



# OLYMPIC VALLEY PUBLIC SERVICE DISTRICT



EXHIBIT F-1  
229 Pages

## COST OF SERVICE AND RATE STUDY

**DATE:** January 28, 2025

**TO:** District Board Members

**FROM:** Danielle Mueller, Finance & Administration Manager

**SUBJECT:** Cost of Service and Rate Study - HDR Engineering, Inc.

**BACKGROUND:** Proposition 218 requires a utility to establish cost-based rates for the services provided. In 2024, the District retained HDR Engineering, Inc. (HDR) to review the water and sewer rate designs and provide options to meet the District's operating and capital funding objectives. It is best practice to review rates from time to time and ensure they remain cost-based, equitable, and proportional. Based on the results of this study, staff will recommend a five-year rate design.

Another key component of the study is the review and development of connection fees, which are based on the value of the available capacity. These fees ensure new customers fairly contribute to the cost of connecting to the District's utility infrastructure. Connection fees were last updated in 2018. HDR's updated analysis reflects the current cost of connecting to the District's utility infrastructure.

**DISCUSSION:** HDR determined the revenue requirements for water and sewer services based on a 10-year analysis of costs to operate the District's water and sewer systems and the anticipated reserves required for capital replacement.

The study also evaluated the District's tiered water rate structure to ensure compliance with legal requirements and align with industry best practices. Lastly, HDR analyzed the District's water and sewer connection fees by assessing existing plant capacity and the impact of future proposed development.

The resulting analysis has provided the district with an equitable rate and fee structure among all customer classes and considered capital replacement projects. Staff will utilize this analysis to publish a 5-year rate plan that will be distributed with the next Proposition 218 notice during spring 2025.

**ALTERNATIVES:**

1. Approve the study results as presented and direct staff to generate Prop 218 mailings.

2. Do not approve the results of the study.

**FISCAL/RESOURCE IMPACTS:** The 2024-25 Operating Budget allocated \$65,710, split equally between water and sewer.

**RECOMMENDATION:** Approve studies from HDR and direct staff to generate Prop 218 mailings.

**ATTACHMENTS:** Water Rate Study Draft Report (88 pages)

Sewer Rate Study Draft Report (61 pages)

Water Connection Fee Draft Report (34 pages)

Sewer Connection Fee Draft Report (26 pages)

Rate Study Board Presentation (18 pages)

**DATE PREPARED:** January 22, 2025

**DRAFT REPORT**



**Olympic Valley PSD**  
**Water Rate Study**  
**January 2025**





January 17, 2025

Mr. Charley Miller  
General Manager  
Olympic Valley Public Service District  
305 Olympic Valley Road  
Olympic Valley, CA 96146

**Subject: Water Rate Study Draft Report**

Dear Mr. Miller:

HDR Engineering, Inc. (HDR) is pleased to present to the Olympic Valley Public Service District (District) the draft report for the 2024 water rate study (Study). The District's Study was developed to provide cost-based rates that generate sufficient revenue to fund the operating and capital needs for the water utility. More specifically, the Study was designed to develop cost-based and proportional water rates for the District's customers. This report outlines the overall approach used to achieve these objectives, along with our findings, conclusions, and recommendations.

The costs associated with providing water services to the District's customers have been developed based on District specific information and is included within the development of the proposed water rates. The Study was developed utilizing industry recognized generally accepted rate setting principles and methodologies to meet the requirements of Proposition 218. This report provides the basis for developing and implementing water rates which are cost-based, proportional, and defensible to the District's customers.

We appreciate the assistance provided by the District's project team in the development of this study. More importantly, HDR appreciates the opportunity to provide these technical and professional services to the Olympic Valley Public Service District.

Sincerely yours,  
HDR Engineering, Inc.

Josiah Close  
Utility Rates Project Manager

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**Technical Appendix**

# 1 Executive Summary

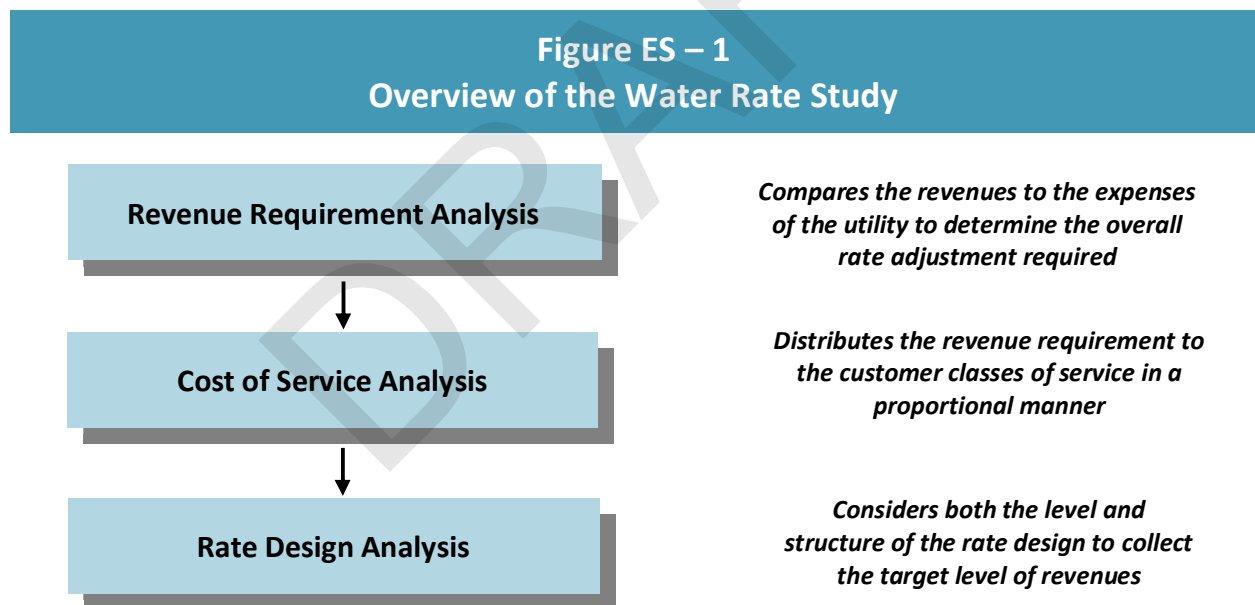
HDR Engineering, Inc. was retained by the Olympic Valley Public Service District to conduct a water rate study. The main objectives of the Study were to:

- Develop a projection of water revenues to support the District’s operating and capital costs
- Proportionally distribute the costs of providing water service to those customers receiving service
- Propose cost-based and proportional water rates for a multi-year time period

The District owns, operates, and maintains the water system in the Olympic Valley. The costs associated with providing water service to the District’s customers have been developed based on the provided information and is included within the development of the proposed water rates.

## Overview of the Rate Study Process

A rate study uses three interrelated analyses to address the adequacy and proportionality of the utility’s rates. These three analyses are a revenue requirement analysis, a cost of service analysis, and a rate design analysis. These three analyses are illustrated below in Figure ES – 1.



This basic framework outlined above was utilized in the development of this study for reviewing and evaluating the District’s water rates.

## Key Rate Study Results

The water rate study technical analysis was developed based on the operating and capital costs necessary to provide water service to the District's customers. The Study resulted in the following findings, conclusions, and recommendations.

- A revenue requirement analysis was developed for the time period of FY 2025 through FY 2034
- The District's FY 2025 adopted budget was used as the starting point of the analysis for the water utility
- Operation and maintenance expenses are projected to increase at inflationary levels with no assumed changes to levels of service or anticipated expenses
- The proposed water revenue adjustment is 6.0% annually from FY 2026 to FY 2030, effective July 1 of each year<sup>1</sup>
- A cost of service analysis was developed to review the existing rates and to proportionally distribute the revenue requirement between the customer classes of service
- The results of the cost of service analysis provided the unit costs (i.e., cost basis), which were used to establish the proposed water rates
- The Study has developed proposed water rates for the FY 2026 – FY 2030 time period, by class of service

## Summary of the Revenue Requirement Analysis

A revenue requirement analysis is the first analytical step in the development of the water rate study. This analysis determines the adequacy of the level of current water rates for the District. From this analysis, a determination can be made as to the overall level of water revenue adjustments needed to provide adequate funding for both operating and capital needs.

For the Study, the revenue requirement was developed for the review period of FY 2025 – FY 2034. The starting point of the analysis was the District's FY 2025 budget, which was then projected through FY 2034 based on assumed inflationary factors. A multi-year time frame is recommended to better anticipate future financial requirements and allow the District to begin planning for these changes sooner, thereby minimizing short-term rate impacts and overall long-term rates. For the revenue requirement analysis, a cash basis approach was utilized. The cash basis approach is the most commonly used methodology by municipal utilities to set their revenue requirement and it includes an analysis of O&M expenses, transfer payments, debt service, and capital projects funded from rates. The primary financial inputs in the development of the revenue requirement analysis were the District's adopted FY 2025 budget, historical billed customer and consumption data, and the water system capital improvement and replacement plans.

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<sup>1</sup> The proposed revenue adjustments represent the overall targeted revenue adjustment for the water utility. Rate impacts between customer classes and individual customers may vary on an individual customer basis.



Once the operating and maintenance expenses have been projected over the time period, based on budgeted expenses and historical inflationary factors, the next step is to develop the capital projects funding plan. The proper and adequate funding of capital projects is important to help minimize rates over time. A general financial guideline states that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense through rates. As a point of reference, the District’s annual depreciation expense is approximately \$405,000 for FY 2023. Shown in Table ES – 1, water rates will annually fund an amount ranging from \$530,000 to \$650,000. For the District’s study, the District developed a capital replacement plan and a capital improvement plan. These plans identified the projects necessary to maintain the water system as well as the projects necessary to meet new growth and expansion of the water system. Provided below in Table ES – 1 is a summary of the capital funding plan over the five-year rate setting period.

Table ES – 1 Summary of the Annual Rate Funded Capital (\$000)						
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Total Capital Projects	\$1,454	\$754	\$833	\$1,938	\$2,055	\$1,537
<i>Less: Other Funding</i>	\$844	\$104	\$188	\$1,328	\$1,485	\$1,007
<b>Total Rate Funded Capital</b>	<b>\$610</b>	<b>\$650</b>	<b>\$645</b>	<b>\$610</b>	<b>\$570</b>	<b>\$530</b>

The financial plan developed for the District’s water utility has placed the rate funded capital level at \$610,000 in FY 2025, ending at \$530,000 in FY 2030. This level of funding was calculated based on the long-term need to prudently fund replacement and repair of the existing water system. As can be seen, the difference between annual capital replacement needs and rate funded capital, when apparent, is being funded through available reserves. It is important to note that the District prioritizes ‘cash financing’ capital projects rather than issuing long-term debt. This can create a more stable level of funding over time for capital projects and may provide the District with financial flexibility in the future.

The revenue requirement analysis for the District’s water utility was developed to determine the necessary revenues to meet the costs of providing water service based on the specific costs of the District’s water utility. Provided below in Table ES – 2 is a summary of the revenue requirement analysis (financial plan). A more detailed analysis of the revenue requirement can be found in Section 4 of this report.

**Table ES – 2**  
**Summary of the Revenue Requirement Analysis (\$000)**

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Revenues</b>						
Rate Revenues	\$2,336	\$2,348	\$2,359	\$2,371	\$2,383	\$2,395
Non-Operating Revenues	<u>347</u>	<u>342</u>	<u>349</u>	<u>352</u>	<u>344</u>	<u>337</u>
<b>Total Revenues</b>	<b>\$2,683</b>	<b>\$2,690</b>	<b>\$2,709</b>	<b>\$2,723</b>	<b>\$2,727</b>	<b>\$2,731</b>
<b>Expenses</b>						
Total Water Dept. Expenses	\$836	\$870	\$905	\$942	\$980	\$1,019
Total Admin. Expenses	1,119	1,132	1,176	1,221	1,269	1,349
Net Annual Debt Service	86	86	0	0	0	0
Rate Funded Capital	610	650	645	610	570	530
Reserve Funding	<u>30</u>	<u>93</u>	<u>274</u>	<u>403</u>	<u>534</u>	<u>643</u>
<b>Total Expenses</b>	<b>\$2,683</b>	<b>\$2,831</b>	<b>\$3,000</b>	<b>\$3,176</b>	<b>\$3,352</b>	<b>\$3,542</b>
Bal./(Def.) of Funds	\$0	(\$141)	(\$292)	(\$453)	(\$625)	(\$810)
<i>Bal. as a % of Rate Rev.</i>	<i>0.0%</i>	<i>6.0%</i>	<i>12.4%</i>	<i>19.1%</i>	<i>26.2%</i>	<i>33.8%</i>
<b>Proposed Rate Revenue Adj.</b>	<b>0.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>
Add'l Rev. from Rate Adj.	\$0	\$141	\$292	\$453	\$625	\$810
Total Bal./(Def.) of Funds	\$0	\$0	\$0	\$0	\$0	\$0

As can be seen, the revenue requirement has summed the annual O&M, rate funded capital, annual debt service, and transfers to reserves. The total revenue requirement is then compared to the total sources of funds, which are the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison, a balance or deficiency of funds in each year can be determined. This deficiency of funds is then compared to the projection of rate revenues, at the Study projected consumption levels, to determine the level of revenue adjustment needed to meet the costs of providing water service. It is important to note that the “Bal./(Def.) of Funds” row is cumulative. That is, any adjustments in the initial years will reduce the deficiency in later years.

In FY 2026, the level of water rate revenues needs to be increased by 6.0%, annually, for the rate setting period in order to meet the operating and capital needs of the water utility. It is proposed that the subsequent proposed rate adjustments will be effective each year on July 1, the beginning of the fiscal year.

HDR has concluded that the District will need to adjust the level of water rate revenues as noted above to maintain cost-based rates. HDR has reached this conclusion for the following reasons:

- Revenue adjustments are necessary to meet the operating and capital costs of providing water service to the District’s customers

- The proposed rate adjustments maintain the District’s financial health and provide long-term sustainable funding levels

## Summary of the Cost of Service Analysis

The primary objective of the cost of service analysis is to determine the proportional manner in which to collect the previously developed revenue requirement from each of the customer classes of service.

The cost of service analysis began by functionalizing the revenue requirement for the water utility. The functionalized revenue requirement was then allocated to the appropriate cost component(s). The allocated costs were then distributed to the customer classes of service based on the appropriate distribution factor. The distributed expenses for each customer class were then aggregated to determine each customer class’s overall revenue responsibility. Table ES – 3 provides the summary of the cost of service analysis for the FY 2026 test year.

**Table ES – 3**  
**Summary of the Cost of Service Analysis (\$000)**

Class of Service	Present Revenues (FY 2026)	Distributed Costs	\$ Difference	% Difference
Single Family Residential	\$710	\$749	(\$39)	5.5%
Multi-Family Residential	1,102	1,169	(67)	6.1%
Commercial	325	347	(22)	6.6%
Commercial Irrigation	195	210	(15)	7.9%
Commercial Fire	16	14	2	-11.7%
<b>Total</b>	<b>\$2,348</b>	<b>\$2,489</b>	<b>(\$141)</b>	<b>6.0%</b>

The cost of service analysis distributes the proportional share of the revenue requirement to each customer class based on their proportional use of the water system and facilities. The results of the analysis indicate that cost differences exist between the customer classes of service. It is important to understand that a cost of service analysis is developed using a projection of customer consumption data based on recent consumption history. The key outcome of the cost of service analysis is the unit costs. The unit costs provide the cost basis for the development of the proposed water rates. Provided in Table ES – 4 is a summary of the consumption related unit costs derived in the cost of service analysis that will be used to develop the proposed rate designs.

**Table ES – 4  
Summary of the Unit Costs**

	Single Family Residential	Multi-Family Residential	Commercial	Irrigation	Commercial Fire
<b>Consumption Related</b>	<i>\$ / 1,000 gallons</i>				
Tier 1 (0 -120 kgal)	\$6.34				
Tier 2 (120 kgal – 220 kgal)	14.76				
Tier 3 (220 kgal – 280 kgal)	20.09				
Tier 4 (280+ kgal)	42.96				
All Consumption		\$9.69	\$8.36	\$14.85	
<b>Fixed Customer Related</b>	\$1,274.80	\$665.59	\$831.51		\$890.75
<b>Basic Data</b>					
Consumption (kgal)		34,448	17,269	7,630	N/A
Tier 1 (0 -120 kgal)	21,439	--	--	--	--
Tier 2 (120 kgal – 220 kgal)	3,233	--	--	--	--
Tier 3 (220 kgal – 280 kgal)	563	--	--	--	--
Tier 4 (280+ kgal)	431	--	--	--	--
# of Accounts	420				16
# of Units		1,254			
# of Equivalent Meters			251	109	

Further detailed discussion of the cost of service analysis conducted for the District as well as the development of unit costs can be found in Section 5 of this report. Based on the results of the cost of service analysis, HDR would recommend that the unit costs, as developed, be the basis for the proposed rate designs. The Technical Appendix contains the various exhibits and additional details associated with the cost of service analysis.

## Summary of the Rate Design

The final step of the rate study process is the design of water rates to collect the desired levels of revenue, based on the results of the revenue requirement and cost of service analyses. The revenue requirement analysis provided a set of recommendations related to annual rate adjustments, or the level of total revenues necessary to provide sufficient funding, while the cost of service analysis resulted in recommendations as to how the revenue is collected proportionally from each customer class of service.

Developing cost-based and proportional rates is of paramount importance in designing proposed water rates. Given this, the District’s proposed water rates have been developed with the intent of meeting the legal requirements of California Constitution Article XIII D, Section 6 (Article XIII D) and California Water Code Section 390 & 390.1. A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally

distributed among the customer classes of service. HDR would point out that there is no single methodology for proportionally assigning costs to the customer groups. The American Water Works Association (AWWA) M1 Manual clearly delineates the various methodologies which may be used to establish cost-based rates. While Article XIII D does not prescribe a particular methodology for establishing rates, HDR developed the District's proposed water rates based on the methodologies outlined in the AWWA M1 manual to meet the requirements of Article XIII D as well as California Water Code Section 390 & 390.1. This report is to document the approach and assumptions utilized in the Study to provide an administrative record of the steps taken to establish the District's proposed water rates.

HDR is of the opinion that the proposed rates comply with the legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- **The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e., water service).** The proposed rates are designed to collect the overall revenue requirement of the District's water utility.
- **The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the District's water rates are used exclusively to operate and maintain the District's water system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** The cost of service analysis was specifically developed to focus on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (Residential, Multi-Family, Commercial, Commercial Irrigation, Commercial Fire) that reflect the varying consumption patterns and system requirements of each customer class of service. The grouping of customers and rates into these classes of service creates the proportionality expected under Article XIII D by having differing rates by customer class of service. The goal of grouping similar customers in this way is to reflect the manner in which these costs are incurred and assigned to customer classes of service based on their proportional impacts and burdens on the District's water system and water resources.

In order to comply with California Water Code Section 390 and Section 390.1 as statutorily required, the District's Study included a water usage demand analysis which is discussed in detail in Section 6.4.2 of this report.

The District currently has customer classes of service and rate schedules for Single Family Residential, Multi-Family Residential, Commercial, Commercial Irrigation and Commercial Fire customers. Single Family Residential customers are charged an annual fixed charge and an increasing block, four-tier consumption charge. Multi-Family Residential customers are charged an annual fixed charge as well as a uniform consumption charge for all usage. Commercial and Commercial Irrigation customers are charged an annual fixed charge by service meter size and a

uniform consumption charge for all consumption, which is unique for each customer class. Finally, Commercial Fire customers are charged an annual fixed charge by service meter size.

Given the prior discussion of the need to develop rates based on cost of service principles, the unit costs in Table ES – 4 were used to develop the proposed water rates for the District’s customer classes of service. Provided below in Table ES – 5 is a summary of the District’s present and proposed water rates over the five-year rate setting period. The District bills annually and includes an annual fixed charge and consumption charges based on annual water usage.

Table ES - 5 Summary of the Present and Proposed Water Rates						
	Present Rate	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>	<b>\$/Acct/Unit</b>					
Single Family Residential	\$1,222.75	\$1,274.80	\$1,351.29	\$1,432.37	\$1,518.31	\$1,609.41
Multi-Family Residential	592.77	665.59	705.53	747.86	792.73	840.29
Commercial / Commercial Irrigation						
5/8" <sup>[1]</sup>	\$1,004.28	--	--	--	--	--
3/4"	1,095.90	1,025.00	1,025.00	1,025.00	1,030.00	1,040.00
1"	1,222.75	1,340.73	1,433.49	1,526.24	1,626.89	1,736.80
1 1/2"	2,456.00	2,687.99	2,869.30	3,050.62	3,247.70	3,463.20
2"	3,918.47	4,292.10	4,584.89	4,877.68	5,195.68	5,543.20
3"	7,357.70	8,057.60	8,605.70	9,153.80	9,749.23	10,400.00
4"	12,273.43	13,438.67	14,350.69	15,262.71	16,253.63	17,336.80
6"	24,550.37	26,878.16	28,699.43	30,520.70	32,499.74	34,663.20
Commercial Fire						
5/8"	\$1,004.28	\$890.75	\$944.20	\$1,000.85	\$1,060.90	\$1,124.55
<b>Consumption Charge</b>	<b>\$/1,000 gal</b>					
SFR						
0 – 120 kgal	\$5.94	\$6.34	\$6.72	\$7.12	\$7.55	\$8.00
120 kgal – 220 kgal	12.08	14.76	15.64	16.58	17.58	18.62
220 kgal – 280 kgal	18.90	20.09	21.29	22.56	23.92	25.35
280 + kgal	41.86	42.96	45.53	48.25	51.16	54.21
MFR	\$10.30	\$9.69	\$10.27	\$10.89	\$11.54	\$12.23
Commercial	\$7.89	\$8.36	\$8.86	\$9.39	\$9.95	\$10.55
Commercial Irrigation	\$14.28	\$14.85	\$15.74	\$16.68	\$17.68	\$18.74

[1] – The district is currently finishing up the meter replacement project which will replace all 5/8" meter with a 3/4" meter and those will be charged the 3/4" rate

As can be seen, the rate structure has been maintained and the proposed water rates have been adjusted to reflect the overall revenue needs of the water utility as well as the proportional

distribution of costs developed in the cost of service analysis. The proposed water rates would be effective July 1 of each fiscal year. Note, one proposed change is the transition of the Commercial and Commercial Irrigation fixed meter charges to reflect AWWA safe operating capacity ratios over the rate setting period as well as designing a separate rate schedule for Commercial Fire customers.

DRAFT

## 2 Introduction and Overview

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HDR was retained by the Olympic Valley Public Service District to conduct a water rate study. The objective of the Study was to review the District’s operating and capital costs in order to develop a financial plan and cost-based rates for the water system. The Study determined the adequacy of the existing water rates and provides the framework and cost basis for the proposed rates.

The District owns and operates the water system in the Olympic Valley. The system consists of supply, transmission, and distribution services. The District pumps local ground water resources in order to provide potable water service to its customers. The costs associated with providing water supply plus the costs of distributing water to customers has been developed based on District provided information and is included within the development of the proposed water rates.

### 2.1 Goals and Objectives

The District had a number of key objectives in developing the water rate study. These key objectives provided a framework for policy decisions in the analysis that follows. These key objectives were to:

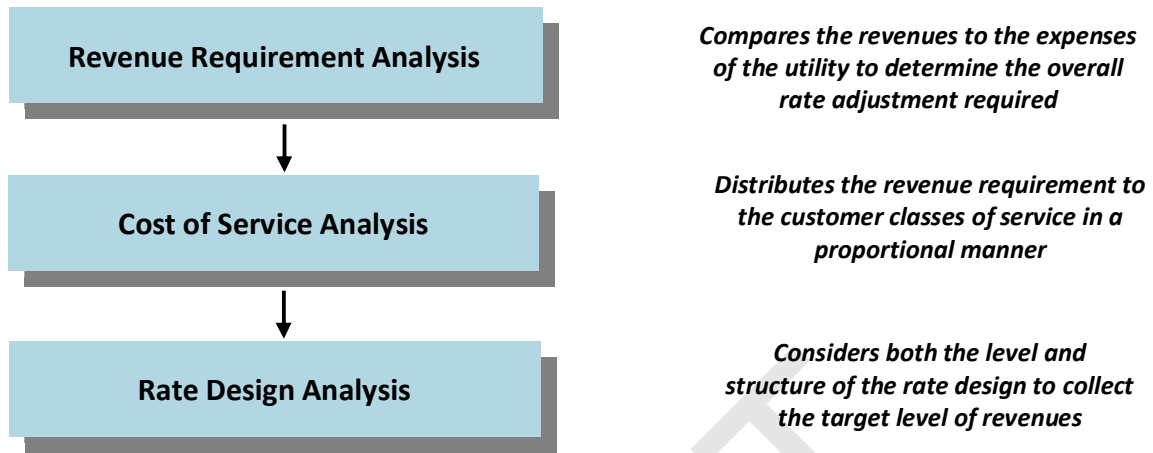
- Develop the rate study in a manner that is consistent with the principles and methodologies established by the American Water Works Association (AWWA), M1 Manual, Principles of Water Rates, Fees, and Charges
- In financial planning and establishing the District’s rates, review and utilize best industry practices, while recognizing and acknowledging the specific and unique characteristics of the District’s system
- Review the District’s water rates utilizing “generally accepted” rate making methodologies to determine adequacy and proportionality of the utility rates
- Meet the District’s financial planning criteria and goals, such as debt service coverage ratios, adequate funding of capital infrastructure replacement, and maintenance of adequate and prudent reserve levels
- Develop a financial plan which adequately supports the utility’s funding requirements, while attempting to minimize overall impacts to rates
- Provide rates designed to meet the legal requirements of Article XIII D

### 2.2 Overview of the Rate Study Process

User rates must be set at a level where a utility’s operating and capital expenses are met with the revenues received from customers. This is an important point, as failure to achieve this objective may lead to insufficient funds to maintain system integrity. To evaluate the adequacy of the existing water rates, a rate study is performed. A rate study consists of three interrelated analyses. Figure 2 – 1 provides an overview of these analyses.



**Figure 2 – 1**  
**Overview of the Water Rate Study Analyses**



The above framework for reviewing and evaluating rates was utilized for the development of the District’s water rate study.

### **2.3 Organization of the Study**

This report is organized in a sequential manner that first provides an overview of utility rate setting principles, followed by sections that detail the specific steps used to review and develop the District’s proposed water rates. The following sections comprise the District’s water rate study report:

- **Section 3** – Overview of Rate Setting Principles
- **Section 4** – Revenue Requirement Analysis
- **Section 5** – Cost of Service Analysis
- **Section 6** – Rate Design Analysis

A Technical Appendix is attached at the end of this report, which details the technical analyses that were undertaken in the preparation of the Study.

## 3 Overview of Rate Setting Principles

This section of the report provides background information about the water rate setting process, including descriptions of generally accepted principles, types of utilities, methods of determining a revenue requirement, the cost of service analysis, and rate design. This information is useful for gaining a better understanding of the details presented in the following sections of this report.

### 3.1 Generally Accepted Rate Setting Principles

As a practical matter, all utilities should consider setting their rates based on generally accepted or global principles and guidelines. Utility rates should be:

- Cost-based, proportional, and set at a level that meets the utility's full revenue requirement
- Easy to understand and administer
- Designed to conform to "generally accepted" rate setting techniques
- Stable in their ability to provide adequate revenues for meeting the utility's financial, operating, and regulatory requirements
- Established at a level that is stable from year-to-year from a customer's perspective

### 3.2 Determining the Revenue Requirement

Most public utilities use the cash basis approach for establishing their revenue requirement and setting rates. This approach conforms to most public utility budgetary requirements and the calculation is easy to understand. A public utility totals its cash expenditures for a period of time to determine required revenues. The revenue requirement for a public utility is usually comprised of the following costs or expenses:

- **Total Operating Expenses:** This includes a utility's operation and maintenance (O&M) expenses, plus applicable taxes or transfer payments. Operation and maintenance expenses include the materials, electricity, labor, supplies, etc., needed to keep the utility functioning.
- **Total Capital Expenses:** Capital expenses are calculated by adding debt service payments (principal and interest) to capital replacements financed with rate revenues. In lieu of including capital replacements financed with rate revenues, a utility sometimes includes depreciation expense to stabilize the annual revenue requirement.

Under the cash basis approach, the sum of the total O&M expenses plus the total capital expenses equals the utility's revenue requirement during any selected period of time (historical or projected).

Note that the two portions of the capital expense component (debt service and rate funded capital) are necessary under the cash basis approach because utilities generally cannot finance all of their capital facilities with long-term debt. At the same time, it is often difficult to pay for capital expenditures on a "pay-as-you-go" basis given that some major capital projects may have significant rate impacts upon a utility, even when financed with long-term debt. Many utilities

have found that some combination of pay-as-you-go funding and long-term financing will often lead to the minimization of rate increases over time.

As noted, public utilities typically use the cash basis<sup>2</sup> approach to establish their revenue requirement. An exception occurs if a public utility provides service to a wholesale or contract customer. In this situation, a public utility could use the utility basis approach (see Table 3 – 1) regarding earning a fair return on its investment.

Table 3 – 1 Cash versus Utility Basis Comparison			
Cash Basis		Utility Basis (Accrual)	
+	O&M Expenses	+	O&M Expenses
+	Taxes/Transfer Payments	+	Taxes/Transfer Payments
+	Capital Improv. Funded From Rates (≥ Depreciation Expense)	+	Depreciation Expense
+	Debt Service (Principal + Interest)	+	Return on Investment
=	Total Revenue Requirement	=	Total Revenue Requirement

### 3.3 Analyzing Cost of Service

After the total revenue requirement is determined, it is proportionally distributed to the users of the service. The distribution of costs, usually analyzed through a cost of service analysis, reflects the cost relationships for providing water services. A cost of service analysis requires three analytical steps:

1. Costs are **functionalized** or grouped into cost categories related to providing service (supply, distribution, pumping, etc.). This step is largely accomplished by the utility’s accounting system.
2. The functionalized costs are then **allocated** to specific cost components. Allocation refers to the arrangement of the functionalized data into the appropriate cost component(s). For example, a utility’s water costs are typically allocated as average day demand, peak day demand, or customer-related.
3. Once the costs are allocated to the appropriate cost component(s), they are proportionally **distributed** to the customer classes of service (residential, commercial, etc.). The distribution is based on each customer class’s relative contribution to the cost component (i.e., benefits received from, and burdens placed on the system and its resources). For example, customer-related costs are distributed to each class of service

<sup>2</sup> Cash basis as used in the context of rate setting is not the same as the terminology used for accounting purposes and recognition of revenues and expenses. As used for rate setting, cash basis refers to the specific cost components to be included within the revenue requirement analysis.

based on the total number of customers in that class of service. Once costs are distributed, the required revenues from each customer class of service to achieve cost-based and proportional rates can be determined.

### **3.4 Designing Utility Rates**

Rates that meet the utility's objectives are designed based on both the revenue requirement and cost of service analyses. This approach results in rates that are strictly cost-based and do not consider other non-cost based goals and objectives (conservation, economic development, ability to pay, revenue stability, etc.). In designing the final proposed rates, factors such as ability to pay, continuity of past rate philosophy, economic development, ease of administration, and customer understanding may be taken into consideration. However, the proposed rates must take into consideration each customer class's proportional share of costs distributed through the cost of service analysis to meet the requirements of Proposition 218.

### **3.5 Economic Theory and Rate Setting**

One of the major justifications for a rate study is founded in economic theory. Economic theory suggests that the price of a commodity must roughly equal its cost if equity among customers is to be maintained. This statement's implications on utility rate designs are significant. For example, a water utility usually incurs capacity-related costs to meet summer lawn watering needs. It follows that the customers who create excessive peak demands on the system, which creates the need for additional system capacity, should pay for those over-sized facilities in proportion to their contribution. When costing and pricing techniques are refined, consumers have a more accurate understanding of what the service costs to produce, treat, deliver, etc.



## 4 Revenue Requirement Analysis

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The District provided detailed revenue and expense data for the water system that allowed for the development of the revenue requirement. The revenue requirement analysis is the first analytical step in the rate study process. This analysis determines the adequacy of the District's overall water rates at current rate levels. From this analysis, a determination can be made as to the overall level of revenue (rate) adjustment needed to provide adequate and prudent funding for both operating and capital needs over the long-term (e.g., 10-year period).

### 4.1 Determining the Water Revenue Requirement

In developing the District's water revenue requirement, the water utility must financially "stand on its own" and be properly funded. That is, no rate revenues are being transferred from other District funds in order to support the water utility. As a result, the water revenue requirement analysis assumes the full and proper funding needed to operate and maintain the water system on a financially sound and prudent basis.

### 4.2 Establishing a Time Frame and Approach

The first step in calculating the revenue requirement for the District's water utility was to establish a time frame for the revenue requirement analysis. For the Study, the revenue requirement was developed starting with the adopted budgeted year (FY 2025) and a projected 9-year review period (FY 2026 – FY 2034). The rate setting period was then defined as FY 2026 through FY 2030. Reviewing a multi-year time period is recommended as it identifies any major expenses that may be on the horizon. By anticipating future financial requirements, the District can begin planning for these changes sooner, thereby minimizing short-term rate impacts and overall long-term rates.

The second step in determining the revenue requirement was to decide on the basis of accumulating costs. In this particular case, a cash basis approach was utilized. The cash basis approach is the most common methodology used by municipal utilities to set their revenue requirement. This is also the methodology that the District has historically used to establish its revenue requirement. Table 4 – 1 provides a summary of the cash basis approach and cost components used to develop the District's revenue requirement.

**Table 4 – 1**  
**Overview of the Water Utility’s Cash Basis Revenue Requirement**

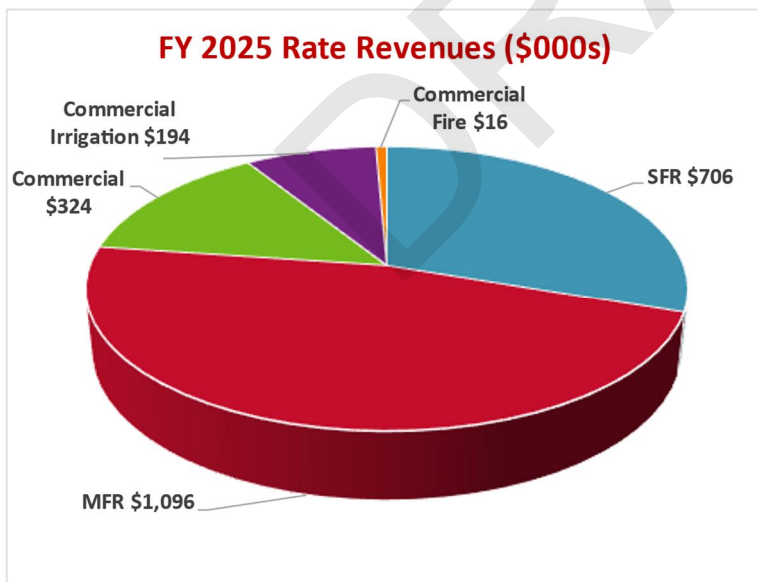
+	Water Operation and Maintenance Expenses
+	Taxes & Transfers
+	Rate Funded Capital
+	Debt Service (Principal + Interest) – Existing and Future
+	<u>Change in Working Capital</u>
=	<b>Total Water Revenue Requirement</b>
–	<u>Miscellaneous Revenues</u>
=	<b>Net Revenue Requirement (Balance Required from Water Rates)</b>

With a time period established for developing the revenue requirement and a method identified to accumulate the costs, the focus shifts to the development and projection of the revenues and expenses of the District.

The primary financial inputs in the development of the revenue requirement are the District’s adopted budget, historical billed customer and consumption data, and the water capital replacement and improvement plans. Presented below is a detailed discussion of the steps and key assumptions contained in the development of the District’s revenue requirement analysis.

### 4.3 Projecting Rate and Other Miscellaneous Revenues

The District receives revenue from two primary sources, water rates and miscellaneous revenues.



Water rate revenues are based on the current water rate structure and are collected on an annual basis. Other revenue includes items such as interest, property tax revenues, rents, fees, and other miscellaneous revenues. Provided below is a brief discussion of the projection of the water revenues.

The first step in developing a projection of water rate revenues is to develop the projected consumption/billing units for each customer class. The basis for the consumption/billing units was the

most recent fiscal year consumption data. The billing units were then multiplied by the current applicable water rates. This method of independently calculating revenues is used to help confirm that projected revenues used within the analysis tie to the projected billing units used in the rate design analysis.

The vast majority of the District's rate revenues, as shown in the chart, are derived from multi-family residential customers. In total, at present water rates, the District is projected to receive approximately \$2.3 million in water rate revenues in FY 2025. Over the rate setting period of the Study, customer growth is expected to be 0.5%, annually, resulting in projected total water rate revenues of approximately \$2.4 million by FY 2030.

