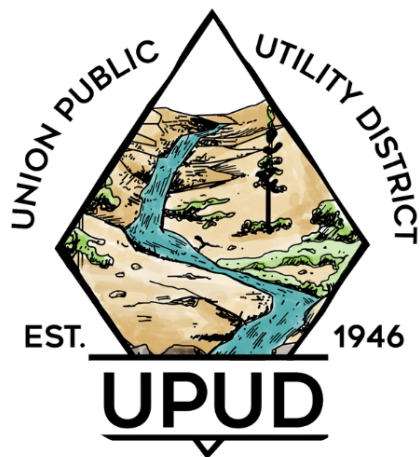


HANSFORD ECONOMIC CONSULTING

Union Public Utility District Connection and Capacity Fees Study



DRAFT

April 17, 2026

HEC No. 250473

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 Union Public Utility District and its consulting engineer Weber Ghio & Associates, 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. There is no warranty or representation that any projected values or results contained in this study will 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 Union Public Utility District's expenses and revenues may affect the result of the findings in this study. In addition, other factors not considered in the study may influence revenues achieved.

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Section 1: Executive Summary

1.1 Introduction

The Union Public Utility District (UPUD or District) provides treated domestic water service and untreated agricultural irrigation water service along the Highway 4 corridor in Calaveras County. Surface water, the only source of water for both domestic and irrigation systems, is provided by Utica Water and Power Authority (UWPA) from the North Fork of the Stanislaus River. The District boundaries extend north to the Utica Canal, north of Murphys, and include the communities of Murphys, Vallecito, Douglas Flat, extending west to Six Mile Village and south to Carson Hill. The District's service area is coterminous with its sphere of influence (SOI) and encompasses approximately 19.1 square miles. The sphere of influence (SOI) overlaps approximately 190 acres of the City of Angels Camp SOI.

The District serves approximately 1,600 metered domestic water connections and approximately 100 metered irrigation water connections. The average daily flow of treated water is around 850,000 gallons, with notably higher flows in the summer months. The untreated irrigation system has daily flows ranging from 35,000 to over 3 million gallons.

The District currently charges a flat fee of \$14,000 for all new domestic water system connections and \$5,000 for all new irrigation water system connections, regardless of the type of new connection (residential, commercial, irrigation) or service size. These fees were established in 2008 to balance the cost of existing and anticipated system upgrades with projected growth within the District boundary. UPUD directed completion of this fee study for four purposes:

1. Separate the fee into (a) a connection fee, and (b) a capacity fee.
2. Establish connection and capacity fees based on meter size, which is an industry standard.
3. Establish connection and capacity fees for Accessory Dwelling Units (ADUs) connecting to the domestic water system.
4. Ensure new customers are paying for the cost to connect their property with the District's facilities and pay in to the cost of infrastructure capacity that rate payers have been carrying on their behalf.

These fees are one-time fees charged to new water system customers and existing customers who require additional capacity (meter upsizing). These fees are unrelated to recurring water service fees and other miscellaneous fees. This report details the calculations, estimates and assumptions used to determine the maximum justifiable connection and capacity fees.

1.2 Authority to Charge Connection and Capacity Fees

The District is authorized to charge connection and capacity fees under the Mitigation Fee Act, which is included in the California Government Code Sections 66010 through 66020. Section 66013 defines the following terms:

water connection: "...the connection of a structure or project to a public water system..."

fee: "...a fee for the physical facilities necessary to make a water connection or sewer connection, including, but not limited to, meters, meter boxes, and pipelines from the structure or project to a water distribution line or sewer main, and the estimated reasonable cost of labor and materials for installation of those facilities bears a fair or reasonable relationship to the payor's burdens on, or benefits received from, the water connection or sewer connection".

capacity charge: "...a charge 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..."

For the purposes of this study, the term "connection fee" assumes the definition of "fee" provided above, whereas the simple terms "fee" and "charge" are used interchangeably within this report. The District must demonstrate that the fees imposed reflect the estimated reasonable cost of providing the facilities and bear a reasonable relationship to the new development's potential system capacity use. This report details the costs of installing a new connection, as well as the calculations used to determine the reasonable cost of providing system capacity to serve the new connection.

