the current year and the five-year forecast in striving for a target of 1.75 on the all-in debt service coverage. This process helps in avoiding large spikes in the RSC from year to year but may also provide an all-in debt service coverage in any one year to be lower or higher than the minimum. In FY's 2018-19, 2019-20 and 2020-21, the RSC did not increase while West Basin phased-in the Fixed Service Charge (FSC). With the full FSC in place, the RSC was increased by \$8/AF (and the effective rate for the in the FSC decreased \$8/AF) in FY 2021-22. However, the FY 2022-23 budget reflects the cost increases required to maintain service to our customers in order to provide a safe and reliable supply of high-quality water and thereby necessitates a \$12/AF increase in the RSC.

Rate Components	Today	Effective July 1, 2022	Effective January 1, 2023	Annual Rate Adjustment
		July - December	January - July	
MWD Imported Water Tier I Rate	\$1,143	\$1,143	\$1,209	\$66
MWD Readiness to Serve (RTS)	\$100	\$100	\$121	\$21
West Basin Reliability Service Charge (RSC)	\$245	\$257	\$257	\$12
Total West Basin Tier I Community Rate	\$1,488	\$1,500	\$1,587	\$99

Imported Retail Sales

Imported retail water sales vary based on hydrologic conditions, water demand and on the available water supply. As the chart below shows, consumer usage of imported water since the end of the last drought in FY 2016-17 has not returned to pre-drought levels. With the Governor's recent calling for steps to drive water conservation, West Basin is projecting sales to be at 101,740 AF, a drop of 2,215 AF from the previous fiscal year actual sales of 103,955 AF. Based on discussions with customer agency and their input regarding overall water management strategies and trends, and due to the uncertainty of what the State may do in response to the ongoing drought and, West Basin is budgeting for retail sales at 103,200 AF in FY 2022-23.

Although West Basin is not the supplier of groundwater, the amount of groundwater use in West Basin's service area can create a downward impact on its imported retail sales. The following table shows the rebound in groundwater use beginning in FY 2018-19 and continuing and projected through FY 2021-22. The rebound in groundwater use projected in FY 2022-23 has been incorporated in the budget for imported retail sales.



Policy & Resource Development programs.

The Fixed Service Charge will decrease from \$6,672,327 in FY 2021-22 to \$6,312,275 in FY 2022-23, effectively a \$2/AF reduction, beginning July 1, 2022. While determined on an annual basis, West Basin charges its customers on a monthly basis. Overall, this fixed service charge represents about 20% of the West Basin's own imported water revenues.

Fixed Service Charge

FY 2022-23

Customer Agencies	3-Year Ave Deliveries (AF)	Annual Charge	Monthly Charge
California American Water Co.	1,375	\$78,775	\$6,565
California Water Service - Dominguez	23,147	1,326,117	110,510
California Water Service - Hawthorne	3,117	178,591	14,883
California Water Service - Hermosa Redondo	10,491	601,040	50,087
California Water Service - Palos Verdes	17,317	992,106	82,676
City of El Segundo	6,410	367,221	30,602
City of Inglewood	6,426	368,154	30,680
City of Lomita	1,872	107,260	8,938
City of Manhattan Beach	4,674	267,801	22,317
Golden State Water	22,798	1,306,130	108,844
L.A. Co. Water Works District No. 29	8,149	466,889	38,907
WRD - Dominguez Gap Barrier	4,402	252,191	21,016
TOTAL	110,179	\$6,312,275	\$526,025

West Basin Municipal Water District

Capacity Charge

MWD developed the Capacity Charge to recover its costs in providing distribution capacity use during peak summer demands. The aim of this charge is to encourage customer agencies to reduce peak day demands during the summer months (May 1 thru September 30) and shift usage to the winter months (October 1 thru April 30), which will result in a more efficient utilization of MWD's existing infrastructure and defers capacity expansion costs. As this is an MWD charge, West Basin passes-through this charge to its customers.

West Basin's combined cubic feet per second (cfs) peak amount from its customers is 253.0 for CY 2021 increased to 255.5 cfs for CY 2022 and increases slightly to 255.7 cfs for CY 2023 and is calculated on each customer's highest overall peak level during the past three (3) years.

West Basin models MWD's methodology to calculate its peak charges to its customer agencies by multiplying each purveyor's highest daily average usage (per cfs) for the past three summer periods by the Capacity Charge Rate. The timing of the rate change is structured to coincide with MWD and is calculated to collect the amount West Basin is to pay. West Basin is able to pass through a lower rate per cfs and establish a more equitable distribution of MWD's charge as the agency's highest peak may be different than the individual customer's highest peak.

West Basin will decrease its current Capacity Charge Rate from \$10,025/cfs to \$9,135/cfs on January 1, 2023, with anticipated revenues of \$2,448,604 during FY 2022-23 to pass through the higher MWD cost.



The tables below show the peak cfs for CY's 2022 and 2023 by customer agency.

Capacity Charge

Effective 1/1/22 to 12/31/22				
West Basin Customers	Calendar Year			3-Year Peak
	2017	2018	2019	
California American Water Co.	4.0	5.0	4.8	5.0
Cal Water - Dominguez	52.3	43.5	44.2	52.3
Cal Water - Hawthorne	6.7	6.2	6.4	6.7
Cal Water - Hermosa Redondo	21.0	19.2	19.7	21.0
Cal Water - Palos Verdes	39.3	40.4	44.8	44.8
LA County Waterworks No. 29	16.1	14.7	15.8	16.1
City of El Segundo	12.1	12.3	8.5	12.3
City of Inglewood	13.8	11.8	12.0	13.8
City of Lomita	3.2	3.5	3.8	3.8
City of Manhattan Beach	8.5	8.1	8.4	8.5
Golden State Water Co.	42.2	44.5	40.9	44.5
Water Replenishment District	26.8	26.0	12.8	26.8
			TOTAL	255.5

Effective 1/1/23 to 12/31/23				
West Basin Customers	Calendar Year			3-Year Peak
	2018	2019	2020	
California American Water Co.	5.0	4.8	4.1	5.0
Cal Water - Dominguez	43.5	44.2	40.3	44.2
Cal Water - Hawthorne	6.2	6.4	6.6	6.6
Cal Water - Hermosa Redondo	19.2	19.7	16.5	19.7
Cal Water - Palos Verdes	40.4	44.8	38.9	44.8
LA County Waterworks No. 29	14.7	15.8	16.7	16.7
City of El Segundo	12.3	8.5	14.0	14.0
City of Inglewood	11.8	12.0	11.9	12.0
City of Lomita	3.5	3.8	3.4	3.8
City of Manhattan Beach	8.1	8.4	8.1	8.4
Golden State Water Co.	44.5	40.9	35.2	44.5
Water Replenishment District	26.0	12.8	36.1	36.1
			TOTAL	255.7

Attachment 7: San Diego County Water Authority News Release



Water Authority Adopts 2023 Rates and Charges

JUNE 23, 2022

Strategic actions reduce water rate increases, maintaining affordability despite inflation

Faced with the same inflationary pressures that are pushing up prices for residents and businesses, the San Diego County Water Authority Board of Directors today adopted 2023 water rates using strategies to minimize increases for its 24 member agencies and their customers.

The rates and charges will increase by 3.7% for untreated water and 5.2% for treated water in calendar year 2023 for the Water Authority's member agencies. The increases – adopted after a public hearing – are attributable to historically high inflation, significant energy cost increases from SDG&E, and continued cost increases by the Metropolitan Water District of Southern California.

"The strategic steps taken to minimize rate increases in the face of rising costs reflects the Board's commitment to water affordability," said Water Authority Board



Our Region's Trusted Water Leader
San Diego County Water Authority

YOUR WATER	PROJECTS & PROGRAMS	IN THE COMMUNITY	WORK WITH US	MEMBER AGENCIES	ABOUT US
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Authority plans to draw \$1.1 million from the Rate Stabilization Fund. Strategic withdrawals from the fund help avoid rate spikes, especially those driven by reduced water sales.

The Water Authority's commitment to affordability includes securing \$25 million from the State of California to pay water bills for San Diego County residents impacted by COVID-19; securing \$90 million over the past two years through advocacy efforts and distributing that money to member agencies; avoiding hundreds of millions of dollars in future costs on water deliveries; and maintaining strong credit ratings that reduce the cost of debt.

In 2023, the Water Authority will charge its 24 member agencies the equivalent to an all-in rate of \$1,579 per acre-foot for untreated water, or \$56 more per acre-foot than they currently pay. Charges would be \$1,929 per acre-foot for treated water, or \$96 more per acre-foot than in 2022. (Note: An acre-foot is about 325,900 gallons, enough to serve the annual needs of 2.5 typical four-person households in San Diego County.)

Actual figures will vary for each retail member agency, and each member agency will incorporate costs from the Water Authority into the retail rates it charges to residents, businesses, and institutions.

The Water Authority's overall rate increase is driven by multiple factors, including rising costs for its water supplies, increases to water treatment (driven by energy costs) and conserved water supplies (driven by inflation), and continued increases from MWD.

Each year, the Water Authority's rate proposal is developed in conjunction with an independent cost-of-service study to ensure rates and charges comply with state law, legal requirements, cost-of-service standards, and Board policies. For 2023, an additional consultant hired to perform a cost-of-service review again affirmed the Water Authority's process. Throughout the six-month rate setting process, the Water Authority worked closely with its member agencies to keep the proposed



Our Region's Trusted Water Leader
San Diego County Water Authority

YOUR WATER PROJECTS & PROGRAMS IN THE COMMUNITY WORK WITH US MEMBER AGENCIES ABOUT US

lower our debt.”

The 2023 rate proposal ensures debt-coverage ratios that maintain the Water Authority's strong credit ratings and minimize the cost of borrowing money for construction projects, an approach that saves ratepayers money over the long run. The Water Authority has senior lien credit ratings of AAA from Standard & Poor's, AA+ from Fitch ratings and Aa2 from Moody's.

For more information about the Water Authority's adopted 2023 rates, go the June Board packet starting on page 65 at: https://www.sdcwa.org/wp-content/uploads/2021/11/2022_06_23BoardPacketSEC.pdf

[BACK TO ALL NEWS](#)

The San Diego County Water Authority sustains a \$240 billion regional economy and the quality of life for 3.3 million residents through a multi-decade water supply diversification plan, major infrastructure investments and forward-thinking policies that promote fiscal and environmental responsibility. A public agency created in 1944, the Water Authority delivers wholesale water supplies to 24 retail water providers, including cities, special districts and a military base.

Media Contact Information

Ed Joyce

Phone: [\(949\) 276-1675](tel:(949)276-1675)

Email: Ejoyce@sdewa.org

Attachment 8: SDCWA June Board Packet Notice to the Public



June 15, 2022

Attention: Administrative and Finance Committee

Adopt the Water Authority's Rates and Charges for Calendar Year 2023. (Action)

Purpose

To establish rates and charges sufficient to meet the Water Authority's revenue requirements in conformance with state law and board policies.

Staff recommendations

- a. Conduct the Public Hearing;
- b. Adopt Ordinance No. 2022-__ an ordinance of the Board of Directors of the San Diego County Water Authority setting rates and charges for the delivery and supply of water, use of facilities, and provision of services;
- c. Adopt Resolution No. 2022-__ a resolution of the Board of Directors of the San Diego County Water Authority continuing the Standby Availability Charge;
- d. Adopt Ordinance No. 2022-__ an ordinance of the Board of Directors of the San Diego County Water Authority amending and restating the System Capacity and Water Treatment Capacity Charges imposed by the Water Authority pursuant to Section 5.9 of the County Water Authority Act;
- e. Find the actions exempt from CEQA pursuant to Public Resources Code § 21080(b)(8) and authorize the General Manager to file a notice of exemption.

Alternative

Direct staff to set a different time or date for the public hearing.

Fiscal Impact

The proposed water rates and charges, in combination with reserves, property tax revenues, the System Capacity Charge, the Water Treatment Capacity Charge, the Infrastructure Access Charge (IAC), investment income, the Standby Availability Charge, and the Supply Reliability Charge (SRC), are expected to raise revenues sufficient to meet the Water Authority's revenue requirement, bond covenants, and other key fiscal policy goals. The recommended M&I All-In cost of water increase for CY 2023 is \$56/AF or 3.7% for untreated water and \$96/AF or 5.2% for treated water. These increases continue to be mitigated by a projected draw from the Rate Stabilization Fund (RSF) within the Board policy.

Executive Summary

- Treated Water Cost increasing from the CY 2022 All-In rate of \$1,833 to \$1,929 in CY 2023 rates, a \$96 or 5.2% increase.
- Untreated Water Cost increasing from the CY 2022 All-In rate of \$1,523 to \$1,584 in CY 2023, rates a \$56 or 3.7% increase.
- Rate Stabilization Fund: Forecasted \$14M use of reserves in FY '23 to mitigate rate increases.
- Infrastructure Access Charge: For CY 2023, staff recommends that the IAC be held flat at \$4.24 to lessen short-term volatility.

Background

At the May 26, 2022 Board meeting, staff provided a report on the proposed CY 2023 rates and charges. In that report, the recommended rates, affordability efforts, and key rate drivers were discussed. Identified rate and charge drivers included MWD's Treatment and Full-Service Supply Rate increases, historically high inflationary cost pressures on IID and desalinated supplies, and operational changes by member agencies leading to decreased efficiencies at the Twin Oaks Treatment Plant. A draft of Carollo's independent cost of service study, and an additional independent draft cost of service study from HDR were presented. Both studies independently affirmed the Water Authority's annual rates and charges process, noting that they aligned with all applicable industry standards and cost-of-service best practices. The Board memo associated with the report is provided as Attachment A.

Previous Board Actions

On May 26, 2022, the Board received the detailed staff report and Carollo's draft cost of service study recommending the proposed CY 2023 rates and charges as well as HDR's cost of service study. Resolution 2022-11 was adopted, setting the time and place for the public hearing on June 23, 2022, to receive comments on the proposed rates and charges.

Discussion

The June 23, 2022 Administrative and Finance Committee meeting has been scheduled as the time, date, and place to receive public comments regarding proposed rates and charges. Information presented in the May 26, 2022 Board meeting is also available. In addition, upon the Board's May action, Carollo's Cost-of-Service Report and HDR's independent Peer Review were finalized and are provided as Attachments B and C, respectively.

The Water Authority continues to emphasize its significant and long-standing affordability efforts through effective cost controls and active debt management. Building on prior efforts, this year's notable cost containment efforts include successfully advocating for MWD to lower its costs (rates) and pursuing lower-cost energy sources for the Water Authority's energy intensive desalination operations in Carlsbad. Cost containment advocacy recently resulted in the Metropolitan Water District dropping their originally proposed rates from a 9% annual "overall" increase to 5%, saving San Diego ratepayers more than \$15 million over the next two years. The Water Authority continues to optimize its nearly \$2 billion debt portfolio to provide the lowest cost of capital. Recent debt optimization efforts have resulted in \$130 million dollars in net-present-value savings,

and the Water Authority is currently pursuing further savings at the Claude “Bud” Lewis Carlsbad Desalination Plant through debt refunding.

The proposed actions are exempt from CEQA as provided by statute under Public Resources Code §21080(b)(8). This Statutory Exemption is stipulated for actions involving the establishment of water rates, tolls, fares, or other charges for the purpose of meeting operating expenses, including employee wages and benefits; purchasing or leasing supplies, equipment, or materials; meeting financial reserve needs and requirements; or obtaining funds for capital projects within existing service areas. The General Manager is therefore authorized to file a Notice of Exemption pursuant to Public Resources Code §21152(b) and §15061(d) of the State CEQA Guidelines (Title 14, Chapter 3, California Code of Regulations).

The Water Authority has complied with the procedural requirements for continuing the Standby Availability Charge and increasing its rates and charges for water and other services. After consideration of public comments at the Public Hearing on June 23, 2022, the staff recommends that the Board adopt the ordinance setting the water rates and charges for CY 2023.

Prepared by: David Gore, Senior Management Analyst
Reviewed by: Pierce Rossum, Rate and Debt Manager
Lisa Marie Harris, Director of Finance/Treasurer
Approved by: Tish Berge, Assistant General Manager

Attachments:

- Attachment A - May 18, 2022 Board Memo setting the public hearing for the proposed CY 2023 rates and charges
- Attachment B - Carollo Engineers' Cost of Service Study dated June 2022
- Attachment C - May 18, 2022 Supplemental Board Memo Peer Review of SDCWA's 2023 Rate Study
- Attachment D - HDR's Cost-of-Service Study dated June 2022
- Attachment E - Ordinance No. 2022-__ an ordinance of the Board of Directors of the San Diego County Water Authority setting rates and charges for the delivery and supply of water, use of facilities, and provision of services
- Attachment F - Resolution No. 2022-__ a resolution of the Board of Directors of the San Diego County Water Authority continuing the Standby Availability Charge
- Attachment G - Ordinance No. 2022-__ an ordinance of the Board of Directors of the San Diego County Water Authority amending and restating the System Capacity and Water Treatment Capacity Charges imposed by the Water Authority pursuant to Section 5.9 of the County Water Authority Act

Attachment 9: City of San Diego Notice of Public Hearing

Proposed Increase to Water Rates

The City of San Diego is proposing changes that will affect your water bill.

Public Hearing Information

A public hearing will be held on proposed maximum increases to water pass-through charges for calendar year 2023.

**The public hearing will be held
Sept. 20, 2022, at 2 p.m.**

The City Council will hear and consider oral testimony and written materials submitted regarding the proposed rate increases at the hearing. The City Council will have the authority to make adjustments to the proposed rate increases in response to oral testimony and written materials submitted for consideration. Only formal written protest will be considered under the City's Proposition 218 protest tabulating procedures and must be received before the close of the public hearing either in person at the public hearing or via mail to City Clerk, 202 C St., MS 2P, San Diego, CA 92101.

You have the right to protest the proposed rate increases.

Written protest must contain a statement of opposition to the rate increase, the property assessor parcel number or property address and the name and signature of the property owner or utility customer of record registering the protest. Only one protest will be counted for each parcel or address. Electronic protest (email, social media messages, etc.) will not qualify as written protest under state requirements. Per state law, the public hearing will be televised on City TV and simulcast on the City's website at sandiego.gov/citytv. More information about Council meeting access and public comment is available online at sandiego.gov/city-clerk/officialdocs/council-agendas-minutes-results. At the close of the public hearing, the City Council will consider and may approve the rate increases. Oral comments at the public hearing will be considered by the City Council but will not qualify as formal protests unless accompanied by a written protest. If, by the close of the public hearing, written protests against the pass-through charges are not presented by a majority of property owners or tenants responsible for paying the utility bills, the City Council will be authorized to adopt a resolution to increase the pass-through charges. If adopted, the calendar year 2023 increases will become effective Jan. 1, 2023, and a public information campaign will commence to ensure customer awareness.

Pursuant to Government Code Section 53759, there is a 120-day statute of limitations for any judicial action or proceeding challenging any new, increased, or extended water and sewer fee or charge.

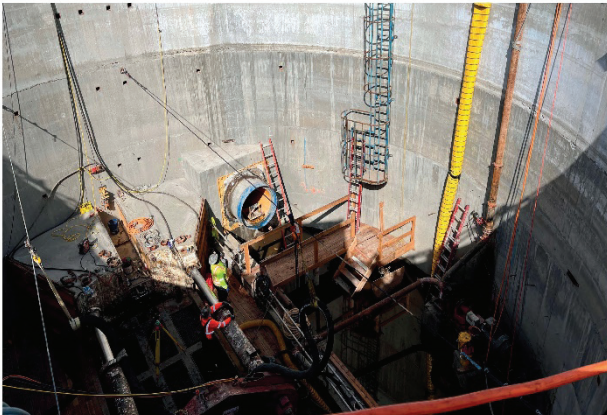


PROPOSED Water Pass-Through Rates

San Diego relies heavily upon imported water from Northern California and the Colorado River. The City historically has purchased approximately 85% to 90% of its annual water needs from the San Diego County Water Authority (SDCWA), which in turn purchases its water from the Metropolitan Water District of Southern California. Historically, SDCWA increases water rates annually. These increases are based on SDCWA costs for infrastructure, operations, maintenance and other costs required to obtain water on behalf of member agencies. SDCWA incorporates all its costs into its water charges which are passed through to member agencies, like the City of San Diego.

In June of each year, the SDCWA board approves wholesale water rate increases which will increase the City's water purchase costs commencing the following year on

Current and Maximum Water Monthly Service Charge		
Meter Size	Current Charge	3% Pass Through Increase
5/8", 3/4"	\$27.09	\$27.91
1"	\$35.87	\$36.95
1.5"	\$55.97	\$57.65
2"	\$81.08	\$83.52
3"	\$140.09	\$144.30
4"	\$224.22	\$230.95
6"	\$432.65	\$445.63
8"	\$683.77	\$704.29
10"	\$977.57	\$1,006.90
12"	\$1,813.79	\$1,868.21
16"	\$3,153.50	\$3,248.11



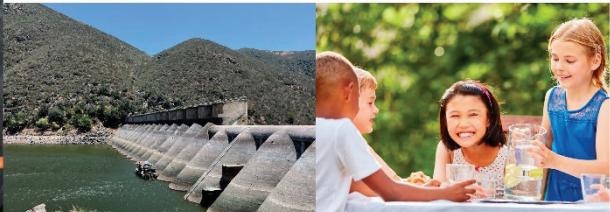
Current and Maximum Water Commodity Rates		
Customer Class	Current Charge	3% Pass Through Increase
Single Family Residential		
Tier 1	\$(HCF)	\$5,415
Tier 2	\$(HCF)	\$6,065
Tier 3	\$(HCF)	\$8,664
Tier 4	\$(HCF)	\$12,183
Multi-Family Residential	\$(HCF)	\$6,553
Commercial/Industrial/Outside City	\$(HCF)	\$6,394
Irrigation	\$(HCF)	\$7,265
Temporary Construction	\$(HCF)	\$7,388

Jan. 1. The City is proposing to pass through the cost to buy water from SDCWA to customers based on the rates approved by SDCWA in June 2022 for calendar year 2023. Water rates are projected to increase up to 3% as a pass through. If the SDCWA increase impact to the City ratepayers is higher than 3%, the City would not implement rates any higher. The City will provide written notice to customers 30 days prior the effective date of the rate increase, which will be no more than 3% increase of all fixed and commodity water rates.

Note: The City bills most of its single-family residential customers on a bi-monthly basis. This means each bill these customers receive includes charges for two months of service.

Current and Maximum Fireline Monthly Service Charge		
Meter Size	Current Charge	3% Pass Through Increase
1"	\$4.03	\$4.15
1.5"	\$4.03	\$4.15
2"	\$6.24	\$6.43
3"	\$24.17	\$24.90
4"	\$30.90	\$31.83
6"	\$45.64	\$47.01
8"	\$64.46	\$66.40
10"	\$83.27	\$85.77
12"	\$99.37	\$102.96
16"	\$161.13	\$165.97
20"	\$200.62	\$206.64

This information is provided as advisory for your review.





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San Diego, CA 92123

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Notice of Public Hearing

DATE: Sept. 20, 2022

TIME: 2 p.m.

LOCATION: 202 C St San Diego, CA 92101

Council Chambers are open for in-person testimony.

For more information, please visit:

sandiego.gov/city-clerk/officialdocs/council-agendas-minutes-results.



*This document is important
to all customers of the
City of San Diego and is
also available in other
languages on our website.
Please visit [sandiego.gov/
rate-increases](http://sandiego.gov/rate-increases)*

IMPORTANT INFORMATION ABOUT YOUR RIGHTS

This notice is being provided to you by the City of San Diego Public Utilities Department pursuant to California Constitution Article XIID (also known as "Proposition 218"). Under the terms of Proposition 218, the City is required to notify the property owners of record of proposed changes to property-related fees, such as water and wastewater service.

This serves as notice that the City Council will conduct a public hearing, at the time, date and location specified above, to consider recommended adjustments to the City's water service rates and charges. If approved, the proposed adjustments will first appear on bills beginning in January 2023. All members of the public are invited to attend the public hearing. **Additionally, under California state law, all property owners and customers of record may submit a written protest to the proposed rate changes. Mailed protest must be received by Sept. 20, 2022. Only one protest per parcel is permitted.** All written protests will be verified. You may also appear at the public hearing at the date and time specified above. More information is available online at: sandiego.gov/rate-increases.



Written protest must be mailed in an envelope or delivered to: City Clerk, 202 C St., MS 2P, San Diego, CA 92101.

I _____ oppose the proposed rate increases.

Assessor's Parcel Number or Address: _____

Signature: _____



Printed on Recycled Paper

Attachment 10: Seaside Watermaster and Sand City Corrections

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$55,771,300 or 18.71% in the year 2024, by \$19,565,300 or 5.50% in the year 2025, and by \$19,892,400 or 5.30% in the year 2026.

A.22-07-001
(Filed July 1, 2022)

**CALIFORNIA-AMERICAN WATER COMPANY'S RESPONSE TO
PUBLIC ADVOCATES OFFICE'S DATA REQUEST TGE 04**

Sarah E. Leeper
Nicholas A. Subias
Cathy Hongola-Baptista
California-American Water Company
555 Montgomery Street, Suite 816
San Francisco, CA 94111
(415) 863-2960
sarah.leeper@amwater.com

Lori Anne Dolqueist
Willis Hon
Nossaman LLP
50 California Street
34th Floor
San Francisco, CA 94111
(415) 398-3600
ldolqueist@nossamna.com

Attorneys for California-American Water Company

Dated: September 7, 2022

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capitol Mall, Suite 630
Sacramento, CA 95814
Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE-04
Company Number: Cal ADV TGE 04 Q001
Date Received: August 23, 2022
Date Response Due: September 7, 2022
Subject Area: Purchased Water

DATA REQUEST:

1. For the following questions, please refer to Excel document "Cal Adv TGI 01 Q001 Attachment 1" submitted by California American Water and sent by email from Demetrio Marquez dated August 5, 2022. This document was submitted by California American Water as part of its response to data request titled "A2207001 - Cal Advocates Data Request TGI-01 (Purchased Water)" sent to California American Water on July 22, 2022.
 - a. In the worksheet tab titled "CEN" in Excel workbook "Cal Adv TGI 01 Q001 Attachment 1," rows 22 through 24 for columns C through G are empty. These rows and columns pertain to the costs and fees associated with Sand City, Seaside Basin Water Master, and Marina Coast Water District Wheeling Fee. Please provide this information as originally requested in "A2207001 - Cal Advocates Data Request TGI-01 (Purchased Water)." If no data exists, please explain why.
 - b. In the worksheet tab titled "CEN" in Excel workbook "Cal Adv TGI 01 Q001 Attachment 1," the cells in Row 12, Columns C through G, show water in acre-feet for "Pure Water Monterey Recovery" for recorded years 2017 through 2021. However, these numbers are not projected in the worksheet tab titled "CEN" in workpaper "ALL_CH04_O&M_WP_Purchased Water" for the projected years 2022 through 2025. Please explain why recorded year data exists for 2017 through 2021 but no similar data is projected for years 2022 through 2025. If Cal Am does not forecast future recorded usage for Pure Water Monterey Recovery as referenced above, please explain why, with an explanation of what changed (or will change) from what occurred during recorded years 2017 to 2021.

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

- c. In the worksheet tab titled "CEN" in Excel workbook "Cal Adv TGI 01 Q001 Attachment 1," the cells found in Row 16, Columns C through G, show water in acre-feet for "Satellite Systems" for recorded years 2017 through 2021. However, these numbers are not projected in the worksheet tab titled "CEN" in workpaper "ALL_CH04_O&M_WP_Purchased Water," for the projected years 2022 through 2025. Please explain why recorded year data exists for 2017 through 2021 but no similar data is projected for years 2022 through 2025. If Cal Am does not forecast future recorded usage for Satellite Systems as referenced above, please explain why, with an explanation of what changed (or will change) from what occurred during recorded years 2017 to 2021.

CAL-AM'S RESPONSE

- a. Please see attachment CAW Response Cal Adv TGE 04 Q001.a Attachment 1. Note that 2017-2021 data is not inflation adjusted. In reviewing the backup calculation, California American Water discovered certain Seaside Basin and property tax invoices were inadvertently transposed between the years in the forecast calculation. The tax year in the original invoice sent by the County of Monterey was different than the final tax bill. California American Water included a corrected version of the calculation in CAW Response Cal Adv TGE 04 Q002.b Attachment 1, and this correction will be reflected in the company's 100-Day update filing.
- b. The purpose of the worksheet as provided in the Application RO Model is to provide estimated purchased water costs based on forecasted demand and current purchased water rates. The "Pure Water Monterey Recovery" terminology was provided in the response to TGI 01 Q001 to provide more detail on the source of the purchased water. The projected purchases from the Pure Water Monterey facility are based on the projected company allotment as defined in the Water Purchase Agreement for Pure Water Monterey Project¹. The Pure Water Monterey facility came online in 2020 and the effective company allotment has fluctuated since that time. Information provided in the response to TGI 01 Q001 reflects recorded extraction.
- c. Central Satellite systems do not utilize purchased water sources (consisting of Pure Water Monterey and Sand City) so it was not necessary to separately

¹ Water Purchase Agreement for Pure Water Monterey Project approved in Decision 16-09-021 and current effective company allotment as approved via Advice Letter 1375

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

forecast related production. This information was provided in response to TGI 01 for informational purposes only.

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capitol Mall, Suite 630
Sacramento, CA 95814
Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE-04
Company Number: Cal ADV TGE 04 Q002.a
Date Received: August 23, 2022
Date Response Due: September 7, 2022
Subject Area: Purchased Water

DATA REQUEST:

2. Please refer to Excel workpaper titled "ALL_CH04_O&M_WP_Purchased Water," worksheet tab "CEN" for the following questions.
- The cells found in Rows 11 through 14, Columns H through K, are hardcoded numbers. Please provide the specific underlying formulas or calculations that support these hardcoded numbers.

CAL-AM'S RESPONSE

'Seaside Basin Native Water (excluding PWM)' 1479 AFY (row 11) is the 1474 Seaside Groundwater Basin allocation to California American Water, along with an additional 5 AFY as part a wheeling agreement.

'Carmel River' 3,300 AFY (row 12) is the 3,376 AFY of California American Water permitted water rights with a reduction of 76 AFY to account for operational buffer needed to ensure limit is not exceeded.

'Sand City' 200 AFY (row 13) is the approximate average historic annual production from the plant. This amount is anticipated to increase in 2024 to 250 AFY, based on an estimated 50 AFY improvement when a new brackish intake well is built and in service.

'Total Purchased Water Rights AF' is the anticipated amount of purchased water from Monterey One Water Pure Water Monterey Project that is extracted and delivered to our customers.

'Seaside Basin ASR if available/deficit' is the anticipated remaining supply needs pumped from Seaside Basin to meet demand after using the other available sources of supply.

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capitol Mall, Suite 630
Sacramento, CA 95814

Response Provided By: Joey Chen
Title: Senior Rates & Regulatory Analyst
Address: California American Water
520 Capitol Mall, Suite 630
Sacramento, CA 95814

Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE-04
Company Number: Cal ADV TGE 04 Q002.b-g
Date Received: August 23, 2022
Date Response Due: September 7, 2022
Subject Area: Purchased Water

DATA REQUEST:

2. Please refer to Excel workpaper titled "ALL_CH04_O&M_WP_Purchased Water," worksheet tab "CEN" for the following questions.
- b. The cells found in Rows 19 through 23, Columns H through K, are hardcoded numbers. Please provide the specific underlying formulas or calculations that support these hardcoded numbers.
 - c. Cell H21 shows an expense of \$946,204.26 for "Sand City" and is hardcoded. Please provide the specific underlying formula or calculation that supports this expense of \$946,204.26. Please also provide all invoices and other documentation that support this expense.
 - d. Cells I21, J21, and K21 shows the expense amounts for "Sand City" as \$966,933.81, \$984,053.76, and \$1,001,248.92 respectively. Please provide the specific formulas or calculations that support each of the following escalation calculations:
 - i. The 2022 expense of \$946,204.26 to the 2023 expense of \$966,933.81.
 - ii. The 2023 expense of \$966,933.81 to the 2024 expense of \$984,053.76.
 - iii. The 2024 expense of \$984,053.76 to the 2025 expense of \$1,001,248.92.
 - e. Cell H22 shows an expense of \$301,922.96 for "Seaside Basin Water Master" and is hardcoded. Please provide the specific underlying formula or calculation

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

- that supports this expense of \$301,922.96. Please also provide all invoices and other documentation that support this expense.
- f. Cells I22, J22, and K22 shows the expense amounts for "Seaside Basin Water Master" as \$313,697.96, \$323,422.59, and \$333,189.96 respectively. Please provide the specific formulas or calculations that support each of the following escalation calculations:
 - i. The 2022 expense of \$301,922.96 to the 2023 expense of \$313,697.96.
 - ii. The 2023 expense of \$313,697.96 to the 2024 expense of \$323,422.59.
 - iii. The 2024 expense of \$323,422.59 to the 2025 expense of \$333,189.96.
 - g. Cell H23 shows an expense of \$24,000.00 for "Marina Coast Water District Wheeling Fee" and is hardcoded. Please provide the specific underlying formula or calculation that supports this expense of \$24,000.00. Please also provide all invoices and other documentation that support this expense.

CAL-AM'S RESPONSE

- b. Please refer to California American Water's attachment CAW Response Cal Adv TGE 04 Q002.b Attachment 1. In reviewing the backup calculation, California American Water discovered that some of the Seaside Basin and property tax invoices were inadvertently transposed between the years in the forecast calculation. The tax year in the original invoice sent by the County of Monterey was different than the final tax bill. California American Water included a corrected version of the calculation in CAW Response Cal Adv TGE 04 Q002.b Attachment 1, and this correction will be reflected in the company's 100-Day update filing.
- c. California American Water objects to this request as overbroad and unduly burdensome. Subject to and without waiving the foregoing objections, California American Water responds as follows. Please refer to California American Water's attachment CAW Response Cal Adv TGE 04 Q002.b Attachment 1 for the calculation. The calculation utilizes 5 years of historical recorded data. There are over 1,000 recorded transactions, retrieving all these invoices would be unduly burdensome. As a compromise, California American Water is providing the historical transaction detail in attachment CAW Response Cal Adv TGE 04 Q002.b Attachment 1. Cal Advocates can review these transaction details and identify specific invoices to request for production.
- d. Please refer to California American Water's attachment CAW Response Cal Adv TGE 04 Q002.b Attachment 1.

CALIFORNIA AMERICAN WATER
A2207001 DR TGE-04

ORIGINAL

Sand City	2017	2018	2019	2020	2021	5 Yr Average	2022	2023	2024	2025	2026
Escalation Factor	1.1997	1.1558	1.1371	1.1094	1.0000		1.0776	1.039	1.031	1.0302	1.0302
Chemicals	24,467	8,971	15,209	29,040	21,298	19,795					
Maintenance	211,520	375,808	102,554	119,476	137,525	189,337					
Permit Fee	4,899	5,145	5,907	-	12,818	5,714					
Property Tax	71,509	73,826	77,285	75,960	77,533	75,182					
SCADA	613	613	613	613	616	613					
Utilities	167,335	149,150	106,795	165,113	148,421	147,363					
Total	480,143	613,112	308,382	390,203	398,199	438,004					
Escalated Total	576,027	708,486	380,649	432,891	398,199	493,250	531,526	552,256	569,376	586,571	604,285
Annualized Lease (Fixed)	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677
Total Sand City	894,820	1,027,789	723,039	804,880	812,876	852,681					
Total Sand City Escalated	990,704	1,123,163	765,326	847,569	812,876	907,928	946,204	966,933	984,053	1,001,248	1,018,963
Seaside Basin Watermaster	309,142	208,182	161,211	251,660	326,951	251,429					
Seaside Basin Watermaster (Escalated to 2022 \$)	370,877	240,566	183,318	279,192	326,951	280,181	301,923	313,698	323,423	333,190	343,252
Marina Coast Water District Wheeling Fee	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
Total Monterey Purchased Water Line	1,385,582	1,387,729	972,645	1,150,760	1,163,827	1,212,109	1,272,127	1,304,631	1,331,476	1,358,438	1,386,215

CORRECTED

Sand City	2017	2018	2019	2020	2021	5 Yr Average	2022	2023	2024	2025	2026
Escalation Factor	1.1997	1.1558	1.1371	1.1094	1.0000		1.0776	1.039	1.031	1.0302	1.0302
Chemicals	24,467	8,971	15,209	29,040	21,288	19,795					
Maintenance	211,520	375,808	102,554	119,476	137,525	189,337					
Permit Fee	4,899	5,145	5,907	-	12,818	5,714					
Property Tax	70,226	71,509	77,285	80,559	75,960	75,108					
SCADA	613	613	613	613	616	613					
Utilities	167,335	149,150	106,795	165,113	148,421	147,363					
Total	478,860	610,995	308,382	394,802	396,826	437,929					
Escalated Total	574,487	706,040	360,849	437,993	396,826	493,159	531,428	552,154	569,271	586,463	604,174
Annualized Lease (Fixed)	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677	414,677
Total Sand City	893,537	1,025,673	723,039	809,479	811,304	852,606					
Total Sand City Escalated	989,165	1,120,717	765,326	852,670	811,304	907,836	946,105	966,831	983,943	1,001,140	1,018,851
Seaside Basin Watermaster	134,160	208,182	161,211	201,500	251,660	191,343					
Seaside Basin Watermaster (Escalated to 2022 \$)	160,952	240,566	183,318	223,544	251,660	212,008	228,460	237,370	244,728	252,119	259,733
Marina Coast Water District Wheeling Fee	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
Total Monterey Purchased Water Line	1,174,116	1,385,283	972,645	1,100,214	1,085,964	1,143,844	1,198,565	1,228,201	1,252,675	1,277,259	1,302,584

Attachment 11: Double-Counted Purchased Power Expenses

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capitol Mall, Suite 630
Sacramento, CA 95814

Response Provided By: Joey Chen
Title: Senior Rates & Regulatory Analyst
Address: California American Water
520 Capital Mall, Suite 630
Sacramento, CA 95814

Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE 14
Company Number: Cal ADV TGE 14 Q001
Date Received: November 16, 2022
Date Response Due: November 30, 2022
Subject Area: Purchased Power

DATA REQUEST:

The following questions pertain to NARUC Account #726 Purchased Power projected expenses for the years 2022 through 2026 as found in Excel workbooks "ALL_CH04_O&M_RO" and "ALL_CH04_O&M_WP_Purchased Power."

1. Snapshot #1 below is a subset of expenses for NARUC Account #726 Purchased Power as found in tab "Escalated Costs WS5" from Excel workbook "ALL_CH04_O&M_RO." For reference, these expenses can be found in "Escalated Costs WS5" and correspond to the Cal Am Districts Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview respectively. The projected amounts for years 2022 through 2026 for these districts do not appear in Cal Am's separate workbook for calculating purchased power expenses, specifically "ALL_CH04_O&M_WP_Purchased Power." Furthermore, these districts are also considered to be part of larger "rollup" districts, which include the Monterey, Los Angeles, and Sacramento districts, whose expenses are included in "ALL_CH04_O&M_WP_Purchased Power."

- a. Please explain why these purchased power expenses for the Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview districts are not included in workpaper "ALL_CH04_O&M_WP_Purchased Power." If these expenses are not duplicative of expenses from "ALL_CH04_O&M_WP_Purchased Power," please explain their exclusion from "ALL_CH04_O&M_WP_Purchased Power." Please also explain why Cal Am chose to escalate these expenses

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

on a 5-year recorded average based on 2017 through 2021 recorded expenses.

Snapshot #1

District #	District Name	SAP Account #	SAP Account # Description	NARUC #	Attrition Year	Projected Amounts Escalated				
						Estimated 2022	Estimated 2023	Test Year 2024	Escalation Year 2025	Attrition Year 2026
1548	Monterey - Toro	51510012	Purchased Power - Pumping	726	N	71,431.00	74,216.81	76,517.53	78,828.36	78,828.36
1549	Monterey - Garrapata	51510012	Purchased Power - Pumping	726	N	46,395.22	48,204.64	49,698.98	51,199.89	51,199.89
1562	Dunnigan WW	51510012	Purchased Power - Pumping	726	N	13,271.76	13,789.36	14,216.83	14,646.18	14,646.18
1564	Geyserville	51510012	Purchased Power - Pumping	726	N	19,597.15	20,361.44	20,992.65	21,626.63	21,626.63
1565	Meadowbrook	51510012	Purchased Power - Pumping	726	N	112,347.38	116,728.93	120,347.52	123,982.02	123,982.02
1557	Rio Plaza	51510012	Purchased Power - Pumping	726	N	35,254.23	36,629.15	37,764.65	38,905.14	38,905.14
1566	Fruitridge	51510012	Purchased Power - Pumping	726	N	301,157.99	312,903.16	322,603.15	332,345.77	332,345.77
1567	Hillview	51510012	Purchased Power - Pumping	726	N	459,074.63	476,978.54	491,764.88	506,616.18	506,616.18

CAL-AM'S RESPONSE

1. Purchased power expenses for the Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview districts are duplicative of expenses from "ALL_CH04_O&M_WP_Purchased Power" file and were inadvertently included in the RO Model. The RO Model should be adjusted to remove year 2022-2026 forecasted purchase power expenses from "ALL_CH04_O&M_RO", worksheet "ORA Adj to Escalated Costs WS8" in Rows 1838, 2192, 5378, 6086, 6440, 8210, 8564, and 8918 for Monterey-Toro, Monterey-Garrapata, Dunnigan WW, Geyserville, Meadowbrook, Rio Plaza, Fruitridge, and Hillview districts.

Attachment 12: Purchased Power 2017-2021 Recorded Year Rate Increases

Total Purchased Power Costs by Recorded Year				
2017	2018	2019	2020	2021
\$6,837,275.62	\$6,801,065.08	\$6,934,075.80	\$8,027,545.29	\$9,182,277.78

Total Kilowatt Hours (KWH) by Recorded Year				
2017	2018	2019	2020	2021
45,632,462.65	45,020,900.63	43,439,209.33	46,395,066.99	49,107,157.39

\$/KWH by Year*				
2017	2018	2019	2020	2021
0.149834	0.151065	0.159627	0.173026	0.186985

Annual Percentage Increase**			
2017-2018	2018-2019	2019-2020	2020-2021
0.82%	5.67%	8.39%	8.07%

Average of Annual Percentage Increase***
5.74%

*Cost per kilowatt hour (\$/KWH) is calculated by dividing total purchased power cost by the total kilowatt hours for each recorded year. Cost and kilowatt hours are based on Cal Am wide expenses across all districts.

** Annual Percentage Increase is the percent year to year change in \$/KWH. For example, 2017-2018 is calculated by taking the difference between the 2018 and 2017 \$/KWH figures and dividing by the 2017 \$/KWH.

***Average of Annual Percentage Increase is the average of the percent year to year change in \$/KWH.

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$55,771,300 or 18.71% in the year 2024, by \$19,565,300 or 5.50% in the year 2025, and by \$19,892,400 or 5.30% in the year 2026.

A.22-07-001
(Filed July 1, 2022)

**CALIFORNIA-AMERICAN WATER COMPANY'S RESPONSE TO
PUBLIC ADVOCATES OFFICE'S DATA REQUEST TGE 02**

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Attorneys for California-American Water Company

Dated: August 24, 2022

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Lakhjit S. Thind
Title: Rates & Regulatory Analyst
Address: California American Water
520 Capital Mall, Suite 630
Sacramento, CA 95814
ORA Request: A2207001 CAL ADV DATA REQUEST # TGE-02
Company Number: Cal ADV TGE 02 Q001
Date Received: August 11, 2022
Date Response Due: August 25, 2022
Subject Area: Purchased Power

DATA REQUEST:

1. Please provide purchased power data for recorded years 2017 through 2020, in the same format and manner as found in the worksheet tab titled "Purchased Power Details WS-1" from workpaper "ALL_CH04_O&M_WP_Purchased Power."
 - a. Please organize this data into separate Excel worksheets, with each worksheet representing each requested year from 2017 to 2020 and organize the data in those worksheets in the same manner as the worksheet titled "Purchased Power Details WS-1" from workpaper "ALL_CH04_O&M_WP_Purchased Power," with columns for District Number, District Name, Location Number, Location Name, Unique Identifier Number, Service Type, Total Cost, and Total Kilowatt Hour Usage.

CAL-AM'S RESPONSE

Please refer to CAW Response Cal Adv TGE 02 Q001 Attachment 1 for the required information.