In addition to rate revenues, the District also receives a variety of miscellaneous revenues, with the largest component being property tax revenues. Miscellaneous revenues are projected to be approximately \$347,000 in FY 2025. Miscellaneous revenues are expected to fluctuate over the rate setting period and are projected to be approximately \$337,000 in FY 2030.

On a combined basis, taking into account both rate revenues and miscellaneous revenues, the District's total water revenues are projected to be approximately \$2.7 million in FY 2025, increasing gradually to slightly above \$2.7 million by FY 2030. It is important to note that these figures do not include rate adjustments, but rather are purely the result of assumed customer growth on the water system and interest earned on cash reserves.

#### **4.4 Projecting Operation and Maintenance Expenses**

Operation and maintenance (O&M) expenses are incurred by the District to operate and maintain the water system. The costs incurred in this area are expensed during the current year and are not capitalized or depreciated. In general, operation and maintenance O&M expenses are grouped into a number of different functional categories. To begin the process of projecting O&M expenses over the planning horizon, escalation factors were developed. Escalation factors were developed for the basic types of expenses incurred: labor, benefits, materials and supplies, utilities, equipment, and miscellaneous expenses. The District's escalation factors were projected based on recent inflationary trends. For the Study rate setting period, the escalation factors were approximately 3.0% - 6.0% per year, depending on the specific cost and expense year.

Given the budgeted FY 2025 O&M expenses, HDR then escalated the O&M expenses based on the previously mentioned escalation factors from FY 2026 through FY 2034. Total water operation and maintenance expenses for the District are budgeted to be approximately \$2.0 million in FY 2025, which includes the water utility's share of general administration costs, which are shared with the sewer and fire utilities. Water O&M expenses are projected to increase to approximately \$2.4 million by FY 2030, as a result of estimated inflation over the time period.

The escalation of costs using escalation factors assumes no changes in current levels of service. It is assumed that no extraordinary changes in O&M levels will occur over the rate setting period (FY 2026 – FY 2030).

## 4.5 Projection of Debt Service

Long-term debt issuance is an acceptable method to adequately fund the District’s capital replacement program. Debt can serve a variety of functions for the utility. For example, long-term debt can provide intergenerational equity as the assets purchased with the debt are paid for by both the current and future customers utilizing the services. Additionally, issuing long-term debt can help to smooth rate impacts over time, lessening the effects of capital projects by spreading the cost out over a longer time period. HDR is not providing municipal advice as it relates to bonds, terms, or structures of debt issuance. Rather, this study simply aims to identify the existing annual debt service payments and projection of future long-term funding needs while utilizing conservative assumptions for modeling purposes only.

The District’s water utility currently has one outstanding long-term debt issuance, the facility loan, for the administration building. The existing debt service for FY 2025 is \$86,410 and is retired in FY 2026, leaving the District with no outstanding debt issuances. During the rate setting period, no additional long-term debt issues are assumed to be necessary to fund future capital projects.

## 4.6 Projecting Rate Funded Capital

Another key component in the development of the water revenue requirement was properly and adequately funding capital replacement needs. One of the major issues facing many utilities across the U.S. is the amount of deferred capital projects and funding pressure from growth/expansion-related improvements. The proper and adequate funding of capital projects is an important issue for all water utilities and is not just a local issue or concern of the District.

In general, there are three types of capital projects that a utility may need to fund. These include the following types:

- Renewal and replacement projects (CRP)
- Growth/capacity expansion projects (CIP)
- Regulatory-related projects

A renewal and replacement project is a project required for maintaining the existing system that is in place today. As the existing infrastructure becomes worn out, obsolete, etc., the utility should be making continuous investments to maintain the integrity of the facilities. To address these needs, the District has developed a 100-year capital replacement plan (CRP), which aides in identifying and prioritizing capital replacement on the system. In contrast to this, a utility may make capital investments to expand the capacity of facilities to accommodate future capacity needs (customers). The District has a capital improvement plan (CIP), which is in place to properly plan for any known growth on the system or additional capacity needs that may be coming in the future. Finally, certain projects may be a function of a regulatory requirement in which the Federal or State government mandates the need for an improvement to the system to meet a regulatory standard. Understanding these different types of capital projects is important because the way in which projects are funded may vary by the type of capital project. For example, renewal and replacement projects may be paid for via rates and funded on a “pay-as-you-go



basis”. In contrast to this, growth or capacity expansion projects may be funded via the collection of water connection fees (i.e., growth-related charges) in which new development pays a proportional share of the cost of the facilities necessary to serve their development (impact). Finally, regulatory projects may be funded by a variety of different means, which may include rates, long-term debt, grants, etc.

Provided in Table 4 – 2 is a summary of the capital funding plan for the District’s water system over the review period.

Table 4 – 2 Summary of the Water Capital Improvements (\$'000)						
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Capital Projects</b>						
Capital Improvement Projects (CIP)	\$844	\$0	\$158	\$1,328	\$1,485	\$246
Capital Replacement Projects (CRP)	287	279	351	29	256	1,006
Utility Equipment Fleet Projects	36	93	78	0	45	257
Facilities Capital Projects	278	382	245	46	61	29
<i>Future Unidentified Projects</i>	0	0	0	0	0	0
<i>To Water FARF</i>	<u>8</u>	<u>0</u>	<u>0</u>	<u>535</u>	<u>208</u>	<u>0</u>
<b>Total Capital Projects</b>	<b>\$1,454</b>	<b>\$754</b>	<b>\$833</b>	<b>\$1,938</b>	<b>\$2,055</b>	<b>\$1,537</b>
<b>Less: Outside Funding Sources</b>						
Operating Reserve	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve	844	0	158	1,328	1,485	246
Fixed Asset Replacement Fund	0	104	30	0	0	762
New SRF Loans	0	0	0	0	0	0
New Revenue Bonds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Outside Funding Sources</b>	<b>\$844</b>	<b>\$104</b>	<b>\$188</b>	<b>\$1,328</b>	<b>\$1,485</b>	<b>\$1,007</b>
<b>Rate Funded Capital</b>	<b>\$610</b>	<b>\$650</b>	<b>\$645</b>	<b>\$610</b>	<b>\$570</b>	<b>\$530</b>

As can be seen in Table 4 – 2, there are a number of projects which vary from year-to-year. While the total amount required to fund a project may vary from year to year, the rate study capital funding plan has attempted to provide a consistent funding source for capital improvements. In this case, rates will annually fund an amount ranging from \$530,000 to \$650,000 (as shown in Table 4 – 2). As a point of reference, the District’s annual depreciation expense is approximately \$405,000 for FY 2023. A desirable and recommended minimum funding target for rate funded capital is an amount equal to or greater than annual depreciation expense. In developing this financial plan, HDR and the District have attempted to minimize rate impacts while funding the planned capital replacement projects of the water system.

## 4.7 Reserve Funding

The final component of the revenue requirement analysis is reserve funding, or additional transfers to, or from, reserve funds to maintain prudent ending fund balances or for future funding of specific projects. Also, the balance of funds after the transfers are made is transferred to the fixed asset replacement fund to maintain minimum fund balances. As will be shown, the rates are at sufficient levels and funds are being transferred back to reserves to meet minimum target levels and to be available for future capital projects.

## 4.8 Summary of the Revenue Requirement

Given the above projections of revenues and expenses, a summary of the District’s water revenue requirement analysis can be developed. In developing the revenue requirement analysis, consideration was given to the financial planning considerations of the District. In particular, emphasis was placed on minimizing rates, yet still having adequate funds to support the operational activities and capital replacement needs throughout the projected time period. Detailed exhibits of this analysis can be found in the Technical Appendix. Shown below in Table 4 – 3 is a summary of the revenue requirement analysis performed for the District’s water utility.

<b>Table 4 – 3</b>						
<b>Summary of the Revenue Requirement Analysis (\$000)</b>						
	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>
<b>Revenues</b>						
Rate Revenues	\$2,336	\$2,348	\$2,359	\$2,371	\$2,383	\$2,395
Non-Operating Revenues	<u>347</u>	<u>342</u>	<u>349</u>	<u>352</u>	<u>344</u>	<u>337</u>
<b>Total Revenues</b>	<b>\$2,683</b>	<b>\$2,690</b>	<b>\$2,709</b>	<b>\$2,723</b>	<b>\$2,727</b>	<b>\$2,731</b>
<b>Expenses</b>						
Total Water Dept. Expenses	\$836	\$870	\$905	\$942	\$980	\$1,019
Total Admin. Expenses	1,119	1,132	1,176	1,221	1,269	1,349
Net Annual Debt Service	86	86	0	0	0	0
Rate Funded Capital	610	650	645	610	570	530
Reserve Funding	<u>30</u>	<u>93</u>	<u>274</u>	<u>403</u>	<u>534</u>	<u>643</u>
<b>Total Expenses</b>	<b>\$2,683</b>	<b>\$2,831</b>	<b>\$3,000</b>	<b>\$3,176</b>	<b>\$3,352</b>	<b>\$3,542</b>
Bal./ (Def.) of Funds	\$0	(\$141)	(\$292)	(\$453)	(\$625)	(\$810)
<i>Bal. as a % of Rate Rev.</i>	<i>0.0%</i>	<i>6.0%</i>	<i>12.4%</i>	<i>19.1%</i>	<i>26.2%</i>	<i>33.8%</i>
<b>Proposed Rate Revenue Adj.</b>	<b>0.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>
Add'l Rev. from Rate Adj.	\$0	\$141	\$292	\$453	\$625	\$810
Total Bal./ (Def.) of Funds	\$0	\$0	\$0	\$0	\$0	\$0

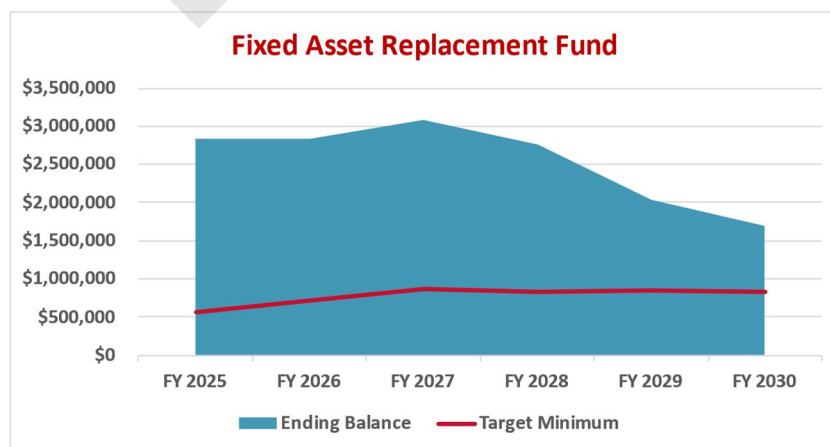
The revenue requirement has summed the O&M, taxes and transfers, rate funded capital, net debt service, and reserve funding. The total revenue requirement is then compared to the total sources of funds, which are the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison, a balance or deficiency of funds in each year can be determined. This balance or deficiency of funds is then compared to the rate revenues to determine the level of rate revenue adjustment needed to meet the revenue requirement.

## 4.9 Reserve Levels

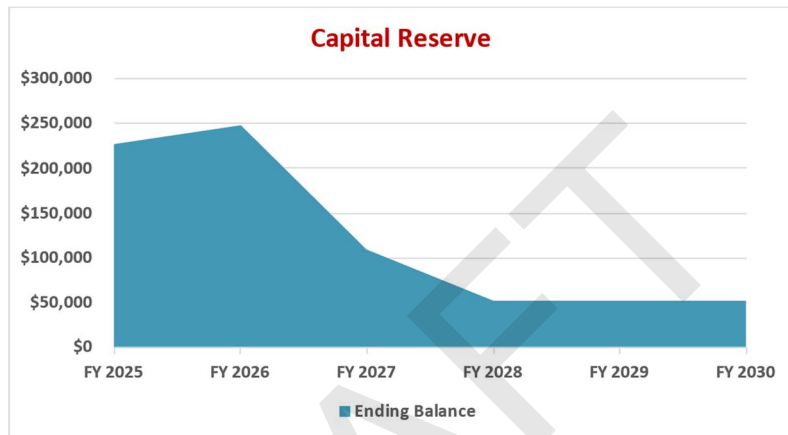
Another key element of determining the financial health and sustainability of the District’s water utility is to review the level of available reserves after the proposed rate adjustments. Utilities can have several different reserves for different purposes. Each of these funds can have a minimum ending balance that, if reached or falls below, is a signal that the District should review the revenue sources associated with each fund. The minimum ending balances will vary depending on the purpose of the fund and the expected revenue sources.

For the District, there are two primary funds for the water utility, a fixed asset replacement fund and capital reserve.

- **Fixed Asset Replacement Fund (FARF)** – The fixed asset replacement fund is in place to meet the District’s annual cash flow needs in addition to funding capital projects that are related to the renewal and replacement of the water system. This fund acts in a similar fashion as the capital fund, but with the distinction that the source of funding is from current customers and that funding is only used toward maintaining the current system. The District has set a minimum ending balance of 60 days of O&M expenses plus the five-year rolling average of the capital replacement plan (CRP), which equates to approximately \$562,000 in FY 2025. This target is used in order to maintain a sufficient amount of funds to cover expenses, should any unexpected interruption of rate revenues occur. Over the projected time period, this fund increases and decreases depending on overall capital replacement needs but maintains prudent reserve levels.



- Capital Reserve** – The capital reserve is in place to fund capital improvement projects, specifically related to growth. This fund acts to store funds for use towards capital projects where the main source of revenue is from connection fees. This creates the nexus between the portion of the connection fee, which is related to future growth projects, which aims to shield current customers from bearing these costs. In this way, the District can decrease the impact to rates and maintain a smoother projection over time. Currently, there is no target minimum set for the capital reserve. Over time, the capital reserve fund increases until capital improvement projects require funding.



#### 4.10 Revenue Requirement Conclusions and Recommendations

The revenue requirement developed above has indicated the need for annual revenue increases to adequately fund the District’s operating and capital needs of the water utility. It is proposed that annual increases of 6.0% be implemented at the start of each fiscal year to adequately fund the District’s water system operating and capital expenses.



## 5 Cost of Service Analysis

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In the previous section, the revenue requirement analysis focused on the total sources and applications of funds required to adequately fund the District's water utility. This section will provide an overview of the cost of service analysis developed for the District's water utility.

A cost of service analysis determines the proportional distribution of the total revenue requirement between the customer classes of service (e.g., Single Family Residential, Multi-Family Residential, Commercial, Commercial Irrigation, and Commercial Fire), or rate schedules. The previously developed revenue requirement was utilized in the development of the cost of service analysis, which was based on the costs incurred by the District to provide water service.

### 5.1 Objectives of a Cost of Service Study

There are two primary objectives in conducting a cost of service analysis:

- Proportionally distribute the District's revenue requirement between the customer classes of service; and
- Derive average unit costs (i.e., cost-based rates) for subsequent rate designs

The main objective of the cost of service analysis is to determine the proportional manner in which to collect the revenue requirement. The results of the cost of service analysis determine the unit costs, which become the final proposed rates. The cost of service analysis provides a per unit cost of water consumption based on each customer class's proportional share of costs. For example, a water utility incurs costs related to average day, peak day, fire protection, and customer-related cost components. A water utility must build sufficient capacity<sup>3</sup> to meet summer peak capacity needs. Therefore, those customers contributing to those peak demands on the system should pay their proportional share of the costs to provide the capacity in the system they utilize. The unit costs provide the relationship between these components, which are then used to set cost-based rates.

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<sup>3</sup> System capacity is the system's ability to supply water to all delivery points at the time when demanded. Coincident peaking factors are calculated for each customer class at the time of greatest system demand. The time of greatest demand is known as peak demand. Both the operating costs and capital asset related costs incurred to accommodate the peak demands are generally allocated to each customer class based on the class's contribution to the peak month, day and hour event.

## 5.2 Determining the Customer Classes of Service

The first step in a cost of service analysis is to determine the customer classes of service. Based on discussion with District staff, and a review of the customer characteristics, the classes of service used within the cost of service analysis were:

- Single Family Residential
- Multi-Family Residential
- Commercial
- Commercial Irrigation
- Commercial Fire

In determining classes of service for cost of service purposes, the objective is to group customers together into similar or homogeneous groups based on similar facility requirements and/or demand characteristics.

## 5.3 General Cost of Service Procedures

In order to determine the cost to serve each customer class of service on the District's water system, a cost of service analysis is conducted. A cost of service analysis utilizes a three-step approach to review costs. These steps take the form of functionalization, allocation, and distribution. Provided below is a detailed discussion of the water cost of service analysis conducted for the District, and the specific steps taken within the analysis. The approach used for the District's study conforms to generally accepted cost of service methodologies as outlined in the AWWA M1 manual to meet the proportionality requirements of Proposition 218.

### 5.3.1 Functionalization of Costs

The first analytical step in the cost of service process is called functionalization. Functionalization is the arrangement of expense and asset (e.g., wells, distribution system) data by major operating functions (e.g., supply, transmission, storage, distribution). Within this study, there was a limited amount of functionalization of the cost data as it was accomplished within the District's system of accounts.

### Water Cost of Service Analysis Terminology

**Functionalization** – The arrangement of cost data by functional category (e.g., source of supply, treatment, etc.).

**Allocation** – The assignment of functionalized costs to cost components (e.g., commodity, capacity, customer and fire protection related).

**Distribution** – Distributing the allocated costs to each class of service based on each class's proportional contribution to that specific cost component.

**Commodity Costs** – Costs that are allocated as commodity related vary with the total demand of water (e.g., chemical use at a treatment plant).

**Capacity Costs** – Costs allocated as capacity related vary with peak day or peak hour usage. Facilities are often designed and sized around meeting peak demands.

**Fire Protection Costs** – Costs that are related to fire protection services (e.g., hydrants, oversizing of storage and distribution mains).

**Customer Costs** – Costs allocated as customer related vary with the number of customers on the system (e.g., metering costs).

### 5.3.2 Allocation of Costs

The second analytical task performed in a water cost of service study is the allocation of the costs. The allocation of costs examines why the expenses were incurred or what type of need is being met. The following cost allocators were used to develop the cost of service analysis:

- **Commodity Related Costs:** Commodity costs are costs which tend to vary with the total quantity of water consumed by a customer. Commodity costs are those incurred under average load (demand) conditions and are generally specified for a period of time such as a month or year. Chemicals or utilities (electricity) are examples of commodity-related costs as these costs tend to vary based on the total demand of water.
- **Capacity Related Costs:** Capacity costs are costs which vary with peak demand, or the maximum rates of flow to customers. System capacity is required when there are large demands for water placed on the system (e.g., summer lawn watering). For water utilities, capacity related costs are generally related to the sizing of facilities needed to meet a customer's maximum water demand at any point in time. For example, portions of distribution storage reservoirs and mains (pipes) must be adequately sized to meet this particular type of requirement.
- **Customer Related Costs:** Customer costs are costs which vary with the number of customers on the water system. They do not vary with system output or consumption levels. These costs are also sometimes referred to as readiness to serve or availability costs. Customer costs may also sometimes be further identified as either actual or weighted. Actual customer costs vary proportionally, from customer to customer, with the addition or deletion of a customer, regardless of the size of the customer. An example of an actual customer cost is postage for mailing bills. This cost does not vary from customer to customer, regardless of the size or consumption characteristics of the customer. In contrast, a weighted customer cost reflects a disproportionate cost, from customer to customer, with the addition or deletion of a customer. Examples of weighted customer costs are items such as meter maintenance or replacement expenses, where a large commercial customer requires a significantly more expensive meter than a typical residential customer.
- **Public Fire Protection Related Costs:** Fire protection costs are costs related to public fire protection functions. Usually, such costs are those related to public fire hydrants and the over-sizing of mains and distribution storage reservoirs for fire protection purposes.
- **Revenue Related Costs:** Some costs associated with the utility may vary with the amount of revenue received by the utility. An example of a revenue related cost would be a utility tax, which is based on the gross utility revenue.

### 5.3.3 Development of Distribution Factors

Once the allocation process is complete and the customer classes of service have been defined, the allocated costs are distributed to each customer group. The District's allocated costs were distributed to the identified customer classes of service using the following distribution factors.



- **Commodity Distribution Factor:** As noted earlier, commodity-related costs vary with total water consumption. Therefore, the commodity distribution factor was based on the projected total metered consumption plus losses for each class of service and tier for the projected test period. The consumption for this Study, and distribution factor, is based on the most recent fiscal year metered annual consumption.
- **Capacity Distribution Factor:** The capacity distribution factor was developed based on the assumed contribution to peak demand use of each class. Peak demand use by customer class of service and tier was developed based on actual monthly metered data and the calculation of peaking factors for each customer group and tier. The peaking factor was defined as the relationship between peak day contribution and average day use and was determined for each customer group based on a review of the average month to peak month usage. Given an estimated peaking factor, the peak demand contribution for each class of service was developed.
- **Customer Distribution Factor:** Customer costs vary with the number of customers on the system. Two basic types of customer distribution factors were identified – actual and weighted. The distribution factor for actual customers is based on the projection of the number of customers developed within the revenue requirement. The weighted customer distribution factors are broken into two factors, which reflect the disproportionate costs associated with serving different types of customers. The first weighted customer factor is for customer service and accounting. This weighted customer distribution factor takes into account the fact that certain costs may vary by the number of living units on the system, such as Multi-Family customers, as they are charged based on the number of living units. The second weighted customer distribution factor is for meters and services. This factor reflects the different capacity demands associated with providing larger sized meters. For example, there is a significant demand difference associated with a 3/4” meter compared to a 6” meter. This demand difference is reflected within the meters and services distribution factor.
- **Public Fire Protection Distribution Factor:** The development of the distribution factor for public fire protection expenses involved an analysis of each class of service and their fire flow requirements. The analysis took into account the gallon per minute fire flow requirements in the event of a fire, along with the duration of the required flow. The fire flow rates used within the distribution factor were based on industry standards. The minimum fire flow requirements are then multiplied by the number of customers in each class of service and the assumed duration of the fire to determine each class’s prorated fire flow requirements.
- **Revenue Related Distribution Factor:** The revenue related distribution factor was developed from the projected rate revenues for FY 2026 for each customer class of service. These same revenues were used within the revenue requirement analysis discussed previously.



As mentioned before, in a typical cost of service analysis, the distribution factors represent a group of similar customers such as Single Family Residential. For this analysis, however, additional cost detail was needed when distributing costs. More specifically, the commodity and capacity distribution factors were further detailed for each of the four Single Family Residential tiers in order to provide the cost basis for the development of the proposed rates as required by Proposition 218.

## 5.4 Functionalization and Allocation of Plant in Service

As noted, one of the first steps of the cost of service analysis is the functionalization and allocation of plant in service. In performing the functionalization of plant in service, HDR utilized the District's historical plant (asset) records. Given the functionalization of the plant assets, the analysis shifted to the allocation of the assets. The allocation process included reviewing each group of assets and determining which cost allocator(s) the assets were related to. For example, the District assets were allocated as: commodity-related, capacity-related, customer-related, revenue-related, public fire protection-related, or a direct assignment. Provided below is a summary of the allocation process. The following approach is based on the methodology as described in the AWWA M1 Manual.

**Source of Supply** – Source of supply was allocated as commodity and capacity related. Based on the operation of the system, the source of supply assets were assigned 35.1% to commodity and 64.9% to capacity. This allocation reflects the District's system peak demand (capacity needs) in relation to the system average day use (commodity needs).

**Pumping** – Pumping was allocated as 100.0% to commodity. This is due to pumping costs being incurred to meet average day needs.

**Transmission & Distribution** – Transmission and distribution lines (mains) are typically in place to provide service to customers in three ways. First, a distribution system is in place to meet a customer's minimum use requirements for water. This portion of the distribution main plant investment is considered to be a customer related cost, or a function of the number of customers on the system. Next, a portion of the distribution system mains is considered to be a function of meeting peak capacity requirements on the system. Distribution mains must be sized to adequately meet the maximum flows demanded by customers. This portion of the distribution main plant investment is considered capacity related and is allocated on an equivalent meter basis, which reflects the capacity, or demand, that can be placed on the system by customers with varying meter sizes. Finally, distribution mains must also be over-sized for public fire flow demands. This final portion of over-sizing for distribution plant investment is classified as public fire protection related. Based on an analysis of the District's distribution system assets, the assignment of the distribution mains were 68.0% customer-related, 20.8% capacity-related, and 11.2% fire protection related.

**Storage** – Storage reservoirs, or water tanks, are typically designed to meet at least two types of needs –peak demands and fire protection. The total storage capacity of the District's reservoirs

were examined and consideration was given to the capacity required for fire protection under a fire event scenario. This amount of capacity, in relation to the total storage capacity, is considered fire protection related. The balance of storage capacity is considered to be in place to meet peak demands. This resulted in 83.2% of the storage costs being assigned to the capacity cost component, and the remaining 16.8% to be assigned to the fire protection component.

Table 5 - 1 provides a summary of the basic functionalization and allocation of the major water plant items.

Table 5 - 1 Summary of the Allocation of Water Plant in Service					
Category	Commodity	Capacity	Customer Related	Fire Protection	Direct Assign.
Source of Supply	35.1%	64.9%	0.0%	0.0%	0.0%
Pumping	100.0%	0.0%	0.0%	0.0%	0.0%
Transmission & Distribution	0.0%	20.8%	68.0%	11.2%	0.0%
Storage	0.0%	83.2%	0.0%	16.8%	0.0%
General Plant	15.5%	48.7%	28.1%	7.8%	0.0%
<b>Total Net Plant In Service</b>	<b>15.5%</b>	<b>48.7%</b>	<b>28.1%</b>	<b>7.8%</b>	<b>0.0%</b>

A more detailed exhibit of the District’s functionalization and allocation of plant investment can be found in the Technical Appendix.

## 5.5 Functionalization and Allocation of Operating Expenses

As noted in the AWWA M1 Manual, operating expenses are generally functionalized and allocated in a manner similar to the corresponding plant account. For example, maintenance of distribution mains is typically allocated in the same manner (allocation percentages) as the plant account for distribution mains. This approach to allocating the District’s operating expenses was used for this analysis. The District does not separate its O&M expenses by function (e.g., supply, treatment, etc.), which is not an uncommon approach for utilities. As a result, the approach to allocate the operating expenses was based on the allocation of the plant, or asset data, which reflects the investment made by the District to provide service.

For the District’s Study, the revenue requirement for FY 2026 was functionalized and allocated based on the approach noted above. As noted, the District utilized a cash basis revenue requirement, which was comprised of operation and maintenance expenses, debt service, and change in working capital. Provided in Table 5 – 2 is a summary of the allocation of the water revenue requirement.

**Table 5 - 2**  
**Summary of the Allocation of the Revenue Requirement (\$000)**

	Total	Commodity	Capacity	Customer Acctg.	Weighted Customer	Fire Protection	Revenue
Net Revenue Requirement	\$2,489	\$240	\$491	\$697	\$987	\$74	\$0

## 5.6 Major Assumptions of the Cost of Service Study

A number of key assumptions were used within the District’s cost of service study. Below is a brief discussion of the major assumptions used.

- A test period is used for the cost of service analysis in order to select the expenses which should be allocated and distributed. The revenue and expense data was previously developed within the revenue requirement analysis
- A cash basis approach was utilized, which conforms to generally accepted water cost of service approaches and methodologies
- The allocation of plant in service was developed based on generally accepted cost allocation techniques. Furthermore, it was developed using the District’s specific data
- Consumption by tier and class of service used within the Study was developed for each class of service from historical usage information provided by the District
- Capacity distribution factors were calculated based on each customer group’s average to peak month relationship based on actual metered data

## 5.7 Summary Results of the Cost of Service Analysis

In summary form, the cost of service analysis began by functionalizing the District’s revenue requirement. The functionalized revenue requirement was then allocated to the appropriate cost component(s). The individual allocation totals were then distributed proportionally to the customer classes of service based on the appropriate distribution factor. The distributed expenses for each customer class were then aggregated to determine each customer class’s overall revenue responsibility. Shown below in Table 5 – 3 is a summary of the distributed costs to each customer class of service.

**Table 5 – 3**  
**Summary of the Allocation and Distribution of the**  
**FY 2026 Water Revenue Requirement (\$000)**

Allocation Components	Total Allocated Costs	Single Family Residential	Multi-Family Residential	Commercial	Commercial Irrigation	Commercial Fire
Commodity	\$240	\$72	\$97	\$49	\$22	\$0
Capacity	491	123	183	92	92	0
Customer Acctg.	697	165	492	18	16	6
Meters & Services	987	371	343	185	80	8
Fire Protection	<u>74</u>	<u>18</u>	<u>53</u>	<u>3</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>\$2,489</b>	<b>\$749</b>	<b>\$1,169</b>	<b>\$347</b>	<b>\$210</b>	<b>\$14</b>

The total distributed costs for each customer class are then compared to the current revenue contribution to determine a balance or deficiency, which is shown in the cost of service summary. Provided in Table 5 – 4 is a summary of the cost of service analysis for the FY 2026 test year.

**Table 5 – 4**  
**Summary of the Cost of Service Analysis (\$000)**

Class of Service	Present Revenues (FY 2026)	Distributed Costs	\$ Difference	% Difference
Single Family Residential	\$710	\$749	(\$39)	5.5%
Multi-Family Residential	1,102	1,169	(67)	6.1%
Commercial	325	347	(22)	6.6%
Commercial Irrigation	195	210	(15)	7.9%
Commercial Fire	<u>16</u>	<u>14</u>	<u>2</u>	-11.7%
<b>Total</b>	<b>\$2,348</b>	<b>\$2,489</b>	<b>(\$141)</b>	<b>6.0%</b>

The cost of service study attempted to proportionally distribute the operating and capital costs to each customer class based on their respective benefit received from and burdens placed on the water system. The results of the analysis show that cost differences exist between the customer classes of service. It is important to understand that a cost of service analysis is based on one year’s O&M expense data and projected customer usage information. Given this, the results of the cost of service analysis may change from year to year. As the District continues to monitor rates and cost of service results through future studies, future cost of service adjustments may be necessary to reflect consumption patterns at that time.

## 5.8 Cost of Service Conclusions and Recommendations

This section of the report has provided the recommendations resulting from the cost of service analysis developed for the District's water utility. This analysis was prepared using generally accepted cost of service techniques as provided in the AWWA M1 Manual and the specific costs and customer characteristics of the District's customers to meet the requirements of Proposition 218.

The cost of service analysis shows that some cost differences exist. Given the requirements of Article XIII D, the results of the cost of service, and specifically, the average unit costs from the cost of service analysis, will be used to establish the proposed water rates for each of the District's customer classes of service. A more detailed discussion of the use of the cost of service results and calculation of the average unit costs is provided in the rate design section of this report.

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## 6 Rate Design Analysis

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The final step of the District's water rate study is the design of proposed water rates to collect the desired levels of revenues, based on the results of the revenue requirement and cost of service analyses. In reviewing the District's rates, consideration must be given to the level of the rates as well as the structure of the rates. The level of the rates reflects the amount of revenues that should be collected, while the structure of the rates is how it is collected (charged) from the customers.

The overall revenue level for the District has been established in the revenue requirement analysis, while the proportional distribution of costs between the various customer classes has been developed in the cost of service analysis, which provides the revenue levels to be collected from each class of service.

### 6.1 Rate Design Goals and Objectives

Prudent rate administration dictates that several criteria should be considered when setting utility rates. Some of these rate design criteria are listed below:

- Compliant with Proposition 218 and other applicable laws
- Rates which are easy to understand from the customer's perspective
- Rates which are easy for the District to administer
- Consideration of the customer's ability to pay
- Continuity, over time, of the rate making philosophy
- Policy considerations (encourage efficient use, economic development, etc.)
- Provide revenue stability from month to month and year to year
- Promote efficient allocation of the resource
- Proportional and non-discriminatory (cost-based)
- Legally defensible

It is important that the District provide its customers with a proper price signal as to what their consumption and demand requirements are costing. This goal may be approached through rate level and structure. When developing the proposed rate designs, the above listed criteria are taken into consideration. However, it should be noted that it is difficult, if not impossible, to design a rate that meets all the goals and objectives listed above. For example, it may be difficult to design a rate that takes into consideration the customer's ability to pay, and one which is cost-based. In designing rates, there are always trade-offs between these various goals and objectives.

### 6.2 Development of Cost-Based Water Rates

Developing cost-based rates is of paramount importance in the development of water rates. While always a key consideration in developing rates, meeting the requirements of Proposition 218 and documenting the steps taken to meet the requirements, has been in the forefront with the recent challenges in the State of California on water rates. Given this, the District's proposed

water rates have been developed to meet the requirements of California Constitution Article XIII D, Section 6 (Article XIII D) and California Water Code Section 390 & 390.1. A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally distributed to the customer classes of service. HDR would point out that there is no single prescribed methodology for proportionally assigning costs to the various customer groups. The American Water Works Association (AWWA) M1 Manual clearly delineates different methodologies which may be used to establish cost-based rates. Article XIII D does not prescribe a particular methodology for establishing cost-based rates. Consequently, HDR reviewed the District's proposed water rates based on the methodologies provided in the AWWA M1 Manual to meet the requirements of Article XIII D to provide an administrative record of the steps taken to establish the District's water rates. Additionally, the Study – and particularly the cost of service analysis – has incorporated the considerations outlined in California Water Code Section 390 & 390.1 with the goals of maintaining compliance.

HDR is of the opinion that the noticed rates comply with the legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- **The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e., water service).** The proposed rates are designed to collect the overall revenue requirement of the District's water utility.
- **The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the District's water rates are used exclusively to operate and maintain the District's water system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** The cost of service analysis was specifically developed to focus on the issue of proportional assignment of costs to the customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (Residential, Multi-Family, Commercial, Commercial Irrigation, Commercial Fire) that reflect the varying consumption patterns and system requirements of each customer class of service. The grouping of customers and rates into these classes of service creates the proportionality expected under Article XIII D by having differing rates by customer class of service. The goal of grouping similar customers in this way is to reflect the manner in which these costs are incurred and assigned to customer classes of service based on their proportional impacts and burdens on the District's water system and water resources.

In order to comply with California Water Code Section 390 and Section 390.1 as statutorily required, the District's Study included a water usage demand analysis which is discussed in detail in Section 6.4.2 of this report.

### 6.3 Overview of the District's Current Water Rates

The District's current rate structure varies by customer class of service, but in general consists of an annual fixed charge and a volumetric charge per 1,000 gallons, which is also charged on an

annual basis. For Single Family Residential customers, they are charged a flat annual fixed charge as well as a 4-tier consumption charge. Multi-Family Residential customers are also charged a flat annual fixed charge per living unit – although it is proportionally less than Single Family, as well as a uniform consumption charge. Commercial and Commercial Irrigation customers have the same annual fixed charges based on service meter size and have a uniform consumption charge, however, each class has its own unique consumption charge rate. Given the prior discussion on the California Proposition 218 requirements of setting rates as well as the development of a cost of service analysis, specifically the unit costs, were the basis for the review of the District’s water rates. Shown below in Table 6 – 1 is a summary of the District’s present rates for each customer class.

<b>Table 6 – 1 Summary of the Current Water Rates</b>	
	<b>Present Rates</b>
<b>Fixed Charge per Acct. or Unit</b>	<b>\$ / Year</b>
Residential (SFR)	\$1,222.75
Condo/Apt./Duplex/ (MFR)	592.77
Commercial/Commercial Irrigation/Commercial Fire	
5/8"	\$1,004.28
3/4"	1,095.90
1"	1,222.75
1 1/2"	2,456.00
2"	3,918.47
3"	7,357.70
4"	12,273.43
6"	24,550.37
<b>Consumption Charge</b>	<b>\$ / 1,000 gal</b>
Residential (SFR)	
0 – 120 kgal	\$5.94
120 kgal – 220 kgal	12.08
220 kgal – 280 kgal	18.90
280 + kgal	41.86
Condo/Apt./Duplex/ (MFR)	\$10.30
Commercial	\$7.89
Commercial Irrigation	\$14.28

As a part of the Study, HDR developed a water rate design discussion to clearly demonstrate and support the noticed water rate pricing. The following discussion provides a more detailed analysis of the costing techniques and methodologies used to support the District’s proposed rates.



## 6.4 Development of the Unit Costs for the Rate Designs

To begin the assignment of costs to the customer classes and specific tiers, the results of the cost of service analysis are utilized. As noted, the cost of service analysis allocates the revenue requirement between the cost components of commodity, capacity, customer, and fire protection. The results are then distributed to the customer classes of service and are then further distributed between the rate structure components (e.g., fixed charge, consumption tiers). Provided in Table 6 – 2 is a summary of the allocation and distribution of the FY 2026 revenue requirement from the cost of service analysis (same as Table 5 – 3).

