

Calaveras Public Utility District

**Water Capacity and
Connection Fees Study**

August 1, 2022

DRAFT FINAL

The following report was prepared by Hansford Economic Consulting LLC.

The analyses and findings contained within this report are based on primary data provided by the Calaveras Public Utility District, as well as additional secondary sources of data available as of the date of this report. Updates to information used in this report could change or invalidate the findings contained herein. While it is believed that the primary and secondary sources of information are accurate, this is not guaranteed.

Every reasonable effort has been made in order that the data contained in this study reflect the most accurate and timely information possible. No responsibility is assumed for inaccuracies in reporting by the client, its consultants and representatives, or any other data source used in the preparation of this study. No warranty or representation is made that any of the projected values or results contained in this study will actually be achieved.

Changes in economic and social conditions due to events including, but not limited to, major recessions, droughts, major environmental problems or disasters that would negatively affect operations, expenses and revenues may affect the result of the findings in this study. In addition, other factors not considered in the study may influence actual results.

TABLE OF CONTENTS

SECTION	PAGE
1. Introduction and Summary of Findings	1
1.1 Introduction	1
1.2 Authority to Charge Capacity and Connection Fees	1
1.3 Calculated Capacity and Connection Fees	2
2. Connection Fees	5
2.1 Meter Fee Calculation	5
2.2 Installation Fee Calculation	5
2.3 Total Calculated Connection Fee	5
3. Capacity Fees	8
3.1 Future Development and Growth Assumptions	8
3.2 Buy-In Fee Costs	9
3.3 Capacity Fee Calculations	10
3.4 Regional Fees Comparison	12
4. Capacity and Connection Fees Adoption and Administration	14
4.1 Capacity and Connection Fees Adoption	14
4.2 Future Fee Adjustments and Updates	14
4.3 Mitigation Fee Act Compliance	14
4.4 Capacity Fee Credits and Reimbursements	15

LIST OF TABLES

TABLE		PAGE
1	Current New Development Water Fees	1
2	Proposed New Development Water Fees Schedule	3
3	Residential Comparison of Current and Proposed Fees	4
4	Non-Residential Comparison of Current and Proposed Fees	4
5	Calculated Connection Fees	6
6	Current Number of ERUs	8
7	Twenty-year Projection of ERUs	9
8	Capacity Fee Calculation per ERU	10
9	Determination of Meter Ratios for Capacity Fee	11
10	Calculated Capacity Fees	12

LIST OF FIGURES

FIGURE		PAGE
1	Comparison of Regional Water Capacity Fees	13

Section 1: INTRODUCTION AND SUMMARY OF FINDINGS

1.1 INTRODUCTION

The Calaveras Public Utility District (CPUD or District) provides water service to residents and businesses in the San Andreas, Mokelumne Hill and outlying areas of Calaveras County. The District currently serves a population of about 5,000, and provides service to new development as it occurs. The purpose of this report is to update the District’s schedule of new development water fees.

Currently, the District charges new development water fees comprising two components: (1) a connection fee, and (2) an installation charge. The fees are mostly based on actual costs incurred, as shown in **Table 1** below. The current new development fees were set by the Board of Directors (Board) in September 1989.

Table 1
Current New Development Water Fees

METER SIZE	CONNECTION FEE	INSTALLATION CHARGE [1]
1" or smaller	current meter cost + \$2,650	\$1,250
1.5" & 2"	current meter cost + \$5,300	cost + 15%
>2"	current meter cost + fee determined by Board	cost +15%

Source: CPUD Resolution 89-23.

curr

[1] Where any service line requires installation greater than 10 feet from the distribution line or across/under any road, the installation fee is actual cost plus 15%.

Given that the fees were set more than 30 years ago, it is appropriate to revisit the current schedule of new development fees.

1.2 AUTHORITY TO CHARGE CAPACITY AND CONNECTION FEES

Under the authority of the Mitigation Fee Act (1987), contained in California Government Code Section 66000 et. seq., the District is authorized to collect water capacity and connection fees. When a municipality adopts or updates a capacity or connection fee, it must demonstrate that the fees shall not exceed the estimated reasonable cost of providing the service for which the fee is imposed. Maximum justifiable fees are calculated in this report pursuant to demonstration of the nexus between new development and the increase in demand for the infrastructure that is provided to serve the new development.

Specifically, the District may impose a connection fee pursuant to Government Code Section 66013 (b)(5) for the physical facilities necessary to make a water connection, including, but not limited to,

meters, meter boxes, and pipelines from the structure or project to a water distribution line, that does not exceed the estimated reasonable cost of labor and materials for installation of those facilities.

The District may impose a capacity fee pursuant to Government Code Section 66013(b)(3) for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interest, and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities.

The new development fees should be evaluated at least every five years; over time, inflationary adjustments to fees alone may be insufficient as development plans change, anticipated pace of development changes, and infrastructure solutions to water service provision (typically in Water Master Plans) are revised.

1.3 CALCULATED CAPACITY AND CONNECTION FEES

This report updates the District’s current water connection fee, and it calculates a proposed new water capacity fee. The connection and capacity fees include these subcomponents:

Connection Fee	Capacity Fee
Meter Fee	Buy-In Fee
Installation Fee	

For the capacity fee, two fee level options are presented in the report for the Board’s consideration.

Option 1: The first fee level option calculates the fees based on the replacement cost of the District’s water system assets less accumulated depreciation. This option is most commonly used for water asset infrastructure because it accounts for the current costs to replace existing infrastructure.

Option 2: The second option calculates the capacity fees based on the original cost of the assets. Under the original cost approach, the buy-in fee reflects the original investment in existing capacity, paying an amount similar to what the existing customers paid for the capacity (or the remaining value of the original investments). Assets that have in theory exceeded their useful life may still have a value associated with them that new development would pay for a portion of; however, the methodology does not take into account that replacement costs of the assets would be greater than when originally installed. A concern with this approach is that it is impractical because insufficient capital is raised to ensure longevity of the assets.

Table 2 presents the proposed updated connection fees and the proposed new capacity fees under Option 1, which is recommended because it better reflects current costs to replace water system facilities. The fees would be charged according the meter size of the new service, with the

exception of Accessory Dwelling Units (ADUs). Pursuant to State law¹, ADUs must be charged development fees on a per building square foot basis.

Table 2
Proposed New Development Water Fees Schedule

New Development Fee [1]	Schedule of Fees [2]			
	Meter Size			
Connection Fee	<= 1"	1.5"	2"	> 2"
Meter	\$825	\$1,175	\$1,675	actual costs
Installation	\$6,150	\$6,150	\$6,150	actual costs
Total [3], [4]	\$6,975	\$7,325	\$7,825	actual costs
ADU Connection Fee [5]	\$3.67	Per Livable Bldg. Sq. Ft. [6]		
Capacity Fee				
1" and Smaller	\$10,802			
1.5"	\$16,203			
2"	\$23,764			
3"	\$39,966			
4"	\$63,730			
6"	\$123,139			
8"	\$193,350			
ADU Capacity Fee [5]	\$5.69	Per Livable Bldg. Sq. Ft. [6]		

Source: HEC July 2022.

summ

- [1] Both fees proposed under authority of California Government Code 66013.
- [2] The fees in this schedule, including the footnotes, will be adjusted every July 1 by the change in the Engineering News Record San Francisco Constructino Cost Index March to March.
- [3] District may waive a portion (meter or installation fee) of the connection fee, circumstance depending.
- [4] Additional at-cost fees will be charged when the connection is greater than 10 feet from the main, and for other extraordinary circumstances requiring additional work. If repaving of a street is necessary, the minimum fee is \$3,010. If the repave requires more than 4 yards of backfill, a fee of \$115 per yard will be charged. If the repave requires more than 200 square feet of asphalt, the fee will be \$10.25 per square foot.
- [5] Contrary to footnote [3], no portion of the fee is to be waived for an ADU.
- [6] Excludes garage and covered outdoor areas.