1.3 Methodologies Used

The "connection fee" includes the material cost of a new meter and its appurtenances plus the labor and equipment costs of installation. A more detailed discussion of the connection fee is presented in Section 2 of this report.

The "capacity fee" includes the cost for a new customer to buy-in to the cost of infrastructure that has already been built to serve new demand on the system. The capacity of the system can be described as the number of typical customers that can safely be served, or the maximum gallons per day that can be distributed to UPUD customers. By determining the replacement value of the existing facilities and comparing current usage to maximum usage of its facilities, the District can assume a reasonable estimate of the cost of capacity per typical customer. The capacity fee for larger services will be higher, in proportion to the additional capacity demand they place on the system compared to a standard (one-inch) service size. A more detailed discussion of the capacity fee is presented in Section 3 of this report.

This study uses fee-setting methodologies described in the American Water Works Association (AWWA) M1 manual titled "Principles of Water Rates, Fees, and Charges". The M1 manual outlines the basic elements involved in the determination of water-related fees and presents various alternative rules of procedure for formulating said fees, providing the water purveyor the ability to exercise judgment and preference to meet local conditions and requirements. The methodologies chosen for this study are widely used and accepted by policy makers and industry professionals. Further detail is provided in the body of this report as to how these are implemented.

1.4 Summary of Proposed Connection and Capacity Fees

Table 1 summarizes the proposed connection and capacity fees beginning July 1, 2026 for the domestic and irrigation water systems, based on the size of the meter installed for the new service.

Pursuant to Government Code Section 66324, UPUD has authority to charge ADUs a connection fee when the District installs a meter and appurtenances to serve the new ADU and a capacity fee when (1) a new detached ADU is built, (2) when a new attached ADU is built at the same time as the main residential or mixed-use building, (3) when the ADU is legally separated from the primary dwelling unit as a condominium, or (4) when an attached ADU adds more than 150 square feet to the existing accessory structure and a new or separate water connection is required between the ADU and the District’s facilities. The fees are charged per livable building square foot of the ADU.

Table 1: Proposed Connection and Capacity Fees

Water System	Water Meter Size				ADU per Bldg. Sq. Ft.
	1-inch	1.5-inch	2-inch	larger than 2"	
Domestic					
Connection	\$1,305	\$1,825	\$2,130	actual cost	\$0.67
Capacity	\$17,352	\$41,646	\$65,939	Table 8	\$8.90
Total Fees	\$18,657	\$43,471	\$68,069		
Irrigation					
Connection	\$1,305	\$1,825	\$2,130	actual cost	
Capacity	\$16,228	\$38,948	\$61,667	Table 8	
Total Fees	\$17,533	\$40,773	\$63,797		

It is recommended that the District update the fees annually by a predetermined index. The Engineering News Record (ENR) San Francisco Construction Cost Index (CCI) March to March change is recommended for an annual July 1 update. The connection and capacity fees should also 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.

Section 2: Connection Fees

2.1 Meter Fee Calculation

The “meter fee” reflects the current market price for the meter, meter radio, and other appurtenances. In other words, it accounts for the material costs associated with installation of a new meter. For meters larger than 2”, the charge is determined by the actual costs. Due to the variability of meter types and applications for larger meters, it is difficult to provide a “one size fits all” cost estimate.

2.2 Installation Fee Calculation

The “installation fee” includes the cost of all labor and equipment for the installation of the new meter. The cost of labor is based on the average hourly employee rate, including benefits. The equipment cost includes the actual usage or any rental costs needed to complete the installation. The District may need any one or combination of a District truck, dump truck, or backhoe to complete the installation. A typical 1-inch meter installation is estimated to take a crew of two field personnel 3.5 hours total, aided by an hour of administrative staff time.

Table 2 shows the minimum meter and installation fees by meter size. The connection fees are the same for domestic and irrigation services. **Table A-1** provides the fee calculations for the installation fee by meter size. The actual cost of any work in addition to the installation of the meter and appurtenances will be charged to the applicant. Additional work may include trenching, lateral and meter box installation, connection to the main, repaving, and any other work required to provide the new service.