California American Water
Purchased Water Details
All Districts - 2017

					\$	KWH	
District #	District Name	Location #	Location Name	Uniqe Identifier	Service Type	Total Cost	Total Usage
1530	San Diego County District	0500006	1St & A	1530-0500006	Interconnection	256.92	750
1530	San Diego County District	0500136	Highland Tank	1530-0500136	Tank	482.52	1,638
1530	San Diego County District	0500199	Montgomery Tank	1530-0500199	Tank	362.25	1,135
1530	San Diego County District	0500224	Palm Ave. Flow Meter	1530-0500224	Interconnection	116.22	110
1540	Monterey County District	0500010	Address Via Malpaso	1540-0500010	Booster	394.04	742
1540	Monterey County District	0500011	Airway Upper	1540-0500011	Tank	286.34	800
1540	Monterey County District	0500012	Airways Lower Pp #17	1540-0500012	Booster	4,605.26	20,350
1540	Monterey County District	0500013	Ambler Park Treatment Pl	1540-0500013	Treatment Plant	23,698.82	104,902
1540	Monterey County District	0500014	Ambler Park Well #4	1540-0500014	Well	2,907.89	12,657
1540	Monterey County District	0500015	Ambler Park Well #5	1540-0500015	Well	13,940.69	63,888
1540	Monterey County District	0500025	Bay Street Wells #1 & #2	1540-0500025	Well	32,782.96	200,600
1540	Monterey County District	0500026	Begonia Iron Removal Pla	1540-0500026	Treatment Plant	4,729.52	19,913
1540	Monterey County District	0500027	Begonia Iron Removal Pla	1540-0500027	Treatment Plant	152,940.22	971,329
1540	Monterey County District	0500028	Berwick Well #7	1540-0500028	Well	67,790.38	399,997
1540	Monterey County District	0500029	Berwick Well #8	1540-0500029	Well	54,674.90	320,451
1540	Monterey County District	0500031	Birdrock Standby Pump	1540-0500031	Booster	122.25	12
1540	Monterey County District	0500032	Bishop #1 Well	1540-0500032	Well	5,535.55	38,360
1540	Monterey County District	0500033	Bishop #2 Well	1540-0500033	Well	20,462.69	94,627
1540	Monterey County District	0500035	Boots Rds	1540-0500035	Tank	302.71	304
1540	Monterey County District	0500037	Boronda Pp #67	1540-0500037	Booster	8,537.04	38,780
1540	Monterey County District	0500047	Carmel Knolls	1540-0500047	Booster	17,139.55	65,628
1540	Monterey County District	0500048	Carmel Valley Filter Pla	1540-0500048	Booster	2,721.38	11,252
1540	Monterey County District	0500049	Carmel Valley Ranch	1540-0500049	Tank	444.68	1,545
1540	Monterey County District	0500050	Carmel Valley Ranch Pp #	1540-0500050	Booster	8,771.21	39,359
1542	Monterey Wastewater	0500051	Carmel Valley Ranch Wwtp	1542-0500051	Waste Water	32,540.15	194,040
1540	Monterey County District	0500052	Carmel Way	1540-0500052	Booster	654.97	1,977
1540	Monterey County District	0500053	Carmel Woods Pp #8	1540-0500053	Booster	11,320.86	51,853
1540	Monterey County District	0500054	Carola Pp #71	1540-0500054	Booster	3,962.29	17,789
1540	Monterey County District	0500060	Chualar Tank	1540-0500060	Well/Booster/Tank	21,112.42	97,415
1540	Monterey County District	0500065	Corona	1540-0500065	Booster	6,285.03	27,486
1540	Monterey County District	0500067	Corte Codollera Pp	1540-0500067	Toro-Booster	828.72	2,832
1540	Monterey County District	0500075	Crespi	1540-0500075	Booster	886.98	2,856
1540	Monterey County District	0500076	Crest Reservoir (Conc)	1540-0500076	Tank	305.84	896
1540	Monterey County District	0500080	Cypress Well	1540-0500080	Well	181,967.50	1,238,584
1540	Monterey County District	0500081	Cypress Pp #14	1540-0500081	Booster	1,975.25	8,264
1540	Monterey County District	0500090	Del Mesa Pp #42	1540-0500090	Booster	5,085.02	22,825
1540	Monterey County District	0500091	Del Monte Test Well	1540-0500091	Well	257.64	18
1540	Monterey County District	0500092	Del Rey Regulating Stati	1540-0500092	Reg Station	484.20	1,750
1540	Monterey County District	0500099	Dry Creek	1540-0500099	Booster	840.24	2,753
1540	Monterey County District	0500102	Eardley Pp #1	1540-0500102	Booster	97,429.05	485,824
1540	Monterey County District	0500103	Eddy Road	1540-0500103	Booster	1,741.44	7,232
1540	Monterey County District	0500108	Encina Pp #54	1540-0500108	Booster	1,061.04	4,409
1540	Monterey County District	0500116	Forest Lake Tanks	1540-0500116	Tank	410.59	1,414
1540	Monterey County District	0500120	Garzas Well #3	1540-0500120	Well	11,190.35	53,023
1540	Monterey County District	0500121	Garzas Well #4	1540-0500121	Well	6,877.87	32,411
1540	Monterey County District	0500134	Hidden Hills Treatment P	1540-0500134	Treatment Plant	64,232.41	241,852
1540	Monterey County District	0500135	High Meadows Pp #45	1540-0500135	Booster	9,109.35	40,280
1540	Monterey County District	0500137	Highland Pp #47	1540-0500137	Booster	1,074.57	3,725
1542	Monterey Wastewater	0500140	Holt Rd Lift Station	1542-0500140	Waste Water	1,850.59	7,650
1540	Monterey County District	0500143	Huckleberry Pp #23	1540-0500143	Booster	4,731.77	19,441
1542	Monterey Wastewater	0500156	Las Palmas Lift Station #1	1542-0500156	Waste Water	3,437.03	15,363
1542	Monterey Wastewater	0500157	Las Palmas Lift Station #2	1542-0500157	Waste Water	5,628.05	25,852
1542	Monterey Wastewater	0500158	Las Palmas Lift Station #3	1542-0500158	Waste Water	3,085.63	13,688
1542	Monterey Wastewater	0500159	Las Palmas Lift Station #4	1542-0500159	Waste Water	791.52	2,660
1542	Monterey Wastewater	0500160	Las Palmas Wastewater Tr	1542-0500160	Waste Water	90,038.96	582,687
1540	Monterey County District	0500169	Los Laureles Well # 3	1540-0500169	Well	329.77	431
1540	Monterey County District	0500170	Los Laureles Well #5	1540-0500170	Well	10,271.94	47,608
1540	Monterey County District	0500171	Los Laureles Well #6	1540-0500171	Well	21,880.70	124,984
1540	Monterey County District	0500172	Los Padres Dam	1540-0500172	Dam	631.78	1,823
1540	Monterey County District	0500176	Los Tulares Lower Pp #51	1540-0500176	Booster	2,433.20	9,927
1540	Monterey County District	0500177	Los Tulares Pp #50	1540-0500177	Booster	3,947.66	16,469
1540	Monterey County District	0500178	Los Tulares Upper	1540-0500178	Booster	1,855.71	7,937
1540	Monterey County District	0500179	Lower Markham Ranch Pp	1540-0500179	Toro-Booster	3,835.57	17,175
1540	Monterey County District	0500180	Lower Tierra Grande	1540-0500180	Booster	3,163.67	13,039
1540	Monterey County District	0500183	Luzern Well	1540-0500183	Well	52,568.20	228,122
1540	Monterey County District	0500190	Mercurio Pp #59	1540-0500190	Booster	942.25	3,404
1540	Monterey County District	0500191	Mesa Pp #2A	1540-0500191	Booster	43,888.20	189,779
1540	Monterey County District	0500192	Meyers Pneumatic Pp #81	1540-0500192	Booster	544.84	1,445
1540	Monterey County District	0500193	Middle Canyon Upper	1540-0500193	Booster	1,890.59	7,187
1540	Monterey County District	0500194	Middle Tierra Grande	1540-0500194	Booster	1,618.85	6,551
1540	Monterey County District	0500204	Munras	1540-0500204	Booster	1,122.56	3,954

California American Water
Purchased Water Details
All Districts - 2017

						\$	KWH
District #	District Name	Location #	Location Name	Uniqe Identifier	Service Type	Total Cost	Total Usage
1540	Monterey County District	0500208	Nueve	1540-0500208	Booster	7,722.16	30,055
1542	Monterey Wastewater	0500211	Oak Hills Wastewater Tre	1542-0500211	Waste Water	5,494.44	19,037
1540	Monterey County District	0500220	Ord Grove Ozone Plant	1540-0500220	Treatment Plant	197,190.70	1,197,273
1540	Monterey County District	0500226	Panetta Well #1	1540-0500226	Well	17,620.26	86,230
1540	Monterey County District	0500227	Paralta Well	1540-0500227	Well	192,247.93	1,058,435
1542	Monterey Wastewater	0500229	Pasadera	1542-0500229	Waste Water	7,284.18	33,161
1542	Monterey Wastewater	0500230	Pasadera Lift Station #2	1542-0500230	Waste Water	4,037.67	18,133
1540	Monterey County District	0500231	Pasadera Pump Station	1540-0500231	Booster	3,215.76	14,077
1542	Monterey Wastewater	0500232	Pasadera Water Treatment	1542-0500232	Waste Water	9,617.31	42,744
1542	Monterey Wastewater	0500233	Pasadera Wwtp #2	1542-0500233	Waste Water	34,467.93	201,327
1540	Monterey County District	0500235	Paseo Privado Lower Pp #	1540-0500235	Booster	5,589.96	25,762
1540	Monterey County District	0500237	Pearce Well	1540-0500237	Well	79,477.04	537,918
1540	Monterey County District	0500238	Pebble Beach Pp #6	1540-0500238	Booster	155.95	347
1540	Monterey County District	0500239	Pebble Beach Pp 6B	1540-0500239	Booster	33,273.26	157,080
1540	Monterey County District	0500240	Playa Well #3	1540-0500240	Well	5,482.01	3,972
1540	Monterey County District	0500241	Plumas Well	1540-0500241	Well	35,124.20	183,378
1540	Monterey County District	0500246	Quail Meadows	1540-0500246	Booster	1,563.57	6,315
1540	Monterey County District	0500247	Ragsdale	1540-0500247	Treatment Plant	25,189.00	112,917
1540	Monterey County District	0500248	Ralph Lane Well	1540-0500248	Well	2,200.26	9,439
1540	Monterey County District	0500249	Rancho Blvd Pp #10	1540-0500249	Booster	313.74	364
1540	Monterey County District	0500250	Rancho Canada Well	1540-0500250	Well	142,605.70	864,592
1540	Monterey County District	0500251	Rancho Fiesta Pp #61	1540-0500251	Booster	2,511.14	10,219
1540	Monterey County District	0500252	Rancho Fiesta Pp #62	1540-0500252	Booster	1,140.97	4,258
1540	Monterey County District	0500253	Rancho Mar Monte	1540-0500253	Booster	1,499.14	5,963
1540	Monterey County District	0500254	Ridgeway	1540-0500254	Booster	2,957.33	12,678
1540	Monterey County District	0500256	Rimrock Upper Pp #82	1540-0500256	Booster	3,514.36	15,599
1540	Monterey County District	0500257	Rio Vista Pp #53	1540-0500257	Booster	3,255.20	13,874
1540	Monterey County District	0500259	Robles Well	1540-0500259	Well	792.46	2,641
1540	Monterey County District	0500260	Robles Lower	1540-0500260	Booster	6,033.23	26,121
1540	Monterey County District	0500272	Ryan Ranch #9	1540-0500272	Well	15,298.68	91,786
1540	Monterey County District	0500273	Ryan Ranch Tank	1540-0500273	Tank	2,077.03	9,389
1540	Monterey County District	0500274	Ryan Ranch Well #11	1540-0500274	Well	363.00	399
1540	Monterey County District	0500275	Ryan Ranch Well #7	1540-0500275	Well	19,409.08	98,704
1540	Monterey County District	0500278	San Carlos Well #2	1540-0500278	Well	1,972.14	1,579
1540	Monterey County District	0500280	Sand City Brackish Water	1540-0500280	Treatment Plant	101,917.71	628,295
1540	Monterey County District	0500284	Schulte Well	1540-0500284	Well	149,076.46	987,738
1540	Monterey County District	0500287	Segunda	1540-0500287	Booster	151,643.10	877,069
1540	Monterey County District	0500295	Spectacular Bid Pp #75	1540-0500295	Booster	2,707.83	11,832
1540	Monterey County District	0500299	Stirrup	1540-0500299	Booster	10,905.33	48,486
1540	Monterey County District	0500306	Telemetry Water Station	1540-0500306	Flow Station	250.58	563
1540	Monterey County District	0500307	Tierra Grande Pp #38	1540-0500307	Booster	3,906.85	17,097
1540	Monterey County District	0500308	Tioga Wells #4 & # 5	1540-0500308	Well	32,634.49	200,332
1540	Monterey County District	0500309	Toyon Lower Pp #32	1540-0500309	Booster	14,027.91	61,446
1540	Monterey County District	0500313	Upper Estrella D Oro Pn	1540-0500313	Booster	1,677.01	6,941
1540	Monterey County District	0500314	Upper Markham Ranch Pp	1540-0500314	Toro-Booster	1,401.09	5,592
1540	Monterey County District	0500315	Upper Tierra Grande	1540-0500315	Booster	1,469.72	5,934
1540	Monterey County District	0500321	Via Contenta	1540-0500321	Booster	9,110.54	41,561
1540	Monterey County District	0500322	Via Las Encinas	1540-0500322	Booster	2,421.24	10,467
1540	Monterey County District	0500323	Viejo Tank	1540-0500323	Tank	305.72	822
1540	Monterey County District	0500329	Viscaino	1540-0500329	Booster	684.06	2,157
1540	Monterey County District	0500330	Waldon Lower	1540-0500330	Booster	1,967.01	8,209
1540	Monterey County District	0500332	Well #1 And #2 Highway 6	1540-0500332	Toro-Well/Treatment	53,070.45	269,468
1540	Monterey County District	0500350	Withers Pp #12	1540-0500350	Booster	15,577.96	68,323
1540	Monterey County District	0503447	Del Monte Regulating Sta	1540-0503447	Reg Station	20,140.94	87,771
1540	Monterey County District	0503580	Mount Devon Tank	1540-0503580	Tank	322.75	972
1540	Monterey County District	0504010	Lower Estrella D Oro	1540-0504010	Booster	4,244.57	19,009
1540	Monterey County District	0504015	Ambler Oaks Well	1540-0504015	Well	370.44	1,221
1540	Monterey County District	0504056	Crest Canyon Tank	1540-0504056	Tank	280.39	779
1540	Monterey County District	0504090	Upper Toyon Tank #1	1540-0504090	Tank	207.13	363
1540	Monterey County District	0504127	Garrapata Pump #5	1540-0504127	Well	8,499.52	36,340
1542	Monterey Wastewater	0504176	Spreckels Wastewater Tre	1542-0504176	Waste Water	1,452.99	5,741
1550	Los Angeles County District	0500008	48Th Street Well	1550-0500008	Well	47,855.35	277,760
1550	Los Angeles County District	0500019	Angeles Mesa Reservoir	1550-0500019	Booster	7,912.27	25,615
1550	Los Angeles County District	0500021	Arlington Well	1550-0500021	Well	2,373.58	1,520
1550	Los Angeles County District	0500074	Crenshaw Well	1550-0500074	Well	94,999.68	639,360
1550	Los Angeles County District	0500119	Garth Reservoir	1550-0500119	Booster	8,757.27	66,915
1550	Los Angeles County District	0500141	Homeland Reservoir	1550-0500141	Tank	459.96	928
1550	Los Angeles County District	0500203	Mt. Vernon Reservoir	1550-0500203	Booster	10,608.61	89,790
1550	Los Angeles County District	0500218	Olympiad Reservoir	1550-0500218	Booster	25,048.16	184,930
1550	Los Angeles County District	0500292	Slauson Avenue Corrosion	1550-0500292	Treatment Plant	339.82	290
1550	Los Angeles County District	0500319	Vernon Well #2	1550-0500319	Well	669.93	0

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1550	Los Angeles County District	0500320	Vernon Well #3	1550-0500320	Well	97,133.81	664,080
1550	Los Angeles County District	0500337	West Basin 27 Connection	1550-0500337	Interconnection	438.22	966
1550	Los Angeles County District	0500024	Bacon Well	1550-0500024	Well	4,372.39	2,607
1550	Los Angeles County District	0500039	Bradbury Tank	1550-0500039	Tank	1,639.10	9,277
1550	Los Angeles County District	0500041	Brookridge Booster Stn	1550-0500041	Booster	559.04	944
1550	Los Angeles County District	0500042	Buena Vista Well	1550-0500042	Well	97,785.36	738,412
1550	Los Angeles County District	0500079	Crownhaven Well	1550-0500079	Well	137,889.24	1,167,727
1550	Los Angeles County District	0500107	Encanto Well	1550-0500107	Well	43,994.79	56,332
1550	Los Angeles County District	0500113	Fish Canyon Well	1550-0500113	Well	966.42	1,531
1550	Los Angeles County District	0500154	Las Lomas Booster	1550-0500154	Booster	17,532.33	134,433
1550	Los Angeles County District	0500155	Las Lomas Well	1550-0500155	Well	65,994.68	519,011
1550	Los Angeles County District	0500164	Lemon Irrigation Booster	1550-0500164	Irrig Booster	14,036.96	71,907
1550	Los Angeles County District	0500282	Santa Fe Well	1550-0500282	Well	43,907.79	268,442
1550	Los Angeles County District	0500286	Scott Reservoir/ Booster	1550-0500286	Booster	56,160.68	482,577
1550	Los Angeles County District	0500296	Spinks Reservoir/Booster	1550-0500296	Booster	3,969.69	12,745
1550	Los Angeles County District	0500325	Vineyard Booster Stn	1550-0500325	Booster	12,108.96	81,219
1550	Los Angeles County District	0500347	Wiley Well	1550-0500347	Well	112,342.37	1,097,484
1550	Los Angeles County District	0500083	Danford Reservoir	1550-0500083	Booster	49,993.13	392,340
1550	Los Angeles County District	0500089	Del Mar Well	1550-0500089	Well	61,675.25	501,128
1550	Los Angeles County District	0500125	Grand Well	1550-0500125	Well	64,226.24	642,604
1550	Los Angeles County District	0500129	Guess Well	1550-0500129	Well	277.64	972
1550	Los Angeles County District	0500131	Hall Well	1550-0500131	Well	83,708.19	756,449
1550	Los Angeles County District	0500142	Howland Well	1550-0500142	Well	76,957.11	680,326
1550	Los Angeles County District	0500150	Lamanda Reservoir/Well S	1550-0500150	Booster	57,517.74	310,000
1550	Los Angeles County District	0500167	Lombardy Well	1550-0500167	Well	95,120.68	899,023
1550	Los Angeles County District	0500168	Longden Well/Reservoir	1550-0500168	Well	60,591.26	420,164
1550	Los Angeles County District	0500186	Mariposa Well	1550-0500186	Well	51,948.67	425,701
1550	Los Angeles County District	0500196	Mission View Well	1550-0500196	Well	3,136.73	1,755
1550	Los Angeles County District	0500198	Monterey Booster	1550-0500198	Booster	2,555.21	19,630
1550	Los Angeles County District	0500212	Oak Knoll Circle Well	1550-0500212	Well	300.31	960
1550	Los Angeles County District	0500213	Oak Knoll Reservoir	1550-0500213	Booster	53,578.92	247,520
1550	Los Angeles County District	0500221	Oswego Well	1550-0500221	Well	7,797.54	600
1550	Los Angeles County District	0500236	Patton Reservoir/Well	1550-0500236	Well	60,998.44	320,100
1550	Los Angeles County District	0500258	Roanoke Well	1550-0500258	Well	499.62	0
1550	Los Angeles County District	0500265	Rosemead Well	1550-0500265	Well	183,605.78	1,748,686
1550	Los Angeles County District	0500349	Winston Well	1550-0500349	Well	47,803.35	418,225
1550	Los Angeles County District	0504397	Adams Ranch	1550-0504397	Interconnection	527.63	85
1551	Ventura County District	0500016	American Oaks Booster St	1551-0500016	Booster	16,097.06	104,287
1551	Ventura County District	0500036	Borchard Road Turnout	1551-0500036	Interconnection	332.43	328
1551	Ventura County District	0500046	Calle Yucca Turnout	1551-0500046	Interconnection	337.67	376
1551	Ventura County District	0500087	Deer Ridge Tank/Pump Sta	1551-0500087	Booster	11,996.43	55,663
1551	Ventura County District	0500088	Deer Valley Booster Stat	1551-0500088	Booster	8,928.16	54,249
1551	Ventura County District	0500094	Dewey Booster Station	1551-0500094	Booster	9,671.38	64,838
1551	Ventura County District	0500098	Dos Vientos Booster/Potr	1551-0500098	Booster	106,985.21	701,727
1551	Ventura County District	0500115	Fordham Booster Station	1551-0500115	Booster	318.40	244
1551	Ventura County District	0500126	Green Ridge Tank	1551-0500126	Tank	311.90	199
1551	Ventura County District	0500127	Greenmeadow Booster Stat	1551-0500127	Booster	336.06	357
1551	Ventura County District	0500139	Hillcrest Drive Booster	1551-0500139	Booster	7,930.52	47,921
1551	Ventura County District	0500144	Industrial Tanks	1551-0500144	Tank	452.98	1,021
1551	Ventura County District	0500146	Janss Booster Station	1551-0500146	Booster	8,454.86	61,765
1551	Ventura County District	0500147	Janss Tank	1551-0500147	Tank	317.71	238
1551	Ventura County District	0500149	Kimber Booster Station	1551-0500149	Booster	1,843.25	11,403
1551	Ventura County District	0500153	Las Flores Turnout	1551-0500153	Booster	341.82	409
1551	Ventura County District	0500161	Las Posas Booster Statio	1551-0500161	Booster	18,545.77	125,899
1551	Ventura County District	0500173	Los Robles Booster Stati	1551-0500173	Booster	17,528.20	103,233
1551	Ventura County District	0500174	Los Robles Tanks	1551-0500174	Tank	320.23	249
1551	Ventura County District	0500175	Los Robles Turnout	1551-0500175	Interconnection	339.26	381
1551	Ventura County District	0500189	Mayfield Booster Station	1551-0500189	Booster	11,351.83	104,844
1551	Ventura County District	0500201	Moorpark Booster Station	1551-0500201	Booster	16,383.21	77,600
1551	Ventura County District	0500202	Moorpark Reservoir	1551-0500202	Tank	639.31	2,444
1551	Ventura County District	0500217	Olsen Road Turnout	1551-0500217	Interconnection	344.62	408
1551	Ventura County District	0500219	Orbis Tank	1551-0500219	Tank	315.44	210
1551	Ventura County District	0500222	Pace Reservoir	1551-0500222	Tank	309.91	185
1551	Ventura County District	0500243	Potrero I Reservoir	1551-0500243	Tank	314.43	205
1551	Ventura County District	0500289	Shopping Center I Reserv	1551-0500289	Tank	282.89	0
1551	Ventura County District	0500290	Shopping Center II Reser	1551-0500290	Tank	528.34	275
1551	Ventura County District	0500297	Springwood Booster Stati	1551-0500297	Booster	4,724.79	40,357
1551	Ventura County District	0500340	White Stallion Tank	1551-0500340	Tank	7,578.84	66,805
1551	Ventura County District	0500344	Wildwood Booster Station	1551-0500344	Booster	6,910.36	41,320
1551	Ventura County District	0500345	Wildwood Tank	1551-0500345	Tank	2,238.90	14,259
1551	Ventura County District	0500346	Wildwood Turnout	1551-0500346	Interconnection	326.77	294

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1560	Sacramento District	0500005	14020 Isle View Way	1560-0500005	Well	18,240.19	77,772
1560	Sacramento District	0500009	A Parkway Booster Statio	1560-0500009	Interconnection	7,697.74	55,878
1560	Sacramento District	0500017	Andrea #1 Well	1560-0500017	Well	33,081.74	224,465
1560	Sacramento District	0500018	Andrea #2 Well	1560-0500018	Well	871.15	4,767
1560	Sacramento District	0500020	Arden	1560-0500020	Well	39,061.70	291,529
1560	Sacramento District	0500022	Auberry Well	1560-0500022	Well	20,339.80	161,066
1560	Sacramento District	0500023	Auburn Well	1560-0500023	Well	305.12	962
1560	Sacramento District	0500030	Billy Mitchell Well	1560-0500030	Well	243.17	25
1560	Sacramento District	0500040	Briggs Well	1560-0500040	Well	24,328.56	208,459
1560	Sacramento District	0500043	Butterfield Well	1560-0500043	Well	721.56	3,589
1560	Sacramento District	0500045	Caldera Well	1560-0500045	Well	1,452.29	9,215
1560	Sacramento District	0500055	Carriage Well	1560-0500055	Well	23,827.45	180,843
1560	Sacramento District	0500056	Central/Sunrise Well	1560-0500056	Well	3,343.49	23,892
1560	Sacramento District	0500057	Cherbourg Well	1560-0500057	Well	78,132.72	587,942
1560	Sacramento District	0500059	Chipping Well	1560-0500059	Well	42,144.69	597,564
1560	Sacramento District	0500061	College Green Well	1560-0500061	Well	1,583.55	10,144
1560	Sacramento District	0500063	Conrad Well	1560-0500063	Well	417.76	129
1560	Sacramento District	0500064	Cook Riolo Well	1560-0500064	Well	94,521.26	731,833
1560	Sacramento District	0500069	Countryside #1 Well	1560-0500069	Well	84,197.16	664,451
1560	Sacramento District	0500070	Countryside #2 Well	1560-0500070	Well	24,249.44	164,026
1560	Sacramento District	0500071	Countryside Treatment Pl	1560-0500071	Treatment Plant	35,553.49	232,150
1560	Sacramento District	0500072	Countryside Way	1560-0500072	Well	52,153.70	415,503
1560	Sacramento District	0500073	Covered Wagon Well	1560-0500073	Well	1,544.15	9,872
1560	Sacramento District	0500077	Crosswoods Well	1560-0500077	Well	6,727.35	12,334
1560	Sacramento District	0500078	Crowder	1560-0500078	Interconnection	539.92	2,009
1560	Sacramento District	0500082	Daly Well	1560-0500082	Well	29,105.88	195,366
1560	Sacramento District	0500086	Davidson Well	1560-0500086	Well	880.97	5,081
1560	Sacramento District	0500095	Diablo Well	1560-0500095	Well	579.55	2,804
1560	Sacramento District	0500097	Don Julio Well	1560-0500097	Well	30,827.72	190,075
1560	Sacramento District	0500101	Eagle Ridge Well	1560-0500101	Well	2,202.45	15,849
1560	Sacramento District	0500104	Ehine Way Well	1560-0500104	Well	1,021.59	6,233
1560	Sacramento District	0500105	Elsie Well	1560-0500105	Well	374.42	1,043
1560	Sacramento District	0500106	Elverta Well	1560-0500106	Well	698.49	3,214
1560	Sacramento District	0500110	Fairlake #1 Well	1560-0500110	Well	862.37	3,460
1560	Sacramento District	0500111	Fairlake #2 Well	1560-0500111	Well	21,986.90	170,662
1560	Sacramento District	0500112	Falcon View Well	1560-0500112	Well	52,123.77	343,726
1560	Sacramento District	0500114	Folsom Well	1560-0500114	Well	19,457.26	126,549
1560	Sacramento District	0500117	Fort Sutter Well	1560-0500117	Well	727.78	3,768
1560	Sacramento District	0500118	Foxpark Well	1560-0500118	Well	28,067.29	249,480
1560	Sacramento District	0500122	Gerber Well	1560-0500122	Well	434.44	1,413
1560	Sacramento District	0500123	Glass Slipperwell	1560-0500123	Well	1,062.55	6,882
1560	Sacramento District	0500124	Gould Well	1560-0500124	Well	15,654.90	116,760
1560	Sacramento District	0500128	Grove #2 Well	1560-0500128	Well	912.33	3,187
1560	Sacramento District	0500130	H Street Well	1560-0500130	Well	663.74	2,040
1560	Sacramento District	0500132	Hemingway Well	1560-0500132	Well	23,037.86	139,825
1560	Sacramento District	0500133	Hemlock Well	1560-0500133	Well	271.46	262
1560	Sacramento District	0500145	Jackson Hwy Well	1560-0500145	Well	42,547.95	372,094
1560	Sacramento District	0500163	Le Mans Well	1560-0500163	Well	536.98	2,354
1560	Sacramento District	0500165	Linda Sue Well	1560-0500165	Well	11,237.43	70,727
1560	Sacramento District	0500166	Lippi Well	1560-0500166	Well	8,534.02	60,230
1560	Sacramento District	0500184	Malaga Well	1560-0500184	Well	3,637.51	5,469
1560	Sacramento District	0500187	Mars Well	1560-0500187	Well	15,347.56	111,930
1560	Sacramento District	0500188	Mather / Sacramento Coun	1560-0500188	Interconnection	15,697.35	83,880
1560	Sacramento District	0500200	Moonbeam Well	1560-0500200	Well	632.86	2,826
1560	Sacramento District	0500205	North Loop Well	1560-0500205	Well	4,324.30	13,317
1560	Sacramento District	0500209	Nut Plains Well	1560-0500209	Well	23,538.38	164,868
1560	Sacramento District	0500210	Oak Forest Well	1560-0500210	Well	590.19	2,663
1560	Sacramento District	0500215	Oaken Bucket Well	1560-0500215	Well	3,884.39	31,003
1560	Sacramento District	0500225	Palmerson Well	1560-0500225	Well	37,130.29	221,656
1560	Sacramento District	0500228	Parkside Treatment Plant	1560-0500228	Treatment Plant	88,726.86	628,128
1560	Sacramento District	0500242	Point Reyes Well	1560-0500242	Well	702.71	3,572
1560	Sacramento District	0500244	Power Inn Well	1560-0500244	Well	43,899.78	351,890
1560	Sacramento District	0500245	Prior Way Well	1560-0500245	Well	625.49	3,215
1560	Sacramento District	0500261	Rockhurst Well	1560-0500261	Well	35,618.18	281,641
1560	Sacramento District	0500262	Rockingham Well	1560-0500262	Well	37,761.50	316,948
1560	Sacramento District	0500263	Rogue River Well	1560-0500263	Well	733.42	348
1560	Sacramento District	0500264	Rose Parade Treatment Pl	1560-0500264	Treatment Plant	40,432.20	330,382
1560	Sacramento District	0500267	Roseville Rd Well	1560-0500267	Well	11,937.03	70,746
1560	Sacramento District	0500268	Roseville Road Well	1560-0500268	Well	1,607.06	1,673
1560	Sacramento District	0500269	Rushmore Well	1560-0500269	Well	37,429.40	314,912
1560	Sacramento District	0500277	Salmon Falls Well	1560-0500277	Well	240.03	0

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1560	Sacramento District	0500288	Shenandoah Well	1560-0500288	Well	623.71	2,859
1560	Sacramento District	0500291	Sky Parkway Well	1560-0500291	Well	1,022.02	5,895
1560	Sacramento District	0500293	Southgate Well	1560-0500293	Well	2,182.68	13,412
1560	Sacramento District	0500294	Southport Well	1560-0500294	Well	667.68	3,198
1560	Sacramento District	0500300	Stocker Well	1560-0500300	Well	1,317.29	5,108
1560	Sacramento District	0500303	Swansea Well	1560-0500303	Well	29,855.86	249,947
1560	Sacramento District	0500304	Tally Ho #1 Well	1560-0500304	Well	61,300.44	471,344
1560	Sacramento District	0500310	Treelark Well	1560-0500310	Well	763.73	3,683
1560	Sacramento District	0500311	Twin Parks Well	1560-0500311	Well	1,380.94	8,645
1560	Sacramento District	0500312	Twin Trails Well	1560-0500312	Well	17,141.29	113,925
1560	Sacramento District	0500317	Van Maren Well	1560-0500317	Well	47,204.82	383,556
1560	Sacramento District	0500318	Vandenberg Well	1560-0500318	Well	309.44	504
1560	Sacramento District	0500324	Villaview Well	1560-0500324	Well	17,127.60	89,041
1560	Sacramento District	0500326	Vintage 1 Well	1560-0500326	Well	29,781.90	213,584
1560	Sacramento District	0500327	Vintage 3 Well	1560-0500327	Well	22,968.66	182,678
1560	Sacramento District	0500328	Vintage Treatment Plant	1560-0500328	Treatment Plant	103,258.09	796,440
1560	Sacramento District	0500331	Watt Ave Well	1560-0500331	Well	395.36	2,323
1560	Sacramento District	0500334	Well 3 3B Treatment Plan	1560-0500334	Treatment Plant	27,670.08	118,172
1560	Sacramento District	0500338	West La Loma Well	1560-0500338	Well	63,314.22	476,808
1560	Sacramento District	0500339	Westporter Well	1560-0500339	Well	19,988.91	165,285
1560	Sacramento District	0500341	Whitewater Well	1560-0500341	Well	16,248.11	119,617
1560	Sacramento District	0500342	Wilbur 2 Well	1560-0500342	Well	16,647.82	104,295
1560	Sacramento District	0500343	Wildrose Well	1560-0500343	Well	4,292.47	4,082
1560	Sacramento District	0500348	Winchester Well	1560-0500348	Well	35,024.66	293,134
1560	Sacramento District	0500351	Wittkop Well	1560-0500351	Well	764.88	3,921
1560	Sacramento District	0500353	Woodman Well	1560-0500353	Well	37,711.67	247,261
1560	Sacramento District	0500354	Wyda Well	1560-0500354	Well	20,726.15	168,809
1560	Sacramento District	0503452	Laurel Oaks Well	1560-0503452	Well	723.91	3,759
1560	Sacramento District	0504006	Isleton Elevated Tank	1560-0504006	Tank	453.47	1,609
1560	Sacramento District	0504057	Folsom Booster Station	1560-0504057	Interconnection	5,545.46	41,415
1560	Sacramento District	0504438	Colonnade Well	1560-0504438	Well	677.53	3,255
1560	Sacramento District	0504456	Lincoln Oaks Tank	1560-0504456	Tank	7,188.00	48,622
1560	Sacramento District	0504493	Dunnigan Well & Pump	1560-0504493	Well	8,761.40	35,909
1560	Sacramento District	0504526	Meadowbrook Well 4	1560-0504526	Well	10,145.69	47,380
1560	Sacramento District	0504739	Walerga Tank & Booster STN	1560-0504739	Booster	15,953.93	61,439
1560	Sacramento District	1004534	pump	1560-1004534	Well	33,899.77	163,664
1560	Sacramento District	1004535	Maple & Fir – 40 HP pump	1560-1004535	Well	203.05	0
1560	Sacramento District	1004536	Fir & Maple – Chlorine pump	1560-1004536	Well	101.54	0
1560	Sacramento District	1004537	SW Corner Balsam & Poplar	1560-1004537	Well	29,839.09	154,525
1561	Larkfield District	0500152	Larkfield Water Treatmen	1561-0500152	Treatment Plant	35,115.78	168,830
1561	Larkfield District	0500181	Lower Wikiup Tank & Boos	1561-0500181	Booster	7,584.54	32,018
1561	Larkfield District	0500206	North Wikiup Tank & Boos	1561-0500206	Booster	3,555.24	15,596
1561	Larkfield District	0500316	Upper Wikiup Tank & Boos	1561-0500316	Booster	1,422.08	5,774
1561	Larkfield District	0500333	Well 1A	1561-0500333	Well	8,551.08	37,033
1561	Larkfield District	0500335	Well 3A	1561-0500335	Well	27,129.21	108,497
1561	Larkfield District	0500336	Well 5	1561-0500336	Well	6,848.22	28,745
1561	Larkfield District	0504481	Geyserville Merrill Well 1	1561-0504481	Well	5,765.37	23,839
1561	Larkfield District	0504482	Geyserville Chianti Tank	1561-0504482	Tank	200.88	366
1561	Larkfield District	0504483	Geyserville Railroad Ave W	1561-0504483	Well	7,919.93	32,921

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End	End	End	End	End	End	End	End
Sum						6,837,275.62	45,632,462.65

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1530	San Diego County District	500006	1st & A	1530-500006	Interconnection	277.11	686
1530	San Diego County District	500136	Highland Tank	1530-500136	Tank	594.06	1,852
1530	San Diego County District	500199	Montgomery Tank	1530-500199	Tank	588.73	1,837
1530	San Diego County District	500224	Palm Ave. Flow Meter	1530-500224	Interconnection	136.39	111
1540	Monterey County District	500010	Address Via Malpaso	1540-500010	Booster	404.79	746
1540	Monterey County District	500011	Airway Upper	1540-500011	Tank	303.35	827
1540	Monterey County District	500012	Airways Lower Pp #17	1540-500012	Booster	7,725.19	29,949
1540	Monterey County District	500013	Ambler Park Treatment Pl	1540-500013	Treatment Plant	25,229.22	105,090
1540	Monterey County District	500014	Ambler Park Well #4	1540-500014	Well	7,998.21	34,011
1540	Monterey County District	500015	Ambler Park Well #5	1540-500015	Well	15,416.45	62,153
1540	Monterey County District	500025	Bay Street Wells #1 & #2	1540-500025	Well	23,669.24	123,228
1540	Monterey County District	500026	Begonia Iron Removal Pla	1540-500026	Treatment Plant	2,433.16	10,230
1540	Monterey County District	500027	Begonia Iron Removal Pla	1540-500027	Treatment Plant	133,245.10	685,660
1540	Monterey County District	500028	Berwick Well #7	1540-500028	Well	40,934.92	190,532
1540	Monterey County District	500029	Berwick Well #8	1540-500029	Well	32,072.79	123,981
1540	Monterey County District	500031	Birdrock Standby Pump	1540-500031	Booster	122.98	12
1540	Monterey County District	500032	Bishop #1 Well	1540-500032	Well	14,057.82	60,881
1540	Monterey County District	500033	Bishop #2 Well	1540-500033	Well	24,954.48	109,457
1540	Monterey County District	500035	Boots Rd.	1540-500035	Tank	304.76	293
1540	Monterey County District	500037	Boronda Pp #67	1540-500037	Booster	9,489.80	40,984
1540	Monterey County District	500049	Carmel Valley Ranch	1540-500049	Tank	446.40	1,455
1540	Monterey County District	500050	Carmel Valley Ranch Pp #	1540-500050	Booster	10,536.55	44,862
1542	Monterey Wastewater	500051	Carmel Valley Ranch Wwtp	1540-500051	Waste Water	39,887.42	233,516
1540	Monterey County District	500052	Carmel Way	1540-500052	Booster	255.64	74
1540	Monterey County District	500053	Carmel Woods Pp #8	1540-500053	Booster	12,431.23	54,552
1540	Monterey County District	500054	Carola Pp #71	1540-500054	Booster	4,762.24	20,174
1540	Monterey County District	500060	Chualar Tank	1540-500060	Well/Booster/Tank	21,714.84	95,389
1540	Monterey County District	500065	Corona	1540-500065	Booster	8,161.70	34,135
1540	Monterey County District	500075	Crespi	1540-500075	Booster	1,160.89	3,810
1540	Monterey County District	500076	Crest Reservoir (Conc)	1540-500076	Tank	273.60	695
1540	Monterey County District	500080	Cypress Well	1540-500080	Well	196,166.18	1,276,538
1540	Monterey County District	500081	Cypress Pp #14	1540-500081	Booster	2,373.64	9,567
1540	Monterey County District	500090	Del Mesa Pp #42	1540-500090	Booster	5,478.62	23,086
1540	Monterey County District	500091	Del Monte Test Well	1540-500091	Well	259.03	17
1540	Monterey County District	500092	Del Rey Regulating Stati	1540-500092	Reg Station	393.41	1,276
1540	Monterey County District	500099	Dry Creek	1540-500099	Booster	308.04	239
1540	Monterey County District	500102	Eardley Pp #1	1540-500102	Booster	107,611.73	505,066
1540	Monterey County District	500103	Eddy Road	1540-500103	Booster	1,202.72	4,360
1540	Monterey County District	500108	Encina Pp #54	1540-500108	Booster	1,136.42	4,208
1540	Monterey County District	500116	Forest Lake Tanks	1540-500116	Tank	338.30	985
1540	Monterey County District	500120	Garzas Well #3	1540-500120	Well	5,836.71	26,229
1540	Monterey County District	500121	Garzas Well #4	1540-500121	Well	9,248.21	42,453
1540	Monterey County District	500134	Hidden Hills Treatment P	1540-500134	Treatment Plant	65,804.56	249,488
1540	Monterey County District	500135	High Meadows Pp #45	1540-500135	Booster	9,755.28	41,541
1540	Monterey County District	500137	Highland Pp #47	1540-500137	Booster	2,228.55	8,457
1540	Monterey County District	500138	Hilby Pp #27	1540-500138	Booster	1,726.10	7,856
1542	Monterey Wastewater	500140	Holt Rd Lift Station	1540-500140	Waste Water	2,416.63	9,707
1540	Monterey County District	500143	Huckleberry Pp #23	1540-500143	Booster	5,308.37	20,722
1542	Monterey Wastewater	500156	Las Palmas Lift Station #1	1540-500156	Waste Water	3,603.01	15,223
1542	Monterey Wastewater	500157	Las Palmas Lift Station #2	1540-500157	Waste Water	6,522.51	28,219
1542	Monterey Wastewater	500158	Las Palmas Lift Station #3	1540-500158	Waste Water	3,544.33	14,925
1542	Monterey Wastewater	500159	Las Palmas Lift Station #4	1540-500159	Waste Water	718.28	2,139
1542	Monterey Wastewater	500160	Las Palmas Wastewater Tr	1540-500160	Waste Water	105,647.14	673,844
1540	Monterey County District	500169	Los Laureles Well # 3	1540-500169	Well	354.23	505
1540	Monterey County District	500170	Los Laureles Well #5	1540-500170	Well	10,039.74	46,067
1540	Monterey County District	500171	Los Laureles Well #6	1540-500171	Well	8,575.86	31,635
1540	Monterey County District	500172	Los Padres Dam	1540-500172	Dam	929.88	3,156
1540	Monterey County District	500176	Los Tulares Lower Pp #51	1540-500176	Booster	2,550.10	9,692
1540	Monterey County District	500177	Los Tulares Pp #50	1540-500177	Booster	4,243.87	16,661
1540	Monterey County District	500178	Los Tulares Upper	1540-500178	Booster	2,064.79	8,370
1540	Monterey County District	500180	Lower Tierra Grande	1540-500180	Booster	3,795.25	13,847
1540	Monterey County District	500183	Luzern Well	1540-500183	Well	18,300.61	73,453
1540	Monterey County District	500185	Manor Well	1540-500185	Well	866.50	2,861
1540	Monterey County District	500190	Mercurio Pp #59	1540-500190	Booster	1,064.58	3,731
1540	Monterey County District	500191	Mesa Pp #2A	1540-500191	Booster	53,376.16	224,751
1540	Monterey County District	500192	Meyers Pneumatic Pp #81	1540-500192	Booster	609.79	1,663
1540	Monterey County District	500193	Middle Canyon Upper	1540-500193	Booster	2,088.90	7,405
1540	Monterey County District	500194	Middle Tierra Grande	1540-500194	Booster	1,748.53	6,663
1540	Monterey County District	500204	Munras	1540-500204	Booster	3,615.27	13,911
1540	Monterey County District	500208	Nueve	1540-500208	Booster	7,921.13	30,587
1542	Monterey Wastewater	500211	Oak Hills Wastewater Tre	1540-500211	Waste Water	5,601.09	18,363

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1540	Monterey County District	500220	Ord Grove Ozone Plant	1540-500220	Treatment Plant	201,734.26	1,276,365
1540	Monterey County District	500226	Panetta Well #1	1540-500226	Well	13,793.04	67,226
1540	Monterey County District	500227	Paralta Well	1540-500227	Well	46,490.84	280,089
1542	Monterey Wastewater	500229	Pasadera	1540-500229	Waste Water	7,556.91	33,158
1542	Monterey Wastewater	500230	Pasadera Lift Station #2	1540-500230	Waste Water	4,735.10	20,108
1540	Monterey County District	500231	Pasadera Pump Station	1540-500231	Booster	3,901.08	16,674
1542	Monterey Wastewater	500232	Pasadera Water Treatment	1540-500232	Waste Water	9,313.03	40,090
1542	Monterey Wastewater	500233	Pasadera Wwtp #2	1540-500233	Waste Water	36,287.45	199,045
1540	Monterey County District	500235	Paseo Privado Lower Pp #	1540-500235	Booster	5,356.92	23,082
1540	Monterey County District	500237	Pearce Well	1540-500237	Well	170,563.61	1,059,864
1540	Monterey County District	500239	Pebble Beach Pp #68	1540-500239	Booster	33,536.76	154,040
1540	Monterey County District	500240	Playa Well #3	1540-500240	Well	16,163.46	72,823
1540	Monterey County District	500241	Plumas Well	1540-500241	Well	28,457.98	137,408
1540	Monterey County District	500246	Quail Meadows	1540-500246	Booster	1,896.65	7,410
1540	Monterey County District	500247	Ragsdale	1540-500247	Treatment Plant	34,850.42	140,110
1540	Monterey County District	500248	Ralph Lane Well	1540-500248	Well	2,305.37	9,330
1540	Monterey County District	500249	Rancho Blvd Pp #10	1540-500249	Booster	360.03	536
1540	Monterey County District	500250	Rancho Canada Well	1540-500250	Well	202,097.55	1,288,306
1540	Monterey County District	500251	Rancho Fiesta Pp #61	1540-500251	Booster	3,840.58	15,483
1540	Monterey County District	500252	Rancho Fiesta Pp #62	1540-500252	Booster	1,748.19	6,861
1540	Monterey County District	500253	Rancho Mar Monte	1540-500253	Booster	1,651.11	6,238
1540	Monterey County District	500254	Ridgeway	1540-500254	Booster	3,096.77	12,606
1540	Monterey County District	500255	Rimrock Lower Pp #80	1540-500255	Booster	2,125.26	9,204
1540	Monterey County District	500256	Rimrock Upper Pp #82	1540-500256	Booster	4,022.06	16,832
1540	Monterey County District	500257	Rio Vista Pp #53	1540-500257	Booster	3,756.25	15,308
1540	Monterey County District	500259	Robles Well	1540-500259	Well	3,821.87	15,245
1540	Monterey County District	500260	Robles Lower	1540-500260	Booster	7,055.61	27,393
1540	Monterey County District	500272	Ryan Ranch #9	1540-500272	Well	17,041.35	95,067
1540	Monterey County District	500273	Ryan Ranch Tank	1540-500273	Tank	1,984.13	8,370
1540	Monterey County District	500274	Ryan Ranch Well #11	1540-500274	Well	346.12	372
1540	Monterey County District	500275	Ryan Ranch Well #7	1540-500275	Well	6,972.56	25,299
1540	Monterey County District	500278	San Carlos Well #2	1540-500278	Well	2,070.57	1,987
1540	Monterey County District	500280	Sand City Brackish Water	1540-500280	Treatment Plant	95,692.84	502,073
1540	Monterey County District	500283	Scarlett Well	1540-500283	Well	813.76	2,426
1540	Monterey County District	500284	Schulte Well	1540-500284	Well	95,411.31	555,104
1540	Monterey County District	500287	Segunda	1540-500287	Booster	63,021.41	277,426
1540	Monterey County District	500295	Spectacular Bid Pp #75	1540-500295	Booster	2,944.05	12,081
1540	Monterey County District	500299	Stirrup	1540-500299	Booster	11,848.02	48,942
1540	Monterey County District	500306	Telemetry Water Station	1540-500306	Flow Station	376.62	1,139
1540	Monterey County District	500307	Tierra Grande Pp #38	1540-500307	Booster	3,944.66	16,351
1540	Monterey County District	500308	Tioga Wells #4 & # 5	1540-500308	Well	29,787.51	155,923
1540	Monterey County District	500309	Toyon Lower Pp #32	1540-500309	Booster	10,594.84	43,831
1540	Monterey County District	500313	Upper Estrella D Oro Pne	1540-500313	Booster	1,345.89	5,089
1540	Monterey County District	500315	Upper Tierra Grande	1540-500315	Booster	1,568.54	5,997
1540	Monterey County District	500321	Via Contenta	1540-500321	Booster	9,745.39	42,297
1540	Monterey County District	500322	Via Las Encinas	1540-500322	Booster	2,733.13	11,223
1540	Monterey County District	500323	Viejo Tank	1540-500323	Tank	314.71	812
1540	Monterey County District	500329	Viscaino	1540-500329	Booster	502.34	1,179
1540	Monterey County District	500330	Waldon Lower	1540-500330	Booster	2,811.11	11,399
1540	Monterey County District	500350	Withers Pp #12	1540-500350	Booster	16,697.09	69,216
1540	Monterey County District	503447	Del Monte Regulating Sta	1540-503447	Reg Station	21,102.36	84,812
1540	Monterey County District	503580	Mount Devon Tank	1540-503580	Tank	338.35	988
1540	Monterey County District	504010	Lower Estrella D Oro	1540-504010	Booster	3,090.31	13,005
1540	Monterey County District	504015	Ambler Oaks Well	1540-504015	Well	504.20	1,750
1540	Monterey County District	504056	Crest Canyon Tank	1540-504056	Tank	186.90	302
1540	Monterey County District	504090	Upper Toyon Tank #1	1540-504090	Tank	251.13	543
1540	Monterey County District	504130	Garrapata Pump #5	1540-504130	Well	10,281.98	43,800
1542	Monterey Wastewater	504176	Spreckels Wastewater Tre	1540-504176	Waste Water	1,567.98	6,064
1540	Monterey County District	504874	Hilby Tank	1540-504874	Tank	5,775.93	22,871
1548	Monterey - Toro	500067	Corte Codollera Pp	1548-500067	Toro-Booster	961.64	3,271
1548	Monterey - Toro	500179	Lower Markham Ranch Pp	1548-500179	Toro-Booster	4,166.88	17,842
1548	Monterey - Toro	500314	Upper Markham Ranch Pp	1548-500314	Toro-Booster	1,490.80	5,662
1548	Monterey - Toro	500332	Well #1 And #2 Highway 6	1548-500332	Toro-Well/Treatment	54,086.71	247,529
1550	Los Angeles County District	500008	48Th Street Well	1550-500008	Well	6,515.50	2,000
1550	Los Angeles County District	500019	Angeles Mesa Reservoir	1550-500019	Booster	2,468.96	6,094
1550	Los Angeles County District	500021	Arlington Well	1550-500021	Well	939.94	1,400
1550	Los Angeles County District	500024	Bacon Well	1550-500024	Well	5,574.09	4,994
1550	Los Angeles County District	500039	Bradbury Tank	1550-500039	Tank	1,236.13	6,789
1550	Los Angeles County District	500041	Brookridge Booster Stn	1550-500041	Booster	577.93	944
1550	Los Angeles County District	500042	Buena Vista Well	1550-500042	Well	107,251.75	828,820
1550	Los Angeles County District	500074	Crenshaw Well	1550-500074	Well	125,405.01	798,040