As shown in the proposed fee schedule table, it is recommended that the District update the fees annually by a predetermined index. The Engineering News Record San Francisco Construction Cost Index March to March change is recommended for an annual July 1 update. Periodic review of the capacity and connection fees is also recommended whenever estimated costs are revised pursuant

¹ California Assembly Bill 494 and Senate Bill 13.

to an update of the Water Master Plan, or whenever there are changes in the County’s General Plan that would affect projected growth in the District’s service territory.

A comparison of current and proposed fees is provided in **Table 3** for a new single-family home. Currently a new home installing a one-inch water meter would pay a connection fee of \$4,650. Under the proposed new fees, a new home would pay a connection fee of \$6,975 and a capacity fee of \$10,802. The total fees due would increase from \$4,650 to \$17,777.

Table 3
Residential Comparison of Current and Proposed Fees

Item	Connection Fee			Capacity Fee Option 1	TOTAL FEE
	Meter	Installation	Total		
<i>Assumption: New single family home with a 1" meter</i>					
Current [1]	\$3,400	\$1,250	\$4,650	\$0	\$4,650
Proposed [2]	\$825	\$6,150	\$6,975	\$10,802	\$17,777

Source: HEC July 2022.

1" sum

[1] Current cost of a 1" meter and appurtenances is \$825.

[2] Fees calculated using Option 1, RCNLD asset valuation methodology.

Table 4 compares the development fees due for a new commercial building with a two-inch water meter. Under the current fee schedule, the building applicant would pay a connection fee of \$6,975 for the meter plus an installation fee that is actual cost plus 15%. Under the proposed fee schedule option one, the applicant would pay a connection fee of \$7,825 plus a capacity fee of \$23,764, for a total fee of \$31,589.

Table 4
Non-Residential Comparison of Current and Proposed Fees

Item	Connection Fee			Capacity Fee Option 1	TOTAL FEE
	Meter	Installation	Total		
<i>Assumption: New commercial building with a 2" meter</i>					
Current [1]	\$6,975	actual cost + 15%		\$0	
Proposed [2]	\$1,675	\$6,150	\$7,825	\$23,764	\$31,589

Source: HEC July 2022.

non sum

[1] Current cost of a 2" meter and appurtenances is \$1,675.

[2] Fees calculated using Option 1, RCNLD asset valuation methodology.

Section 2: CONNECTION FEES

Under current California Government Code, connection fees are charges imposed by the District to pay for the reasonable cost of providing physical facilities necessary to make a water connection, including, but not limited to meters, meter boxes, and pipelines from the structure or project to a water distribution line that does not exceed the estimated cost of labor and materials for installation of those facilities².

The connection fee is made up of two fee components: (1) the meter fee, which covers the estimated costs of the meter and meter appurtenances, and (2) the installation fee, which covers the estimated costs of labor and equipment to install the facilities.

2.1 METER FEE CALCULATION

The meter fee reflects the most current costs of meters and appurtenances for meters one-inch (and smaller), 1.5-inch, and 2-inch in size. Meters larger than 2-inch should be charged the actual cost of the meter and appurtenances because the costs for these meters are more variable and less predictable. There are many options for type of larger meter size (jet, turbine, propeller and so forth) and different meter types may be necessary for different building types and building locations (including fire protection) needs.

2.2 INSTALLATION FEE CALCULATION

The installation fee is based on the estimated amount of staff time (labor cost) and equipment time (rental cost) needed to install the meter. Staff time is the average hourly cost of labor at the District, including benefits. The District has documented labor and equipment time needed for typical installations, which includes connection up to ten feet from the main. **Table A-1** in Appendix A shows the assumptions used in the calculation to determine the installation cost for a one-inch meter. Labor costs are based on a crew of 3 taking two days to install the service and meter. Installation costs are assumed to be the same for service sizes two-inches and smaller. Costs are less predictable with larger meter sizes; therefore, it is recommended that the actual cost of installation be charged for new larger size meter services.

If a new connection is further than 10 feet from the main, or if any other extraordinary costs are incurred, such as a road crossing, actual costs of installation will be charged. In addition, if the District is required to dig up the street to tap the main or install the service line, a repave fee will be added. The repave fee is based on contractor bids received by the District in July, 2022. Contractor minimum quantities are 4 yards of backfill and 200 square feet of asphalt. If quantities greater than the minimum are necessary, additional fees will apply per yard of backfill and per square foot of asphalt.

² Government Code Section 66013(b)(5).

2.3 TOTAL CALCULATED CONNECTION FEE

The total calculated connection fees are shown in **Table 5**.

Table 5
Calculated Connection Fees

Fee Component	Service Size			
	<= 1"	1.5"	2"	> 2"
Meter Fee				
Meter and Radio	\$415	\$715	\$1,165	actual
Meter Appurtenances	\$410	\$460	\$510	actual
Total Meter Fee (rounded)	\$825	\$1,175	\$1,675	actual costs
Installation Fee				
Labor	\$3,600	\$3,600	\$3,600	actual
Equipment	\$2,550	\$2,550	\$2,550	actual
Extraordinary Costs	> 10ft from main and other circumstances actual cost [1]			
Repaving	minimum plus actual cost - if applicable [2]			
Total Installation Fee (rounded)	\$6,150	\$6,150	\$6,150	actual costs
Total Connection Fee	\$6,975	\$7,325	\$7,825	actual costs
ADU Connection Fee				
Est. ERU Livable Bldg. Sq. Ft.	1,900			
ADU Fee per Bldg. Sq. Ft. [3]	\$3.67			

Source: CPUD and HEC, July 2022.

conn fee

[1] Additional at-cost fee will be charged for extraordinary circumstances such as the connection being greater than 10 feet from the main, a road crossing, pressure reducer installation, and so forth.

[2] If repaving is necessary, the following minimum charge will be incurred:

County fee	\$500	
Backfill fee	\$460	If >4 yards, add'l fee of \$115 per yard
Asphalt fee	\$2,050	If > 200 square feet, add'l fee of \$10.25 per sq. ft.
Total Minimum fee	\$3,010	

[3] Excludes garage and covered outdoor areas.

As already described, the connection fees are calculated for new services with meters 2-inches and smaller. For new services requiring larger meters, the District will charge the actual cost of installation. Note, the District may charge greater fees than established in the fee schedule for meters 2-inches and smaller for extraordinary circumstances (such as a road crossing or a pressure reducer installation) and repaving under which greater than typical service installation costs occur.

The District can charge new ADUs per livable building square foot of the ADU. Attached ADU space can only be charged the fee when it is being built as part of a single family home. Detached ADUs can be charged whenever they are created.

The calculation of the ADU fee is based on the connection fee of \$6,975 for a typical home divided by the typical livable building square feet of homes in the CPUD service territory. The typical size of a home in the CPUD service territory is 1,900 square feet; this size was determined by pulling local real estate data and holding discussions with District staff. **Table A-2** in Appendix A lists recently sold homes in the area built since 2013. The connection fee for an ADU is \$3.67 per livable building square foot.