Table 2: Connection Fee by Meter Size

Meter Size	Connection Fee Component		
	Meter Fee	Installation Fee	Connection Fee
1"	\$900	\$405	\$1,305
1.5"	\$1,405	\$420	\$1,825
2"	\$1,690	\$440	\$2,130
larger than 2"	actual cost		
ADU Connection Fee per Livable Bldg. Sq. Ft.			\$0.67

ADU Connection Fee

The calculation of the ADU fee is based on the connection fee of \$1,305 for a one-inch meter service which is the usual requirement for new residential homes with fire sprinklers. The fee is divided by the typical livable building square feet of homes in UPUD’s service territory. The typical size of a home in UPUD’s service territory is 1,950 square feet; this size was determined by examining 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 2015.

Section 3: Capacity Fees

Capacity fees are charged to pay for District water system infrastructure that new customers will use. Capacity fees fund major infrastructure such as water supply and development, treatment and distribution facilities. As with the connection fee, it is a one-time fee applied to new customers requiring a new metered connection, or to existing customers who require additional capacity (a larger meter). This charge can be understood as a “buy-in” to the existing system’s capacity.

Capacity related facilities and upgrade projects are typically constructed in advance of when new development occurs, often years before connections are made. Because of this, it is not feasible to determine an exact cost to the District for each individual connection. The “buy-in” method is a way to establish an equitable standard fee based on average costs per unit of capacity over the lifetime of the system. In other words, the buy-in fee is intended to approximate the amount that existing customers have paid over the years, through water usage rates and capacity fees, to fund the construction of the system as it is today.

As presented in the M1 manual, the formula for the buy-in fee is:

$$\text{Customer Buy-in Fee} = \text{System Value} \div \text{System Capacity} \times \text{Customer Capacity Demands}$$

The calculation is explained in steps.

Step 1. Determine the current capacity of the system. There are several factors that may limit a system’s capacity, including raw water availability, transmission capabilities (backbone pipelines), treatment capabilities, and storage capacity.

- **UPUD’s Domestic System** is limited by the filtering capabilities at the treatment plant. According to documents provided by UPUD, the maximum capacity of the filters is 2.07 million gallons per day (GPD).
- **UPUD’s Irrigation System** is limited by the raw water supply, as dictated by UPUD’s agreement with UWPA. The maximum flow after subtracting the flow for treated water is approximately 5.49 million GPD.

In order to convert these numbers into “maximum number of typical customers served”, the standard service size is defined as a 1-inch meter, the most common size of meter being installed in new residential buildings within the District. The capacity, or demand on the system, of this standard service is expressed as one Equivalent Meter Unit (EMU). To convert larger service sizes to an EMU, a factor is applied based on the maximum flow rate of the meter compared to the 1-inch meter. This factor is referred to as the “meter equivalent ratio”. **Table 3** presents the safe operating capacity of meters by size and their meter equivalent ratios.

Applying these meter ratios, a 1-inch meter is considered 1 EMU, and a 1.5-inch meter, which has 2.4 times the safe operating maximum flow rate, is 2.4 EMUs. Thus, a 1.5-inch meter has potential to use 2.4 times the capacity placed on the system by a 1-inch meter.

Table 3: Safe Operating Capacity of Meters

Meter Size	Domestic System		Irrigation System	
	Flow Rate (gpm)	Meter Ratio	Flow Rate (gpm)	Meter Ratio
3/4" or smaller	30	0.6	30	0.6
1-inch	50	1.0	50	1.0
1.5-inch	120	2.4	120	2.4
2-inch	190	3.8	190	3.8
3-inch	350	7.0	350	7.0
4-inch	600	12.0	600	12.0
6-inch	1,350	27.0	1,350	27.0

Source: AWWA M1 Manual safe operating flow rates for C-710 meters for 1-inch and smaller meters, C-701 Clas II turbine meters for 1.5 and 2-inch meters, and C-702 Class II compound meters for larger sized meters.

Table 4 calculates the number of EMUs served by the domestic and irrigation water systems.

Table 4: Calculated Equivalent Meter Units

Meter Size	Number of Meters	Meter Equivalent Ratio	Number of EMUs
Domestic			
3/4" & smaller	1,565	0.6	939
1"	32	1.0	32
1.5"	4	2.4	10
2"	7	3.8	27
3"	1	7.0	7
4"	1	12.0	12
6"	1	27.0	27
Total Domestic	1,611		1,053
Irrigation			
3/4" & smaller	8	0.6	5
1"	36	1.0	36
1.5"	37	2.4	89
2"	13	3.8	49
3"	8	7.0	56
4"	2	12.0	24
Total Irrigation	104		259

Source: UPUD billing system and AWWA M1 Manual.