Allocation Components	Total Allocated Costs	Single Family Residential	Multi-Family Residential	Commercial	Commercial Irrigation	Commercial Fire
Commodity	<b>\$240</b>	\$72	\$97	\$49	\$22	\$0
Capacity	<b>491</b>	123	183	92	92	0
Customer Acctg.	<b>697</b>	165	492	18	16	6
Meters & Services	<b>987</b>	371	343	185	80	8
Fire Protection	<u>74</u>	<u>18</u>	<u>53</u>	<u>3</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>\$2,489</b>	<b>\$749</b>	<b>\$1,169</b>	<b>\$347</b>	<b>\$210</b>	<b>\$14</b>

The total of the above distributed costs, of approximately \$2.5 million, is the same as the total costs distributed in Table 5 – 3 of the cost of service analysis. This allocation of the total revenue requirement for FY 2026 is then distributed to the customer classes of service and are further distributed between the rate structure components based on the corresponding distribution factors. For example, the commodity costs are divided through by each customer class’s consumption in a given tier, or in total. Provided below is a discussion of the approach used to distribute the revenue requirement between the customer classes of service, as established in the cost of service analysis, and to each of the rate components for each customer class of service.

### 6.4.1 Commodity Distribution Factor

The commodity distribution factor is based on the average annual use for each of the customer classes of service, and by tier. For the development of the pricing of the proposed rates, the following customer class components were used:

- Single Family Residential – Tier 1
- Single Family Residential – Tier 2

- Single Family Residential – Tier 3
- Single Family Residential – Tier 4
- Multi-Family Residential
- Commercial
- Commercial Irrigation
- Commercial Fire

To develop the commodity distribution factor for each customer class, the usage for each class was divided by the total usage of the system. This produces the percent of the system that each class is responsible for, and therefore, is their contribution to commodity related costs. It is important to note that the distribution factors are based on the amount of water used by each class, including the assumed losses on the system. As an example, Tier 1 consumption of the Single Family Residential class of service represents 25.2% of the total consumption on the system. As a result, 25.2% of the commodity related costs are distributed to Tier 1 of the Single Family Residential customers. This approach is used for each of the customer classes of service for each rate component. Provided below in Table 6 – 3 is a summary of the commodity distribution factor.

<b>Table 6 – 3</b>				
<b>Summary of the Commodity Distribution Factor</b>				
<i>Reference</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Calculation			C = A + B	
	FY 2023-2024 Consumption (1,000 gal)	Est. System Losses (1,000 gal)	Total Annual Use (1,000 gal)	% of Total
<b>Single Family Residential (SFR)</b>				
Tier 1	21,439	3,173	24,611	25.2%
Tier 2	3,233	479	3,712	3.8%
Tier 3	563	83	647	0.7%
Tier 4	431	64	494	0.5%
<b>SFR Total</b>	<b>25,666</b>	<b>3,799</b>	<b>29,464</b>	<b>30.2%</b>
<b>Multi-Family Residential (MFR)</b>	34,448	5,098	39,546	40.5%
<b>Commercial</b>	17,269	2,556	19,825	20.3%
<b>Commercial Irrigation</b>	7,630	1,129	8,759	9.0%
<b>Commercial Fire</b>	0	0	0	0.0%
<b>Grand Total</b>	<b>85,012</b>	<b>12,582</b>	<b>97,594</b>	<b>100.0%</b>

This approach is used for each of the customer classes of service for each rate component and tier. Using the costs allocated to the commodity component in the cost of service analysis from Table 6 – 2, and the commodity distribution factor in Table 6 – 3, the distribution of costs to each tier or customer class can be developed. The summary of the distributed commodity costs is shown below in Table 6 – 4.

**Table 6 - 4**  
**Distributed Commodity Costs (\$000s)**

<i>Reference</i> Calculation	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i> D = B / C
	% of Total	Commodity Costs	Water Sales (1,000 gal)	Unit Cost (\$ / 1,000 gal)
<b>Single Family Residential (SFR)</b>				
Tier 1	25.2%	\$61	21,439	\$2.82
Tier 2	3.8%	9	3,233	2.82
Tier 3	0.7%	2	563	2.82
Tier 4	<u>0.5%</u>	<u>1</u>	<u>431</u>	2.82
<b>SFR Total</b>	<b>30.2%</b>	<b>\$72</b>	<b>25,666</b>	
<b>Multi-Family Residential (MFR)</b>	40.5%	\$97	34,448	\$2.82
<b>Commercial</b>	20.3%	49	17,269	2.82
<b>Commercial Irrigation</b>	9.0%	22	7,630	2.82
<b>Commercial Fire</b>	<u>0.0%</u>	<u>0</u>	<u>0</u>	0.00
<b>Grand Total</b>	<b>100.0%</b>	<b>\$240</b>	<b>85,012</b>	

The figures in column A are from column D in Table 6 – 3. The costs shown in column B are based on the total commodity related costs from Table 6 – 2. Column C is from column A in Table 6 – 3, or the actual consumption that is billed to the customers.

From the unit costs developed in Table 6 – 4 above, the per unit cost basis of the tiered and uniform rates can be determined for the commodity related costs identified in the cost of service analysis (Column D). For example, the proposed commodity component (rate) is \$2.82 per 1,000 gallons. This applies to each tier and customer class.

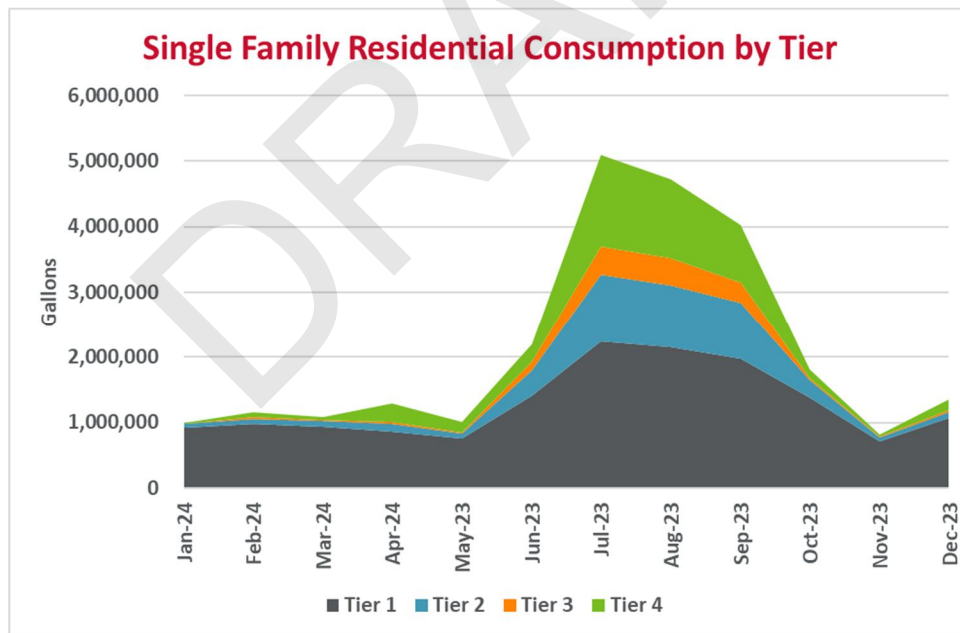
#### 6.4.2 Capacity Distribution Factor

The capacity distribution factor utilizes the same customer classes as the commodity distribution factor. Whereas commodity costs are related to the volume of water used by each class of service by tier or season, capacity is related to how the class uses that water in each tier. Customers use water in different ways and at different times, thus creating different usage patterns and resulting in different capacity demands. These usage patterns drive how the District must size the system to meet the demands of customers, regardless of when they occur. To determine the distribution factors by tier, peaking factors need to be calculated for each customer class of service and tier.

The method used to estimate a class’s peaking factor is to review the average monthly volume of water consumed and compare it to the maximum monthly usage of water. By dividing the maximum month by the average month, a peak-day factor is calculated. This factor provides a

surrogate for the difference between the average use and peak day use in each tier. For example, if a customer used 10,000 gallons per month on average and in the peak month 15,000 gallons were used, the peaking factor would be 1.50 (15,000 / 10,000 = 1.50). In this example, the peaking factor is stating that the maximum usage in a month is 1.50 times higher than the average usage per month. HDR reviewed the District’s recent individual monthly customer consumption data to establish the peaking factors for each customer class of service, and by tier for the Single Family Residential customers (SFR). This resulted in the peaking factors that are used in the development of the capacity distribution factor. Based on the capacity of each customer and tier, the costs can be proportionally distributed and establish the pricing for the customer classes and tiers.

For the District’s Study, the consumption patterns of each customer class and tier were reviewed and peaking factors were developed for each tier based on each customer’s peak contribution to the system peak. In other words, a peak factor for each customer, by tier, was developed depending on the amount of water used and the peak demands of those customers within that tier compared to the average customer consumption in Tier 1. After reviewing the customer consumption patterns and in discussion with the District, it was determined that the current 4-tier structure for Single Family Residential and uniform structure for Multi-Family Residential, Commercial, and Commercial Irrigation reflects their respective consumption patterns. Below is a chart showing the consumption patterns for the Single Family Residential customer class as the other classes will have uniform consumption charges.



For the District’s Single Family Residential customer class, Tier 1 is targeted at the average indoor usage, Tier 2 is targeted at significant indoor usage, Tier 3 is targeted at average outdoor usage, and Tier 4 is targeted at significant outdoor usage. The Multi-Family, Commercial, and Commercial Irrigation customer classes are comprised of various different customers and, as a result, it is difficult to develop tiers which reflect the typical customer consumption habits. This

is because Single Family Residential customers behave in a much more homogeneous make up meaning that customers often use water in a similar manner on average.

Shown below in Table 6 – 5 is a summary of the capacity distribution factor for each customer class.

Table 6 – 5 Summary of the Capacity Distribution Factor				
Reference Calculation	A	B	C C = A x B	D
	Average Consumption (MGD)	Peaking Factors	Peak Day Use (MGD)	% of Total
<b>Single Family Residential (SFR)</b>				
Tier 1	0.0674	1.00	0.0674	12.3%
Tier 2	0.0102	3.99	0.0405	7.4%
Tier 3	0.0018	5.87	0.0104	1.9%
Tier 4	<u>0.0014</u>	13.99	<u>0.0189</u>	<u>3.5%</u>
<b>SFR Total</b>	<b>0.0807</b>		<b>0.1373</b>	<b>25.1%</b>
<b>Multi-Family Residential (MFR)</b>	0.1083	1.89	0.2044	37.4%
<b>Commercial</b>	0.0543	1.90	0.1030	18.8%
<b>Commercial Irrigation</b>	0.0240	4.27	0.1024	18.7%
<b>Commercial Fire</b>	<u>0.0000</u>	0.00	<u>0.0000</u>	<u>0.0%</u>
<b>Grand Total</b>	<b>0.2674</b>		<b>0.5471</b>	<b>100.0%</b>

Table 6 – 5 above shows the development of the capacity distribution factor. For example, based on the District’s Single Family Residential customer consumption data, Tier 2 has a peaking factor of 3.99. In other words, those customers use 3.99 times more water in the peak period than on average. This is compared to customers in the remaining tiers which show a higher peaking factor based on how the customers in these tiers consume water. These peaking factors were developed around the District’s specific customers consumption patterns. Similar to the distribution of commodity costs to the tiers or customer classes, the capacity related costs are distributed in the same manner. For example, 12.3% of the capacity costs are allocated to Tier 1 of the Single Family Residential customers based on column D in Table 6 – 5. To determine this, the total average day use (column A) of each tier or class is multiplied by the peaking factor (column B). Once this is complete, the total peak use by tier or class is divided by the system total peak use to develop the proportional distribution. Table 6 – 6 provides a summary of the distributed capacity related costs to each tier.

**Table 6 - 6**  
**Distributed Capacity Costs (\$000s)**

<i>Reference Calculation</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i> D = B / C
	<b>% of Total</b>	<b>Capacity Costs</b>	<b>Water Sales (1,000 gal)</b>	<b>Unit Cost (\$ / 1,000 gal)</b>
<b>Single Family Residential (SFR)</b>				
Tier 1	12.3%	\$60	21,439	\$2.82
Tier 2	7.4%	36	3,233	11.24
Tier 3	1.9%	9	563	16.57
Tier 4	<u>3.5%</u>	<u>17</u>	<u>431</u>	39.44
<b>SFR Total</b>	<b>25.1%</b>	<b>\$123</b>	<b>25,666</b>	
<b>Multi-Family Residential (MFR)</b>	37.4%	\$183	34,448	\$5.32
<b>Commercial</b>	18.8%	92	17,269	5.35
<b>Commercial Irrigation</b>	18.7%	92	7,630	12.03
<b>Commercial Fire</b>	<u>0.0%</u>	<u>0</u>	<u>0</u>	0.00
<b>Grand Total</b>	<b>100.0%</b>	<b>\$491</b>	<b>85,012</b>	

The figures in column A are from column D in Table 6 – 5. The costs shown in column B are based on the total capacity-related costs from Table 6 – 2. Column C is from column A in Table 6 – 3. For example, the proposed rate for Tier 2 includes a capacity component cost of \$11.24 per 1,000 gallons while the Tier 3 capacity cost is \$16.57 per 1,000 gallons. This difference reflects the costs associated with providing consumption at higher tiers and the costs of providing that capacity.

Combining the unit costs from the commodity and capacity unit costs, plus the public fire protection, revenue related, and direct assignment related costs, results in the basis for the consumption rate pricing. For the fixed charges, the three customer related allocations – actual customer, customer accounting, and weighted customer – were combined and distributed based on equivalent meters. Shown below in Table 6 – 7 is a summary of the unit costs.

**Table 6 – 7**  
**Summary of the Water Cost of Service Analysis Unit Costs**

	Single Family Residential					Commercial		
	Tier 1	Tier 2	Tier 3	Tier 4	MFR	Commercial	Irrigation	Fire
<b>Consumption Charge</b>								
Commodity	\$2.82	\$2.82	\$2.82	\$2.82	\$2.82	\$2.82	\$2.82	\$0.00
Capacity	2.82	11.24	16.57	39.44	5.32	5.35	12.03	0.00
RR / DA / FP	<u>0.70</u>	<u>0.70</u>	<u>0.70</u>	<u>0.70</u>	<u>1.55</u>	<u>0.19</u>	<u>0.00</u>	<u>0.00</u>
<b>Total</b>	<b>\$6.34</b>	<b>\$14.76</b>	<b>\$20.09</b>	<b>\$42.96</b>	<b>\$9.69</b>	<b>\$8.36</b>	<b>\$14.85</b>	<b>\$0.00</b>
<b>Fixed Charge</b>								
\$/Acct./Yr	\$0.00				\$0.00	\$0.00		\$0.00
\$/Wt. Cust./Yr	392.23				392.23	94.25		392.23
\$/Wt. Mtr/Yr	882.57				273.36	737.27		493.97
Private Fire/ Mtr/Yr	<u>0.00</u>				<u>0.00</u>	<u>0.00</u>		<u>4.55</u>
<b>Total</b>	<b>\$1,274.80</b>				<b>\$665.59</b>	<b>\$831.51</b>		<b>\$890.75</b>

## 6.5 Summary of the Proposed Rates

Based on the above analysis, the proposed water rates can be developed. It was determined that the current rate structure would be maintained, and only the level of the rates would be adjusted based on the target revenue levels and cost of service results. Provided below in Table 6 – 8 is a summary of the present and proposed water rates for the District. The District bills annually and includes an annual fixed charge and consumption charges based on annual water usage.

**Table 6 – 8**  
**Summary of the Present and Proposed Water Rates**

	<b>Present Rate</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>
<b>Fixed Charge</b>	<b>\$/Acct/Unit</b>					
Single Family Residential	\$1,222.75	\$1,274.80	\$1,351.29	\$1,432.37	\$1,518.31	\$1,609.41
Multi-Family Residential	592.77	665.59	705.53	747.86	792.73	840.29
Commercial / Commercial Irrigation						
5/8" <sup>[1]</sup>	\$1,004.28					
3/4"	1,095.90	1,025.00	1,025.00	1,025.00	1,030.00	1,040.00
1"	1,222.75	1,340.73	1,433.49	1,526.24	1,626.89	1,736.80
1 1/2"	2,456.00	2,687.99	2,869.30	3,050.62	3,247.70	3,463.20
2"	3,918.47	4,292.10	4,584.89	4,877.68	5,195.68	5,543.20
3"	7,357.70	8,057.60	8,605.70	9,153.80	9,749.23	10,400.00
4"	12,273.43	13,438.67	14,350.69	15,262.71	16,253.63	17,336.80
6"	24,550.37	26,878.16	28,699.43	30,520.70	32,499.74	34,663.20
Commercial Fire						
5/8"	\$1,004.28	\$890.75	\$944.20	\$1,000.85	\$1,060.90	\$1,124.55
<b>Consumption Charge</b>	<b>\$/1,000 gal</b>					
SFR						
0 – 120 kgal	\$5.94	\$6.34	\$6.72	\$7.12	\$7.55	\$8.00
120 kgal – 220 kgal	12.08	14.76	15.64	16.58	17.58	18.62
220 kgal – 280 kgal	18.90	20.09	21.29	22.56	23.92	25.35
280 + kgal	41.86	42.96	45.53	48.25	51.16	54.21
MFR	\$10.30	\$9.69	\$10.27	\$10.89	\$11.54	\$12.23
Commercial	\$7.89	\$8.36	\$8.86	\$9.39	\$9.95	\$10.55
Commercial Irrigation	\$14.28	\$14.85	\$15.74	\$16.68	\$17.68	\$18.74

[1] – The district is currently finishing up the meter replacement project which will replace all 5/8" meter with a 3/4" meter and those will be charged the 3/4" rate

As can be seen, the proposed rates, proposed to be effective July 1, 2025, have been adjusted to reflect the overall revenue needs of the water system based on the revenue requirement and cost of service analyses. One proposed change to note is transitioning the commercial and commercial irrigation fixed meter charges to reflect AWWA safe operating capacity ratios over the rate setting period. This is done to better align the District's fixed charges with the relationship of the meter sizes based on their potential capacity tied to a known relationship as shown in the AWWA M1 Manual. In addition, Commercial Fire rates were developed as a separate customer class to better reflect the cost to provide private fire service. Overall, the District's proposed water rates have been adjusted to meet the proportional distribution of costs to each customer class as shown and developed in the cost of service analysis (Section 5). The detailed analyses for the District's water rates can be found in the Technical Appendix.



## 6.6 Summary of the Rate Study

This completes the overview of the analysis for the Olympic Valley Public Service District water utility. This study has provided a review of the District's water rates. The analysis allows the District to meet their current and projected water system financial obligations for the time period reviewed based on the assumed customer growth, capital plan, and projected increases in operating costs. Should these assumptions change, the analysis may also need to be revised to reflect the current conditions.

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**Olympic Valley PSD  
Water Cost of Service Study  
Revenue Requirement Summary  
Exhibit 1**

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
<b>Revenue</b>										
Rate Revenues	\$2,335,977	\$2,347,657	\$2,359,395	\$2,371,192	\$2,383,048	\$2,394,963	\$2,406,938	\$2,418,973	\$2,431,068	\$2,443,223
Non-Operating Revenues	346,534	342,266	349,267	351,673	343,857	336,506	329,179	329,479	341,450	351,929
<b>Total Revenues</b>	<b>\$2,682,511</b>	<b>\$2,689,923</b>	<b>\$2,708,662</b>	<b>\$2,722,865</b>	<b>\$2,726,906</b>	<b>\$2,731,470</b>	<b>\$2,736,117</b>	<b>\$2,748,452</b>	<b>\$2,772,518</b>	<b>\$2,795,152</b>
<b>Expenses</b>										
Total Water Department Expenses	\$836,468	\$870,024	\$905,029	\$941,551	\$979,659	\$1,019,428	\$1,060,934	\$1,104,259	\$1,149,487	\$1,196,709
Total Administration Expenses	1,119,157	1,132,070	1,175,864	1,221,493	1,269,041	1,348,595	1,371,145	1,425,014	1,481,178	1,539,741
<b>Total O&amp;M Expenses</b>	<b>\$1,955,625</b>	<b>\$2,002,093</b>	<b>\$2,080,893</b>	<b>\$2,163,044</b>	<b>\$2,248,700</b>	<b>\$2,368,022</b>	<b>\$2,432,078</b>	<b>\$2,529,273</b>	<b>\$2,630,665</b>	<b>\$2,736,450</b>
<b>Net Annual Debt Service</b>	<b>\$86,410</b>	<b>\$86,119</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Rate Funded Capital</b>	<b>\$610,000</b>	<b>\$650,000</b>	<b>\$645,000</b>	<b>\$610,000</b>	<b>\$570,000</b>	<b>\$530,000</b>	<b>\$675,000</b>	<b>\$1,100,000</b>	<b>\$1,200,000</b>	<b>\$1,300,000</b>
<b>Transfer To / (From) Reserves</b>	<b>\$30,475</b>	<b>\$92,569</b>	<b>\$274,391</b>	<b>\$402,756</b>	<b>\$533,701</b>	<b>\$643,485</b>	<b>\$636,388</b>	<b>\$234,506</b>	<b>\$169,316</b>	<b>\$102,606</b>
<b>Total Revenue Requirement</b>	<b>\$2,682,511</b>	<b>\$2,830,782</b>	<b>\$3,000,284</b>	<b>\$3,175,801</b>	<b>\$3,352,401</b>	<b>\$3,541,507</b>	<b>\$3,743,466</b>	<b>\$3,863,779</b>	<b>\$3,999,981</b>	<b>\$4,139,057</b>
Balance/(Deficiency) of Funds	\$0	(\$140,859)	(\$291,621)	(\$452,936)	(\$625,495)	(\$810,038)	(\$1,007,350)	(\$1,115,327)	(\$1,227,463)	(\$1,343,905)
Bal/(Def.) as a % of Rate Rev.	0.0%	6.0%	12.4%	19.1%	26.2%	33.8%	41.9%	46.1%	50.5%	55.0%
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>
Add'l Revenue from Adj.	\$0	\$140,859	\$291,621	\$452,936	\$625,495	\$810,038	\$1,007,350	\$1,115,327	\$1,227,463	\$1,343,905
Total Bal/(Def.) of Funds	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Additional Rate Increase Needed</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Avg Annual Res Bill (3/4" Meter + 120,000 gallons)</b>	<b>\$1,935.55</b>	<b>\$2,051.68</b>	<b>\$2,174.78</b>	<b>\$2,305.27</b>	<b>\$2,443.59</b>	<b>\$2,590.20</b>	<b>\$2,745.61</b>	<b>\$2,827.98</b>	<b>\$2,912.82</b>	<b>\$3,000.21</b>
<b>Total Ending Reserve Funds</b>	<b>\$3,072,256</b>	<b>\$3,081,165</b>	<b>\$3,187,658</b>	<b>\$2,818,279</b>	<b>\$2,096,242</b>	<b>\$1,752,865</b>	<b>\$1,021,330</b>	<b>\$1,276,547</b>	<b>\$1,466,677</b>	<b>\$1,590,202</b>

Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 2  
 Escalation Factors

	Budgeted	Projected									
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	
<b>Revenues</b>											
Customer Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Property Tax Revenues	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Miscellaneous Revenues	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Flat	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Expenses</b>											
Labor	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Benefits - Medical	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Benefits - Other	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Materials & Supplies	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Equipment	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Miscellaneous	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Utilities	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Insurance	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Billed Expenses	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Flat	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Interest</b>	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
<b>New Debt Service</b>											
<b>Low Interest Loans</b>											
Term in Years	20	20	20	20	20	20	20	20	20	20	20
Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
<b>Revenue Bond</b>											
Term in Years	20	20	20	20	20	20	20	20	20	20	20
Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%

	Budgeted	Projected									Notes	
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034		
<b>Revenues</b>												
<b>Rate Revenues</b>	\$2,335,977	\$2,347,657	\$2,359,395	\$2,371,192	\$2,383,048	\$2,394,963	\$2,406,938	\$2,418,973	\$2,431,068	\$2,443,223	As Customer Growth	
<b>Total Rate Revenues</b>	\$2,335,977	\$2,347,657	\$2,359,395	\$2,371,192	\$2,383,048	\$2,394,963	\$2,406,938	\$2,418,973	\$2,431,068	\$2,443,223		
<b>Non-Operating Revenues</b>												
Interest	\$86,366	\$76,667	\$78,108	\$74,820	\$61,176	\$47,858	\$34,420	\$28,465	\$34,030	\$37,950	Calc'd on Reserve Balances	
Property Tax Revenue	200,000	205,000	210,125	215,378	220,763	226,282	231,939	237,737	243,681	249,773	As Property Tax Revenues	
Administrative Fees	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	3,060	As Flat	
Rental Income	43,108	43,539	43,974	44,414	44,858	45,307	45,760	46,218	46,680	47,147	As Miscellaneous Revenues	
Miscellaneous Income	0	0	0	0	0	0	0	0	0	0	As Miscellaneous Revenues	
Administration Rev	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	As Flat	
<b>Total Non-Operating Revenues</b>	\$346,534	\$342,266	\$349,267	\$351,673	\$343,857	\$336,506	\$329,179	\$329,479	\$341,450	\$351,929		
<b>Total Revenues</b>	\$2,682,511	\$2,689,923	\$2,708,662	\$2,722,865	\$2,726,906	\$2,731,470	\$2,736,117	\$2,748,452	\$2,772,518	\$2,795,152		
<b>Water Department Expenses</b>												
<b>Salaries &amp; Wages</b>												
Salaries-Water	10-01-611100	\$369,565	\$380,652	\$392,071	\$403,833	\$415,948	\$428,427	\$441,280	\$454,518	\$468,154	\$482,198	As Labor
Sick Leave / Vacation	10-01-611200	46,632	48,031	49,471	50,956	52,484	54,059	55,681	57,351	59,072	60,844	As Labor
Salaries-Special Projects	10-01-611900	0	0	0	0	0	0	0	0	0	0	As Labor
Water Salaries Billed/Capital	10-01-619000	(20,810)	(21,434)	(22,077)	(22,739)	(23,422)	(24,124)	(24,848)	(25,593)	(26,361)	(27,152)	As Labor
<b>Total Salaries &amp; Wages</b>		\$395,387	\$407,248	\$419,466	\$432,050	\$445,011	\$458,361	\$472,112	\$486,276	\$500,864	\$515,890	
<b>Employee Benefits</b>												
Benefit-Fed/State Taxes	10-01-621000	\$32,208	\$33,496	\$34,836	\$36,229	\$37,678	\$39,185	\$40,753	\$42,383	\$44,078	\$45,841	As Benefits - Other
Benefit-Health/Life Insurance	10-01-621500	96,351	102,132	108,260	114,755	121,640	128,939	136,675	144,876	153,568	162,782	As Benefits - Medical
PERS-Retirement Program	10-01-623000	46,124	47,969	49,887	51,883	53,958	56,117	58,361	60,696	63,123	65,648	As Benefits - Other
Worker's Comp Insurance	10-01-624000	24,933	26,180	27,489	28,863	30,307	31,822	33,413	35,084	36,838	38,680	As Insurance
Water Benefits Billed	10-01-629000	(9,981)	(10,380)	(10,795)	(11,227)	(11,676)	(12,143)	(12,629)	(13,134)	(13,659)	(14,206)	As Benefits - Other
<b>Total Employee Benefits</b>		\$189,634	\$199,396	\$209,676	\$220,504	\$231,907	\$243,920	\$256,573	\$269,904	\$283,948	\$298,746	

		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	
<b>Materials and Supplies</b>												
Water-Material/Supplies	10-01-631000	\$14,300	\$15,015	\$15,766	\$16,554	\$17,382	\$18,251	\$19,163	\$20,122	\$21,128	\$22,184	As Materials & Supplies
Water-Uniforms	10-01-632000	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	4,072	As Materials & Supplies
Water - Safety	10-01-632500	3,025	3,176	3,335	3,502	3,677	3,861	4,054	4,256	4,469	4,693	As Materials & Supplies
Water-Chemicals/Lab Fees	10-01-633000	90,000	94,500	99,225	104,186	109,396	114,865	120,609	126,639	132,971	139,620	As Materials & Supplies
<b>Total Materials and Supplies</b>		<b>\$109,950</b>	<b>\$115,448</b>	<b>\$121,220</b>	<b>\$127,281</b>	<b>\$133,645</b>	<b>\$140,327</b>	<b>\$147,344</b>	<b>\$154,711</b>	<b>\$162,446</b>	<b>\$170,569</b>	
<b>Maintenance Equipment</b>												
Water-Equipment Rental	10-01-635000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Equipment
Water- SCADA Repairs & Maint	10-01-642000	5,250	5,460	5,678	5,906	6,142	6,387	6,643	6,909	7,185	7,472	As Equipment
Olympic Valley GMP	10-01-642100	2,500	2,600	2,704	2,812	2,925	3,042	3,163	3,290	3,421	3,558	As Equipment
Meter Read Licensing	10-01-642200	10,000	10,400	10,816	11,249	11,699	12,167	12,653	13,159	13,686	14,233	As Equipment
Wtr-Cell Phone & Answr Service	10-01-642500	1,480	1,539	1,601	1,665	1,731	1,801	1,873	1,948	2,025	2,107	As Equipment
Water Meter Repair/Replace	10-01-651000	1,250	1,300	1,352	1,406	1,462	1,521	1,582	1,645	1,711	1,779	As Equipment
Water-Equip Repair/Replace	10-01-652000	4,000	4,160	4,326	4,499	4,679	4,867	5,061	5,264	5,474	5,693	As Equipment
Water-Equip Maint Contracts	10-01-652100	0	0	0	0	0	0	0	0	0	0	As Equipment
<b>Total Maintenance Equipment</b>		<b>\$24,480</b>	<b>\$25,459</b>	<b>\$26,478</b>	<b>\$27,537</b>	<b>\$28,638</b>	<b>\$29,784</b>	<b>\$30,975</b>	<b>\$32,214</b>	<b>\$33,503</b>	<b>\$34,843</b>	
<b>Facilities-Maint/Repair</b>												
Wtr-Generators Air Quality Fee	10-01-652600	\$3,100	\$3,255	\$3,418	\$3,589	\$3,768	\$3,956	\$4,154	\$4,362	\$4,580	\$4,809	As Materials & Supplies
Water-Wells - Maintenance	10-01-660000	45,000	47,250	49,613	52,093	54,698	57,433	60,304	63,320	66,485	69,810	As Materials & Supplies
Water-Mains/Lines/Tanks Maint	10-01-661000	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
Water-Meter Leak Detection	10-01-662000	10,000	10,500	11,025	11,576	12,155	12,763	13,401	14,071	14,775	15,513	As Materials & Supplies
Water-Chem Pump Maint/Repr	10-01-663500	4,000	4,200	4,410	4,631	4,862	5,105	5,360	5,628	5,910	6,205	As Materials & Supplies
Water-Computer Repair	10-01-664600	500	525	551	579	608	638	670	704	739	776	As Materials & Supplies
East-B/G Interior Maint/Rpr	10-01-664701	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654	As Materials & Supplies
East-B/G Exterior Maint/Rpr	10-01-664702	2,500	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	As Materials & Supplies
East B&G - Elevator Inspection	10-01-664705	1,500	1,575	1,654	1,736	1,823	1,914	2,010	2,111	2,216	2,327	As Materials & Supplies
East B&G-HVAC Filtering	10-01-664708	800	840	882	926	972	1,021	1,072	1,126	1,182	1,241	As Materials & Supplies
E Bldg-Fire Alarm System Maint	10-01-664709	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
West-B&G-Interior M/R	10-01-664751	1,067	1,120	1,176	1,235	1,297	1,362	1,430	1,501	1,576	1,655	As Materials & Supplies
West B&G-Exterior M/R	10-01-664752	1,667	1,750	1,838	1,930	2,026	2,128	2,234	2,346	2,463	2,586	As Materials & Supplies
West-B&G Elevator Inspection	10-01-664755	1,333	1,400	1,470	1,543	1,620	1,701	1,786	1,876	1,969	2,068	As Materials & Supplies
Easement Abatement	10-01-666000	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
<b>Total Facilities-Maint/Repair</b>		<b>\$74,467</b>	<b>\$78,190</b>	<b>\$82,100</b>	<b>\$86,205</b>	<b>\$90,515</b>	<b>\$95,041</b>	<b>\$99,793</b>	<b>\$104,783</b>	<b>\$110,022</b>	<b>\$115,523</b>	

		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	
<b>Training &amp; Memberships</b>												
Water-Certifications	10-01-671000	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478	\$3,582	\$3,690	\$3,800	\$3,914	As Miscellaneous
Training - Meetings/Classes	10-01-671055	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067	5,219	As Miscellaneous
Water-Membership/Subscripts	10-01-672000	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	As Miscellaneous
Water-Spec Licenses-Drug Tests	10-01-673000	750	773	796	820	844	869	896	922	950	979	As Miscellaneous
<b>Total Training &amp; Memberships</b>		<b>\$19,750</b>	<b>\$20,343</b>	<b>\$20,953</b>	<b>\$21,581</b>	<b>\$22,229</b>	<b>\$22,896</b>	<b>\$23,583</b>	<b>\$24,290</b>	<b>\$25,019</b>	<b>\$25,769</b>	
<b>Vehicle Maintenance &amp; Repair</b>												
Water - Vehicle - Fuel/Oil	10-01-681000	\$12,500	\$13,125	\$13,781	\$14,470	\$15,194	\$15,954	\$16,751	\$17,589	\$18,468	\$19,392	As Materials & Supplies
Water - Veh/Equip - Tires/Reprs	10-01-682000	9,250	9,713	10,198	10,708	11,243	11,806	12,396	13,016	13,666	14,350	As Materials & Supplies
Water - Vehicles - Mileage Reimb	10-01-683000	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551	1,629	As Materials & Supplies
<b>Total Vehicle Maintenance &amp; Repair</b>		<b>\$22,800</b>	<b>\$23,940</b>	<b>\$25,137</b>	<b>\$26,394</b>	<b>\$27,714</b>	<b>\$29,099</b>	<b>\$30,554</b>	<b>\$32,082</b>	<b>\$33,686</b>	<b>\$35,370</b>	
<b>Total Water Department Expenses</b>		<b>\$836,468</b>	<b>\$870,024</b>	<b>\$905,029</b>	<b>\$941,551</b>	<b>\$979,659</b>	<b>\$1,019,428</b>	<b>\$1,060,934</b>	<b>\$1,104,259</b>	<b>\$1,149,487</b>	<b>\$1,196,709</b>	
<b>Administration Expenses</b>												
<b>Salaries &amp; Wages (50% Allocation)</b>												
Salaries-G&A	10-09-611000	\$598,312	\$616,261	\$634,749	\$653,791	\$673,405	\$693,607	\$714,416	\$735,848	\$757,924	\$780,661	As Labor
Salaries-Admin-S/L & Vacation	10-09-611200	73,147	75,341	77,602	79,930	82,328	84,797	87,341	89,962	92,660	95,440	As Labor
Admin-Salaries Billed	10-09-619000	(157,729)	(162,460)	(167,334)	(172,354)	(177,525)	(182,851)	(188,336)	(193,986)	(199,806)	(205,800)	As Labor
<b>Total Salaries &amp; Wages</b>		<b>\$513,730</b>	<b>\$529,142</b>	<b>\$545,016</b>	<b>\$561,367</b>	<b>\$578,208</b>	<b>\$595,554</b>	<b>\$613,421</b>	<b>\$631,823</b>	<b>\$650,778</b>	<b>\$670,301</b>	
<b>Employee Benefits (50% Allocation)</b>												
Benefit-Fed/State Taxes	10-09-621000	\$47,237	\$49,127	\$51,092	\$53,135	\$55,261	\$57,471	\$59,770	\$62,161	\$64,647	\$67,233	As Benefits - Other
Benefit-Health/Life Insurance	10-09-621500	120,517	127,748	135,413	143,538	152,150	161,279	170,956	181,213	192,086	203,611	As Benefits - Medical
Benefit - Retiree Health	10-09-621600	5,491	5,820	6,169	6,539	6,932	7,348	7,788	8,256	8,751	9,276	As Benefits - Medical
PERS-Retirement Program	10-09-623000	50,692	52,720	54,829	57,022	59,303	61,675	64,142	66,708	69,376	72,151	As Benefits - Other
PERS Unfunded Liability Exp	10-09-623500	50,000	52,000	54,080	56,243	58,493	60,833	63,266	65,797	68,428	71,166	As Benefits - Other
Worker's Comp Insurance	10-09-624000	8,555	8,898	9,254	9,624	10,009	10,409	10,825	11,258	11,709	12,177	As Benefits - Other
Veh/Fuel Personal Use	10-09-625000	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
Admin Benefits-Billed	10-09-629000	(57,311)	(59,604)	(61,988)	(64,467)	(67,046)	(69,728)	(72,517)	(75,418)	(78,435)	(81,572)	As Benefits - Other
<b>Total Employee Benefits</b>		<b>\$225,181</b>	<b>\$236,709</b>	<b>\$248,848</b>	<b>\$261,634</b>	<b>\$275,101</b>	<b>\$289,286</b>	<b>\$304,230</b>	<b>\$319,974</b>	<b>\$336,563</b>	<b>\$354,042</b>	