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						Total Cost	Total Usage
1550	Los Angeles County District	500079	Crownhaven Well	1550-500079	Well	121,730.24	1,119,961
1550	Los Angeles County District	500083	Danford Reservoir	1550-500083	Booster	60,653.64	503,679
1550	Los Angeles County District	500089	Del Mar Well	1550-500089	Well	127,217.87	1,195,776
1550	Los Angeles County District	500107	Encanto Well	1550-500107	Well	136,203.42	1,163,520
1550	Los Angeles County District	500109	Fair Oaks Reservoir	1550-500109	Irrig Tank	342.86	275
1550	Los Angeles County District	500113	Fish Canyon Well	1550-500113	Well	999.49	1,547
1550	Los Angeles County District	500119	Garth Reservoir	1550-500119	Booster	8,134.40	53,347
1550	Los Angeles County District	500125	Grand Well	1550-500125	Well	14,330.96	122,516
1550	Los Angeles County District	500129	Guess Well	1550-500129	Well	281.24	972
1550	Los Angeles County District	500131	Hall Well	1550-500131	Well	115,986.84	1,068,390
1550	Los Angeles County District	500141	Homeland Reservoir	1550-500141	Tank	462.58	863
1550	Los Angeles County District	500142	Howland Well	1550-500142	Well	61,378.51	514,066
1550	Los Angeles County District	500150	Lamanda Reservoir/Well S	1550-500150	Booster	43,473.20	243,600
1550	Los Angeles County District	500154	Las Lomas Booster	1550-500154	Booster	18,824.61	133,934
1550	Los Angeles County District	500155	Las Lomas Well	1550-500155	Well	41,704.67	244,880
1550	Los Angeles County District	500164	Lemon Irrigation Booster	1550-500164	Irrig Booster	19,348.32	80,193
1550	Los Angeles County District	500167	Lombardy Well	1550-500167	Well	104,152.76	989,051
1550	Los Angeles County District	500168	Longden Well/Reservoir	1550-500168	Well	56,109.95	296,398
1550	Los Angeles County District	500186	Mariposa Well	1550-500186	Well	71,709.46	637,255
1550	Los Angeles County District	500196	Mission View Well	1550-500196	Well	618.19	1,189
1550	Los Angeles County District	500198	Monterey Booster	1550-500198	Booster	2,507.30	18,919
1550	Los Angeles County District	500203	Mt. Vernon Reservoir	1550-500203	Booster	9,963.55	84,795
1550	Los Angeles County District	500212	Oak Knoll Circle Well	1550-500212	Well	308.86	1,120
1550	Los Angeles County District	500213	Oak Knoll Reservoir	1550-500213	Booster	55,051.43	252,000
1550	Los Angeles County District	500218	Olympiad Reservoir	1550-500218	Booster	26,095.55	193,997
1550	Los Angeles County District	500221	Oswego Well	1550-500221	Well	6,802.56	0
1550	Los Angeles County District	500236	Patton Reservoir/Well	1550-500236	Well	69,088.17	372,300
1550	Los Angeles County District	500258	Roanoke Well	1550-500258	Well	517.61	0
1550	Los Angeles County District	500265	Rosemead Well	1550-500265	Well	164,698.35	1,590,216
1550	Los Angeles County District	500282	Santa Fe Well	1550-500282	Well	71,469.06	596,897
1550	Los Angeles County District	500286	Scott Reservoir/Booster	1550-500286	Booster	69,929.26	625,272
1550	Los Angeles County District	500292	Slauson Avenue Corrosion	1550-500292	Treatment Plant	356.40	319
1550	Los Angeles County District	500296	Spinks Reservoir/Booster	1550-500296	Booster	4,125.08	13,876
1550	Los Angeles County District	500319	Vernon Well #2	1550-500319	Well	708.10	0
1550	Los Angeles County District	500320	Vernon Well #3	1550-500320	Well	81,373.56	526,480
1550	Los Angeles County District	500325	Vineyard Booster Stn	1550-500325	Booster	8,281.90	26,494
1550	Los Angeles County District	500337	West Basin 27 Connection	1550-500337	Interconnection	400.34	614
1550	Los Angeles County District	500347	Wiley Well	1550-500347	Well	60,143.62	540,517
1550	Los Angeles County District	500349	Winston Well	1550-500349	Well	44,778.65	378,710
1550	Los Angeles County District	500352	Woodlyn Lane Reservoir/B	1550-500352	Irrig Booster	8,993.93	17,759
1550	Los Angeles County District	504397	Adams Ranch	1550-504397	Interconnection	517.13	0
1550	Los Angeles County District	504922	Duarte Rd. PRV	1550-504922	Reg Station	91.19	64
1551	Ventura County District	500016	American Oaks Booster St	1551-500016	Booster	16,811.40	110,445
1551	Ventura County District	500036	Borchard Road Turnout	1551-500036	Interconnection	347.90	365
1551	Ventura County District	500046	Calle Yucca Turnout	1551-500046	Interconnection	339.80	306
1551	Ventura County District	500087	Deer Ridge Tank/Pump Sta	1551-500087	Booster	13,175.06	53,627
1551	Ventura County District	500088	Deer Valley Booster Stat	1551-500088	Booster	8,194.31	50,674
1551	Ventura County District	500094	Dewey Booster Station	1551-500094	Booster	10,169.50	68,983
1551	Ventura County District	500098	Dos Vientos Booster/Potr	1551-500098	Booster	104,884.05	704,259
1551	Ventura County District	500115	Fordham Booster Station	1551-500115	Booster	314.62	144
1551	Ventura County District	500126	Green Ridge Tank	1551-500126	Tank	339.43	299
1551	Ventura County District	500127	Greenmeadow Booster Stat	1551-500127	Booster	336.53	284
1551	Ventura County District	500139	Hillcrest Drive Booster	1551-500139	Booster	6,241.53	48,085
1551	Ventura County District	500144	Industrial Tanks	1551-500144	Tank	428.09	759
1551	Ventura County District	500146	Janess Booster Station	1551-500146	Booster	6,568.22	41,825
1551	Ventura County District	500147	Janess Tank	1551-500147	Tank	346.77	353
1551	Ventura County District	500149	Kimber Booster Station	1551-500149	Booster	1,361.77	7,924
1551	Ventura County District	500153	Las Flores Turnout	1551-500153	Booster	345.00	344
1551	Ventura County District	500161	Las Posas Booster Statio	1551-500161	Booster	17,964.30	123,692
1551	Ventura County District	500173	Los Robles Booster Stati	1551-500173	Booster	17,761.02	101,506
1551	Ventura County District	500174	Los Robles Tanks	1551-500174	Tank	346.72	356
1551	Ventura County District	500175	Los Robles Turnout	1551-500175	Interconnection	345.49	336
1551	Ventura County District	500189	Mayfield Booster Station	1551-500189	Booster	10,786.05	99,229
1551	Ventura County District	500201	Moorpark Booster Station	1551-500201	Booster	13,303.18	63,115
1551	Ventura County District	500202	Moorpark Reservoir	1551-500202	Tank	612.15	2,135
1551	Ventura County District	500217	Olsen Road Turnout	1551-500217	Interconnection	345.92	351
1551	Ventura County District	500219	Orbis Tank	1551-500219	Tank	342.22	326
1551	Ventura County District	500222	Pace Reservoir	1551-500222	Tank	337.56	291
1551	Ventura County District	500243	Potrero I Reservoir	1551-500243	Tank	339.14	305
1551	Ventura County District	500289	Shopping Center I Reserv	1551-500289	Tank	294.17	0
1551	Ventura County District	500290	Shopping Center II Reser	1551-500290	Tank	538.76	325

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						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1551	Ventura County District	500297	Springwood Booster Stati	1551-500297	Booster	4,753.31	43,547
1551	Ventura County District	500340	White Stallion Tank	1551-500340	Tank	8,255.62	69,892
1551	Ventura County District	500344	Wildwood Booster Station	1551-500344	Booster	8,097.05	44,121
1551	Ventura County District	500345	Wildwood Tank	1551-500345	Tank	2,368.75	15,212
1551	Ventura County District	500346	Wildwood Turnout	1551-500346	Interconnection	346.82	346
1551	Ventura County District	504855	Warwick Pump Station	1551-504855	Tank	3,012.59	18,363
1551	Ventura County District	504709	Gainsborough PRV	1551-504709	Reg Station	290.95	0
1560	Sacramento District	500005	14020 Isle View Way	1560-500005	Well	23,175.05	95,643
1560	Sacramento District	500009	A Parkway Booster Statio	1560-500009	Interconnection	2,090.00	14,004
1560	Sacramento District	500017	Andrea #1 Well	1560-500017	Well	8,599.64	9,053
1560	Sacramento District	500018	Andrea #2 Well	1560-500018	Well	13,447.65	100,143
1560	Sacramento District	500020	Arden	1560-500020	Well	35,747.44	260,167
1560	Sacramento District	500022	Auberry Well	1560-500022	Well	22,287.61	181,360
1560	Sacramento District	500023	Auburn Well	1560-500023	Well	830.54	4,229
1560	Sacramento District	500030	Billy Mitchell Well	1560-500030	Well	246.64	35
1560	Sacramento District	500040	Briggs Well	1560-500040	Well	14,147.84	88,692
1560	Sacramento District	500043	Butterfield Well	1560-500043	Well	740.80	3,725
1560	Sacramento District	500045	Caldera Well	1560-500045	Well	1,525.58	9,993
1560	Sacramento District	500055	Carriage Well	1560-500055	Well	36,982.28	309,798
1560	Sacramento District	500056	Central/Sunrise Well	1560-500056	Well	3,472.06	24,849
1560	Sacramento District	500057	Cherbourg Well	1560-500057	Well	42,568.40	306,217
1560	Sacramento District	500058	Chettenham Well	1560-500058	Well	588.92	2,723
1560	Sacramento District	500059	Chipping Well	1560-500059	Well	48,687.41	397,528
1560	Sacramento District	500061	College Green Well	1560-500061	Well	1,606.96	10,349
1560	Sacramento District	500063	Conrad Well	1560-500063	Well	330.58	52
1560	Sacramento District	500064	Cook Riolo Well	1560-500064	Well	95,273.08	771,791
1560	Sacramento District	500069	Countryside #1 Well	1560-500069	Well	85,703.75	689,835
1560	Sacramento District	500070	Countryside #2 Well	1560-500070	Well	29,954.67	223,531
1560	Sacramento District	500071	Countryside Treatment Pl	1560-500071	Treatment Plant	37,393.02	252,433
1560	Sacramento District	500072	Countryside Way	1560-500072	Well	38,609.54	303,567
1560	Sacramento District	500073	Covered Wagon Well	1560-500073	Well	1,415.97	8,921
1560	Sacramento District	500077	Crosswoods Well	1560-500077	Well	9,349.86	36,772
1560	Sacramento District	500078	Crowder	1560-500078	Interconnection	445.10	1,499
1560	Sacramento District	500082	Daly Well	1560-500082	Well	9,400.28	13,246
1560	Sacramento District	500086	Davidson Well	1560-500086	Well	1,351.66	8,558
1560	Sacramento District	500095	Diablo Well	1560-500095	Well	570.58	2,529
1560	Sacramento District	500097	Don Julio Well	1560-500097	Well	56,966.99	438,454
1560	Sacramento District	500101	Eagle Ridge Well	1560-500101	Well	1,584.62	10,358
1560	Sacramento District	500104	Ehine Way Well	1560-500104	Well	697.84	3,459
1560	Sacramento District	500105	Elsie Well	1560-500105	Well	370.63	991
1560	Sacramento District	500106	Elverta Well	1560-500106	Well	620.82	2,813
1560	Sacramento District	500110	Fairlake #1 Well	1560-500110	Well	1,576.40	10,057
1560	Sacramento District	500111	Fairlake #2 Well	1560-500111	Well	23,475.27	187,260
1560	Sacramento District	500112	Falcon View Well	1560-500112	Well	10,618.79	16,435
1560	Sacramento District	500114	Folsom Well	1560-500114	Well	28,428.39	208,728
1560	Sacramento District	500117	Fort Sutter Well	1560-500117	Well	774.35	4,114
1560	Sacramento District	500118	Foxpark Well	1560-500118	Well	24,110.42	159,291
1560	Sacramento District	500122	Gerber Well	1560-500122	Well	559.17	2,343
1560	Sacramento District	500123	Glass Slipperwell	1560-500123	Well	1,029.60	6,280
1560	Sacramento District	500124	Gould Well	1560-500124	Well	12,777.70	93,478
1560	Sacramento District	500128	Grove #2 Well	1560-500128	Well	1,375.51	5,085
1560	Sacramento District	500130	H Street Well	1560-500130	Well	743.50	2,299
1560	Sacramento District	500132	Hemingway Well	1560-500132	Well	25,277.51	160,388
1560	Sacramento District	500133	Hemlock Well	1560-500133	Well	248.61	52
1560	Sacramento District	500145	Jackson Hwy Well	1560-500145	Well	26,424.91	158,023
1560	Sacramento District	500163	Le Mans Well	1560-500163	Well	492.13	1,836
1560	Sacramento District	500165	Linda Sue Well	1560-500165	Well	14,968.97	110,607
1560	Sacramento District	500166	Lippi Well	1560-500166	Well	3,478.68	13,303
1560	Sacramento District	500184	Malaga Well	1560-500184	Well	840.19	4,490
1560	Sacramento District	500187	Mars Well	1560-500187	Well	8,571.71	49,061
1560	Sacramento District	500188	Mather / Sacramento Coun	1560-500188	Interconnection	13,167.62	52,143
1560	Sacramento District	500200	Moonbeam Well	1560-500200	Well	799.88	4,157
1560	Sacramento District	500205	North Loop Well	1560-500205	Well	446.79	1,583
1560	Sacramento District	500209	Nut Plains Well	1560-500209	Well	62,315.21	517,629
1560	Sacramento District	500210	Oak Forest Well	1560-500210	Well	11,116.21	78,387
1560	Sacramento District	500214	Oakberry	1560-500214	Well	133.23	0
1560	Sacramento District	500215	Oaken Bucket Well	1560-500215	Well	4,284.79	35,966
1560	Sacramento District	500225	Palmerson Well	1560-500225	Well	6,595.86	502,662
1560	Sacramento District	500228	Parkside Treatment Plant	1560-500228	Treatment Plant	100,575.84	755,067
1560	Sacramento District	500242	Point Reyes Well	1560-500242	Well	656.22	3,204
1560	Sacramento District	500244	Power Inn Well	1560-500244	Well	42,702.36	331,471

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District #	District Name	Location #	Location Name	Uniqe Identifier	Service Type	Total Cost	Total Usage
1560	Sacramento District	500245	Prior Way Well	1560-500245	Well	627.74	2,985
1560	Sacramento District	500261	Rockhurst Well	1560-500261	Well	22,320.63	158,066
1560	Sacramento District	500262	Rockingham Well	1560-500262	Well	37,948.97	320,832
1560	Sacramento District	500263	Rogue River Well	1560-500263	Well	17,568.13	125,445
1560	Sacramento District	500264	Rose Parade Treatment Pl	1560-500264	Treatment Plant	27,547.35	167,409
1560	Sacramento District	500267	Roseville Rd Well	1560-500267	Well	5,350.65	41,181
1560	Sacramento District	500268	Roseville Road Well	1560-500268	Well	54,641.29	449,907
1560	Sacramento District	500269	Rushmore Well	1560-500269	Well	26,359.59	216,092
1560	Sacramento District	500277	Salmon Falls Well	1560-500277	Well	147.01	43
1560	Sacramento District	500281	Sandlewood Intertie	1560-500281	Interconnection	133.23	0
1560	Sacramento District	500285	Scotland Well	1560-500285	Well	135.80	25
1560	Sacramento District	500288	Shenandoah Well	1560-500288	Well	628.57	2,838
1560	Sacramento District	500291	Sky Parkway Well	1560-500291	Well	23,443.50	171,400
1560	Sacramento District	500293	Southgate Well	1560-500293	Well	14,030.74	98,377
1560	Sacramento District	500294	Southport Well	1560-500294	Well	2,465.79	19,634
1560	Sacramento District	500300	Stocker Well	1560-500300	Well	11,937.33	75,051
1560	Sacramento District	500302	Sutters Gold Well	1560-500302	Well	354.04	1,661
1560	Sacramento District	500303	Swansea Well	1560-500303	Well	28,656.46	238,218
1560	Sacramento District	500304	Tally Ho #1 Well	1560-500304	Well	37,883.86	205,017
1560	Sacramento District	500310	Treelark Well	1560-500310	Well	765.46	3,896
1560	Sacramento District	500311	Twin Parks Well	1560-500311	Well	1,339.36	8,334
1560	Sacramento District	500312	Twin Trails Well	1560-500312	Well	5,032.64	1,453
1560	Sacramento District	500317	Van Maren Well	1560-500317	Well	62,237.82	527,241
1560	Sacramento District	500318	Vandenberg Well	1560-500318	Well	291.95	388
1560	Sacramento District	500324	Villaview Well	1560-500324	Well	11,986.34	64,597
1560	Sacramento District	500326	Vintage 1 Well	1560-500326	Well	42,858.43	354,992
1560	Sacramento District	500327	Vintage 3 Well	1560-500327	Well	24,260.86	194,839
1560	Sacramento District	500328	Vintage Treatment Plant	1560-500328	Treatment Plant	106,581.75	821,028
1560	Sacramento District	500331	Watt Ave Well	1560-500331	Well	18,389.53	119,372
1560	Sacramento District	500334	Well 3 3B Treatment Plan	1560-500334	Treatment Plant	30,135.42	126,399
1560	Sacramento District	500338	West La Loma Well	1560-500338	Well	66,378.35	559,106
1560	Sacramento District	500339	Westporter Well	1560-500339	Well	20,638.33	155,795
1560	Sacramento District	500341	Whitewater Well	1560-500341	Well	17,098.96	134,700
1560	Sacramento District	500342	Wilbur 2 Well	1560-500342	Well	18,325.85	120,459
1560	Sacramento District	500343	Wildrose Well	1560-500343	Well	1,541.14	9,754
1560	Sacramento District	500348	Winchester Well	1560-500348	Well	33,462.44	279,970
1560	Sacramento District	500351	Wittkop Well	1560-500351	Well	419.09	2,067
1560	Sacramento District	500353	Woodman Well	1560-500353	Well	19,367.43	70,306
1560	Sacramento District	500354	Wyda Well	1560-500354	Well	20,487.93	165,456
1560	Sacramento District	503452	Laurel Oaks Well	1560-503452	Well	627.86	2,994
1560	Sacramento District	503616	- Montezuma Well	1560-503616	Well	179.52	359
1560	Sacramento District	504006	Isleton Elevated Tank	1560-504006	Tank	464.63	1,588
1560	Sacramento District	504057	Folsom Booster Station	1560-504057	Interconnection	10,769.78	80,874
1560	Sacramento District	504324	Walerga Tank & Booster STN	1560-504324	Tank	18,031.85	52,135
1560	Sacramento District	504438	Colonnade Well	1560-504438	Well	660.45	3,102
1560	Sacramento District	504456	Lincoln Oaks Tank	1560-504456	Tank	13,658.38	87,602
1560	Sacramento District	504481	Geyserville Merrill Well 1	1560-504481	Well	6,210.11	24,139
1560	Sacramento District	504482	Geyserville Chianti Tank	1560-504482	Tank	204.55	357
1560	Sacramento District	504483	Geyserville Railroad Ave W	1560-504483	Well	9,531.14	38,235
1560	Sacramento District	504493	Dunnigan Well & Pump	1560-504493	Well	8,620.36	36,125
1560	Sacramento District	504526	Meadowbrook Well 4	1560-504526	Well	41,669.56	288,340
1560	Sacramento District	004534	2272 Meadowbrook 40HP-pump	1560-004534	Well	40,427.50	178,176
1560	Sacramento District	004535	& Fir - 40 HP pump	1560-004535	Well	241.83	0
1560	Sacramento District	004536	Maple - Chlorine pump	1560-004536	Well	121.18	1
1560	Sacramento District	004537	rner Balsam & Poplar	1560-004537	Well	4,747.18	15,583
1561	Larkfield District	500152	Larkfield Water Treatmen	1561-500152	Treatment Plant	32,687.15	137,544
1561	Larkfield District	500181	Lower Wikipup Tank & Boos	1561-500181	Booster	4,771.44	18,632
1561	Larkfield District	500206	North Wikipup Tank & Boos	1561-500206	Booster	3,650.85	15,655
1561	Larkfield District	500316	Upper Wikipup Tank & Boos	1561-500316	Booster	256.84	976
1561	Larkfield District	500333	Well 1A	1561-500333	Well	6,986.01	33,056
1561	Larkfield District	500335	Well 3A	1561-500335	Well	28,100.76	134,294
1561	Larkfield District	500336	Well 5	1561-500336	Well	3,982.40	17,593

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						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage

End	End	End	End	End	End	End	End
Sum						6,801,065.08	45,020,900.63

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	\$	KWH
						Total Cost	Total Usage
1530	San Diego County District	0500006	1st & A	1530-0500006	Interconnection	256.90	540
1530	San Diego County District	0500136	Highland Tank	1530-0500136	Tank	561.20	1,719
1530	San Diego County District	0500199	Montgomery Tank	1530-0500199	Tank	559.59	1,704
1530	San Diego County District	0500224	Palm Ave. Flow Meter	1530-0500224	Interconnection	154.55	111
1540	Monterey County District	0500010	Address Via Malpaso	1540-0500010	Booster	424.96	755
1540	Monterey County District	0500011	Airway Upper	1540-0500011	Tank	239.78	524
1540	Monterey County District	0500012	Airways Lower Pp #17	1540-0500012	Booster	4,628.03	17,292
1540	Monterey County District	0500013	Ambler Park Treatment Pl	1540-0500013	Treatment Plant	26,549.89	104,046
1540	Monterey County District	0500014	Ambler Park Well #4	1540-0500014	Well	21,378.78	88,805
1540	Monterey County District	0500015	Ambler Park Well #5	1540-0500015	Well	402.60	620
1540	Monterey County District	0500025	Bay Street Wells #1 & #2	1540-0500025	Well	18,936.70	73,805
1540	Monterey County District	0500026	Begonia Iron Removal Pla	1540-0500026	Treatment Plant	15,268.38	69,694
1540	Monterey County District	0500027	Begonia Iron Removal Pla	1540-0500027	Treatment Plant	157,278.13	929,547
1540	Monterey County District	0500028	Berwick Well #7	1540-0500028	Well	71,748.30	387,396
1540	Monterey County District	0500029	Berwick Well #8	1540-0500029	Well	65,380.10	370,543
1540	Monterey County District	0500031	Birdrock Standby Pump	1540-0500031	Booster	123.45	12
1540	Monterey County District	0500032	Bishop #1 Well	1540-0500032	Well	14,984.85	60,890
1540	Monterey County District	0500033	Bishop #2 Well	1540-0500033	Well	23,898.03	99,820
1540	Monterey County District	0500035	Boots Rd.	1540-0500035	Tank	318.54	288
1540	Monterey County District	0500037	Boronda Pp #67	1540-0500037	Booster	10,559.79	43,418
1540	Monterey County District	0500047	Carmel Knolls	1540-0500047	Booster	30,492.37	124,031
1540	Monterey County District	0500048	Carmel Valley Filter Pla	1540-0500048	Booster	4,026.83	9,555
1540	Monterey County District	0500049	Carmel Valley Ranch	1540-0500049	Tank	463.83	1,458
1540	Monterey County District	0500050	Carmel Valley Ranch Pp #	1540-0500050	Booster	10,818.59	43,736
1542	Monterey Wastewater	0500051	Carmel Valley Ranch Wwtp	1542-0500051	Waste Water	37,556.95	209,559
1540	Monterey County District	0500052	Carmel Way	1540-0500052	Booster	249.03	0
1540	Monterey County District	0500053	Carmel Woods Pp #8	1540-0500053	Booster	12,431.70	52,427
1540	Monterey County District	0500054	Carola Pp #71	1540-0500054	Booster	4,831.60	19,396
1540	Monterey County District	0500060	Chualar Tank	1540-0500060	Well/Booster/Tank	22,368.87	93,533
1540	Monterey County District	0500065	Corona	1540-0500065	Booster	9,468.81	35,424
1540	Monterey County District	0500067	Corte Codollera Pp	1540-0500067	Toro-Booster	1,384.09	4,977
1540	Monterey County District	0500075	Crespi	1540-0500075	Booster	2,434.60	8,100
1540	Monterey County District	0500076	Crest Reservoir (Conc)	1540-0500076	Tank	302.31	786
1540	Monterey County District	0500080	Cypress Well	1540-0500080	Well	174,409.33	1,134,968
1540	Monterey County District	0500081	Cypress Pp #14	1540-0500081	Booster	2,472.42	9,442
1540	Monterey County District	0500090	Del Mesa Pp #42	1540-0500090	Booster	5,784.18	23,225
1540	Monterey County District	0500091	Del Monte Test Well	1540-0500091	Well	268.81	9
1540	Monterey County District	0500092	Del Rey Regulating Stati	1540-0500092	Reg Station	291.17	740
1540	Monterey County District	0500099	Dry Creek	1540-0500099	Booster	336.09	303
1540	Monterey County District	0500102	Eardley Pp #1	1540-0500102	Booster	121,836.15	497,183
1540	Monterey County District	0500103	Eddy Road	1540-0500103	Booster	1,117.31	3,795
1540	Monterey County District	0500108	Encina Pp #54	1540-0500108	Booster	1,171.50	4,122
1540	Monterey County District	0500116	Forest Lake Tanks	1540-0500116	Tank	469.71	1,500
1540	Monterey County District	0500120	Garzas Well #3	1540-0500120	Well	20,221.32	88,416
1540	Monterey County District	0500121	Garzas Well #4	1540-0500121	Well	25,883.13	111,611
1540	Monterey County District	0500134	Hidden Hills Treatment P	1540-0500134	Treatment Plant	70,960.23	264,761
1540	Monterey County District	0500135	High Meadows Pp #45	1540-0500135	Booster	10,649.24	40,234
1540	Monterey County District	0500137	Highland Pp #47	1540-0500137	Booster	810.72	2,326
1542	Monterey Wastewater	0500140	Holt Rd Lift Station	1542-0500140	Waste Water	2,559.44	9,854
1540	Monterey County District	0500143	Huckleberry Pp #23	1540-0500143	Booster	5,846.70	21,520
1542	Monterey Wastewater	0500156	Las Palmas Lift Station #1	1542-0500156	Waste Water	3,869.69	15,574
1542	Monterey Wastewater	0500157	Las Palmas Lift Station #2	1542-0500157	Waste Water	4,945.32	20,141
1542	Monterey Wastewater	0500158	Las Palmas Lift Station #3	1542-0500158	Waste Water	3,670.97	14,733
1542	Monterey Wastewater	0500159	Las Palmas Lift Station #4	1542-0500159	Waste Water	780.48	2,253
1542	Monterey Wastewater	0500160	Las Palmas Wastewater Tr	1542-0500160	Waste Water	102,780.35	631,704
1540	Monterey County District	0500169	Los Laureles Well # 3	1540-0500169	Well	330.37	448
1540	Monterey County District	0500170	Los Laureles Well #5	1540-0500170	Well	16,648.41	73,344
1540	Monterey County District	0500171	Los Laureles Well #6	1540-0500171	Well	40,948.94	230,700
1540	Monterey County District	0500172	Los Padres Dam	1540-0500172	Dam	873.17	2,745
1540	Monterey County District	0500176	Los Tulares Lower Pp #51	1540-0500176	Booster	3,173.26	10,641
1540	Monterey County District	0500177	Los Tulares Pp #50	1540-0500177	Booster	5,480.13	19,322
1540	Monterey County District	0500178	Los Tulares Upper	1540-0500178	Booster	2,424.47	8,960
1540	Monterey County District	0500179	Lower Markham Ranch Pp	1540-0500179	Toro-Booster	4,203.87	16,925
1540	Monterey County District	0500180	Lower Tierra Grande	1540-0500180	Booster	4,095.84	14,895
1540	Monterey County District	0500183	Luzern Well	1540-0500183	Well	9,701.70	37,113
1540	Monterey County District	0500190	Mercurio Pp #59	1540-0500190	Booster	1,028.53	3,349
1540	Monterey County District	0500191	Mesa Pp #2A	1540-0500191	Booster	42,233.21	144,612
1540	Monterey County District	0500192	Meyers Pneumatic Pp #81	1540-0500192	Booster	642.18	1,689
1540	Monterey County District	0500193	Middle Canyon Upper	1540-0500193	Booster	2,243.23	7,398
1540	Monterey County District	0500194	Middle Tierra Grande	1540-0500194	Booster	1,657.96	5,962
1540	Monterey County District	0500204	Munras	1540-0500204	Booster	5,134.07	19,498

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						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1540	Monterey County District	0500208	Nueve	1540-0500208	Booster	8,379.83	31,639
1542	Monterey Wastewater	0500211	Oak Hills Wastewater Tre	1542-0500211	Waste Water	4,892.63	12,753
1540	Monterey County District	0500220	Ord Grove Ozone Plant	1540-0500220	Treatment Plant	203,149.53	1,219,345
1540	Monterey County District	0500226	Panetta Well #1	1540-0500226	Well	40,779.84	167,547
1540	Monterey County District	0500227	Paralta Well	1540-0500227	Well	81,758.26	363,603
1542	Monterey Wastewater	0500229	Pasadera	1542-0500229	Waste Water	8,685.28	35,762
1542	Monterey Wastewater	0500230	Pasadera Lift Station #2	1542-0500230	Waste Water	5,544.82	22,635
1540	Monterey County District	0500231	Pasadera Pump Station	1540-0500231	Booster	4,753.61	18,915
1542	Monterey Wastewater	0500232	Pasadera Water Treatment	1542-0500232	Waste Water	12,413.62	50,698
1542	Monterey Wastewater	0500233	Pasadera Wwtp #2	1542-0500233	Waste Water	39,058.93	203,981
1540	Monterey County District	0500235	Paseo Privado Lower Pp #	1540-0500235	Booster	5,254.85	21,472
1540	Monterey County District	0500237	Pearce Well	1540-0500237	Well	121,622.62	810,891
1540	Monterey County District	0500239	Pebble Beach Pp 6B	1540-0500239	Booster	34,733.26	160,839
1540	Monterey County District	0500240	Playa Well #3	1540-0500240	Well	21,883.61	94,173
1540	Monterey County District	0500241	Plumas Well	1540-0500241	Well	28,195.39	100,828
1540	Monterey County District	0500246	Quail Meadows	1540-0500246	Booster	1,985.35	7,384
1540	Monterey County District	0500247	Ragsdale	1540-0500247	Treatment Plant	39,087.95	148,736
1540	Monterey County District	0500248	Ralph Lane Well	1540-0500248	Well	2,471.55	9,533
1540	Monterey County District	0500249	Rancho Blvd Pp #10	1540-0500249	Booster	348.52	434
1540	Monterey County District	0500250	Rancho Canada Well	1540-0500250	Well	192,432.05	1,225,275
1540	Monterey County District	0500251	Rancho Fiesta Pp #61	1540-0500251	Booster	2,639.84	9,083
1540	Monterey County District	0500252	Rancho Fiesta Pp #62	1540-0500252	Booster	1,336.27	4,425
1540	Monterey County District	0500253	Rancho Mar Monte	1540-0500253	Booster	1,913.24	6,608
1540	Monterey County District	0500254	Ridgeway	1540-0500254	Booster	3,215.34	12,453
1540	Monterey County District	0500256	Rimrock Upper Pp #82	1540-0500256	Booster	4,059.92	15,976
1540	Monterey County District	0500257	Rio Vista Pp #53	1540-0500257	Booster	3,771.44	13,968
1540	Monterey County District	0500259	Robles Well	1540-0500259	Well	1,143.23	3,582
1540	Monterey County District	0500260	Robles Lower	1540-0500260	Booster	7,361.22	27,063
1540	Monterey County District	0500272	Ryan Ranch #9	1540-0500272	Well	17,354.72	89,637
1540	Monterey County District	0500273	Ryan Ranch Tank	1540-0500273	Tank	1,370.58	5,374
1540	Monterey County District	0500274	Ryan Ranch Well #11	1540-0500274	Well	370.91	397
1540	Monterey County District	0500275	Ryan Ranch Well #7	1540-0500275	Well	14,801.83	59,104
1540	Monterey County District	0500278	San Carlos Well #2	1540-0500278	Well	2,048.85	1,803
1540	Monterey County District	0500280	Sand City Brackish Water	1540-0500280	Treatment Plant	67,887.04	294,173
1540	Monterey County District	0500284	Schulte Well	1540-0500284	Well	100,289.82	603,642
1540	Monterey County District	0500287	Segunda	1540-0500287	Booster	69,883.88	235,871
1540	Monterey County District	0500295	Spectacular Bid Pp #75	1540-0500295	Booster	3,469.98	13,646
1540	Monterey County District	0500299	Stirrup	1540-0500299	Booster	12,072.85	46,494
1540	Monterey County District	0500306	Telemetry Water Station	1540-0500306	Flow Station	455.33	1,442
1540	Monterey County District	0500307	Tierra Grande Pp #38	1540-0500307	Booster	3,557.20	14,060
1540	Monterey County District	0500308	Tioga Wells #4 & # 5	1540-0500308	Well	19,971.04	83,721
1540	Monterey County District	0500309	Toyon Lower Pp #32	1540-0500309	Booster	8,255.28	32,311
1540	Monterey County District	0500313	Upper Estrella D Oro Pne	1540-0500313	Booster	1,180.01	4,045
1540	Monterey County District	0500314	Upper Markham Ranch Pp	1540-0500314	Toro-Booster	1,389.63	4,932
1540	Monterey County District	0500315	Upper Tierra Grande	1540-0500315	Booster	1,643.71	6,029
1540	Monterey County District	0500321	Via Contenta	1540-0500321	Booster	10,539.27	43,340
1540	Monterey County District	0500322	Via Las Encinas	1540-0500322	Booster	2,877.08	11,251
1540	Monterey County District	0500323	Viejo Tank	1540-0500323	Tank	325.88	818
1540	Monterey County District	0500329	Viscalino	1540-0500329	Booster	920.37	2,961
1540	Monterey County District	0500330	Waldon Lower	1540-0500330	Booster	2,836.26	10,973
1540	Monterey County District	0500332	Well #1 And #2 Highway 6	1540-0500332	Toro-Well/Treatment	55,361.56	258,335
1540	Monterey County District	0500350	Withers Pp #12	1540-0500350	Booster	17,727.39	70,210
1540	Monterey County District	0503447	Del Monte Regulating Sta	1540-0503447	Reg Station	22,810.83	85,359
1540	Monterey County District	0503580	Mount Devon Tank	1540-0503580	Tank	331.20	917
1540	Monterey County District	0504010	Lower Estrella D Oro	1540-0504010	Booster	3,127.08	12,307
1540	Monterey County District	0504015	Ambler Oaks Well	1540-0504015	Well	424.20	1,117
1540	Monterey County District	0504056	Crest Canyon Tank	1540-0504056	Tank	183.69	278
1540	Monterey County District	0504090	Upper Toyon Tank #1	1540-0504090	Tank	331.16	861
1540	Monterey County District	0504127	Garrapata Pump #5	1540-0504127	Well	8,354.49	32,687
1542	Monterey Wastewater	0504176	Spreckels Wastewater Tre	1542-0504176	Waste Water	1,623.70	5,983
1540	Monterey County District	0504695	Hilby ASR Pump Station	1540-0504695	Booster	135,005.01	38,680
1540	Monterey County District	0504874	Hilby Tank	1540-0504874	Tank	67,786.54	300,461
1540	Monterey County District	0504974	Test Well Site	1540-0504974	Well	5,109.39	2,364
1550	Los Angeles County District	0500008	48Th Street Well	1550-0500008	Well	7,284.28	2,120
1550	Los Angeles County District	0500019	Angeles Mesa Reservoir	1550-0500019	Booster	1,770.19	2,441
1550	Los Angeles County District	0500021	Arlington Well	1550-0500021	Well	963.61	1,240
1550	Los Angeles County District	0500074	Crenshaw Well	1550-0500074	Well	43,021.75	216,480
1550	Los Angeles County District	0500119	Garth Reservoir	1550-0500119	Booster	9,661.48	60,681
1550	Los Angeles County District	0500141	Homeland Reservoir	1550-0500141	Tank	304.20	790
1550	Los Angeles County District	0500203	Mt. Vernon Reservoir	1550-0500203	Booster	11,016.51	90,422
1550	Los Angeles County District	0500218	Olympiad Reservoir	1550-0500218	Booster	22,759.40	176,548

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1550	Los Angeles County District	0500292	Slauson Avenue Corrosion	1550-0500292	Treatment Plant	210.06	320
1550	Los Angeles County District	0500319	Vernon Well #2	1550-0500319	Well	733.76	0
1550	Los Angeles County District	0500320	Vernon Well #3	1550-0500320	Well	111,476.50	639,920
1550	Los Angeles County District	0500337	West Basin 27 Connection	1550-0500337	Interconnection	184.20	153
1550	Los Angeles County District	0500024	Bacon Well	1550-0500024	Well	4,408.89	3,930
1550	Los Angeles County District	0500039	Bradbury Tank	1550-0500039	Tank	1,025.07	6,612
1550	Los Angeles County District	0500041	Brookridge Booster Stn	1550-0500041	Booster	553.45	918
1550	Los Angeles County District	0500042	Buena Vista Well	1550-0500042	Well	51,339.48	226,703
1550	Los Angeles County District	0500079	Crownhaven Well	1550-0500079	Well	138,242.81	1,390,071
1550	Los Angeles County District	0500107	Encanto Well	1550-0500107	Well	42,409.14	183,294
1550	Los Angeles County District	0500113	Fish Canyon Well	1550-0500113	Well	818.90	1,515
1550	Los Angeles County District	0500154	Las Lomas Booster	1550-0500154	Booster	11,624.22	68,835
1550	Los Angeles County District	0500155	Las Lomas Well	1550-0500155	Well	33,082.24	184,056
1550	Los Angeles County District	0500164	Lemon Irrigation Booster	1550-0500164	Irrig Booster	31,612.29	204,009
1550	Los Angeles County District	0500282	Santa Fe Well	1550-0500282	Well	60,421.00	428,771
1550	Los Angeles County District	0500286	Scott Reservoir/ Booster	1550-0500286	Booster	65,006.92	604,268
1550	Los Angeles County District	0500296	Spinks Reservoir/Booster	1550-0500296	Booster	4,043.96	15,481
1550	Los Angeles County District	0500325	Vineyard Booster Stn	1550-0500325	Booster	5,670.77	10,009
1550	Los Angeles County District	0500347	Wiley Well	1550-0500347	Well	110,968.52	1,097,213
1550	Los Angeles County District	0504922	Duarte Rd. PRV	1550-0504922	Reg Station	198.66	281
1550	Los Angeles County District	0500083	Danford Reservoir	1550-0500083	Booster	38,956.38	325,621
1550	Los Angeles County District	0500089	Del Mar Well	1550-0500089	Well	128,876.49	1,232,631
1550	Los Angeles County District	0500125	Grand Well	1550-0500125	Well	5,172.40	28,261
1550	Los Angeles County District	0500129	Guess Well	1550-0500129	Well	295.26	972
1550	Los Angeles County District	0500131	Hall Well	1550-0500131	Well	104,248.40	996,861
1550	Los Angeles County District	0500142	Howland Well	1550-0500142	Well	64,344.72	550,989
1550	Los Angeles County District	0500150	Lamanda Reservoir/Well S	1550-0500150	Booster	57,638.97	316,600
1550	Los Angeles County District	0500167	Lombardy Well	1550-0500167	Well	89,866.03	868,361
1550	Los Angeles County District	0500168	Longden Well/Reservoir	1550-0500168	Well	44,949.14	286,751
1550	Los Angeles County District	0500186	Mariposa Well	1550-0500186	Well	53,857.30	515,523
1550	Los Angeles County District	0500196	Mission View Well	1550-0500196	Well	15,706.63	7,613
1550	Los Angeles County District	0500198	Monterey Booster	1550-0500198	Booster	2,396.98	18,391
1550	Los Angeles County District	0500212	Oak Knoll Circle Well	1550-0500212	Well	1,837.50	1,120
1550	Los Angeles County District	0500213	Oak Knoll Reservoir	1550-0500213	Booster	56,712.29	241,640
1550	Los Angeles County District	0500221	Oswego Well	1550-0500221	Well	8,201.92	0
1550	Los Angeles County District	0500236	Patton Reservoir/Well	1550-0500236	Well	62,544.59	307,700
1550	Los Angeles County District	0500258	Roanoke Well	1550-0500258	Well	484.52	0
1550	Los Angeles County District	0500265	Rosemead Well	1550-0500265	Well	155,009.59	1,591,113
1550	Los Angeles County District	0500349	Winston Well	1550-0500349	Well	33,322.81	269,055
1550	Los Angeles County District	0504397	Adams Ranch	1550-0504397	Interconnection	486.29	0
1551	Ventura County District	0500016	American Oaks Booster St	1551-0500016	Booster	13,197.34	97,669
1551	Ventura County District	0500036	Borchard Road Turnout	1551-0500036	Interconnection	213.57	381
1551	Ventura County District	0500046	Calle Yucca Turnout	1551-0500046	Interconnection	199.27	292
1551	Ventura County District	0500087	Deer Ridge Tank/Pump Sta	1551-0500087	Booster	9,151.66	39,829
1551	Ventura County District	0500088	Deer Valley Booster Stat	1551-0500088	Booster	7,068.33	43,601
1551	Ventura County District	0500094	Dewey Booster Station	1551-0500094	Booster	9,817.97	79,121
1551	Ventura County District	0500098	Dos Vientos Booster/Potr	1551-0500098	Booster	93,138.85	638,308
1551	Ventura County District	0500115	Fordham Booster Station	1551-0500115	Booster	161.86	90
1551	Ventura County District	0500126	Green Ridge Tank	1551-0500126	Tank	215.17	337
1551	Ventura County District	0500127	Greenmeadow Booster Stat	1551-0500127	Booster	222.86	437
1551	Ventura County District	0500139	Hillcrest Drive Booster	1551-0500139	Booster	6,034.34	47,639
1551	Ventura County District	0500144	Industrial Tanks	1551-0500144	Tank	258.24	557
1551	Ventura County District	0500146	Janss Booster Station	1551-0500146	Booster	5,779.89	38,417
1551	Ventura County District	0500147	Janss Tank	1551-0500147	Tank	223.64	390
1551	Ventura County District	0500149	Kimber Booster Station	1551-0500149	Booster	657.51	3,738
1551	Ventura County District	0500153	Las Flores Turnout	1551-0500153	Booster	216.89	351
1551	Ventura County District	0500161	Las Posas Booster Statio	1551-0500161	Booster	18,144.71	143,128
1551	Ventura County District	0500173	Los Robles Booster Stati	1551-0500173	Booster	15,570.16	95,110
1551	Ventura County District	0500174	Los Robles Tanks	1551-0500174	Tank	213.10	382
1551	Ventura County District	0500175	Los Robles Turnout	1551-0500175	Interconnection	201.26	301
1551	Ventura County District	0500189	Mayfield Booster Station	1551-0500189	Booster	12,064.05	113,306
1551	Ventura County District	0500201	Moorpark Booster Station	1551-0500201	Booster	14,265.38	77,404
1551	Ventura County District	0500202	Moorpark Reservoir	1551-0500202	Tank	446.65	1,711
1551	Ventura County District	0500217	Olsen Road Turnout	1551-0500217	Interconnection	200.38	314
1551	Ventura County District	0500219	Orbis Tank	1551-0500219	Tank	207.25	344
1551	Ventura County District	0500222	Pace Reservoir	1551-0500222	Tank	256.98	575
1551	Ventura County District	0500243	Potrero I Reservoir	1551-0500243	Tank	210.88	366
1551	Ventura County District	0500289	Shopping Center I Reserv	1551-0500289	Tank	149.11	0
1551	Ventura County District	0500290	Shopping Center II Reser	1551-0500290	Tank	519.78	355
1551	Ventura County District	0500297	Springwood Booster Stati	1551-0500297	Booster	4,602.84	42,840
1551	Ventura County District	0500340	White Stallion Tank	1551-0500340	Tank	8,351.70	73,839