Domestic System

The District produces an average of 1,000,000 gallons per day (GPD) of treated water during the summer months, with a Maximum Daily Demand (MDD) of 1,480,000 GPD (highest day production in the last 10 years). This means that the 1,053 EMUs result in a capacity demand of 1.48 million GPD on the domestic water system.

$$1,480,000 \text{ GPD} \div 1,053 \text{ EMUs} = 1,405 \text{ GPD per EMU.}$$

Since the maximum capacity of the domestic system is 2.07 million GPD, the maximum capacity of the system in EMUs can be expressed as:

$$2,070,000 \text{ GPD} \div 1,405 = 1,473 \text{ EMUs}$$

Irrigation System

The irrigation system currently serves 259 EMUs and has an MDD of 4.09 million GPD and a maximum capacity of 5.49 million GPD. Following the same methodology as detailed above for the domestic system:

$$4,090,000 \text{ GPD} \div 259 \text{ EMUs} = 15,792 \text{ GPD per EMU}$$

$$5,490,000 \text{ GPD} \div 15,792 = 348 \text{ EMUs}$$

Table 5 shows the calculation of system capacity in EMUs.

Table 5: System Capacity in EMUs

Capacity Item		Domestic	Irrigation
Max. Day Demand (gallons)	a	1,480,000	4,090,000
EMUs (1-inch meters) Served	b	1,053	259
GPD per EMU	c = a/b	1,405	15,792
Max. Capacity (gallons)	d	2,070,000	5,490,000
System Capacity EMUs	e = d/c	1,473	348

Step 2. Estimate the value of the system. The M1 manual provides several accepted methods to determine the value of assets. This study uses the “Reproduction Cost New” (RCN) value methodology. The replacement cost is calculated by converting past expenses into current dollars by accounting for inflation and changing construction costs. Projects funded through sources other than the District’s customers, such as grants and developer dedications, were intentionally left out.

Table A-3 lists the major infrastructure included in the buy-in fee and the asset value determination by water system. The original cost of infrastructure was inflated to an estimated replacement cost in today’s dollars using the 50-year average ENR CCI (see **Table A-4**). The

cost of infrastructure that is used to serve both domestic and irrigation water systems is split between the two systems by the number of customers served by each system as shown in **Table 6**.

Table 6: Share of System Capacity EMUs

System	Customers	Share of Customers
Domestic	1,600	94%
Irrigation	100	6%
Total	1,700	

Table A-5 shows the total asset value calculated for each system.

The RCN value of the domestic water system infrastructure is estimated at \$15.21 million.

The RCN value of the irrigation system infrastructure is estimated at \$4.93 million.

Step 3. Determine the cost of system capacity per EMU.

The cost of capacity per EMU is calculated for both systems in **Table 7**. Two adjustments are made to the RCN values.

1. First, the dams and spillways values included in the irrigation system valuation are decreased 50% because these facilities are typically at least partially funded by federal and State grants due to the protection of public safety and flood risk associated with these major infrastructure assets.
2. Second, cash reserves held specifically for infrastructure rehabilitation and upgrades are added to the RCN values. Cash reserves are treated as assets because existing customers contributed to this funding for capital facilities.

Finally, an administrative fee of 3% is applied to cover the costs of handling fees, facilitate public hearings, performing updates to the fee program, etc.

The calculated fees should be understood as the maximum allowable fees based on the data, assumptions, and chosen calculation methodologies presented herein. They are intended to represent the estimated reasonable cost of providing capacity. The ultimate goal is long-term financial stability related to sustained growth and to equitably levy fees from those who benefit from that growth, in proportion to the benefit received.

Table 7: Capacity Fee Calculations

Item		Domestic	Irrigation
RCN Value		\$24,250,000	\$10,092,000
Federal or State Funds Estimate			(\$4,834,522)
Capital Cash Reserves [1]		\$566,500	\$220,000
Cost in Fee Calculation	a	\$24,816,500	\$5,477,478
Max. Capacity EMUs	b	1,473	348
Fee per EMU	c = a/b	\$16,847	\$15,755
Administration 3%	d	\$505	\$473
Capacity Fee per EMU	e = c+d	\$17,352	\$16,228

Source: 2026 fee study.