		Budgeted	Projected									Notes
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	
<b>Board Expenses (50% Allocation)</b>												
Board-Regular/Committee Mtgs	10-09-711000	\$24,750	\$25,493	\$26,257	\$27,045	\$27,856	\$28,692	\$29,553	\$30,439	\$31,353	\$32,293	As Miscellaneous
Board-Workshops & Training	10-09-712000	750	773	796	820	844	869	896	922	950	979	As Miscellaneous
Board-Food/Supply/Advertising	10-09-714000	750	773	796	820	844	869	896	922	950	979	As Miscellaneous
Board-Election Expenses	10-09-715000	188	194	199	205	212	218	224	231	238	245	As Miscellaneous
<b>Total Board Expenses</b>		<b>\$26,438</b>	<b>\$27,231</b>	<b>\$28,048</b>	<b>\$28,890</b>	<b>\$29,756</b>	<b>\$30,649</b>	<b>\$31,568</b>	<b>\$32,515</b>	<b>\$33,491</b>	<b>\$34,496</b>	
<b>Consulting (50% Allocation)</b>												
Accounting-Audit	10-09-721000	\$9,084	\$9,357	\$9,637	\$9,926	\$10,224	\$10,531	\$10,847	\$11,172	\$11,507	\$11,853	As Labor
Cafeteria Plan Administration	10-09-723000	750	773	796	820	844	869	896	922	950	979	As Labor
Special Projects & Studies	10-09-732000	67,500	39,525	40,711	41,932	43,190	74,486	46,720	48,122	49,566	51,053	As Labor
Legal-General	10-09-741000	12,750	13,133	13,526	13,932	14,350	14,781	15,224	15,681	16,151	16,636	As Labor
<b>Total Consulting</b>		<b>\$90,084</b>	<b>\$62,787</b>	<b>\$64,670</b>	<b>\$66,610</b>	<b>\$68,609</b>	<b>\$100,667</b>	<b>\$73,687</b>	<b>\$75,897</b>	<b>\$78,174</b>	<b>\$80,520</b>	
<b>Insurance (50% Allocation)</b>												
Insurance-Commercial Package	10-09-751000	\$46,814	\$49,155	\$51,612	\$54,193	\$56,903	\$59,748	\$62,735	\$65,872	\$69,166	\$72,624	As Insurance
Insurance-Old Firehouse	10-09-752000	3,348	3,515	3,691	3,876	4,070	4,273	4,487	4,711	4,947	5,194	As Insurance
Insurance West Liability Insurance	10-04-751000	2,163	2,271	2,385	2,504	2,629	2,761	2,899	3,044	3,196	3,356	As Insurance
<b>Total Insurance</b>		<b>\$52,325</b>	<b>\$54,941</b>	<b>\$57,688</b>	<b>\$60,573</b>	<b>\$63,601</b>	<b>\$66,781</b>	<b>\$70,121</b>	<b>\$73,627</b>	<b>\$77,308</b>	<b>\$81,173</b>	
<b>Special Fees (50% Allocation)</b>												
Annual Dues/Memberships	10-09-761000	\$3,261	\$3,359	\$3,460	\$3,563	\$3,670	\$3,780	\$3,894	\$4,011	\$4,131	\$4,255	As Miscellaneous
G&A-Subscriptions	10-09-762000	4,038	4,159	4,284	4,412	4,545	4,681	4,822	4,966	5,115	5,269	As Miscellaneous
G&A-Annual Maint Contracts	10-09-763000	10,150	10,455	10,768	11,091	11,424	11,767	12,120	12,483	12,858	13,243	As Miscellaneous
Bank Fees	10-09-764000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	As Miscellaneous
Placer Recording Fees & Maps	10-09-764100	0	0	0	0	0	0	0	0	0	0	As Miscellaneous
G&A-Licenses/Notary	10-09-765000	750	773	796	820	844	869	896	922	950	979	As Miscellaneous
<b>Total Special Fees</b>		<b>\$25,199</b>	<b>\$25,955</b>	<b>\$26,734</b>	<b>\$27,536</b>	<b>\$28,362</b>	<b>\$29,213</b>	<b>\$30,089</b>	<b>\$30,992</b>	<b>\$31,921</b>	<b>\$32,879</b>	



		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033		FY 2034
<b>Office Expenses (50% Allocation)</b>												
G&A-Office Supplies	10-09-771000	\$7,500	\$7,875	\$8,269	\$8,682	\$9,116	\$9,572	\$10,051	\$10,553	\$11,081	\$11,635	As Materials & Supplies
Computer Expenses-Repair	10-09-773000	3,750	3,938	4,134	4,341	4,558	4,786	5,025	5,277	5,540	5,817	As Materials & Supplies
Advertising Public Notices	10-09-774000	1,200	1,260	1,323	1,389	1,459	1,532	1,608	1,689	1,773	1,862	As Materials & Supplies
Advertising-Recruitment ads	10-09-774100	250	263	276	289	304	319	335	352	369	388	As Materials & Supplies
Newsletter Printing	10-09-774200	2,500	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	As Materials & Supplies
Postage/Meter Expenses	10-09-775000	1,375	1,444	1,516	1,592	1,671	1,755	1,843	1,935	2,032	2,133	As Materials & Supplies
Office & Mtg Room Cleaning	10-09-776000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757	As Materials & Supplies
Sm Equip Repair/Replacement	10-09-777000	1,750	1,838	1,929	2,026	2,127	2,233	2,345	2,462	2,586	2,715	As Materials & Supplies
Name Change Costs	10-09-778000	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
Hardware/Software Upgrades	10-09-779000	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	4,072	As Materials & Supplies
Annual Record Archival	10-09-779100	225	236	248	260	273	287	302	317	332	349	As Materials & Supplies
Website Expenses	10-09-779200	3,665	3,848	4,041	4,243	4,455	4,678	4,911	5,157	5,415	5,686	As Materials & Supplies
<b>Total Office Expenses</b>		<b>\$29,840</b>	<b>\$31,332</b>	<b>\$32,899</b>	<b>\$34,544</b>	<b>\$36,271</b>	<b>\$38,084</b>	<b>\$39,988</b>	<b>\$41,988</b>	<b>\$44,087</b>	<b>\$46,292</b>	
<b>Travel &amp; Meetings (50% Allocation)</b>												
Training & Travel	10-09-782000	\$4,750	\$4,893	\$5,039	\$5,190	\$5,346	\$5,507	\$5,672	\$5,842	\$6,017	\$6,198	As Miscellaneous
Employee Recognition	10-09-783000	4,500	4,635	4,774	4,917	5,065	5,217	5,373	5,534	5,700	5,871	As Miscellaneous
Recruitment/Backgrnd cks/Tests	10-09-786000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	As Miscellaneous
<b>Total Travel &amp; Meetings</b>		<b>\$10,250</b>	<b>\$10,558</b>	<b>\$10,874</b>	<b>\$11,200</b>	<b>\$11,536</b>	<b>\$11,883</b>	<b>\$12,239</b>	<b>\$12,606</b>	<b>\$12,984</b>	<b>\$13,374</b>	
<b>Utilities (50% Allocation)</b>												
Water-Pumping Electric	10-01-641000	\$80,640	\$84,672	\$88,906	\$93,351	\$98,018	\$102,919	\$108,065	\$113,469	\$119,142	\$125,099	As Utilities
West - Admin Electricity	10-04-791000	1,766	1,854	1,947	2,044	2,147	2,254	2,367	2,485	2,609	2,740	As Utilities
West - Admin Heating Fuel	10-04-791100	12,480	13,104	13,759	14,447	15,170	15,928	16,724	17,561	18,439	19,361	As Utilities
West - Admin TTSA	10-04-791200	550	578	606	637	669	702	737	774	813	853	As Utilities
East Office Electricity	10-09-791000	28,560	29,988	31,487	33,062	34,715	36,451	38,273	40,187	42,196	44,306	As Utilities
East Office Heating Fuel	10-09-791100	11,340	11,907	12,502	13,127	13,784	14,473	15,197	15,957	16,754	17,592	As Utilities
East Office T-TSA	10-09-791200	2,750	2,888	3,032	3,183	3,343	3,510	3,685	3,870	4,063	4,266	As Utilities
Telephone	10-09-792000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757	As Utilities
West-Power Old Firehouse	10-09-793100	2,815	2,956	3,104	3,259	3,422	3,593	3,772	3,961	4,159	4,367	As Utilities
West-TTSA Fees-Old Firehouse	10-09-793300	209	219	230	242	254	267	280	294	309	324	As Utilities
<b>Total Utilities</b>		<b>\$146,110</b>	<b>\$153,416</b>	<b>\$161,086</b>	<b>\$169,141</b>	<b>\$177,598</b>	<b>\$186,477</b>	<b>\$195,801</b>	<b>\$205,591</b>	<b>\$215,871</b>	<b>\$226,665</b>	
<b>Total Administration Expenses</b>		<b>\$1,119,157</b>	<b>\$1,132,070</b>	<b>\$1,175,864</b>	<b>\$1,221,493</b>	<b>\$1,269,041</b>	<b>\$1,348,595</b>	<b>\$1,371,145</b>	<b>\$1,425,014</b>	<b>\$1,481,178</b>	<b>\$1,539,741</b>	
<b>Total Operations &amp; Maintenance</b>		<b>\$1,955,625</b>	<b>\$2,002,093</b>	<b>\$2,080,893</b>	<b>\$2,163,044</b>	<b>\$2,248,700</b>	<b>\$2,368,022</b>	<b>\$2,432,078</b>	<b>\$2,529,273</b>	<b>\$2,630,665</b>	<b>\$2,736,450</b>	

	Budgeted	Projected									Notes	
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034		
<b>Annual Debt Service</b>												
Facility Loan	\$86,410	\$86,119	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	69.0% Water
CalPERS Additional UAL Payments	0	0	0	0	0	0	0	0	0	0	0	
CalPERS Pension Adjustment	0	0	0	0	0	0	0	0	0	0	0	
New SRF Loans	0	0	0	0	0	0	0	0	0	0	0	Calc @ 2.5% for 20 Yrs
New Revenue Bonds	0	0	0	0	0	0	0	0	0	0	0	Calc @ 5.5% for 20 Yrs
<b>Total Annual Debt Service</b>	<b>\$86,410</b>	<b>\$86,119</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Less Connection Fees</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Net Annual Debt Service</b>	<b>\$86,410</b>	<b>\$86,119</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Rate Funded Capital</b>	<b>\$610,000</b>	<b>\$650,000</b>	<b>\$645,000</b>	<b>\$610,000</b>	<b>\$570,000</b>	<b>\$530,000</b>	<b>\$675,000</b>	<b>\$1,100,000</b>	<b>\$1,200,000</b>	<b>\$1,300,000</b>	<b>\$1,300,000</b>	\$405,062 FY 2023 Dep. Exp.
<b>Transfer To / (From) Reserves</b>												
To/(From) Capital Reserve	\$0	\$0	\$0	\$1,250,000	\$1,464,205	\$225,346	\$1,003,577	\$0	\$0	\$0	\$0	
To/(From) FARF	30,475	92,569	274,391	(847,244)	(930,504)	418,139	(367,189)	234,506	169,316	102,606		
<b>Total Transfer To / (From) Reserves</b>	<b>\$30,475</b>	<b>\$92,569</b>	<b>\$274,391</b>	<b>\$402,756</b>	<b>\$533,701</b>	<b>\$643,485</b>	<b>\$636,388</b>	<b>\$234,506</b>	<b>\$169,316</b>	<b>\$102,606</b>		
<b>Total Revenue Requirement</b>	<b>\$2,682,511</b>	<b>\$2,830,782</b>	<b>\$3,000,284</b>	<b>\$3,175,801</b>	<b>\$3,352,401</b>	<b>\$3,541,507</b>	<b>\$3,743,466</b>	<b>\$3,863,779</b>	<b>\$3,999,981</b>	<b>\$4,139,057</b>		
Bal/(Def.) of Funds	\$0	(\$140,859)	(\$291,621)	(\$452,936)	(\$625,495)	(\$810,038)	(\$1,007,350)	(\$1,115,327)	(\$1,227,463)	(\$1,343,905)		
Rate Adj. as a % of Rate Rev.	0.0%	6.0%	12.4%	19.1%	26.2%	33.8%	41.9%	46.1%	50.5%	55.0%		
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>6.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.0%</b>		
Add'l Revenue from Adj.	\$0	\$140,859	\$291,621	\$452,936	\$625,495	\$810,038	\$1,007,350	\$1,115,327	\$1,227,463	\$1,343,905		
Total Bal/(Def.) of Funds	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
<b>Additional Rate Increase Needed</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

	Budgeted	Projected									Notes
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	
<b>Debt Service Coverage Ratio (DSC)</b>											
Before Rate Adjustment	8.41	7.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
After Rate Adjustment	8.41	9.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Avg Annual Res Bill (3/4" Meter + 120,000 gallons)</b>											
	<b>\$1,935.55</b>										
After Proposed Rate Adjustment	\$1,935.55	\$2,051.68	\$2,174.78	\$2,305.27	\$2,443.59	\$2,590.20	\$2,745.61	\$2,827.98	\$2,912.82	\$3,000.21	
Annual \$ Change		116.13	123.10	130.49	138.32	146.62	155.41	82.37	84.84	87.38	
Cumulative Change		116.13	239.23	369.72	508.04	654.65	810.06	892.43	977.27	1,064.66	
<b>Reserves</b>											
<b>Total Beginning Reserve Balance</b>	<b>\$3,856,988</b>	<b>\$3,072,256</b>	<b>\$3,081,165</b>	<b>\$3,187,658</b>	<b>\$2,818,279</b>	<b>\$2,096,242</b>	<b>\$1,752,865</b>	<b>\$1,021,330</b>	<b>\$1,276,547</b>	<b>\$1,466,677</b>	
<b>Capital Reserve (Restricted)</b>											
<b>Beginning Balance</b>	<b>\$1,051,293</b>	<b>\$227,768</b>	<b>\$247,868</b>	<b>\$109,681</b>	<b>\$52,134</b>	<b>\$52,134</b>	<b>\$52,134</b>	<b>\$52,134</b>	<b>\$72,844</b>	<b>\$93,658</b>	
Plus: Additions	0	0	0	1,250,000	1,464,205	225,346	1,003,577	0	0	0	
Plus: Connection Fees	20,000	20,100	20,201	20,302	20,403	20,505	20,608	20,711	20,814	20,918	
Less: Uses of Funds	(843,525)	0	(158,388)	(1,327,848)	(1,484,608)	(245,851)	(1,024,185)	0	0	0	
<b>Ending Balance</b>	<b>\$227,768</b>	<b>\$247,868</b>	<b>\$109,681</b>	<b>\$52,134</b>	<b>\$52,134</b>	<b>\$52,134</b>	<b>\$52,134</b>	<b>\$72,844</b>	<b>\$93,658</b>	<b>\$114,577</b>	
<b>Fixed Asset Replacement Fund</b>											
<b>Beginning Balance</b>	<b>\$2,805,695</b>	<b>\$2,844,488</b>	<b>\$2,833,297</b>	<b>\$3,077,977</b>	<b>\$2,766,145</b>	<b>\$2,044,108</b>	<b>\$1,700,731</b>	<b>\$969,197</b>	<b>\$1,203,703</b>	<b>\$1,373,019</b>	
Plus: Additions	38,793	92,569	274,391	535,411	208,468	418,139	0	234,506	169,316	102,606	
Less: Uses of Funds	0	(103,760)	(29,711)	(847,244)	(930,504)	(761,517)	(731,534)	0	0	0	
<b>Ending Balance</b>	<b>\$2,844,488</b>	<b>\$2,833,297</b>	<b>\$3,077,977</b>	<b>\$2,766,145</b>	<b>\$2,044,108</b>	<b>\$1,700,731</b>	<b>\$969,197</b>	<b>\$1,203,703</b>	<b>\$1,373,019</b>	<b>\$1,475,625</b>	
<i>Minimum: 60 days of O&amp;M</i>	\$321,473	\$329,111	\$342,065	\$355,569	\$369,649	\$389,264	\$399,794	\$415,771	\$432,438	\$449,827	
<i>Minimum: 5 year rolling average of CRP</i>	\$240,422	\$384,081	\$534,355	\$470,646	\$477,583	\$433,391	\$438,233	\$472,355	\$487,582	\$479,514	
<b>Total Target</b>	<b>\$561,895</b>	<b>\$713,193</b>	<b>\$876,420</b>	<b>\$826,215</b>	<b>\$847,233</b>	<b>\$822,655</b>	<b>\$838,026</b>	<b>\$888,126</b>	<b>\$920,020</b>	<b>\$929,341</b>	
<b>Total Ending Reserve Funds</b>	<b>\$3,072,256</b>	<b>\$3,081,165</b>	<b>\$3,187,658</b>	<b>\$2,818,279</b>	<b>\$2,096,242</b>	<b>\$1,752,865</b>	<b>\$1,021,330</b>	<b>\$1,276,547</b>	<b>\$1,466,677</b>	<b>\$1,590,202</b>	

As Customer Growth

Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 4  
 Capital Improvement Plan

Inflation 3.5%

Capital Projects	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total	Notes
<b>Capital Improvement Projects (CIP)</b>												
East Booster Replacement Project	\$0	\$0	\$0	\$0	\$0	\$245,851	\$1,024,185	\$0	\$0	\$0	\$1,270,036	
Pressure Zone 1A Project	0	0	158,388	1,327,848	0	0	0	0	0	0	1,486,236	
SVPSPD/SVMWC Intertie	843,525	0	0	0	0	0	0	0	0	0	843,525	
PlumpJack Well	0	0	0	0	1,484,608	0	0	0	0	0	1,484,608	
<b>Total Capital Projects</b>	<b>\$843,525</b>	<b>\$0</b>	<b>\$158,388</b>	<b>\$1,327,848</b>	<b>\$1,484,608</b>	<b>\$245,851</b>	<b>\$1,024,185</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,084,405</b>	
<b>Capital Replacement Projects (CRP)</b>												
Zone 3 Tank Recoating Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Residential Meter Replacement Project	207,000	0	0	0	0	0	0	0	0	0	207,000	
SCADA Upgrade Project	0	26,781	27,718	0	0	0	0	0	0	0	54,499	
10" West Tank Water Transmission Line Replacement	0	0	0	0	215,012	964,330	998,081	0	0	0	2,177,423	
Fire Hydrant Replacements	25,875	26,781	27,718	28,688	29,692	30,731	31,807	32,920	34,072	35,265	303,549	
Victor/Hidden Lake 2" Waterline Replacement Project	0	32,137	259,440	0	0	0	0	0	0	0	291,577	
Well 1R Pump & Motor Replacement	0	0	0	0	0	0	0	0	29,302	0	29,302	
Well 2R Pump & Motor Replacement	0	96,410	0	0	0	0	0	0	0	0	96,410	
Well 3 Pump & Motor Replacement	0	0	0	0	0	10,449	0	0	0	0	10,449	
Well 5R Pump & Motor Replacement	0	0	36,588	0	0	0	0	0	0	0	36,588	
Well 5R Chemical Feed Equipment Replacement	0	32,137	0	0	0	0	0	0	0	0	32,137	
Well 2R Chemical Feed Equipment Replacement	0	64,274	0	0	0	0	0	0	0	0	64,274	
East Booster Pump Replacement	7,763	0	0	0	0	0	0	0	0	0	7,763	
Easter Booster Pipe & Valve Replacement	46,575	0	0	0	0	0	0	0	0	0	46,575	
Zone 3 Booster Pump Replacement	0	0	0	0	11,521	0	0	0	0	0	11,521	
<b>Total Capital Replacement Projects (CRP)</b>	<b>\$287,213</b>	<b>\$278,520</b>	<b>\$351,464</b>	<b>\$28,688</b>	<b>\$256,225</b>	<b>\$1,005,510</b>	<b>\$1,029,888</b>	<b>\$32,920</b>	<b>\$63,374</b>	<b>\$35,265</b>	<b>\$3,369,067</b>	
<b>Utility Equipment Fleet Projects</b>												
Ford F-250 w/ Utility Box	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,950	
Ford F-350 - Flat Bed ZEV	0	0	44,349	0	0	0	0	0	0	0	44,349	
Dodge Ram 2500 ZEV	0	0	0	0	44,538	0	0	0	0	0	44,538	
Ford F-150 Service Truck	25,875	0	0	0	0	0	0	0	0	0	25,875	
Ford Explorer PI	0	0	0	0	0	0	0	22,978	0	0	22,978	
305 EV Charging Station	0	32,137	0	0	0	0	0	0	0	0	32,137	
1810 EV Charging Station	0	32,137	0	0	0	0	0	0	0	0	32,137	
Ford Dump Truck ZEV	0	0	0	0	0	0	0	76,177	0	0	76,177	
New Holland	0	28,896	0	0	0	0	0	0	0	0	28,896	
JD Loader	0	0	29,215	0	0	0	0	0	0	0	29,215	
VacCon	0	0	0	0	0	251,813	0	0	0	0	251,813	
SCBA Cart	10,350	0	0	0	0	0	0	0	0	0	10,350	
Trimble GPS	0	0	0	0	0	0	0	0	8,791	0	8,791	
Hydraulic Trench Shoring	0	0	4,657	0	0	0	0	0	0	0	4,657	
Confined Space Harnesses	0	0	0	0	0	4,978	0	0	0	0	4,978	
5.5KW Deisel Portable Generator	0	0	0	0	0	0	0	0	2,862	0	2,862	
<b>Total Utility Equipment Fleet Projects</b>	<b>\$36,225</b>	<b>\$93,170</b>	<b>\$78,221</b>	<b>\$0</b>	<b>\$44,538</b>	<b>\$256,791</b>	<b>\$0</b>	<b>\$99,155</b>	<b>\$11,653</b>	<b>\$0</b>	<b>\$653,703</b>	

Capital Projects	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total	Notes
<b>Facilities Capital Projects</b>												
AC Slurry Seal/Pave Repair	\$8,625	\$0	\$0	\$0	\$0	\$5,040	\$0	\$0	\$5,588	\$0	\$19,253	
AC Repaving	0	0	108,654	0	0	0	0	0	0	0	108,654	
Exterior Wood Surfaces - Paint	0	8,927	0	0	0	0	0	0	0	0	8,927	
Replace Carpet	0	0	0	42,076	0	0	0	0	0	0	43,743	
Paint - Interior Walls	0	0	0	0	32,463	0	0	0	0	0	32,463	
Kitchen Appliance (Common Area)	2,588	2,678	0	0	0	0	0	0	0	0	5,266	
Locks	3,450	3,571	3,696	3,825	3,959	4,098	4,241	4,389	4,543	4,702	43,807	
Replace Window Coverings	0	0	0	0	6,532	0	0	0	0	0	6,532	
Replace Light Fixtures	4,313	0	35,109	0	0	0	0	0	0	0	39,422	
LED Light Replacement	1,725	0	0	0	0	0	0	0	0	0	1,725	
HVAC Equipment (Boilers, Chiller, Pumps, Controls, etc.)	248,400	171,396	0	0	0	0	0	0	0	0	419,796	
Linoleum - All	0	0	0	0	0	10,244	0	0	0	0	10,244	
Roof Replacement	0	178,538	0	0	0	0	0	0	0	0	178,538	
AC Slurry Seal/Pave Patch	5,175	0	0	0	0	0	5,216	0	0	5,783	16,174	
AC Repaving	0	0	97,567	0	0	0	0	0	0	0	97,567	
Rollup Doors (Fire Station)	0	10,712	0	0	0	0	0	0	0	0	10,712	
Exterior (Admin Building) - Stain Wood Siding	3,968	0	0	0	0	4,712	0	0	0	0	8,680	
Exterior (Admin Building) - Paint Wood Trim	0	893	0	0	0	1,024	0	0	0	0	1,917	
Exterior (Fire Building) - Paint Wood Trim	0	1,785	0	0	0	2,049	0	0	0	0	3,834	
Exterior (Fire Building) - Stucco Repair	0	1,785	0	0	0	2,049	0	0	0	0	3,834	
Exterior Maintenance & Repair Sand Barn	0	1,785	0	0	0	0	0	0	0	0	1,785	
Exhaust Vents (FD Rooftop)	0	0	0	0	0	0	0	0	0	0	5,000	
Furnace Replacement	0	0	0	0	17,815	0	0	0	0	0	17,815	
<b>Total Facilities Capital Projects</b>	<b>\$278,244</b>	<b>\$382,070</b>	<b>\$245,026</b>	<b>\$45,901</b>	<b>\$60,769</b>	<b>\$29,216</b>	<b>\$9,457</b>	<b>\$4,389</b>	<b>\$10,131</b>	<b>\$10,485</b>	<b>\$1,085,688</b>	
<b>Connection Fee Funded Projects</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Future Unidentified Projects</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$963,536</b>	<b>\$1,114,842</b>	<b>\$1,254,250</b>	<b>\$3,680,611</b>	
<b>To FARF Reserves</b>	<b>\$8,318</b>	<b>\$0</b>	<b>\$0</b>	<b>\$535,411</b>	<b>\$208,468</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$752,197</b>	
<b>Total Capital Improvement Projects</b>	<b>\$1,453,525</b>	<b>\$753,760</b>	<b>\$833,099</b>	<b>\$1,937,848</b>	<b>\$2,054,608</b>	<b>\$1,537,368</b>	<b>\$2,063,530</b>	<b>\$1,100,000</b>	<b>\$1,200,000</b>	<b>\$1,300,000</b>	<b>\$14,625,671</b>	
<b>Less: Outside Funding Sources</b>												
Operating Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Capital Reserve (Restricted)	843,525	0	158,388	1,327,848	1,484,608	245,851	1,024,185	0	0	0	5,084,405	
Fixed Asset Replacement Fund	0	103,760	29,711	0	0	761,517	364,345	0	0	0	1,259,333	
New SRF Loans	0	0	0	0	0	0	0	0	0	0	0	
New Revenue Bonds	0	0	0	0	0	0	0	0	0	0	0	
<b>Total Outside Funding Sources</b>	<b>\$843,525</b>	<b>\$103,760</b>	<b>\$188,099</b>	<b>\$1,327,848</b>	<b>\$1,484,608</b>	<b>\$1,007,368</b>	<b>\$1,388,530</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,343,738</b>	
<b>Rate Funded Capital</b>	<b>\$610,000</b>	<b>\$650,000</b>	<b>\$645,000</b>	<b>\$610,000</b>	<b>\$570,000</b>	<b>\$530,000</b>	<b>\$675,000</b>	<b>\$1,100,000</b>	<b>\$1,200,000</b>	<b>\$1,300,000</b>	<b>\$8,281,933</b>	

Effective 7.1.2024		May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Total
<b>Single Family Residential</b>														
Fixed Charge	\$/Acct./Year													
SFR	\$1,222.75												419	419
		0	0	0	0	0	0	0	0	0	0	0	419	419
<b>Total Fixed Charge Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$512,332	<b>\$512,332</b>
Consumption Charge	\$/1,000 gal													
0 - 120	\$5.94												21,332	21,332
120 - 220	12.08												3,217	3,217
220 - 280	18.90												560	560
280 +	41.86												428	428
		0	0	0	0	0	0	0	0	0	0	0	25,538	<b>25,538</b>
<b>Total Consumption Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$194,100	<b>\$194,100</b>
<b>Total Single Family Residential</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$706,432	<b>\$706,432</b>
<b>Residential (Multi-Unit)</b>														
Fixed Charge	\$/Year													
Residential (Multi-Unit)	\$592.77												58	58
Accounts	0.00												58	58
		0	0	0	0	0	0	0	0	0	0	0	58	58
<b>Total Fixed Charge Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,381	<b>\$34,381</b>
Consumption Charge	\$/1,000 gal													
All Usage	\$10.30												2,144	2,144
		0	0	0	0	0	0	0	0	0	0	0	2,144	<b>2,144</b>
<b>Total Consumption Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,078	<b>\$22,078</b>
<b>Total Residential (Multi-Unit)</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56,459	<b>\$56,459</b>

Effective 7.1.2024	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Total
<b>Multi-Unit Bldgs</b>													
Fixed Charge	\$/Unit/Yr.												
Multi-Unit Bldgs	\$592.77												
Accounts	0.00												
	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Fixed Charge Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Consumption Charge	\$/1,000 gal												
All Usage	\$10.30												
	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Consumption Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Multi-Unit Bldgs</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Com / Condo Split</b>													
Fixed Charge	\$/Unit/Yr.												
Com / Condo Split	\$592.77												
Accounts	0.00												
	0	0	0	0	0	0	0	0	0	0	0	287	287
<b>Total Fixed Charge Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$170,125	\$170,125
Consumption Charge	\$/1,000 gal												
All Usage	\$10.30												
	0	0	0	0	0	0	0	0	0	0	0	11,104	11,104
<b>Total Consumption Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$114,368	\$114,368
<b>Total Com / Condo Split</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$284,493	\$284,493

Effective 7.1.2024		May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Total
<b>Multi-Family Residential</b>														
<b>Fixed Charge</b>	<b>\$/Unit/Yr.</b>													
Multi-Family	\$592.77												909	909
Accounts	0.00													
		0	0	0	0	0	0	0	0	0	0	0	909	909
<b>Total Fixed Charge Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$538,828	<b>\$538,828</b>
<b>Consumption Charge</b>	<b>\$/1,000 gal</b>													
All Usage	\$10.30												21,030	21,030
		0	0	0	0	0	0	0	0	0	0	0	21,030	<b>21,030</b>
<b>Total Consumption Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$216,604	<b>\$216,604</b>
<b>Total Multi-Family Residential</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$755,432</b>	<b>\$755,432</b>
<b>Commercial</b>														
<b>Fixed Charge</b>	<b>\$/Acct./Year</b>													
5/8"	\$1,004.28												10	10
3/4"	1,095.90												5	5
1"	1,222.75												5	5
1 1/2"	2,456.00												5	5
2"	3,918.47												13	13
3"	7,357.70												4	4
4"	12,273.43												0	0
6"	24,550.37												3	3
		0	0	0	0	0	0	0	0	0	0	0	45	<b>45</b>
<b>Total Fixed Charge Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$187,938	<b>\$187,938</b>
<b>Consumption Charge</b>	<b>\$/1,000 gal</b>													
All Usage	\$7.89												17,183	17,183
		0	0	0	0	0	0	0	0	0	0	0	17,183	<b>17,183</b>
<b>Total Consumption Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135,574	<b>\$135,574</b>
<b>Total Commercial</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$323,512</b>	<b>\$323,512</b>



		Effective 7.1.2024												Total
		May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	
<b>Commercial Irrigation</b>														
<b>Fixed Charge</b>	<b>\$/Acct./Year</b>													
5/8"	\$1,004.28												13	13
3/4"	1,095.90												5	5
1"	1,222.75												6	6
1 1/2"	2,456.00												5	5
2"	3,918.47												12	12
3"	7,357.70												0	0
4"	12,273.43												0	0
6"	24,550.37												0	0
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
		0	0	0	0	0	0	0	0	0	0	0	41	41
<b>Total Fixed Charge Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$85,173	\$85,173
<b>Consumption Charge</b>	<b>\$/1,000 gal</b>													
All Usage	\$14.28												7,592	7,592
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
		0	0	0	0	0	0	0	0	0	0	0	7,592	7,592
<b>Total Consumption Revenue</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$108,408	\$108,408
<b>Total Commercial Irrigation</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$193,581</b>	<b>\$193,581</b>



Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 8  
 Commodity Distribution Factor

	Recent 12 Mo. Consumption (1,000 gal)	14.8% Losses <sup>[1]</sup>	Net Water Delivered (Flow + Losses)	Base Consumption (MGD)	Component % of Total	Class Total % of Total
<b>Single Family Residential</b>						<b>30.2%</b>
Tier 1	21,439	3,173	24,611	0.0674	25.2%	
Tier 2	3,233	479	3,712	0.0102	3.8%	
Tier 3	563	83	647	0.0018	0.7%	
Tier 4	431	64	494	0.0014	0.5%	
<b>Multi-Family Residential</b>	34,448	5,098	39,546	0.1083	40.5%	<b>40.5%</b>
<b>Commercial</b>	17,269	2,556	19,825	0.0543	20.3%	<b>20.3%</b>
<b>Commercial Irrigation</b>	7,630	1,129	8,759	0.0240	9.0%	<b>9.0%</b>
<b>Commercial Fire</b>	0	0	0	0.0000	0.0%	<b>0.0%</b>
<b>Total</b>	<b>85,012</b>	<b>12,582</b>	<b>97,594</b>	<b>0.2674</b>	<b>100.0%</b>	<b>100.0%</b>
			<b>Water Production Report <sup>[2]</sup></b>	<b>97.79</b>	<b>0.2679</b>	
<b>Distribution Factor</b>						<b>(COM)</b>

Notes

[1] - Estimated; based on District's 2023 water audit

[2] - Water Supply provided by OVPSD (Based on 2022 calendar year)

Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 9  
 Capacity Distribution Factor

	Average Consumption (MGD)	Peaking Factors <sup>[1]</sup>	Peak Day Use (MGD)	Component % of Total	Class % of Total
<b>Single Family Residential</b>					<b>25.1%</b>
Tier 1	0.0674	1.00	0.0674	12.3%	
Tier 2	0.0102	3.99	0.0405	7.4%	
Tier 3	0.0018	5.87	0.0104	1.9%	
Tier 4	0.0014	13.99	0.0189	3.5%	
<b>Multi-Family Residential</b>	0.1083	1.89	0.2044	37.4%	<b>37.4%</b>
<b>Commercial</b>	0.0543	1.90	0.1030	18.8%	<b>18.8%</b>
<b>Commercial Irrigation</b>	0.0240	4.27	0.1024	18.7%	<b>18.7%</b>
<b>Commercial Fire</b>	0.0000	0.00	0.0000	0.0%	<b>0.0%</b>
<b>Total</b>	<b>0.2674</b>		<b>0.5471</b>	<b>100.0%</b>	<b>100.0%</b>
		<b>Historical Peak Day <sup>[2]</sup></b>	<b>0.7632</b>		

**Notes**

[1] - Tier relationship based on peak to average month usage; data from May '23 - Apr '24

[2] - Water System Peak Day Data Provided by District

Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 10  
 Customer Distribution Factors

	<i>Actual Customer</i>		<i>Customer Service &amp; Acctng.</i>		<i>Meters &amp; Services</i>		
	Number of Meters	% of Total	Number of Living Units	% of Total	Weighting Factor <sup>[1]</sup>	Weighted Customer	% of Total
Single Family Residential	420	48.3%	420	23.6%	1.20	503	37.6%
Multi-Family Residential	347	39.9%	1,254	70.6%	1.34	465	34.7%
Commercial	45	5.2%	45	2.5%	5.54	251	18.7%
Commercial Irrigation	41	4.7%	41	2.3%	2.65	109	8.2%
Commercial Fire	16	1.8%	16	0.9%	0.67	11	0.8%
<b>Total</b>	<b>869</b>	<b>100.0%</b>	<b>1,777</b>	<b>100.0%</b>		<b>1,338</b>	<b>100.0%</b>
<i>Distribution Factor</i>		<i>(AC)</i>		<i>(WCA)</i>			<i>(WCMS)</i>

**Notes**

[1] - Based on number of equivalent meters using AWWA meter equivalency factors

**Development of Equivalent Meter Allocation Factor**

	Number of Meters								Total	% of Total
	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"		
Single Family Residential		302	117	2	0	0	0	0	420	48.3%
Multi-Family Residential		325	3	4	9	4	2	0	347	39.9%
Commercial		15	5	5	13	4	0	3	45	5.2%
Commercial Irrigation		18	6	5	12	0	0	0	41	4.7%
Commercial Fire	16	0	0	0	0	0	0	0	16	1.8%
<b>Total Meters</b>	<b>16</b>	<b>659</b>	<b>131</b>	<b>16</b>	<b>34</b>	<b>8</b>	<b>2</b>	<b>3</b>	<b>869</b>	
<i>Equivalency Factor</i>	<i>0.67</i>	<i>1.00</i>	<i>1.67</i>	<i>3.33</i>	<i>5.33</i>	<i>10.00</i>	<i>16.67</i>	<i>33.33</i>		
	Equivalent Meters								Total	
	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"		
Single Family Residential	0	302	195	7	0	0	0	0	503	1.20
Multi-Family Residential	0	325	5	13	48	40	34	0	465	1.34
Commercial	0	15	8	17	70	40	0	100	251	5.54
Commercial Irrigation	0	18	10	17	64	0	0	0	109	2.65
Commercial Fire	11	0	0	0	0	0	0	0	11	0.67
<b>Total Equivalent Meters</b>	<b>0</b>	<b>659</b>	<b>218</b>	<b>54</b>	<b>182</b>	<b>80</b>	<b>34</b>	<b>100</b>	<b>1,328</b>	

Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 11  
 Public Fire Distribution Factor

	Number of Meters	Fire Prot. Requirements (gals/min) <sup>[1]</sup>	Duration (minutes)	Total FP Requirements (1,000 g/min)	% of Total
Single Family Residential	420	1,500	120	75,616	24.0%
Multi-Family Residential	1,254	1,500	120	225,720	71.7%
Commercial	45	2,500	120	13,568	4.3%
Commercial Irrigation	41	0	0	0	0.0%
Commercial Fire	16	0	0	0	0.0%
<b>Total</b>	<b>1,777</b>			<b>314,904</b>	<b>100.0%</b>