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						\$	KWH
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1551	Ventura County District	0500344	Wildwood Booster Station	1551-0500344	Booster	7,131.57	40,794
1551	Ventura County District	0500345	Wildwood Tank	1551-0500345	Tank	2,206.73	14,997
1551	Ventura County District	0500346	Wildwood Turnout	1551-0500346	Interconnection	219.89	355
1551	Ventura County District	0504439	Borchaerd Road Pump Statio	1551-0504439	Booster	419.20	0
1551	Ventura County District	0504719	Cortez	1551-0504719	Well/Booster/Tank	11,959.82	61,271
1551	Ventura County District	0504855	Warwick Pump Station	1551-0504855	Tank	4,835.73	26,868
1551	Ventura County District	1504709	Gainsborough PRV	1551-1504709	Reg Station	177.18	252
1560	Sacramento District	0500005	14020 Isle View Way	1560-0500005	Well	25,028.90	96,781
1560	Sacramento District	0500009	A Parkway Booster Statio	1560-0500009	Interconnection	11,688.75	83,458
1560	Sacramento District	0500017	Andrea #1 Well	1560-0500017	Well	3,879.17	30,524
1560	Sacramento District	0500018	Andrea #2 Well	1560-0500018	Well	1,101.38	6,594
1560	Sacramento District	0500020	Arden	1560-0500020	Well	35,990.10	260,162
1560	Sacramento District	0500022	Auberry Well	1560-0500022	Well	18,555.42	142,430
1560	Sacramento District	0500023	Auburn Well	1560-0500023	Well	852.67	4,559
1560	Sacramento District	0500030	Billy Mitchell Well	1560-0500030	Well	248.09	24
1560	Sacramento District	0500040	Briggs Well	1560-0500040	Well	8,460.39	32,209
1560	Sacramento District	0500043	Butterfield Well	1560-0500043	Well	749.55	3,720
1560	Sacramento District	0500045	Caldera Well	1560-0500045	Well	1,424.52	9,109
1560	Sacramento District	0500055	Carriage Well	1560-0500055	Well	4,369.17	849
1560	Sacramento District	0500056	Central/Sunrise Well	1560-0500056	Well	3,591.93	25,132
1560	Sacramento District	0500057	Cherbourg Well	1560-0500057	Well	55,449.05	436,216
1560	Sacramento District	0500059	Chipping Well	1560-0500059	Well	48,981.42	401,890
1560	Sacramento District	0500061	College Green Well	1560-0500061	Well	1,658.05	10,569
1560	Sacramento District	0500063	Conrad Well	1560-0500063	Well	162.60	0
1560	Sacramento District	0500064	Cook Riolo Well	1560-0500064	Well	74,212.72	553,647
1560	Sacramento District	0500069	Countryside #1 Well	1560-0500069	Well	64,090.80	468,075
1560	Sacramento District	0500070	Countryside #2 Well	1560-0500070	Well	11,024.93	40,364
1560	Sacramento District	0500071	Countryside Treatment Pl	1560-0500071	Treatment Plant	32,588.90	203,849
1560	Sacramento District	0500072	Countryside Way	1560-0500072	Well	64,166.83	522,543
1560	Sacramento District	0500073	Covered Wagon Well	1560-0500073	Well	5,226.92	39,667
1560	Sacramento District	0500077	Crosswoods Well	1560-0500077	Well	5,353.61	5,800
1560	Sacramento District	0500078	Crowder	1560-0500078	Interconnection	520.24	1,778
1560	Sacramento District	0500082	Daly Well	1560-0500082	Well	19,862.11	142,546
1560	Sacramento District	0500086	Davidson Well	1560-0500086	Well	638.94	3,039
1560	Sacramento District	0500095	Diablo Well	1560-0500095	Well	582.31	2,571
1560	Sacramento District	0500097	Don Julio Well	1560-0500097	Well	47,205.75	341,964
1560	Sacramento District	0500101	Eagle Ridge Well	1560-0500101	Well	835.55	4,542
1560	Sacramento District	0500104	Elhine Way Well	1560-0500104	Well	748.30	3,722
1560	Sacramento District	0500105	Elsie Well	1560-0500105	Well	370.93	966
1560	Sacramento District	0500106	Elverta Well	1560-0500106	Well	627.32	2,816
1560	Sacramento District	0500110	Fairlake #1 Well	1560-0500110	Well	789.03	4,007
1560	Sacramento District	0500111	Fairlake #2 Well	1560-0500111	Well	22,864.00	178,963
1560	Sacramento District	0500112	Falcon View Well	1560-0500112	Well	12,515.40	92,213
1560	Sacramento District	0500114	Folsom Well	1560-0500114	Well	25,246.16	173,338
1560	Sacramento District	0500117	Fort Sutter Well	1560-0500117	Well	829.00	4,571
1560	Sacramento District	0500118	Foxpark Well	1560-0500118	Well	23,007.35	148,715
1560	Sacramento District	0500122	Gerber Well	1560-0500122	Well	538.95	2,161
1560	Sacramento District	0500123	Glass Slipperwell	1560-0500123	Well	13,169.32	99,384
1560	Sacramento District	0500124	Gould Well	1560-0500124	Well	8,392.85	49,704
1560	Sacramento District	0500128	Grove #2 Well	1560-0500128	Well	1,472.30	5,197
1560	Sacramento District	0500130	H Street Well	1560-0500130	Well	745.29	2,127
1560	Sacramento District	0500132	Hemingway Well	1560-0500132	Well	30,581.65	200,315
1560	Sacramento District	0500133	Hemlock Well	1560-0500133	Well	252.96	67
1560	Sacramento District	0500145	Jackson Hwy Well	1560-0500145	Well	45,892.26	335,953
1560	Sacramento District	0500163	Le Mans Well	1560-0500163	Well	527.78	2,076
1560	Sacramento District	0500165	Linda Sue Well	1560-0500165	Well	15,466.24	115,281
1560	Sacramento District	0500166	Lippi Well	1560-0500166	Well	785.77	4,151
1560	Sacramento District	0500184	Malaga Well	1560-0500184	Well	885.70	4,756
1560	Sacramento District	0500187	Mars Well	1560-0500187	Well	14,579.38	109,269
1560	Sacramento District	0500188	Mather / Sacramento Coun	1560-0500188	Interconnection	17,335.21	69,284
1560	Sacramento District	0500200	Moonbeam Well	1560-0500200	Well	8,807.44	63,452
1560	Sacramento District	0500205	North Loop Well	1560-0500205	Well	15,602.42	123,598
1560	Sacramento District	0500209	Nut Plains Well	1560-0500209	Well	58,582.55	477,137
1560	Sacramento District	0500210	Oak Forest Well	1560-0500210	Well	27,801.51	203,734
1560	Sacramento District	0500215	Oaken Bucket Well	1560-0500215	Well	11,162.73	57,872
1560	Sacramento District	0500225	Palmerson Well	1560-0500225	Well	63,858.17	509,888
1560	Sacramento District	0500228	Parkside Treatment Plant	1560-0500228	Treatment Plant	117,841.87	900,737
1560	Sacramento District	0500242	Point Reyes Well	1560-0500242	Well	695.63	3,455
1560	Sacramento District	0500244	Power Inn Well	1560-0500244	Well	37,219.56	275,122
1560	Sacramento District	0500245	Prior Way Well	1560-0500245	Well	715.43	3,639
1560	Sacramento District	0500261	Rockhurst Well	1560-0500261	Well	34,987.80	275,668

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						Total Cost	Total Usage
1560	Sacramento District	0500262	Rockingham Well	1560-0500262	Well	4,974.87	10,265
1560	Sacramento District	0500263	Rogue River Well	1560-0500263	Well	5,708.47	17,520
1560	Sacramento District	0500264	Rose Parade Treatment Pl	1560-0500264	Treatment Plant	43,460.63	315,347
1560	Sacramento District	0500267	Roseville Rd Well	1560-0500267	Well	5,604.32	43,266
1560	Sacramento District	0500268	Roseville Road Well	1560-0500268	Well	36,523.46	287,381
1560	Sacramento District	0500269	Rushmore Well	1560-0500269	Well	30,648.29	252,514
1560	Sacramento District	0500277	Salmon Falls Well	1560-0500277	Well	598.39	3,959
1560	Sacramento District	0500288	Shenandoah Well	1560-0500288	Well	653.30	3,016
1560	Sacramento District	0500291	Sky Parkway Well	1560-0500291	Well	7,345.48	18,867
1560	Sacramento District	0500293	Southgate Well	1560-0500293	Well	10,285.08	66,135
1560	Sacramento District	0500294	Southport Well	1560-0500294	Well	515.28	2,069
1560	Sacramento District	0500300	Stocker Well	1560-0500300	Well	3,067.13	4,008
1560	Sacramento District	0500303	Swansea Well	1560-0500303	Well	25,360.51	203,678
1560	Sacramento District	0500304	Tally Ho #1 Well	1560-0500304	Well	12,188.74	24,930
1560	Sacramento District	0500310	Treelark Well	1560-0500310	Well	714.44	3,462
1560	Sacramento District	0500311	Twin Parks Well	1560-0500311	Well	1,340.43	8,251
1560	Sacramento District	0500312	Twin Trails Well	1560-0500312	Well	19,411.07	141,964
1560	Sacramento District	0500317	Van Maren Well	1560-0500317	Well	63,197.82	529,971
1560	Sacramento District	0500318	Vandenberg Well	1560-0500318	Well	290.98	353
1560	Sacramento District	0500324	Villaview Well	1560-0500324	Well	8,665.39	33,345
1560	Sacramento District	0500326	Vintage 1 Well	1560-0500326	Well	36,176.22	288,797
1560	Sacramento District	0500327	Vintage 3 Well	1560-0500327	Well	32,752.73	275,416
1560	Sacramento District	0500328	Vintage Treatment Plant	1560-0500328	Treatment Plant	143,414.31	1,172,161
1560	Sacramento District	0500331	Watt Ave Well	1560-0500331	Well	35,122.17	248,962
1560	Sacramento District	0500334	Well 3 38 Treatment Plan	1560-0500334	Treatment Plant	37,250.94	145,104
1560	Sacramento District	0500338	West La Loma Well	1560-0500338	Well	41,541.82	314,243
1560	Sacramento District	0500339	Westporter Well	1560-0500339	Well	15,029.69	101,307
1560	Sacramento District	0500341	Whitewater Well	1560-0500341	Well	8,156.64	46,713
1560	Sacramento District	0500342	Wilbur 2 Well	1560-0500342	Well	21,176.56	143,032
1560	Sacramento District	0500343	Wildrose Well	1560-0500343	Well	12,079.68	75,552
1560	Sacramento District	0500348	Winchester Well	1560-0500348	Well	35,145.64	292,073
1560	Sacramento District	0500353	Woodman Well	1560-0500353	Well	41,715.82	280,584
1560	Sacramento District	0500354	Wyda Well	1560-0500354	Well	18,315.17	143,788
1560	Sacramento District	0503452	Laurel Oaks Well	1560-0503452	Well	843.62	4,671
1560	Sacramento District	0504006	Isleton Elevated Tank	1560-0504006	Tank	480.25	1,563
1560	Sacramento District	0504057	Folsom Booster Station	1560-0504057	Interconnection	14,544.95	104,511
1560	Sacramento District	0504438	Colonnade Well	1560-0504438	Well	690.19	3,288
1560	Sacramento District	0504456	Lincoln Oaks Tank	1560-0504456	Tank	9,384.14	34,452
1560	Sacramento District	0504493	Dunnigan Well & Pump	1560-0504493	Well	9,447.06	37,810
1560	Sacramento District	0504526	Meadowbrook Well 4	1560-0504526	Well	48,117.70	352,680
1560	Sacramento District	0504739	Walerga Tank & Booster STN	1560-0504739	Booster	18,944.29	61,091
1560	Sacramento District	1004534	pump	1560-1004534	Well	15,704.49	51,184
1560	Sacramento District	1004535	Maple & Fir – 40 HP pump	1560-1004535	Well	249.69	0
1560	Sacramento District	1004536	Fir & Maple – Chlorine pump	1560-1004536	Well	119.93	0
1560	Sacramento District	1004537	SW Corner Balsam & Poplar	1560-1004537	Well	22,202.15	92,694
1561	Larkfield District	0500152	Larkfield Water Treatmen	1561-0500152	Treatment Plant	37,661.61	161,077
1561	Larkfield District	0500181	Lower Wikiup Tank & Boos	1561-0500181	Booster	5,629.44	21,485
1561	Larkfield District	0500206	North Wikiup Tank & Boos	1561-0500206	Booster	3,572.82	14,616
1561	Larkfield District	0500316	Upper Wikiup Tank & Boos	1561-0500316	Booster	1,672.38	6,232
1561	Larkfield District	0500333	Well 1A	1561-0500333	Well	7,481.43	32,494
1561	Larkfield District	0500335	Well 3A	1561-0500335	Well	22,784.48	100,502
1561	Larkfield District	0500336	Well 5	1561-0500336	Well	7,136.57	30,884
1561	Larkfield District	0504481	Geyserville Merrill Well 1	1561-0504481	Well	6,046.33	22,479
1561	Larkfield District	0504482	Geyserville Chianti Tank	1561-0504482	Tank	198.00	317
1561	Larkfield District	0504483	Geyserville Railroad Ave W	1561-0504483	Well	10,716.08	41,534

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						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage

End	End	End	End	End	End	End	End
Sum						6,934,075.80	43,439,209.33

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						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1530	San Diego County District	0500006	1St & A	1530-0500006	Interconnection	284.09	688
1530	San Diego County District	0500136	Highland Tank	1530-0500136	Tank	567.70	1,731
1530	San Diego County District	0500199	Montgomery Tank	1530-0500199	Tank	566.33	1,724
1530	San Diego County District	0500224	Palm Ave. Flow Meter	1530-0500224	Interconnection	155.43	113
1540	Monterey County District	0500010	Address Via Malpaso	1540-0500010	Booster	485.97	758
1540	Monterey County District	0500011	Airway Upper	1540-0500011	Tank	199.68	323
1540	Monterey County District	0500012	Airways Lower Pp #17	1540-0500012	Booster	5,513.79	18,936
1540	Monterey County District	0500013	Ambler Park Treatment Pl	1540-0500013	Treatment Plant	29,978.64	108,859
1540	Monterey County District	0500014	Ambler Park Well #4	1540-0500014	Well	25,944.35	101,957
1540	Monterey County District	0500015	Ambler Park Well #5	1540-0500015	Well	301.41	0
1540	Monterey County District	0500025	Bay Street Wells #1 & #2	1540-0500025	Well	32,237.14	155,648
1540	Monterey County District	0500026	Begonia Iron Removal Pla	1540-0500026	Treatment Plant	26,492.96	113,520
1540	Monterey County District	0500027	Begonia Iron Removal Pla	1540-0500027	Treatment Plant	115,526.63	567,107
1540	Monterey County District	0500028	Berwick Well #7	1540-0500028	Well	26,866.45	113,533
1540	Monterey County District	0500029	Berwick Well #8	1540-0500029	Well	49,246.20	188,803
1540	Monterey County District	0500031	Birdrock Standby Pump	1540-0500031	Booster	122.94	12
1540	Monterey County District	0500032	Bishop #1 Well	1540-0500032	Well	23,181.77	91,334
1540	Monterey County District	0500033	Bishop #2 Well	1540-0500033	Well	22,308.44	87,179
1540	Monterey County District	0500035	Boots Rd.	1540-0500035	Tank	373.24	294
1540	Monterey County District	0500037	Boronda Pp #67	1540-0500037	Booster	12,820.77	49,884
1540	Monterey County District	0500047	Carmel Knolls	1540-0500047	Booster	38,315.22	157,182
1540	Monterey County District	0500048	Carmel Valley Filter Pla	1540-0500048	Booster	4,298.50	9,863
1540	Monterey County District	0500049	Carmel Valley Ranch	1540-0500049	Tank	274.04	633
1540	Monterey County District	0500050	Carmel Valley Ranch Pp #	1540-0500050	Booster	10,272.55	39,314
1542	Monterey Wastewater	0500051	Carmel Valley Ranch Wwtp	1542-0500051	Waste Water	38,472.38	197,650
1540	Monterey County District	0500052	Carmel Way	1540-0500052	Booster	479.29	692
1540	Monterey County District	0500053	Carmel Woods Pp #8	1540-0500053	Booster	15,055.58	61,249
1540	Monterey County District	0500054	Carola Pp #71	1540-0500054	Booster	5,380.49	20,495
1540	Monterey County District	0500060	Chualar Tank	1540-0500060	Well/Booster/Tank	22,195.39	87,209
1540	Monterey County District	0500065	Corona	1540-0500065	Booster	11,093.70	39,273
1540	Monterey County District	0500067	Corte Codollera Pp	1540-0500067	Toro-Booster	1,463.74	5,003
1540	Monterey County District	0500075	Crespi	1540-0500075	Booster	4,745.50	17,972
1540	Monterey County District	0500076	Crest Reservoir (Conc)	1540-0500076	Tank	329.58	856
1540	Monterey County District	0500080	Cypress Well	1540-0500080	Well	199,501.65	1,195,426
1540	Monterey County District	0500081	Cypress Pp #14	1540-0500081	Booster	2,668.05	9,532
1540	Monterey County District	0500090	Del Mesa Pp #42	1540-0500090	Booster	7,072.07	26,850
1540	Monterey County District	0500091	Del Monte Test Well	1540-0500091	Well	321.22	6
1540	Monterey County District	0500092	Del Rey Regulating Stati	1540-0500092	Reg Station	314.85	793
1540	Monterey County District	0500099	Dry Creek	1540-0500099	Booster	375.31	232
1540	Monterey County District	0500102	Eardley Pp #1	1540-0500102	Booster	121,730.64	555,463
1540	Monterey County District	0500103	Eddy Road	1540-0500103	Booster	1,416.58	4,754
1540	Monterey County District	0500108	Encina Pp #54	1540-0500108	Booster	1,282.40	4,247
1540	Monterey County District	0500116	Forest Lake Tanks	1540-0500116	Tank	452.14	1,359
1540	Monterey County District	0500120	Garzas Well #3	1540-0500120	Well	12,058.04	49,054
1540	Monterey County District	0500121	Garzas Well #4	1540-0500121	Well	20,376.54	82,965
1540	Monterey County District	0500134	Hidden Hills Treatment P	1540-0500134	Treatment Plant	76,461.95	271,739
1540	Monterey County District	0500135	High Meadows Pp #45	1540-0500135	Booster	12,732.10	44,587
1540	Monterey County District	0500137	Highland Pp #47	1540-0500137	Booster	895.98	2,372
1542	Monterey Wastewater	0500140	Holt Rd Lift Station	1542-0500140	Waste Water	2,811.86	10,121
1540	Monterey County District	0500143	Huckleberry Pp #23	1540-0500143	Booster	6,570.02	22,467
1542	Monterey Wastewater	0500156	Las Palmas Lift Station #1	1542-0500156	Waste Water	4,156.97	15,573
1542	Monterey Wastewater	0500157	Las Palmas Lift Station #2	1542-0500157	Waste Water	5,993.05	22,398
1542	Monterey Wastewater	0500158	Las Palmas Lift Station #3	1542-0500158	Waste Water	4,548.63	16,782
1542	Monterey Wastewater	0500159	Las Palmas Lift Station #4	1542-0500159	Waste Water	882.39	2,350
1542	Monterey Wastewater	0500160	Las Palmas Wastewater Tr	1542-0500160	Waste Water	108,726.39	627,136
1540	Monterey County District	0500169	Los Laureles Well # 3	1540-0500169	Well	422.90	529
1540	Monterey County District	0500170	Los Laureles Well #5	1540-0500170	Well	8,163.03	30,177
1540	Monterey County District	0500171	Los Laureles Well #6	1540-0500171	Well	28,986.34	148,588
1540	Monterey County District	0500172	Los Padres Dam	1540-0500172	Dam	774.51	1,968
1540	Monterey County District	0500176	Los Tulares Lower Pp #51	1540-0500176	Booster	3,748.56	11,710
1540	Monterey County District	0500177	Los Tulares Pp #50	1540-0500177	Booster	7,014.86	23,573
1540	Monterey County District	0500178	Los Tulares Upper	1540-0500178	Booster	2,646.93	9,108
1540	Monterey County District	0500179	Lower Markham Ranch Pp	1540-0500179	Toro-Booster	2,986.05	11,615
1540	Monterey County District	0500180	Lower Tierra Grande	1540-0500180	Booster	5,462.57	17,175
1540	Monterey County District	0500183	Luzern Well	1540-0500183	Well	55,128.26	204,767
1540	Monterey County District	0500190	Mercurio Pp #59	1540-0500190	Booster	1,064.11	3,068
1540	Monterey County District	0500191	Mesa Pp #2A	1540-0500191	Booster	38,285.81	119,271
1540	Monterey County District	0500192	Meyers Pneumatic Pp #81	1540-0500192	Booster	791.03	1,968
1540	Monterey County District	0500193	Middle Canyon Upper	1540-0500193	Booster	2,440.18	7,520
1540	Monterey County District	0500194	Middle Tierra Grande	1540-0500194	Booster	2,002.93	6,729
1540	Monterey County District	0500204	Munras	1540-0500204	Booster	21,304.65	78,007

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	\$	KWH
						Total Cost	Total Usage
1540	Monterey County District	0500208	Nueve	1540-0500208	Booster	9,826.13	34,396
1542	Monterey Wastewater	0500211	Oak Hills Wastewater Tre	1542-0500211	Waste Water	14,369.76	50,566
1540	Monterey County District	0500220	Ord Grove Ozone Plant	1540-0500220	Treatment Plant	135,394.50	708,863
1540	Monterey County District	0500226	Panetta Well #1	1540-0500226	Well	33,324.06	130,046
1540	Monterey County District	0500227	Paralta Well	1540-0500227	Well	150,843.80	760,793
1542	Monterey Wastewater	0500229	Pasadera	1542-0500229	Waste Water	9,551.07	36,038
1542	Monterey Wastewater	0500230	Pasadera Lift Station #2	1542-0500230	Waste Water	6,019.95	23,024
1540	Monterey County District	0500231	Pasadera Pump Station	1540-0500231	Booster	5,040.32	18,847
1542	Monterey Wastewater	0500232	Pasadera Water Treatment	1542-0500232	Waste Water	9,915.87	38,633
1542	Monterey Wastewater	0500233	Pasadera Wwtp #2	1542-0500233	Waste Water	41,033.30	202,250
1540	Monterey County District	0500235	Paseo Privado Lower Pp #	1540-0500235	Booster	3,877.22	14,458
1540	Monterey County District	0500237	Pearce Well	1540-0500237	Well	161,913.17	936,028
1540	Monterey County District	0500238	Pebble Beach Pp #6	1540-0500238	Booster	1,217.43	2,982
1540	Monterey County District	0500239	Pebble Beach Pp #68	1540-0500239	Booster	39,387.13	169,792
1540	Monterey County District	0500240	Playa Well #3	1540-0500240	Well	21,722.41	89,681
1540	Monterey County District	0500241	Plumas Well	1540-0500241	Well	13,542.75	66,136
1540	Monterey County District	0500246	Quail Meadows	1540-0500246	Booster	2,224.73	7,743
1540	Monterey County District	0500247	Ragsdale	1540-0500247	Treatment Plant	24,692.24	92,039
1540	Monterey County District	0500248	Ralph Lane Well	1540-0500248	Well	2,837.45	10,237
1540	Monterey County District	0500249	Rancho Blvd Pp #10	1540-0500249	Booster	467.39	689
1540	Monterey County District	0500250	Rancho Canada Well	1540-0500250	Well	133,967.95	810,258
1540	Monterey County District	0500251	Rancho Fiesta Pp #61	1540-0500251	Booster	2,375.94	7,409
1540	Monterey County District	0500252	Rancho Fiesta Pp #62	1540-0500252	Booster	1,475.90	4,894
1540	Monterey County District	0500253	Rancho Mar Monte	1540-0500253	Booster	2,238.51	7,229
1540	Monterey County District	0500254	Ridgeway	1540-0500254	Booster	3,807.05	13,950
1540	Monterey County District	0500256	Rimrock Upper Pp #82	1540-0500256	Booster	4,819.31	17,622
1540	Monterey County District	0500257	Rio Vista Pp #53	1540-0500257	Booster	4,976.32	16,130
1540	Monterey County District	0500259	Robles Well	1540-0500259	Well	1,233.18	3,488
1540	Monterey County District	0500260	Robles Lower	1540-0500260	Booster	7,954.24	27,468
1540	Monterey County District	0500272	Ryan Ranch #9	1540-0500272	Well	26,007.75	135,839
1540	Monterey County District	0500273	Ryan Ranch Tank	1540-0500273	Tank	2,538.66	9,775
1540	Monterey County District	0500274	Ryan Ranch Well #11	1540-0500274	Well	427.55	399
1540	Monterey County District	0500275	Ryan Ranch Well #7	1540-0500275	Well	17,993.04	71,122
1540	Monterey County District	0500278	San Carlos Well #2	1540-0500278	Well	2,171.19	2,160
1540	Monterey County District	0500280	Sand City Brackish Water	1540-0500280	Treatment Plant	103,971.32	513,053
1540	Monterey County District	0500284	Schulte Well	1540-0500284	Well	84,462.94	465,805
1540	Monterey County District	0500287	Segunda	1540-0500287	Booster	82,931.58	268,562
1540	Monterey County District	0500295	Spectacular Bid Pp #75	1540-0500295	Booster	4,158.63	15,495
1540	Monterey County District	0500299	Stirrup	1540-0500299	Booster	14,201.61	50,653
1540	Monterey County District	0500306	Telemetry Water Station	1540-0500306	Flow Station	286.07	674
1540	Monterey County District	0500307	Tierra Grande Pp #38	1540-0500307	Booster	4,238.58	15,563
1540	Monterey County District	0500308	Tioga Wells #4 & # 5	1540-0500308	Well	28,904.70	136,521
1540	Monterey County District	0500309	Toyon Lower Pp #32	1540-0500309	Booster	9,598.12	34,922
1540	Monterey County District	0500313	Upper Estrella D Oro Ppe	1540-0500313	Booster	1,656.53	5,513
1540	Monterey County District	0500314	Upper Markham Ranch Pp	1540-0500314	Toro-Booster	1,408.50	4,641
1540	Monterey County District	0500315	Upper Tierra Grande	1540-0500315	Booster	1,715.35	5,744
1540	Monterey County District	0500321	Via Contenta	1540-0500321	Booster	11,391.85	44,306
1540	Monterey County District	0500322	Via Las Encinas	1540-0500322	Booster	3,076.36	11,180
1540	Monterey County District	0500323	Viejo Tank	1540-0500323	Tank	337.85	818
1540	Monterey County District	0500329	Viscaino	1540-0500329	Booster	907.52	2,444
1540	Monterey County District	0500330	Waldon Lower	1540-0500330	Booster	3,107.48	11,242
1540	Monterey County District	0500332	Well #1 And #2 Highway 6	1540-0500332	Toro-Well/Treatment	51,243.61	218,258
1540	Monterey County District	0500350	Withers Pp #12	1540-0500350	Booster	17,816.22	67,390
1540	Monterey County District	0503447	Del Monte Regulating Sta	1540-0503447	Reg Station	25,478.71	90,670
1540	Monterey County District	0503580	Mount Devon Tank	1540-0503580	Tank	300.41	763
1540	Monterey County District	0504010	Lower Estrella D Oro	1540-0504010	Booster	3,868.99	15,317
1540	Monterey County District	0504015	Ambler Oaks Well	1540-0504015	Well	557.74	1,812
1540	Monterey County District	0504056	Crest Canyon Tank	1540-0504056	Tank	182.07	264
1540	Monterey County District	0504090	Upper Toyon Tank #1	1540-0504090	Tank	395.99	1,114
1540	Monterey County District	0504127	Garrapata Pump #5	1540-0504127	Well	7,377.75	28,085
1542	Monterey Wastewater	0504176	Spreckels Wastewater Tre	1542-0504176	Waste Water	1,739.80	6,163
1540	Monterey County District	0504695	Hilby ASR Pump Station	1540-0504695	Booster	163,798.05	70,435
1540	Monterey County District	0504874	Hilby Tank	1540-0504874	Tank	32,884.98	139,092
1540	Monterey County District	0504974	Test Well Site	1540-0504974	Well	12,203.81	5,732
1550	Los Angeles County District	0500008	48Th Street Well	1550-0500008	Well	14,173.70	2,480
1550	Los Angeles County District	0500019	Angeles Mesa Reservoir	1550-0500019	Booster	964.64	2,420
1550	Los Angeles County District	0500021	Arlington Well	1550-0500021	Well	5,270.85	1,120
1550	Los Angeles County District	0500074	Crenshaw Well	1550-0500074	Well	81,443.80	400,760
1550	Los Angeles County District	0500119	Garth Reservoir	1550-0500119	Booster	15,807.16	84,531
1550	Los Angeles County District	0500141	Homeland Reservoir	1550-0500141	Tank	297.14	784
1550	Los Angeles County District	0500203	Mt. Vernon Reservoir	1550-0500203	Booster	13,011.76	96,077

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1550	Los Angeles County District	0500218	Olympiad Reservoir	1550-0500218	Booster	29,003.65	187,704
1550	Los Angeles County District	0500292	Slauson Avenue Corrosion	1550-0500292	Treatment Plant	212.70	380
1550	Los Angeles County District	0500319	Vernon Well #2	1550-0500319	Well	624.91	0
1550	Los Angeles County District	0500320	Vernon Well #3	1550-0500320	Well	132,638.37	769,200
1550	Los Angeles County District	0500337	West Basin 27 Connection	1550-0500337	Interconnection	167.85	146
1550	Los Angeles County District	0500024	Bacon Well	1550-0500024	Well	4,107.43	2,576
1550	Los Angeles County District	0500039	Bradbury Tank	1550-0500039	Tank	1,218.12	6,777
1550	Los Angeles County District	0500041	Brookridge Booster Stn	1550-0500041	Booster	655.39	1,157
1550	Los Angeles County District	0500042	Buena Vista Well	1550-0500042	Well	110,715.46	792,281
1550	Los Angeles County District	0500079	Crownhaven Well	1550-0500079	Well	93,233.36	582,413
1550	Los Angeles County District	0500107	Encanto Well	1550-0500107	Well	117,123.29	737,533
1550	Los Angeles County District	0500113	Fish Canyon Well	1550-0500113	Well	974.03	2,185
1550	Los Angeles County District	0500154	Las Lomas Booster	1550-0500154	Booster	13,484.81	79,154
1550	Los Angeles County District	0500155	Las Lomas Well	1550-0500155	Well	93,273.59	788,219
1550	Los Angeles County District	0500164	Lemon Irrigation Booster	1550-0500164	Irrig Booster	13,141.30	130,965
1550	Los Angeles County District	0500282	Santa Fe Well	1550-0500282	Well	(2,294.96)	1,762
1550	Los Angeles County District	0500286	Scott Reservoir/ Booster	1550-0500286	Booster	91,854.45	671,374
1550	Los Angeles County District	0500296	Spinks Reservoir/Booster	1550-0500296	Booster	4,150.47	12,982
1550	Los Angeles County District	0500325	Vineyard Booster Stn	1550-0500325	Booster	7,980.52	18,345
1550	Los Angeles County District	0500347	Wiley Well	1550-0500347	Well	131,978.18	1,091,499
1550	Los Angeles County District	0504922	Duarte Rd. PRV	1550-0504922	Reg Station	205.44	405
1550	Los Angeles County District	0500083	Danford Reservoir	1550-0500083	Booster	43,587.67	304,592
1550	Los Angeles County District	0500089	Del Mar Well	1550-0500089	Well	73,851.90	619,023
1550	Los Angeles County District	0500125	Grand Well	1550-0500125	Well	77,959.11	613,348
1550	Los Angeles County District	0500129	Guess Well	1550-0500129	Well	312.83	972
1550	Los Angeles County District	0500131	Hall Well	1550-0500131	Well	171,920.69	1,390,702
1550	Los Angeles County District	0500142	Howland Well	1550-0500142	Well	31,670.81	236,581
1550	Los Angeles County District	0500150	Lamanda Reservoir/Well S	1550-0500150	Booster	57,663.47	312,400
1550	Los Angeles County District	0500167	Lombardy Well	1550-0500167	Well	83,338.60	705,327
1550	Los Angeles County District	0500168	Longden Well/Reservoir	1550-0500168	Well	83,094.04	535,497
1550	Los Angeles County District	0500186	Mariposa Well	1550-0500186	Well	115,676.04	952,203
1550	Los Angeles County District	0500196	Mission View Well	1550-0500196	Well	85,645.05	567,735
1550	Los Angeles County District	0500198	Monterey Booster	1550-0500198	Booster	3,009.60	19,428
1550	Los Angeles County District	0500212	Oak Knoll Circle Well	1550-0500212	Well	503.77	1,141
1550	Los Angeles County District	0500213	Oak Knoll Reservoir	1550-0500213	Booster	65,356.28	303,040
1550	Los Angeles County District	0500221	Oswego Well	1550-0500221	Well	9,875.14	1
1550	Los Angeles County District	0500236	Patton Reservoir/Well	1550-0500236	Well	42,983.36	186,000
1550	Los Angeles County District	0500258	Roanoke Well	1550-0500258	Well	505.58	0
1550	Los Angeles County District	0500265	Rosemead Well	1550-0500265	Well	121,304.72	875,286
1550	Los Angeles County District	0500349	Winston Well	1550-0500349	Well	38,009.51	258,047
1550	Los Angeles County District	0504397	Adams Ranch	1550-0504397	Interconnection	552.08	0
1551	Ventura County District	0500016	American Oaks Booster St	1551-0500016	Booster	19,027.18	123,745
1551	Ventura County District	0500036	Borchard Road Turnout	1551-0500036	Interconnection	209.80	385
1551	Ventura County District	0500046	Calle Yucca Turnout	1551-0500046	Interconnection	193.53	303
1551	Ventura County District	0500087	Deer Ridge Tank/Pump Sta	1551-0500087	Booster	13,262.27	41,108
1551	Ventura County District	0500088	Deer Valley Booster Stat	1551-0500088	Booster	8,650.03	48,799
1551	Ventura County District	0500094	Dewey Booster Station	1551-0500094	Booster	12,779.78	81,348
1551	Ventura County District	0500098	Dos Vientos Booster/Potr	1551-0500098	Booster	120,506.24	745,483
1551	Ventura County District	0500115	Fordham Booster Station	1551-0500115	Booster	136.74	12
1551	Ventura County District	0500126	Green Ridge Tank	1551-0500126	Tank	197.82	333
1551	Ventura County District	0500127	Greenmeadow Booster Stat	1551-0500127	Booster	206.51	367
1551	Ventura County District	0500139	Hillcrest Drive Booster	1551-0500139	Booster	7,536.42	49,852
1551	Ventura County District	0500144	Industrial Tanks	1551-0500144	Tank	254.18	557
1551	Ventura County District	0500146	Janss Booster Station	1551-0500146	Booster	8,283.66	51,388
1551	Ventura County District	0500147	Janss Tank	1551-0500147	Tank	208.59	390
1551	Ventura County District	0500149	Kimber Booster Station	1551-0500149	Booster	727.25	3,687
1551	Ventura County District	0500153	Las Flores Turnout	1551-0500153	Booster	201.24	350
1551	Ventura County District	0500161	Las Posas Booster Statio	1551-0500161	Booster	19,969.51	136,367
1551	Ventura County District	0500173	Los Robles Booster Stati	1551-0500173	Booster	18,413.17	107,481
1551	Ventura County District	0500174	Los Robles Tanks	1551-0500174	Tank	208.72	378
1551	Ventura County District	0500175	Los Robles Turnout	1551-0500175	Interconnection	189.72	282
1551	Ventura County District	0500189	Mayfield Booster Station	1551-0500189	Booster	14,767.05	118,063
1551	Ventura County District	0500201	Moorpark Booster Station	1551-0500201	Booster	15,580.52	71,061
1551	Ventura County District	0500202	Moorpark Reservoir	1551-0500202	Tank	463.57	1,695
1551	Ventura County District	0500217	Olsen Road Turnout	1551-0500217	Interconnection	202.25	328
1551	Ventura County District	0500219	Orbis Tank	1551-0500219	Tank	202.19	347
1551	Ventura County District	0500222	Pace Reservoir	1551-0500222	Tank	258.40	649
1551	Ventura County District	0500243	Potrero I Reservoir	1551-0500243	Tank	205.84	366
1551	Ventura County District	0500289	Shopping Center I Reserv	1551-0500289	Tank	134.94	0
1551	Ventura County District	0500290	Shopping Center II Reser	1551-0500290	Tank	598.92	348
1551	Ventura County District	0500297	Springwood Booster Stati	1551-0500297	Booster	5,967.10	44,692

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	\$	KWH
						Total Cost	Total Usage
1551	Ventura County District	0500340	White Stallion Tank	1551-0500340	Tank	8,076.56	58,048
1551	Ventura County District	0500344	Wildwood Booster Station	1551-0500344	Booster	8,617.44	46,197
1551	Ventura County District	0500345	Wildwood Tank	1551-0500345	Tank	2,648.23	15,748
1551	Ventura County District	0500346	Wildwood Turnout	1551-0500346	Interconnection	205.73	361
1551	Ventura County District	0504439	Borchaerd Road Pump Statio	1551-0504439	Booster	1,314.20	5,960
1551	Ventura County District	0504719	Cortez	1551-0504719	Well/Booster/Tank	21,867.34	109,970
1551	Ventura County District	0504855	Warwick Pump Station	1551-0504855	Tank	4,542.00	22,928
1551	Ventura County District	1504709	Gainsborough PRV	1551-1504709	Reg Station	243.64	462
1560	Sacramento District	0500005	14020 Isle View Way	1560-0500005	Well	29,152.66	108,140
1560	Sacramento District	0500009	A Parkway Booster Statio	1560-0500009	Interconnection	19,183.03	130,904
1560	Sacramento District	0500017	Andrea #1 Well	1560-0500017	Well	1,459.19	8,573
1560	Sacramento District	0500018	Andrea #2 Well	1560-0500018	Well	58,306.62	422,308
1560	Sacramento District	0500020	Arden	1560-0500020	Well	8,340.94	6,730
1560	Sacramento District	0500022	Auberry Well	1560-0500022	Well	19,947.27	143,594
1560	Sacramento District	0500023	Auburn Well	1560-0500023	Well	866.92	4,466
1560	Sacramento District	0500030	Billy Mitchell Well	1560-0500030	Well	261.91	47
1560	Sacramento District	0500040	Briggs Well	1560-0500040	Well	14,765.56	82,867
1560	Sacramento District	0500043	Butterfield Well	1560-0500043	Well	741.06	3,425
1560	Sacramento District	0500045	Caldera Well	1560-0500045	Well	14,828.80	102,555
1560	Sacramento District	0500055	Carriage Well	1560-0500055	Well	3,282.68	23,977
1560	Sacramento District	0500056	Central/Sunrise Well	1560-0500056	Well	3,822.81	25,511
1560	Sacramento District	0500057	Cherbourg Well	1560-0500057	Well	46,392.12	330,536
1560	Sacramento District	0500059	Chipping Well	1560-0500059	Well	56,036.43	441,038
1560	Sacramento District	0500061	College Green Well	1560-0500061	Well	1,636.08	9,849
1560	Sacramento District	0500063	Conrad Well	1560-0500063	Well	164.27	0
1560	Sacramento District	0500064	Cook Riolo Well	1560-0500064	Well	104,485.81	797,932
1560	Sacramento District	0500069	Countryside #1 Well	1560-0500069	Well	57,207.54	380,413
1560	Sacramento District	0500070	Countryside #2 Well	1560-0500070	Well	19,830.26	140,524
1560	Sacramento District	0500071	Countryside Treatment Pl	1560-0500071	Treatment Plant	27,718.13	143,421
1560	Sacramento District	0500072	Countryside Way	1560-0500072	Well	10,067.29	11,711
1560	Sacramento District	0500073	Covered Wagon Well	1560-0500073	Well	3,916.53	28,595
1560	Sacramento District	0500077	Crosswoods Well	1560-0500077	Well	1,277.03	7,504
1560	Sacramento District	0500078	Crowder	1560-0500078	Interconnection	461.44	1,417
1560	Sacramento District	0500082	Daly Well	1560-0500082	Well	49,408.03	340,580
1560	Sacramento District	0500086	Davidson Well	1560-0500086	Well	642.14	2,829
1560	Sacramento District	0500095	Diablo Well	1560-0500095	Well	605.83	2,548
1560	Sacramento District	0500097	Don Julio Well	1560-0500097	Well	70,661.81	534,206
1560	Sacramento District	0500101	Eagle Ridge Well	1560-0500101	Well	910.45	4,856
1560	Sacramento District	0500104	Elhine Way Well	1560-0500104	Well	742.19	3,414
1560	Sacramento District	0500105	Elsie Well	1560-0500105	Well	386.74	963
1560	Sacramento District	0500106	Elverta Well	1560-0500106	Well	697.74	3,105
1560	Sacramento District	0500110	Fairlake #1 Well	1560-0500110	Well	3,945.36	29,566
1560	Sacramento District	0500111	Fairlake #2 Well	1560-0500111	Well	36,587.56	290,779
1560	Sacramento District	0500112	Falcon View Well	1560-0500112	Well	2,493.81	16,058
1560	Sacramento District	0500114	Folsom Well	1560-0500114	Well	59,897.67	464,499
1560	Sacramento District	0500117	Fort Sutter Well	1560-0500117	Well	819.73	4,154
1560	Sacramento District	0500118	Foxpark Well	1560-0500118	Well	66,215.29	536,922
1560	Sacramento District	0500122	Gerber Well	1560-0500122	Well	579.35	2,286
1560	Sacramento District	0500123	Glass Slipperwell	1560-0500123	Well	27,512.65	209,851
1560	Sacramento District	0500124	Gould Well	1560-0500124	Well	15,394.19	105,418
1560	Sacramento District	0500128	Grove #2 Well	1560-0500128	Well	1,574.36	5,104
1560	Sacramento District	0500130	H Street Well	1560-0500130	Well	874.05	2,330
1560	Sacramento District	0500132	Hemingway Well	1560-0500132	Well	30,775.06	194,815
1560	Sacramento District	0500133	Hemlock Well	1560-0500133	Well	262.18	84
1560	Sacramento District	0500145	Jackson Hwy Well	1560-0500145	Well	41,142.70	289,265
1560	Sacramento District	0500163	Le Mans Well	1560-0500163	Well	4,491.16	34,618
1560	Sacramento District	0500165	Linda Sue Well	1560-0500165	Well	8,386.59	37,620
1560	Sacramento District	0500166	Lippi Well	1560-0500166	Well	754.78	3,644
1560	Sacramento District	0500184	Malaga Well	1560-0500184	Well	866.28	4,325
1560	Sacramento District	0500187	Mars Well	1560-0500187	Well	35,945.86	290,425
1560	Sacramento District	0500188	Mather / Sacramento Coun	1560-0500188	Interconnection	21,019.17	108,131
1560	Sacramento District	0500200	Moonbeam Well	1560-0500200	Well	20,724.01	128,328
1560	Sacramento District	0500205	North Loop Well	1560-0500205	Well	20,202.08	151,204
1560	Sacramento District	0500209	Nut Plains Well	1560-0500209	Well	6,577.91	5,969
1560	Sacramento District	0500210	Oak Forest Well	1560-0500210	Well	7,176.08	28,776
1560	Sacramento District	0500215	Oaken Bucket Well	1560-0500215	Well	33,716.58	234,399
1560	Sacramento District	0500225	Palmerson Well	1560-0500225	Well	13,443.90	31,005
1560	Sacramento District	0500228	Parkside Treatment Plant	1560-0500228	Treatment Plant	124,160.31	896,631
1560	Sacramento District	0500242	Point Reyes Well	1560-0500242	Well	720.07	3,391
1560	Sacramento District	0500244	Power Inn Well	1560-0500244	Well	20,647.59	111,136
1560	Sacramento District	0500245	Prior Way Well	1560-0500245	Well	723.66	3,422