[1] Balances as of 2nd quarter (end of December) 2025.

ADU Capacity Fees

As with the ADU connection fee described in Section 2.3, the ADU capacity fee is charged per livable building square foot. The calculation of the ADU fee is based on the capacity fee of \$17,352 for a one-inch meter service, which is the usual requirement for new residential homes with fire sprinklers.

3.1 Fees Summary

The capacity fees schedules are presented in **Table 8**.

Table 8: Calculated Capacity Fees by Meter Size

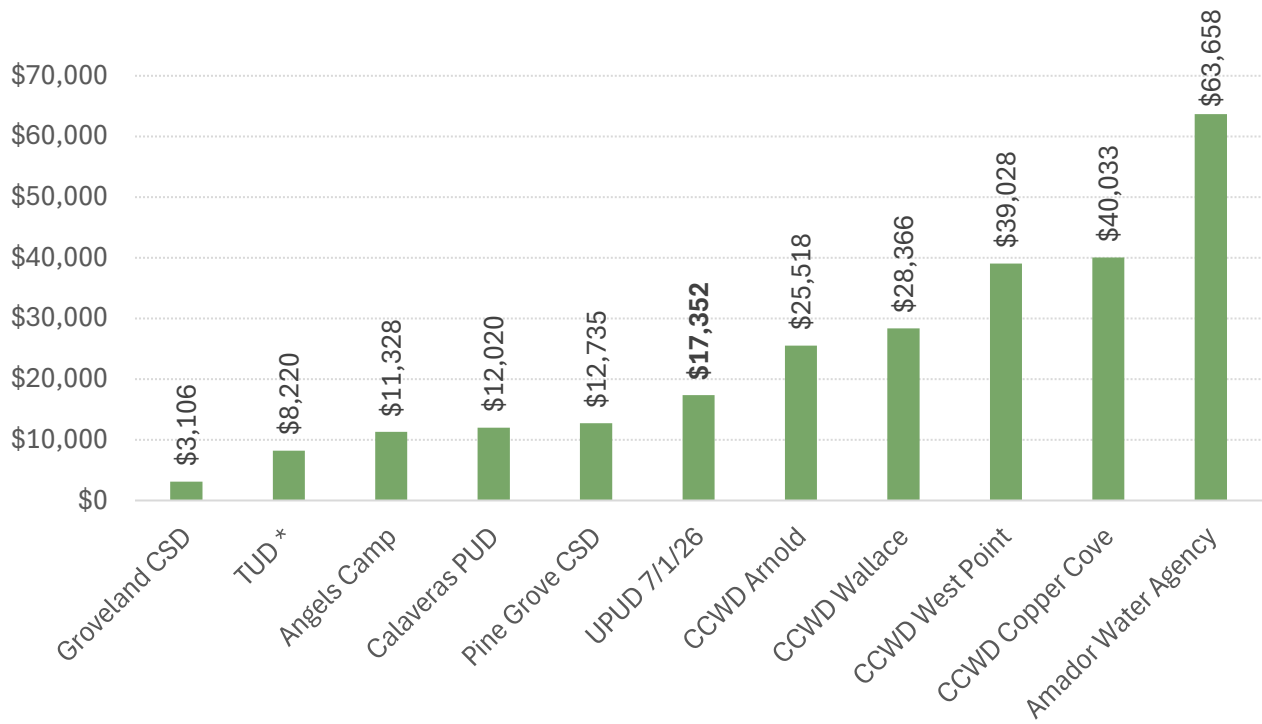
Meter Size	Domestic	Irrigation
1"	\$17,352	\$16,228
1.5"	\$41,646	\$38,948
2"	\$65,939	\$61,667
3"	\$121,466	\$113,597
4"	\$208,228	\$194,738
6"	\$468,513	
ADU Fee per Building		
Square Foot	\$8.90	

3.2 Regional Fees Comparison

Capacity fees are a common method for utility providers to offset the cost of capacity-related infrastructure projects in a way that ensures the equitable distribution of cost between existing and new customers. Most water providers charge a capacity fee.