*Distribution Factor*

(FP)

<i>Private Fire</i>					<i>Public Fire - Hydrants</i>				
Connection Size	# of Connections	Factor <sup>[2]</sup>	Equivalent Services	% of Total	Hydrant Size	# of Hydrants	Factor <sup>[2]</sup>	Equivalent Services	% of Total
< 1 1/2"	16	1.00	16	100.0%	< 1 1/2"	0	1.00	0	0.0%
1 1/2"	0	2.90	0	0.0%	1 1/2"	0	2.90	0	0.0%
2"	0	6.19	0	0.0%	2"	0	6.19	0	0.0%
3"	0	17.98	0	0.0%	3"	0	17.98	0	0.0%
4"	0	38.32	0	0.0%	4"	0	38.32	0	0.0%
6"	0	111.31	0	0.0%	6"	147	111.31	16,363	100.0%
8"	0	237.21	0	0.0%	8"	0	237.21	0	0.0%
10"	0	426.58	0	0.0%	10"	0	426.58	0	0.0%
	<b>16</b>		<b>16</b>	<b>100.0%</b>		<b>147</b>		<b>16,363</b>	<b>100.0%</b>

0.1%

99.9%

*Distribution Factor*

(PVFP)

(PBFP)

**Notes**

[1] - Pg 9 of 2015 Water System Capacity Analysis

[2] - Based on demand factors from the AWWA M1 Manual, 7th Edition, page 163

Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 12  
 Revenue Related Distribution Factor

	Projected FY 2026	% of Total
Single Family Residential	\$709,964	30.5%
Multi-Family Residential	1,101,866	47.3%
Commercial	325,129	13.9%
Commercial Irrigation	194,549	8.3%
Commercial Fire	16,149	0.7%
<b>Total Rate Revenues</b>	<b>\$2,331,508</b>	<b>100.0%</b>
<b>Distribution Factor</b>		<b>(RR)</b>

DRAFT



Olympic Valley PSD  
Water Cost of Service Study  
Exhibit 13  
Net Plant In Service

	Net Plant 06/30/23	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)					
<b>Source of Supply - Wells</b>											
Wells	\$1,300,750	\$456,563	\$844,187	\$0	\$0	\$0	\$0	\$0	\$0	35.1% COM	64.9% CAP
<b>Total Source of Supply - Wells</b>	<b>\$1,300,750</b>	<b>\$456,563</b>	<b>\$844,187</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Treatment</b>											
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	35.1% COM	64.9% CAP
<b>Total Treatment</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Pumping</b>											
Water Pumping	\$79,334	\$79,334	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% COM	
<b>Total Pumping</b>	<b>\$79,334</b>	<b>\$79,334</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Transmission &amp; Distribution</b>											
Mains	\$1,365,972	\$0	\$297,597	\$0	\$0	\$969,840	\$98,535	\$0	\$0	21.8% CAP	71.0% WCMS/WCA
Meters	2,332	0	0	0	0	2,332	0	0	0	100.0% WCMS	
Hydrants	61,377	0	0	0	0	0	61,377	0	0	100.0% FP	
<b>Total Transmission &amp; Distribution</b>	<b>\$1,429,680</b>	<b>\$0</b>	<b>\$297,597</b>	<b>\$0</b>	<b>\$0</b>	<b>\$972,171</b>	<b>\$159,912</b>	<b>\$0</b>	<b>\$0</b>		
<b>Storage</b>											
Water Reserve & Tanks	\$651,854	\$0	\$542,299	\$0	\$0	\$0	\$109,555	\$0	\$0	83.2% CAP	16.8% FP
<b>Total Storage</b>	<b>\$651,854</b>	<b>\$0</b>	<b>\$542,299</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$109,555</b>	<b>\$0</b>	<b>\$0</b>		
<b>Plant Before General Plant</b>	<b>\$3,461,619</b>	<b>\$535,898</b>	<b>\$1,684,083</b>	<b>\$0</b>	<b>\$0</b>	<b>\$972,171</b>	<b>\$269,467</b>	<b>\$0</b>	<b>\$0</b>		
<i>Percent Plant Before General Plant</i>	<i>100.0%</i>	<i>15.5%</i>	<i>48.7%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>28.1%</i>	<i>7.8%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>Factor PBG</i>	
<b>General Plant</b>											
Building Improvements	\$1,158,581	\$179,361	\$563,651	\$0	\$0	\$325,379	\$90,189	\$0	\$0	As Factor PBG	
East Valley Property	502,552	77,801	244,492	0	0	141,138	39,121	0	0	As Factor PBG	
Furniture & Fixtures	0	0	0	0	0	0	0	0	0	As Factor PBG	
Headquarters	1,651	256	803	0	0	464	129	0	0	As Factor PBG	
Land	3,750	581	1,824	0	0	1,053	292	0	0	As Factor PBG	
Working Capital	0	0	0	0	0	0	0	0	0	As Factor PBG	
Equipment	42,667	6,605	20,758	0	0	11,983	3,321	0	0	As Factor PBG	
Vehicles	74,041	11,462	36,021	0	0	20,794	5,764	0	0	As Factor PBG	
<b>Total General Plant</b>	<b>\$1,783,242</b>	<b>\$276,066</b>	<b>\$867,550</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500,811</b>	<b>\$138,815</b>	<b>\$0</b>	<b>\$0</b>		
<b>Total Net Plant in Service</b>	<b>\$5,244,861</b>	<b>\$811,964</b>	<b>\$2,551,633</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,472,982</b>	<b>\$408,282</b>	<b>\$0</b>	<b>\$0</b>		

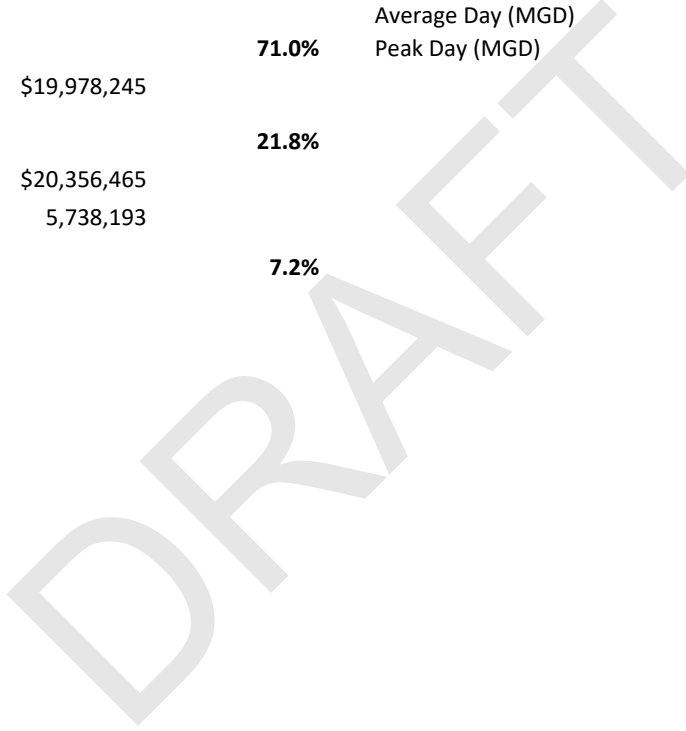
Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 14  
 Distribution System Analysis

<b>Distribution Main Analysis</b>			
Main Size	Length (ft)	Replcmt \$	Total
1"	0	\$0.00	\$0
2"	0	0.00	0
4"	0	227.50	0
6"	26,973	238.78	6,440,613
8"	29,883	337.50	10,085,513
10"	10,733	356.88	3,830,339
12"	16,079	480.00	7,717,920
<hr/>			
<sup>(4)</sup> Total 1" - 14"	<b>83,668</b>		<b>\$28,074,385</b>

<b>Customer</b>		<b>71.0%</b>
<sup>(1)</sup> Total @ 6" Equiv	\$19,978,245	
<b>Capacity</b> <sup>[(2+3-1)/4]</sup>		<b>21.8%</b>
<sup>(2)</sup> Cost for 1-10"	\$20,356,465	
<sup>(3)</sup> Equiv 10" - 12"	5,738,193	
<b>Fire Protection</b>		<b>7.2%</b>
1-COM-CAP		

<b>Fire Protection</b>			
	Max Gal	Max Minutes	Total
Fire Flow Requirements	2,500	120	300,000
Storage Capacity -		1,785,000	1,785,000
% Public Fire Protection			16.8%
% Capacity			83.2%

<b>Source of Supply</b>			
Capacity/Commodity			
Average Day (MGD)	0.27	COM	35.1%
Peak Day (MGD)	0.76	(1-COM)=CAP	64.9%



Allocation of the Revenue Requirement

FY 2026	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
			Actual Customer (AC)	Weighted for -						
				Cust. Acctg. (WCA)	Meters & Services (WCMS)					
<b>Water Department Expenses</b>										
<b>Salaries &amp; Wages</b>										
Salaries-Water	\$380,652	\$0	\$0	\$0	\$190,326	\$190,326	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
Sick Leave / Vacation	48,031	0	0	0	24,015	24,015	0	0	0	50.0% WCA 50.0% WCMS
Salaries-Special Projects	0	0	0	0	0	0	0	0	0	50.0% WCA 50.0% WCMS
Water Salaries Billed/Capital	(21,434)	0	0	0	(10,717)	(10,717)	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Salaries &amp; Wages</b>	<b>\$407,248</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$203,624</b>	<b>\$203,624</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Employee Benefits</b>										
Benefit-Fed/State Taxes	\$33,496	\$0	\$0	\$0	\$16,748	\$16,748	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
Benefit-Health/Life Insurance	102,132	0	0	0	51,066	51,066	0	0	0	50.0% WCA 50.0% WCMS
PERS-Retirement Program	47,969	0	0	0	23,984	23,984	0	0	0	50.0% WCA 50.0% WCMS
Worker's Comp Insurance	26,180	0	0	0	13,090	13,090	0	0	0	50.0% WCA 50.0% WCMS
Water Benefits Billed	(10,380)	0	0	0	(5,190)	(5,190)	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Employee Benefits</b>	<b>\$199,396</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$99,698</b>	<b>\$99,698</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Materials and Supplies</b>										
Water-Material/Supplies	\$15,015	\$2,324	\$7,305	\$0	\$0	\$4,217	\$1,169	\$0	\$0	As Net Plant in Service
Water-Uniforms	2,756	427	1,341	0	0	774	215	0	0	As Net Plant in Service
Water - Safety	3,176	492	1,545	0	0	892	247	0	0	As Net Plant in Service
Water-Chemicals/Lab Fees	94,500	14,630	45,974	0	0	26,540	7,356	0	0	As Net Plant in Service
<b>Total Materials and Supplies</b>	<b>\$115,448</b>	<b>\$17,873</b>	<b>\$56,165</b>	<b>\$0</b>	<b>\$0</b>	<b>\$32,423</b>	<b>\$8,987</b>	<b>\$0</b>	<b>\$0</b>	
<b>Maintenance Equipment</b>										
Water-Equipment Rental	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Net Plant in Service
Water- SCADA Repairs & Maint	5,460	0	1,137	0	0	3,713	611	0	0	As T&D
Olympic Valley GMP	2,600	403	1,265	0	0	730	202	0	0	As Net Plant in Service
Meter Read Licensing	10,400	0	0	0	0	10,400	0	0	0	100.0% WCMS
Wtr-Cell Phone & Answr Service	1,539	238	749	0	0	432	120	0	0	As Net Plant in Service
Water Meter Repair/Replace	1,300	0	0	0	0	1,300	0	0	0	100.0% WCMS
Water-Equip Repair/Replace	4,160	644	2,024	0	0	1,168	324	0	0	As Net Plant in Service
Water-Equip Maint Contracts	0	0	0	0	0	0	0	0	0	As Net Plant in Service
<b>Total Maintenance Equipment</b>	<b>\$25,459</b>	<b>\$1,285</b>	<b>\$5,174</b>	<b>\$0</b>	<b>\$0</b>	<b>\$17,744</b>	<b>\$1,257</b>	<b>\$0</b>	<b>\$0</b>	

Allocation of the Revenue Requirement

FY 2026	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
			Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)					
<b>Facilities-Maint/Repair</b>										
Wtr-Generators Air Quality Fee	\$3,255	\$504	\$1,584	\$0	\$0	\$914	\$253	\$0	\$0	As Net Plant in Service
Water-Wells - Maintenance	47,250	16,585	30,665	0	0	0	0	0	0	As Source of Supply
Water-Mains/Lines/Tanks Maint	0	0	0	0	0	0	0	0	0	As T&D
Water-Meter Leak Detection	10,500	0	0	0	0	10,500	0	0	0	100.0% WCMS
Water-Chem Pump Maint/Repr	4,200	4,200	0	0	0	0	0	0	0	100.0% COM
Water-Computer Repair	525	81	255	0	0	147	41	0	0	As Net Plant in Service
East-B/G Interior Maint/Rpr	3,150	488	1,532	0	0	885	245	0	0	As Net Plant in Service
East-B/G Exterior Maint/Rpr	2,625	406	1,277	0	0	737	204	0	0	As Net Plant in Service
East B&G - Elevator Inspection	1,575	244	766	0	0	442	123	0	0	As Net Plant in Service
East B&G-HVAC Filtering	840	130	409	0	0	236	65	0	0	As Net Plant in Service
E Bldg-Fire Alarm System Maint	0	0	0	0	0	0	0	0	0	As Net Plant in Service
West-B&G-Interior M/R	1,120	173	545	0	0	315	87	0	0	As Net Plant in Service
West B&G-Exterior M/R	1,750	271	852	0	0	492	136	0	0	As Net Plant in Service
West-B&G Elevator Inspection	1,400	217	681	0	0	393	109	0	0	As Net Plant in Service
Easement Abatement	0	0	0	0	0	0	0	0	0	As Net Plant in Service
<b>Total Facilities-Maint/Repair</b>	<b>\$78,190</b>	<b>\$23,299</b>	<b>\$38,566</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,061</b>	<b>\$1,264</b>	<b>\$0</b>	<b>\$0</b>	
<b>Training &amp; Memberships</b>										
Water-Certifications	\$3,090	\$478	\$1,503	\$0	\$0	\$868	\$241	\$0	\$0	As Net Plant in Service
Training - Meetings/Classes	4,120	638	2,004	0	0	1,157	321	0	0	As Net Plant in Service
Water-Membership/Subscripts	12,360	1,913	6,013	0	0	3,471	962	0	0	As Net Plant in Service
Water-Spec Licenses-Drug Tests	773	120	376	0	0	217	60	0	0	As Net Plant in Service
<b>Total Training &amp; Memberships</b>	<b>\$20,343</b>	<b>\$3,149</b>	<b>\$9,897</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,713</b>	<b>\$1,584</b>	<b>\$0</b>	<b>\$0</b>	

Allocation of the Revenue Requirement

FY 2026	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
			Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)					
<b>Vehicle Maintenance &amp; Repair</b>										
Water - Vehicle - Fuel/Oil	\$13,125	\$2,032	\$6,385	\$0	\$0	\$3,686	\$1,022	\$0	\$0	As Net Plant in Service
Water - Veh/Equip - Tires/Reprs	9,713	1,504	4,725	0	0	2,728	756	0	0	As Net Plant in Service
Water - Vehicles - Mileage Reimb	1,103	171	536	0	0	310	86	0	0	As Net Plant in Service
<b>Total Vehicle Maintenance &amp; Repair</b>	<b>\$23,940</b>	<b>\$3,706</b>	<b>\$11,647</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,723</b>	<b>\$1,864</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Water Department Expenses</b>	<b>\$870,024</b>	<b>\$49,312</b>	<b>\$121,449</b>	<b>\$0</b>	<b>\$303,322</b>	<b>\$380,986</b>	<b>\$14,955</b>	<b>\$0</b>	<b>\$0</b>	
<b>Administration Expenses</b>										
<b>Salaries &amp; Wages (50% Allocation)</b>										
Salaries-G&A	\$616,261	\$0	\$0	\$0	\$308,131	\$308,131	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
Salaries-Admin-S/L & Vacation	75,341	0	0	0	37,671	37,671	0	0	0	50.0% WCA 50.0% WCMS
Admin-Salaries Billed	(162,460)	0	0	0	(81,230)	(81,230)	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Salaries &amp; Wages</b>	<b>\$529,142</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$264,571</b>	<b>\$264,571</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Employee Benefits (50% Allocation)</b>										
Benefit-Fed/State Taxes	\$49,127	\$0	\$0	\$0	\$24,563	\$24,563	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
Benefit-Health/Life Insurance	127,748	0	0	0	63,874	63,874	0	0	0	50.0% WCA 50.0% WCMS
Benefit - Retiree Health	5,820	0	0	0	2,910	2,910	0	0	0	50.0% WCA 50.0% WCMS
PERS-Retirement Program	52,720	0	0	0	26,360	26,360	0	0	0	50.0% WCA 50.0% WCMS
PERS Unfunded Liability Exp	52,000	0	0	0	26,000	26,000	0	0	0	50.0% WCA 50.0% WCMS
Worker's Comp Insurance	8,898	0	0	0	4,449	4,449	0	0	0	50.0% WCA 50.0% WCMS
Veh/Fuel Personal Use	0	0	0	0	0	0	0	0	0	50.0% WCA 50.0% WCMS
Admin Benefits-Billed	(59,604)	0	0	0	(29,802)	(29,802)	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Employee Benefits</b>	<b>\$236,709</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$118,354</b>	<b>\$118,354</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Board Expenses (50% Allocation)</b>										
Board-Regular/Committee Mtgs	\$25,493	\$0	\$0	\$0	\$12,746	\$12,746	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
Board-Workshops & Training	773	0	0	0	386	386	0	0	0	50.0% WCA 50.0% WCMS
Board-Food/Supply/Advertising	773	0	0	0	386	386	0	0	0	50.0% WCA 50.0% WCMS
Board-Election Expenses	194	0	0	0	97	97	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Board Expenses</b>	<b>\$27,231</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,616</b>	<b>\$13,616</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	

Allocation of the Revenue Requirement

FY 2026	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
			Actual Customer (AC)	Weighted for -						
				Cust. Acctg. (WCA)	Meters & Services (WCMS)					
<b>Consulting (50% Allocation)</b>										
Accounting-Audit	\$9,357	\$0	\$0	\$0	\$4,678	\$4,678	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
Cafeteria Plan Administration	773	0	0	0	386	386	0	0	0	50.0% WCA 50.0% WCMS
Special Projects & Studies	39,525	0	0	0	19,763	19,763	0	0	0	50.0% WCA 50.0% WCMS
Legal-General	13,133	0	0	0	6,566	6,566	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Consulting</b>	<b>\$62,787</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$31,393</b>	<b>\$31,393</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Insurance (50% Allocation)</b>										
Insurance-Commercial Package	\$49,155	\$0	\$0	\$0	\$24,577	\$24,577	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
Insurance-Old Firehouse	3,515	0	0	0	1,758	1,758	0	0	0	50.0% WCA 50.0% WCMS
Insurance West Liability Insurance	2,271	0	0	0	1,136	1,136	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Insurance</b>	<b>\$54,941</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$27,471</b>	<b>\$27,471</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Special Fees (50% Allocation)</b>										
Annual Dues/Memberships	\$3,359	\$0	\$0	\$0	\$1,679	\$1,679	\$0	\$0	\$0	50.0% WCA 50.0% WCMS
G&A-Subscriptions	4,159	0	0	0	2,080	2,080	0	0	0	50.0% WCA 50.0% WCMS
G&A-Annual Maint Contracts	10,455	0	0	0	5,227	5,227	0	0	0	50.0% WCA 50.0% WCMS
Bank Fees	7,210	0	0	0	3,605	3,605	0	0	0	50.0% WCA 50.0% WCMS
Placer Recording Fees & Maps	0	0	0	0	0	0	0	0	0	50.0% WCA 50.0% WCMS
G&A-Licenses/Notary	773	0	0	0	386	386	0	0	0	50.0% WCA 50.0% WCMS
<b>Total Special Fees</b>	<b>\$25,955</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,977</b>	<b>\$12,977</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	

Allocation of the Revenue Requirement

FY 2026	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification		
			Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)						
<b>Office Expenses (50% Allocation)</b>											
G&A-Office Supplies	\$7,875	\$0	\$0	\$0	\$3,938	\$3,938	\$0	\$0	\$0	50.0% WCA	50.0% WCMS
Computer Expenses-Repair	3,938	0	0	0	1,969	1,969	0	0	0	50.0% WCA	50.0% WCMS
Advertising Public Notices	1,260	0	0	0	630	630	0	0	0	50.0% WCA	50.0% WCMS
Advertising-Recruitment ads	263	0	0	0	131	131	0	0	0	50.0% WCA	50.0% WCMS
Newsletter Printing	2,625	0	0	0	1,313	1,313	0	0	0	50.0% WCA	50.0% WCMS
Postage/Meter Expenses	1,444	0	0	0	722	722	0	0	0	50.0% WCA	50.0% WCMS
Office & Mtg Room Cleaning	5,250	0	0	0	2,625	2,625	0	0	0	50.0% WCA	50.0% WCMS
Sm Equip Repair/Replacement	1,838	0	0	0	919	919	0	0	0	50.0% WCA	50.0% WCMS
Name Change Costs	0	0	0	0	0	0	0	0	0	50.0% WCA	50.0% WCMS
Hardware/Software Upgrades	2,756	0	0	0	1,378	1,378	0	0	0	50.0% WCA	50.0% WCMS
Annual Record Archival	236	0	0	0	118	118	0	0	0	50.0% WCA	50.0% WCMS
Website Expenses	3,848	0	0	0	1,924	1,924	0	0	0	50.0% WCA	50.0% WCMS
<b>Total Office Expenses</b>	<b>\$31,332</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,666</b>	<b>\$15,666</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Travel &amp; Meetings (50% Allocation)</b>											
Training & Travel	\$4,893	\$0	\$0	\$0	\$2,446	\$2,446	\$0	\$0	\$0	50.0% WCA	50.0% WCMS
Employee Recognition	4,635	0	0	0	2,318	2,318	0	0	0	50.0% WCA	50.0% WCMS
Recruitment/Backgrnd cks/Tests	1,030	0	0	0	515	515	0	0	0	50.0% WCA	50.0% WCMS
<b>Total Travel &amp; Meetings</b>	<b>\$10,558</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,279</b>	<b>\$5,279</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Utilities (50% Allocation)</b>											
Water-Pumping Electric	\$84,672	\$84,672	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% COM	
West - Admin Electricity	1,854	287	902	0	0	521	144	0	0	As Net Plant in Service	
West - Admin Heating Fuel	13,104	2,029	6,375	0	0	3,680	1,020	0	0	As Net Plant in Service	
West - Admin TTSA	578	89	281	0	0	162	45	0	0	As Net Plant in Service	
East Office Electricity	29,988	4,642	14,589	0	0	8,422	2,334	0	0	As Net Plant in Service	
East Office Heating Fuel	11,907	1,843	5,793	0	0	3,344	927	0	0	As Net Plant in Service	
East Office T-TSA	2,888	447	1,405	0	0	811	225	0	0	As Net Plant in Service	
Telephone	5,250	813	2,554	0	0	1,474	409	0	0	As Net Plant in Service	
West-Power Old Firehouse	2,956	458	1,438	0	0	830	230	0	0	As Net Plant in Service	
West-TTSA Fees-Old Firehouse	219	34	107	0	0	62	17	0	0	As Net Plant in Service	
<b>Total Utilities</b>	<b>\$153,416</b>	<b>\$95,314</b>	<b>\$33,444</b>	<b>\$0</b>	<b>\$0</b>	<b>\$19,306</b>	<b>\$5,351</b>	<b>\$0</b>	<b>\$0</b>		
<b>Total Administration Expenses</b>	<b>\$1,132,070</b>	<b>\$95,314</b>	<b>\$33,444</b>	<b>\$0</b>	<b>\$489,327</b>	<b>\$508,633</b>	<b>\$5,351</b>	<b>\$0</b>	<b>\$0</b>		

Allocation of the Revenue Requirement

	FY 2026	Customer Related							Direct Assign. (DA)	Basis of Classification
		Commodity (COM)	Capacity (CAP)	Actual Customer (AC)	Weighted for -		Public Fire Protection (FP)	Revenue Related (RR)		
					Cust. Acctg. (WCA)	Meters & Services (WCMS)				
<b>Total Operations &amp; Maintenance</b>	<b>\$2,002,093</b>	<b>\$144,626</b>	<b>\$154,893</b>	<b>\$0</b>	<b>\$792,649</b>	<b>\$889,619</b>	<b>\$20,306</b>	<b>\$0</b>	<b>\$0</b>	
<b>Annual Debt Service</b>										
Facility Loan	\$86,119	\$13,332	\$41,897	\$0	\$0	\$24,186	\$6,704	\$0	\$0	As Net Plant in Service
CalPERS Additional UAL Payments	0	0	0	0	0	0	0	0	0	As Net Plant in Service
CalPERS Pension Adjustment	0	0	0	0	0	0	0	0	0	As Net Plant in Service
New SRF Loans	0	0	0	0	0	0	0	0	0	As Net Plant in Service
New Revenue Bonds	0	0	0	0	0	0	0	0	0	As Net Plant in Service
<b>Total Annual Debt Service</b>	<b>\$86,119</b>	<b>\$13,332</b>	<b>\$41,897</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,186</b>	<b>\$6,704</b>	<b>\$0</b>	<b>\$0</b>	
Less Connection Fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Net Plant in Service
<b>Net Annual Debt Service</b>	<b>\$86,119</b>	<b>\$13,332</b>	<b>\$41,897</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,186</b>	<b>\$6,704</b>	<b>\$0</b>	<b>\$0</b>	
<b>Rate Funded Capital</b>	<b>\$650,000</b>	<b>\$100,627</b>	<b>\$316,226</b>	<b>\$0</b>	<b>\$0</b>	<b>\$182,548</b>	<b>\$50,599</b>	<b>\$0</b>	<b>\$0</b>	As Net Plant in Service
<b>Transfer To / (From) Reserves</b>										
To/(From) Operating Reserve	0	0	0	0	0	0	0	0	0	As O&M
To/(From) Capital Reserve	0	0	0	0	0	0	0	0	0	As O&M
To/(From) FARF	92,569	14,331	45,035	0	0	25,997	7,206	0	0	As O&M
<b>Total Transfer To / (From) Reserves</b>	<b>\$92,569</b>	<b>\$14,331</b>	<b>\$45,035</b>	<b>\$0</b>	<b>\$0</b>	<b>\$25,997</b>	<b>\$7,206</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Revenue Requirement</b>	<b>\$2,830,782</b>	<b>\$272,916</b>	<b>\$558,051</b>	<b>\$0</b>	<b>\$792,649</b>	<b>\$1,122,350</b>	<b>\$84,815</b>	<b>\$0</b>	<b>\$0</b>	
<b>Less: Non-Operating Revenues</b>										
Interest	\$76,667	\$7,391	\$15,114	\$0	\$21,467	\$30,397	\$2,297	\$0	\$0	As Total Rev Req
Property Tax Revenue	205,000	19,764	40,413	0	57,402	81,279	6,142	0	0	As Total Rev Req
Administrative Fees	3,060	295	603	0	857	1,213	92	0	0	As Total Rev Req
Rental Income	43,539	4,198	8,583	0	12,191	17,262	1,305	0	0	As Total Rev Req
Miscellaneous Income	0	0	0	0	0	0	0	0	0	As Total Rev Req
Administration Rev	14,000	1,350	2,760	0	3,920	5,551	419	0	0	As Total Rev Req
<b>Total Non-Operating Revenues</b>	<b>\$342,266</b>	<b>\$32,998</b>	<b>\$67,473</b>	<b>\$0</b>	<b>\$95,838</b>	<b>\$135,702</b>	<b>\$10,255</b>	<b>\$0</b>	<b>\$0</b>	
<b>Net Revenue Requirement</b>	<b>\$2,488,516</b>	<b>\$239,918</b>	<b>\$490,578</b>	<b>\$0</b>	<b>\$696,811</b>	<b>\$986,649</b>	<b>\$74,560</b>	<b>\$0</b>	<b>\$0</b>	



Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 16  
 Breakout of Fire Protection

	Total	<i>Fire Protection</i>	
		Private	Public
<b>Net Revenue Requirement</b>	<b>\$74,560</b>	\$73	\$74,487
<i>Plus: Direct Assignments</i>	\$0	\$0	\$0
<b>Miscellaneous Income</b>	<b>\$74,560</b>	<b>\$73</b>	<b>\$74,487</b>

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Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 17  
 Distribution of Revenue Requirement - COM, CAP, & DA

		Single Family Residential				Multi-Family Residential	Commercial	Commercial Irrigation	Factor
		Tier 1	Tier 2	Tier 3	Tier 4				
Commodity	\$239,918	\$60,503	\$9,125	\$1,590	\$1,215	\$97,218	\$48,736	\$21,532	COM - W / COM - S
Capacity	\$490,578	\$60,462	\$36,353	\$9,331	\$16,983	\$183,318	\$92,346	\$91,786	CAP - W / CAP - S
Direct Assign.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Exhibit 15.2
<b>Net Revenue Requirement</b>	<b>\$730,497</b>	<b>\$120,965</b>	<b>\$45,478</b>	<b>\$10,921</b>	<b>\$18,198</b>	<b>\$280,536</b>	<b>\$141,082</b>	<b>\$113,318</b>	

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Olympic Valley PSD  
Water Cost of Service Study  
Exhibit 18  
Distribution of Revenue Requirement

	Total	Single Family Residential	Multi-Family Residential	Commercial	Commercial Irrigation	Commercial Fire	Factor
Commodity	\$239,918	\$72,433	\$97,218	\$48,736	\$21,532	\$0	(COM)
Capacity	\$490,578	\$123,128	\$183,318	\$92,346	\$91,786	\$0	(CAP)
Customer							
Actual Customer	\$0	\$0	\$0	\$0	\$0	\$0	(AC)
Cust. Acctg.	696,811	164,773	491,861	17,739	16,162	6,276	(WCA)
Meters & Services	986,649	370,757	342,794	184,704	80,490	7,903	(WCMS)
<b>Total Customer</b>	<b>\$1,683,460</b>	<b>\$535,531</b>	<b>\$834,655</b>	<b>\$202,443</b>	<b>\$96,652</b>	<b>\$14,179</b>	
Public Fire Protection	\$74,487	\$17,886	\$53,392	\$3,209	\$0	\$0	(FP)
Private Fire Protection	\$73	\$0	\$0	\$0	\$0	\$73	
Revenue Related	\$0	\$0	\$0	\$0	\$0	\$0	(RR)
Direct Assign.	\$0	\$0	\$0	\$0	\$0	\$0	(DA)
<b>Net Revenue Requirement</b>	<b>\$2,488,516</b>	<b>\$748,978</b>	<b>\$1,168,583</b>	<b>\$346,734</b>	<b>\$209,969</b>	<b>\$14,252</b>	

Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 19  
 Summary of Cost of Service

	Total	Single Family Residential	Multi-Family Residential	Commercial	Commercial Irrigation	Commercial Fire	Notes
Revenues at Present Rates	\$2,347,657	\$709,964	\$1,101,866	\$325,129	\$194,549	\$16,149	
Net Revenue Requirement	\$2,488,516	\$748,978	\$1,168,583	\$346,734	\$209,969	\$14,252	
<i>Bal/Def of Funds</i>	<b>(\$140,859)</b>	<b>(\$39,013)</b>	<b>(\$66,717)</b>	<b>(\$21,605)</b>	<b>(\$15,420)</b>	<b>\$1,897</b>	
Required % Change in Rates	<b>6.0%</b>	<b>5.5%</b>	<b>6.1%</b>	<b>6.6%</b>	<b>7.9%</b>	<b>-11.7%</b>	

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Olympic Valley PSD  
 Water Cost of Service Study  
 Exhibit 20  
 Summary of Unit Costs

	Total	Single Family Residential				Multi-Family Residential	Commercial	Commercial Irrigation	Commercial Fire	Notes
		Tier 1	Tier 2	Tier 3	Tier 4					
<b>Consumption Related</b>										
Commodity - \$/CCF	\$2.82	\$2.82	\$2.82	\$2.82	\$2.82	\$2.82	\$2.82	\$2.82		
Capacity - \$/CCF	5.77	2.82	11.24	16.57	39.44	5.32	5.35	12.03		
RR/FP/DA - \$/CCF	0.88	0.70	0.70	0.70	0.70	1.55	0.19	0.00		
	\$9.47	\$6.34	\$14.76	\$20.09	\$42.96	\$9.69	\$8.36	\$14.85		
<i>Differential</i>			\$8.42	\$5.33	\$22.87					
<b>Current Rates</b>		\$5.94	\$12.08	\$18.90	\$41.86	\$10.30	\$7.89	\$14.28		
<i>Differential</i>			\$6.14	\$6.82	\$22.96					
<b>Customer Related</b>										
\$/Acct./Yr	\$0.00	\$0.00				\$0.00	\$0.00		\$0.00	
\$/Wt. Cust. Acctg./Yr	392.23	392.23				392.23	94.25		392.23	
\$/Wt. Meter/Yr	737.27	882.57				273.36	737.27		493.97	
Private Fire / mtr / yr									4.55	
	\$1,129.50	\$1,274.80				\$665.59	\$831.51		\$890.75	
<b>Current Rates</b>		\$1,222.75				\$592.77	\$1,004.28		\$1,004.28	
<b>Basic Data</b>										
Consumption (1,000 gallons)	85,012	21,439	3,233	563	431	34,448	17,269	7,630	0	
# of Accounts	1,777	420				1,254	45	41	16	
# of Wt. Cust (WCA)	1,777	420				1,254	45	41	16	
# of Wt. Cust (WCMS)	1,338	503				465	251	109	11	

Olympic Valley PSD  
 Water Cost of Service Study  
 Rate Schedule  
 Single Family Residential Rates

	<i>Present Rates</i>	<i>Proposed Rates</i>				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
SFR	\$1,222.75	\$1,274.80	\$1,351.29	\$1,432.37	\$1,518.31	\$1,609.41
<b>Consumption Charge</b>						
0 - 120	\$5.94	\$6.34	\$6.72	\$7.12	\$7.55	\$8.00
120 - 220	12.08	14.76	15.64	16.58	17.58	18.62
220 - 280	18.90	20.09	21.29	22.56	23.92	25.35
280 +	41.86	42.96	45.53	48.25	51.16	54.21

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Olympic Valley PSD  
 Water Cost of Service Study  
 Rate Schedule  
 Multi-Family Residential Rates

	<i>Present Rates</i>	<i>Proposed Rates</i>				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
MFR	\$592.77	\$665.59	\$705.53	\$747.86	\$792.73	\$840.29
<b>Consumption Charge</b>						
All Usage	\$10.30	\$9.69	\$10.27	\$10.89	\$11.54	\$12.23

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Olympic Valley PSD  
 Water Cost of Service Study  
 Rate Schedule  
 Commercial Rates

	<i>Present Rates</i>	<i>Proposed Rates</i>				
		<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>
<b>Fixed Charge</b>						
5/8"	\$1,004.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3/4"	1,095.90	1,025.00	1,025.00	1,025.00	1,030.00	1,040.00
1"	1,222.75	1,340.73	1,433.49	1,526.24	1,626.89	1,736.80
1 1/2"	2,456.00	2,687.99	2,869.30	3,050.62	3,247.70	3,463.20
2"	3,918.47	4,292.10	4,584.89	4,877.68	5,195.68	5,543.20
3"	7,357.70	8,057.60	8,605.70	9,153.80	9,749.23	10,400.00
4"	12,273.43	13,438.67	14,350.69	15,262.71	16,253.63	17,336.80
6"	24,550.37	26,878.16	28,699.43	30,520.70	32,499.74	34,663.20
<b>Consumption Charge</b>						
All Usage	\$7.89	\$8.36	\$8.86	\$9.39	\$9.95	\$10.55



Olympic Valley PSD  
 Water Cost of Service Study  
 Rate Schedule  
 Commercial Irrigation Rates

	<i>Present Rates</i>	<i>Proposed Rates</i>				
		<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>
<b>Fixed Charge</b>						
5/8"	\$1,004.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3/4"	1,095.90	1,025.00	1,025.00	1,025.00	1,030.00	1,040.00
1"	1,222.75	1,340.73	1,433.49	1,526.24	1,626.89	1,736.80
1 1/2"	2,456.00	2,687.99	2,869.30	3,050.62	3,247.70	3,463.20
2"	3,918.47	4,292.10	4,584.89	4,877.68	5,195.68	5,543.20
3"	7,357.70	8,057.60	8,605.70	9,153.80	9,749.23	10,400.00
4"	12,273.43	13,438.67	14,350.69	15,262.71	16,253.63	17,336.80
6"	24,550.37	26,878.16	28,699.43	30,520.70	32,499.74	34,663.20
<b>Consumption Charge</b>						
All Usage	\$14.28	\$14.85	\$15.74	\$16.68	\$17.68	\$18.74

Olympic Valley PSD  
 Water Cost of Service Study  
 Rate Schedule  
 Commercial Fire Rates

	<i>Present Rates</i>	<i>Proposed Rates</i>				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
5/8"	\$1,004.28	\$890.75	\$944.20	\$1,000.85	\$1,060.90	\$1,124.55

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**DRAFT REPORT**



**Olympic Valley PSD**  
**Sewer Rate Study**  
**January 2025**





January 17, 2025

Mr. Charley Miller  
General Manager  
Olympic Valley Public Service District  
305 Olympic Valley Road  
Olympic Valley, CA 96146

**Subject: Sewer Rate Study Draft Report**

Dear Mr. Miller:

HDR Engineering, Inc. (HDR) is pleased to present to the Olympic Valley Public Service District (District) the draft report for the 2024 sewer rate study (Study). The District's Study was developed to provide cost-based sewer rates that generate sufficient revenue to fund the operating and capital needs for the District's sewer utility. More specifically, the Study was designed to develop cost-based and proportional sewer rates for the District's customers. This report outlines the overall approach used to achieve these objectives, along with our findings, conclusions, and recommendations.