Section 3: CAPACITY FEES

Capacity fees are charged to pay for current and future District facilities that new water customers will use. Capacity fees pay for major infrastructure such as water supply and development, treatment and distribution facilities. Currently, the District does not charge water capacity fees. The proposed capacity fee would pay for buy-in to existing facilities that the new customer will use.

3.1 FUTURE DEVELOPMENT AND GROWTH ASSUMPTIONS

The first step in determining capacity fees is establishing the current number of water customers, expressed in equivalent residential units (ERUs). Using the current number of customers by meter size and applying AWWA-standard meter ratios, the current number of ERUs is 2,185 (see **Table 6** below).

Table 6
Current Number of ERUs

Meters	Number of Meters	Flow Rate (gpm)	Meter Ratios	Number of ERUs
1" and Smaller	1,966	50	1.0	1,966
1.5"	14	100	2.0	28
2"	31	160	3.2	99
3"	0	300	6.0	0
4"	6	500	10.0	60
6"	0	1,000	20.0	0
8"	1	1,600	32.0	32
TOTAL	2,018			2,185

Source: AWWA M1 meter flow rates and CPUD number of meters. erus

Based on historical growth patterns in the CPUD service territory, it is estimated that 10 ERUs will be added to the customer base each year. Over the next twenty years it is estimated that the District will serve an additional 200 ERUs, as shown in **Table 7** on the next page. With this level of growth, the new ERUs represent 8% of all ERUS by 2040.

Table 7
Twenty-year Projection of ERUs

Fiscal Year Ending	# ERUs	Share of ERUs by 2040
2020	2,185	92%
2040	2,385	
Increase	200	8%

Source: CPUD and HEC 2022. proj

3.2 BUY-IN FEE COSTS

The cost included in the buy-in fee calculation depends on the methodology that is used to determine the value of the District’s current water assets. This report provides two methodologies, a replacement cost less depreciation (RCNLD) methodology, and an original cost methodology. Both methodologies are described in the American Water Works Association M1 Manual, and both are considered to be valid for calculating capacity fees.

Table A-3 in Appendix A provides a list of the CPUD water assets, their original cost, and estimated replacement cost analysis. The first fee level option using the RCNLD methodology calculates the fees based on the estimated current replacement cost of the District’s water system assets less accumulated depreciation. This option is most commonly used for water asset infrastructure because it accounts for the current costs to replace existing infrastructure.

The second option calculates the capacity fees based on the original cost of the assets. Under this option, assets that have in theory exceeded their useful life may still have a value associated with them that new development would pay for a portion of; however, it does not take into account that replacement costs of the assets would be greater than when originally installed. Under the original cost approach, the buy-in fee reflects the original investment in existing capacity, paying an amount similar to what the existing customers paid for the capacity (or the remaining value of the original investments). A concern with this approach is that it is impractical because insufficient capital is raised to ensure longevity of the asset.

Under both options, the cost of any assets funded with grants is removed, and the cost of land (which is not depreciable) is added. In addition, the cost of replacing or rehabilitating and upgrading existing assets that is included in the CIP is excluded at the estimated current cost (option 1) or original cost (option 2). Total cost included in the buy-in fee is \$16.58 million under option 1, and \$11.91 million under option 2.

3.3 CAPACITY FEE CALCULATIONS

The total buy-in costs are divided by the number of estimated ERUs in 2040 to determine the maximum buy-in fee per ERU. An administrative fee of three-percent is added for collection and handling of the fees, public hearing costs, and periodic updates of the fee program.

Under fee level option 1 with the RCNLD methodology, the total capacity fee per ERU is \$10,802. Under fee level option 2 with the original cost methodology, the total capacity fee per ERU is \$8,264. The fee calculations are shown in **Table 8**.

Table 8
Capacity Fee Calculation per ERU

Item	Option 1 (RCNLD)	Option 2 (Original Cost)
Buy-In Fee		
Buy-In of 2021 Assets	\$20,773,939	\$14,898,733
Plus Fiscal Year 2021/22 Improvements	\$4,100,000	\$4,100,000
less grant-funded projects	(\$10,590)	(\$12,439)
Plus Land	\$150,436	\$150,436
Net Buy-In Facilities Cost	\$25,013,786	\$19,136,730
Total ERUs by 2040	2,385	2,385
Total Fee per ERU	\$10,487	\$8,023
Administrative Fee @ 3%	\$315	\$241
Total Water Capacity Fee per ERU	\$10,802	\$8,264

Source: CPUD supporting data and HEC June 2022.

exp costs

The fee per ERU is the fee for a one-inch meter because almost all new residential homes will be required to install a one-inch meter. The fees for all other meter sizes are based on a) maximum flow rates by meter size, and b) estimated installation costs³.

Maximum flow rates are used because a significant portion of a water system's design (supply, treatment and transmission) is related to meeting capacity needs. The ratio at which the meter charge increases is a function of the meter's safe operating capacity as established by the American Water Works Association. For example, a one-inch meter has a maximum flow rate of 50 gallons per minute (gpm) and a two-inch meter has a maximum flow rate of 100 gpm. The flow rate of a two-inch meter is twice that of a one-inch meter therefore the ratio for a two-inch meter is 2.0. Meter ratios based on safe operating capacity were previously shown in **Table 6**.

³ Regionally, the Tuolumne Utilities District also uses this methodology for capacity fee calculations.

Installation costs are also used because they more closely reflect the new customer’s demand on the water system’s distribution facilities, and because for larger meters, the meter capacity may not be a reasonable indicator for the actual demand of the customer. The installation cost meter ratios are shown in **Appendix A Table A-4**. Service installation costs, which are an input to the installation cost meter ratios, are estimated in **Table A-5**.

The meter ratios used to calculate the capacity fee by meter size are an average of the installation cost and meter capacity ratios, shown in **Table 9** below.

Table 9
Determination of Meter Ratios for Capacity Fee

Meter Size	Installation Cost	Meter Capacity	Average
1" and Smaller	1.0	1.0	1.0
1.5"	1.1	2.0	1.5
2"	1.1	3.2	2.2
3"	1.5	6.0	3.7
4"	1.9	10.0	5.9
6"	2.7	20.0	11.4
8"	3.8	32.0	17.9

Source: CPUD and HEC July 2022.

ratios

The calculated capacity fees under each fee level option are shown in **Table 10**. The calculation of the ADU fee is based on the capacity fee for a typical home divided by the typical livable building square feet of homes in the CPUD service territory (1,900 square feet).

Table 10
Calculated Capacity Fees

Item	Option 1 (RCNLD)	Option 2 (Original Cost)
Fee per ERU	\$10,802	\$8,264
Est. ERU Livable Bldg. Sq. Ft.	1,900	1,900
ADU Fee per Bldg. Sq. Ft. [1]	\$5.69	\$4.35
Meter Size		
1" and Smaller	\$10,802	\$8,264
1.5"	\$16,203	\$12,396
2"	\$23,764	\$18,180
3"	\$39,966	\$30,576
4"	\$63,730	\$48,756
6"	\$123,139	\$94,207
8"	\$193,350	\$147,922

Source: HEC June 2022.