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	\$	KWH
						Total Cost	Total Usage
1560	Sacramento District	0500261	Rockhurst Well	1560-0500261	Well	25,848.17	185,001
1560	Sacramento District	0500262	Rockingham Well	1560-0500262	Well	873.57	4,412
1560	Sacramento District	0500263	Rogue River Well	1560-0500263	Well	18,600.89	136,252
1560	Sacramento District	0500264	Rose Parade Treatment Pl	1560-0500264	Treatment Plant	40,251.95	267,478
1560	Sacramento District	0500267	Roseville Rd Well	1560-0500267	Well	4,674.25	33,769
1560	Sacramento District	0500268	Roseville Road Well	1560-0500268	Well	49,784.04	385,538
1560	Sacramento District	0500269	Rushmore Well	1560-0500269	Well	24,963.27	190,710
1560	Sacramento District	0500277	Salmon Falls Well	1560-0500277	Well	11,230.16	77,364
1560	Sacramento District	0500288	Shenandoah Well	1560-0500288	Well	675.72	2,962
1560	Sacramento District	0500291	Sky Parkway Well	1560-0500291	Well	15,810.20	116,871
1560	Sacramento District	0500293	Southgate Well	1560-0500293	Well	11,609.98	63,623
1560	Sacramento District	0500294	Southport Well	1560-0500294	Well	446.69	1,390
1560	Sacramento District	0500300	Stocker Well	1560-0500300	Well	5,149.41	35,389
1560	Sacramento District	0500301	Summerplace Well	1560-0500301	Well	17,508.81	121,463
1560	Sacramento District	0500303	Swansea Well	1560-0500303	Well	35,991.32	290,566
1560	Sacramento District	0500304	Tally Ho #1 Well	1560-0500304	Well	924.42	4,214
1560	Sacramento District	0500310	Treelark Well	1560-0500310	Well	683.78	3,007
1560	Sacramento District	0500311	Twin Parks Well	1560-0500311	Well	1,331.04	7,720
1560	Sacramento District	0500312	Twin Trails Well	1560-0500312	Well	31,202.48	210,213
1560	Sacramento District	0500317	Van Maren Well	1560-0500317	Well	63,588.00	506,686
1560	Sacramento District	0500318	Vandenberg Well	1560-0500318	Well	309.40	391
1560	Sacramento District	0500324	Villaview Well	1560-0500324	Well	2,237.84	529
1560	Sacramento District	0500326	Vintage 1 Well	1560-0500326	Well	30,402.99	221,605
1560	Sacramento District	0500327	Vintage 3 Well	1560-0500327	Well	31,667.36	251,725
1560	Sacramento District	0500328	Vintage Treatment Plant	1560-0500328	Treatment Plant	148,173.33	1,158,625
1560	Sacramento District	0500331	Watt Ave Well	1560-0500331	Well	34,913.59	220,140
1560	Sacramento District	0500334	Well 3 3B Treatment Plan	1560-0500334	Treatment Plant	45,842.17	179,117
1560	Sacramento District	0500338	West La Loma Well	1560-0500338	Well	61,953.81	482,106
1560	Sacramento District	0500339	Westporter Well	1560-0500339	Well	23,720.67	164,923
1560	Sacramento District	0500341	Whitewater Well	1560-0500341	Well	6,160.76	22,465
1560	Sacramento District	0500342	Wilbur 2 Well	1560-0500342	Well	21,589.25	139,499
1560	Sacramento District	0500343	Wildrose Well	1560-0500343	Well	2,358.04	1,441
1560	Sacramento District	0500348	Winchester Well	1560-0500348	Well	37,023.31	295,126
1560	Sacramento District	0500351	Wittkop Well	1560-0500351	Well	2,060.83	1,133
1560	Sacramento District	0500353	Woodman Well	1560-0500353	Well	36,014.14	212,355
1560	Sacramento District	0500354	Wyda Well	1560-0500354	Well	30,548.13	241,480
1560	Sacramento District	0503452	Laurel Oaks Well	1560-0503452	Well	1,090.25	6,103
1560	Sacramento District	0504006	Isleton Elevated Tank	1560-0504006	Tank	654.04	2,164
1560	Sacramento District	0504057	Folsom Booster Station	1560-0504057	Interconnection	20,924.53	158,486
1560	Sacramento District	0504438	Colonnade Well	1560-0504438	Well	707.94	3,172
1560	Sacramento District	0504456	Lincoln Oaks Tank	1560-0504456	Tank	6,947.49	51,287
1560	Sacramento District	0504493	Dunnigan Well & Pump	1560-0504493	Well	9,855.39	37,115
1560	Sacramento District	0504526	Meadowbrook Well 4	1560-0504526	Well	47,137.71	338,010
1560	Sacramento District	0504739	Walerga Tank & Booster STN	1560-0504739	Booster	17,839.61	64,021
1560	Sacramento District	0504979	Dunnigan WW Pump Station	1560-0504979	Booster	1,327.57	3,971
1560	Sacramento District	0504985	Fruitridge	1560-0504985	Well	3,460.32	8,628
1560	Sacramento District	0504986	Fruitridge	1560-0504986	Well	4,779.80	6,860
1560	Sacramento District	0504987	Fruitridge	1560-0504987	Well	2,356.05	15,207
1560	Sacramento District	0504988	Fruitridge	1560-0504988	Well	1,230.69	7,213
1560	Sacramento District	0504989	Fruitridge Booster	1560-0504989	Booster	17,411.77	116,542
1560	Sacramento District	0504990	Fruitridge	1560-0504990	Well	20,441.26	153,052
1560	Sacramento District	0504991	Fruitridge	1560-0504991	Well	366.45	937
1560	Sacramento District	0504992	Fruitridge	1560-0504992	Well	312.56	416
1560	Sacramento District	0504993	Fruitridge	1560-0504993	Well	5,782.32	21,424
1560	Sacramento District	0504994	Fruitridge	1560-0504994	Well	2,284.02	14,410
1560	Sacramento District	0504995	Fruitridge	1560-0504995	Well	294.61	393
1560	Sacramento District	0504996	Fruitridge	1560-0504996	Well	288.74	347
1560	Sacramento District	0504997	Fruitridge	1560-0504997	Well	278.97	274
1560	Sacramento District	0504998	Miami Creek Well #1	1560-0504998	Well	53.78	30
1560	Sacramento District	0504999	Fruitridge	1560-0504999	Well	40,125.35	306,951
1560	Sacramento District	0505000	Fruitridge	1560-0505000	Well	154.36	0
1560	Sacramento District	0505001	Fruitridge	1560-0505001	Well	283.39	410
1560	Sacramento District	0505002	Fruitridge	1560-0505002	Well	1,141.52	6,771
1560	Sacramento District	0505003	47th Ave Booster	1560-0505003	Booster	3,714.23	26,081
1560	Sacramento District	0505006	OOOO Big Sandy Dr	1560-0505006	Well/Booster/Tank	2,480.91	9,275
1560	Sacramento District	0505007	Hinds Sub Dy	1560-0505007	Well	1,997.14	7,314
1560	Sacramento District	0505008	Glenn Darry Ct Loc 131 Well 2	1560-0505008	Well	1,941.35	6,904
1560	Sacramento District	0505009	Echo Valley View Court Well 8	1560-0505009	Well	13,977.54	53,795
1560	Sacramento District	0505010	Courtney Drive Off Road 426	1560-0505010	Well/Tank	10,738.89	39,834
1560	Sacramento District	0505011	Meadow Springs Ln Loc 76 Well 3	1560-0505011	Well	609.84	1,606
1560	Sacramento District	0505012	Hwy 49	1560-0505012	Well/Booster/Tank	13,009.32	31,621

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	\$	KWH
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1560	Sacramento District	0505013	Next to 39563 Pine Rdg	1560-0505013	Booster Tank	407.83	1,246
1560	Sacramento District	0505014	Greenwood Way	1560-0505014	Booster Tank	2,588.07	9,396
1560	Sacramento District	0505015	Live Oak Dr	1560-0505015	Booster Tank	3,287.81	12,194
1560	Sacramento District	0505016	Off Darling Wy	1560-0505016	Well/Booster/Tank	827.69	2,434
1560	Sacramento District	0505017	Sutton Dr	1560-0505017	Well/Tank	27,272.94	107,007
1560	Sacramento District	0505018	Lt 12 & Boulder Pl	1560-0505018	Booster/Tank	488.77	1,618
1560	Sacramento District	0505019	John West Rd	1560-0505019	Tank	142.65	242
1560	Sacramento District	0505020	Bon Veu	1560-0505020	Well	14,580.80	56,378
1560	Sacramento District	0505021	Highland View Ln	1560-0505021	Well/Tank	13,347.14	32,576
1560	Sacramento District	0505022	Public Wate	1560-0505022	Booster Tank	258.61	691
1560	Sacramento District	0505023	Inidan Spgs Rd	1560-0505023	Booster/Tank	156.66	294
1560	Sacramento District	0505024	Victoria Ln	1560-0505024	Booster Tank	2,459.12	1,837
1560	Sacramento District	0505025	Off Victoria Ln	1560-0505025	Well	3,147.52	3,252
1560	Sacramento District	0505026	Indian Rock Rd #1	1560-0505026	Well	84.42	17
1560	Sacramento District	0505027	Indian Rock Rd #2	1560-0505027	Well	325.33	916
1560	Sacramento District	0505028	Meadow Springs L Loc 24	1560-0505028	Well	1,175.98	3,886
1560	Sacramento District	0505029	Echo Valley View Court Well 7	1560-0505029	Well	15,885.36	66,120
1560	Sacramento District	0505030	NE Cor/O Victoria Ln N Slope Rd	1560-0505030	Well/Booster/Tank	4,359.21	15,440
1560	Sacramento District	0505031	51105 Road 426	1560-0505031	Well/Booster/Tank	37,667.00	138,400
1560	Sacramento District	0505032	48444 Victoria Ln	1560-0505032	Well	1,628.86	5,744
1560	Sacramento District	0505033	SE NW NW 21 8 19	1560-0505033	Well	3,018.74	32,927
1560	Sacramento District	0505034	Road 600 Valley St	1560-0505034	Well/Booster/Tank	92.89	48
1560	Sacramento District	0505035	Off Rd 600	1560-0505035	Booster Tank	80.18	0
1560	Sacramento District	0505036	32282 Horse Canyon Rd	1560-0505036	Well	190.61	406
1560	Sacramento District	0505037	End of Bon Veu Circle	1560-0505037	Well	5,919.26	22,211
1560	Sacramento District	0505038	Echo Valley View Court Well 6	1560-0505038	Well	13,458.58	39,882
1560	Sacramento District	0505039	Woodside Dr	1560-0505039	Booster Tank	5,949.14	18,511
1560	Sacramento District	0505040	PO Box 2269	1560-0505040	Security Light	134.47	0
1560	Sacramento District	0505041	DOM WELL	1560-0505041	Well	1,846.84	6,745
1560	Sacramento District	0505042	SEC 21 8 19	1560-0505042	Well	5,342.92	22,737
1560	Sacramento District	0505044	Dunnigan Well No. 1	1560-0505044	Well	2,862.33	10,185
1560	Sacramento District	0505045	Alton Arden Booster Statio	1560-0505045	Booster	1,022.07	4,682
1560	Sacramento District	1004534	pump	1560-1004534	Well	27,519.98	81,643
1560	Sacramento District	1004535	Maple & Fir - 40 HP pump	1560-1004535	Well	299.78	0
1560	Sacramento District	1004536	Fir & Maple - Chlorine pump	1560-1004536	Well	119.94	0
1560	Sacramento District	1004537	SW Corner Balsam & Poplar	1560-1004537	Well	34,024.88	136,104
1561	Larkfield District	0500152	Larkfield Water Treatmen	1561-0500152	Treatment Plant	4,495.27	158,963
1561	Larkfield District	0500181	Lower Wikiup Tank & Boos	1561-0500181	Booster	7,226.47	24,553
1561	Larkfield District	0500206	North Wikiup Tank & Boos	1561-0500206	Booster	5,037.43	18,772
1561	Larkfield District	0500316	Upper Wikiup Tank & Boos	1561-0500316	Booster	2,245.40	7,694
1561	Larkfield District	0500333	Well 1A	1561-0500333	Well	8,810.00	33,791
1561	Larkfield District	0500335	Well 3A	1561-0500335	Well	36,106.69	140,863
1561	Larkfield District	0500336	Well 5	1561-0500336	Well	8,286.20	31,343
1561	Larkfield District	0503602	Aqueduct	1561-0503602	Dam	139.12	315
1561	Larkfield District	0504481	Geyserville Merrill Well 1	1561-0504481	Well	6,560.93	22,551
1561	Larkfield District	0504482	Geyserville Chianti Tank	1561-0504482	Tank	172.91	191
1561	Larkfield District	0504483	Geyserville Railroad Ave W	1561-0504483	Well	10,721.94	38,279

						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage

End	End	End	End	End	End	End	End
Sum						8,027,545.29	46,395,066.99

Filing Type: Final

						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1530	San Diego County District	0500006	1st & A	1530-0500006	Interconnection	150.80	116
1530	San Diego County District	0500136	Highland Tank	1530-0500136	Tank	604.11	1,680
1530	San Diego County District	0500199	Montgomery Tank	1530-0500199	Tank	644.33	1,816
1530	San Diego County District	0500224	Palm Ave. Flow Meter	1530-0500224	Interconnection	158.33	106
1540	Monterey County District	0500010	Address Via Malpaso	1540-0500010	Booster	491.62	752
1540	Monterey County District	0500011	Airway Upper	1540-0500011	Tank	164.49	178
1540	Monterey County District	0500012	Airways Lower Pp #17	1540-0500012	Booster	5,467.71	19,357
1540	Monterey County District	0500013	Ambler Park Treatment Pl	1540-0500013	Treatment Plant	27,870.32	102,133
1540	Monterey County District	0500014	Ambler Park Well #4	1540-0500014	Well	32,254.82	115,640
1540	Monterey County District	0500015	Ambler Park Well #5	1540-0500015	Well	298.89	0
1540	Monterey County District	0500025	Bay Street Wells #1 & #2	1540-0500025	Well	26,014.24	105,314
1540	Monterey County District	0500026	Begonia Iron Removal Pla	1540-0500026	Treatment Plant	28,247.82	107,871
1540	Monterey County District	0500027	Begonia Iron Removal Pla	1540-0500027	Treatment Plant	121,068.85	551,529
1540	Monterey County District	0500028	Berwick Well #7	1540-0500028	Well	40,560.54	172,552
1540	Monterey County District	0500029	Berwick Well #8	1540-0500029	Well	70,314.02	359,827
1540	Monterey County District	0500031	Birdrock Standby Pump	1540-0500031	Booster	122.71	12
1540	Monterey County District	0500032	Bishop #1 Well	1540-0500032	Well	713.33	1,560
1540	Monterey County District	0500033	Bishop #2 Well	1540-0500033	Well	1,087.51	2,910
1540	Monterey County District	0500035	Boots Rd.	1540-0500035	Tank	370.87	287
1540	Monterey County District	0500037	Boronda Pp #67	1540-0500037	Booster	12,122.09	43,732
1540	Monterey County District	0500047	Carmel Knolls	1540-0500047	Booster	53,246.43	205,189
1540	Monterey County District	0500048	Carmel Valley Filter Pla	1540-0500048	Booster	3,729.76	6,689
1540	Monterey County District	0500049	Carmel Valley Ranch	1540-0500049	Tank	236.88	463
1540	Monterey County District	0500050	Carmel Valley Ranch Pp #	1540-0500050	Booster	13,612.46	48,883
1540	Monterey County District	0500052	Carmel Way	1540-0500052	Booster	669.48	1,445
1540	Monterey County District	0500053	Carmel Woods Pp #8	1540-0500053	Booster	11,608.57	44,569
1540	Monterey County District	0500054	Carola Pp #71	1540-0500054	Booster	4,853.49	17,015
1540	Monterey County District	0500060	Chualar Tank	1540-0500060	Well/Booster/Tank	24,465.62	90,043
1540	Monterey County District	0500065	Corona	1540-0500065	Booster	10,761.47	39,826
1540	Monterey County District	0500067	Corte Codollera Pp	1540-0500067	Toro-Booster	1,640.14	5,237
1540	Monterey County District	0500075	Crespi	1540-0500075	Booster	2,921.85	10,805
1540	Monterey County District	0500076	Crest Reservoir (Conc)	1540-0500076	Tank	326.88	815
1540	Monterey County District	0500080	Cypress Well	1540-0500080	Well	165,097.31	1,042,295
1540	Monterey County District	0500081	Cypress Pp #14	1540-0500081	Booster	2,921.98	9,852
1540	Monterey County District	0500090	Del Mesa Pp #42	1540-0500090	Booster	7,627.39	25,380
1540	Monterey County District	0500091	Del Monte Test Well	1540-0500091	Well	317.76	3
1540	Monterey County District	0500092	Del Rey Regulating Stati	1540-0500092	Reg Station	326.63	819
1540	Monterey County District	0500099	Dry Creek	1540-0500099	Booster	376.74	234
1540	Monterey County District	0500102	Eardley Pp #1	1540-0500102	Booster	146,893.28	636,243
1540	Monterey County District	0500103	Eddy Road	1540-0500103	Booster	1,619.55	5,167
1540	Monterey County District	0500108	Encina Pp #54	1540-0500108	Booster	1,516.08	5,562
1540	Monterey County District	0500116	Forest Lake Tanks	1540-0500116	Tank	401.65	1,118
1540	Monterey County District	0500120	Garzas Well #3	1540-0500120	Well	3,595.85	14,103
1540	Monterey County District	0500121	Garzas Well #4	1540-0500121	Well	14,228.73	53,787
1540	Monterey County District	0500134	Hidden Hills Treatment P	1540-0500134	Treatment Plant	82,718.44	304,342
1540	Monterey County District	0500135	High Meadows Pp #45	1540-0500135	Booster	23,300.40	88,208
1540	Monterey County District	0500137	Highland Pp #47	1540-0500137	Booster	962.61	2,438
1540	Monterey County District	0500143	Huckleberry Pp #23	1540-0500143	Booster	6,079.76	22,875
1540	Monterey County District	0500169	Los Laureles Well # 3	1540-0500169	Well	317.57	296
1540	Monterey County District	0500170	Los Laureles Well #5	1540-0500170	Well	4,964.74	17,987
1540	Monterey County District	0500171	Los Laureles Well #6	1540-0500171	Well	21,244.28	95,809
1540	Monterey County District	0500172	Los Padres Dam	1540-0500172	Dam	1,622.54	5,159
1540	Monterey County District	0500176	Los Tulares Lower Pp #51	1540-0500176	Booster	3,199.81	10,912
1540	Monterey County District	0500177	Los Tulares Pp #50	1540-0500177	Booster	7,572.35	27,510
1540	Monterey County District	0500178	Los Tulares Upper	1540-0500178	Booster	2,315.48	8,108
1540	Monterey County District	0500179	Lower Markham Ranch Pp	1540-0500179	Toro-Booster	2,870.13	9,998
1540	Monterey County District	0500180	Lower Tierra Grande	1540-0500180	Booster	4,683.25	16,114
1540	Monterey County District	0500183	Luzern Well	1540-0500183	Well	57,828.55	196,531
1540	Monterey County District	0500190	Mercurio Pp #59	1540-0500190	Booster	1,194.48	3,546
1540	Monterey County District	0500191	Mesa Pp #2A	1540-0500191	Booster	27,905.12	71,558
1540	Monterey County District	0500192	Meyers Pneumatic Pp #81	1540-0500192	Booster	739.44	1,702
1540	Monterey County District	0500193	Middle Canyon Upper	1540-0500193	Booster	2,076.88	6,663
1540	Monterey County District	0500194	Middle Tierra Grande	1540-0500194	Booster	2,119.28	6,625
1540	Monterey County District	0500204	Munras	1540-0500204	Booster	11,826.38	41,803
1540	Monterey County District	0500208	Nueve	1540-0500208	Booster	8,706.24	33,401
1540	Monterey County District	0500220	Ord Grove Ozone Plant	1540-0500220	Treatment Plant	194,801.28	955,458
1540	Monterey County District	0500226	Panetta Well #1	1540-0500226	Well	19,837.83	79,911

Refer to Direct Testimony of Stephen Owens and Bahman Pourtaherian

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Filing Type: Final

						\$	KWH
District #	District Name	Location #	Location Name	Uniqe Identifier	Service Type	Total Cost	Total Usage
1540	Monterey County District	0500227	Paralta Well	1540-0500227	Well	157,236.06	717,744
1540	Monterey County District	0500231	Pasadera Pump Station	1540-0500231	Booster	5,381.75	18,632
1540	Monterey County District	0500234	Pasadera Wwtp Generators	1540-0500234	Treatment Plant	3,752.79	0
1540	Monterey County District	0500235	Paseo Privado Lower Pp #	1540-0500235	Booster	2,566.27	8,866
1540	Monterey County District	0500237	Pearce Well	1540-0500237	Well	159,890.68	855,676
1540	Monterey County District	0500238	Pebble Beach Pp #6	1540-0500238	Booster	999.36	2,678
1540	Monterey County District	0500239	Pebble Beach Pp #8	1540-0500239	Booster	39,405.85	157,364
1540	Monterey County District	0500240	Playa Well #3	1540-0500240	Well	7,043.97	4,630
1540	Monterey County District	0500241	Plumas Well	1540-0500241	Well	37,115.41	166,330
1540	Monterey County District	0500246	Quail Meadows	1540-0500246	Booster	1,940.90	6,489
1540	Monterey County District	0500247	Ragsdale	1540-0500247	Treatment Plant	23,066.77	89,256
1540	Monterey County District	0500248	Ralph Lane Well	1540-0500248	Well	3,018.29	10,114
1540	Monterey County District	0500249	Rancho Blvd Pp #10	1540-0500249	Booster	473.36	680
1540	Monterey County District	0500250	Rancho Canada Well	1540-0500250	Well	123,466.57	701,467
1540	Monterey County District	0500251	Rancho Fiesta Pp #61	1540-0500251	Booster	2,268.33	7,815
1540	Monterey County District	0500252	Rancho Fiesta Pp #62	1540-0500252	Booster	1,498.74	5,455
1540	Monterey County District	0500253	Rancho Mar Monte	1540-0500253	Booster	2,110.50	7,282
1540	Monterey County District	0500254	Ridgeway	1540-0500254	Booster	4,029.11	13,849
1540	Monterey County District	0500256	Rimrock Upper Pp #82	1540-0500256	Booster	5,662.24	19,676
1540	Monterey County District	0500257	Rio Vista Pp #53	1540-0500257	Booster	4,508.33	15,958
1540	Monterey County District	0500259	Robles Well	1540-0500259	Well	1,157.27	3,435
1540	Monterey County District	0500260	Robles Lower	1540-0500260	Booster	7,182.31	26,082
1540	Monterey County District	0500272	Ryan Ranch #9	1540-0500272	Well	37,003.36	177,281
1540	Monterey County District	0500273	Ryan Ranch Tank	1540-0500273	Tank	1,211.89	4,478
1540	Monterey County District	0500274	Ryan Ranch Well #11	1540-0500274	Well	418.59	397
1540	Monterey County District	0500275	Ryan Ranch Well #7	1540-0500275	Well	5,106.77	10,037
1540	Monterey County District	0500278	San Carlos Well #2	1540-0500278	Well	1,783.45	1,341
1540	Monterey County District	0500280	Sand City Brackish Water	1540-0500280	Treatment Plant	89,409.94	376,864
1540	Monterey County District	0500284	Schulte Well	1540-0500284	Well	66,687.52	326,593
1540	Monterey County District	0500287	Segunda	1540-0500287	Booster	77,613.81	198,163
1540	Monterey County District	0500295	Spectacular Bid Pp #75	1540-0500295	Booster	4,577.54	15,724
1540	Monterey County District	0500299	Stirrup	1540-0500299	Booster	13,329.09	47,998
1540	Monterey County District	0500306	Telemetry Water Station	1540-0500306	Flow Station	156.56	143
1540	Monterey County District	0500307	Tierra Grande Pp #38	1540-0500307	Booster	4,476.08	15,494
1540	Monterey County District	0500308	Trioga Wells #4 & # 5	1540-0500308	Well	32,996.76	136,725
1540	Monterey County District	0500309	Toyon Lower Pp #32	1540-0500309	Booster	10,337.18	35,696
1540	Monterey County District	0500313	Upper Estrella D Oro Ppe	1540-0500313	Booster	1,972.53	6,591
1540	Monterey County District	0500314	Upper Markham Ranch Pp	1540-0500314	Toro-Booster	1,272.00	3,761
1540	Monterey County District	0500315	Upper Tierra Grande	1540-0500315	Booster	1,801.96	5,902
1540	Monterey County District	0500321	Via Contenta	1540-0500321	Booster	11,401.95	41,052
1540	Monterey County District	0500322	Via Las Encinas	1540-0500322	Booster	3,845.94	13,221
1540	Monterey County District	0500323	Viejo Tank	1540-0500323	Tank	344.56	814
1540	Monterey County District	0500329	Viscaino	1540-0500329	Booster	509.74	883
1540	Monterey County District	0500330	Waldon Lower	1540-0500330	Booster	2,941.18	9,905
1540	Monterey County District	0500332	Well #1 And #2 Highway 6	1540-0500332	Toro-Well/Treatment	46,737.27	195,571
1540	Monterey County District	0500350	Withers Pp #12	1540-0500350	Booster	19,902.97	69,939
1540	Monterey County District	0503447	Del Monte Regulating Sta	1540-0503447	Reg Station	23,259.29	85,700
1540	Monterey County District	0503580	Mount Devon Tank	1540-0503580	Tank	317.51	778
1540	Monterey County District	0504010	Lower Estrella D Oro	1540-0504010	Booster	3,519.08	12,631
1540	Monterey County District	0504015	Ambler Oaks Well	1540-0504015	Well	397.95	1,129
1540	Monterey County District	0504056	Crest Canyon Tank	1540-0504056	Tank	173.35	212
1540	Monterey County District	0504090	Upper Toyon Tank #1	1540-0504090	Tank	468.45	1,281
1540	Monterey County District	0504127	Garrapata Pump #5	1540-0504127	Well	8,563.96	30,388
1540	Monterey County District	0504695	Hilby ASR Pump Station	1540-0504695	Booster	423,402.85	1,829,678
1540	Monterey County District	0504874	Hilby Tank	1540-0504874	Tank	39,985.90	149,079
1540	Monterey County District	0504974	Test Well Site	1540-0504974	Well	11,901.15	5,901
1542	Monterey Wastewater	0500051	Carmel Valley Ranch Wwtp	1542-0500051	Waste Water	43,869.14	223,715
1542	Monterey Wastewater	0500140	Holt Rd Lift Station	1542-0500140	Waste Water	4,163.27	14,855
1542	Monterey Wastewater	0500156	Las Palmas Lift Station #1	1542-0500156	Waste Water	4,412.72	15,132
1542	Monterey Wastewater	0500157	Las Palmas Lift Station #2	1542-0500157	Waste Water	9,364.82	33,594
1542	Monterey Wastewater	0500158	Las Palmas Lift Station #3	1542-0500158	Waste Water	4,092.77	14,294
1542	Monterey Wastewater	0500159	Las Palmas Lift Station #4	1542-0500159	Waste Water	877.69	2,245
1542	Monterey Wastewater	0500160	Las Palmas Wastewater Tr	1542-0500160	Waste Water	121,083.31	603,802
1542	Monterey Wastewater	0500211	Oak Hills Wastewater Tre	1542-0500211	Waste Water	14,584.67	57,998
1542	Monterey Wastewater	0500229	Pasadera	1542-0500229	Waste Water	11,055.83	39,219
1542	Monterey Wastewater	0500230	Pasadera Lift Station #2	1542-0500230	Waste Water	6,578.50	23,094
1542	Monterey Wastewater	0500232	Pasadera Water Treatment	1542-0500232	Waste Water	9,902.14	48,325

Filing Type: Final

						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1542	Monterey Wastewater	0500233	Pasadera Wwtp #2	1542-0500233	Waste Water	45,224.50	198,829
1542	Monterey Wastewater	0504176	Spreckels Wastewater Tre	1542-0504176	Waste Water	2,229.59	7,537
1551	Ventura County District	0500016	American Oaks Booster St	1551-0500016	Booster	23,219.79	116,742
1551	Ventura County District	0500036	Borchard Road Turnout	1551-0500036	Interconnection	237.80	356
1551	Ventura County District	0500046	Calle Yucca Turnout	1551-0500046	Interconnection	238.10	284
1551	Ventura County District	0500087	Deer Ridge Tank/Pump Sta	1551-0500087	Booster	21,180.63	60,222
1551	Ventura County District	0500088	Deer Valley Booster Stat	1551-0500088	Booster	12,167.92	54,432
1551	Ventura County District	0500094	Dewey Booster Station	1551-0500094	Booster	13,166.16	64,721
1551	Ventura County District	0500098	Dos Vientos Booster/Potr	1551-0500098	Booster	150,938.46	701,975
1551	Ventura County District	0500115	Fordham Booster Station	1551-0500115	Booster	174.95	1
1551	Ventura County District	0500126	Green Ridge Tank	1551-0500126	Tank	245.32	335
1551	Ventura County District	0500127	Greenmeadow Booster Stat	1551-0500127	Booster	194.04	82
1551	Ventura County District	0500139	Hillcrest Drive Booster	1551-0500139	Booster	8,182.27	47,913
1551	Ventura County District	0500144	Industrial Tanks	1551-0500144	Tank	309.40	552
1551	Ventura County District	0500146	Janss Booster Station	1551-0500146	Booster	10,120.86	48,543
1551	Ventura County District	0500147	Janss Tank	1551-0500147	Tank	257.94	392
1551	Ventura County District	0500149	Kimber Booster Station	1551-0500149	Booster	890.13	3,743
1551	Ventura County District	0500153	Las Flores Turnout	1551-0500153	Booster	249.75	353
1551	Ventura County District	0500161	Las Posas Booster Statio	1551-0500161	Booster	26,219.07	137,783
1551	Ventura County District	0500173	Los Robles Booster Stati	1551-0500173	Booster	11,049.18	53,010
1551	Ventura County District	0500174	Los Robles Tanks	1551-0500174	Tank	260.08	376
1551	Ventura County District	0500175	Los Robles Turnout	1551-0500175	Interconnection	236.49	277
1551	Ventura County District	0500189	Mayfield Booster Station	1551-0500189	Booster	16,224.60	104,155
1551	Ventura County District	0500201	Moorpark Booster Station	1551-0500201	Booster	17,762.83	70,001
1551	Ventura County District	0500202	Moorpark Reservoir	1551-0500202	Tank	560.84	1,721
1551	Ventura County District	0500217	Olsen Road Turnout	1551-0500217	Interconnection	224.47	288
1551	Ventura County District	0500219	Orbis Tank	1551-0500219	Tank	229.68	320
1551	Ventura County District	0500222	Pace Reservoir	1551-0500222	Tank	311.27	631
1551	Ventura County District	0500243	Potrero I Reservoir	1551-0500243	Tank	232.66	332
1551	Ventura County District	0500289	Shopping Center I Reserv	1551-0500289	Tank	174.22	0
1551	Ventura County District	0500290	Shopping Center II Reser	1551-0500290	Tank	752.57	348
1551	Ventura County District	0500297	Springwood Booster Stati	1551-0500297	Booster	2,869.93	0
1551	Ventura County District	0500340	White Stallion Tank	1551-0500340	Tank	8,390.61	47,074
1551	Ventura County District	0500344	Wildwood Booster Station	1551-0500344	Booster	12,191.46	52,592
1551	Ventura County District	0500345	Wildwood Tank	1551-0500345	Tank	2,742.32	13,485
1551	Ventura County District	0500346	Wildwood Turnout	1551-0500346	Interconnection	269.46	416
1551	Ventura County District	0504439	Borchard Road Pump Statio	1551-0504439	Booster	6,261.53	15,944
1551	Ventura County District	0504719	Rio Plaza Cortez	1551-0504719	Well/Booster/Tank	26,643.34	113,687
1551	Ventura County District	0504855	Warwick Pump Station	1551-0504855	Tank	4,366.39	18,419
1551	Ventura County District	1504709	Gainsborough PRV	1551-1504709	Reg Station	261.69	387
1550	Los Angeles County District	0500008	48Th Street Well	1550-0500008	Well	22,291.21	6,800
1550	Los Angeles County District	0500019	Angeles Mesa Reservoir	1550-0500019	Booster	1,144.51	2,304
1550	Los Angeles County District	0500021	Arlington Well	1550-0500021	Well	16,825.56	2,560
1550	Los Angeles County District	0500074	Crenshaw Well	1550-0500074	Well	139,352.98	776,560
1550	Los Angeles County District	0500119	Garth Reservoir	1550-0500119	Booster	18,310.41	80,756
1550	Los Angeles County District	0500141	Homeland Reservoir	1550-0500141	Tank	354.77	730
1550	Los Angeles County District	0500203	Mt. Vernon Reservoir	1550-0500203	Booster	13,684.92	86,453
1550	Los Angeles County District	0500218	Olympiad Reservoir	1550-0500218	Booster	44,429.79	252,424
1550	Los Angeles County District	0500292	Slauson Avenue Corrosion	1550-0500292	Treatment Plant	259.86	351
1550	Los Angeles County District	0500319	Vernon Well #2	1550-0500319	Well	827.15	0
1550	Los Angeles County District	0500320	Vernon Well #3	1550-0500320	Well	128,862.21	714,360
1550	Los Angeles County District	0500337	West Basin 27 Connection	1550-0500337	Interconnection	215.37	158
1550	Los Angeles County District	0500024	Bacon Well	1550-0500024	Well	1,352.07	1,276
1550	Los Angeles County District	0500039	Bradbury Tank	1550-0500039	Tank	1,637.90	7,654
1550	Los Angeles County District	0500041	Brookridge Booster Stn	1550-0500041	Booster	518.20	797
1550	Los Angeles County District	0500042	Buena Vista Well	1550-0500042	Well	200,854.72	1,240,502
1550	Los Angeles County District	0500079	Crownhaven Well	1550-0500079	Well	124,948.44	681,966
1550	Los Angeles County District	0500107	Encanto Well	1550-0500107	Well	119,306.05	609,447
1550	Los Angeles County District	0500113	Fish Canyon Well	1550-0500113	Well	698.73	0
1550	Los Angeles County District	0500154	Las Lomas Booster	1550-0500154	Booster	11,767.72	54,587
1550	Los Angeles County District	0500155	Las Lomas Well	1550-0500155	Well	71,147.74	357,168
1550	Los Angeles County District	0500164	Lemon Irrigation Booster	1550-0500164	Irrig Booster	38,823.03	174,926
1550	Los Angeles County District	0500282	Santa Fe Well	1550-0500282	Well	11,870.05	4,997
1550	Los Angeles County District	0500286	Scott Reservoir/ Booster	1550-0500286	Booster	87,196.03	492,932
1550	Los Angeles County District	0500296	Spinks Reservoir/Booster	1550-0500296	Booster	4,990.87	13,653
1550	Los Angeles County District	0500325	Vineyard Booster Stn	1550-0500325	Booster	3,839.21	1,845
1550	Los Angeles County District	0500347	Wiley Well	1550-0500347	Well	150,047.39	1,041,688

Filing Type: Final

						\$	KWH
District #	District Name	Location #	Location Name	Uniqe Identifier	Service Type	Total Cost	Total Usage
1550	Los Angeles County District	0504922	Duarte Rd. PRV	1550-0504922	Reg Station	253.16	404
1550	Los Angeles County District	0505116	Deodar	1550-0505116	Reg Station	145.01	127
1550	Los Angeles County District	0500083	Danford Reservoir	1550-0500083	Booster	67,662.08	386,051
1550	Los Angeles County District	0500089	Del Mar Well	1550-0500089	Well	137,241.90	860,308
1550	Los Angeles County District	0500125	Grand Well	1550-0500125	Well	60,406.31	257,453
1550	Los Angeles County District	0500129	Guess Well	1550-0500129	Well	370.18	972
1550	Los Angeles County District	0500131	Hall Well	1550-0500131	Well	134,960.92	624,301
1550	Los Angeles County District	0500142	Howland Well	1550-0500142	Well	63,320.09	319,104
1550	Los Angeles County District	0500150	Lamanda Reservoir/Well S	1550-0500150	Booster	60,724.08	332,200
1550	Los Angeles County District	0500167	Lombardy Well	1550-0500167	Well	112,691.55	774,659
1550	Los Angeles County District	0500168	Longden Well/Reservoir	1550-0500168	Well	99,124.85	579,925
1550	Los Angeles County District	0500186	Mariposa Well	1550-0500186	Well	133,467.88	934,656
1550	Los Angeles County District	0500196	Mission View Well	1550-0500196	Well	129,178.92	775,105
1550	Los Angeles County District	0500198	Monterey Booster	1550-0500198	Booster	3,756.03	20,784
1550	Los Angeles County District	0500212	Oak Knoll Circle Well	1550-0500212	Well	610.96	1,280
1550	Los Angeles County District	0500213	Oak Knoll Reservoir	1550-0500213	Booster	64,930.20	314,720
1550	Los Angeles County District	0500221	Oswego Well	1550-0500221	Well	10,072.00	0
1550	Los Angeles County District	0500236	Patton Reservoir/Well	1550-0500236	Well	34,654.81	143,100
1550	Los Angeles County District	0500258	Roanoke Well	1550-0500258	Well	683.90	0
1550	Los Angeles County District	0500265	Rosemead Well	1550-0500265	Well	200,587.67	1,366,460
1550	Los Angeles County District	0500349	Winston Well	1550-0500349	Well	44,305.49	257,199
1550	Los Angeles County District	0504397	Adams Ranch	1550-0504397	Interconnection	716.35	0
1550	Los Angeles County District	0505171	Woodward Site	1550-0505171	Booster	10,184.72	59,671
1550	Los Angeles County District	0505172	Duarte Rd Well Site	1550-0505172	Well/Booster	73,559.68	571,903
1550	Los Angeles County District	0505173	Michillinda Site	1550-0505173	Well	314.81	397
1550	Los Angeles County District	0505174	East Pasadena Office	1550-0505174	Well/Booster	5,773.84	30,144
1560	Sacramento District	0500005	14020 Isle View Way	1560-0500005	Well	29,000.60	109,126
1560	Sacramento District	0500009	A Parkway Booster Statio	1560-0500009	Interconnection	13,125.39	84,555
1560	Sacramento District	0500017	Andrea #1 Well	1560-0500017	Well	1,726.96	9,904
1560	Sacramento District	0500018	Andrea #2 Well	1560-0500018	Well	60,913.90	398,316
1560	Sacramento District	0500020	Arden	1560-0500020	Well	58.68	185
1560	Sacramento District	0500022	Auberry Well	1560-0500022	Well	38,444.19	290,649
1560	Sacramento District	0500023	Auburn Well	1560-0500023	Well	1,407.13	7,577
1560	Sacramento District	0500030	Billy Mitchell Well	1560-0500030	Well	292.80	89
1560	Sacramento District	0500040	Briggs Well	1560-0500040	Well	27,035.20	185,262
1560	Sacramento District	0500043	Butterfield Well	1560-0500043	Well	807.42	3,573
1560	Sacramento District	0500045	Caldera Well	1560-0500045	Well	28,923.26	142,280
1560	Sacramento District	0500055	Carriage Well	1560-0500055	Well	27,308.02	198,102
1560	Sacramento District	0500056	Central/Sunrise Well	1560-0500056	Well	3,463.84	22,270
1560	Sacramento District	0500057	Cherbourg Well	1560-0500057	Well	55,413.49	397,545
1560	Sacramento District	0500059	Chipping Well	1560-0500059	Well	50,758.89	376,399
1560	Sacramento District	0500061	College Green Well	1560-0500061	Well	1,815.51	10,530
1560	Sacramento District	0500063	Conrad Well	1560-0500063	Well	166.37	0
1560	Sacramento District	0500064	Cook Riolo Well	1560-0500064	Well	97,759.50	702,729
1560	Sacramento District	0500069	Countryside #1 Well	1560-0500069	Well	81,711.45	572,898
1560	Sacramento District	0500070	Countryside #2 Well	1560-0500070	Well	37,750.17	285,759
1560	Sacramento District	0500071	Countryside Treatment Pl	1560-0500071	Treatment Plant	47,708.61	298,773
1560	Sacramento District	0500072	Countryside Way	1560-0500072	Well	1,542.70	8,604
1560	Sacramento District	0500073	Covered Wagon Well	1560-0500073	Well	3,427.00	23,270
1560	Sacramento District	0500077	Crosswoods Well	1560-0500077	Well	1,052.78	5,425
1560	Sacramento District	0500078	Crowder	1560-0500078	Interconnection	517.13	1,471
1560	Sacramento District	0500082	Daly Well	1560-0500082	Well	74,936.50	531,969
1560	Sacramento District	0500086	Davidson Well	1560-0500086	Well	708.41	3,056
1560	Sacramento District	0500095	Diablo Well	1560-0500095	Well	631.19	2,452
1560	Sacramento District	0500097	Don Julio Well	1560-0500097	Well	63,202.28	445,062
1560	Sacramento District	0500101	Eagle Ridge Well	1560-0500101	Well	851.15	4,021
1560	Sacramento District	0500104	Ehine Way Well	1560-0500104	Well	787.28	3,412
1560	Sacramento District	0500105	Elsie Well	1560-0500105	Well	418.88	972
1560	Sacramento District	0500106	Elverta Well	1560-0500106	Well	745.10	3,101
1560	Sacramento District	0500110	Fairlake #1 Well	1560-0500110	Well	2,783.65	19,123
1560	Sacramento District	0500111	Fairlake #2 Well	1560-0500111	Well	36,839.36	276,597
1560	Sacramento District	0500112	Falcon View Well	1560-0500112	Well	2,942.87	18,610
1560	Sacramento District	0500114	Folsom Well	1560-0500114	Well	53,329.64	404,072
1560	Sacramento District	0500117	Fort Sutter Well	1560-0500117	Well	865.66	4,112
1560	Sacramento District	0500118	Foxpark Well	1560-0500118	Well	76,139.65	597,626
1560	Sacramento District	0500122	Gerber Well	1560-0500122	Well	634.94	2,395
1560	Sacramento District	0500123	Glass Slipperwell	1560-0500123	Well	17,672.92	118,292

Filing Type: Final

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1560	Sacramento District	0500124	Gould Well	1560-0500124	Well	5,742.19	14,387
1560	Sacramento District	0500128	Grove #2 Well	1560-0500128	Well	1,600.86	5,049
1560	Sacramento District	0500130	H Street Well	1560-0500130	Well	965.77	2,612
1560	Sacramento District	0500132	Hemingway Well	1560-0500132	Well	32,885.77	201,385
1560	Sacramento District	0500133	Hemlock Well	1560-0500133	Well	299.33	141
1560	Sacramento District	0500145	Jackson Hwy Well	1560-0500145	Well	17,125.04	51,800
1560	Sacramento District	0500163	Le Mans Well	1560-0500163	Well	840.50	3,771
1560	Sacramento District	0500165	Linda Sue Well	1560-0500165	Well	16,765.43	106,626
1560	Sacramento District	0500166	Lippi Well	1560-0500166	Well	836.39	3,899
1560	Sacramento District	0500184	Malaga Well	1560-0500184	Well	914.43	4,287
1560	Sacramento District	0500187	Mars Well	1560-0500187	Well	25,456.71	159,868
1560	Sacramento District	0500188	Mather / Sacramento Coun	1560-0500188	Interconnection	20,984.42	91,977
1560	Sacramento District	0500200	Moonbeam Well	1560-0500200	Well	20,424.70	122,884
1560	Sacramento District	0500205	North Loop Well	1560-0500205	Well	35,105.92	262,103
1560	Sacramento District	0500209	Nut Plains Well	1560-0500209	Well	57,863.13	414,472
1560	Sacramento District	0500210	Oak Forest Well	1560-0500210	Well	386.54	2,537
1560	Sacramento District	0500215	Oaken Bucket Well	1560-0500215	Well	38,768.05	264,163
1560	Sacramento District	0500225	Palmerson Well	1560-0500225	Well	3,342.81	4,937
1560	Sacramento District	0500228	Parkside Treatment Plant	1560-0500228	Treatment Plant	148,253.86	1,012,267
1560	Sacramento District	0500242	Point Reyes Well	1560-0500242	Well	781.66	3,521
1560	Sacramento District	0500244	Power Inn Well	1560-0500244	Well	7,631.31	1,771
1560	Sacramento District	0500245	Prior Way Well	1560-0500245	Well	723.43	3,090
1560	Sacramento District	0500261	Rockhurst Well	1560-0500261	Well	39,983.89	273,609
1560	Sacramento District	0500262	Rockingham Well	1560-0500262	Well	892.37	4,175
1560	Sacramento District	0500263	Rogue River Well	1560-0500263	Well	27,500.69	201,758
1560	Sacramento District	0500264	Rose Parade Treatment PI	1560-0500264	Treatment Plant	20,029.91	82,601
1560	Sacramento District	0500267	Roseville Rd Well	1560-0500267	Well	3,712.60	24,391
1560	Sacramento District	0500268	Roseville Road Well	1560-0500268	Well	25,370.01	150,851
1560	Sacramento District	0500269	Rushmore Well	1560-0500269	Well	25,796.54	183,590
1560	Sacramento District	0500277	Salmon Falls Well	1560-0500277	Well	11,594.17	43,969
1560	Sacramento District	0500288	Shenandoah Well	1560-0500288	Well	742.10	3,122
1560	Sacramento District	0500291	Sky Parkway Well	1560-0500291	Well	10,481.44	32,920
1560	Sacramento District	0500293	Southgate Well	1560-0500293	Well	9,651.69	39,769
1560	Sacramento District	0500294	Southport Well	1560-0500294	Well	35.35	0
1560	Sacramento District	0500297	Springwood Booster Stati	1560-0500297	Booster	3,934.58	41,336
1560	Sacramento District	0500300	Stocker Well	1560-0500300	Well	5,360.93	36,967
1560	Sacramento District	0500301	Summerplace Well	1560-0500301	Well	18,793.35	93,716
1560	Sacramento District	0500303	Swansea Well	1560-0500303	Well	26,566.77	190,626
1560	Sacramento District	0500304	Tally Ho #1 Well	1560-0500304	Well	9,771.49	57,056
1560	Sacramento District	0500305	Tally Ho #2 Well	1560-0500305	Well	3,202.67	5,040
1560	Sacramento District	0500310	Treelark Well	1560-0500310	Well	698.63	2,798
1560	Sacramento District	0500311	Twin Parks Well	1560-0500311	Well	1,460.76	8,133
1560	Sacramento District	0500312	Twin Trails Well	1560-0500312	Well	44,659.64	313,299
1560	Sacramento District	0500317	Van Maren Well	1560-0500317	Well	67,613.27	513,885
1560	Sacramento District	0500318	Vandenberg Well	1560-0500318	Well	337.20	437
1560	Sacramento District	0500324	Villaview Well	1560-0500324	Well	363.88	519
1560	Sacramento District	0500326	Vintage 1 Well	1560-0500326	Well	5,671.76	3,149
1560	Sacramento District	0500327	Vintage 3 Well	1560-0500327	Well	32,194.18	243,496
1560	Sacramento District	0500328	Vintage Treatment Plant	1560-0500328	Treatment Plant	141,689.08	1,173,737
1560	Sacramento District	0500331	Watt Ave Well	1560-0500331	Well	37,609.31	228,242
1560	Sacramento District	0500334	Well 3 3B Treatment Plan	1560-0500334	Treatment Plant	46,241.45	177,086
1560	Sacramento District	0500338	West La Loma Well	1560-0500338	Well	76,216.32	581,066
1560	Sacramento District	0500339	Westporter Well	1560-0500339	Well	5,058.05	3,931
1560	Sacramento District	0500341	Whitewater Well	1560-0500341	Well	1,632.12	5,590
1560	Sacramento District	0500342	Wilbur 2 Well	1560-0500342	Well	26,452.18	175,323
1560	Sacramento District	0500343	Wildrose Well	1560-0500343	Well	287.96	0
1560	Sacramento District	0500348	Winchester Well	1560-0500348	Well	38,766.73	293,787
1560	Sacramento District	0500351	Wittkop Well	1560-0500351	Well	17,762.71	70,537
1560	Sacramento District	0500353	Woodman Well	1560-0500353	Well	38,558.82	216,923
1560	Sacramento District	0500354	Wyda Well	1560-0500354	Well	28,794.91	214,939
1560	Sacramento District	0503452	Laurel Oaks Well	1560-0503452	Well	621.98	2,422
1560	Sacramento District	0504006	Isleton Elevated Tank	1560-0504006	Tank	907.63	3,041
1560	Sacramento District	0504057	Folsom Booster Station	1560-0504057	Interconnection	16,470.88	112,113
1560	Sacramento District	0504438	Colonnade Well	1560-0504438	Well	767.24	3,174
1560	Sacramento District	0504456	Lincoln Oaks Tank	1560-0504456	Tank	5,157.08	34,042
1560	Sacramento District	0504493	Dunnigan Well & Pump	1560-0504493	Well	7,016.91	25,609
1560	Sacramento District	0504526	Meadowbrook Well 4	1560-0504526	Well	13,296.63	51,760