The costs associated with providing sewer services to the District's customers have been developed based on District specific information and is included within the development of the proposed rates. The Study was developed utilizing industry recognized generally accepted rate setting principles and methodologies. This report provides the basis for developing and implementing sewer rates which are cost-based, proportional, and defensible to the District's customers.

We appreciate the assistance provided by the District's project team in the development of this Study. More importantly, HDR appreciates the opportunity to provide these technical and professional services to Olympic Valley Public Service District.

Sincerely yours,  
HDR Engineering, Inc.

Josiah Close  
Utility Rates Project Manager

[hdrinc.com](http://hdrinc.com)

555 110<sup>th</sup> Ave NE, Suite 1200, Bellevue, WA 98004  
T 425-450-6200



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**Technical Appendix**

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# 1 Executive Summary

## Introduction

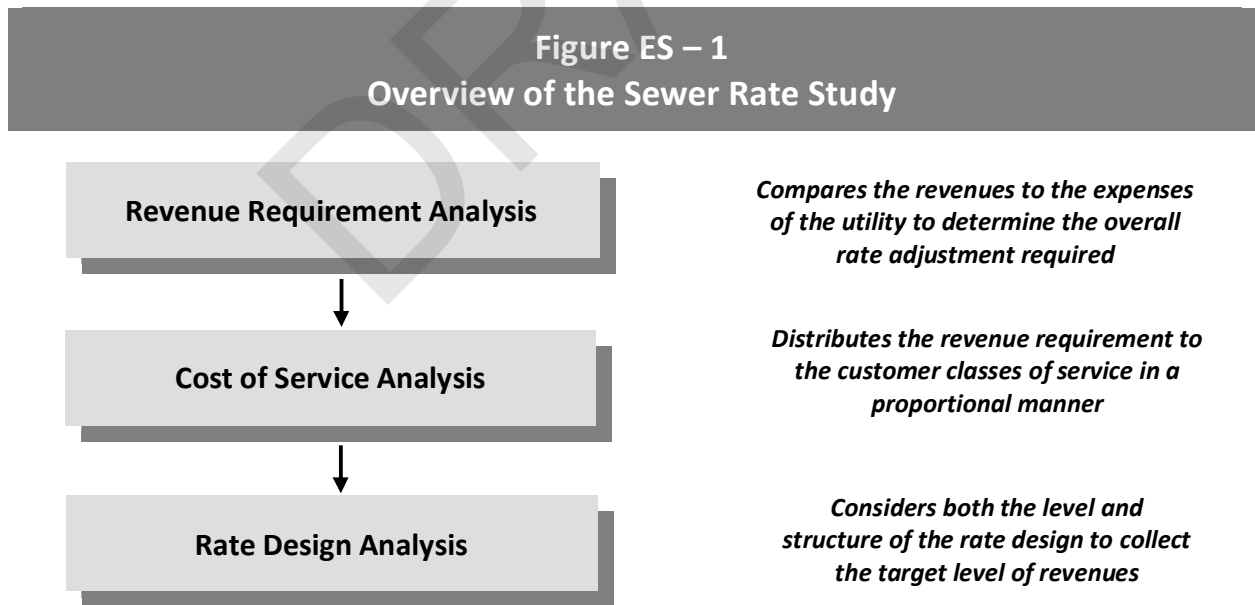
HDR Engineering, Inc. was retained by the Olympic Valley Public Service District to conduct a sewer rate study. The main objectives of the Study were to:

- Develop a projection of sewer revenues to support the District’s operating and capital costs
- Proportionally distribute the costs of providing sewer service to those customers receiving service
- Propose cost-based and proportional sewer rates for a multi-year time period

The District owns, operates, and maintains the sewer collection system in the Olympic Valley. The costs associated with providing sewer collection service to the District’s customers have been developed based on the provided information and are included within the development of the proposed sewer rates. It is important to note that the wastewater is conveyed to Tahoe-Truckee Sanitation Agency (TTSA) for regional treatment services and those costs are not included in the Study.

## Overview of the Rate Study Process

A rate study uses three interrelated analyses to address the adequacy and proportionality of the utility’s rates. These three analyses are a revenue requirement analysis, a cost of service analysis, and a rate design analysis. These three analyses are illustrated below in Figure ES – 1.



The above basic framework was utilized in the development of the Study for reviewing and evaluating the District’s sewer rates.

## Key Sewer Rate Study Results

The sewer rate study was developed based on the operating and capital costs necessary to provide sewer collection service to the District’s customers. The sewer analyses resulted in the following findings, conclusions, and recommendations.

- A revenue requirement analysis was developed for the time period of FY 2025 through FY 2034
- The District’s FY 2025 adopted budget was used as the starting point of the analysis for the utility
- Operation and maintenance expenses are projected to increase at inflationary levels with no assumed changes to levels of service or anticipated extraordinary expenses
- The proposed sewer revenue adjustment is 5.0%, annually, from FY 2026 to FY 2030, effective July 1 of each year<sup>1</sup>
- A cost of service analysis was developed to review the existing sewer rates and to proportionally distribute the revenue requirement between the customer classes of service
- The results of the cost of service analysis provided the unit costs (i.e., cost basis), which were used to establish the proposed sewer rates
- The Study developed proposed rates for FY 2026 – FY 2030, by class of service

## Summary of the Sewer Revenue Requirement Analysis

The sewer utility revenue requirement analysis is the first analytical step in the rate study process. The revenue requirement analysis determines the adequacy of the current sewer rates to fund current and future operating and capital expenses. From this analysis, a determination can be made as to the overall level of sewer rate revenue adjustments needed to provide adequate and prudent funding for the sewer system.

For the Study, the revenue requirement was developed for the time period of FY 2025 – FY 2034. As a practical matter, a multi-year time frame is recommended in an attempt to identify any major expenses that may be on the horizon. By anticipating future financial requirements, the District can begin planning for these changes sooner, thereby minimizing short-term rate impacts and overall long-term rates. The focus of the Study was on the next five-years – i.e., the rate setting period – of FY 2026– FY 2030.

For the revenue requirement analysis, a cash basis approach was utilized. The cash basis approach is the most commonly used methodology by municipal utilities to set their revenue requirement and is comprised of O&M expenses, transfers, annual debt service payments, and rate funded capital. The primary financial inputs in the development of the revenue requirement were the District’s adopted FY 2025 budget document, historical billed customer and

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<sup>1</sup> The proposed revenue adjustments represent the overall targeted revenue adjustment for the sewer utility. Rate impacts between customer classes and individual customers may vary on an individual customer basis.



consumption data, and the District’s capital improvement and replacement plans. Budgeted O&M expenses were projected using inflationary factors for the District’s various expenses to provide sewer collection services over the projected time period.

The proper and adequate funding of capital projects is important to help minimize rate increases over time. A general financial guideline states that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense through rates. Annual depreciation expense reflects the current investment in plant being depreciated or “losing” its useful life. Therefore, this portion of plant investment needs to be replaced to maintain the existing level of infrastructure (and service levels). However, it must be kept in mind that, in theory, annual depreciation expense reflects an investment in infrastructure that was placed in service an average of 15 years ago, assuming a 30-year useful, depreciable, life. Simply funding an amount equal to annual depreciation expense will not be sufficient to fund the replacement of an existing or depreciated facility. Therefore, consideration should be given to funding within rates some amount greater than annual depreciation expense for renewals and replacements. For the District’s Study, the District developed a capital replacement plan and a capital improvement plan to identify the projects necessary to maintain the sewer system as well as meet new growth and expansion on the system.

As a part of the Study, and in keeping with the District’s past funding approach, a concerted effort was made to increase the overall level of “pay-as-you-go” (rate) funding to meet the District’s capital replacement plan in order to maintain the sewer system. Provided below in Table ES – 1 is a summary of the amount of rate funded capital over the five-year rate setting period.

Table ES – 1						
Summary of the Sewer Annual Rate Funded Capital (\$000)						
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Total Capital Improvement Projects	\$377	\$1,520	\$840	\$1,139	\$675	\$1,469
Less: Other Funding (reserves)	36	1,075	330	599	90	874
<b>Total Rate Funded Capital</b>	<b>\$340</b>	<b>\$445</b>	<b>\$510</b>	<b>\$540</b>	<b>\$585</b>	<b>\$595</b>

As a point of reference, the District’s annual depreciation expense is approximately \$268,000 (FY 2023). This financial plan has placed the District’s rate funding for capital at approximately \$340,000 and is increasing over time to prudently fund capital replacement needs. The annual funding through rates increases to \$595,000 by FY 2030 to reflect the capital replacement plan funding needs over the time period reviewed. In developing this financial plan, HDR and the District have attempted to minimize rate impacts while funding the capital replacement plan projects of the District over the long-term. This approach has strengthened the District’s “pay-as-you-go” funding for capital projects.

Given a projection of operating and capital expenses, a summary of the revenue requirement analysis was developed. Provided below in Table ES – 2 is a summary of the revenue requirement analysis for the District’s sewer utility.

Table ES – 2 Summary of the Revenue Requirement Analysis (\$000)						
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Revenues</b>						
Rate Revenues	\$1,748	\$1,757	\$1,765	\$1,774	\$1,783	\$1,792
Non-Operating Revenues	<u>423</u>	<u>373</u>	<u>361</u>	<u>355</u>	<u>354</u>	<u>350</u>
<b>Total Revenues</b>	<b>\$2,171</b>	<b>\$2,129</b>	<b>\$2,126</b>	<b>\$2,130</b>	<b>\$2,137</b>	<b>\$2,142</b>
<b>Expenses</b>						
Total Sewer Dept. Expenses	\$668	\$693	\$719	\$746	\$774	\$804
Total Admin. Expenses	1,028	1,036	1,075	1,116	1,159	1,233
Net Annual Debt Service	39	39	0	0	0	0
Rate Funded Capital	340	445	510	540	585	595
Reserve Funding	<u>96</u>	<u>4</u>	<u>3</u>	<u>7</u>	<u>4</u>	<u>5</u>
<b>Total Expenses</b>	<b>\$2,171</b>	<b>\$2,217</b>	<b>\$2,307</b>	<b>\$2,409</b>	<b>\$2,522</b>	<b>\$2,637</b>
Bal./(Def.) of Funds	\$0	(\$88)	(\$181)	(\$280)	(\$384)	(\$495)
Bal. as a % of Rate Rev.	0.0%	5.0%	10.3%	15.8%	21.6%	27.6%
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>
Add'l Rev. from Rate Adj.	\$0	\$88	\$181	\$280	\$384	\$495
Total Bal./(Def.) of Funds	\$0	\$0	\$0	\$0	\$0	\$0

As can be seen, the revenue requirement has summed the O&M, rate funded capital, net debt service and reserve funding. The total revenue requirement is then compared to the total sources of funds, which include the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison, a balance or deficiency of funds in each year can be determined. This balance or deficiency of funds is then compared to the rate revenues to determine the level of rate adjustment needed to meet the revenue requirement. It is important to note that the “Bal./(Def.) of Funds” row is cumulative. That is, any adjustments in the initial years will reduce the deficiency in later years. Over the projected time period, the total rate revenue deficiency is 27.6%.

Based on the revenue requirement analysis developed herein, HDR has concluded that the District will need to adjust their sewer rates over the next five years (FY 2026 – FY 2030). HDR has reached this conclusion for the following reasons:

- Rate adjustments are necessary to fund the District’s operating and capital costs
- The proposed rate adjustments maintain the District’s strong financial health and provide long-term sustainable funding levels for the District

In reaching this conclusion, HDR would recommend that the District adopt the proposed rates through FY 2030 in order to provide sufficient funding for the sewer utility.

## Summary of the Sewer Cost of Service Analysis

A cost of service analysis determines the proportional distribution of the revenue requirement to the customer classes of service (i.e., Residential, Residential Multi-Unit, Commercial). The objective of the cost of service analysis is different from determining the revenue requirement. A revenue requirement analysis determines the utility’s overall financial needs, while the cost of service analysis determines the proportional manner in which to collect that revenue requirement.

In summary form, the cost of service analysis began by functionalizing the revenue requirement for the sewer system. The functionalized revenue requirement was then allocated to the appropriate cost component(s). The individual allocation totals are then proportionally distributed to the customer classes of service based on each customer class’s use of the system. The distributed expenses for each customer class were then aggregated to determine each customer class’s overall revenue responsibility. Table ES – 3 provides a summary of the cost of service analysis completed for the District’s sewer utility.

Class of Service	Present Rate Revenues	Distributed Costs	\$ Difference	% Difference
<b>Residential</b>	\$536	\$564	(\$28)	5.3%
<b>Residential Multi-Unit</b>	846	869	(22)	2.6%
<b>Commercial</b>	<u>374</u>	<u>412</u>	<u>(37)</u>	10.0%
<b>Total</b>	<b>\$1,757</b>	<b>\$1,844</b>	<b>(\$88)</b>	<b>5.0%</b>

The results of the cost of service analysis indicate cost differences between the customer classes of service. In reaching this conclusion, one of the variables that will play a role in the results is the seasonality of the District’s customer base, such as a majority of the residential accounts being second homes. This is also true for the multi-family accounts, which can be very seasonal in nature. In addition, customer characteristics for commercial customers have changed since the prior rate study.

## Summary of the Sewer Rate Designs

The final step of the rate study process is the design of proposed sewer rates to collect the desired levels of revenue, based on the results of the revenue requirement and cost of service analyses. The revenue requirement analysis provided a set of recommendations related to annual rate revenue adjustments, while the cost of service results indicated that interclass adjustments were needed at this time. Given the above, the District’s existing sewer rates were adjusted to reflect the results of the cost of service analysis. Provided below in Table ES – 4 is a summary of the District’s present and proposed sewer rates.

Table ES – 4 Summary of the Proposed Sewer Rates						
	Present Rates	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>	<i>\$ / Acct. or Unit / Yr</i>					
Residential (SFR)	\$810.34	\$853.12	\$895.78	\$940.57	\$987.60	\$1,036.98
Residential Multi-Unit	637.57	654.32	687.04	721.39	757.46	795.33
Commercial	1,434.51	1,578.75	1,657.69	1,740.57	1,827.60	1,918.98
Residential - Pool / Spa	1,058.71	1,111.65	1,167.23	1,225.59	1,286.87	1,351.21
<b>Consumption Charge</b>	<i>\$ / 1,000 gal</i>					
Commercial <sup>[1]</sup>	\$19.14	\$21.05	\$22.10	\$23.21	\$24.37	\$25.59

[1] – The volume fee is for all water use over 75,000 gallons per year for commercial customers

As can be seen in Table ES – 4, the rates for FY 2026 have been revised to reflect the proportional distribution of the revenue requirement. The first proposed rate adjustment to the District’s sewer rates occurs in FY 2026 on July 1, 2025 and is a realignment of the rates to reflect the cost of service results. The rates are then adjusted each subsequent July 1 by the overall revenue adjustment of 5.0% annually. Section 6 of this report provides a detailed discussion of the proposed sewer rates for FY 2026 – FY 2030.



## 2 Introduction and Overview

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HDR was retained by the Olympic Valley Public Service District to conduct a sewer rate study. The objective of the Study was to review the District’s operating and capital costs in order to develop a financial plan and cost-based rates for the sewer system. The Study determined the adequacy of the existing sewer rates and provides the framework and cost basis for the proposed rates.

The District owns and operates the sewer collection system in the Olympic Valley, which includes the collection and conveyance of wastewater to an interceptor within the Tahoe-Truckee Sanitary Agency (TTSA) collection infrastructure, who then provides treatment service.

### 2.1 Goals and Objectives

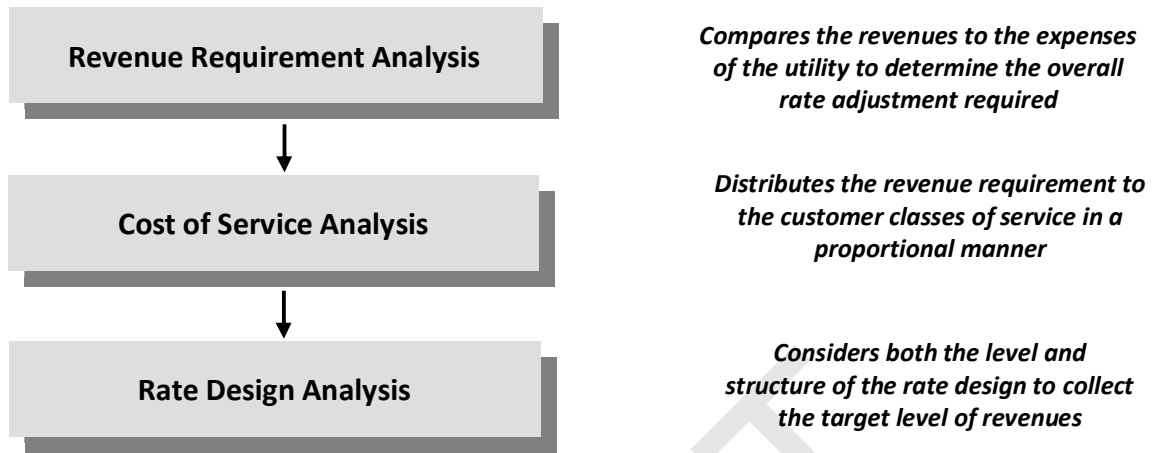
The District had a number of key objectives in developing the sewer rate study. These key objectives provided a framework for policy decisions in the analysis that follows. These key objectives were as follows:

- Develop the wastewater study in a manner that is consistent with the principles and methodologies established by the Water Environment Federation (WEF), Manual of Practice No. 27, Financing and Charges for Wastewater Systems
- In financial planning and establishing the District’s sewer rates, review and utilize best industry practices, while recognizing and acknowledging the specific and unique characteristics of the District’s sewer system
- Review the District’s rates utilizing “generally accepted” rate making methodologies to determine the adequacy and proportionality of the sewer rates
- Meet the District’s financial planning criteria and goals, such as debt service coverage ratios, adequate funding of capital infrastructure replacement, and maintenance of prudent reserve levels
- Develop a financial plan which adequately supports the utility’s funding requirements, while attempting to minimize overall impacts to rates
- Provide sewer rates designed to meet the requirements of Article XIII D

### 2.2 Overview of the Rate Study Process

User rates must be set at a level where a utility’s operating and capital expenses are met with the revenues received from customers. This is an important point, as failure to achieve this objective may lead to insufficient funds to maintain system integrity. To evaluate the adequacy of the existing sewer rates, a rate study is often performed. A rate study consists of three interrelated analyses. Figure 2 – 1 provides an overview of these analyses.

**Figure 2 – 1**  
**Overview of the Sewer Rate Study Analyses**



The above framework for reviewing and evaluating rates was utilized for the development of the District’s sewer rate study.

### **2.3 Organization of the Study**

This report is organized in a sequential manner that first provides an overview of utility rate setting principles, followed by sections that detail the specific steps used to review and develop the District’s proposed sewer rates. The following sections comprise the District’s sewer rate study report:

- **Section 3** – Overview of Rate Setting Principles
- **Section 4** – Revenue Requirement Analysis
- **Section 5** – Cost of Service Analysis
- **Section 6** – Rate Design Analysis

A Technical Appendix is attached at the end of this report, which details the technical analyses that were undertaken in the preparation of the Study.

## 3 Overview of Rate Setting Principles

This section of the report provides background information about the sewer rate setting process, including descriptions of generally accepted principles, methods of determining a revenue requirement, the cost of service analysis, and rate design. This information is useful for gaining a better understanding of the details presented in the following sections of this report.

### 3.1 Generally Accepted Rate Setting Principles

As a practical matter, utilities should consider setting their rates around some generally accepted or global principles and guidelines. Utility rates should be:

- Cost-based, proportional, and set at a level that meets the utility's full revenue requirement
- Easy to understand and administer
- Designed to conform to "generally accepted" rate setting techniques
- Stable in their ability to provide adequate revenues to meet the utility's financial, operating, and regulatory requirements
- Established at a level that is stable from year-to-year from a customer's perspective

### 3.2 Determining the Revenue Requirement

Most public utilities use the cash basis approach for establishing the revenue requirement and setting rates. This approach conforms to most public utility budgetary requirements and the calculation is easy to understand. A public utility totals its cash expenditures for a period of time to determine required revenues. The revenue requirement for a public utility is usually comprised of the following costs or expenses:

- **Total Operating Expenses:** This includes a utility's operation and maintenance (O&M) expenses, plus applicable taxes or transfer payments. Operation and maintenance expenses include the materials, electricity, labor, supplies, etc., necessary to keep the utility functioning.
- **Total Capital Expenses:** Capital expenses are calculated by adding debt service payments (principal and interest) to capital replacements financed with rate revenues. In lieu of including capital replacements financed with rate revenues, a utility sometimes includes depreciation expense to stabilize the annual revenue requirement.

Under the cash basis approach, the sum of the total O&M expenses plus the total capital expenses equals the utility's revenue requirement during any selected period of time (historical or projected).

Note that the two portions of the capital expense component (debt service and rate funded capital) are necessary under the cash basis approach because utilities generally cannot finance all of their capital facilities with long-term debt. At the same time, it is often difficult to pay for capital expenditures on a "pay-as-you-go" basis given that some major capital projects may have significant rate impacts on a utility, even when financed with long-term debt. Many utilities have

found that some combination of pay-as-you-go funding and long-term financing will often lead to the minimization of rate increases over time.

Public utilities typically use the cash basis<sup>2</sup> approach to establish their revenue requirement. An exception occurs if a public utility provides service to a wholesale or contract customer. In this situation, a public utility could use the utility basis approach (see Table 3 – 1) regarding earning a fair return on its investment.

Table 3 – 1 Cash versus Utility Basis Comparison			
Cash Basis		Utility Basis (Accrual)	
+	O&M Expenses	+	O&M Expenses
+	Taxes/Transfer Payments	+	Taxes/Transfer Payments
+	Capital Improv. Funded From Rates (≥ Depreciation Expense)	+	Depreciation Expense
+	Debt Service (Principal + Interest)	+	Return on Investment
=	Total Revenue Requirement	=	Total Revenue Requirement

### 3.3 Analyzing Cost of Service

After the total revenue requirement is determined, it is proportionally distributed to the users of the service. The distribution, usually analyzed through a cost of service analysis, reflects the cost relationships for providing sewer services. A cost of service analysis requires three analytical steps:

1. Costs are **functionalized** or grouped into various cost categories related to providing service (collection, pumping, etc.). This step is largely accomplished by the utility’s accounting system.
2. The functionalized costs are then **allocated** to specific cost components. Allocation refers to the arrangement of the functionalized data to the appropriate cost component(s). For example, a utility’s sewer costs are typically allocated as volume, strength, and customer-related.
3. Once the costs are allocated to the appropriate cost component(s), they are proportionally **distributed** to the customer classes of service. The distribution is based on each customer class’s relative contribution to the cost component (i.e., benefits received from and burdens placed on the system and its resources). For example, customer-related costs are distributed to each class of service based on the total number of customers in

<sup>2</sup> Cash basis as used in the context of rate setting is not the same as the terminology used for accounting purposes and recognition of revenues and expenses. As used for rate setting, cash basis refers to the specific cost components to be included within the revenue requirement analysis.



that class of service. Once the costs are distributed, the revenues required from each customer class of service to achieve cost-based rates can be determined.

### **3.4 Designing Utility Rates**

Rates that meet the utility’s objectives are designed based on both the revenue requirement and cost of service analyses. This approach results in rates that are strictly cost-based and do not consider other non-cost based goals and objectives (conservation, economic development, ability to pay, revenue stability, etc.). In designing the final proposed rates, factors such as the ability to pay, continuity of past rate philosophy, economic development, ease of administration, and customer understanding may be taken into consideration. However, the proposed rates must take into consideration each customer class’s proportional share of costs distributed through the cost of service analysis to meet the requirements of Proposition 218.

### **3.5 Economic Theory and Rate Setting**

One of the major justifications for a rate study is founded in economic theory. Economic theory suggests that the price of a commodity must roughly equal its cost if equity among customers is to be maintained. This statement’s implications on utility rate designs are significant. For example, a sewer utility treats wastewater from all customers and must plan for the treatment of different wastewater strengths. It follows that customers with high-strength wastewater should proportionally pay for the higher cost associated with treating their higher strength wastewater. When costing and pricing techniques are refined, consumers have a more accurate understanding of what the service costs to provide.



## 4 Revenue Requirement Analysis

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The revenue requirement analysis is the first analytical step in the rate study process. From this analysis, a determination can be made as to the overall level of rate adjustment needed to provide adequate funding for both the operating and capital needs of the utility. The revenue requirement utilized the District’s adopted budget, capital replacement and capital improvement plans, and historical customer and consumption data.

### 4.1 Determining the Revenue Requirement

In developing the District’s sewer revenue requirement, the sewer utility must financially “stand on its own” and be properly funded. That is, no revenues are to be transferred from other District funds in order to support the sewer utility. As a result, the sewer revenue requirement analysis assumes the full and proper funding needed to operate and maintain the sewer system on a financially sound and prudent basis.

### 4.2 Establishing a Time Frame and Approach

To begin calculating the revenue requirement for the District’s sewer system, a time frame was established. The budget year (FY 2025) plus a 9-year review period (FY 2026 – FY 2034) was determined with a 5-year rate setting period of FY 2026 through FY 2030. As noted, the financial plan was based on the District’s adopted sewer budget, which was then projected over a multi-year period based on historical escalation factors. Reviewing a multi-year time period is recommended as it enables the District to identify major expenses that may be on the horizon. By anticipating future financial requirements, the District can begin planning for these changes sooner, thereby minimizing short-term rate impacts and overall long-term rates.

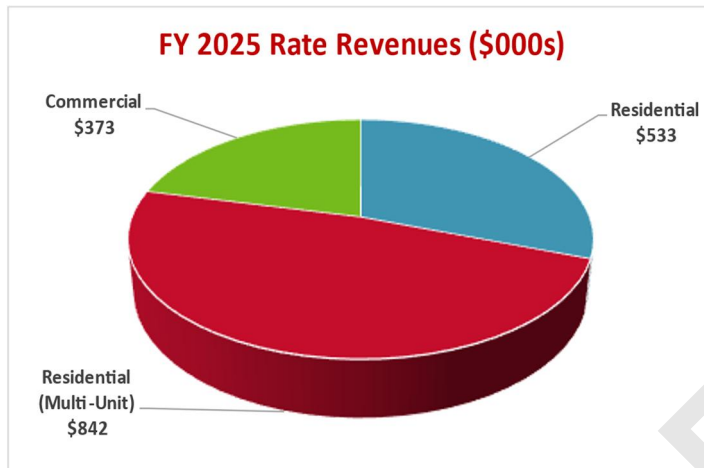
The second step in determining the revenue requirement was to decide on the basis of accumulating costs. In this particular case, the revenue requirement analysis utilized a cash basis approach. The cash basis approach (see Table 3 – 1) is the most commonly used methodology by municipal utilities to set their revenue requirement. This is also the methodology that the District has historically used to establish their sewer revenue requirement.

Given a time period around which to develop the revenue requirement and a method to accumulate the costs, the focus shifts to the development and projection of the revenues and expenses of the District’s sewer system.

The primary financial inputs in the development of the revenue requirement were the District’s adopted FY 2025 budget document, recent billed customer and consumption data, as well as the District’s capital improvement plan (CIP) and capital replacement plan (CRP). Presented below is a detailed discussion of the steps and key assumptions contained in the development of the District’s revenue requirement analysis.

### 4.3 Projecting Rate and Other Miscellaneous Revenues

The first step in developing a projection of the sewer rate revenues, at present rate levels, was to determine the projected billing units for each customer class of service. The billing units for each customer class were then multiplied by the applicable current sewer rates. This method of independently calculating revenues links the projected revenues used within the analysis to the projected billing units. It also helps to confirm that the billing units used within the Study are



reasonable for purposes of projecting future revenues, distributing costs and, ultimately, establishing the proposed sewer rates.

The vast majority of the District’s rate revenues are derived from Residential Multi-Unit customers, but they also serve a variety of Residential and Commercial customers. In total, and at currently adopted rate levels, the District’s sewer system is projected to receive approximately \$1.7 million in

rate revenue in FY 2025. Over time, the Study has assumed a conservative level of customer growth at 0.5%/year. By FY 2030, rate revenues - assuming no rate adjustments - are projected to be approximately \$1.8 million.

In addition to rate revenues, the District also receives non-operating or miscellaneous revenues. These are revenues related to rental income, interest income, property tax income, etc. In total, the District is projected to receive approximately \$423,000 in non-operating revenues in FY 2025. Annual property tax revenues, the largest source of miscellaneous income, were estimated to increase slightly over the Study rate setting period.

On a combined basis, taking into account the rate and non-operating revenues, the District’s sewer utility has total projected revenues of approximately \$2.2 million in FY 2025. As a result of estimated growth as noted above, the District’s sewer rate revenues increase slightly and are approximately \$1.8 million in FY 2030. The assumptions used for growth can be found in Exhibit 2 of the Technical Appendix, a summary of the calculation of the revenues can be found in Exhibit 5, and the projection of rate revenues is provided in Exhibit 3.

### 4.4 Projecting Operation and Maintenance Expenses

Operation and maintenance (O&M) expenses are incurred by the District to maintain and improve the sewer collection and conveyance system. The starting point for the projection of the O&M expenses was the adopted FY 2025 budget. Budgeted O&M expenses were projected over the review period (FY 2026 – FY 2034) based on historical inflationary factors. These factors took into consideration the District’s historical cost increases and projected increases. The factors

ranged from 3.0% to 6.0% annually for the various types of expenses (e.g., labor, benefits, materials & supplies). In total, O&M expenses were projected at an annual inflation rate of approximately 4.2% over the rate setting period. The total operation and maintenance expenses budgeted for the sewer utility are projected to be approximately \$1.7 million in FY 2025. Over the five-year rate setting period, total O&M expenses are projected to increase to approximately \$2.0 million by FY 2030.

## 4.5 Projecting Capital Funding Needs

A key component in the development of the sewer revenue requirement was properly and adequately funding capital improvement needs. One of the major issues facing many utilities across the U.S. is the amount of deferred capital projects as well as funding pressure from growth/expansion-related improvements. The proper and adequate funding of capital projects is an important issue for all sewer utilities and is not just a local issue or concern of the District.

In general, there are three types of capital projects that the District may need to fund. These include:

- Renewal and replacement projects (CRP)
- Growth/capacity expansion projects (CIP)
- Regulatory-related projects

A renewal and replacement project is essentially maintaining the existing system that is in place today. As the existing plant becomes worn out, obsolete, etc., the District should be making continuous investments to maintain the integrity of its facilities. The District has developed a 100-year capital replacement plan, which will help guide and prioritize capital projects over time. In contrast to this, the District may make capital investments to expand the capacity of their facilities to accommodate future customers. The District has also developed a capital improvement plan to address these needs and utilizes close relationships with developers so that the timing and necessity of improvements can be planned appropriately. Finally, certain projects may be a function of a regulatory requirement in which the Federal or State government mandates the need for an improvement to the system to meet a regulatory standard. Understanding these different types of capital projects is important as it may help to explain why costs are increasing as well as the cost drivers for identified rate adjustments. In addition, the way in which projects are funded may vary by the type of capital project. For example, renewal and replacement projects may be paid for via rates and funded on a “pay-as-you-go basis”. In contrast to this, growth or capacity expansion projects may be funded through the collection of connection fees (i.e., growth-related charges) in which new development pays a proportional share of the cost of improvements required as a result of their connection (impact). Finally, regulatory projects may be funded by a variety of different means, which may include rates, long-term debt, grants, etc.

While the above discussion appears to neatly divide capital projects into three clearly defined categories, the reality of working with specific capital projects may be more complex. For example, a pump may be replaced, but while being replaced, it is up sized to accommodate

greater capacity. There are many projects that share these “joint” characteristics. At the same time, projects may not be “replacement” related, but rather “improvement” related. Provided below in Table 4 – 1 is a summary of the sewer capital funding analysis.

<b>Table 4 – 1</b>						
<b>Summary of the Sewer Capital Improvements (\$000)</b>						
	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>
<b>Capital Projects</b>						
Capital Improvement Projects (CIP)	\$36	\$16	\$83	\$0	\$0	\$0
Capital Replacement Projects (CRP)	0	991	434	1,093	460	1,183
Utility Equipment Fleet Projects	62	131	78	0	45	257
Facilities Capital Projects	278	382	245	46	61	29
To Sewer FARF	\$0	\$0	\$0	\$0	\$110	\$0
Future Unidentified Projects	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Total Capital Projects</b>	<b>\$377</b>	<b>\$1,520</b>	<b>\$840</b>	<b>\$1,139</b>	<b>\$675</b>	<b>\$1,469</b>
<b>Less: Outside Funding Sources</b>						
Operating Reserve	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve	36	16	173	90	90	0
Fixed Asset Replacement Fund	0	1,059	157	509	0	874
New SRF Loans	0	0	0	0	0	0
New Revenue Bonds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Outside Funding Sources</b>	<b>\$36</b>	<b>\$1,075</b>	<b>\$330</b>	<b>\$599</b>	<b>\$90</b>	<b>\$874</b>
<b>Rate Funded Capital</b>	<b>\$340</b>	<b>\$445</b>	<b>\$510</b>	<b>\$540</b>	<b>\$585</b>	<b>\$595</b>

While the total amount of a project may vary from year to year, this sewer capital funding plan has attempted to provide a consistent funding source for necessary capital improvements and replacements. In this case, the sewer rates will annually fund an amount ranging from \$340,000 to \$595,000. As a point of reference, the District’s annual depreciation expense is approximately \$268,000.

It is important to note and understand that depreciation expense is not the same as replacement cost. Thus, funding an amount which exceeds depreciation expense is both prudent and appropriate. As noted, to help establish a prudent level of annual replacement funding through rates, HDR worked with District staff to develop a funding plan for the 100-year replacement plan. To fund the CRP projects in each year, annual rate funding would need to be increased to avoid future long-term debt. In developing this financial plan, HDR and the District have attempted to minimize rate impacts while funding the planned capital replacement projects of the District.

## 4.6 Projection of Debt Service

The District currently has one outstanding long-term debt issuance, a facility loan, with a debt service payment of \$38,822 in FY 2025, which will be retired in FY 2026. No new long-term debt issuances are assumed over the projected five-year period. HDR is not providing municipal advice as it relates to bonds, terms, or structures of debt issuance. Rather, the Study simply aims to identify the existing annual debt service payments and projection of future funding needs while utilizing conservative terms for modeling purposes only.

## 4.7 Reserve Funding

The final component of the revenue requirement analysis is reserve funding, or additional transfers to, or from, reserve funds to maintain prudent ending fund balances or for future funding of specific projects. Any additional balance of funds after the transfers are made is transferred to the fixed asset replacement fund to maintain minimum fund balances. As will be shown, the sewer rates are at sufficient levels and funds are being transferred back to reserves to meet minimum target levels and to be available for future capital projects.

## 4.8 Summary of the Revenue Requirement

Given the above projections of revenues and expenses, a summary of the sewer revenue requirement analysis can be developed. In developing the revenue requirement analysis, consideration was given to the financial planning considerations of the District. In particular, emphasis was placed on attempting to minimize rates, yet still having adequate funds to support the operational expenses and capital projects throughout the projected time period. Presented below in Table 4 – 2 is a summary of the District’s projected sewer revenue requirement. Detailed exhibits of this analysis can be found in the Technical Appendix (Exhibits 1 – 5).