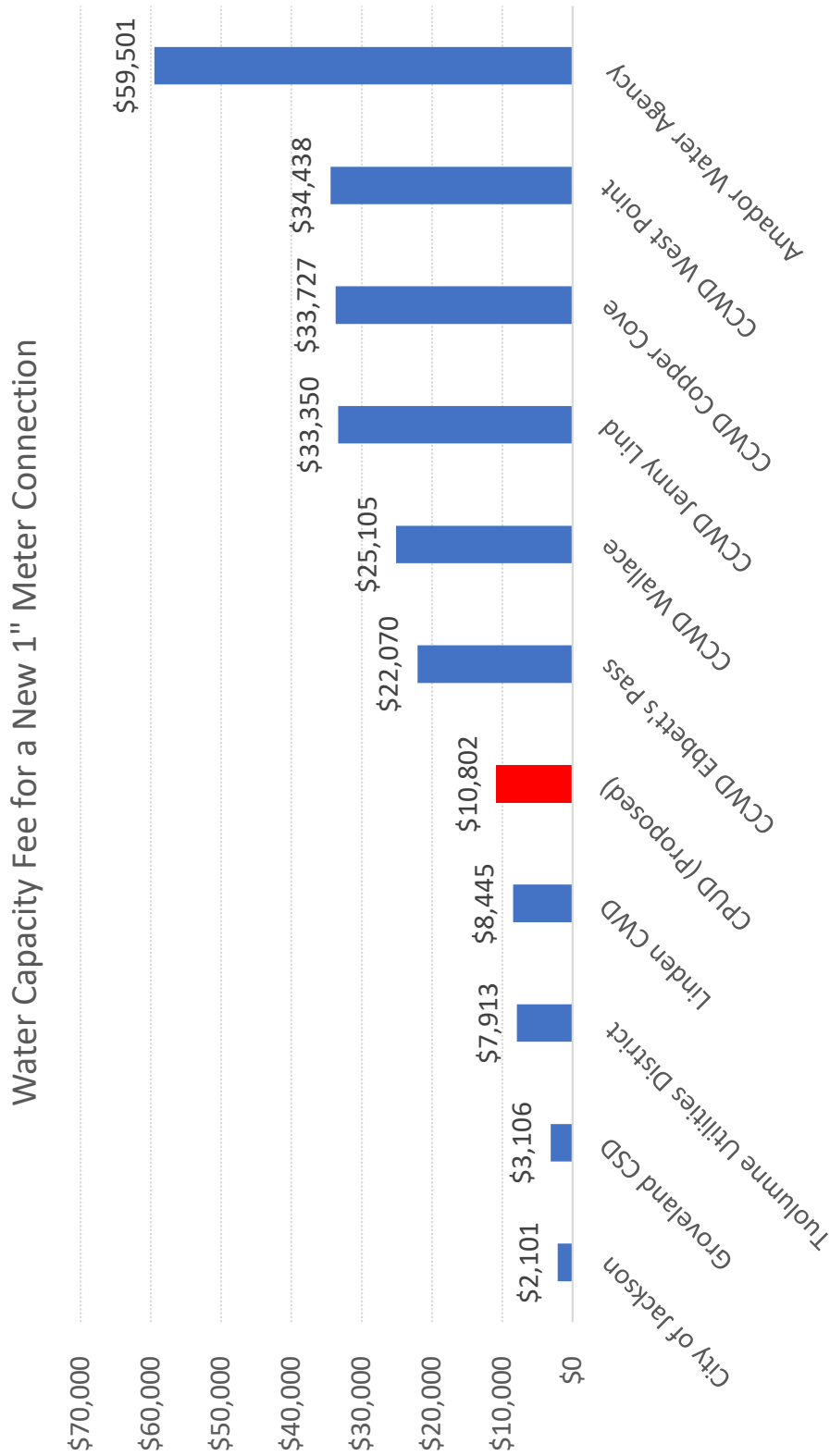
cap calc

[1] Excludes garage and covered outdoor areas.

3.4 REGIONAL FEES COMPARISON

It is common for municipal water providers to charge capacity fees (sometimes also called “participation fees”) to equalize the cost of infrastructure between current and future system users. Other regional municipal water providers charge capacity fees, as shown in **Figure 1** on the next page. The proposed capacity fee for a new ERU is less than that charged by the Calaveras County Water District and the Amador Water Agency which serve the communities surrounding the CPUD service territory.

Figure 1
Comparison of Regional Water Capacity Fees



Section 4: CAPACITY AND CONNECTION FEES ADOPTION AND ADMINISTRATION

4.1 CAPACITY AND CONNECTION FEES ADOPTION

Pursuant to California Government Code 66016, prior to increasing an existing fee or adopting a new fee, an agency must hold at least one open and public meeting. Notice of the time and place of the meeting, including a general explanation of the matter to be considered, and a statement that all supporting studies and information are available to the public, shall be noticed at least 10 days prior to the meeting. Increases to an existing fee or adoption of a new fee may be made by ordinance or resolution.

4.2 FUTURE FEE ADJUSTMENTS AND UPDATES

It is recommended that the District update the Capacity and Connection Fees annually by a predetermined index. The Engineering News Record San Francisco Construction Cost Index March to March change is recommended for an annual July 1 update. Periodic review of the Capacity and Connection Fees is also recommended whenever estimated costs are revised pursuant to an update of the District's Water Master Plan, or whenever there are changes in the County's General Plan that would affect projected growth in the District's service territory.

4.3 MITIGATION FEE ACT COMPLIANCE

For the capacity fees only, the District must deposit fee revenues in a separate capital facilities fund to avoid any comingling with other monies of the District. Any interest income earned must also be deposited into the Water Capacity Fee Fund. In addition, the District must comply with annual and five-year reporting requirements for the Water Capacity Fees Fund.

Within 180 days of the end of a fiscal year, the following is to be furnished for the prior fiscal year:

1. A description of the charges deposited in the fund,
2. The beginning and ending balance of the fund,
3. The amount of the fees collected and interest earned,
4. An identification of each public improvement for which fees were expended and the amount of expenditure for each improvement, including the percentage of the total cost of the improvement that was funded with capacity fees if more than one source of funding was used,
5. An identification of each public improvement on which charges were expended that were completed during the fiscal year, and each improvement anticipated to be undertaken in the following fiscal year, and
6. A description of any interfund transfer or loan made from the Water Capacity Fee Fund, identification of any public improvements on which any transferred monies are, or will be, expended, and a description of repayment terms.

All of the above information may be included in the District's annual financial report.

4.4 CAPACITY FEE CREDITS AND REIMBURSEMENTS

The District may provide fee credits and reimbursements to developers who dedicate land or construct facilities included in the expansion fee portion of the capacity fee with private financing. The credit / reimbursement may only be up to the cost of the improvement, as included in the expansion fee program, or the actual cost paid by the developer, whichever is lower. No credit or reimbursement will be allowed for costs incurred that are higher than estimated in the fee program, and the administrative portion of the fee is excluded from fee credits / reimbursements.

Credits. Once fee credits have been determined, they will be used at the time the respective fees would be due. The use of accumulated fee revenues shall first be used for District-determined priority capital improvement projects, and secondly for repayment of accrued reimbursement to private developers.

Reimbursements. Reimbursements would be due to developers who advance-fund water facilities in excess of their fair share of the facility costs. Developers must enter into a reimbursement agreement with the District to receive reimbursements. Fee credits would be provided up to the fair share cost for the developer, then reimbursements would be due to the developer once revenue collections have been made from other developers. Reimbursement priority is a "first in, first out" system. As money becomes available, the first in would receive reimbursement first. Developers may have to wait some time before their reimbursement is paid in full. Reimbursements are only an obligation of the Water Capacity Fee Fund, not any other District fund.