Figure 1 shows the capacity fees for new domestic service charged by several water providers in the general vicinity of UPUD for a 1-inch water meter. The purpose of this chart is to give potential new UPUD customers a general comparison, and not to give justification for the calculated fees. The comparison fees below are subject to change, and their current accuracy is not guaranteed. It is important to note that every water provider has its own challenges and circumstances regarding costs of infrastructure. Availability and reliability of raw water, treatment requirements, ease of transmission, existing unused capacity, among many other factors, affect the cost of adding new customers. Furthermore, there are varying methods of recovering costs and allocating resources, and many ways to determine an appropriate fee structure. These variations are reflected in the significant range of capacity fees charged by the comparison domestic water providers.

Figure 1: Comparison of Domestic Capacity Fees for a One-Inch Meter



*TUD fees vary depending on the water system the development is connecting to.

Section 4: Administration and Adoption

4.1 Adoption of New and Revised Fees

Prior to adoption by ordinance or resolution of the proposed fees discussed in this study, the District is required by State Government Code Section 66016 to hold a public meeting to consider the material for adoption. A final draft of this report and other pertinent information will be made available to the public at least ten days before the public hearing.

4.2 Future Fee Corrections and Incremental Adjustments

The District should review the adopted fee schedule periodically and adjust as appropriate to reflect the actual costs of the service being provided. Adjustments may be triggered by major proposed capital improvement projects, desire to change the calculation methodology, changes to demand forecast and capacity usage, and changing legislation. Pursuant to Government Code Section 66016, if the fees create revenues in excess of the actual cost, those revenues should be used to reduce the fees, and an updated fee schedule should be adopted. Conversely, if it is found that the adopted schedule adequately covers the costs, it may become necessary to implement yearly, or otherwise regular adjustments, based on construction cost trends.

It is recommended that the District update the fees annually by a predetermined index. The ENR San Francisco CCI March to March change is recommended for an annual July 1 update. The connection and capacity fees should also 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.

4.3 Separate Capacity Fee Fund

Section 66013, subdivision (c) of the California Government Code states:

A local agency receiving payment of a [capacity] charge ... shall deposit it in a separate capital facilities fund with other charges received, and account for the charges in a manner to avoid any commingling with other moneys of the local agency, except for investments, and shall expend those charges solely for the purposes for which the charges were collected. Any interest income earned from the investment of moneys in the capital facilities fund shall be deposited in that fund.

This requirement only applies to treated and untreated water capacity fees, and not the connection fees discussed in this study. There are specific transparency and reporting requirements associated with this fund, listed in the same code section. The District should review these requirements prior to preparing the resolution or ordinance implementing the new fees.

4.4 Exceptions and Alternative Capacity Fees

There may be certain instances in which the actual capacity demand of a customer is not accurately reflected by the meter size or the EMU calculation methodology presented in

this report. When this occurs, the District will review and approve or reject special calculations prepared by a qualified professional and submitted by the prospective customer. Following approval of a special calculation, a monitoring period might be imposed, after which the capacity fee would be “trued-up” based on the data collected. The District should establish a standard administrative fee for this review process.

The adopting capacity fee ordinance or resolution should include a paragraph describing the District’s discretion to approve or reject special calculations that may be submitted.

APPENDIX A

CONNECTION AND CAPACITY FEES STUDY SUPPORT TABLES

ALL TABLES ARE DRAFT

Table A-1: Service Installation Cost Estimates

Labor and Equipment	Meter Size		
	1	1.5	2
LABOR			
Hours by Position			
Administrative	1.00	1.00	1.00
Field Personnel	3.50	3.75	4.00
Cost by Position [1]			
Admin. @ \$55/hr	\$55	\$55	\$55
Field Crew @ \$60/hr	\$210	\$225	\$240
Total Labor	\$265	\$280	\$295
Overhead 15%	\$40	\$42	\$44
Labor Cost	\$305	\$322	\$339
Equipment			
Hours by Equipment Type			
District Truck	1.00	1.00	1.00
Cost by Equipment			
District Truck	\$100	\$100	\$100
Equipment Cost	\$100	\$100	\$100
TOTAL (rounded)	\$405	\$420	\$440

Source: UPUD and HEC April 2026.

all sizes

[1] "Loaded" cost per hour includes benefits.