**Table 4 – 2**  
**Summary of the Revenue Requirement Analysis (\$000)**

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Revenues</b>						
Rate Revenues	\$1,748	\$1,757	\$1,765	\$1,774	\$1,783	\$1,792
Non-Operating Revenues	<u>423</u>	<u>373</u>	<u>361</u>	<u>355</u>	<u>354</u>	<u>350</u>
<b>Total Revenues</b>	<b>\$2,171</b>	<b>\$2,129</b>	<b>\$2,126</b>	<b>\$2,130</b>	<b>\$2,137</b>	<b>\$2,142</b>
<b>Expenses</b>						
Total Sewer Dept. Expenses	\$668	\$693	\$719	\$746	\$774	\$804
Total Admin. Expenses	1,028	1,036	1,075	1,116	1,159	1,233
Net Annual Debt Service	39	39	0	0	0	0
Rate Funded Capital	340	445	510	540	585	595
Reserve Funding	<u>96</u>	<u>4</u>	<u>3</u>	<u>7</u>	<u>4</u>	<u>5</u>
<b>Total Expenses</b>	<b>\$2,171</b>	<b>\$2,217</b>	<b>\$2,307</b>	<b>\$2,409</b>	<b>\$2,522</b>	<b>\$2,637</b>
Bal./(Def.) of Funds	\$0	(\$88)	(\$181)	(\$280)	(\$384)	(\$495)
Bal. as a % of Rate Rev.	0.0%	5.0%	10.3%	15.8%	21.6%	27.6%
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>
Add'l Rev. from Rate Adj.	\$0	\$88	\$181	\$280	\$384	\$495
Total Bal./(Def.) of Funds	\$0	\$0	\$0	\$0	\$0	\$0

As can be seen, the revenue requirement has summed the O&M, rate funded capital, net debt service, and reserve funding. The total revenue requirement is then compared to the total sources of funds, which include the rate revenues, at present rate levels, and other miscellaneous revenues. From this comparison, a balance or deficiency of funds in each year can be determined. This balance or deficiency of funds is then compared to the rate revenues to determine the level of rate adjustment needed to meet the revenue requirement. It is important to note that the “Bal./(Def.) of Funds” row is cumulative. That is, any adjustments in the initial years will reduce the deficiency in later years. Over the projected time period, the total deficiency of rates is 27.6%.

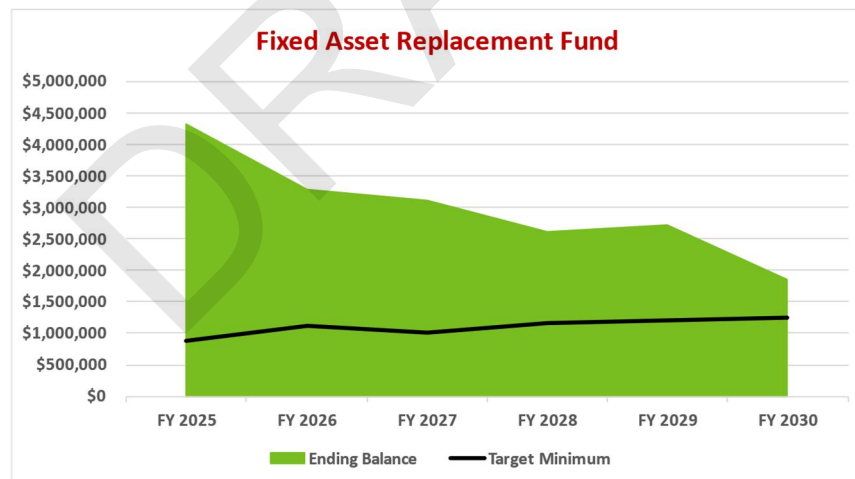
The revenue requirement summarized in Table 4 – 2 has been developed to meet the financial planning objectives of the District. More specifically, the District strives to adequately fund its sewer operating and capital expenses. Table 4 – 2 has also included a set of proposed rate revenue adjustments (green band), which are sufficient to meet the total revenue requirement over the projected time period. The proposed rate adjustments are a function of assumed inflation over the time period, coupled with the need to increase the level of capital improvement funding from rates (renewal and replacement funding) as well as meet minimum reserve levels. If sewer rate adjustments are not implemented, the District will not have sufficient funding to prudently operate and maintain the sewer system. Over the five-year rate setting period, annual deficiencies range from \$88,000 to \$495,000.

## 4.9 Reserve Levels

A key element of determining the financial health and sustainability of the District’s sewer utility is to review the level of available reserves after the proposed rate adjustments. Utilities can have several different reserves, each with a different purpose. Each of these funds can have a minimum ending balance that, if reached or falls below, is a signal that the District should review the revenue sources associated with each fund. The minimum ending balances will vary depending on the purpose of the fund and the expected revenue sources.

For the District, there are two primary funds for the sewer utility, a fixed asset replacement fund and capital reserve.

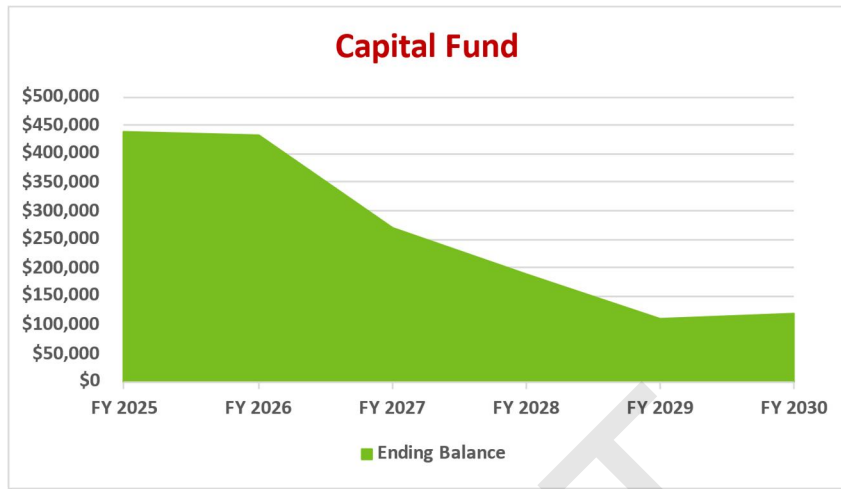
- **Fixed Asset Replacement Fund (FARF)** – The FARF reserve is in place to meet the District’s annual cash flow needs in addition to funding capital projects that are related to the renewal and replacement of the sewer system. This fund acts in a similar fashion as the capital fund, but with the distinction that the source of funding is from current customers and that funding is only used toward maintaining the current system. The District has set a minimum ending balance of 60 days of O&M expenses plus the five year rolling average of the capital replacement plan (CRP), which equates to approximately \$874,000 in FY 2025. This target is used in order to maintain a sufficient amount of funds to cover expenses, should any unexpected interruption of rate revenues occur. Over the projected time period, this fund increases and decreases depending on overall capital replacement needs, but maintains prudent reserve levels.



- **Capital Reserve** – The capital reserve is in place to fund capital improvement projects, specifically related to growth. This fund acts to store funds for use towards capital projects where the main source of revenue is from connection fees. This creates the nexus between the portion of the connection fee which is related to future growth projects, which aims to shield current customers from bearing these costs. In this way, the District can decrease the impact to rates and maintain a smoother projection over time.



Currently, there is no target minimum set for the capital reserve. Over time, the capital reserve fund increases until capital improvement projects require funding.



#### 4.10 Revenue Requirement Conclusions and Recommendations

Based on the revenue requirement analysis developed herein, HDR has recommended that the District adjust sewer rates over the next five-year period (FY 2026 – FY 2030). HDR has reached this conclusion for the following reasons:

- Rate revenue adjustments are necessary to fund the District’s capital improvement and replacement needs
- Rate revenue adjustments are necessary to fund the District’s capital projects on a “pay-as-you-go” basis and avoid the need to issue any long-term debt
- The proposed rate adjustments maintain the District’s strong financial health and provide long-term, sustainable funding levels for the District

In reaching this conclusion, HDR would recommend that the District adopt the proposed rates through FY 2030 in order to provide sufficient funding for the operating and capital expenses of the sewer utility.

## 5 Cost of Service Analysis

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In the previous section, the revenue requirement analysis focused on the total sources and applications of funds required to adequately fund the District's sewer collection system. This section will provide an overview of the cost of service analysis developed for the District's sewer utility.

A cost of service analysis determines the proportional distribution of the total revenue requirement between the customer classes of service. The previously developed revenue requirement was utilized in the development of the cost of service analysis.

### 5.1 Objectives of a Cost of Service Analysis

There are two primary objectives in conducting a sewer cost of service analysis:

- Distribute the District's revenue requirement between the customer classes of service; and
- Derive average unit costs (i.e., cost-based rates) for subsequent rate designs

The primary objective of the cost of service analysis is the proportional manner in which to collect the revenue requirement from the District's customer classes of service. The second rationale for conducting a cost of service analysis is to ensure that proposed rates are designed such that they properly reflect the costs incurred by the District. For example, a sewer utility typically incurs costs related to flow (wastewater volumes), strength, and customer-related costs.

### 5.2 Determining the Customer Classes of Service

The first step in a cost of service analysis is to determine the customer classes of service. Based on the current sewer rates, the classes of service used within the cost of service analysis were:

- Residential
- Residential Multi-Unit
- Commercial

In determining classes of service for cost of service purposes, the objective is to group customers together into similar or homogeneous groups based on facility requirements and/or flow characteristics. HDR reviewed the current customer characteristics and facility requirements in order to determine the classes of service, which were the District's current customer classes, that are also consistent with typical industry practices.

## 5.3 General Cost of Service Procedures

In order to determine the cost to serve each customer class of service on the District’s sewer system, a cost of service analysis is conducted. A cost of service analysis utilizes a three-step approach to review costs. These steps take the form of functionalization, allocation, and distribution. Provided below is a detailed discussion of the sewer cost of service analysis conducted for the District’s Study, and the specific steps taken within the analysis.

### 5.3.1 Functionalization of Costs

The first analytical step in the cost of service process is called functionalization. Functionalization is the arrangement of expense and asset (plant) data by major operating functions (e.g., collection, pumping). Within the Study, there was a limited amount of functionalization of the cost data, as the District’s records functionalized a majority of the costs.

### 5.3.2 Allocation of Costs

The second analytical task performed in a sewer cost of service analysis is the allocation of costs. Allocation determines why the expenses were incurred or what type of need is being met. The following cost allocators were used to develop the cost of service analysis:

- **Volume Related Costs:** Volume related costs are those costs which tend to vary with the total quantity of wastewater collected and conveyed.
- **Strength Related Costs:** Strength related costs are those costs associated with the additional handling and treatment of high “strength” wastewater. Strength of wastewater is typically

### Terminology of a Sewer Cost of Service Analysis

**Functionalization** – The arrangement of cost data by functional category (e.g. collection, pumping, treatment, etc.).

**Allocation** – The assignment of functionalized costs to cost components (e.g., volume, strength, and customer related).

**Distribution** – Distributing the allocated costs to each class of service based on each class’s proportional contribution to that specific cost component.

**Volume Costs** – Costs that are allocated as volume related vary with the total flow of wastewater (e.g., power for pumping).

**Strength Costs** – Costs allocated as strength related refer to the wastewater treatment function. Typically, strength-related costs are further defined as biochemical oxygen demand (BOD) and suspended solids (SS). Different types of customers may have high wastewater strength characteristics and high strength wastewater costs more to treat. Treatment facilities are often designed and sized around meeting these costs.

**Customer Costs** – Costs allocated as customer related vary with the number of customers on the sewer system (e.g., billing costs).

**Direct Assignment** – Costs that can be clearly identified as belonging to a specific customer group or group of customers.

measured in biochemical oxygen demand<sup>3</sup> (BOD) and total suspended solids<sup>4</sup> (SS). Increased levels of BOD or SS generally equate to increased treatment costs. For the District's Study, strength allocation was not necessary as no treatment is provided by the District and that function is performed by TTSA.

- **Customer Related Costs:** Customer-related costs vary with the addition or deletion of a customer or a cost which is a function of the number of customers served. Customer related costs typically include the costs of billing, collecting, and accounting.
- **Revenue Related Costs:** Some costs associated with the utility may vary with the amount of revenue received by the utility. An example of a revenue related cost would be a utility tax, which is based on gross utility revenue.

The basis, or methodology, for the allocation process is developed in the WEF MOP #27. The methodology provided in the manual was then applied to the District's specific circumstances, costs, and operations to develop the appropriate allocation approach to meet the requirements of Proposition 218.

### 5.3.3 Development of Distribution Factors

Once the allocation process is complete and the customer groups have been defined, the allocated costs are proportionally distributed to each customer class of service. The District's allocated costs were distributed to the customer classes of service using the following distribution factors.

- **Volume Distribution Factor:** Volume-related costs are generally distributed on the basis of contribution to sewer flows. Sewer flows were calculated based on winter (November – February) water flow estimates for residential customers and volumetric billing information for commercial customers. Because wastewater discharges are not metered, metered water data is used to estimate contributed average wastewater volume units of service. The average monthly flow is multiplied by 12 months and the number of Residential or Residential Multi-Unit sewer customers for each customer class of service. As noted, commercial customers are billed on the basis of water consumption over 75,000 gallons per year.
- **Strength Distribution Factor:** Strength-related costs are allocated between BOD and SS. For the District's Study, strength related costs are not used for the distribution of costs as the District's costs are not driven by the strength of the wastewater.
- **Customer Distribution Factor:** Customer costs within the cost of service analysis are distributed to the various customer classes of service based on their respective customer counts. Two types of customer distribution factors were developed, actual and weighted. The actual customer distribution factor assumes that there is no disproportionate cost associated with serving a customer (e.g., postage for bills is the same regardless of the

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<sup>3</sup> BOD is the amount of [dissolved oxygen](#) that must be present in water [in order](#) for [microorganisms](#) to [decompose](#) the [organic](#) matter in the wastewater.

<sup>4</sup> SS is the entire amount of organic and inorganic particles dispersed in wastewater.

size or usage of the customer). In contrast, a weighted customer distribution factor assumes that there is some disproportionality associated with serving different types of customers and attempts to estimate the level of difference in serving these customers.

- **Revenue Related Distribution Factor:** The revenue related distribution factor was developed from the projected rate revenues for FY 2026.

The development of the distribution factors is based on generally accepted principles as developed in the WEF MOP #27.

## 5.4 Summary of the Sewer Cost of Service Analysis

In summary form, the cost of service analysis began by functionalizing the District’s plant asset records and O&M expenses. The functionalized plant and expense accounts were then allocated to the various cost components. Provided below is a summary of the allocation of the District’s FY 2026 test period revenue requirement using the methodology outlined in the WEF MOP #27.

	<b>Total</b>	<b>Volume</b>	<b>BOD</b>	<b>SS</b>	<b>Weighted Customer</b>	<b>Revenue</b>
<b>Net Revenue Requirement</b>	<b>\$1,844</b>	\$1,476	\$0	\$0	\$369	\$0

As shown in Table 5 – 1, the total revenue requirement for FY 2026 has been allocated between the cost components based on generally accepted methodologies. Next, the individual allocation totals were then distributed to the customer groups based on the appropriate distribution factors. For example, volume related costs were distributed based on each customer class’s share of total wastewater contributions. In this case, approximately 30.1% is distributed to Residential, 42.5% to Residential Multi-Unit, and the remaining 27.5% distributed to Commercial customers. The total costs allocated to each cost component were then distributed between the customer classes using the previously mentioned distribution factors. Provided below in Table 5 – 2 is a summary of the total distribution of costs, by cost component, to the customer classes of service.

**Table 5 – 2**  
**Summary of the Allocation and Distribution of the**  
**FY 2026 Sewer Revenue Requirement (\$000's)**

Allocation Components	Total Allocated Costs	Residential	Residential Multi-Unit	Commercial
Volume	\$1,476	\$444	\$627	\$405
BOD	0	0	0	0
TSS	0	0	0	0
Customer	369	120	242	7
RR / DA	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>\$1,844</b>	<b>\$564</b>	<b>\$869</b>	<b>\$412</b>

The distributed expenses for each customer group were then aggregated to determine each customer group's overall revenue responsibility. Provided in Table 5 – 3 is a summary of the cost of service analysis.

**Table 5 – 3**  
**Summary of the Cost of Service Analysis (\$000)**

Class of Service	Present Rate Revenues	Distributed Costs	\$ Difference	% Difference
<b>Residential</b>	\$536	\$564	(\$28)	5.3%
<b>Residential Multi-Unit</b>	846	869	(22)	2.6%
<b>Commercial</b>	<u>374</u>	<u>412</u>	<u>(37)</u>	10.0%
<b>Total</b>	<b>\$1,757</b>	<b>\$1,844</b>	<b>(\$88)</b>	<b>5.0%</b>

The results of the cost of service analysis indicated cost differences between the customer classes of service. When reviewing the results of the cost of service analysis, it is important to understand that the results will not be “exact” each time the District updates its cost of service analysis. However, in light of the requirements of Proposition 218, HDR proposes that cost of service adjustments be made in accordance with the unit cost summary as shown below in Table 5 – 4.

**Table 5 – 4  
Summary of the Sewer Unit Costs**

	Residential	Residential Multi- Unit	Commercial
<b>Distributed Costs (\$000s)</b>	\$564	\$869	\$412
<b>Units (Customers)</b>	661	1,328	n/a
<b>Gallons</b>	n/a	n/a	19,561
<b>Unit Cost</b>	<b>\$853.12 / LU</b>	<b>\$654.32 / LU</b>	<b>\$21.05 / Gallon</b>

## 5.5 Cost of Service Conclusions and Recommendations

Cost differences exist based on the overall distribution of costs to the customer classes of service. HDR is recommending that the District implement cost of service adjustments and realign the rate structures at this time. Given this, the proposed sewer rates reflect the results of the cost of service analysis, and specifically the unit costs developed in Table 5 – 4.

It should also be noted that a cost of service analysis reflects a single point in time, reaching conclusions based on one data point that may or may not reflect customer impacts on the system that in turn can result in rates that do not reflect actual customer impacts. It is recommended that the District closely follow the results of subsequent cost of service analyses in order to gauge the effects of these outside forces.

## 6 Rate Design Analysis

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The final step of the District’s sewer rate study is the design of rates to collect the desired levels of revenues, based on the results of the revenue requirement and cost of service analyses. In reviewing the District’s rates, consideration is given to the level of the rates and the structure of the rates.

### 6.1 Rate Design Criteria and Considerations

Prudent rate administration dictates that several criteria must be considered when setting utility rates. Some of these rate design criteria are listed below:

- Compliant with Proposition 218 and other applicable law
- Rates which are easy to understand from the customer’s perspective
- Rates which are easy for the District to administer
- Consideration of the customer’s ability to pay
- Continuity, over time, of the rate making philosophy
- Policy considerations (encourage efficient use, economic development, etc.)
- Provide revenue stability from month to month and year to year
- Promote efficient allocation of the resource
- Proportional and non-discriminatory (cost-based)

It is important that the District provide its customers with a proper price signal as to what their usage or volumetric contributions are costing. This goal may be approached through rate level and structure. When developing the proposed rate designs, the above-listed criteria were taken into consideration. However, it should be noted that it is difficult, if not impossible, to design a rate that meets all of the goals and objectives listed above. For example, it may be difficult to design a rate that takes into consideration customers’ ability to pay, and one which is cost-based. In designing rates, there are always trade-offs between these goals and objectives.

### 6.2 Development of Cost-Based Sewer Rates

As mentioned, developing cost-based and proportional rates is of paramount importance in developing proposed sewer rates. While always a key consideration in developing rates, meeting the legal requirements, and documenting the steps taken to meet these requirements, has been in the forefront with the requirements to establish sewer rates within the requirements of Proposition 218. Given this, the District’s proposed sewer rates have been developed to meet the legal requirements of California Constitution Article XIII D, Section 6 (Article XIII D). A key component of Article XIII D is the development of rates which reflect the costs of providing service and are proportionally allocated between the customer classes of service. HDR would point out that there is no single methodology for proportionally assigning costs to the various customer groups. The Water Environment Federation Manual of Practice #27 provides various methodologies which may be used to establish cost-based rates. Unfortunately, Article XIII D is not prescriptive and does not provide a specific methodology for establishing rates. Given that,



HDR developed the District’s proposed sewer rates based on generally accepted rate setting methodologies to meet the requirements of Article XIII D.

HDR is of the opinion that the proposed rates meet the legal requirements of Article XIII D. HDR reaches this conclusion based on the following:

- **The revenue derived from sewer rates does not exceed the funds required to provide the property related service (i.e., sewer service).** The proposed rates are designed to collect the overall revenue requirement of the District’s sewer system.
- **The revenues derived from sewer rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the District’s sewer rates are used exclusively to operate and maintain the District’s sewer system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** The cost of service analysis has focused exclusively on the issue of the proportional assignment of costs to the customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service that reflect the varying usage patterns and system requirements (i.e., the benefits they receive from and burdens they place on the system) of each customer class of service. The grouping of customers and rates into these classes of service creates the proportionality expected under Proposition 218 by having differing rates by customer class of service which reflect both the level of revenue to be collected by the utility, and the manner in which these costs are incurred and assigned to the customer classes of service based upon their proportional impacts.

### 6.3 Overview of the Present Sewer Rate Structure

The District currently has a flat annual fixed charge rate for the Residential and Residential Multi-Unit sewer customers. The flat rate provides revenue stability for the District as well as reflects the fact that the majority of the District’s costs are fixed. The sewer rate structure for the Commercial customers includes an annual fixed charge (which includes usage up to 75,000 gallons) and a volume charge for all water consumption over 75,000 gallons.

### 6.4 Development of the Proposed Sewer Rates

Given the seasonality of the occupancy in the District’s service area and the fact that a majority of the expenses are fixed in nature, no changes to the sewer rate structure have been proposed and only the level of the District’s sewer rates will be adjusted based on the results of the revenue requirement and cost of service analyses.

The revenue requirement analysis was used to determine the adequate and prudent level of funding needed to operate and maintain the District’s sewer system. The revenue requirement reviewed the time period of FY 2026 – FY 2030 for rate setting purposes. The results of the revenue requirement analysis indicate the need for annual revenue adjustments for FY 2026 – FY 2030. In addition, the cost of service resulted in adjustments between the customer classes of

service based on current customer characteristics. The proposed sewer rates will reflect the proposed revenue adjustments for each of the fiscal years, along with the adjustments as provided in the cost of service analysis. Provided below in Table 6 – 1 is a summary of the present and proposed rates for the sewer utility.

**Table 6 – 1**  
**Summary of the Proposed Sewer Rates**

	Present Rates	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>	<b>\$ / Acct. or Unit / Yr</b>					
Residential (SFR)	\$810.34	\$853.12	\$895.78	\$940.57	\$987.60	\$1,036.98
Residential Multi-Unit	637.57	654.32	687.04	721.39	757.46	795.33
Commercial	1,434.51	1,578.75	1,657.69	1,740.57	1,827.60	1,918.98
Residential - Pool / Spa	1,058.71	1,111.65	1,167.23	1,225.59	1,286.87	1,351.21
<b>Consumption Charge</b>	<b>\$ / 1,000 gal</b>					
Commercial <sup>[1]</sup>	\$19.14	\$21.05	\$22.10	\$23.21	\$24.37	\$25.59

*[1] – The volume fee is for all water use over 75,000 gallons per year for commercial customers*

As can be seen, the proposed rates are adjusted in the first year (FY 2026) based on the overall revenue needs and cost of service results. As a result, each customer class’s rates have been increased to reflect the cost responsibility of each customer class. Similarly, the consumption charge for Commercial customers has been adjusted to reflect the distribution of costs and cost responsibility of the Commercial customer class.

## 6.5 Summary of the Sewer Rate Designs

The development of the proposed sewer rates is based on the overall level of revenues developed as part of the revenue requirement analysis and the proportional distribution of costs to the customer classes of service based on the cost of service recommendations. HDR would recommend the adoption of the proposed sewer rates which are cost-based, proportionate to the cost of service results, and reflect the specific costs of the District’s sewer system.

## 6.6 Summary of the Sewer Rate Study

This completes the sewer rate study for the District. The Study has provided a review of the District’s sewer rates. Adoption of the proposed rates will allow the District to meet their current and projected sewer system financial obligations and major capital projects for the time period reviewed. Should any of the assumptions contained in this report change, the analysis may also need to be revised to reflect the current conditions.



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Olympic Valley PSD  
Sewer Cost of Service Study  
Revenue Requirement Summary  
Exhibit 1

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
<b>Revenue</b>										
Rate Revenues	\$1,747,923	\$1,756,662	\$1,765,446	\$1,774,273	\$1,783,144	\$1,792,060	\$1,801,020	\$1,810,025	\$1,819,076	\$1,828,171
Non-Operating Revenues	422,635	372,573	360,913	355,372	354,349	350,005	348,916	351,898	345,844	351,473
<b>Total Revenues</b>	<b>\$2,170,557</b>	<b>\$2,129,235</b>	<b>\$2,126,359</b>	<b>\$2,129,645</b>	<b>\$2,137,493</b>	<b>\$2,142,065</b>	<b>\$2,149,936</b>	<b>\$2,161,924</b>	<b>\$2,164,920</b>	<b>\$2,179,644</b>
<b>Expenses</b>										
Total Sewer Department Expenses	\$667,818	\$692,884	\$718,972	\$746,127	\$774,398	\$803,833	\$834,486	\$866,411	\$899,667	\$934,312
Total Administration Expenses	1,027,702	1,036,257	1,075,482	1,116,320	1,158,845	1,233,130	1,250,156	1,298,233	1,348,322	1,400,515
<b>Total O&amp;M Expenses</b>	<b>\$1,695,520</b>	<b>\$1,729,141</b>	<b>\$1,794,454</b>	<b>\$1,862,448</b>	<b>\$1,933,242</b>	<b>\$2,036,963</b>	<b>\$2,084,642</b>	<b>\$2,164,645</b>	<b>\$2,247,989</b>	<b>\$2,334,827</b>
<b>Net Annual Debt Service</b>	<b>\$38,822</b>	<b>\$38,691</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Rate Funded Capital (CRP)</b>	<b>\$340,344</b>	<b>\$445,000</b>	<b>\$510,000</b>	<b>\$540,000</b>	<b>\$585,000</b>	<b>\$595,000</b>	<b>\$665,000</b>	<b>\$730,000</b>	<b>\$775,000</b>	<b>\$835,000</b>
<b>Transfer To / (From) Reserves</b>	<b>\$95,871</b>	<b>\$4,236</b>	<b>\$2,863</b>	<b>\$6,867</b>	<b>\$3,529</b>	<b>\$5,215</b>	<b>\$12,813</b>	<b>\$4,141</b>	<b>\$10,459</b>	<b>\$17,740</b>
<b>Total Revenue Requirement</b>	<b>\$2,170,557</b>	<b>\$2,217,068</b>	<b>\$2,307,317</b>	<b>\$2,409,315</b>	<b>\$2,521,772</b>	<b>\$2,637,178</b>	<b>\$2,762,455</b>	<b>\$2,898,786</b>	<b>\$3,033,447</b>	<b>\$3,187,567</b>
Balance/(Deficiency) of Funds	\$0	(\$87,833)	(\$180,958)	(\$279,670)	(\$384,279)	(\$495,113)	(\$612,519)	(\$736,862)	(\$868,528)	(\$1,007,922)
Bal/(Def.) as a % of Rate Rev.	0.0%	5.0%	10.3%	15.8%	21.6%	27.6%	34.0%	40.7%	47.7%	55.1%
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>
Add'l Revenue from Adj.	\$0	\$87,833	\$180,958	\$279,670	\$384,279	\$495,113	\$612,519	\$736,862	\$868,528	\$1,007,922
Total Bal/(Def.) of Funds	\$0	(\$0)	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0
<b>Additional Rate Increase Needed</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Avg Annual Residential Bill</b>	<b>\$810.34</b>	<b>\$850.86</b>	<b>\$893.40</b>	<b>\$938.07</b>	<b>\$984.97</b>	<b>\$1,034.22</b>	<b>\$1,085.93</b>	<b>\$1,140.23</b>	<b>\$1,197.24</b>	<b>\$1,257.10</b>
<b>Total Ending Balance (w/o I&amp;I Reserve)</b>	<b>\$4,767,170</b>	<b>\$3,706,771</b>	<b>\$3,389,652</b>	<b>\$2,808,108</b>	<b>\$2,841,538</b>	<b>\$1,983,265</b>	<b>\$2,265,610</b>	<b>\$1,721,434</b>	<b>\$1,268,908</b>	<b>\$1,647,106</b>

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 2  
 Escalation Factors

	Budgeted	Projected								
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
<b>Revenues</b>										
Customer Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Property Tax Revenues	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Miscellaneous Revenues	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Flat	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Expenses</b>										
Labor	Budgeted	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Benefits - Medical	Budgeted	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Benefits - Other	Budgeted	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Materials & Supplies	Budgeted	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Equipment	Budgeted	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Miscellaneous	Budgeted	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Utilities	Budgeted	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Insurance	Budgeted	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Billed Expenses	Budgeted	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Flat	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Interest</b>	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
<b>New Debt Service</b>										
<i>Low Interest Loans</i>										
Term in Years	20	20	20	20	20	20	20	20	20	20
Rate	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
<i>Revenue Bond</i>										
Term in Years	20	20	20	20	20	20	20	20	20	20
Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%

		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033		FY 2034
<b>Revenues</b>												
<b>Rate Revenues</b>												
Residential		\$533,204	\$535,870	\$538,549	\$541,242	\$543,948	\$546,668	\$549,401	\$552,148	\$554,909	\$557,683	As Customer Growth
Residential (Multi-Unit)		842,217	846,428	850,660	854,914	859,188	863,484	867,802	872,141	876,501	880,884	As Customer Growth
Commercial		372,502	374,364	376,236	378,117	380,008	381,908	383,818	385,737	387,665	389,604	As Customer Growth
<b>Total Rate Revenues</b>		<b>\$1,747,923</b>	<b>\$1,756,662</b>	<b>\$1,765,446</b>	<b>\$1,774,273</b>	<b>\$1,783,144</b>	<b>\$1,792,060</b>	<b>\$1,801,020</b>	<b>\$1,810,025</b>	<b>\$1,819,076</b>	<b>\$1,828,171</b>	
<b>Non-Operating Revenues</b>												
Interest		\$118,184	\$105,799	\$88,579	\$77,345	\$70,493	\$60,182	\$52,982	\$49,709	\$37,249	\$36,319	Calc'd on Reserve Balances
Residential - Pool / Spa		4,235	4,235	4,235	4,235	4,235	4,235	4,235	4,235	4,235	4,235	As Flat
Property Tax Revenue		200,000	205,000	210,125	215,378	220,763	226,282	231,939	237,737	243,681	249,773	As Property Tax Revenues
Administration Revenue		57,108	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	As Flat
Rental Income		43,108	43,539	43,974	44,414	44,858	45,307	45,760	46,218	46,680	47,147	As Miscellaneous Revenues
Miscellaneous Income		0	0	0	0	0	0	0	0	0	0	As Miscellaneous Revenues
<b>Total Non-Operating Revenues</b>		<b>\$422,635</b>	<b>\$372,573</b>	<b>\$360,913</b>	<b>\$355,372</b>	<b>\$354,349</b>	<b>\$350,005</b>	<b>\$348,916</b>	<b>\$351,898</b>	<b>\$345,844</b>	<b>\$351,473</b>	
<b>Total Revenues</b>		<b>\$2,170,557</b>	<b>\$2,129,235</b>	<b>\$2,126,359</b>	<b>\$2,129,645</b>	<b>\$2,137,493</b>	<b>\$2,142,065</b>	<b>\$2,149,936</b>	<b>\$2,161,924</b>	<b>\$2,164,920</b>	<b>\$2,179,644</b>	
<b>Sewer Department Expenses</b>												
<b>Salaries &amp; Wages</b>												
Salaries-Sewer	10-02-611100	\$369,565	\$380,652	\$392,071	\$403,833	\$415,948	\$428,427	\$441,280	\$454,518	\$468,154	\$482,198	As Labor
Salaries-Sick Leave / Vacation	10-02-611200	46,632	48,031	49,471	50,956	52,484	54,059	55,681	57,351	59,072	60,844	As Labor
Salaries-Special Projects	10-02-611900	0	0	0	0	0	0	0	0	0	0	As Labor
Sewer Salaries Billed	10-02-619000	(20,810)	(21,434)	(22,077)	(22,739)	(23,422)	(24,124)	(24,848)	(25,593)	(26,361)	(27,152)	As Labor
<b>Total Salaries &amp; Wages</b>		<b>\$395,387</b>	<b>\$407,248</b>	<b>\$419,466</b>	<b>\$432,050</b>	<b>\$445,011</b>	<b>\$458,361</b>	<b>\$472,112</b>	<b>\$486,276</b>	<b>\$500,864</b>	<b>\$515,890</b>	
<b>Employee Benefits</b>												
Benefit-Fed/State Taxes	10-02-621000	\$32,208	\$33,496	\$34,836	\$36,229	\$37,678	\$39,185	\$40,753	\$42,383	\$44,078	\$45,841	As Benefits - Other
Benefit-Health/Life Insurance	10-02-621500	96,351	102,132	108,260	114,755	121,640	128,939	136,675	144,876	153,568	162,782	As Benefits - Medical
PERS-Retirement Program	10-02-623000	46,124	47,969	49,887	51,883	53,958	56,117	58,361	60,696	63,123	65,648	As Benefits - Other
Worker's Comp Insurance	10-02-624000	24,933	25,931	26,968	28,047	29,168	30,335	31,549	32,811	34,123	35,488	As Benefits - Other
Sewer Benefits Billed	10-02-629000	(9,981)	(10,380)	(10,795)	(11,227)	(11,676)	(12,143)	(12,629)	(13,134)	(13,659)	(14,206)	As Benefits - Other
<b>Total Employee Benefits</b>		<b>\$189,634</b>	<b>\$199,147</b>	<b>\$209,155</b>	<b>\$219,687</b>	<b>\$230,769</b>	<b>\$242,433</b>	<b>\$254,709</b>	<b>\$267,631</b>	<b>\$281,234</b>	<b>\$295,554</b>	
<b>Materials and Supplies</b>												
Sewer-Material/Supplies	10-02-631000	\$9,600	\$10,080	\$10,584	\$11,113	\$11,669	\$12,252	\$12,865	\$13,508	\$14,184	\$14,893	As Materials & Supplies
Sewer - Uniforms	10-02-632000	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	4,072	As Materials & Supplies
Sewer - Safety	10-02-632500	3,025	3,176	3,335	3,502	3,677	3,861	4,054	4,256	4,469	4,693	As Materials & Supplies
<b>Total Materials and Supplies</b>		<b>\$15,250</b>	<b>\$16,013</b>	<b>\$16,813</b>	<b>\$17,654</b>	<b>\$18,536</b>	<b>\$19,463</b>	<b>\$20,436</b>	<b>\$21,458</b>	<b>\$22,531</b>	<b>\$23,658</b>	