Fee credits/reimbursements will be adjusted annually by the inflation factor used to adjust the fee.

APPENDIX A

WATER CAPACITY AND CONNECTION FEE STUDY

SUPPORT TABLES

Table A-1
Calaveras Public Utility District Connection Fees Update
Installation Fee Calculations for a One-Inch Meter **DRAFT**

Item	Cost per Hour	Time (Hours)	Total Cost
Labor			
Crew (3 persons)	\$75	16.00	\$3,600
Total Labor			\$3,600
Equipment			
District Truck	\$75	10.00	\$750
Dump Truck	\$150	4.00	\$600
Backhoe	\$150	8.00	\$1,200
Total Equipment			\$2,550
Total Installation Fee			\$6,150

Source: CPUD and HEC July 2022.

install fee

Table A-2 **DRAFT**
Calaveras Public Utility District Connection Fees Update
Homes Recently Sold or For Sale Built Since 2013

Area	Bldg. Sq. Ft.
Mokelumne Hill	1,200
Mokelumne Hill	4,704
Mokelumne Hill	1,205
Mokelumne Hill	1,674
Mokelumne Hill	1,200
Mokelumne Hill	1,330
Mokelumne Hill	2,059
Mokelumne Hill	2,264
Mokelumne Hill	3,172
Mokelumne Hill	2,300
Mokelumne Hill	1,514
Mokelumne Hill	1,200
Mountain Ranch	1,296
Mountain Ranch	1,396
Copperopolis	1,442
Pioneer	1,568
Pine Grove	2,370
Murphys	1,787
Drytown	1,914
Jackson	1,897
Jackson	1,998
Jackson	2,248
Jackson	4,125
Jackson	1,897
Jackson	2,598
San Andreas	1,680
San Andreas	2,786
Median Home Size	1,897

Source: Zillow and Trulia searches, Jan. 7, 2021, sf built
and July 8, 2022.

Table A-3
 Calaveras Public Utility District Connection Fees Update
 CPUD Water Assets and Current Values

DRAFT

Asset Description	Date Acquired	Base Year	Years of Life	Years Deprec.	Remaining Years	ORIGINAL COST		REPLACEMENT COST				
						Original Cost	Replacement Factor	Replacement Cost Est.	Annual Depr.	Accum. Deprec.	Remaining Value	
						2022						
						e	f	$g = e * f$	$h = g / b$	$i = h * c$	$j = g - i$	
BUILDING AND IMPROVEMENT												
506 w. Charles Office	06/30/05	2005	30	17	13	\$297,320	1.89	\$560,505	\$18,683	\$317,619	\$242,885	
New a/c for office	06/30/06	2006	10	16	0	\$13,564	1.82	\$24,635	\$2,463	\$24,635	\$0	
Office Roof Replacement	06/30/18	2018	30	4	26	\$10,250	1.16	\$11,899	\$397	\$1,587	\$10,313	
TOTAL BUILDING AND IMPROVEMENT						\$321,134		\$597,038	\$21,544	\$343,840	\$253,198	
PUMPING PLANT												
Dam	06/30/74	1974	99	48	51	\$1,286,710	5.99	\$7,708,211	\$77,861	\$3,737,314	\$3,970,896	
Pump Station controls	04/30/04	2004	30	18	12	\$13,775	1.96	\$26,955	\$899	\$16,173	\$10,782	
Rebuild So. Fork Pump Station Controls	02/29/12	2012	10	10	0	\$5,165	1.45	\$7,499	\$750	\$7,499	\$0	
Rebuild So. Fork 400 HP GE Solid Shaft Motor	05/31/12	2012	10	10	0	\$7,271	1.45	\$10,558	\$1,056	\$10,558	\$0	
South Fork Pump Station	06/30/20	2020	40	2	38	\$167,810	1.08	\$180,806	\$4,520	\$9,040	\$171,765	
TOTAL PUMPING PLANT						\$1,480,730		\$7,934,028	\$85,085	\$3,780,585	\$4,153,444	
HYDRO PLANT												
Hydro #1	12/31/94	1994	25	28	0	\$16,667	2.84	\$47,357	\$1,894	\$47,357	\$0	
Hydro #2	12/31/94	1994	25	28	0	\$16,667	2.84	\$47,357	\$1,894	\$47,357	\$0	
Hydro #3	12/31/94	1994	25	28	0	\$16,666	2.84	\$47,354	\$1,894	\$47,354	\$0	
80 KW Cummins & GE Zenith Backup Generator (Glencoe)	11/30/11	2011	10	11	0	\$38,616	1.51	\$58,202	\$5,820	\$58,202	\$0	
Pipeline Hydros - Cla Val	06/30/15	2015	10	7	3	\$12,155	1.30	\$15,781	\$1,578	\$11,047	\$4,734	
Schaads Dam Access Road	06/30/19	2019	30	3	27	\$52,746	1.12	\$58,990	\$1,966	\$5,899	\$53,091	
Schaads Underground Irrigation Line	06/30/19	2019	30	3	27	\$52,500	1.12	\$58,715	\$1,957	\$5,872	\$52,844	
Schaads	06/30/20	2020	30	2	28	\$47,139	1.08	\$50,790	\$1,693	\$3,386	\$47,404	
Ponderosa Hydro	06/30/20	2020	30	2	28	\$17,373	1.08	\$18,718	\$624	\$1,248	\$17,470	
TOTAL HYDRO PLANT						\$270,529		\$403,265	\$19,321	\$227,721	\$175,544	
TREATMENT PLANT & TANKS												
Diversion Dam	06/30/74	1974	99	48	51	\$38,505	5.99	\$230,669	\$2,330	\$111,840	\$118,830	
Pumping Plant	06/30/74	1974	40	48	0	\$166,854	5.99	\$999,562	\$24,989	\$999,562	\$0	
Treatment Plant	06/30/74	1974	40	48	0	\$500,564	5.99	\$2,998,698	\$74,967	\$2,998,698	\$0	
Clearwell Tank	06/30/74	1974	60	48	12	\$102,680	5.99	\$615,119	\$10,252	\$492,095	\$123,024	
Mokelumne Hill Reservoir	06/30/74	1974	99	48	51	\$166,855	5.99	\$999,568	\$10,097	\$484,639	\$514,929	
San Andreas Reservoir	06/30/74	1974	99	48	51	\$302,833	5.99	\$1,814,162	\$18,325	\$879,594	\$934,569	
Pump Station Road	06/30/74	1974	33	48	0	\$5,839	5.99	\$34,979	\$1,060	\$34,979	\$0	
Mokelumne Hill Road	06/30/74	1974	33	48	0	\$5,399	5.99	\$32,343	\$980	\$32,343	\$0	
Pump Station B Road	06/30/74	1974	33	48	0	\$5,402	5.99	\$32,361	\$981	\$32,361	\$0	
Other	06/30/93	1993	33	29	4	\$98,115	2.95	\$289,373	\$8,769	\$254,298	\$35,076	
Electric Panel with new switch	06/30/00	2000	10	22	0	\$10,115	2.27	\$22,977	\$2,298	\$22,977	\$0	
Railroad flat water line extension	06/30/02	2002	99	20	79	\$1,559,469	2.11	\$3,287,939	\$33,212	\$664,230	\$2,623,709	
Treatment plant filters	06/30/05	2005	40	17	23	\$286,507	1.89	\$540,119	\$13,503	\$229,551	\$310,569	
Treatment plant pump	06/30/05	2005	40	17	23	\$46,254	1.89	\$87,197	\$2,180	\$37,059	\$50,138	
Backwash Pond Renewal	06/30/14	2014	20	8	12	\$168,213	1.35	\$226,694	\$11,335	\$90,677	\$136,016	
Treatment Plant Valve Project	06/30/14	2014	20	8	12	\$69,302	1.35	\$93,395	\$4,670	\$37,358	\$56,037	
Treatment Plant Improvements	06/30/15	2015	20	7	13	\$157,435	1.30	\$204,401	\$10,220	\$71,540	\$132,861	
Filter Media Replacement	06/30/16	2016	10	6	4	\$274,605	1.25	\$343,473	\$34,347	\$206,084	\$137,389	
Energy Efficient Lighting Upgrade	06/30/16	2016	40	6	34	\$24,574	1.25	\$30,737	\$768	\$4,611	\$26,127	
Water Treatment Plant Backwash Valve	06/30/17	2017	10	5	5	\$5,985	1.20	\$7,212	\$721	\$3,606	\$3,606	
Filter Cla-Val Replacement	06/30/18	2018	5	4	1	\$13,813	1.16	\$16,035	\$3,207	\$12,828	\$3,207	
Treatment Plant HVAC/Lighting Upgrade	06/30/18	2018	15	4	11	\$12,439	1.16	\$14,440	\$963	\$3,851	\$10,590	
Reservoir Diversion Ditch Improvement	06/30/18	2018	3	4	0	\$31,040	1.16	\$36,034	\$12,011	\$36,034	\$0	
Water Treatment Plant On-Site Chlorine Generator	06/30/18	2018	20	4	16	\$292,154	1.16	\$339,157	\$16,958	\$67,831	\$271,326	
Treatment Plant Salt Storage	06/30/19	2019	30	3	27	\$75,806	1.12	\$84,780	\$2,826	\$8,478	\$76,302	
Treatment Plant Compressor	06/30/20	2020	20	2	18	\$7,503	1.08	\$8,085	\$404	\$808	\$7,276	
TOTAL TREATMENT PLANTS AND TANKS						\$4,428,261		\$13,389,512	\$302,372	\$7,817,933	\$5,571,579	