Table A-2: Homes Sold in Calaveras County Built Since 2015

Area		Year Built	Price	Beds	Baths	Size (Sq Ft)	Price per Sq Ft
Angels Camp (14 Homes)	Averages	2019	\$658,336	3.1	2.7	2,109	\$317
	Median	2019	\$593,450	3.0	2.5	2,096	\$315
Arnold (9 Homes)	Averages	2022	\$665,863	2.4	2.4	1,775	\$391
	Median	2023	\$670,432	2.7	2.0	1,707	\$385
Camp Connell (1 House)	Averages	2018	\$749,000	3.0	3.0	1,713	\$437
	Median	2018	\$749,000	3.0	3.0	1,713	\$437
Copperopolis (48 Homes)	Averages	2020	\$785,756	3.2	3.0	2,383	\$321
	Median	2020	\$757,500	3.0	3.0	2,340	\$317
Mokelumne Hill (8 Homes)	Averages	2017	\$518,125	3.1	2.1	1,873	\$295
	Median	2017	\$547,500	3.0	2.0	1,794	\$307
Mountain Ranch (6 Homes)	Averages	2018	\$321,667	2.2	1.5	1,293	\$253
	Median	2018	\$317,500	2.0	1.5	1,230	\$259
Murphys (15 Homes)	Averages	2021	\$687,833	2.8	2.3	1,681	\$416
	Median	2022	\$695,000	3.0	2.0	1,603	\$400
San Andreas (2 Homes)	Averages	2019	\$597,500	3.0	2.0	1,953	\$339
	Median	2019	\$597,500	3.0	2.0	1,953	\$339
Sheep Ranch (1 Home)	Averages	2018	\$250,000	3.0	2.0	1,136	\$220
	Median	2018	\$250,000	3.0	2.0	1,136	\$220
Vallecito (1 Home)	Averages	2020	\$1,050,000	4.0	3.0	2,300	\$457
	Median	2020	\$1,050,000	4.0	3.0	2,300	\$457
Valley Springs (35 Homes)	Averages	2019	\$619,400	3.3	2.3	2,053	\$294
	Median	2019	\$545,000	3.0	2.0	1,908	\$276
Wallace (3 Homes)	Averages	2020	\$1,176,667	3.0	2.3	1,389	\$1,087
	Median	2021	\$530,000	3.0	2.0	1,386	\$382
West Point (2 Homes)	Averages	2018	\$326,000	2.0	1.5	990	\$370
	Median	2018	\$326,000	2.0	1.5	990	\$370
Wilseyville (1 Home)	Averages	2019	\$335,000	2.0	2.0	1,680	\$199
	Median	2019	\$335,000	2.0	2.0	1,680	\$199
Calveras County [1]	Averages	2020	\$626,000	3.0	2.0	1,943	\$310
	Median	2019	\$568,849	2.8	2.2	1,703	\$333

Source: Zillow, December 2025.

sales

[1] The Calveras County Average uses the raw Zillow data, not Averages/Medians.

Table A-3: Calculation of Replacement Cost of System Assets

Asset	In-Service Date	Original Cost	Asset Age (years)	Inflation Factor	Replacement Cost Estimate (RCN)
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = b*d</i>
Domestic System			2026		
Treatment plant	1984	\$4,226,312	42	4.43	\$18,742,687
Additional filter at WTP	1993	\$91,800	33	3.22	\$295,868
Vallecito tank chlorine station	2006	\$50,000	20	2.03	\$101,626
Eltringham tank station	2006	\$50,000	20	2.03	\$101,626
Water Tanks					
Treatment plant (2M)	2005	\$2,529,772	21	2.11	\$5,327,415
2M gal tank aerator installation	2020	\$192,892	6	1.24	\$238,630
Vallecito Tank & system expansion	1986	\$605,400	40	4.13	\$2,500,975
Vallecito Tank recoat	1998	\$17,350	28	2.70	\$46,832
Sheep Ranch Eltringham (1M)	1992	\$391,520	34	3.34	\$1,307,407
WTP & Cademartori parcels (land value) [1]		\$289,900			\$289,900
Irrigation System					
Stephens Dam	1951	\$300,000	75	14.29	\$4,287,921
Siebel Dam	1947	\$250,000	79	16.47	\$4,117,866
Association Dam	1947	\$20,000	79	16.47	\$329,429
Stephens Spillway	1951	\$25,000	75	14.29	\$357,327
Siebel Spillway	1947	\$25,000	79	16.47	\$411,787
Association Spillway	1947	\$10,000	79	16.47	\$164,715
Stephens Reservoir parcel (land value) [1]		\$327,300			\$327,300
Buildings					
UPUD main office	1981	\$99,003	45	4.93	\$488,342
UPUD garage (main street)	2019	\$74,981	7	1.28	\$96,109
Corp yard site improvements	2003	\$130,905	23	2.26	\$295,934
Corp yard equip. storage building	2005	\$120,200	21	2.11	\$253,128
Land Value					
UPUD Main Office parcel [2]		\$162,500			\$162,500
Corp Yard [1]		\$333,800			\$333,800
Total Assets Value		\$10,323,635			\$40,579,122