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District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1560	Sacramento District	0504739	Walerga Tank & Booster STN	1560-0504739	Booster	19,798.48	91,465
1560	Sacramento District	0504979	Dunnigan WW Pump Station	1560-0504979	Booster	1,993.12	6,468
1560	Sacramento District	0504985	Well #4 - Fruitridge	1560-0504985	Well	3,398.21	11,408
1560	Sacramento District	0504986	Well #14 - Fruitridge	1560-0504986	Well	170.54	0
1560	Sacramento District	0504987	Well #19 - Fruitridge	1560-0504987	Well	1,697.66	9,196
1560	Sacramento District	0504988	Well #18 - Fruitridge	1560-0504988	Well	15,722.93	103,452
1560	Sacramento District	0504989	Fruitridge Booster	1560-0504989	Booster	19,048.14	108,183
1560	Sacramento District	0504990	Well #3 - Fruitridge	1560-0504990	Well	11,036.75	62,125
1560	Sacramento District	0504991	Well #7 - Fruitridge	1560-0504991	Well	437.22	1,059
1560	Sacramento District	0504992	Well #15 - Fruitridge	1560-0504992	Well	372.86	409
1560	Sacramento District	0504993	Well #9 - Fruitridge	1560-0504993	Well	3,480.60	362
1560	Sacramento District	0504994	Well #17 - Fruitridge	1560-0504994	Well	2,328.86	13,945
1560	Sacramento District	0504995	Well #10 - Fruitridge	1560-0504995	Well	244.45	30
1560	Sacramento District	0504996	Well #8 - Fruitridge	1560-0504996	Well	296.61	62
1560	Sacramento District	0504997	Well #6 - Fruitridge	1560-0504997	Well	223.16	38
1560	Sacramento District	0504998	Miami Creek Well #1	1560-0504998	Well	91.13	49
1560	Sacramento District	0504999	Well #16 - Fruitridge	1560-0504999	Well	65,420.64	506,890
1560	Sacramento District	0505000	Well #8 Light - Fruitridge	1560-0505000	Well	170.57	0
1560	Sacramento District	0505001	Well #13 - Fruitridge	1560-0505001	Well	207.90	0
1560	Sacramento District	0505002	Well #20 - Fruitridge	1560-0505002	Well	30,974.21	212,323
1560	Sacramento District	0505003	47th Ave Booster	1560-0505003	Booster	4,769.74	31,838
1560	Sacramento District	0505006	OOOO Big Sandy Dr	1560-0505006	Well/Booster/Tank	3,258.21	11,895
1560	Sacramento District	0505007	Hlnds Sub Dv	1560-0505007	Well	2,487.80	8,844
1560	Sacramento District	0505008	Glenn Darry Ct Loc 131 Well 2	1560-0505008	Well	2,978.28	10,342
1560	Sacramento District	0505009	Echo Valley View Court Well 8	1560-0505009	Well	19,790.38	79,575
1560	Sacramento District	0505010	Courtney Drive Off Road 426	1560-0505010	Well/Tank	14,263.46	53,859
1560	Sacramento District	0505011	Meadow Springs Ln Loc 76 Well 3	1560-0505011	Well	2,472.93	8,333
1560	Sacramento District	0505012	Hwy 49	1560-0505012	Well/Booster/Tank	15,815.99	40,586
1560	Sacramento District	0505013	Next to 39563 Pine Rdg	1560-0505013	Booster Tank	146.31	97
1560	Sacramento District	0505014	Greenwood Way	1560-0505014	Booster Tank	4,590.02	16,603
1560	Sacramento District	0505015	Live Oak Dr	1560-0505015	Booster Tank	8,151.78	30,182
1560	Sacramento District	0505016	Off Darling Wy	1560-0505016	Well/Booster/Tank	317.67	78
1560	Sacramento District	0505017	Sutton Dr	1560-0505017	Well/Tank	41,272.39	174,705
1560	Sacramento District	0505018	Lt 12 & Boulder Pl	1560-0505018	Booster/Tank	582.10	1,759
1560	Sacramento District	0505019	John West Rd	1560-0505019	Tank	202.09	311
1560	Sacramento District	0505020	Bon Veu	1560-0505020	Well	20,881.22	84,973
1560	Sacramento District	0505021	Highland View Ln	1560-0505021	Well/Tank	11,489.74	44,682
1560	Sacramento District	0505022	RD 426 & Courtney Ln-Public Wate	1560-0505022	Booster Tank	407.70	1,094
1560	Sacramento District	0505023	Inidan Spgs Rd	1560-0505023	Booster/Tank	252.09	507
1560	Sacramento District	0505024	Victoria Ln	1560-0505024	Booster Tank	3,447.05	3,828
1560	Sacramento District	0505025	Off Victoria Ln	1560-0505025	Well	4,170.58	6,098
1560	Sacramento District	0505026	Indian Rock Rd #1	1560-0505026	Well	127.74	34
1560	Sacramento District	0505027	Indian Rock Rd #2	1560-0505027	Well	124.55	22
1560	Sacramento District	0505028	Meadow Springs L Loc 24	1560-0505028	Well	1,956.17	6,395
1560	Sacramento District	0505029	Echo Valley View Court Well 7	1560-0505029	Well	23,780.94	97,456
1560	Sacramento District	0505030	NE Cor/O Victoria Ln N Slope Rd	1560-0505030	Well/Booster/Tank	9,064.60	33,370
1560	Sacramento District	0505031	51105 Road 426	1560-0505031	Well/Booster/Tank	55,445.78	208,656
1560	Sacramento District	0505032	48444 Victoria Ln	1560-0505032	Well	3,014.82	10,838
1560	Sacramento District	0505033	SE NW NW 21 8 19	1560-0505033	Well	12,702.90	48,623
1560	Sacramento District	0505034	Road 600 Valley St	1560-0505034	Well/Booster/Tank	123.75	17
1560	Sacramento District	0505035	Off Rd 600	1560-0505035	Booster Tank	119.60	0
1560	Sacramento District	0505036	32282 Horse Canyon Rd	1560-0505036	Well	153.32	131
1560	Sacramento District	0505037	End of Bon Veu Circle	1560-0505037	Well	8,976.90	33,381
1560	Sacramento District	0505038	Echo Valley View Court Well 6	1560-0505038	Well	15,630.77	58,837
1560	Sacramento District	0505039	Woodside Dr	1560-0505039	Booster Tank	6,849.90	26,015
1560	Sacramento District	0505040	PO Box 2269	1560-0505040	Security Light	149.63	78
1560	Sacramento District	0505041	DOM WELL	1560-0505041	Well	3,492.10	11,845
1560	Sacramento District	0505042	SEC 21 8 19	1560-0505042	Well	8,675.84	32,844
1560	Sacramento District	0505044	Dunnigan Well No. 1	1560-0505044	Well	6,021.10	21,808
1560	Sacramento District	0505045	Alton Arden Booster Statio	1560-0505045	Booster	1,709.40	8,079
1560	Sacramento District	1004534	2772 Meadowbrook 40HP pump	1560-1004534	Well	56,536.19	247,930
1560	Sacramento District	1004535	Maple & Fir - 40 HP pump	1560-1004535	Well	298.96	0
1560	Sacramento District	1004536	Fir & Maple - Chlorine pump	1560-1004536	Well	119.61	0
1560	Sacramento District	1004537	SW Corner Balsam & Poplar	1560-1004537	Well	28,487.43	93,074
1561	Larkfield District	0500152	Larkfield Water Treatment	1561-0500152	Treatment Plant	43,175.88	168,730
1561	Larkfield District	0500181	Lower Wikiup Tank & Boos	1561-0500181	Booster	6,384.24	22,913
1561	Larkfield District	0500206	North Wikiup Tank & Boos	1561-0500206	Booster	5,187.13	18,086

California American Water
Purchased Water Details
All Districts - 2022 General Rate Case

Source Data

References

,WP_Purchased Power - Original_101

Refer to Direct Testimony of Stephen Owens and Bahman Pourtaherian

1 2 4 5

Filing Type: Final

						\$	KWH
District #	District Name	Location #	Location Name	Unique Identifier	Service Type	Total Cost	Total Usage
1561	Larkfield District	0500316	Upper Wklup Tank & Boos	1561-0500316	Booster	2,293.34	7,393
1561	Larkfield District	0500333	Well 1A	1561-0500333	Well	7,056.91	25,594
1561	Larkfield District	0500335	Well 3A	1561-0500335	Well	36,785.65	136,856
1561	Larkfield District	0500336	Well 5	1561-0500336	Well	7,571.17	27,311
1561	Larkfield District	0503602	Aqueduct	1561-0503602	Dam	389.93	901
1561	Larkfield District	0504481	Geyserville Merrill Well 1	1561-0504481	Well	4,786.18	17,101
1561	Larkfield District	0504482	Geyserville Chianti Tank	1561-0504482	Tank	171.53	199
1561	Larkfield District	0504483	Geyserville Railroad Ave W	1561-0504483	Well	8,091.02	29,698
End	End	End	End	End	End	End	End
Check/Tie Out Section						9,182,277.78	49,107,157.39
Sum of the yearly balance							

Attachment 13: 2019 Pourtaherian Testimony on Chemical Expenses

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**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water
Company (U210W) for Authorization to Increase
its Revenues for Water Service by \$25,999,900 or
10.60% in the year 2021, by \$9,752,500 or 3.59%
in the year 2022, and by \$10,754,500 or 3.82% in
the year 2023.

Application 19-07-
(Filed July 1, 2019)

**DIRECT TESTIMONY OF BAHMAN POURTAHERIAN
(FINAL APPLICATION)**

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Attorneys for Applicant California-
American Water Company

Attorneys for Applicant California-American
Water Company

Dated: July 1, 2019

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those years. Similarly, the cost per kwh is calculated by taking the 2018 cost per district and dividing it by 2018's kwh usage. These district costs per kwh are then escalated each year of the rate case cycle. 2018 data were used because they contain the most up to date pricing from power providers and are more representative of the costs to be incurred.

D. Water Treatment – Chemicals (Account #744)

Q35. How were chemicals forecast for 2021 and 2022?

A35. Chemical costs were calculated based on a five-year inflation adjusted average for all service areas of the company and are included in PUC account 744.

VI. DEPRECIATION EXPENSE AND AD VALOREM TAXES

Q36. How were the Ad Valorem taxes calculated in the RO model?

A36. Ad Valorem tax rate in RO model is calculated by dividing actual Ad Valorem taxes paid in year 2018 by taxable plant for the same year. Forecasted Ad Valorem tax expense were calculated by multiplying the calculated Ad Valorem tax rates and forecasted taxable plant.

Q37. How were the estimates for plant depreciation expense calculated?

A37. The current authorized depreciation rates in D.18-12-021 were used to estimate the depreciation expense for 2019 - 2023. The depreciation rates were applied to the average Utility Plant in Service for each of the years 2019 - 2023. California American Water included a depreciation study in A.16-07-002 and no objections were made in the record regarding the study. However, D.18-12-021 rejected it. California American Water had not started preparing a new study due to the lack of objections in A.16-07-002, and the timing of D.18-12-021 did not leave California American Water with sufficient time to prepare a new study. The Company will provide a new depreciation study as part of its 2022 GRC.

Attachment 14: Metropolitan Water District of Southern California Treatment Process



Protecting Water Quality from Source to Tap

Safe Drinking Water is Our Mission

If water is life, then there is nothing more important in our daily lives than safe and sustainable water supplies. And there is nothing more important to Metropolitan than safeguarding the quality of drinking water we provide to our 26 member agencies and the communities they serve. To ensure we meet this responsibility, every year we test our water for more than 400 constituents and perform nearly 250,000 water quality tests on samples gathered from throughout our vast distribution system. We invest in the latest and best technology at our Water Quality Laboratory in La Verne and each of our five smaller treatment plant laboratories. And we rely on the expertise of our highly skilled staff from disciplines across the sciences, many of whom are leaders in their fields of research and regulatory compliance.

Metropolitan's water meets or surpasses all state and federal regulatory requirements.

Our staff oversees treatment operations that enable us to ensure water quality remains well-within state and federal guidelines. We go beyond the minimum requirements and conduct investigations that develop and optimize advanced analytical contaminant detection methods that provide additional operational support and understanding of water quality contaminants that are not regulated.



Water Quality Reporting

Metropolitan's Water Quality Report is available on our website in [English](#). The annual report provides information on the constituents in water that can affect your health, along with how it looks, smells and tastes. The report lists the maximum levels



allowed by state and federal regulations, and the levels found at our five water treatment plants and throughout our distribution system. The report also includes contact information, along with health advisories for sensitive populations.



The Mechanics of Treating Water

Before water pours from a tap, it passes through one of our five water treatment plants, which together can disinfect more than 2 billion gallons of water daily, using a five-step treatment process. All of our facilities use ozone as the primary disinfectant. Ozone destroys a wider range of micro-organisms and allows Metropolitan to keep pace with stringent regulations that limit the levels of drinking water disinfection byproducts in water. The result is historically low levels of disinfection byproducts systemwide. Ozone disinfection also provides increased protection from pathogens and improves the taste and smell of water.

Learn more about ozone disinfection [here](#).



Treatment Steps

As water enters the treatment plant, the first step is **Disinfection** and, depending on the source water quality, it may be necessary to add various chemicals to optimize this process. Water is disinfected using ozone primarily, which kills microorganisms, including pathogens

The third step is **Flocculation** as water further mixes with the coagulant chemicals added in the previous step, allowing time for larger suspended particles in the water to bind together and form "floc."

Once the treatment process is completed, chlorine and ammonia are added to the water to form chloramines and maintain a disinfectant residual in the distribution system. This ensures water quality is maintained as supplies travel through the

such as viruses, including SARS-CoV-2, and protozoa such as *Cryptosporidium* and *Giardia*.

As water flows through the ozone contactors, hydrogen peroxide may be added for taste and odor control. If there are any interruptions in the ozone process, chlorine can also be used as a back-up disinfectant and is readily available.

The second step in the treatment process is **Coagulation**, where chemical coagulants — such as alum (aluminum sulfate) or ferric chloride and polymer — are injected into the water and mixed rapidly using flash jet mixers. The coagulants help unwanted particles stick together, making larger particles that are more easily removed. Water then flows into the mixing and settling basins, where large mechanical mixers or flocculators gently agitate the water.

The fourth step is **Sedimentation**. In this process, the floc particles, which are much heavier than the surrounding water, settle to the bottom of the basin, forming a layer of material that is later removed. In the fifth step, Filtration, filter aid is applied to settled water from the sedimentation basins to help remove particles.

Filters consist of layers of anthracite coal, sand, and gravel filter media. As water passes through, the filters remove smaller particles from the water as well as larger particles that did not settle during the sedimentation process.

distribution system. Caustic soda also is added as a corrosion control measure to adjust the pH level of the water and protect pipes and plumbing fixtures. Fluoride is added to help prevent dental caries as recommended by the U.S. Department of Health and Human Services. Treated water is temporarily stored in finished water reservoirs and distributed to member agency connections.



Metropolitan's Treatment Plants



F.E. Weymouth Water Treatment Plant

The Mission-style Weymouth plant in La Verne began treating and delivering water in 1941. Today, it treats up to 520 million gallons of water per day and is home to Metropolitan's world-renowned Water Quality Laboratory. The plant generally serves eastern Los Angeles County, the San Gabriel Valley and parts of Orange County. It is named for Frank E. Weymouth, the general manager who oversaw construction of the Colorado River Aqueduct (and died just weeks after its completion).

Robert B. Diemer Water Treatment Plant

The Diemer plant started operation in 1964 and treats as much as 520 million gallons per day. It is the only water treatment plant that generates electricity through a hydroelectric power plant, thanks to the 5.1-megawatt Yorba Linda Hydroelectric Power Plant. It is named for Robert B. Diemer, who built Metropolitan's initial distribution system starting in 1934, and who became general manager from 1952 to 1961. The Diemer plant serves areas of Orange County and coastal Los Angeles.





Joseph Jensen Water Treatment Plant

Commissioned in 1971, the Jensen plant is the largest such facility west of the Mississippi River, with a capacity of 750 million gallons per day. Treated water from the plant helps supply the San Fernando Valley, Ventura County, West Los Angeles, Santa Monica and the Palos Verdes Peninsula. It is named for Joseph Jensen, Metropolitan's longest serving board chair, serving from 1949 to 1974.

Robert A. Skinner Water Treatment Plant

The Skinner plant is located in the southwestern corner of Riverside County in the community of Winchester, south of Hemet. Dedicated in 1976, it provides up to 350 million gallons per day to Eastern and Western municipal water districts in Riverside County, and to the San Diego County Water Authority. The plant was named for Robert A. Skinner, an engineer who served as Metropolitan's General Manager from 1962 to 1967.



Henry J. Mills Water Treatment Plant

In 1978, the Mills plant in Riverside came online and treats up to 220 million gallons per day. The smallest of Metropolitan's water treatment plants, it is named for Henry J. "Hank" Mills, who capped a 41-year Metropolitan career by becoming general manager in 1967 until his retirement in 1971. The Mills plant provides water to western Riverside County.



[Learn More](#) →

Supporting Innovation with Science

Attachment 15: City of Sacramento 2020 Urban Water Management Plan

City of Sacramento 2020 Urban Water Management Plan



JOINTLY PREPARED BY

City of
SACRAMENTO

WEST YOST
Water. Engineered.

CITY OF SACRAMENTO WATER SUPPLIES

The City has the following existing water supplies:

- Surface water diverted from the Sacramento River, which is treated at the Sacramento Water Treatment Plant
- Surface water diverted from the American River, which is treated at the E.A. Fairbairn Water Treatment Plant
- Groundwater pumped from City-owned and operated wells from the underlying North American and South American subbasins

To reliably meet current and future water demands, the City is evaluating several projects to increase the long-term water treatment capacities. The first project the City is considering is the expansion of the Sacramento River Water Treatment Plant. The second project the City is considering is RiverArc project, which is proposed to be a new regional water treatment plant that could benefit the greater Sacramento area.

In addition to considering the Sacramento River Water Treatment Plant expansion or the RiverArc Water Treatment Plant projects, the City's on-going Water Master Plan Update recommends for the City to continue to plan for the rehabilitation of the E.A. Fairbairn Water Treatment Plant and the retrofit of the existing intake at the Sacramento Water Treatment Plant. The City's Groundwater Master Plan recommended for the City to expand its groundwater program.

CONSERVATION TARGET COMPLIANCE

In accordance with SB X7-7, the City must meet a per capita water use target of 225 gallons per person per day by 2020 for its water service area. Looking at the City's water service area population and water use in 2020, the City met and exceeded its water conservation target with a per capita water use of 169 gallons per person per day.

WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

The California Water Code requires water suppliers to evaluate their water service reliability by examining the impact of drought on their water supplies and comparing those reduced supplies to water demands. Specifically, agencies should calculate their water supplies during a single dry year and five consecutive dry years using historical records.

The City is well-positioned to withstand the effects of a single dry year and a five-year drought at any period between 2025 and 2045. The City's drought risk was specifically assessed between 2021 and 2025, assuming that the next five years are dry years. In each case, water supplies comfortably exceed water demands. This remains true whether the drought occurs in 2021, 2045, or any year between.

Table 4-7. Wholesale Demands for Potable and Non-Potable Water – Actual
(DWR Table 4-1 Wholesale)

Use Type	2020 Actual		
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUE data online submittal tool	Additional Description (as needed)	Level of Treatment When Delivered Drop down list	Volume*
Add additional rows as needed			
Sales to other agencies	SCWA - Airport	Drinking Water	712
Sales to other agencies	SCWA - Zone 50 Metro Air Park	Drinking Water	90
Sales to other agencies	SSWD - Arden	Drinking Water	390
Sales to other agencies	Cal Am Arden	Drinking Water	0
Sales to other agencies	Cal Am Fruitridge	Drinking Water	267
Sales to other agencies	Cal Am Parkway	Drinking Water	1,127
Sales to other agencies	Cal Am Rosemont	Drinking Water	1,022
TOTAL			3,607
* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.			
NOTES: Units are in acre-feet (AF). The City did not deliver water to Natomas Unified School District in 2020.			

4.3.3 Projected Wholesale Water Use

In the future, the City may expand its role as a wholesaler for the benefit of other water purveyors and their customers in the region. Projected wholesale demands were developed in the on-going Water Master Plan Update and are based on two future supply scenarios: 1) probable estimate of future wholesale demands; and 2) maximum estimate that assumes all water agencies within the American River Place of Use Boundary receive wholesale water. The probable estimate is based on other agencies' master plans, communications that other agencies have had with the City, or by judgment of the City staff, as reported in the City's on-going Water Master Plan Update. As discussed in Chapter 3, the City currently provides wholesale and wheeling service to several neighboring water agencies. A brief description of the POU boundaries is presented in Chapter 3.

For the purposes of this 2020 UWMP, it is assumed that the existing wholesale customers will take the probable estimate by 2030 and assumed that all wholesale customers within the American River POU Boundary will take the maximum estimate by 2040. Projected wholesale demands past 2040 are not expected to change. The interim years are linearly interpolated. Table 4-8 summarizes the projected wholesale customer water use through 2045.

Table 4-12. Retail Last Five Years of Water Loss Audit Reporting (DWR Table 4-4 Retail)

Reporting Period Start Date (mm/yyyy)	Volume of Water Loss ^{1,2}
07/2015	9,856
07/2016	6,801
07/2017	8,391
07/2018	9,160
07/2019	10,097
¹ Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet. ² Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3. NOTES: Units are in acre-feet (AF). Water loss audits are prepared based on the fiscal year.	

Losses from the City's wholesale water distribution system are included in the retail water distribution system reporting. The City's distribution system for retail and wholesale customers is a single system and not separated. Therefore, Table 4-13 assumes a wholesale loss of 0 AF to avoid over counting system losses. In addition, the City's wholesale customers will report their individual system water losses in their UWMPs.

Table 4-13. Wholesale Last Five Years of Water Loss Audit Reporting (DWR Table 4-4 Wholesale)

Reporting Period Start Date (mm/yyyy)	Volume of Water Loss ^{1,2}
-	-
¹ Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet. ² Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3. NOTES: Water loss audit reporting for the City's wholesale customers is included in the Retail Water Loss Audit reporting as the City's water distribution system for wholesale and retail customers is a single system.	

At the time of preparation of this UWMP, DWR and the State Water Board are in the process of adopting water loss standards. This is discussed further in Chapter 9.

Attachment 16: City of Sacramento Drinking Water Source and Treatment

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WATER HOME
WATER QUALITY HOME
WATER TREATMENT PROCESS
► WATER QUALITY
DATA PORTAL
GLOSSARY
CONTACT US

WHERE YOUR WATER COMES FROM

The City of Sacramento has provided drinking water service since it was founded in 1849.

One of our primary goals is to deliver the highest quality water to our customers, which requires a team of experts from certified treatment and distribution operators to laboratory technicians and chemists.

Staff work 24/7 to provide the highest quality water for residents and businesses in the city.

DRINKING WATER SOURCES

About 80 percent of the City's water supply is surface water and comes from the Sacramento and American rivers. The remaining 20 percent of water comes from a system of about 28 groundwater wells that pull water from an underground layer that acts like a reservoir..

Groundwater is treated on site at the wells while surface water is treated at the E.A. Fairbairn and Sacramento River Water Treatment plants located on the American and Sacramento rivers.

After it's treated, drinking water travels through 1,500 miles of pipe to homes and businesses.

Our water quality team routinely monitors your water to ensure it meets regulations set by the U.S. Environmental Protection Agency and State Water Resources Control Board, designed to protect public health and ensure aesthetic qualities.

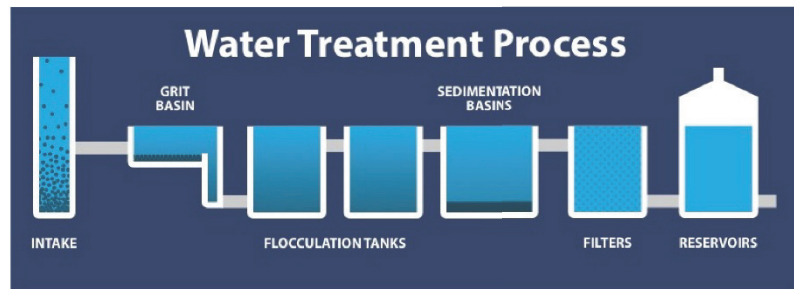


THE DRINKING WATER TREATMENT PROCESS

Drinking water in the city goes through a comprehensive treatment process, which removes harmful materials, including sand, sediment, bacteria and viruses

1. **Intake:** Our intake structures on the Sacramento and American rivers pump water into the grit basin.

2. **Grit Basin:** Sand and other heavy particles settle out in the grit basin and then water flows from the top of the basin to the next step.
3. **Flocculation Tanks:** In the flocculation tanks, coagulants are added and the water is gently mixed, which causes particles to grow large enough to settle.
4. **Sedimentation Tanks:** The water flows into sedimentation basins where particles settle to the bottom, which removes about 85 percent of suspended matter in the water.
5. **Filters:** Water is fed through filters of sand and anthracite (hard coal), coming out crystal clear.
6. **Reservoirs:** Our treatment plant reservoirs store water until it is needed.



Attachment 17: Department of Water Resources Submittal Table 4-1

AutoSave Off FINAL Submittal 2020 UWMP Tables 05.20.2021 Search

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	A	B	C	D	E
1					
2	Submittal Table 4-1 Retail: Demands for Potable and Non-Potable¹ Water - Actual				
3	Use Type	2020 Actual			
4	Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool	Additional Description (as needed)	Level of Treatment When Delivered Drop down list	Volume²	
5	Add additional rows as needed				
6			Drinking Water		
7			Raw Water		
8			Other Non-Potable Water		
9					
10			Drinking Water		
11			Raw Water		
12			Other Non-Potable Water		
13					
14					

Table 3-1 W **Table 4-1 R** Table 4-1 W Table 4-2 R Table 4-2 W Table 4-3 R Table 4-3 W

Ready Accessibility: Investigate

Attachment 18: Water Loss Performance Standards Draft Regulatory Text

Water Loss Performance Standards Draft Regulatory Text

Title 23. Waters

Division 3. State Water Resources Control Board and Regional Water Quality Control Boards

Chapter 3.5. Urban Water Use Efficiency and Conservation

Article 1. Water Loss Performance Standards for Urban Retail Water Suppliers

§ 980. Definitions

As used in this Article:

- (a) "Active leak detection" means a leak control strategy utilizing the appropriate combination of leak detection surveys and continuous monitoring of flows~~the industry approach used to proactively detect and locate leaks in water distribution systems owned or operated by urban retail water suppliers.~~
- (b) "Annual audit" means the validated annual water loss audit submitted by an urban retail water supplier pursuant to Water Code 10608.34, subdivision (b).
- (c) "Annual background leakage" ~~means~~ is the estimated total fraction of real loss that is not detected by active leak detection in a distribution system, in acre-feet per year. The default value shall be the value calculated in accordance with section 982, subdivision (a)(1).
- (d) "Annual reported leakage" ~~means~~ is the total volume of real loss occurring due to reported leaks on mains and reported leaks in lateral and service lines, in acre-feet per year. Reported leakage is a component of real loss. The default value shall be the value calculated in accordance with section 982, subdivision (a)(2).
- (e) "Annual unreported leakage" ~~means~~ is the average baseline real loss that remains after deducting the annual reported leakage and the annual background leakage from the average baseline real loss, in acre-feet per year. Unreported leakage is a component of real loss. The default value shall be the value calculated in accordance with section 982, subdivision (a)(3).
- (f) "Apparent losses" means losses in customer consumption attributed to inaccuracies associated with customer metering, systematic data handling errors, plus unauthorized consumption (theft or illegal use of water), the type of inaccuracies associated with customer metering and billing inaccuracies, in addition to water loss to theft, as reported in the annual audit as "apparent losses."

(2) Multiple public water systems that are owned and operated by the same supplier are, together, considered an urban retail water supplier, provided they:

(A) Individually serve 200 connections or more;

(B) Collectively, meet the criteria in paragraph (1); and

(C) Meet one or more of the criteria below:

(i) The systems are permanently interconnected;

(ii) The service area boundaries are adjacent;

(iii) The supplier is using the system's data, such as population or landscape area, to calculate its urban water use objective pursuant to Water Code section 10609.20.

(eee) "Water from own sources" means the volume of water withdrawn from water resources controlled by the urban retail water supplier as reported by the urban retail water supplier in the annual audit as "volume from own sources."

Authority: Section 1058, Water Code.

References: Article X, Section 2, California Constitution; Sections 116275 and 116902, Health and Safety Code; Sections 102, 104, 105, 350, 516, 1846, 10608.12, and 10608.34, and 10609.2, and 10609.4, Water Code.

§ 981. Volumetric Water Loss Performance Standards

- (a) No later than January 1, 2028, each urban retail water supplier shall reduce real loss from its distribution systems to no greater than the real water loss standard identified in section 982~~this article~~, as reflected in the supplier's reported real loss in its annual audit submitted for 2027.
- (b) If the urban retail water supplier's real loss reported in its 2027 annual audit exceeds the supplier's real water loss standard calculated in accordance with section 982, the supplier will be in compliance with subdivision (a) of this section if the supplier has achieved its real water loss standard as reflected in the real loss levels reported in its annual audit submitted for either 2025 or 2026.
- (c) After 2028, each urban retail water supplier's compliance with its real water loss standard shall be assessed in every third year based on an average of the real losses reported in its three most recent annual audits. A supplier shall maintain, for each compliance assessment, real loss that is no greater than 5 gallons per connection per day above the supplier's real water loss standard.
- (d) At the time compliance with real water loss standards is assessed, apparent losses will also be evaluated. ~~If the average apparent losses for any compliance period are greater than~~Each supplier's apparent loss standard is the average of the supplier's baseline apparent losses plus an allowed variation of 25 gallons per connection per day. If the average apparent losses for any compliance period are greater than this standard, then the supplier must submit an inventory of all apparent losses, and any calculations and data used to determine apparent losses for that compliance period within 6 months of being informed by the State Water Board of exceeding the apparent losses standard.
- (1) The apparent losses inventory shall include any calculations and data used to determine apparent losses for the water loss audits spanning the compliance

period for which the standards have been evaluated. Each inventory item shall include the type of apparent loss (for example, metering inaccuracies, data handling errors, theft), the estimated volume of loss, and how each value was determined (for example, direct measurement, calculation based on specific equation(s), visual estimate).

- (2) The apparent losses inventory must be submitted on a spreadsheet readable by the Board within 6 months of the supplier being informed by the Board that the supplier has exceeded its apparent loss standard. The Board will make a template available on its website.
- (e) An urban retail water supplier's real water loss standard may be adjusted to include changes to the default parameter inputs identified in section 982(c), pursuant to section 984.
- (f) An urban retail water supplier may calculate the average baseline real loss using three out of the four years of the baseline period by removing an outlier value that varies by over 10 gallons per service connection per day from the each of the adjacent values for the other three years or that is negative. If one year of real loss is removed from a supplier's calculated baseline real loss, that same year must be removed from the baseline average length of mains, average service connections, average operating pressure, average variable production cost, and average apparent loss calculations.
- (g) In accordance with section 985, an urban retail water supplier may seek approval of a variance to its real water loss standard in response to unexpected adverse conditions and to its apparent water loss standard if apparent loss data quality improves.
- (h) An urban retail water supplier whose service area meets the following criteria shall achieve compliance with this section no later than January 1, 2031:
 - (1) The service area has a disadvantaged communities (DAC) or severely disadvantaged communities (SDAC) designation owing to the median household income of the supplier's service area being less than or equal to 80 percent of the median household income of California per the median household income determination conducted by the board;
 - (2) The service area has a calculated benefit to cost ratio until 2028, pursuant to section 982, subdivision (a)(24), of less than 2; and
 - (3) The urban retail water supplier's real water loss standard calculated pursuant to section 982, subdivision (b) is lower than the supplier's average baseline real loss by 25% or more.
- (i) Suppliers that do not meet their ~~real~~water loss standard by January 1, 2028, will be considered in compliance for the first compliance period if:
 - (1) The supplier's real water loss standard is lower than the supplier's average baseline real loss by 30% or more;
 - (2) The supplier's 2025, 2026, or 2027 water loss audits show progress as a reduction of real loss by at least 30% of the difference between the average baseline real loss and the real water loss standard;
 - (3) The supplier's data validity scores are at Level 3 or the supplier has demonstrated improving data validity scores. When determining eligibility, consideration will be given to data validity score reductions related to

water audits prepared using different versions of the water auditing software;

- (4) The supplier has completed ~~one~~^{two} full cycle of leak detection surveys; and
- (5) The supplier has submitted a written request for this compliance pathway to the Board and received approval prior to January 1, 2028. The request shall include:
 - (A) Why the supplier was unable to meet its real water loss standard;
 - (B) A list of leakage prevention activities the supplier has engaged in to prevent water loss;
 - (C) How the supplier is being a good steward with respect to other pieces of Water Code, division 6, part 2.55, chapter 9; and
 - (D) A plan for how it will meet its real water loss standard no later than January 1, 2031.

(j) For systems that do not meet the criteria to be considered an urban retail water supplier in section 980(ccc) until after the effective date of this section, this section applies beginning five (5) years after the system meets the criteria to be considered a supplier, except that the supplier must submit annual water loss audits starting with data for the first full year (calendar year or fiscal year, depending on how the supplier chooses to report its audits) it meets the criteria to be considered a supplier.

(1) The baseline period for suppliers subject to this subdivision consists of the first four years of submitted data.

(2) For suppliers subject to this subdivision, compliance with their real water loss standards will be assessed pursuant to subdivision (c) at the end of the first full compliance period after the standard is assigned except that if there is less than one full year between the standard being assigned and the start of the first full assessment period, compliance will be assessed at the end of the next full compliance period.

Authority: Sections 1058, 10608.34, Water Code.

References: Article X, Section 2, California Constitution; Section 116275, Health and Safety Code; Sections 102, 104, 105, 350, 516, 1846, 10608.12, and 10608.34, Water Code.

§ 982. Economic Model

- (a) Except as provided in subdivision (d), each urban retail water supplier's real water loss standard shall be based on the formula identified in subdivision (b), with the following inputs based on each supplier's own data or the default value:

- (1) Annual background leakage:
Annual background leakage shall be calculated as follows:

$$\begin{aligned}
& \left(0.2 \left[\frac{\text{thousand gallons}}{\text{mile} \cdot \text{day}} \right] \times \text{Length of mains [miles]} \right. \\
& \left. + 0.008 \left[\frac{\text{thousand gallons}}{\text{service connection} \cdot \text{day}} \right] \times \text{Number of service connections} \right) \\
& \times \left(\frac{\text{Average operating pressure [psi]}^{1.5}}{70[\text{psi}]} \right) \times \text{Infrastructure Condition Factor} \\
& \times \left[\frac{1,000 \text{ gallons}}{\text{thousand gallons}} \right] \times \left[\frac{1 \text{ acre} - \text{foot}}{325,851 \text{ gallons}} \right] \times \left[\frac{365 \text{ days}}{\text{year}} \right]
\end{aligned}$$

(2) Annual reported leakage:

Annual reported leakage shall be calculated as follows:

$$\begin{aligned}
& 50 \left[\frac{\text{gallons}}{\text{leak} \cdot \text{minute}} \right] \times \left[\frac{1 \text{ acre} - \text{foot}}{325,851 \text{ gallons}} \right] \times 0.2 \left[\frac{\text{leaks}}{\text{mile}} \right] \\
& \times \text{Length of mains [miles]} \times \left[\frac{60 \text{ minutes}}{\text{hour}} \right] \times \left[\frac{24 \text{ hours}}{\text{day}} \right] \times 3 \left[\frac{\text{days}}{\text{year}} \right] \\
& + 7 \left[\frac{\text{gallons}}{\text{leak} \cdot \text{minute}} \right] \times \left[\frac{1 \text{ acre} - \text{foot}}{325,851 \text{ gallons}} \right] \\
& \times 0.75 \left[\frac{\text{leaks}}{\text{thousand service connections}} \right] \times \left[\frac{\text{thousand service connections}}{1,000 \text{ service connections}} \right] \\
& \times \text{Number of service connections} \times \left[\frac{60 \text{ minutes}}{\text{hour}} \right] \times \left[\frac{24 \text{ hours}}{\text{day}} \right] \times 8 \left[\frac{\text{days}}{\text{year}} \right]
\end{aligned}$$

(3) Annual unreported leakage:

Annual unreported leakage shall be calculated by deducting annual background leakage and annual reported leakage from average baseline real loss.

(4) Months taken to survey whole system:

Months taken to survey whole system shall be calculated by dividing average length of mains by average leak detection survey frequency.

(5) Part of system:

Each part represents the amount of the system that can be surveyed each month, such that the number of parts in a system is equal to the number of months needed to survey the whole system.

(6) Unreported leakage per part of system:

Unreported leakage per part of system shall be calculated by dividing annual unreported leakage by months taken to survey whole system.

(7) Rate of rise of leakage per part of system:

Rate of rise of leakage per part of system shall be calculated by dividing rate of rise of leakage by months taken to survey whole system.

- (8) Monthly water lost due to backlog of unreported leakage:

Monthly water lost due to backlog of unreported leakage shall be calculated as follows:

$$\begin{aligned} & (\text{Months taken to survey whole system} - \text{month of implementation} + 1) \\ & \times \text{Unreported leakage per part of system} \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right) \end{aligned}$$

- (9) Monthly water lost from rising leakage in never surveyed parts of the system:
Monthly water lost from rising leakage prior to first leak survey shall be calculated as follows:

$$\begin{aligned} & \frac{(\text{Months taken to survey whole system} - \text{month of implementation} + 1) \times \text{Rate of rise in leakage} \left[\frac{\text{acre} - \text{feet}}{\text{year}^2} \right]}{\text{month}} \\ & \times \left(\frac{\text{month of implementation} - 1}{2} \right) \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right)^2 \\ & \frac{(\text{Months taken to survey system} - \text{Month of Implementation} + 1)[\text{months}] \times \text{Average annual rise in leakage} \left[\frac{\text{acre} - \text{feet}}{\text{year}^2 \times \text{part}} \right]}{\times (12 \text{ months since the end of 2020} + \text{Month of implementation} - 0.5)[\text{months}] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right)^2} \end{aligned}$$

- (10) Monthly water lost from rising leakage in previously surveyed parts of the system:

(A) Before one full leak detection survey has been completed, the monthly water lost from rising leakage in previously surveyed parts of the system shall be calculated as follows:

$$\begin{aligned} & \text{Rate of rise in leakage} \left[\frac{\text{acre} - \text{feet}}{\text{year}^2} \right] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right)^2 \\ & \times \frac{(\text{month of implementation} - 1)^2}{2} \end{aligned}$$

(B) After the entire system has been surveyed once, the monthly water lost from rising leakage in previously surveyed parts of the system shall be calculated as follows:

$$\begin{aligned} & \text{Rate of rise in leakage} \left[\frac{\text{acre} - \text{feet}}{\text{year}^2} \right] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right)^2 \\ & \times \frac{\text{months taken to survey whole system}^2}{2} \end{aligned}$$

- (11) Monthly unreported real loss with intervention:

Monthly unreported real loss with intervention shall be the sum of monthly water lost due to backlog of unreported leakage, monthly water lost from

rising leakage in never surveyed parts of the system, and monthly water lost from rising leakage in previously surveyed parts of the system.

(12) Monthly unreported real loss without intervention:

Monthly unreported real loss without intervention shall be calculated as follows:

$$\frac{\text{Months taken to survey whole system} \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right) \times \left(\text{Unreported leakage per part of system} \left[\frac{\text{acre - feet}}{\text{year}} \right] + \text{Rate of rise in leakage} \left[\frac{\text{acre - feet}}{\text{year}^2} \right] \right)}{\times \left(\frac{\text{month of implementation}}{2} \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right) \right)} \times \left(\frac{\text{Annual Unreported Leakage} \left[\frac{\text{acre - feet}}{\text{year}} \right] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right)}{+ \left(\text{Rate of rise in leakage} \left[\frac{\text{acre - feet}}{\text{year}^2} \right] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right)^2 \times 12 \text{ months since the end of 2020} \right)} \right)$$

(13) Water saved in month of implementation:

Water saved in month of implementation shall be calculated by deducting monthly unreported real loss with intervention from monthly unreported real loss without intervention.

(14) Marginal avoided cost of water:

(A) At the beginning of 2022, the marginal avoided cost of water shall be calculated as follows:

$$\text{Avoided cost of alternative supplies} \times \left(1 + \text{Rise in price of water} \left[\frac{\text{acre - feet}}{\text{year}^2} \right] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right)^2 \times 24 \text{ months from 2020} \right)$$

(B) After 2022 begins, the marginal avoided cost of water shall be calculated as follows:

$$\text{Avoided cost of alternative supplies} \times \left(1 + \text{Rise in price of water} \left[\frac{\text{acre - feet}}{\text{year}^2} \right] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right) \times (\text{month of implementation} - 1) \right)$$

(15) Value of water loss reduced in each month:

Value of water loss reduced in each month shall be calculated as follows:

$$\frac{(\text{water loss occurring without intervention} - \text{water loss occurring with intervention})}{\times \text{Marginal cost of water in each time step}}$$

(16) Present value of water loss reduced each month:

Present value of water loss reduced each month shall be calculated as follows:

$$\frac{\text{Future value of water reduced}}{\left(1 + \text{discount rate} \times \frac{1 \text{ year}}{12 \text{ months}} \right)^{\text{month of implementation}}}$$

(17) Cost of leak detection during each month:

Cost of leak detection during each month shall be the product of average leak detection survey frequency in miles surveyed each month and average cost of leak detection surveying per mile.

(18) Initial leakage level for part surveyed each month:

(A) Before one full leak detection survey has been completed, then unreported leakage per month shall be calculated as follows:

$$\text{Unreported leakage per part of system} \left[\frac{\text{acre} - \text{feet}}{\text{year}} \right] + \text{month of implementation} \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right) \\ \times \text{Rate of rise in leakage} \left[\frac{\text{acre} - \text{feet}}{\text{year}^2} \right] \left[\frac{\text{year}^2}{\text{month}} \right]$$

(B) After the entire system has been surveyed once, unreported leakage per month shall be calculated as follows:

$$\text{Rate of rise in leakage} \left[\frac{\text{acre} - \text{feet}}{\text{year}^2} \right] \times \left(\frac{1 \text{ year}}{12 \text{ months}} \right) \times \text{Months taken to survey whole system}$$

(19) Average volume per leak per year:

Average volume per leak per year shall be calculated as follows:

$$\left(\frac{\text{Volume leakage from mains} [\text{acre} - \text{feet}/\text{leak}/\text{year}] \times \text{Total Unreported leaks on mains} \left[\frac{\# \text{ leaks}}{\text{year}} \right]}{\left(\text{Total unreported leaks on mains} \left[\frac{\# \text{ leaks}}{\text{year}} \right] + \text{Total Unreported leaks on service connections} \left[\frac{\# \text{ leaks}}{\text{year}} \right] \right)} \right) \\ + \left(\frac{\text{Volume of leakage from service connections} [\text{acre} - \text{feet}/\text{leak}/\text{year}] \times \text{Total Unreported Leaks on service connections} \left[\frac{\# \text{ leaks}}{\text{year}} \right]}{\left(\text{Total Unreported Leaks on main} \left[\frac{\# \text{ leaks}}{\text{year}} \right] + \text{Total Unreported Leaks on service connections} \left[\frac{\# \text{ leaks}}{\text{year}} \right] \right)} \right)$$

(20) Volume of leakage from mains:

Volume of leakage from mains per leak per year shall be calculated as follows:

$$\frac{\text{Estimated average flow rate for unreported leaks on mains} \left[\frac{\text{gallons}}{\text{minute}} \right]}{\times \left(\frac{60 \text{ minutes}}{1 \text{ hour}} \right) \times \left(\frac{24 \text{ hours}}{1 \text{ day}} \right) \times \left(\frac{365 \text{ days}}{1 \text{ year}} \right) \times \left(\frac{1 \text{ acre} - \text{foot}}{325,851 \text{ gallons}} \right)}$$

(21) Volume of leakage from service connections:

Volume of leakage from service connections per leak per year shall be calculated as follows:

$$\frac{\text{Estimated average flow rate for unreported leaks on service connections} \left[\frac{\text{gallons}}{\text{minute}} \right]}{\times \left(\frac{60 \text{ minutes}}{1 \text{ hour}} \right) \times \left(\frac{24 \text{ hours}}{1 \text{ day}} \right) \times \left(\frac{365 \text{ days}}{1 \text{ year}} \right) \times \left(\frac{1 \text{ acre} - \text{foot}}{325,851 \text{ gallons}} \right)}$$

(22) Leaks found per part of the system:

Leaks found per part of the system is calculated for each month as follows:

$$\frac{\text{Initial leakage for part of system surveyed}}{\text{Annual unreported leakage}} \times \text{(Number of total unreported leaks on mains and service connections)} \\ \left(\frac{\text{Initial Leakage Level for part surveyed each month} [\text{acre} - \text{feet}/\text{year}]}{\text{Average Volume per Leak} \left[\frac{\text{acre} - \text{feet}/\text{year}}{\text{leak}} \right]} \right)$$

(23) Cost of leak repair during each month:

Cost of leak repair during each month shall be calculated as follows:

$$\frac{\text{Leaks found per part of system with intervention } \left[\frac{\# \text{ leaks}}{\text{year}} \right] \div \text{Efficiency of Leak Detection Equipment } [\text{percent}]}{\left(\frac{\text{Total Unreported Leakage on mains } \left[\frac{\# \text{ leaks}}{\text{year}} \right]}{\left(\frac{\text{Total Unreported leaks on mains } \left[\frac{\# \text{ leaks}}{\text{year}} \right] + \text{Total Unreported leaks on service connections } \left[\frac{\# \text{ leaks}}{\text{year}} \right]} \right) \times \text{Repair costs for leaks on mains } \left[\frac{\$}{\text{leak repaired}} \right]} + \left(\frac{\text{Total Unreported Leakage on service connections } \left[\frac{\# \text{ leaks}}{\text{year}} \right]}{\left(\frac{\text{Total Unreported leaks on mains } \left[\frac{\# \text{ leaks}}{\text{year}} \right] + \text{Total Unreported leaks on service connections } \left[\frac{\# \text{ leaks}}{\text{year}} \right]} \right) \times \text{Repair costs for leaks on service connections } \left[\frac{\$}{\text{leak repaired}} \right]} \right)} \times \left(\frac{\text{Unreported leakage per month}}{\text{Annual unreported leakage}} \right) \times \left(\frac{\text{Efficiency of leak detection equipment}}{\text{Efficiency of leak detection equipment}} \right)$$

~~× (Number of unreported leaks on mains)~~
~~× Average unit leak repair cost for mains~~
~~+ Number of unreported leaks on laterals and service lines~~
~~× Average unit leak repair costs for laterals and service lines per leak)~~

(24) Total leak detection and repair cost for each month:

Total leak detection and repair cost for each month shall be the sum of cost of leak detection during each month plus cost of leak repair during each month.

(25) Present value of cost for each month:

Present value of cost for each month shall be calculated as follows:

$$\frac{\text{Future cost of leak detection and repair}}{\left(1 + \text{discount rate} \times \frac{1}{12} \text{ years} \right)^{\text{month of implementation}}}$$

(26) Present value of net benefit in month of implementation:

Present value of net benefit in month of implementation shall be calculated by deducting present value of cost for each month from present value of benefit for each month.

(27) Present value of net benefit over 30 years:

Present value of net benefit over 30 years is the sum of present value of net benefit in month of implementation summed from January 1, 2022, through December 31, 2051.

(28) Benefit to cost ratio until 2028:

The Benefit to cost ratio until 2028 is the sum of present value of benefit for each month from January 2022 through December 2027 divided by the sum of the present value of cost for each month from January 2022 through December 2027.