Table A-3
 Calaveras Public Utility District Connection Fees Update
 CPUD Water Assets and Current Values

DRAFT

Asset Description	Date Acquired	Base Year	Years of Life	Years Deprec.	Remaining Years	ORIGINAL COST		REPLACEMENT COST				
						Original Cost	Replacement Factor	Replacement Cost Est.	Annual Depr.	Accum. Deprec.	Remaining Value	
						<i>e</i>	<i>f</i>	<i>g = e*f</i>	<i>h = g/b</i>	<i>i = h*c</i>	<i>j = g - i</i>	
2022												
GENERAL PLANT												
Warehouse Construction	06/30/70	1970	40	52	0	\$5,573	6.95	\$38,757	\$969	\$38,757	\$0	
Dump Truck	06/30/05	2005	15	17	0	\$72,627	1.89	\$136,915	\$9,128	\$136,915	\$0	
TOTAL GENERAL PLANT						\$78,200		\$175,672	\$10,097	\$175,672	\$0	
TRANSMISSION & DISTRIBUTION												
Mokelumne River System	06/30/39	1939	40	83	0	\$20,000	22.10	\$441,988	\$11,050	\$441,988	\$0	
Construction Cost	06/30/40	1940	40	82	0	\$257,215	21.29	\$5,476,200	\$136,905	\$5,476,200	\$0	
Extension Lines	06/30/47	1947	40	75	0	\$5,127	16.40	\$84,075	\$2,102	\$84,075	\$0	
Extension Lines	06/30/48	1948	40	74	0	\$8,683	15.80	\$137,175	\$3,429	\$137,175	\$0	
Extension Lines	06/30/49	1949	40	73	0	\$8,091	15.22	\$123,143	\$3,079	\$123,143	\$0	
San Andreas Line	06/30/52	1952	40	70	0	\$104,025	13.61	\$1,415,639	\$35,391	\$1,415,639	\$0	
Line to cement plant	06/30/53	1953	40	69	0	\$9,317	13.11	\$122,150	\$3,054	\$122,150	\$0	
McCarty Dam Spillway	06/30/54	1954	25	68	0	\$25,689	12.63	\$324,465	\$12,979	\$324,465	\$0	
Highway Realignment	06/30/55	1955	40	67	0	\$16,768	12.17	\$204,035	\$5,101	\$204,035	\$0	
Mainline Extension	06/30/64	1964	40	58	0	\$6,164	8.70	\$53,618	\$1,340	\$53,618	\$0	
Mainline Extension Reimbursement	06/30/68	1968	40	54	0	\$51,073	7.49	\$382,691	\$9,567	\$382,691	\$0	
Mainline Extension Garamendi	06/30/72	1972	40	50	0	\$7,439	6.45	\$48,016	\$1,200	\$48,016	\$0	
Water Lines	06/30/74	1974	75	48	27	\$2,725,934	5.99	\$16,330,080	\$217,734	\$10,451,251	\$5,878,829	
Water Line - Construction	06/30/76	1976	75	46	29	\$9,789	5.56	\$54,427	\$726	\$33,382	\$21,045	
Paloma Water Project	06/30/78	1978	75	44	31	\$537,378	5.16	\$2,773,087	\$36,974	\$1,626,877	\$1,146,209	
Replace Line Material	06/29/83	1983	40	39	1	\$5,290	4.28	\$22,654	\$566	\$22,088	\$566	
Water Meters	03/01/87	1987	30	35	0	\$5,500	3.69	\$20,289	\$676	\$20,289	\$0	
Additions	07/01/89	1989	40	33	7	\$5,465	3.42	\$18,711	\$468	\$15,437	\$3,274	
Additions	07/01/90	1990	40	32	8	\$105,339	3.30	\$347,460	\$8,687	\$277,968	\$69,492	
Additions	07/01/90	1990	40	32	8	\$24,403	3.30	\$80,493	\$2,012	\$64,394	\$16,099	
Additions	07/01/90	1990	40	32	8	\$851,588	3.30	\$2,808,955	\$70,224	\$2,247,164	\$561,791	
Additions	07/01/91	1991	40	31	9	\$40,829	3.18	\$129,744	\$3,244	\$100,551	\$29,192	
Additions	07/01/92	1992	40	30	10	\$138,537	3.06	\$424,118	\$10,603	\$318,088	\$106,029	
Additions	06/30/94	1994	40	28	12	\$49,630	2.84	\$141,017	\$3,525	\$98,712	\$42,305	
Handheld Units, 3	07/31/94	1994	10	28	0	\$5,980	2.84	\$16,991	\$1,699	\$16,991	\$0	
Backhoe	10/31/94	1994	30	28	2	\$57,862	2.84	\$164,407	\$5,480	\$153,446	\$10,960	
Extension Lines	12/31/94	1994	40	28	12	\$6,493	2.84	\$18,449	\$461	\$12,914	\$5,535	
Line Replace Various	01/31/95	1995	10	27	0	\$10,000	2.74	\$27,373	\$2,737	\$27,373	\$0	
Extension Lines	06/30/95	1995	10	27	0	\$15,978	2.74	\$43,737	\$4,374	\$43,737	\$0	
MTR 5/8-3/4 SR DR 10G - Sensus Tech	06/30/96	1996	40	26	14	\$7,398	2.64	\$19,509	\$488	\$12,681	\$6,828	
Misc-Camellia, US Pipe, Super Plumbing	06/30/96	1996	10	26	0	\$7,225	2.64	\$19,053	\$1,905	\$19,053	\$0	
12-C-900 CL 150 Pipe - Westburne Supply	06/30/96	1996	40	26	14	\$21,983	2.64	\$57,972	\$1,449	\$37,682	\$20,290	
Lines Replacement, Various	06/30/97	1997	10	25	0	\$74,300	2.54	\$188,766	\$18,877	\$188,766	\$0	
Hydroelectric Project	06/30/98	1998	40	24	16	\$57,629	2.45	\$141,053	\$3,526	\$84,632	\$56,421	
Line Replacement Supplies	06/30/98	1998	30	24	6	\$28,845	2.45	\$70,599	\$2,353	\$56,480	\$14,120	
Pipe	06/30/98	1998	30	24	6	\$6,492	2.45	\$15,890	\$530	\$12,712	\$3,178	
Pipelines	06/30/99	1999	10	23	0	\$13,065	2.36	\$30,807	\$3,081	\$30,807	\$0	
Pickup, Toyota Tacoma 2000	06/30/00	2000	10	22	0	\$22,618	2.27	\$51,380	\$5,138	\$51,380	\$0	
Lewis Avenue	06/30/00	2000	30	22	8	\$52,792	2.27	\$119,925	\$3,998	\$87,945	\$31,980	
Air Compressor	06/30/00	2000	10	22	0	\$11,895	2.27	\$27,020	\$2,702	\$27,020	\$0	
Misc. Pipeline MTGS	06/30/00	2000	10	22	0	\$1,877	2.27	\$4,264	\$426	\$4,264	\$0	
Welder, Rock Splitter	06/30/00	2000	10	22	0	\$8,365	2.27	\$19,002	\$1,900	\$19,002	\$0	
Gold Strike Road Replacement	06/30/01	2001	40	21	19	\$17,256	2.19	\$37,765	\$944	\$19,826	\$17,938	
County Bond reimbursement	09/30/01	2001	40	21	19	(\$10,000)	2.19	(\$21,885)	(\$547)	(\$11,490)	(\$10,395)	