Source: UPUD asset inventory.

[1] Based on February 2026 search on Loopnet.com the table assumes \$10,000 per acre.

[2] Based on February 2026 search on Loopnet.com the value is estimated at \$650,000 per acre for 0.25 acres.

Table A-4: Inflation Factors for RCN Methodology

Year	Calculated Index	Inflation Factor
50-yr Avg. Change [1]		3.61%
1947	860	16.5
1951	991	14.3
1981	2,870	4.9
1984	3,192	4.4
1986	3,427	4.1
1992	4,240	3.3
1993	4,393	3.2
1998	5,245	2.7
2003	6,263	2.3
2005	6,723	2.1
2006	6,966	2.0
2013	8,928	1.6
2019	11,045	1.3
2020	11,444	1.2
2026 -Apr	14,158	1.0

Source: Engineering News Record.

[1] Average annual change in the ENR CCI from December 1976 to April 2026.

Table A-5: Asset RCN by Water System

Asset	RCN Current Value	% Funded by District	Percent Domestic	Percent Irrigation	RCN Value Domestic	RCN Value Irrigation
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = a*b*c</i>	<i>f = a*b*d</i>
Domestic System			<i>Domestic System</i>			
Treatment plant	\$18,742,687	79%	100%	0%	\$14,806,723	\$0
Additional filter at WTP	\$295,868	4%	100%	0%	\$11,835	\$0
Vallecito tank chlorine station	\$101,626	100%	100%	0%	\$101,626	\$0
Eltringham tank station	\$101,626	100%	100%	0%	\$101,626	\$0
Water Tanks						
Treatment plant (2M)	\$5,327,415	100%	100%	0%	\$5,327,415	\$0
2M gal tank aerator installation	\$238,630	100%	100%	0%	\$238,630	\$0
Vallecito Tank & system expansion	\$2,500,975	34%	100%	0%	\$850,332	\$0
Vallecito Tank recoat	\$46,832	100%	100%	0%	\$46,832	\$0
Sheep Ranch Eltringham (1M)	\$1,307,407	72%	100%	0%	\$941,333	\$0
Treatment Plant Land	\$289,900	100%	100%	0%	\$289,900	\$0
Irrigation System			<i>Irrigation System</i>			
Stephens Dam	\$4,287,921	100%	0%	100%	\$0	\$4,287,921
Siebel Dam	\$4,117,866	100%	0%	100%	\$0	\$4,117,866
Association Dam	\$329,429	100%	0%	100%	\$0	\$329,429
Stephens Spillway	\$357,327	100%	0%	100%	\$0	\$357,327
Siebel Spillway	\$411,787	100%	0%	100%	\$0	\$411,787
Association Spillway	\$164,715	100%	0%	100%	\$0	\$164,715
Irrigation System parcels	\$327,300	100%	0%	100%	\$0	\$327,300
District-Wide Facilities			<i>District-Wide</i>			
UPUD main office	\$488,342	100%	94%	6%	\$459,616	\$28,726
UPUD garage (main street)	\$96,109	100%	94%	6%	\$90,455	\$5,653
Corp yard site improvements	\$295,934	100%	94%	6%	\$278,526	\$17,408
Corp yard equip. storage building	\$253,128	100%	94%	6%	\$238,238	\$14,890
Land Value						
UPUD Main Office	\$162,500	100%	94%	6%	\$152,941	\$9,559
Corp Yard	\$333,800	100%	94%	6%	\$314,165	\$19,635
RCNLD by Water System	\$40,579,122				\$24,250,191	\$10,092,216

Source: UPUD asset inventory.