(b) Each urban retail water supplier's real water loss standard shall be as follows:

(1) If the present value of net benefit over 30 years is negative, the real water loss standard is increased to the point at which the present value of the net benefit is positive, if possible. If a non-negative net benefit is not possible, the real water loss standard is equal to the average baseline real loss.

- (2) If the present value of net benefit over 30 years is zero or positive, the real water loss standard is equal to the sum of annual background leakage plus annual reported leakage plus unreported leakage for 2027.
- (c) For purposes of subdivision (a) of this section, each input value, except real discount rate, average annual rise in price of water, and effective timeline for lifecycle benefit-cost analysis, shall be either the default value identified in section 980, or the supplier's own value if adequately supported by documentation submitted to the board. Average annual rise in price of water shall be either the default value identified in section 980 or the supplier's own value if the requirements in section 984 subdivision (b) are met. If the board concludes that any specific value used by a supplier is not adequately supported by documentation, the board shall promptly communicate that deficiency to the supplier with a timeline within which to cure the deficiency.
- (d) (1) Suppliers may apply for a real water loss standard of 16 gallons per connection per day if the supplier has an average baseline real loss of 16 gallons per connection per day or less and~~The real water loss standard for an urban retail water supplier whose average baseline real loss is 16 gallons per connection per day or less, or, for an urban retail water supplier that reports real loss in gallons per mile per day in the annual audit, 1,184 gallons per mile per day or less, is not less than 16 gallons per connection per day, or, for an urban retail water supplier that reports real loss in gallons per mile per day in the annual audit, 1,184 gallons per mile per day, assessed on a three-year average basis every three years beginning 2028, if the supplier also meets the following criteria for its annual audits:~~
- (A) ~~The supplier does not show a year-to-year variability higher than 10 gallons per connection per day for suppliers reporting in gallons per connection per day or 740 gallons per mile per day for suppliers reporting in gallons per mile per day for real loss on any annual audit for the years used to calculate the average real loss pursuant to paragraph (3) of this subdivision 2017, 2018, 2019, and 2020.~~
 - (B) ~~For a supplier that has reported a negative value for theits real loss for any of the years used to calculate the average real loss pursuant to paragraph (3) of this subdivision 2017, 2018, 2019, or 2020, it has identified the cause for the negative value and documented the steps taken to correct it.~~
 - (C) ~~The supplier's water from own sources, imported water, and exported water are completely metered.~~
 - (D) ~~If the supplier's water from own sources is greater than 5% of the total water supplied, the supplier demonstrates that meters measuring at least 95% of the total produced volume are tested on at least an annual basis.~~
 - (E) ~~If the supplier's imported water volume is greater than 5% of the total water supplied, the supplier demonstrates that meters measuring at least 95% of the total imported volume are calibrated on at least an annual basis.~~

- (F) If the supplier's exported water volume is greater than 5% of the total water supplied, the supplier demonstrates that meters measuring at least 95% of the total exported volume are tested on at least an annual basis.
 - (G) All customer accounts, excluding those providing fire-flow, are metered, with at least 90% success rates in meter reading.
 - (H) A statistically significant sample of customer meters, as determined by the supplier, or 300 meters, whichever is lower, are tested annually.
 - (I) If the unbilled metered water volume is higher than 1% of the total water supplied, the supplier reads the meters for accounts that are supplied through unbilled metered water accounts at the same or greater frequency as the supplier reads the meters for the majority of customers.
- (2) ~~This subdivision shall only apply to urban retail water suppliers that submit, on or before January 1, 2023, supporting documentation to demonstrate they meet the real loss and data quality criteria of this subdivision. If a supplier that would otherwise meets the above criteria of this subdivision, except that it is unable to meet the criteria for subdivision (d)(1) paragraphs sections (D), (E), or (F) of subdivision (d)(1) due to aspects outside of its control, such as not having access to calibrate water meters owned by other entities or not being able to move large meters, then it may petition to be exempted from criteria involving only those aspects outside of their control. This petition may be granted at the discretion of the Board and may include provisions, such as a requirement to calibrate rather than test a meter or to request in writing that water meters be tested and/or calibrated by the entities that own them.~~
- (3) For the purposes of this subdivision, average real loss shall be calculated using the following years of data:
- (A) The original baseline period, which consists of data for the years 2017, 2018, 2019, and 2020, provided the submission is received by July 1, 2023; or
 - (B) Data for any three consecutive years, provided those years are within five years of the submission date.
- ~~(4) An urban retail water supplier whose average real loss reported for the years 2021 and 2022 is 16 gallons per connection per day or less, or, for an urban retail water supplier that reports real loss in gallons per mile per day in the annual audit, 1,184 gallons per mile per day or less, shall maintain real loss at or not less than 16 gallons per connection per day, or, for an urban retail water supplier that reports real loss in gallons per mile per day in the annual audit, 1,184 gallons per mile per day, assessed on a three-year average basis every three years beginning 2028, provided that the supplier also meets the criteria identified in subdivision (d)(1) of this section in its annual audits, except that for subdivisions (d)(1)(A) and (B) the supplier's data shall be for the years 2021 and 2022.~~
- (4) This subdivision shall only apply to urban retail water suppliers that submit supporting documentation to demonstrate that their average baseline real

loss is 16 gallons per connection per day or less and that they have met the data quality criteria of this subdivision. Submissions on or before July 1, 2023, will take effect immediately. Submissions received after July 1, 2023, will take effect in the next compliance period, exempting suppliers from the reporting requirements in section 983 for subsequent compliance periods.

Authority: Sections 1058, 10608.34, Water Code.

References: Article X, Section 2, California Constitution; Section 116275, Health and Safety Code; Sections 102, 104, 105, 350, 516, 1846, 10608.12, and 10608.34, Water Code.

§ 983. Questionnaires and Reporting Requirements

- (a) Each urban retail water supplier, except those meeting the criteria in section 982, subdivision (d), shall submit responses to specific questions developed by the board on metering practices and data handling that influence data quality for water loss audits by July 1, 2023. Questions shall solicit information on the following:
 - (1) The proportion of source/production water withdrawals that is metered
 - (2) The program for regular flow testing of its production and source meters for accuracy
 - (3) Frequency with which source meters are tested
 - (4) The program for regular electronic calibration of secondary instrumentation that supports source or production meters, including the frequency of calibration
 - (5) The proportion of authorized consumption that is measured by customer meters
 - (6) The program for regular flow testing of customer meters for accuracy
 - (7) Frequency with which customer meters are flow tested to determine accuracy
 - (8) Types of data handling and billing errors identified in the prior year
- (b) Each urban retail water supplier, except those meeting the criteria in section 982, subdivision (d), shall submit responses to specific questions developed by the board on pressure management practices and associated estimated real loss reduction that influence data quality for water loss audits by July 1, 2023, and updated responses by July 1, 2026. Questions shall solicit information on the following:
 - (1) Devices used to control pressure transients in the water distribution system
 - (2) Inspection, maintenance and repair of devices installed for controlling pressure transients in the distribution system
 - (3) Inspection, maintenance and repair of pressure reducing/modulating valves in the distribution system
 - (4) Frequency with which each device for controlling pressure transients is inspected
 - (5) Portions of the system that have high operating pressure
 - (6) Potential for reducing or modulating pressure to reduce leakage
 - (7) For update response due by July 1, 2026, approach to reduce leakage in high leakage zones

Attachment 19: Fact Sheet on Water Loss Performance Standards



Water Loss Performance Standards

Regulatory context

Water Code section 10608.34, subdivision (i), (Senate Bill 555, 2015) directs the Board to “adopt rules requiring urban retail water suppliers¹ to meet performance standards for the volume of water losses.” Pursuant to this law, urban retail water suppliers have been annually submitting water loss audits to the Department of Water Resources since October 2017. Additionally, urban retail water suppliers are required to calculate an [urban water use objective](#) that includes indoor, outdoor, commercial, industrial and institutional irrigation uses and allowed water loss by 2024 ([AB 1668 and SB 606, 2018](#)).

Proposed regulation

The proposed regulation consists of the following pieces:

Compliance

[January 1, 2028](#)

- Each urban retail water supplier will be required to comply, by 2028, with an individualized volumetric water loss standard *based on real loss*², using the economic model developed by the State Water Board and the supplier’s own unique data. Several alternative compliance pathways are included, such as for disadvantaged communities under certain circumstances.
- Post-2028 compliance with volumetric water loss standards will be assessed every three years based on the average of the supplier’s real loss from the preceding three years, with an allowed variation of 5 gallons per connection per day above the supplier’s water loss standard.
- Suppliers may comply with the standard by demonstrating a real loss value at or below the standard in either their 2026 or 2027 water loss audit.

[January 1, 2023](#)

Suppliers that have already achieved low levels *real loss* (under 16 gallons per connection per day or 1184 gallons per mile per day, depending on how the supplier

¹ Urban retail water suppliers directly supply potable municipal water to more than 3,000 connections or more than 3,000 acre-feet of potable water annually.

² Real loss is the physical loss of water from water distribution systems, as opposed to apparent losses, which are revenue losses due to meter inaccuracies, billing errors or unauthorized consumption.

reports real loss) based on high quality data (per criteria determined by the State Water Board) would not be required to submit responses to questionnaires on water loss-specific information or further reduce water loss. These suppliers will be required to maintain losses at or below 16 gallons per connection per day or 1184 gallons per mile per day, depending on how the supplier *reports* real loss.

January 1, 2023

Other than suppliers meeting the low water loss and high data quality standards prior to 2023, suppliers will be required to submit responses to questionnaires on water loss data quality.

July 1, 2024; and update in July 1, 2027

Other than suppliers meeting the low water loss and high data quality standards prior to 2023, suppliers will be required to submit responses to questionnaires on:

Pressure management, and systematic asset management (in 2024 and 2027).

Audit data and adjustments to model inputs

Formal rulemaking process and March 1 to July 1, 2023

- A supplier may discard outliers or negative values and use three out of the four years of audit data (2017-2020 audits) to establish their *average* baseline water loss. A reported real loss value for a year that varies more than 10 gallons per connection per day or 740 gallons per mile per day, depending on how the supplier *reports* real loss, from the data reported in each of the remaining years used to calculate the baseline real loss would qualify as an outlier.
- Suppliers may, no later than July 1, 2023, provide the State Water Board new data from initial implementation to request an adjustment to their water loss standard.

Urban water use objective

January 1, 2024

Suppliers calculate their [urban water use objective](#) (pursuant to AB 1668 and SB 606, 2018), including a volume of water based on their water loss standard, which may be prorated until 2028 by the supplier.

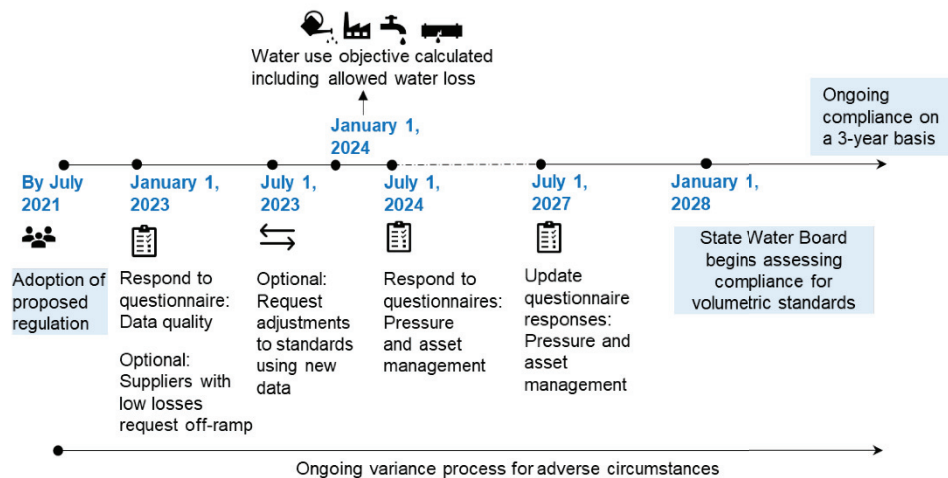
Variances

Adverse circumstances

Suppliers may use the variance process in response to certain unexpected adverse circumstances that impact compliance.

January 1, 2031

Suppliers serving disadvantaged communities with smaller benefit-to-cost ratios for their water loss standard, as identified through the economic model, will have until 2031 to achieve their standard.



Regulatory timeline

- A 45-day comment period begins when formal rulemaking is initiated.
 - Staff workshop prior to comment period to overview the current draft model and proposed regulatory framework, and answer questions. Staff will provide guidance on using the model and where supporting documentation may be needed as a matter of data quality for certain inputs.
 - Suppliers may enter data in the model and provide the model with entered data to State Water Board staff during the comment period with supporting justification.
 - Peer review concurrent with formal comment period
- Post 45-day comment period
 - Staff review public comments and peer review comments and, if needed, revise draft model and draft proposed framework
 - Subsequent 15-day comment periods if needed on any changes
- Tentative adoption between March and July 2021
- Regulation in effect by October 2021

Pre-rulemaking stakeholder process

Since early 2018, State Water Board staff have engaged with stakeholders during development of this regulatory proposal. The proposed regulation, including the economic model, have been informed by stakeholder feedback through seven pre-

rulemaking public workshops, two pre-rulemaking comment periods, focused stakeholder calls, and individual meetings. The formal rulemaking process will involve further public and stakeholder engagement and opportunity to comment before the regulation is considered by the Board for adoption and subsequently submitted to the Office of Administrative Law for approval.

Background

The proposed regulation would require the State's approximately 415 larger urban water suppliers, that together serve approximately 36 million people (over 90% of California's population), to meet individual volumetric water loss standards determined through a water system-specific economic model developed by the State Water Board. An average urban water supplier in California loses about 34 gallons per day from leakage from each service connection, equivalent to about 326,000 acre-feet or 106 billion gallons annually. The proposed water loss standards are anticipated to reduce water loss statewide by about 40%, reduce energy use for water treatment, improve infrastructure maintenance, and prevent breaks that cause property damage and water outages.

The State Water Board allocated \$3.2 million in 2016 for technical assistance for water loss auditing to improve data quality. Staff from nearly every urban water supplier participated in the technical assistance program. State Water Board staff have been using the data reported by suppliers to the Department of Water Resources to create the economic model and proposed regulation. This model will be peer reviewed by a third-party expert panel.

(This fact sheet was last updated on November 18, 2020)

Attachment 20: SWRCB Water Loss Website



[Home](#) :: [Conservation](#) :: [Water Loss Control](#)

Water Loss Control

[California Water Code Section 10608.34](#) requires the State Water Board to develop water loss performance standards for urban retail water suppliers. Executive Orders [B-37-16](#) and [B-40-17](#) direct the State Water Board and Department of Water Resources (DWR) to minimize water waste through system leaks.

Rulemaking Status

- [This rulemaking started December 24, 2021.](#)
- A Board Hearing will be held on October 19, 2022
 - [Text of Proposed Regulations as of 10/14/2022](#)
 - [Draft Response to Comments](#)
- Rulemaking documents will be posted in the [Complete Rulemaking File](#) as they are released.
- Inquiries regarding the contents of this regulation may be directed to Beti Girma (Beti.Girma@Waterboards.ca.gov).
- The Board Hearing will be on February 10, 2022 at 2pm.

Quick Links

[Water Loss Auditing](#)
[Technical Assistance](#)
[Pre-rulemaking Meetings-Workshops](#)
[Resources](#)
[Fact sheet \(PDF\)](#)
[Contacts](#)

Water Loss Model, Standards, and Questionnaires

[Updated Water Loss Model](#) (Released September 2, 2022)

[Model Equation Changes](#) (Released September 2, 2022)

[Individual System Water Loss Standards](#) (Released September 9, 2022)

Questionnaires

1. [Data Quality](#)
2. [Asset Management](#)
3. [Pressure Management](#)

CEQA

 [View the CEQA Negative Declaration.](#)

Documents Released for August 17th Board Meeting

- [Draft Regulation Text](#) (Released August 8, 2022)
- [Updated Model and Standards](#)

Staff Workshop on January 11, 2022



Water Loss Performance Standards Workshop - January 11, 2022 (YouTube)

Purposed of Workshop

- To explain the proposed regulation and standards
- To communicate the ways interested parties can be involved in the formal rulemaking process
- To explain how suppliers can submit updates to default data
- To answer quesitons

Peer Review

A peer review of the Economic Model was completed on December 28, 2020. Both the [Peer Review](#) and [Staff's Summary and Responses to the Peer Review](#) are available.

Directions for Updating Default Parameters

Default parameters in the Economic model may be updated to incorporate supplier-specific information. While updates may be submitted until July 1, 2023, we are asking that suppliers submit requests as soon as possible. An updated [guidance document](#) is available for reference.

✉ To submit a request, please email ORPP-WaterLossControl@Waterboards.ca.gov.

**Attachment 21: 2022-12-07 A2207001 CAW
Response Cal Adv TGE 15**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$55,771,300 or 18.71% in the year 2024, by \$19,565,300 or 5.50% in the year 2025, and by \$19,892,400 or 5.30% in the year 2026.

A.22-07-001
(Filed July 1, 2022)

**CALIFORNIA-AMERICAN WATER COMPANY'S RESPONSE TO
PUBLIC ADVOCATES OFFICE'S DATA REQUEST TGE 15**

Sarah E. Leeper
Nicholas A. Subias
Cathy Hongola-Baptista
California-American Water Company
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San Francisco, CA 94111
(415) 863-2960
sarah.leeper@amwater.com

Lori Anne Dolqueist
Willis Hon
Nossaman LLP
50 California Street
34th Floor
San Francisco, CA 94111
(415) 398-3600
ldolqueist@nossamna.com

Attorneys for California-American Water Company

Dated: December 7, 2022

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Patrick Pilz
Title: Senior Field Manager, Operations
Address: California American Water
 655 West Broadway, #1410
 San Diego, CA 92101
Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE 15
Company Number: Cal ADV TGE 15 Q001
Date Received: November 21, 2022
Date Response Due: December 7, 2022
Subject Area: Water Loss Performance

DATA REQUEST:

Please refer to Patrick Pilz's testimony as found in the pdf file titled "Pilz Direct Testimony CAW 2022 GRC Final App" for the following questions. These questions pertain specifically to Pilz's testimony in Section X. Water Loss Performance Standards, and in Attachment 7.

1. Snapshot #1 below shows a portion of the summary of expenses for capital expenses and operational expenses as found in Attachment 7 (pages 195-196 per Adobe PDF Reader). Cal Am estimates a \$250,000.00 expense in each Cal Am District for "Water Loss Consulting."

- a. Please provide invoices, contracts, and other relevant documents that support the estimated expense of \$250,000.00 for each of the six Cal Am Districts.

Snapshot #1

Sum of Cost Row Labels	Column Labels			
	Larkfield	Los Angeles	Monterey	Sacramento
Cap-Ex	\$ 39,755.27	\$ 1,955,693.17	\$ 336,790.73	\$ 1,908,145.12
Customer Meter Testing and Replacement	\$ 6,375.00	\$ 204,000.00	\$ 102,000.00	\$ 306,000.00
Pressure Management - PRV Maintenance & Repair	\$ -	\$ 20,862.00	\$ 94,748.25	\$ 11,300.25
Proactive Main/Service Repair due to Leak Detection Findings	\$ 33,380.27	\$ 1,721,899.17	\$ 122,178.48	\$ 1,523,854.87
Production Meter Replacement	\$ -	\$ 8,932.00	\$ 17,864.00	\$ 66,990.00
Op-Ex	\$ 299,214.50	\$ 730,839.76	\$ 722,964.02	\$ 1,186,522.93
Customer Meter Testing and Replacement	\$ 1,250.00	\$ 40,000.00	\$ 20,000.00	\$ 60,000.00
Leak Detection	\$ 34,564.50	\$ 383,519.76	\$ 289,744.02	\$ 706,882.93
Pressure Management - Pressure reduction	\$ 12,500.00	\$ 12,500.00	\$ 12,500.00	\$ 12,500.00
Pressure Management - PRV Maintenance & Repair	\$ -	\$ 25,920.00	\$ 117,720.00	\$ 14,040.00
Production Meter Testing	\$ 900.00	\$ 18,900.00	\$ 33,000.00	\$ 143,100.00
Water Loss Consulting	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
Grand Total	\$ 338,969.77	\$ 2,686,532.93	\$ 1,059,754.75	\$ 3,094,668.05

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

2. Snapshot #2 below highlights a portion of a table found in Attachment 7 (page 205 per Adobe PDF Reader). This table shows a \$380 "Leak Detection Cost (\$/mi)" for each of Cal Am's districts.
- a. Please provide invoices, contracts, and other relevant documents that support the \$380 amount for "Leak Detection Cost (\$/mi)."

Snapshot #2

CAW System	CAW District	Leak Detection Cost (\$/mi)	Leak Detection Mileage - 2024
CA-Larkfield Water System	Larkfield	\$380	34.97
CA-Baldwin Hills Water System	Los Angeles	\$380	69.62
CA-Duarte Water System	Los Angeles	\$380	100.27
CA-East Pasadena	Los Angeles	\$380	32.14
CA-Rio Plaza (El Rio)	Los Angeles	\$380	4.30
CA-San Marino Water System	Los Angeles	\$380	181.67
CA-Ambler Park Water System	Monterey	\$380	11.61
CA-Bishop Water System	Monterey	\$380	16.58
CA-Chualar Water System	Monterey	\$380	3.00
CA-Garrapata	Monterey	\$380	2.47
CA-Hidden Hills Water System	Monterey	\$380	22.13
CA-Monterey Water System (Monterey Main)	Monterey	\$380	227.05
CA-Ralph Lane Water System	Monterey	\$380	0.55
CA-Ryan Ranch Water System	Monterey	\$380	4.87
CA-Toro Water System	Monterey	\$380	18.07
CA-Antelope Water System	Sacramento	\$380	95.73
CA-Arden Water System	Sacramento	\$380	21.80
CA-Dunnigan	Sacramento	\$380	2.47
CA-Fruitridge Vista	Sacramento	\$380	52.00
CA-Geyserville	Sacramento	\$380	6.09
CA-Grove Water System	Sacramento	\$380	3.03

CAL-AM'S RESPONSE

- 1) The estimate of \$250,000 per district for the three-year GRC period was provided by the consultant E-Source as an estimate for consulting service costs based on their experience having provided similar services to other water agencies for achieving compliance with the newly implemented Water loss performance standards¹.

The \$250,000 figures are based on an estimated annual consulting cost of \$500,000 per year in total for California American Water for each of the three ratecase cycle years and then divided equally to the six different California American Water service areas. Individual district consulting costs will ultimately vary based on scope and efforts needed to bring each service area into

¹ Water Code section 10608.34, subdivision (i), (Senate Bill 555, 2015) and (AB 1668 and SB 606, 2018)

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

compliance. Work currently performed by E-Source and California American Water is underway to establish such compliance gaps and to determine scope and efforts needed for compliance of each system.

- 2) The \$380 (\$/mi) leak detection cost estimate was provided by E-Source and reflects their current pricing for providing leak detection services.

**Attachment 22: Cal Am Los Angeles County
District 2019 Condition Based Assessment
(Redacted)**



**California American Water
Los Angeles County District
Comprehensive Planning Study – 2019**

FINAL JUNE 2019



Mark Reifer, P.E.
California American Water
CA License No. C 74588

**California American Water
Los Angeles County District
2019 Condition Based Assessment**

**Prepared by:
Stantec Consulting Services, Inc.**

June 2019

SECTION 1

EXISTING SYSTEM

1.1 INTRODUCTION

The Condition Based Assessment (CBA) for California American Water Company (CAW) was undertaken in tandem with the Comprehensive Planning Study (CPS) to (1) identify water mains that need rehabilitation and/or replacement and (2) evaluate the existing operating conditions of the booster pump stations (BPS) and identify possible opportunities for capital improvement projects. This assessment is used to develop a capital improvement plan and identify estimated cost of rehabilitation/replacement for the plan. To meet this goal for the main replacement portion of the CBA analysis, a comprehensive scoring methodology was developed to assign a risk score for each individual pipe, based on both likelihood of failure (LOF) and consequence of failure (COF). In addition to identifying mains for replacement, this assessment also identifies data gaps that CAW may choose to improve upon for future condition analyses. The BPS portion of the CBA analysis used desktop and on-site assessments to identify potential improvement projects related to CAW's Los Angeles County District BPSs.

1.2 SUMMARY OF EXISTING SYSTEM

CAW owns and operates three water systems in the Los Angeles County District. The Los Angeles County District of CAW includes the water systems of Baldwin Hills; Duarte; and San Marino. The locations of these systems are shown on **Figure 1-1** and additional characteristics are presented in **Table 1-1**.

The Baldwin Hills system is located east of Highway 90, to the north of Inglewood. The Baldwin Hills system serves over 6,000 customers in the communities of Ladera Heights, Windsor Hills, and View Park. The pipe network consists of approximately 65 miles of main, ranging in size from 2-inch to 24-inch pipes and is primarily cast iron. The overall service area covers approximately 2,056 acres (3.2 square miles) with elevations ranging from 48 feet to 470 feet. Due to these changes in elevation, the distribution system is divided into seven main gradient zones.

SECTION 2
MAIN REPLACEMENT METHODOLOGY

2.1 METHODOLOGY OVERVIEW

The CBA methodology is a risk-based approach that uses an estimation of LOF based on available information and its potential COF. This methodology is commonly used in the asset-management industry, and was further customized and refined with CAW to maximize the available information to complete this assessment and to adapt potential constraints. A series of parameters pertaining to both likelihood and failure were defined, discussed, and further refined within the CBA. Data source and key assumptions used in this assessment are summarized in **Section 2.2**.

The LOF parameters are combined to estimate an individual pipe's qualitative probability of failure based on available information. LOF parameters pertain to the physical characteristics of the pipe, such as age, material, leak/break history, as well the condition of a pipe's surroundings that may contribute to pipe failure (i.e., soil conditions). **Section 2.3** describes the LOF estimation in further detail.

COF parameters are related to pipe location, potential impacts, and damage that could occur if the pipe fails. **Section 2.4** describes this methodology in greater detail. Similar to the LOF, the COF parameters are summed to create a comprehensive COF score.

Subsequently, the total LOF and COF scores are respectively normalized for each system. These normalized scores are then assigned a risk level of 1 to 5, based on their location within a 5x5 matrix. The methodology for normalization and risk level assignment is further detailed in **Section 2.5**. An example of the 5x5 risk matrix is shown in **Table 2-1**, with Risk Level 1 (LOF or COF 1) the lowest priority and Risk Level 5 (LOF or COF 5) the highest (most critical) priority. Pipes with a risk level of 4 or 5 for both LOF and COF are recommended for replacement, as indicated by the dashed lines in **Table 2-1**. Based on conversations with CAW, pipes with an LOF 5/COF 5, LOF 4/COF 5, LOF 5/COF 4 will be recommended for replacement. Pipes with LOF 4/COF 4 will be identified as needing eventual replacement, but it will be of a lower priority.

highways, state highway, or county highway systems. These two types of systems would have the most significant effect on a pipes' LOF due to higher level of stress from road traffic, and therefore were assigned specific scores when present. Other roadway types include local neighborhood roads, rural roads, private roads, and parking lot roads. The LOF as a result of these remaining road types were deemed equal and thus were grouped together as one score. **Table 2-11** describes the scoring criteria used by roadway type.

Table 2-11. Scoring Criteria for Major Roadways

ROAD CLASSIFICATION	ROADWAY DESCRIPTION	SCORE
S1100	Primary Road	9
S1200	Secondary Road	7
Other	Local neighborhood road, rural road, private road, service drive, parking lot road, etc.	5

Notes:

A higher score indicates a relatively higher likelihood of failure due to roadway traffic effects. Road types are grouped into ranges because the effects within a given range are not distinct enough to provide a specific score.

2.3.8 Break/Leak History

Frequent breaks or leaks can indicate poor pipe condition and thus a higher LOF. Geocoded records of leaks and breaks were provided by CAW. Pipes were scored based on the number of leaks and breaks within a 30-foot radius of the respective pipe. Breaks and leaks were scored individually and then summed together, with a maximum possible score of 10. **Table 2-12** summarizes the scores assigned for the numbers of leaks and breaks along pipes.

Table 2-12. Scoring Criteria for Leaks and Breaks

BREAKS/LEAKS	SCORE
2 or more breaks	10
1 break	5
0 breaks	0
6 or more leaks	10
3-5 leaks	5
2 leaks	4
1 leak	3
0 leaks	0

**Attachment 23: 2022-10-07 A2207001 CAW
Response Cal Adv TGE 11**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$55,771,300 or 18.71% in the year 2024, by \$19,565,300 or 5.50% in the year 2025, and by \$19,892,400 or 5.30% in the year 2026.

A.22-07-001
(Filed July 1, 2022)

**CALIFORNIA-AMERICAN WATER COMPANY'S RESPONSE TO
PUBLIC ADVOCATES OFFICE'S DATA REQUEST TGE 11**

Sarah E. Leeper
Nicholas A. Subias
Cathy Hongola-Baptista
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555 Montgomery Street, Suite 816
San Francisco, CA 94111
(415) 863-2960
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Willis Hon
Nossaman LLP
50 California Street
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San Francisco, CA 94111
(415) 398-3600
ldolqueist@nossamna.com

Attorneys for California-American Water Company

Dated: October 7, 2022

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Nina Miller
Title: Manager Engineering – Asset Planning
Address: California American Water
511 Forest Lodge Road, Suite 100
Pacific Grove CA 93950
Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE 11
Company Number: Cal ADV TGE 11 Q002
Date Received: September 23, 2022
Date Response Due: October 7, 2022
Subject Area: Miscellaneous Expenses Planning Studies

DATA REQUEST:

2. Please refer to California Public Utilities Commission document titled, “California-American Water Company (U210W) Notice of Corrected Pages to Attachment E-1 and Attachment G-1 to the Settlement Agreement,” for Application 19-07-004, for the following questions. The referenced version of this document can be found at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M425/K604/425604744.pdf>

- a. Please refer to the table titled “Planning Studies and System Maps Costs,” found on pages 55, 56, and 57 under section titled “Attachment B-6 For Settlement Planning Studies and Mapping.” Please note that these page numbers refer to the pages utilized by the PDF viewer, as the attachment itself has no labeled page numbers. Please answer the following.
 - i. The “Planning Studies and System Maps Costs” table shows an authorized expense of \$222,250 in 2021 for “SCADA Master Plan” in the Monterey District. Please explain how much of the authorized \$222,250 was spent for 2021 and provide the relevant invoices, receipts, and other documents supporting this recorded spent amount. Additionally, please identify the specific cells from Excel workbook “ALL_CH04_O&M_RO,” worksheet “Sum Costs After Go Alloc WS9D,” in which the recorded spent amount is located. If the recorded spent amount is not present in workbook “ALL_CH04_O&M_RO,” worksheet “Sum Costs After Go Alloc WS9D,” please identify the specific Excel workbooks, worksheets, and cells therein, in which this amount is located in the current GRC filing, workpapers, and other documents.
 - ii. The “Planning Studies and System Maps Costs” table shows an authorized expense of \$500,000 in 2021 for “Tank Seismic Assessments” and an authorized expense of \$150,000 in 2021 for “Well Master Plan” in

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

the Los Angeles District. Please explain how much of the authorized \$500,000 and \$150,000 amounts were spent for 2021 and provide the relevant invoices, receipts, and other documents supporting these recorded spent amounts. Additionally, please identify the specific cells from Excel workbook "ALL_CH04_O&M_RO," worksheet "Sum Costs After Go Alloc WS9D," in which the recorded spent amounts are located. If the recorded spent amounts are not present in workbook "ALL_CH04_O&M_RO," worksheet "Sum Costs After Go Alloc WS9D," please identify the specific Excel workbooks, worksheets, and cells therein, in which these amounts are located in the current GRC filing, workpapers, and other documents.

- iii. The "Planning Studies and System Maps Costs" table shows an expense of \$700,000 in 2021 for "Water Storage Tank Seismic Study" and an expense of \$550,000 in 2021 for "Integrated Water Supply (IWS) Master Plan" in Ventura District. Please explain how much of the authorized \$700,000 and \$550,000 amounts were spent for 2021 and provide the relevant invoices, receipts, and other documents supporting these recorded spent amounts. Additionally, please identify the specific cells from Excel workbook "ALL_CH04_O&M_RO," worksheet "Sum Costs After Go Alloc WS9D," in which the recorded spent amounts are located. If the recorded spent amounts are not present in workbook "ALL_CH04_O&M_RO," worksheet "Sum Costs After Go Alloc WS9D," please identify the specific Excel workbooks, worksheets, and cells therein, in which these amounts are located in the current GRC filing, workpapers, and other documents.
- iv. The "Planning Studies and System Maps Costs" table shows an expense of \$150,000 in 2021 for "Portable Generator Power Shutoff Study" in CA - Corporate District. Please explain how much of the \$150,000 was spent for 2021 and provide the relevant invoices, receipts, and documents supporting this recorded spent amount. Additionally, please identify the specific cells from Excel workbook "ALL_CH04_O&M_RO," worksheet "Sum Costs After Go Alloc WS9D," in which the recorded spent amount is located. If the recorded spent amount is not present in workbook "ALL_CH04_O&M_RO," worksheet "Sum Costs After Go Alloc WS9D," please identify the specific Excel workbooks, worksheets, and cells therein, in which this amount is located in the current GRC filing, workpapers, and other documents.

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

CAL-AM'S RESPONSE

Q2.a.i.

In 2021 \$89,500 of the approved \$222,250 was spent on the "SCADA Master Plan" in the Monterey District. The 2021 spend is reflected in workbook "ALL_CH04_O&M_RO," worksheet "Y_OM Data Rec WS1" cell N-785 along with other 2021 Contract Services Engineering spend.
See CAW Response Cal Adv TGE-11 Q002 Attachment 1 for invoices.

Q2.a.ii.

In 2021 \$198,567.39 of the approved \$500,000 was invoiced on the "Tank Seismic Assessments" in the LA District. Some 2021 invoices were not processed until 2022, therefore the spend was not accounted for in 2021. In addition, this spend is deferred and thus not reflected in workbook "ALL_CH04_O&M_RO."
In 2021 \$13,431.25 of the approved \$150,000 was invoiced on the "Well Master Plan" in the LA District. Some 2021 invoices were not processed until 2022, therefore the spend was not accounted for in 2021. The 2021 spend is reflected in workbook "ALL_CH04_O&M_RO," worksheet "Y_OM Data Rec WS1" cell N-2555 along with other 2021 Contract Services Engineering spend.
CAW Response Cal Adv TGE-11 Q002 Attachments 2 and 3 for invoices.

Q2.a.iii.

In 2021 \$172,975.28 was spent on the "Water Storage Tank Seismic Study" in the Ventura District. Some 2021 invoices were not processed until 2022, therefore the spend was not accounted for in 2021. In addition, this spend is deferred and thus not reflected in workbook "ALL_CH04_O&M_RO."
In 2021 \$230,000 of the approved \$550,000 was spent on the "Integrated Water Supply (IWS) Master Plan" in the Ventura District. Some 2021 invoices were not processed until 2022, therefore the spend was not accounted for in 2021. The 2021 spend is reflected in workbook "ALL_CH04_O&M_RO," worksheet "Y_OM Data Rec WS1" cell N-2909 along with other 2021 Contract Services Engineering spend.
See CAW Response Cal Adv TGE-11 Q002 Attachments 4 and 5 for invoices.

Q2.a.iv.

In 2021 \$207,370 of the approved \$150,000 was spent on the "Portable Generator Power Shutoff Study". This was a statewide study and as such the 2021 spend is reflected in workbook "ALL_CH04_O&M_RO," worksheet "Y_OM Data Rec WS1" cells N-431, N-785, N-2555, N-2909, N-4679, and N-5033 along with other 2021 Contract Services Engineering spend.
See CAW Response Cal Adv TGE-11 Q002 Attachment 6 for invoices.

**Attachment 24: 2022-10-07 A2207001 CAW
Response Cal Adv TGE-11 Q002 Attachment
4 (Ventura Seismic Tank Assessments Spend)**

Invoice

Invoice Number	2110119	Supplier	Customer
Invoice Date	Nov 29, 2021	RICHARD BRADY & ASSOCIATES	California American Water Company
Supply Date	Oct 31, 2021	INC	1 Water St
Currency	USD (US Dollar)	2655 CAMINO DEL RIO NORTH	Camden, NJ 08102-1658
Purchase Order	3000534030	SUITE 100	US (United States)
Payment Terms	45 days net	SAN DIEGO, CA 92108	8667778426
		US (United States)	8565199733
		858-496-0500	
		858-496-0505	

Ship To
Sacramento Prod
4701 Beloit Dr
Sacramento, CA 95838-2434
US (United States)

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10	Ventura Tank Seismic Assessments	AU	1	\$42,493.84	\$42,493.84

Subtotal	\$42,493.84
Total Tax Amount	\$0.00
Invoice Amount	\$42,493.84



2655 Camino del Rio North, Suite 100
 San Diego, CA 92108
 tel: 858-496-0500 fax: 858-496-0505
 www.richardbrady.com

California-American Water Co
 AP Dept 1015
 1 Water Street, Camden, NJ 08102-1658
 Vendor #: 123275
 PO #: 3000534030

Invoice number 2110119
 Invoice date 11/29/2021
 Professional Services Through 10/31/2021
 Project **CAWCO2.002 TANK SEISMIC ASSESSMENTS**
VENTURA COUNTY DISTRICT

Invoice Summary

Description	Contract Amount	Percent Complete	Remaining	Prior Billed	Total Billed	Current Billed
CAWCO2.002 VENTURA	\$ 376,598.00	11.28%	\$ 334,104.16	\$ -	\$ 42,493.84	\$ 42,493.84
Total	\$ 376,598.00	11.28%	\$ 334,104.16	\$ -	\$ 42,493.84	\$ 42,493.84

Professional Fees

Ventura (PO# 3000534030)	Contract Amount	Percent Complete	Remaining	Prior Billed	Total Billed	Current Billed
Task 1 - Project Management	\$ 45,195.00	94.02%	\$ 2,701.16	\$ -	\$ 42,493.84	\$ 42,493.84
Task 2 - Resource Document and Data Review	\$ 61,699.00	0.00%	\$ 61,699.00	\$ -	\$ -	
Task 3 - Hazardous Materials Testing (Not Applicable)	\$ -		\$ -	\$ -	\$ -	
Task 4 - Field Investigation for Condition Assessment	\$ 38,666.00	0.00%	\$ 38,666.00	\$ -	\$ -	
Task 5 - Condition Assessment Report and Recommendations for Reservoirs	\$ 52,516.00	0.00%	\$ 52,516.00	\$ -	\$ -	
Task 6 - Seismic and Structural Assessment for Reservoirs	\$ 106,587.00	0.00%	\$ 106,587.00	\$ -	\$ -	
Task 7 - Hydraulic Review	\$ 71,935.00	0.00%	\$ 71,935.00	\$ -	\$ -	
	\$ 376,598.00	11.28%	\$ 334,104.16	\$ -	\$ 42,493.84	\$ 42,493.84
Invoice Total						\$ 42,493.84

Approved by:
 Richard Brady, PE, BCEE, CEO
 Fed. I.D. No. 33-0854675
 PLEASE REMIT TO: Richard Brady & Associates, Inc. 2655 Camino Del Rio North # 100, San Diego, CA 92108

Invoice

Invoice Number 2111119
Invoice Date Dec 22, 2021
Supply Date Oct 31, 2021
Currency USD (US Dollar)
Purchase Order 3000534030
Payment Terms 45 days net

Supplier
RICHARD BRADY & ASSOCIATES
INC
2655 CAMINO DEL RIO NORTH
SUITE 100
SAN DIEGO, CA 92108
US (United States)
858-496-0500
858-496-0505

Customer
California American Water Company
1 Water St
Camden, NJ 08102-1658
US (United States)
8667778426
8565199733

Ship To
Sacramento Prod
4701 Beloit Dr
Sacramento, CA 95838-2434
US (United States)

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10	Ventura Tank Seismic Assessments	AU	1	\$130,481.44	\$130,481.44

Subtotal \$130,481.44
Total Tax Amount \$0.00
Invoice Amount \$130,481.44





2655 Camino del Rio North, Suite 100
San Diego, CA 92108
tel: 858-496-0500 fax: 858-496-0505
www.richardbrady.com

California-American Water Co
AP Dept 1015
1 Water Street, Camden, NJ 08102-1658
Vendor #: 123275
PO #: 3000534030

Invoice number 2111119
Invoice date 12/22/2021
Professional Services Through 11/30/2021
Project **CAWCO2.002 TANK SEISMIC ASSESSMENTS**
VENTURA COUNTY DISTRICT

Invoice Summary

Description	Contract Amount	Percent Complete	Remaining	Prior Billed	Total Billed	Current Billed
CAWCO2.002 VENTURA	\$ 376,598.00	45.93%	\$ 203,622.72	\$ 42,493.84	\$ 172,975.28	\$ 130,481.44
Total	\$ 376,598.00	45.93%	\$ 203,622.72	\$ 42,493.84	\$ 172,975.28	\$ 130,481.44

Professional Fees

Ventura (PO# 3000534030)	Contract Amount	Percent Complete	Remaining	Prior Billed	Total Billed	Current Billed
Task 1 - Project Management	\$ 45,195.00	50.00%	\$ 65,091.34	\$ 42,493.84	\$ 22,597.50	\$ (19,896.34)
Task 2 - Resource Document and Data Review	\$ 61,699.00	100.00%	\$ -	\$ -	\$ 61,699.00	\$ 61,699.00
Task 3 - Hazardous Materials Testing (Not Applicable)	\$ -		\$ -	\$ -	\$ -	\$ -
Task 4 - Field Investigation for Condition Assessment	\$ 38,666.00	100.00%	\$ -	\$ -	\$ 38,666.00	\$ 38,666.00
Task 5 - Condition Assessment Report and Recommendations for Reservoirs	\$ 52,516.00	0.00%	\$ 52,516.00	\$ -	\$ -	
Task 6 - Seismic and Structural Assessment for Reservoirs	\$ 106,587.00	46.92%	\$ 56,574.22	\$ -	\$ 50,012.78	\$ 50,012.78
Task 7 - Hydraulic Review	\$ 71,935.00	0.00%	\$ 71,935.00	\$ -	\$ -	\$ -
	\$ 376,598.00	45.93%	\$ 246,116.56	\$ 42,493.84	\$ 172,975.28	\$ 130,481.44
Invoice Total						\$ 130,481.44

Approved by:
Richard Brady, PE, BCEE, CEO
Fed. I.D. No. 33-0854675
PLEASE REMIT TO: Richard Brady & Associates, Inc. 2655 Camino Del Rio North # 100, San Diego, CA 92108

**Attachment 25: 2022-10-07 A2207001 CAW
Response Cal Adv TGE-11 Q002 Attachment
5 (IWS Master Plan Ventura Spend)**

Invoice

Invoice Number 504400789
Invoice Date Dec 30, 2021
Supply Date Dec 30, 2021
Currency USD (US Dollar)
Purchase Order 3000534056
Payment Terms 30 days net

Supplier
Mott MacDonald
Pittsburgh, PA
US (United States)
PO Box 358061
Pittsburgh 15251-5061
973-379-3400
973-912-2491

Customer
California American Water Company
1 Water St
Camden, NJ 08102-1658
US (United States)
8667778426
8565199733

Ship To
Ventura Dist
2439 W Hillcrest Dr
Newbury Park, CA 91320-2202
US (United States)

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10	Ventura Integrated Water Supply Study	AU	1	\$10,000.00	\$10,000.00

Subtotal \$10,000.00
Total Tax Amount \$0.00
Invoice Amount \$10,000.00





California American Water
P.O. Box 5623
Cherry Hill
NJ 08034
United States

12647 Alcosta Boulevard
Suite 275
San Ramon
CA 94583
United States

T +1 925-469-8010

Invoice

504400789

Our Contact Stephanie Douglass
Project No. 504100664
Client Contact

Purchase Order 3000534056

Invoice Date 12/30/2021
Due Date 1/29/2022
Payment Terms 30 Days Net
Client No. 0001249
Currency USD

Sale of Professional Services

504100664 CAW Ventura Integrated Water Supply Plan - T&M **10,000.00**
Professional Engineering Services rendered in connection with
CAW - Ventura Integrated Water Supply Study, Task Order No
36102
As of December 31, 2021, \$230,000 of the approve budget has
been spent.

Invoice Total **10,000.00**

Preferred Method of Payment:

Bank Name HSBC USA
Bank Id. 021001088
Account No. 006064361
SWIFT/BIC MRMDUS33

Remittance Advice Address

Check Payment To:

Mott MacDonald
Dept LA 22336
Pasadena
CA 91185-2336

Invoice 504400789

Page 2

Project # 504100664
Project Name CAW Ventura Integrated Water Supply Plan - T&M

Amount	Total Amount
Invoice On Account	10,000.00
Amount Subtotal	10,000.00
Invoice Total	10,000.00

Preferred Method of Payment:	Remittance Advice Address	Check Payment To:
Bank Name HSBC USA		Mott MacDonald
Bank Id. 021001088		Dept LA 22336
Account No. 006064361		Pasadena
SWIFT/BIC MRMDUS33		CA 91185-2336

Invoice

Invoice Number 504400785
Invoice Date Dec 28, 2021
Supply Date Dec 28, 2021
Currency USD (US Dollar)
Purchase Order 3000534056
Payment Terms 30 days net

Supplier
Mott MacDonald
Pittsburgh, PA
US (United States)
PO Box 358061
Pittsburgh 15251-5061
973-379-3400
973-912-2491

Customer
California American Water Company
1 Water St
Camden, NJ 08102-1658
US (United States)
8667778426
8565199733

Ship To
Ventura Dist
2439 W Hillcrest Dr
Newbury Park, CA 91320-2202
US (United States)

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10	Ventura Integrated Water Supply Study	AU	1	\$172,000.00	\$172,000.00

Subtotal \$172,000.00
Total Tax Amount \$0.00
Invoice Amount \$172,000.00





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P.O. Box 5623
Cherry Hill
NJ 08034
United States

12647 Alcosta Boulevard
Suite 275
San Ramon
CA 94583
United States

T +1 925-469-8010

Invoice

504400785

Our Contact Stephanie Douglass
Project No. 504100664
Client Contact
Purchase Order 3000534056

Invoice Date 12/28/2021
Due Date 1/27/2022
Payment Terms 30 Days Net
Client No. 0001249
Currency USD

Sale of Professional Services

504100664 CAW Ventura Integrated Water Supply Plan - T&M **172,000.00**
Professional Engineering Services rendered in connection with
CAW - Ventura Integrated Water Supply Study, Task Order No.
36102
As of December 31, 2021, \$220,000 or 69% of the approved budget
has been spent.