Table A-3
 Calaveras Public Utility District Connection Fees Update
 CPUD Water Assets and Current Values

DRAFT

Asset Description	Date Acquired	Base Year	Years of Life	2022			ORIGINAL COST	REPLACEMENT COST				
				Years Deprec.	Remaining Years		Original Cost	Replacement Factor	Replacement Cost Est.	Annual Depr.	Accum. Deprec.	Remaining Value
				$c = 2022 - b$	$d = b - c$	e	3.8% per year					$j = g - i$
		a	b	$c = 2022 - b$	$d = b - c$	e	f	$g = e * f$	$h = g / b$	$i = h * c$	$j = g - i$	
Valves	06/30/01	2001	10	21	0	\$6,595	2.19	\$14,433	\$1,443	\$14,433	\$0	\$0
Pipeline from CCWD	06/30/01	2001	40	21	19	\$23,310	2.19	\$51,014	\$1,275	\$26,782	\$24,232	\$24,232
Pipelines	06/30/01	2001	40	21	19	\$25,337	2.19	\$55,450	\$1,386	\$29,111	\$26,339	\$26,339
Pickup truck F3504x4	02/28/02	2002	5	20	0	\$30,763	2.11	\$64,861	\$12,972	\$64,861	\$0	\$0
Meters	06/30/02	2002	10	20	0	\$6,618	2.11	\$13,953	\$1,395	\$13,953	\$0	\$0
Whittle pump controls	06/30/03	2003	30	19	11	\$14,820	2.03	\$30,102	\$1,003	\$19,065	\$11,037	\$11,037
Winebrenner line extention	06/30/04	2004	30	18	12	\$5,708	1.96	\$11,170	\$372	\$6,702	\$4,468	\$4,468
Fence materials	06/30/04	2004	30	18	12	\$28,068	1.96	\$54,924	\$1,831	\$32,955	\$21,970	\$21,970
GSH Water system (dev cont)	06/30/05	2005	30	17	13	\$91,085	1.89	\$171,712	\$5,724	\$97,304	\$74,409	\$74,409
Simpson road extention	06/30/06	2006	30	16	14	\$32,360	1.82	\$58,771	\$1,959	\$31,345	\$27,427	\$27,427
Toyota Tacoma	06/30/07	2007	5	15	0	\$28,058	1.75	\$49,092	\$9,818	\$49,092	\$0	\$0
Chain link fence-Jack Davis reservoir	06/30/07	2007	30	15	15	\$33,894	1.75	\$59,304	\$1,977	\$29,652	\$29,652	\$29,652
Major pipeline leak repair	06/30/07	2007	30	15	15	\$111,545	1.75	\$195,169	\$6,506	\$97,584	\$97,584	\$97,584
Pope & California St. new water line Ph1	06/30/09	2009	30	13	17	\$38,740	1.62	\$62,911	\$2,097	\$27,261	\$35,649	\$35,649
2009 Toyota Tacoma	06/30/09	2009	5	13	0	\$28,173	1.62	\$45,751	\$9,150	\$45,751	\$0	\$0
Paloma pressure station	06/30/09	2009	30	13	17	\$5,717	1.62	\$9,283	\$309	\$4,023	\$5,261	\$5,261
Ford Truck	11/23/10	2010	5	12	0	\$34,091	1.56	\$53,335	\$10,667	\$53,335	\$0	\$0
2009 Trail Max Trailer	10/31/10	2010	5	12	0	\$20,533	1.56	\$32,123	\$6,425	\$32,123	\$0	\$0
Pope & California St. new water line Ph1	06/30/10	2010	30	12	18	\$40,756	1.56	\$63,762	\$2,125	\$25,505	\$38,257	\$38,257
Pope & California St. new water line Ph2	10/31/11	2011	30	11	19	\$37,504	1.51	\$56,527	\$1,884	\$20,726	\$35,800	\$35,800
Blastronix Upgrade	11/30/11	2011	5	11	0	\$5,145	1.51	\$7,754	\$1,551	\$7,754	\$0	\$0
Lafayette Line Replacement	07/31/11	2011	40	11	29	\$94,301	1.51	\$142,131	\$3,553	\$99,086	\$103,045	\$103,045
Foothills Terrace Water System	06/30/12	2012	40	10	30	\$36,950	1.45	\$53,652	\$1,341	\$13,413	\$40,239	\$40,239
Ridge Road	06/30/13	2013	40	9	31	\$93,442	1.40	\$130,713	\$3,268	\$29,410	\$101,303	\$101,303
18" Main	06/30/13	2013	40	9	31	\$37,041	1.40	\$51,816	\$1,295	\$11,659	\$40,157	\$40,157
Cemetery Lane	06/30/13	2013	40	9	31	\$19,617	1.40	\$27,442	\$686	\$6,174	\$21,267	\$21,267
Mokelumne Hill Tank Fence	06/30/13	2013	8	9	0	\$7,316	1.40	\$10,234	\$1,279	\$10,234	\$0	\$0
Dozer Retrofit	06/30/13	2013	5	9	0	\$21,224	1.40	\$29,690	\$5,938	\$29,690	\$0	\$0
Warehouse Paving	06/30/13	2013	10	9	1	\$13,350	1.40	\$18,675	\$1,867	\$16,807	\$1,867	\$1,867
506 St. Charles Line Replacement	06/30/13	2013	40	9	31	\$20,765	1.40	\$29,048	\$726	\$6,536	\$22,512	\$22,512
Hildebrandt Line Replacement	06/30/14	2014	40	8	32	\$69,704	1.35	\$93,938	\$2,348	\$18,788	\$75,150	\$75,150
SCADA System Upgrade (Eurotherm)	06/30/15	2015	10	7	3	\$11,485	1.30	\$14,911	\$1,491	\$10,438	\$4,473	\$4,473
SF Pump Station Motor and Flow Meter	06/30/15	2015	10	7	3	\$18,204	1.30	\$23,634	\$2,363	\$16,544	\$7,090	\$7,090
Zimmerman & Happy Valley Line Replacement Project	06/30/15	2015	40	7	33	\$32,789	1.30	\$42,571	\$1,064	\$7,450	\$35,121	\$35,121
S. Main Line Replacement Project	06/30/16	2016	40	6	34	\$205,527	1.25	\$257,071	\$6,427	\$38,561	\$218,511	\$218,511
S. Main (Leger) Moke Hill Line Replacement	06/30/17	2017	40	5	35	\$69,415	1.20	\$83,644	\$2,091	\$10,456	\$73,189	\$73,189
Pope/Hildebrandt Fill Station	06/30/17	2017	20	5	15	\$45,148	1.20	\$54,403	\$2,720	\$13,601	\$40,802	\$40,802
Railroad Flat Fill Station	06/30/17	2017	20	5	15	\$43,726	1.20	\$52,690	\$2,634	\$13,172	\$39,517	\$39,517
Mokelumne Hill Fill Station	06/30/17	2017	20	5	15	\$52,941	1.20	\$63,794	\$3,190	\$15,948	\$47,845	\$47,845
2016 Ford F-350 1FD8X3B6XGED28505	06/30/17	2017	10	5	5	\$48,212	1.20	\$58,095	\$5,810	\$29,048	\$29,048	\$29,048
Oak Street Line Replacement	06/30/17	2017	40	5	35	\$50,656	1.20	\$61,041	\$1,526	\$7,630	\$53,411	\$53,411
High School Street Line Replacement	06/30/17	2017	40	5	35	\$78,489	1.20	\$94,579	\$2,364	\$11,822	\$82,757	\$82,757
Main Control Valve Road Improvements	06/30/17	2017	15	5	10	\$31,454	1.20	\$37,902	\$2,527	\$12,634	\$25,268	\$25,268
Marler Line Replacement	06/30/17	2017	40	5	35	\$53,471	1.20	\$64,432	\$1,611	\$8,054	\$56,378	\$56,378
Paloma Fill Station	06/30/18	2018	20	4	16	\$34,379	1.16	\$39,910	\$1,996	\$7,982	\$31,928	\$31,928
George Reed Fill Station	06/30/18	2018	20	4	16	\$34,379	1.16	\$39,910	\$1,996	\$7,982	\$31,928	\$31,928
2018 Ford F-350	06/30/18	2018	10	4	6	\$31,783	1.16	\$36,896	\$3,690	\$14,758	\$22,138	\$22,138
Ponderosa Meter Upgrade	06/30/18	2018	20	4	16	\$24,009	1.16	\$27,872	\$1,394	\$5,574	\$22,297	\$22,297
Sunset Line Replacement Project	06/30/18	2018	40	4	36	\$402,327	1.16	\$467,055	\$11,676	\$46,706	\$420,350	\$420,350
Pixley Ave Line Replacement Project	06/30/19	2019	40	3	37	\$219,096	1.12	\$245,034	\$6,126	\$18,378	\$226,656	\$226,656
Court Line Replacement Project	06/30/19	2019	40	3	37	\$16,974	1.12	\$18,984	\$475	\$1,424	\$17,560	\$17,560
FLEXUS F601 Portable Ultrasonic Flowmeter	06/30/19	2019	10	3	7	\$11,906	1.12	\$13,316	\$1,332	\$3,995	\$9,321	\$9,321
SCADA System Upgrade	06/30/20	2020	10	2	8	\$273,668	1.08	\$294,862	\$29,486	\$58,972	\$235,890	\$235,890
2020 Ford F150 XL (VIN 1FTEX1EP5LKD19366)	06/30/20	2020	5	2	3	\$29,985	1.08	\$32,307	\$6,461	\$12,923	\$19,384	\$19,384
TOTAL TRANSMISSION AND DISTRIBUTION						\$8,319,879		\$36,889,958	\$846,781	\$26,269,782	\$10,620,175	
GRAND TOTAL CPUD ASSETS						\$14,898,733		\$59,389,473	\$1,285,201	\$38,615,534	\$20,773,939	

Source: CPUD Depreciation schedule.

[1] Adjusted by the average annual rate of inflation in California since 1955.

Table A-4
Calaveras Public Utility District Connection Fees Update

Installation Cost Meter Ratios

DRAFT

Meter Size	Estimated Costs by Meter Size			Installation Cost Meter Ratio
	Meter [1]	Install	Total	
1" and Smaller	\$825	\$6,150	\$6,975	1.00
1.5"	\$1,175	\$6,150	\$7,325	1.05
2"	\$1,675	\$6,150	\$7,825	1.12
3"	\$2,000	\$8,330	\$10,330	1.48
4"	\$4,800	\$8,330	\$13,130	1.88
6"	\$8,400	\$10,500	\$18,900	2.71
8"	\$13,500	\$12,680	\$26,180	3.75

Source: HEC 2022.

install ratio

[1] Costs for meter smaller than 3" based on CPUD data and costs for meters 3" and larger based on data from comparison communities.

Table A-5
Calaveras Public Utility District Connection Fees Update

Service Installation Cost Estimates

DRAFT

Labor and Equipment	Meter Size						
	1 or Smaller	1.5	2	3	4	6	8
LABOR							
Hours by Position							
Crew 1	16.00	16.00	16.00	20.00	20.00	24.00	28.00
Crew 2	16.00	16.00	16.00	20.00	20.00	24.00	28.00
Crew 3	16.00	16.00	16.00	20.00	20.00	24.00	28.00
Cost by Position							
Crew 1	\$1,200	\$1,200	\$1,200	\$1,500	\$1,500	\$1,800	\$2,100
Crew 2	\$1,200	\$1,200	\$1,200	\$1,500	\$1,500	\$1,800	\$2,100
Crew 3	\$1,200	\$1,200	\$1,200	\$1,500	\$1,500	\$1,800	\$2,100
Total Labor	\$3,600	\$3,600	\$3,600	\$4,500	\$4,500	\$5,400	\$6,300
Equipment							
Hours per Equipment Type							
District Truck	10.00	10.00	10.00	15.00	15.00	20.00	25.00
Dump Truck	4.00	4.00	4.00	6.00	6.00	8.00	10.00
Backhoe	8.00	8.00	8.00	12.00	12.00	16.00	20.00
Cost by Equipment							
District Truck	\$750	\$750	\$750	\$1,125	\$1,125	\$1,500	\$1,875
Dump Truck	\$600	\$600	\$600	\$900	\$900	\$1,200	\$1,500
Backhoe	\$1,200	\$1,200	\$1,200	\$1,800	\$1,800	\$2,400	\$3,000
Total Equipment	\$2,550	\$2,550	\$2,550	\$3,830	\$3,830	\$5,100	\$6,380
TOTAL	\$6,150	\$6,150	\$6,150	\$8,330	\$8,330	\$10,500	\$12,680

Source: CPUD and HEC July 2022.

all sizes