Invoice Total **172,000.00**

Preferred Method of Payment:
Bank Name HSBC USA
Bank Id. 021001088
Account No. 006064361
SWIFT/BIC MRMDUS33

Remittance Advice Address

Check Payment To:
Mott MacDonald
Dept LA 22336
Pasadena
CA 91185-2336



California American Water Ventura District Integrated Water Supply Plan

Progress Statement as of December 27, 2021

Consultant: Mott MacDonald

Progress Summary/Overview

For the period from December 1, 2021 through December 31, 2021, activities included:

Task 0 – Project Management

- Internal design team coordination meetings
- Project management services during design included document control, contract administration, and project coordination with District staff and Project Team.

Task 1 – Service Area Review

- Complete review CAW Ventura District Service Area.

Task 2 – Ventura County Water Supply Resources Review

- Complete review of water supply in Ventura County.

Task 3 – Source Evaluation

- Summarize publicly available data on groundwater sources.

Task 4 – Potential Users

- Identify potential users in service area.

Task 5 – Infrastructure Needs

- Develop infrastructure improvements

Task 6 – Preliminary Recommendations Report

- Prepare Phase 1 draft preliminary report for internal QA/QC.

[https://mottmac.sharepoint.com/teams/pj-f7388/do/Project Management/Invoicing/December 2021 Progress Report.docm](https://mottmac.sharepoint.com/teams/pj-f7388/do/Project%20Management/Invoicing/December%202021%20Progress%20Report.docm)

**Next Month Activities:****Task 0 – Project Management**

- Project management services during design included document control, contract administration, and project coordination with District staff and Project Team.

Task 1 – Service Area Review

- Finalize draft section on CAW Ventura District Service Area in the report.

Task 2 – Ventura County Water Supply Resources Review

- Finalize draft section on water supply in Ventura County in the report.

Task 3 – Source Evaluation

- Complete preliminary source evaluation based on publicly available data on groundwater sources.

Task 4 – Potential Users

- Complete preliminary review of potential recycled water users in service area.

Task 5 – Infrastructure Needs

- Complete preliminary draft of infrastructure improvements

Task 6 – Preliminary Recommendations Report

- Submit Phase 1 draft preliminary report.

Budget Status

The approved budget is \$320,000. As of December 31, 2021, \$220,000 or 69% of the approved budget has been spent.

Invoice

Invoice Number 504400747
Invoice Date Dec 14, 2021
Supply Date Dec 14, 2021
Currency USD (US Dollar)
Purchase Order 3000534056
Payment Terms 30 days net

Supplier
Mott MacDonald
Pittsburgh, PA
US (United States)
PO Box 358061
Pittsburgh 15251-5061
973-379-3400
973-912-2491

Customer
California American Water Company
1 Water St
Camden, NJ 08102-1658
US (United States)
8667778426
8565199733

Ship To
Ventura Dist
2439 W Hillcrest Dr
Newbury Park, CA 91320-2202
US (United States)

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10	Ventura Integrated Water Supply Study	AU	1	\$32,000.00	\$32,000.00

Comment
15% of the total budget

Subtotal \$32,000.00
Total Tax Amount \$0.00
Invoice Amount \$32,000.00





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P.O. Box 5623
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NJ 08034
United States

12647 Alcosta Boulevard
Suite 275
San Ramon
CA 94583
United States

T +1 925-469-8010

Invoice

504400747

Our Contact Stephanie Douglass
Project No. 504100664
Client Contact

Purchase Order 3000534056

Invoice Date 12/13/2021
Due Date 1/12/2022
Payment Terms 30 Days Net
Client No. 0001249
Currency USD

Sale of Professional Services

504100664 CAW Ventura Integrated Water Supply Plan - T&M **32,000.00**
Professional Engineering Services rendered in connection with
CAW - Ventura Integrated Water Supply Study, Task Order No.
36102

Invoice Total **32,000.00**

Preferred Method of Payment:

Bank Name HSBC USA
Bank Id. 021001088
Account No. 006064361
SWIFT/BIC MRMDUS33

Remittance Advice Address

Check Payment To:

Mott MacDonald
Dept LA 22336
Pasadena
CA 91185-2336



California American Water Ventura District Integrated Water Supply Plan

Progress Statement as of November 30, 2021

Consultant: Mott MacDonald

Progress Summary/Overview

For the period from October 1, 2021 through November 30, 2021, activities included:

Task 0 – Project Management

- Internal design team Kickoff Meeting on October 25, 2021.
- Project Kickoff Meeting Held on November 1, 2021.
- Developed Project Execution Plan (submitted on November 16, 2021).
- Project management services during design included document control, contract administration, and project coordination with District staff and Project Team.

Task 1 – Service Area Review

- Reviewed CAW Ventura District Service Area.

Task 2 – Ventura County Water Supply Resources Review

- Conducted review of water supply in Ventura County.

Task 3 – Source Evaluation

- Reviewed background information provided the District and GAMA data on surrounding water quality/production.
- Evaluated City of Thousand Oaks groundwater studies from other consultants.

Task 4 – Potential Users

- Reviewed previous studies completed by other consultants.
- Outreach to agencies for master plan shape files.

Task 5 – Infrastructure Needs

- Evaluated proposed recycled water alignment in previous studies.

Task 6 – Preliminary Recommendations Report

- Created draft preliminary report outline for Phase.
- Developing Phase 1 draft preliminary report.

https://mottmac.sharepoint.com/teams/pj-e9481/exec/Invoicing/504100323-001/01_April 2021/Design Set 1 Apr 30, 2021 Flow Meters Progress Statement.docm

Next Month Activities:

Task 0 – Project Management

- Internal design team Kickoff Meeting on October 25, 2021.
- Project Kickoff Meeting Held on November 1, 2021.
- Developed Project Execution Plan (submitted on November 16, 2021).
- Project management services during design included document control, contract administration, and project coordination with District staff and Project Team.

Task 1 – Service Area Review

- Complete review CAW Ventura District Service Area.

Task 2 – Ventura County Water Supply Resources Review

- Complete review of water supply in Ventura County.

Task 3 – Source Evaluation

- Summarize publicly available data on groundwater sources.

Task 4 – Potential Users

- Identify potential users in service area.

Task 5 – Infrastructure Needs

- Develop infrastructure improvements

Task 6 – Preliminary Recommendations Report

- Prepare Phase 1 draft preliminary report for internal QA/QC.

Budget Status

The approved budget is \$320,000. As of November 30, 2021, \$48,000 or 15% of the approved budget has been spent.

Invoice

Invoice Number 504400685
Invoice Date Nov 17, 2021
Supply Date Nov 17, 2021
Currency USD (US Dollar)
Purchase Order 3000534056
Payment Terms 30 days net

Supplier
Mott MacDonald
Pittsburgh, PA
US (United States)
PO Box 358061
Pittsburgh 15251-5061
973-379-3400
973-912-2491

Customer
California American Water Company
1 Water St
Camden, NJ 08102-1658
US (United States)
8667778426
8565199733

Ship To
Ventura Dist
2439 W Hillcrest Dr
Newbury Park, CA 91320-2202
US (United States)

#	PO Item	Description	Unit	Qty	Unit Price	Line Total
1	10-1	Ventura Integrated Water Supply Study - Ventura Integrated Water Supply Study	AU	1	\$16,000.00	\$16,000.00

Subtotal \$16,000.00
Total Tax Amount \$0.00
Invoice Amount \$16,000.00





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P.O. Box 5623
Cherry Hill
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United States

12647 Alcosta Boulevard
Suite 275
San Ramon
CA 94583
United States

T +1 925-469-8010

Invoice 504400685

Our Contact Stephanie Douglass
Project No. 504100664
Client Contact
Purchase Order 3000534056

Invoice Date 11/17/2021
Due Date 12/17/2021
Payment Terms 30 Days Net
Client No. 0001249
Currency USD

Sale of Professional Services

504100664 CAW Ventura Integrated Water Supply Plan - T&M 16,000.00
Professional Engineering Services rendered in connection with
CAW - Ventura Integrated Water Supply Study, Task Order No.
36102

Invoice Total 16,000.00

Preferred Method of Payment:
Bank Name HSBC USA
Bank Id. 021001088
Account No. 006064361
SWIFT/BIC MRMDUS33

Remittance Advice Address

Check Payment To:
Mott MacDonald
Dept LA 22336
Pasadena
CA 91185-2336

**Attachment 26: 2022-12-21 A2207001 CAW
Response Cal Adv TGE 16**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$55,771,300 or 18.71% in the year 2024, by \$19,565,300 or 5.50% in the year 2025, and by \$19,892,400 or 5.30% in the year 2026.

A.22-07-001
(Filed July 1, 2022)

**CALIFORNIA-AMERICAN WATER COMPANY'S RESPONSE TO
PUBLIC ADVOCATES OFFICE'S DATA REQUEST TGE 16**

Sarah E. Leeper
Nicholas A. Subias
Cathy Hongola-Baptista
California-American Water Company
555 Montgomery Street, Suite 816
San Francisco, CA 94111
(415) 863-2960
sarah.leeper@amwater.com

Lori Anne Dolqueist
Willis Hon
Nossaman LLP
50 California Street
34th Floor
San Francisco, CA 94111
(415) 398-3600
ldolqueist@nossamna.com

Attorneys for California-American Water Company

Dated: December 21, 2022

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Nina Miller
Title: Manager Engineering – Asset Planning
Address: California American Water
511 Forest Lodge Road, Suite 100
Pacific Grove CA 93950

Response Provided By: Joey Chen
Title: Senior Rates & Regulatory Analyst
Address: California American Water
520 Capital Mall, Suite 630
Sacramento, CA 95814

Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE 16
Company Number: Cal ADV TGE 16 Q001
Date Received: November 30, 2022
Date Response Due: December 14, 2022
Subject Area: Maintenance of Maps

DATA REQUEST:

Please refer to California Public Utilities Commission document titled, “California-American Water Company (U210W) Notice of Corrected Pages to Attachment E-1 and Attachment G-1 to the Settlement Agreement,” for Application 19-07-004, for the following questions. The referenced version of this document can be found at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M425/K604/425604744.pdf>. The following questions specifically pertain to “Planning Studies and System Maps Costs,” found on pages 55, 56, and 57 under section titled “Attachment B-6 For Settlement Planning Studies and Mapping.” Please note that these page numbers refer to the pages utilized by the PDF viewer, as the attachment itself has no labeled pages.

1. The “Planning Studies and System Maps Costs” table shows authorized expenses for “Maintenance of Systems Maps” for various districts for calendar year 2021, which include \$46,503 for San Diego; \$129,920 for Sacramento; \$5,118 for Larkfield; \$61,368 for Los Angeles; \$43,574 for Ventura; and \$92,417 for Monterey. Please answer the following questions and requests. For the Excel format requests for each question, please refer to Snapshot #1 below, taken from Excel document “CAW Response Cal Adv TGE 12 Q001.e-p Attachment 1” as an example reference.

- a. San Diego District
 - a. Please explain how much of the authorized expense of \$46,503 for the San Diego District was spent for 2021.
 - b. Please also provide in Excel format a list of individual transactions, their posting dates, and the individual amounts comprising the total amount spent

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

- for Maintenance of Systems Maps expenses for the San Diego District in 2021, in the same manner as the example in Snapshot #1 shown below.
- c. Please also provide relevant invoices, contracts, and other documents supporting these spent amounts, and identify the specific pages supporting these amounts therein.
 - b. Sacramento District
 - a. Please explain how much of the authorized expense of \$129,920 for the Sacramento District was spent for 2021.
 - b. Please also provide in Excel format a list of individual transactions, their posting dates, and the individual amounts comprising the total amount spent for Maintenance of Systems Maps expenses for the Sacramento District in 2021, in the same manner as the example in Snapshot #1 shown below.
 - c. Please also provide relevant invoices, contracts, and other documents supporting these spent amounts, as well as identify the specific pages supporting these amounts therein.
 - c. Larkfield District
 - a. Please explain how much of the authorized expense of \$5,118 for the Larkfield District was spent for 2021.
 - b. Please also provide in Excel format a list of individual transactions, their posting dates, and the individual amounts comprising the total amount spent for Maintenance of Systems Maps expenses for the Larkfield District in 2021, in the same manner as the example in Snapshot #1 shown below.
 - c. Please also provide relevant invoices, contracts, and other documents supporting these spent amounts, and as identify the specific pages supporting these amounts therein.
 - d. Los Angeles District
 - a. Please explain how much of the authorized expense of \$61,368 for the Los Angeles District was spent for 2021.
 - b. Please also provide in an Excel format a list of individual transactions, their posting dates, and the individual amounts comprising the total amount spent for Maintenance of Systems Maps expenses for the Los Angeles District in 2021, in the same manner as the example in Snapshot #1 shown below.
 - c. Please also provide relevant invoices, contracts, and other documents supporting these spent amounts, and identify the specific pages supporting these amounts therein.
 - e. Ventura District
 - a. Please explain how much of the authorized expense of \$43,574 for the Ventura District was spent for 2021.
 - b. Please also provide in Excel format a list of individual transactions, their posting dates, and their individual amounts comprising the total amount spent

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

for Maintenance of Systems Maps expenses for Ventura District in 2021, in the same manner as the example in Snapshot #1 shown below.

- c. Please also provide relevant invoices, contracts, and other documents supporting these spent amounts, and identify the specific pages supporting these amounts therein.
- f. Monterey District
 - a. Please explain how much of the authorized expense of \$92,417 for the Monterey District was spent for 2021.
 - b. Please also provide in Excel format a list of individual transactions, their posting dates, and the individual amounts comprising the total amount spent for Maintenance of Systems Maps expenses for the Monterey District in 2021, in the same manner as the example in Snapshot #1 shown below.
 - c. Please also provide relevant invoices, contracts, and other documents supporting these spent amounts, and identify the specific pages supporting these amounts therein.

CAL-AM'S RESPONSE

1.a.-f. (a) Performance and completion of GIS collection tasks require multiple employees and/or contractors to be on site within close proximity of each other. As a result, to comply with COVID-19 restrictions and company safety guidance, minimal GIS Mapping work was completed in 2021. Please refer to California American Water's attachment CAW Response Cal ADV TGE 16 Q001 a-f Attachment 1 for 2021 spend.

1.a.-f. (b) Please refer to California American Water's attachment CAW Response Cal ADV TGE 16 Q001 a-f Attachment 1

1.a.-f (c) Please refer to California American Water's attachment CAW Response Cal ADV TGE 16 Q001 a-f Attachment 2.

California-American Water Company

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

Response Provided By: Nina Miller
Title: Manager Engineering – Asset Planning
Address: California American Water
511 Forest Lodge Road, Suite 100
Pacific Grove CA 93950

Response Provided By: Joey Chen
Title: Senior Rates & Regulatory Analyst
Address: California American Water
520 Capital Mall, Suite 630
Sacramento, CA 95814

Cal Adv Request: A2207001 CAL ADV DATA REQUEST # TGE 16
Company Number: Cal ADV TGE 16 Q002
Date Received: November 30, 2022
Date Response Due: December 14, 2022
Subject Area: Maintenance of Maps

DATA REQUEST:

Please refer to California Public Utilities Commission document titled, “California-American Water Company (U210W) Notice of Corrected Pages to Attachment E-1 and Attachment G-1 to the Settlement Agreement,” for Application 19-07-004, for the following questions. The referenced version of this document can be found at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M425/K604/425604744.pdf>. The following questions specifically pertain to “Planning Studies and System Maps Costs,” found on pages 55, 56, and 57 under section titled “Attachment B-6 For Settlement Planning Studies and Mapping.” Please note that these page numbers refer to the pages utilized by the PDF viewer, as the attachment itself has no labeled pages.

2. Maintenance of Systems Maps Expenses
 - a. Please also provide the recorded amounts spent for Maintenance of Systems Maps expenses for recorded years 2017 through 2020, for each of the following districts: San Diego, Sacramento, Larkfield, Los Angeles, Ventura, and Monterey.
 - b. Please also provide in an Excel format a list of individual transactions, their posting dates, and their individual amounts comprising the total amount spent for Maintenance of Systems Maps expenses for each recorded year from 2017 through 2020 for each of the following districts: San Diego, Sacramento, Larkfield, Los Angeles, Ventura, and Monterey.
 - c. Please provide these transactions in the same manner as the example shown in Snapshot #1 below.

APPLICATION NO. A.22-07-001
DATA REQUEST RESPONSE

CAL-AM'S RESPONSE

- a. Performance and completion of GIS collection tasks require multiple employees and/or contractors to be on site within close proximity of each other. As a result, to comply with COVID-19 restrictions and company safety guidance, minimal GIS Mapping work was completed in 2020. Please refer to California American Water's attachment CAW Response Cal ADV TGE 16 Q001 a-f Attachment 1 for 2018 to 2020 recorded spend.
- b. Please refer to California American Water's attachment CAW Response Cal ADV TGE 16 Q001 a-f Attachment 1.
- c. Please refer to CAW Response Cal ADV TGE 16 Q002 Attachment 1.

Snapshot of CAW Response Cal ADV TGE 16 Q001 a-f Attachment 1

Company	Document Number	Cost element name	Val in re	Posting Date	Created on	GL Account	Period	Fiscal Year	Name	Ref Docu	Total qua	Posted unit c	Purchasing Docu	Item	Purchase order	District #	District Name
1015	1005898060	Contract Svc-Eng - Natural	\$ 10,825	1/22/2018	1/22/2018	53110016 1		2018		50001335	0			0		1501	CAW Corporate
1015	1007137781	Contract Svc-Eng - Natural	\$ 10,775	1/22/2019	1/22/2019	53110016 1		2019		50001549	0			0		1501	CAW Corporate
1015	1007736208	Contract Svc-Eng - Natural	\$ 22,354	7/23/2019	7/23/2019	53110016 7		2019	Task Order 10340	50011110	1 AU		3000409104	10	Task Order 10340	1560	Sacramento District
1015	1007758415	Contract Svc-Eng - Natural	\$ 20,252	7/31/2019	7/31/2019	53110016 7		2019	Task Order 10340	50011170	1 AU		3000409104	10	Task Order 10340	1560	Sacramento District
1015	1007812046	Contract Svc-Eng - Natural	\$ 7,387	8/8/2019	8/8/2019	53110016 8		2019	Inv1003 Task Orde	50011214	1 AU		3000409104	10	Task Order 10340	1560	Sacramento District
1015	1007922252	Contract Svc-Eng - Natural	\$ 18,697	9/10/2019	9/10/2019	53110016 9		2019	GPS Collection Ser	50011394	1 AU		3000409104	20	GPS Collection Se	1560	Sacramento District
1015	1008012205	Contract Svc-Eng - Natural	\$ 13,528	10/3/2019	10/3/2019	53110016 10		2019	GPS Collection Ser	50011536	1 AU		3000409104	20	GPS Collection Se	1560	Sacramento District
1015	1008012207	Contract Svc-Eng - Natural	\$ 10,778	10/3/2019	10/3/2019	53110016 10		2019	GPS Collection Ser	50011536	1 AU		3000409104	20	GPS Collection Se	1560	Sacramento District
1015	1008062950	Contract Svc-Eng - Natural	\$ 6,998	10/23/2019	10/23/2019	53110016 10		2019	GPS Collection Ser	50011649	1 AU		3000409104	20	GPS Collection Se	1560	Sacramento District
1015	1008274970	Contract Svc-Eng - Natural	\$ 8,000	12/19/2019	12/19/2019	53110016 12		2019	GPS Collection Ser	50012006	1 AU		3000409104	20	GPS Collection Se	1560	Sacramento District
1015	1008274967	Contract Svc-Eng - Natural	\$ 8	12/19/2019	12/19/2019	53110016 12		2019	GPS Collection Ser	50012006	1 AU		3000409104	10	Task Order 10340	1560	Sacramento District
1015	1010017761	Contract Svc-Other - Natur	\$ 85	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1567	Hillview
1015	1010017761	Contract Svc-Other - Natur	\$ 277	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1566	Fruitridge
1015	1010017761	Contract Svc-Other - Natur	\$ 31	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1557	Rio Plaza
1015	1010017761	Contract Svc-Other - Natur	\$ 100	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1565	Meadowbrook
1015	1010017761	Contract Svc-Other - Natur	\$ 18	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1564	Geyersville
1015	1010017761	Contract Svc-Other - Natur	\$ 7	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1563	Dunnigan
1015	1010017761	Contract Svc-Other - Natur	\$ 129	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1561	Larkfield District
1015	1010017761	Contract Svc-Other - Natur	\$ 3,765	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1560	Sacramento District
1015	1010017761	Contract Svc-Other - Natur	\$ 1,273	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1551	Ventura County District
1015	1010017761	Contract Svc-Other - Natur	\$ 1,610	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1550	Los Angeles County District
1015	1010017761	Contract Svc-Other - Natur	\$ 1,684	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1540	Monterey County District
1015	1010017761	Contract Svc-Other - Natur	\$ 1,683	6/9/2021	6/9/2021	52501500 6		2021		50002104	0			0		1530	San Diego County District

**Attachment 27: Decision 18-12-021, Decision
Adopting the 2018, 2019, and 2020 Revenue
Requirement for California-American Water
Company**

ALJ/SJP/EC2/jt2

Date of Issuance 12/20/2018

Decision 18-12-021 December 13, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$34,559,200 or 16.29% in the year 2018, by \$8,478,500 or 3.43% in the year 2019, and by \$7,742,600 or 3.03% in the year 2020.

Application 16-07-002

**DECISION ADOPTING THE 2018, 2019, AND 2020 REVENUE REQUIREMENT
FOR CALIFORNIA-AMERICAN WATER COMPANY**

7.7. Comprehensive Planning Study and Geographic Information Systems

Cal-Am requests an overall budget of \$1,289,352 in 2018 for: (1) tasks related to Comprehensive Planning Studies (CPS) and the preparation of associated planning reports for each of its districts;¹⁸⁶ and (2) maintenance of Geographic Information System (GIS) system plans, maps, drawings, and other records as required pursuant to Commission General Order 103-A.¹⁸⁷

ORA argues that Cal-Am's forecasts for CPS/GIS work products in previous GRCs have been much higher than its actual expenses in these areas. ORA notes that Cal-Am incurred just 44% and 20% of its proposed CPS/GIS expenses in the two most recent Test Years, 2012 and 2015, respectively.¹⁸⁸ ORA also argues that given the fifteen year planning horizon and five to eight year cycle for preparing the CPSs, and given that the next cycle of UWMPs will be due in 2020, it is unnecessary for the Commission to authorize additional funds to update the CPS or UWMP in this GRC cycle.¹⁸⁹ ORA recommends that the Commission approve Cal-Am's forecasted GIS expenses of \$654,160 for TY 2018 as a reasonable budget for all CPS/GIS related tasks.¹⁹⁰

Cal-Am argues that its proposed CPS/GIS budget for 2018 is justified based on the CPS/CBA study work that is planned for 2017, 2018, and into early

¹⁸⁶ The typical tasks conducted under this budget usually include: CPSs; Emerging-Need Project Evaluations; Condition Based Assessments (CBAs); Urban Water Management Plans (UWMPs); and Strategic Capital Expenditure Plans. (Exh. CAW-12 at 193.)

¹⁸⁷ Exh. CAW-12 at 194-195; Exh. CAW-31 at 8. For TY 2018, \$635,191 is budgeted for CPS expenses and \$654,160 is budgeted for GIS expenses.

¹⁸⁸ Exh. ORA-6 at 7.

¹⁸⁹ *Id.* at 7-9.

¹⁹⁰ *Id.* at 10.

2019. In March 2017, Cal-Am awarded CPS/CBA work to three firms and Cal-Am anticipates that these studies will be completed by the end of 2018.¹⁹¹ Cal-Am argues that given that CPSs were last conducted in 2012 or 2013 for all of its districts, the completion date of 2018 falls within the typical five to eight year cycle for CPSs.¹⁹² Cal-Am also states that it is also likely to perform supplemental studies in the next several years under the CPS/GIS expense line item.¹⁹³ Cal-Am further argues that ORA's focus solely on the 2012 TY and 2015 TY for CPS and CBA related study expenses is not reasonable since these studies are multi-year undertakings that can take anywhere from 18 to 24 months to complete.¹⁹⁴

We find that Cal-Am has adequately justified its proposed budget for TY 2018 with respect to CPS-related tasks. Cal-Am's anticipated timeline for completing the CPS/CBA studies fits within the typical five to eight year cycle for these studies and will require work to be undertaken in this GRC cycle. The only information in the record regarding recorded CPS/GIS expenses are for TY 2012 and TY 2015, which was provided by ORA. We agree with Cal-Am that CPSs involve multi-year studies, and therefore, that a single year of recorded expenses is not a reasonable basis for determining a budget. A five-year historical average of CPS/GIS expenses is not available because these costs were not treated as expenses until 2012.¹⁹⁵ Given this lack of information regarding

¹⁹¹ Exh. CAW-31 at 5.

¹⁹² Cal-Am Reply Brief at 19-20.

¹⁹³ Exh. CAW-31 at 6.

¹⁹⁴ *Id.* at 8.

¹⁹⁵ Exh. ORA-6 at 6.

recorded expenses, we find Cal-Am's proposed CIS budget to be reasonable based on the documentation Cal-Am provided regarding the CPS/CBA work it has awarded that is to be completed in 2018.

On the other hand, we find that Cal-Am has failed to adequately justify its budget with respect to GIS work products. There is a lack of information in the record regarding Cal-Am's recorded expenses specifically for GIS work products. The only information available in the record indicates that Cal-Am significantly underspent its forecasted budget in 2012 and 2015 for the overall CPS/GIS category. Cal-Am recorded CPS/GIS expenses of \$603,103 in 2012 and \$269,560 in 2015.¹⁹⁶ In light of past recorded expenses, we do not find Cal-Am's proposed 2018 budget of \$654,160 for just GIS work products to be reasonable. Cal-Am indicates that regular preventative maintenance and licensing costs are part of the continuing GIS budget for 2018 and 2019 but does not provide adequate justification for budgeting for other GIS work products in this GRC cycle.¹⁹⁷

Given Cal-Am's justification for its budget for CPS-related tasks, we do not find it reasonable to reduce Cal-Am's forecasted CPS/GIS budget by 49% as recommended by ORA. On the other hand, although Cal-Am has adequately justified its budget for CPS-related tasks, Cal-Am has failed to adequately justify its budget related to GIS-related tasks. Therefore, we find reasonable Cal-Am's forecasted budget of \$635,191 for CPS-related tasks for 2018 but reduce Cal-Am's forecasted GIS budget of \$654,160 for 2018 by 50% to approve a total budget of \$962,271 for CIS/GIS expenses for TY 2018.

¹⁹⁶ *Id.* at 7.

¹⁹⁷ Exh. CAW-31 at 7-8.

Attachment 28: Projected Maps Expenses 2018-2021

APPENDIX B:

**Settlement between California American Water,
the Public Advocates Office at the California
Public Utilities Commission; and the Cities of
Duarte, San Marino, and Thousand Oaks**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$25,999,900 or 10.60% in the year 2021, by \$9,752,500 or 3.59% in the year 2022, and by \$10,754,500 or 3.82% in the year 2023.

A.19-07-004
(Filed July 1, 2019)

**CALIFORNIA-AMERICAN WATER COMPANY (U210W) NOTICE OF UPDATED
SETTLEMENT AGREEMENT**

[SETTLEMENT AGREEMENT ATTACHED]

Sarah E. Leeper
Nicholas A. Subias
Cathy Hongola-Baptista
California-American Water Company
555 Montgomery Street, Suite 816
San Francisco, CA 94111
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Attorneys for Applicant California-American
Water Company

February 24, 2021

CALIFORNIA AMERICAN WATER

2019 GENERAL RATE CASE

A.19-07-004

Attachment B-6 For Settlement

Planning Studies and Mapping

Planning Studies and System Maps Costs					
District	Description	2020	2021	2022	2023
CA-Corporate	Portable Generator and Power Shutoff Study		\$150,000		
CA-Corporate Total		\$0	\$150,000	\$0	\$0
San Diego	Urban Water Management Plan	\$20,000	\$20,000		
	Water Infrastructure Act Risk & Resiliency Assessment	\$20,000	\$20,000		
	Alternative Source of Supply Study		\$100,000	\$400,000	\$400,000
	Maintenance of System Maps		\$46,503	\$47,898	\$49,332
San Diego Total		\$40,000	\$186,503	\$447,898	\$449,332
Sacramento	Urban Water Management Plan	\$20,000	\$25,000		
	Water Infrastructure Act Risk & Resiliency Assessment	\$40,000	\$165,000		
	Wildfire Risk Assessment and Emergency Plan		\$52,000	\$52,000	
	Maintenance of System Maps		\$129,920	\$133,818	\$137,823
Sacramento Total		\$60,000	\$371,920	\$185,818	\$137,823
Larkfield	Water Infrastructure Act Risk & Resiliency Assessment		\$20,000		
	Wildfire Risk Assessment and Emergency Plan		\$24,000	\$24,000	
	Maintenance of System Maps		\$5,118	\$5,271	\$5,429
Larkfield Total			\$49,118	\$29,271	\$5,429
Los Angeles	Urban Water Management Plan	\$22,500	\$22,500		
	Water Infrastructure Act Risk & Resiliency Assessment	\$20,000	\$95,000		
	Wildfire Risk Assessment and Emergency Plan		\$65,000	\$65,000	
	Tank Seismic Assessments		\$500,000		
	Well Master Plan		\$150,000		
	Maintenance of System Maps		\$61,368	\$63,209	\$65,101
Los Angeles Total		\$42,500	\$893,868	\$128,209	\$65,101
Ventura	Urban Water Management Plan	\$20,000	\$20,000		
	Water Infrastructure Act Risk & Resiliency Assessment	\$20,000	\$20,000		
	Wildfire Risk Assessment and Emergency Plan		\$140,000	\$140,000	
	Water Storage Tank Seismic Study		\$700,000		
	SCADA Master Plan		\$50,000		
	Integrated Water Supply (IWS) Master Plan		\$550,000		
	Solar Power Study at Tank Sites			\$125,000	

Planning Studies and System Maps Costs					
District	Description	2020	2021	2022	2023
	Turnout PRV Hydropower Study				\$125,000
	CMWD Peak Supply Study		\$75,000		
	Maintenance of System Maps		\$43,574	\$44,881	\$46,225
Ventura Total		\$40,000	\$1,598,574	\$309,881	\$171,225
Monterey	Urban Water Management Plan	\$25,000	\$25,000		
	Water Infrastructure Act Risk & Resiliency Assessment	\$25,000	\$25,000		
	Wildfire Risk Assessment and Emergency Plan		\$260,000	\$260,000	
	SCADA Master Plan		\$222,250		
	Maintenance of System Maps		\$92,417	\$95,189	\$98,038
Monterey Total		\$50,000	\$624,667	\$355,189	\$98,038

Attachment 29: California American Water Los Angeles 2019 Comprehensive Planning Study (Redacted)



**California American Water
Los Angeles County District
Comprehensive Planning Study – 2019**

FINAL JUNE 2019



Mark Reifer, P.E.
California American Water
CA License No. C 74588

**California American Water
Los Angeles County District
2019 Comprehensive Planning Study**

**Prepared by:
Stantec Consulting Services, Inc.**

June 2019

EXECUTIVE SUMMARY

This Comprehensive Planning Study (CPS) details the capital improvement recommendations for California American Water's (CAW) Los Angeles County District through the planning horizon (2035). The CPS presents a strategy for facility improvements to ensure that CAW can continue to provide safe, adequate and reliable service to its customers. Specifically, this report:

1. Presents customer and demand projections;
2. Examines the need for additional source of supply capacity;
3. Evaluates the need to upgrade and renovate existing water distribution system facilities;
4. Addresses existing and proposed water quality and treatment standards;
5. Analyzes the water distribution system transmission and storage needs; and
6. Presents the capital improvement plan to address facility needs.

OVERVIEW OF THE LOS ANGELES COUNTY DISTRICT

The Los Angeles County District includes three individual service areas: Baldwin Hills, Duarte, and San Marino.

CPS PROCESS

The CPS was conducted in four steps. First, a system wide evaluation of District's systems was conducted using American Water's standard planning criteria for analysis of the water systems. The American Water Planning Criteria provides review and analysis guidance and methodology for the following key areas.

Engineering Criteria

- Water demand Projections
- Source of Supply analysis
- Source water quality and watershed protection
- Treatment facility evaluation
- Electrical service and standby power evaluations
- Partnership for safe drinking water targets

2.3 PLANNING CRITERIA

In planning future water facilities, accepted engineering standards and practices have been used to evaluate existing facilities. Using these standards and practices to evaluate the Los Angeles County District systems, an assessment is made to determine if adequate capacity and an appropriate level of reliability are present for domestic, commercial, industrial and fire protection needs. Appendix A provides an additional discussion of the criteria and regulations used in the evaluation of the water facilities.

2.3.1 Customer and Demand Projections

Customer and demand projections provide the basis for evaluating future system needs. These projections of the total number of customers and their associated demands were developed for each system through 2035.

Projections were developed based on a review of population trends, historic customer and demand data, and local planning commission forecasts. The effects of water conservation are considered in the demand projections along with the analysis of historic water consumption trends. Demand projections also used the 2015 CAW Southern Division Los Angeles County District Urban Water Management Plan.

Three projections of water demand were developed for each system, referred to as the Low Growth, Most Likely Growth (or Base), and High Growth scenarios. The three water demand projections were generated by considering different forecasts of residential customer growth, increases in (or decline of) major commercial and industrial customer water consumption, and various levels of non-revenue and unaccounted-for water.

Residential customer growth is projected based on trends in historic customer figures as well as population and housing forecasts developed by State, county, and/or local planning agencies. In the Los Angeles County District systems, the Low Growth scenario may indicate that the residential customer base will remain constant or decline. Customer forecasts also account for new home construction, connection of existing homes on private water supplies to the systems, and acquisition of adjacent systems.

Per customer residential usage in gallons per customer per day is projected based on historic use patterns; consideration of the impacts of both existing and future water conservation efforts, including California's Water Conservation Act of 2009; and any potential changes in the number

of persons per household, based on the 2010 U.S. Census and the United States population projections from 2000 to 2050 published in 2009 by the U.S. Census.

Projections of commercial and industrial customers and water demand are based primarily on historic trends. Growth in commercial water demand generally follows residential growth trends, as commercial development typically goes hand in hand with residential growth. Since there are typically far fewer industrial customers than commercial customers, it is easier to identify changes in water demands by the major industries for use in forecasting industrial water demand.

Non-revenue water is projected based on historical annual data. Non-revenue water is defined as the difference between the total system delivery and the sum of all billed authorized (metered and flat rate) consumption. It includes water for firefighting, street cleaning, main flushing, and identifiable leakage or unbilled authorized consumption as well as water losses.

The average day demand projections are determined from a summation of forecasts for the individual classifications. Future maximum day to average day demand ratios are estimated using a statistical analysis of historical data. CAW's long-range forecasts use the criteria that facility planning should be based on meeting projected maximum day customer demands with a 95 percent confidence level. The confidence level value of 95 percent represents a level that is not expected to be exceeded more than once in 20 years. Planning facilities for a higher confidence level would result in higher capital costs for small incremental gains in reliability.

2.3.2 Sources of Supply

CAW sources of supply should have the necessary quantity of water to meet the projected system demand, including average and maximum demands, and comply with all Federal and State regulations. The quality of the water from the sources of supply are regularly monitored for routine wet chemistry parameters such as pH, turbidity, alkalinity, parasites, microbes, etc., as well as for potential chemical contaminants.

CAW conducts water resource management activities and programs that are designed to protect, maintain, and monitor the efficient use of supply sources and the finished product water. These measures include managing water resources from both the supply and demand side. For example, this CPS looks at sources of supply as compared to projected demands to ensure demands and fire flow standards are met in each system. Continuation of these practices will assist in providing high quality service to the customer.

**Attachment 30: American Water Press
Release - “California American Water
Acquires Rio Plaza Water Company”**

June 04, 2019 | American Water (NYSE: AWK) | PDF

California American Water Acquires Rio Plaza Water Company

Dateline City:

NEWBURY PARK, Calif.

California American Water assumes ownership and operations of the Rio Plaza Water Company

NEWBURY PARK, Calif.--(<http://www.businesswire.com>)--California American Water today announced the closing of acquisition and its commencement of operations of the Rio Plaza Water Company in Ventura County. Under the terms of an agreement approved by the California Public Utilities Commission, California American Water will be providing its newly welcomed customers with state-regulated potable water service beginning June 4, 2019.

"We look forward to welcoming our new Rio Plaza customers to California American Water and are eager to introduce them to our various programs that include rebates, free water conservation services and devices," said Chris Mattis, Director of Southern California Operations. "California American Water maintains a staff of qualified personnel who are experts in their field and duly certified by the California State Water Resources Control Board. And our commitment to Rio Plaza customers includes ensuring they have access to safe and reliable water services at a reasonable rate."

California American Water purchased the Rio Plaza water system of approximately 500 customers from the Nickel family of Moorpark, California. The Nickel family has owned

and operated the water system for two generations.

“California American Water and Rio Plaza Water Company share a goal of providing dependable water services to customers in Ventura County,” said John Chris Nickel, Sr. of the Rio Plaza Water Company. “We believe California American Water will provide the best service to our customers and we look forward to their active participation in the community.”

California American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to more than 675,000 people. California American Water’s Ventura County service district includes approximately 21,000 households and businesses and serves a population of approximately 63,000 in the cities of Camarillo, Thousand Oaks, and the community of Newbury Park as well as unincorporated portions of Ventura County. More information can be found at www.californiaamwater.com.

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter , Facebook and LinkedIn .

Language:

English

Contact:

Kevin Tilden

Office: 619-466-4762

Email: <mailto:kevin.tilden@amwater.com>

**Attachment 31: American Water Press
Release - “California American Water
Acquires the Operating Assets of the
Fruitridge Vista Water Company”**

February 04, 2020 | American Water (NYSE: AWK) | PDF

California American Water Acquires the Operating Assets of the Fruitridge Vista Water Company

Dateline City:

SACRAMENTO, Calif.

SACRAMENTO, Calif.--(<http://www.businesswire.com>)--California American Water acquired the Fruitridge Vista Water Company's operating assets and has become the new water provider to its approximately 4,800 customers.

The transaction was finalized on February 4 th and California American Water assumed operation of the system on that date.

Fruitridge Vista was a Class B Water Utility in south Sacramento County and is regulated by the California Public Utilities Commission. California American Water currently supplies water service to nearly 60,000 homes and businesses in the Sacramento region and nearly 180,000 customers within the State of California. Fruitridge Vista Water Company customers will now be served by California American Water's water treatment and distribution operators who are experts in their fields certified through the California State Water Resources Control Board's Division of Drinking Water. Professionals from the company's water quality, engineering and finance groups will also lend their expertise.

California American Water staff have been working for the better part of a year to ensure a smooth integration for these new customers. This process includes billing and operational services as well as in-depth assessment and planning for Fruitridge's most

urgent capital investment needs. "We are pleased to welcome the Fruitridge customers to the California American Water family," said California American Water President Rich Svindland. "This acquisition will allow Fruitridge Vista customers to take advantage of our excellent conservation and customer service programs. We are also planning on improving the system and make the capital investments this system needs."

Former Fruitridge Vista customers should now call California American Water customer service center at 888 237-1333 for questions about water service, billing or to report water system emergencies. The company will be sending new customer information packets to each new customer.

About California American Water: California American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to more than 690,000 California residents. Information regarding California American Water's service areas can be found on the company's website www.californiaamwater.com.

About American Water: With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Language:

English

Contact:

Evan Jacobs

Director of Regulatory Policy and Case Management

**Attachment 32: American Water Press
Release - “California American Water
Acquires Hillview Water Company”**

June 24, 2020 | American Water (NYSE: AWK) | PDF

California American Water Acquires Hillview Water Company

Dateline City:

SACRAMENTO, Calif.

SACRAMENTO, Calif. --(<http://www.businesswire.com/>)--California American Water has closed its agreement to acquire the Hillview Company to become the new water provider to its approximately 1,500 customers.

Hillview Water Company is a family owned Water Utility in Madera County and is regulated by the California Public Utilities Commission. It serves approximately 1,500 homes and businesses in Oakhurst, Raymond, and Coursegold. California American Water currently supplies water service to over 60,000 homes and businesses in the Central Valley and nearly 180,000 customers within the State of California. Hillview Water Company customers will be served by California American Water's water treatment and distribution operators who are experts in their fields certified through the California State Water Resources Control Board's Division of Drinking Water. "We are pleased to begin operations and look forward to serving our Hillview customers," said California American Water's Director of Northern California Operations S. Audie Foster. "We are working closely with the current Hillview team to welcome them to California American Water."

Hillview customers are expected to receive welcome packets and customer information by mail. The information includes new contact information, payment options and restrictions on the local office during the COVID-19 emergencies. "We have worked hard

to serve our community and I'm pleased to welcome California American Water to our area," said Hillview Water Company co-owner Roger Forrester.

In 2021, California American Water expects to expand its services and programs to the Hillview area, including its Low Income Rate Assistance program and at-home conservation services. However, customers will have immediate access to its 24-hour customer service line (1-888-237-1333) for questions about water service, billing or to report water system emergencies. In addition, Hillview customers will also have access to California American Water's online customer service portal, MyWater, where they can review their account, pay bills and read important service announcements in different languages.

California American Water will keep open the local Hillview Company Office.

About California American Water: California American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to more than 690,000 California residents. Information regarding California American Water's service areas can be found on the company's website www.californiaamwater.com.

About American Water: With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

Language:

English

Contact:

**Attachment 33: Metropolitan Water District
– Rate Structure Administrative Procedures
Handbooks for Fiscal Year 2021-2022 and
Fiscal Year 2022-2023**



*THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA*

Rate Structure Administrative Procedures Handbook

FY 2021/22

5 Capacity Charge

5.1 Purpose

The Capacity Charge recovers costs incurred to provide peaking capacity within Metropolitan's distribution system.

The Capacity Charge provides a price signal to encourage member agencies to reduce peak day demands on the system and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period. This results in more efficient utilization of Metropolitan's existing infrastructure and defers capacity expansion costs.

5.2 Administration

Each member agency will pay the Capacity Charge based on a three-year trailing maximum peak day flow. Due to accepted certifications and error corrections, peak day flows may change for up to three years after the month of delivery. Therefore, the Three Year Trailing Max Peak Day is calculated with a one-year lag.

Table 4

Calendar Year 2022 Capacity Charge					
AGENCY	Peak Day Demand (cfs) (May 1 through September 30) Calendar Year				Rate (\$/cfs): \$12,200 Calendar Year 2022 Capacity Charge
	2018	2019	2020	3-Year Peak	
Anaheim	37.2	37.1	84.1	84.1	1,026,020
Beverly Hills	27.8	23.5	23.2	27.8	339,160
Burbank	17.1	17.3	16.6	17.3	211,060
Calleguas	184.7	168.9	178.2	184.7	2,253,340
Central Basin	39.2	48.6	51.9	51.9	633,180
Compton	6.9	2.9	-	6.9	84,180
Eastern	225.1	196.8	215.8	225.1	2,746,220
Foothill	19.9	16.0	19.3	19.9	242,780
Fullerton	13.3	13.1	14.1	14.1	172,020
Glendale	33.5	32.2	37.9	37.9	462,380
Inland Empire	147.8	118.7	98.4	147.8	1,803,160
Las Virgenes	45.9	39.4	41.7	45.9	559,980
Long Beach	80.4	51.8	67.3	80.4	980,880
Los Angeles	284.6	283.2	339.0	339.0	4,135,800
MWD OC	442.3	263.2	272.2	442.3	5,396,060
Pasadena	43.0	39.9	46.4	46.4	566,080
San Diego	855.5	672.1	723.4	855.5	10,437,100
San Fernando	-	-	-	-	-
San Marino	4.5	2.3	7.3	7.3	89,060
Santa Ana	19.3	19.4	21.7	21.7	264,740
Santa Monica	16.7	20.7	17.0	20.7	252,540
Three Valleys	142.9	128.1	134.3	142.9	1,743,380
Torrance	32.6	27.8	28.9	32.6	397,720
Upper San Gabriel	23.3	29.1	21.1	29.1	355,020
West Basin	197.9	211.8	196.0	211.8	2,583,960
Western	194.7	186.1	178.3	194.7	2,375,340
Total	3,136.1	2,650.0	2,834.1	3,287.8	40,111,160

Totals may not foot due to rounding

Data as of 3/2021



*THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA*

Rate Structure Administrative Procedures Handbook

FY 2022/23

5 Capacity Charge

5.1 Purpose

The Capacity Charge recovers costs incurred to provide peaking capacity within Metropolitan's distribution system.

The Capacity Charge provides a price signal to encourage member agencies to reduce peak day demands on the system and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period. This results in more efficient utilization of Metropolitan's existing infrastructure and defers capacity expansion costs.

5.2 Administration

Each member agency will pay the Capacity Charge based on a three-year trailing maximum peak day flow. Due to accepted certifications and error corrections, peak day flows may change for up to three years after the month of delivery. Therefore, the Three Year Trailing Max Peak Day is calculated with a one-year lag.

Table 4

Calendar Year 2023 Capacity Charge					
AGENCY	Peak Day Demand (cfs) (May 1 through September 30) Calendar Year				Rate (\$/cfs): \$10,600 Calendar Year 2023 Capacity Charge
	2019	2020	2021	3-Year Peak	
Anaheim	37.1	84.1	77.2	84.1	891,460
Beverly Hills	23.5	23.2	24.8	24.8	262,880
Burbank	17.3	16.6	15.5	17.3	183,380
Calleguas	168.9	178.2	189.6	189.6	2,009,760
Central Basin	48.6	51.9	54.1	54.1	573,460
Compton	2.9	-	-	2.9	30,740
Eastern	196.8	211.5	215.3	215.3	2,282,180
Foothill	16.0	19.3	22.8	22.8	241,680
Fullerton	13.1	14.1	20.0	20.0	212,000
Glendale	32.2	37.9	32.5	37.9	401,740
Inland Empire	118.7	98.4	101.4	118.7	1,258,220
Las Virgenes	39.4	41.7	42.9	42.9	454,740
Long Beach	51.8	67.3	45.7	67.3	713,380
Los Angeles	283.2	339.0	584.1	584.1	6,191,460
MWDOC	262.8	272.0	332.4	332.4	3,523,440
Pasadena	39.9	46.4	48.2	48.2	510,920
San Diego	672.1	723.4	672.5	723.4	7,668,040
San Fernando	-	-	-	-	-
San Marino	2.3	7.3	5.4	7.3	77,380
Santa Ana	19.4	21.7	18.3	21.7	230,020
Santa Monica	20.7	17.0	15.1	20.7	219,420
Three Valleys	128.1	134.3	138.3	138.3	1,465,980
Torrance	27.8	28.9	27.2	28.9	306,340
Upper San Gabriel	29.1	21.1	32.4	32.4	343,440
West Basin	211.8	196.0	218.2	218.2	2,312,920
Western	186.1	175.1	189.4	189.4	2,007,640
Total	2,649.6	2,826.4	3,123.3	3,242.7	34,372,620

Totals may not foot due to rounding

Data as of 3/2022