		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033		FY 2034
<b>Maintenance Equipment</b>												
Sewer-Equipment Rental	10-02-635000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Equipment
Sewer- SCADA Repairs & Maint	10-02-642000	5,250	5,460	5,678	5,906	6,142	6,387	6,643	6,909	7,185	7,472	As Equipment
Swr-Cell Phone & Ans Service	10-02-642500	1,480	1,539	1,601	1,665	1,731	1,801	1,873	1,948	2,025	2,107	As Equipment
Sewer Meter Repair/Replace	10-02-651000	1,250	1,300	1,352	1,406	1,462	1,521	1,582	1,645	1,711	1,779	As Equipment
Sewer-Equip Repair/Replace	10-02-652000	4,000	4,160	4,326	4,499	4,679	4,867	5,061	5,264	5,474	5,693	As Equipment
Sewer-Equip Maint Contracts	10-02-652100	0	0	0	0	0	0	0	0	0	0	As Equipment
<b>Total Maintenance Equipment</b>		<b>\$11,980</b>	<b>\$12,459</b>	<b>\$12,958</b>	<b>\$13,476</b>	<b>\$14,015</b>	<b>\$14,576</b>	<b>\$15,159</b>	<b>\$15,765</b>	<b>\$16,395</b>	<b>\$17,051</b>	
<b>Facilities-Maint/Repair</b>												
Swr- Generators Air Quality Fee	10-02-652600	\$1,500	\$1,575	\$1,654	\$1,736	\$1,823	\$1,914	\$2,010	\$2,111	\$2,216	\$2,327	As Materials & Supplies
Air Quality-Mobil Equip Permit	10-02-652700	1,000	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551	As Materials & Supplies
Swr-Emergency Repair	10-02-664550	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
Sewer-Computer Repair	10-02-664600	500	525	551	579	608	638	670	704	739	776	As Materials & Supplies
East-B/Grnds-Interior Mnt/Rpr	10-02-664701	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654	As Materials & Supplies
East-B/Grnds-Exterior Mnt/Rpr	10-02-664702	2,500	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	As Materials & Supplies
East B&G - Elevator Inspection	10-02-664705	1,500	1,575	1,654	1,736	1,823	1,914	2,010	2,111	2,216	2,327	As Materials & Supplies
East B&G-HVAC Filtering	10-02-664708	800	840	882	926	972	1,021	1,072	1,126	1,182	1,241	As Materials & Supplies
E Bldg Fire Alarm System Maint	10-02-664709	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
West B&G Interior M/R	10-02-664751	1,067	1,120	1,176	1,235	1,297	1,362	1,430	1,501	1,576	1,655	As Materials & Supplies
West-B&G Exterior M/R	10-02-664752	1,667	1,750	1,838	1,930	2,026	2,128	2,234	2,346	2,463	2,586	As Materials & Supplies
West-B&G Elevator Inspection	10-02-664755	1,333	1,400	1,470	1,543	1,620	1,701	1,786	1,876	1,969	2,068	As Materials & Supplies
Sewer - Easement Abatement	10-02-666000	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
<b>Total Facilities-Maint/Repair</b>		<b>\$14,867</b>	<b>\$15,610</b>	<b>\$16,391</b>	<b>\$17,210</b>	<b>\$18,071</b>	<b>\$18,974</b>	<b>\$19,923</b>	<b>\$20,919</b>	<b>\$21,965</b>	<b>\$23,064</b>	
<b>Training &amp; Memberships</b>												
Sewer-Certifications	10-02-671000	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478	\$3,582	\$3,690	\$3,800	\$3,914	As Miscellaneous
Training - Meetings/Classes	10-02-671055	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,919	5,067	5,219	As Miscellaneous
Sewer-Membership/Subsripts	10-02-672000	8,650	8,910	9,177	9,452	9,736	10,028	10,329	10,638	10,958	11,286	As Miscellaneous
Sewer-Spec Licenses-Drug Tests	10-02-673000	750	773	796	820	844	869	896	922	950	979	As Miscellaneous
<b>Total Training &amp; Memberships</b>		<b>\$16,400</b>	<b>\$16,892</b>	<b>\$17,399</b>	<b>\$17,921</b>	<b>\$18,458</b>	<b>\$19,012</b>	<b>\$19,582</b>	<b>\$20,170</b>	<b>\$20,775</b>	<b>\$21,398</b>	
<b>Vehicle Maintenance &amp; Repair</b>												
Sewer-Vehicle-Fuel/Oil	10-02-681000	\$14,000	\$14,700	\$15,435	\$16,207	\$17,017	\$17,868	\$18,761	\$19,699	\$20,684	\$21,719	As Materials & Supplies
Sewer-Vehicles-Tires/Reprs	10-02-682000	9,250	9,713	10,198	10,708	11,243	11,806	12,396	13,016	13,666	14,350	As Materials & Supplies
Sewer-Vehicles-Mileage Reimb	10-02-683000	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551	1,629	As Materials & Supplies
<b>Total Vehicle Maintenance &amp; Repair</b>		<b>\$24,300</b>	<b>\$25,515</b>	<b>\$26,791</b>	<b>\$28,130</b>	<b>\$29,537</b>	<b>\$31,014</b>	<b>\$32,564</b>	<b>\$34,193</b>	<b>\$35,902</b>	<b>\$37,697</b>	
<b>Total Sewer Department Expenses</b>		<b>\$667,818</b>	<b>\$692,884</b>	<b>\$718,972</b>	<b>\$746,127</b>	<b>\$774,398</b>	<b>\$803,833</b>	<b>\$834,486</b>	<b>\$866,411</b>	<b>\$899,667</b>	<b>\$934,312</b>	

		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033		FY 2034
<b>Administration Expenses</b>												
<b>Salaries &amp; Wages (50% Allocation)</b>												
Salaries-G&A	10-09-611000	\$598,312	\$616,261	\$634,749	\$653,791	\$673,405	\$693,607	\$714,416	\$735,848	\$757,924	\$780,661	As Labor
Salaries-Admin-S/L & Vacation	10-09-611200	73,147	75,341	77,602	79,930	82,328	84,797	87,341	89,962	92,660	95,440	As Labor
Admin-Salaries Billed	10-09-619000	(157,729)	(162,460)	(167,334)	(172,354)	(177,525)	(182,851)	(188,336)	(193,986)	(199,806)	(205,800)	As Labor
<b>Total Salaries &amp; Wages</b>		<b>\$513,730</b>	<b>\$529,142</b>	<b>\$545,016</b>	<b>\$561,367</b>	<b>\$578,208</b>	<b>\$595,554</b>	<b>\$613,421</b>	<b>\$631,823</b>	<b>\$650,778</b>	<b>\$670,301</b>	
<b>Employee Benefits (50% Allocation)</b>												
Benefit-Fed/State Taxes	10-09-621000	\$47,237	\$49,127	\$51,092	\$53,135	\$55,261	\$57,471	\$59,770	\$62,161	\$64,647	\$67,233	As Benefits - Other
Benefit-Health/Life Insurance	10-09-621500	120,517	127,748	135,413	143,538	152,150	161,279	170,956	181,213	192,086	203,611	As Benefits - Medical
Benefit - Retiree Health	10-09-621600	5,491	5,820	6,169	6,539	6,932	7,348	7,788	8,256	8,751	9,276	As Benefits - Medical
PERS-Retirement Program	10-09-623000	50,692	52,720	54,829	57,022	59,303	61,675	64,142	66,708	69,376	72,151	As Benefits - Other
PERS Unfunded Liability Exp	10-09-623500	50,000	52,000	54,080	56,243	58,493	60,833	63,266	65,797	68,428	71,166	As Benefits - Other
Worker's Comp Insurance	10-09-624000	8,555	8,898	9,254	9,624	10,009	10,409	10,825	11,258	11,709	12,177	As Benefits - Other
Veh/Fuel Personal Use	10-09-625000	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
Admin Benefits-Billed	10-09-629000	(57,311)	(59,604)	(61,988)	(64,467)	(67,046)	(69,728)	(72,517)	(75,418)	(78,435)	(81,572)	As Benefits - Other
<b>Total Employee Benefits</b>		<b>\$225,181</b>	<b>\$236,709</b>	<b>\$248,848</b>	<b>\$261,634</b>	<b>\$275,101</b>	<b>\$289,286</b>	<b>\$304,230</b>	<b>\$319,974</b>	<b>\$336,563</b>	<b>\$354,042</b>	
<b>Board Expenses (50% Allocation)</b>												
Board-Regular/Committee Mtgs	10-09-711000	\$24,750	\$25,493	\$26,257	\$27,045	\$27,856	\$28,692	\$29,553	\$30,439	\$31,353	\$32,293	As Miscellaneous
Board-Workshops & Training	10-09-712000	750	773	796	820	844	869	896	922	950	979	As Miscellaneous
Board-Food/Supply/Advertising	10-09-714000	750	773	796	820	844	869	896	922	950	979	As Miscellaneous
Board-Election Expenses	10-09-715000	188	194	199	205	212	218	224	231	238	245	As Miscellaneous
<b>Total Board Expenses</b>		<b>\$26,438</b>	<b>\$27,231</b>	<b>\$28,048</b>	<b>\$28,890</b>	<b>\$29,756</b>	<b>\$30,649</b>	<b>\$31,568</b>	<b>\$32,515</b>	<b>\$33,491</b>	<b>\$34,496</b>	



		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033		FY 2034
<b>Consulting (50% Allocation)</b>												
Accounting-Audit	10-09-721000	\$9,084	\$9,357	\$9,637	\$9,926	\$10,224	\$10,531	\$10,847	\$11,172	\$11,507	\$11,853	As Labor
Cafeteria Plan Administration	10-09-723000	750	773	796	820	844	869	896	922	950	979	As Labor
Special Projects & Studies	10-09-732000	\$57,500	29,225	30,102	31,005	31,935	62,893	34,780	35,823	36,898	38,005	As Labor
Legal-General	10-09-741000	\$12,750	13,133	13,526	13,932	14,350	14,781	15,224	15,681	16,151	16,636	As Labor
<b>Total Consulting</b>		<b>\$80,084</b>	<b>\$52,487</b>	<b>\$54,061</b>	<b>\$55,683</b>	<b>\$57,353</b>	<b>\$89,074</b>	<b>\$61,746</b>	<b>\$63,599</b>	<b>\$65,507</b>	<b>\$67,472</b>	
<b>Insurance (50% Allocation)</b>												
Insurance-Commercial Package	10-09-751000	\$46,814	\$49,155	\$51,612	\$54,193	\$56,903	\$59,748	\$62,735	\$65,872	\$69,166	\$72,624	As Insurance
Insurance-Old Firehouse	10-09-752000	3,348	3,515	3,691	3,876	4,070	4,273	4,487	4,711	4,947	5,194	As Insurance
Insurance West Liability Insurance	10-04-751000	2,163	2,271	2,385	2,504	2,629	2,761	2,899	3,044	3,196	3,356	As Insurance
<b>Total Insurance</b>		<b>\$52,325</b>	<b>\$54,941</b>	<b>\$57,688</b>	<b>\$60,573</b>	<b>\$63,601</b>	<b>\$66,781</b>	<b>\$70,121</b>	<b>\$73,627</b>	<b>\$77,308</b>	<b>\$81,173</b>	
<b>Special Fees (50% Allocation)</b>												
Annual Dues/Memberships	10-09-761000	\$3,261	\$3,359	\$3,460	\$3,563	\$3,670	\$3,780	\$3,894	\$4,011	\$4,131	\$4,255	As Miscellaneous
G&A-Subscriptions	10-09-762000	4,038	4,159	4,284	4,412	4,545	4,681	4,822	4,966	5,115	5,269	As Miscellaneous
G&A-Annual Maint Contracts	10-09-763000	10,150	10,455	10,768	11,091	11,424	11,767	12,120	12,483	12,858	13,243	As Miscellaneous
Bank Fees	10-09-764000	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133	As Miscellaneous
Placer Recording Fees & Maps	10-09-764100	0	0	0	0	0	0	0	0	0	0	As Miscellaneous
G&A-Licenses/Notary	10-09-765000	0	0	0	0	0	0	0	0	0	0	As Miscellaneous
<b>Total Special Fees</b>		<b>\$24,449</b>	<b>\$25,182</b>	<b>\$25,938</b>	<b>\$26,716</b>	<b>\$27,518</b>	<b>\$28,343</b>	<b>\$29,193</b>	<b>\$30,069</b>	<b>\$30,971</b>	<b>\$31,900</b>	

		Budgeted	Projected								Notes	
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033		FY 2034
<b>Office Expenses (50% Allocation)</b>												
G&A-Office Supplies	10-09-771000	\$7,500	\$7,875	\$8,269	\$8,682	\$9,116	\$9,572	\$10,051	\$10,553	\$11,081	\$11,635	As Materials & Supplies
Computer Expenses-Repair	10-09-773000	3,750	3,938	4,134	4,341	4,558	4,786	5,025	5,277	5,540	5,817	As Materials & Supplies
Advertising Public Notices	10-09-774000	1,200	1,260	1,323	1,389	1,459	1,532	1,608	1,689	1,773	1,862	As Materials & Supplies
Advertising-Recruitment ads	10-09-774100	250	263	276	289	304	319	335	352	369	388	As Materials & Supplies
Newsletter Printing	10-09-774200	2,500	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	As Materials & Supplies
Postage/Meter Expenses	10-09-775000	1,375	1,444	1,516	1,592	1,671	1,755	1,843	1,935	2,032	2,133	As Materials & Supplies
Office & Mtg Room Cleaning	10-09-776000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757	As Materials & Supplies
Sm Equip Repair/Replacement	10-09-777000	1,750	1,838	1,929	2,026	2,127	2,233	2,345	2,462	2,586	2,715	As Materials & Supplies
Name Change Costs	10-09-778000	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
Hardware/Software Upgrades	10-09-779000	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878	4,072	As Materials & Supplies
Annual Record Archival	10-09-779100	225	236	248	260	273	287	302	317	332	349	As Materials & Supplies
Website Expenses	10-09-779200	3,665	3,848	4,041	4,243	4,455	4,678	4,911	5,157	5,415	5,686	As Materials & Supplies
<b>Total Office Expenses</b>		<b>\$29,840</b>	<b>\$31,332</b>	<b>\$32,899</b>	<b>\$34,544</b>	<b>\$36,271</b>	<b>\$38,084</b>	<b>\$39,988</b>	<b>\$41,988</b>	<b>\$44,087</b>	<b>\$46,292</b>	
<b>Travel &amp; Meetings (50% Allocation)</b>												
Training & Travel	10-09-782000	\$4,750	\$4,893	\$5,039	\$5,190	\$5,346	\$5,507	\$5,672	\$5,842	\$6,017	\$6,198	As Miscellaneous
Employee Recognition	10-09-783000	4,500	4,635	4,774	4,917	5,065	5,217	5,373	5,534	5,700	5,871	As Miscellaneous
Recruitment/Backgrnd cks/Tests	10-09-786000	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305	As Miscellaneous
<b>Total Travel &amp; Meetings</b>		<b>\$10,250</b>	<b>\$10,558</b>	<b>\$10,874</b>	<b>\$11,200</b>	<b>\$11,536</b>	<b>\$11,883</b>	<b>\$12,239</b>	<b>\$12,606</b>	<b>\$12,984</b>	<b>\$13,374</b>	
<b>Utilities (50% Allocation)</b>												
Water-Pumping Electric	10-01-641000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Utilities
West - Admin Electricity	10-04-791000	1,766	1,854	1,947	2,044	2,147	2,254	2,367	2,485	2,609	2,740	As Utilities
West - Admin Heating Fuel	10-04-791100	12,480	13,104	13,759	14,447	15,170	15,928	16,724	17,561	18,439	19,361	As Utilities
West - Admin TTSA	10-04-791200	550	578	606	637	669	702	737	774	813	853	As Utilities
East Office Electricity	10-09-791000	28,560	29,988	31,487	33,062	34,715	36,451	38,273	40,187	42,196	44,306	As Utilities
East Office Heating Fuel	10-09-791100	11,340	11,907	12,502	13,127	13,784	14,473	15,197	15,957	16,754	17,592	As Utilities
East Office T-TSA	10-09-791200	2,750	2,888	3,032	3,183	3,343	3,510	3,685	3,870	4,063	4,266	As Utilities
Telephone	10-09-792000	5,000	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757	As Utilities
West-Power Old Firehouse	10-09-793100	2,750	2,888	3,032	3,183	3,343	3,510	3,685	3,870	4,063	4,266	As Utilities
West-TTSA Fees-Old Firehouse	10-09-793300	209	219	230	242	254	267	280	294	309	324	As Utilities
<b>Total Utilities</b>		<b>\$65,405</b>	<b>\$68,675</b>	<b>\$72,109</b>	<b>\$75,714</b>	<b>\$79,500</b>	<b>\$83,475</b>	<b>\$87,649</b>	<b>\$92,031</b>	<b>\$96,633</b>	<b>\$101,465</b>	
<b>Total Administration Expenses</b>		<b>\$1,027,702</b>	<b>\$1,036,257</b>	<b>\$1,075,482</b>	<b>\$1,116,320</b>	<b>\$1,158,845</b>	<b>\$1,233,130</b>	<b>\$1,250,156</b>	<b>\$1,298,233</b>	<b>\$1,348,322</b>	<b>\$1,400,515</b>	

	Budgeted	Projected									Notes
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	
<b>Total Operations &amp; Maintenance</b>	<b>\$1,695,520</b>	<b>\$1,729,141</b>	<b>\$1,794,454</b>	<b>\$1,862,448</b>	<b>\$1,933,242</b>	<b>\$2,036,963</b>	<b>\$2,084,642</b>	<b>\$2,164,645</b>	<b>\$2,247,989</b>	<b>\$2,334,827</b>	
<b>Annual Debt Service</b>											
Facility Loan	\$38,822	\$38,691	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	31.0% Sewer
CalPERS Additional UAL Payments	0	0	0	0	0	0	0	0	0	0	
CalPERS Pension Adjustment	0	0	0	0	0	0	0	0	0	0	
New SRF Loans	0	0	0	0	0	0	0	0	0	0	Calc @ 2.5% for 20 Yrs
New Revenue Bonds	0	0	0	0	0	0	0	0	0	0	Calc @ 5.5% for 20 Yrs
<b>Total Annual Debt Service</b>	<b>\$38,822</b>	<b>\$38,691</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Less Connection Fees</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Net Annual Debt Service</b>	<b>\$38,822</b>	<b>\$38,691</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Rate Funded Capital (CRP)</b>	<b>\$340,344</b>	<b>\$445,000</b>	<b>\$510,000</b>	<b>\$540,000</b>	<b>\$585,000</b>	<b>\$595,000</b>	<b>\$665,000</b>	<b>\$730,000</b>	<b>\$775,000</b>	<b>\$835,000</b>	\$268,411 FY 2023 Dep. Exp.
<b>Transfer To / (From) Reserves</b>											
To/(From) Operating Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
To/(From) Capital Reserve	0	0	0	0	0	0	0	0	0	0	
To/(From) FARF	95,871	4,236	2,863	6,867	3,529	5,215	12,813	4,141	10,459	17,740	
<b>Total Transfer To / (From) Reserves</b>	<b>\$95,871</b>	<b>\$4,236</b>	<b>\$2,863</b>	<b>\$6,867</b>	<b>\$3,529</b>	<b>\$5,215</b>	<b>\$12,813</b>	<b>\$4,141</b>	<b>\$10,459</b>	<b>\$17,740</b>	
<b>Total Revenue Requirement</b>	<b>\$2,170,557</b>	<b>\$2,217,068</b>	<b>\$2,307,317</b>	<b>\$2,409,315</b>	<b>\$2,521,772</b>	<b>\$2,637,178</b>	<b>\$2,762,455</b>	<b>\$2,898,786</b>	<b>\$3,033,447</b>	<b>\$3,187,567</b>	
Bal/(Def.) of Funds	\$0	(\$87,833)	(\$180,958)	(\$279,670)	(\$384,279)	(\$495,113)	(\$612,519)	(\$736,862)	(\$868,528)	(\$1,007,922)	
Rate Adj. as a % of Rate Rev.	0.0%	5.0%	10.3%	15.8%	21.6%	27.6%	34.0%	40.7%	47.7%	55.1%	
<b>Proposed Rate Adjustment</b>	<b>0.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	
Add'l Revenue from Adj.	\$0	\$87,833	\$180,958	\$279,670	\$384,279	\$495,113	\$612,519	\$736,862	\$868,528	\$1,007,922	
Total Bal/(Def.) of Funds	\$0	(\$0)	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	
<b>Additional Rate Increase Needed</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

	Budgeted	Projected									Notes	
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034		
<b>Avg Annual Residential Bill</b>	\$810.34											
After Proposed Rate Adjustment	\$810.34	\$850.86	\$893.40	\$938.07	\$984.97	\$1,034.22	\$1,085.93	\$1,140.23	\$1,197.24	\$1,257.10		
Annual \$ Change		40.52	42.54	44.67	46.90	49.25	51.71	54.30	57.01	59.86		
Cumulative Change		40.52	83.06	127.73	174.63	223.88	275.59	329.89	386.90	446.76		
<b>Reserves</b>												
<b>Total Beginning Balance</b>	<b>\$4,864,342</b>	<b>\$4,933,988</b>	<b>\$3,873,589</b>	<b>\$3,556,470</b>	<b>\$2,974,926</b>	<b>\$3,008,356</b>	<b>\$2,150,083</b>	<b>\$2,432,428</b>	<b>\$1,888,252</b>	<b>\$1,435,726</b>		
<b>Capital Reserve (Restricted)</b>												
<b>Beginning Balance</b>	<b>\$465,266</b>	<b>\$439,041</b>	<b>\$433,023</b>	<b>\$269,969</b>	<b>\$190,120</b>	<b>\$110,322</b>	<b>\$120,574</b>	<b>\$130,878</b>	<b>\$141,233</b>	<b>\$151,640</b>		
Plus: Additons	0	0	0	0	0	0	0	0	0	0		
Plus: Connection Fees	10,000	10,050	10,100	10,151	10,202	10,253	10,304	10,355	10,407	10,459		As Customer Growth
Less: Uses of Funds	(36,225)	(16,068)	(173,154)	(90,000)	(90,000)	0	0	0	0	0		
<b>Ending Balance</b>	<b>\$439,041</b>	<b>\$433,023</b>	<b>\$269,969</b>	<b>\$190,120</b>	<b>\$110,322</b>	<b>\$120,574</b>	<b>\$130,878</b>	<b>\$141,233</b>	<b>\$151,640</b>	<b>\$162,099</b>		
<b>I&amp;I Reserve</b>												
<b>Beginning Balance</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	
Plus: Additons	0	0	0	0	0	0	0	0	0	0		
Less: Uses of Funds	0	0	0	0	0	0	0	0	0	0		
<b>Ending Balance</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	<b>\$166,818</b>	
<b>Fixed Asset Replacement Fund</b>												
<b>Beginning Balance</b>	<b>\$4,232,258</b>	<b>\$4,328,129</b>	<b>\$3,273,748</b>	<b>\$3,119,683</b>	<b>\$2,617,988</b>	<b>\$2,731,217</b>	<b>\$1,862,691</b>	<b>\$2,134,732</b>	<b>\$1,580,201</b>	<b>\$1,117,268</b>	<b>\$1,485,007</b>	
Plus: Additons	95,871	4,236	2,863	6,867	113,228	5,215	272,041	4,141	10,459	367,740		
Less: Uses of Funds	0	(1,058,617)	(156,928)	(508,562)	0	(873,741)	0	(558,672)	(473,392)	0		
<b>Ending Balance</b>	<b>\$4,328,129</b>	<b>\$3,273,748</b>	<b>\$3,119,683</b>	<b>\$2,617,988</b>	<b>\$2,731,217</b>	<b>\$1,862,691</b>	<b>\$2,134,732</b>	<b>\$1,580,201</b>	<b>\$1,117,268</b>	<b>\$1,485,007</b>		
<i>Minimum: 60 days of O&amp;M</i>	\$278,716	\$284,242	\$294,979	\$306,156	\$317,793	\$334,843	\$342,681	\$355,832	\$369,532	\$383,807		
<i>Minimum: 5 year rolling average of CRP</i>	595,444	831,991	713,077	863,366	890,156	921,311	953,557	986,932	1,021,474	1,057,226		
<b>Total Target</b>	<b>\$874,160</b>	<b>\$1,116,233</b>	<b>\$1,008,056</b>	<b>\$1,169,522</b>	<b>\$1,207,949</b>	<b>\$1,256,155</b>	<b>\$1,296,238</b>	<b>\$1,342,764</b>	<b>\$1,391,007</b>	<b>\$1,441,033</b>		
<b>Total Ending Balance (w/o I&amp;I Reserve)</b>	<b>\$4,767,170</b>	<b>\$3,706,771</b>	<b>\$3,389,652</b>	<b>\$2,808,108</b>	<b>\$2,841,538</b>	<b>\$1,983,265</b>	<b>\$2,265,610</b>	<b>\$1,721,434</b>	<b>\$1,268,908</b>	<b>\$1,647,106</b>		

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 4  
 Capital Improvement Plan

Inflation 3.5%

Capital Projects	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total	Notes
<b>Capital Improvement Projects (CIP)</b>												
Sewer Flow Meter Project	\$0	\$16,068	\$83,154	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$99,222	
Sewer Bypass Trailer	36,225	0	0	0	0	0	0	0	0	0	36,225	
<b>Total Capital Projects</b>	<b>\$36,225</b>	<b>\$16,068</b>	<b>\$83,154</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$135,447</b>	
<b>Capital Replacement Projects (CRP)</b>												
Sewer System Rehabilitation Project	\$0	\$964,103	\$0	\$1,032,771	\$0	\$1,106,330	\$0	\$1,185,128	\$1,226,608	\$0	\$5,514,940	
SCADA Upgrade Project	0	26,781	27,718	0	0	0	0	0	0	0	54,499	
Sewer System CCTV	0	0	73,348	59,890	103,688	76,404	0	0	0	0	313,330	
Backyard Easement Sewer Replacement Projects	0	0	332,615	0	356,306	0	381,684	0	0	0	1,070,605	
Highway 89 Sewer Flow Meter	0	0	0	0	0	0	14,631	0	0	0	14,631	
T-45A Sewer Flow Meter	0	0	0	0	0	0	0	0	0	0	11,000	
<b>Total Capital Replacement Projects (CRP)</b>	<b>\$0</b>	<b>\$990,884</b>	<b>\$433,681</b>	<b>\$1,092,661</b>	<b>\$459,994</b>	<b>\$1,182,734</b>	<b>\$396,315</b>	<b>\$1,185,128</b>	<b>\$1,226,608</b>	<b>\$0</b>	<b>\$6,979,005</b>	
<b>Utility Equipment Fleet Projects</b>												
Ford F-250 w/ Utility Box	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,950	
Ford F-350 - Flat Bed ZEV	0	0	44,349	0	0	0	0	0	0	0	44,349	
Dodge Ram 2500 ZEV	0	0	0	0	44,538	0	0	0	0	0	44,538	
Ford F-150 Service Truck	25,875	0	0	0	0	0	0	0	0	0	25,875	
Ford Explorer PI	0	0	0	0	0	0	0	22,978	0	0	22,978	
305 EV Charging Station	0	32,137	0	0	0	0	0	0	0	0	32,137	
1810 EV Charging Station	0	32,137	0	0	0	0	0	0	0	0	32,137	
Sewer Bypass Trailer and Hose	0	37,493	0	0	0	0	0	0	0	0	37,493	
Ford Dump Truck ZEV	0	0	0	0	0	0	0	76,177	0	0	76,177	
New Holland	0	28,896	0	0	0	0	0	0	0	0	28,896	
JD Loader	0	0	29,215	0	0	0	0	0	0	0	29,215	
VacCon	0	0	0	0	0	251,813	0	0	0	0	251,813	
SCBA Cart	10,350	0	0	0	0	0	0	0	0	0	10,350	
Sewer Lateral CCTV Cam	25,875	0	0	0	0	0	0	0	0	0	25,875	
Trimble GPS	0	0	0	0	0	0	0	0	8,791	0	8,791	
Hydraulic Trench Shoring	0	0	4,657	0	0	0	0	0	0	0	4,657	
Confined Space Harnesses	0	0	0	0	0	4,978	0	0	0	0	4,978	
5.5KW Deisel Portable Generator	0	0	0	0	0	0	0	0	2,862	0	2,862	
<b>Total Utility Equipment Fleet Projects</b>	<b>\$62,100</b>	<b>\$130,663</b>	<b>\$78,221</b>	<b>\$0</b>	<b>\$44,538</b>	<b>\$256,791</b>	<b>\$0</b>	<b>\$99,155</b>	<b>\$11,653</b>	<b>\$0</b>	<b>\$717,071</b>	

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 4  
 Capital Improvement Plan

Inflation 3.5%

Capital Projects	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total	Notes
<b>Facilities Capital Projects</b>												
AC Slurry Seal/Pave Repair	\$8,625	\$0	\$0	\$0	\$0	\$5,040	\$0	\$0	\$5,588	\$0	\$19,253	
AC Repaving	0	0	108,654	0	0	0	0	0	0	0	108,654	
Exterior Wood Surfaces - Paint	0	8,927	0	0	0	0	0	0	0	0	8,927	
Replace Carpet	0	0	0	42,076	0	0	0	0	0	0	43,743	
Paint - Interior Walls	0	0	0	0	32,463	0	0	0	0	0	32,463	
Kitchen Appliance (Common Area)	2,588	2,678	0	0	0	0	0	0	0	0	5,266	
Locks	3,450	3,571	3,696	3,825	3,959	4,098	4,241	4,389	4,543	4,702	43,807	
Replace Window Coverings	0	0	0	0	6,532	0	0	0	0	0	6,532	
Replace Light Fixtures	4,313	0	35,109	0	0	0	0	0	0	0	39,422	
LED Light Replacement	1,725	0	0	0	0	0	0	0	0	0	1,725	
HVAC Equipment (Boilers, Chiller, Pumps, Controls, etc.)	248,400	171,396	0	0	0	0	0	0	0	0	419,796	
Linoleum - All	0	0	0	0	0	10,244	0	0	0	0	10,244	
Roof Replacement	0	178,538	0	0	0	0	0	0	0	0	178,538	
AC Slurry Seal/Pave Patch	5,175	0	0	0	0	0	5,216	0	0	5,783	16,174	
AC Repaving	0	0	97,567	0	0	0	0	0	0	0	97,567	
Rollup Doors (Fire Station)	0	10,712	0	0	0	0	0	0	0	0	10,712	
Exterior (Admin Building) - Stain Wood Siding	3,968	0	0	0	0	4,712	0	0	0	0	8,680	
Exterior (Admin Building) - Paint Wood Trim	0	893	0	0	0	1,024	0	0	0	0	1,917	
Exterior (Fire Building) - Paint Wood Trim	0	1,785	0	0	0	2,049	0	0	0	0	3,834	
Exterior (Fire Building) - Stucco Repair	0	1,785	0	0	0	2,049	0	0	0	0	3,834	
Exterior Maintenance & Repair Sand Barn	0	1,785	0	0	0	0	0	0	0	0	1,785	
Exhaust Vents (FD Rooftop)	0	0	0	0	0	0	0	0	0	0	5,000	
Furnace Replacement	0	0	0	0	17,815	0	0	0	0	0	17,815	
<b>Total Facilities Capital Projects</b>	<b>\$278,244</b>	<b>\$382,070</b>	<b>\$245,026</b>	<b>\$45,901</b>	<b>\$60,769</b>	<b>\$29,216</b>	<b>\$9,457</b>	<b>\$4,389</b>	<b>\$10,131</b>	<b>\$10,485</b>	<b>\$1,085,688</b>	
<b>To FARF</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$109,699</b>	<b>\$0</b>	<b>\$259,228</b>	<b>\$0</b>	<b>\$0</b>	<b>\$350,000</b>	<b>\$718,927</b>	
<b>Future Unidentified Projects</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$474,515</b>	<b>\$474,515</b>	
<b>To Capital Reserves</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Capital Improvement Projects</b>	<b>\$376,569</b>	<b>\$1,519,685</b>	<b>\$840,082</b>	<b>\$1,138,562</b>	<b>\$675,000</b>	<b>\$1,468,741</b>	<b>\$665,000</b>	<b>\$1,288,672</b>	<b>\$1,248,392</b>	<b>\$835,000</b>	<b>\$10,110,653</b>	
<b>Less: Outside Funding Sources</b>												
Operating Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Capital Reserve (Restricted)	36,225	16,068	173,154	90,000	90,000	0	0	0	0	0	405,447	
Fixed Asset Replacement Fund	0	1,058,617	156,928	508,562	0	873,741	0	558,672	473,392	0	3,629,912	
New SRF Loans	0	0	0	0	0	0	0	0	0	0	0	
New Revenue Bonds	0	0	0	0	0	0	0	0	0	0	0	
<b>Total Outside Funding Sources</b>	<b>\$36,225</b>	<b>\$1,074,685</b>	<b>\$330,082</b>	<b>\$598,562</b>	<b>\$90,000</b>	<b>\$873,741</b>	<b>\$0</b>	<b>\$558,672</b>	<b>\$473,392</b>	<b>\$0</b>	<b>\$4,035,359</b>	
<b>Rate Funded Capital (CRP)</b>	<b>\$340,344</b>	<b>\$445,000</b>	<b>\$510,000</b>	<b>\$540,000</b>	<b>\$585,000</b>	<b>\$595,000</b>	<b>\$665,000</b>	<b>\$730,000</b>	<b>\$775,000</b>	<b>\$835,000</b>	<b>\$3,070,294</b>	

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Total
<b>Residential</b>													
Fixed Charge													
All													\$810.34
	0	0	0	0	0	0	0	0	0	0	0	0	658
<b>Total Fixed Charge Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$533,204
<b>Total Residential</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$533,204
<b>Residential (Multi-Unit)</b>													
Fixed Charge													
Per Unit / Year													\$637.57
Split (MF)													637.57
Split (Com)													637.57
	0	0	0	0	0	0	0	0	0	0	0	0	1,321
<b>Total Fixed Charge Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$842,217
<b>Total Residential (Multi-Unit)</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$842,217
<b>Commercial</b>													
Fixed Charge													
All													\$1,434.51
	0	0	0	0	0	0	0	0	0	0	0	0	36
<b>Total Fixed Charge Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$51,642
Consumption Charge													
< 75,000													\$0.00
> 75,000													19.14
	0	0	0	0	0	0	0	0	0	0	0	0	16,764
<b>Total Consumption Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$320,860
<b>Total Commercial</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$372,502
<b>Residential - Pool / Spa</b>													
Fixed Charge													
5/8"													\$1,058.71
	0	0	0	0	0	0	0	0	0	0	0	0	4
<b>Total Fixed Charge Revenue</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,235
<b>Total Residential - Pool / Spa</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,235





Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 6  
 Volume Distribution Factor

	Estimated Annual Flow (1,000 gal) <sup>[1][2]</sup>	15.0% I&I <sup>[3]</sup>	Total Flows (Flow + Losses)	Base Consumption (MGD)	Component % of Total
Residential	21,426	3,214	24,640	0.07	30.1%
Residential (Multi-Unit)	30,269	4,540	34,809	0.10	42.5%
Commercial	19,561	2,934	22,495	0.06	27.5%
<i>Total</i>	<b>71,256</b>	<b>10,688</b>	<b>81,944</b>	<b>0.22</b>	<b>69.9%</b>
			<i>Sewer Flows<sup>[4]</sup></i>	<b>0.23</b>	

**Notes**

- [1] - Based on estimated winter water average
- [2] - Commercial is based on water usage
- [3] - Estimated
- [4] - Flows provided by District (5/23 - 5/24)

(VOL)

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 7  
 Customer Distribution Factors

	<i>Actual Customer</i>		<i>Customer Service &amp; Acctng.</i>	
	Number of Accounts	% of Total	Number of Living Units	% of Total
Residential	661	63.2%	661	32.7%
Residential (Multi-Unit)	349	33.3%	1,328	65.6%
Commercial	36	3.5%	36	1.8%
<b>Total</b>	<b>1,046</b>	<b>100.0%</b>	<b>2,025</b>	<b>100.0%</b>

Notes

(AC)

(WCA)

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 8  
 Strength Distribution Factor

	Annual Flow (1,000 gal)	<i>BOD</i>			<i>SS</i>		
		Avg. Factor (mg/l) <sup>[1]</sup>	Calculated Pounds	% of Total	Avg. Factor (mg/l) <sup>[1]</sup>	Calculated Pounds	% of Total
Residential	21,426	225	40	28.3%	225	40	28.3%
Residential (Multi-Unit)	30,269	225	57	40.0%	225	57	40.0%
Commercial	19,561	275	45	31.6%	275	45	31.6%
<b>Total</b>	<b>71,256</b>		<b>142</b>			<b>142</b>	

**Notes**

[1] - Estimated

(BOD)

(SS)

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 9  
 Revenue Related Distribution Factor

	Projected FY 2026	% of Total
Residential	\$535,870	30.5%
Residential (Multi-Unit)	846,428	48.2%
Commercial	374,364	21.3%
	-----	-----
<b>Total Rate Revenues</b>	<b>\$1,756,662</b>	<b>100.0%</b>

(RR)

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Olympic Valley PSD  
Sewer Cost of Service Study  
Exhibit 10.1  
Net Plant In Service

	Net Plant 06/30/23	Volume (VOL)	Strength Related		Customer Related		Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
			Bio-Oxygen Demand (BOD)	Suspended Solids (SS)	Actual Customer (AC)	Cust Srvcs & Acct (WCA)			
<b>Collection</b>									
Squaw Valley Interceptor	\$7,085	\$5,668	\$0	\$0	\$0	\$1,417	\$0	\$0	80.0% VOL 20.0% WCA
Sewer Collection	3,177,909	2,542,327	0	0	0	635,582	0	0	80.0% VOL 20.0% WCA
<b>Total Collection</b>	<b>\$3,184,994</b>	<b>\$2,547,995</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$636,999</b>	<b>\$0</b>	<b>\$0</b>	
<b>Plant Before General Plant</b>									
<b>Plant Before General Plant</b>	<b>\$3,184,994</b>	<b>\$2,547,995</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$636,999</b>	<b>\$0</b>	<b>\$0</b>	
<i>Percent Plant Before General Plant</i>	<i>100.0%</i>	<i>80.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>20.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>Factor PBG</i>
<b>General Plant</b>									
Building Improvements	\$1,158,581	\$926,865	\$0	\$0	\$0	\$231,716	\$0	\$0	As Factor PBG
East Valley Property	502,552	402,041	0	0	0	100,510	0	0	As Factor PBG
Furniture & Fixtures	0	0	0	0	0	0	0	0	As Factor PBG
Headquarters	1,651	1,321	0	0	0	330	0	0	As Factor PBG
Land	3,750	3,000	0	0	0	750	0	0	As Factor PBG
Working Capital	0	0	0	0	0	0	0	0	As Factor PBG
Equipment	42,667	34,134	0	0	0	8,533	0	0	As Factor PBG
Vehicles	74,041	59,233	0	0	0	14,808	0	0	As Factor PBG
<b>Total General Plant</b>	<b>\$1,783,242</b>	<b>\$1,426,594</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$356,648</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Net Plant in Service</b>	<b>\$4,968,236</b>	<b>\$3,974,589</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$993,647</b>	<b>\$0</b>	<b>\$0</b>	

Olympic Valley PSD  
Sewer Cost of Service Study  
Exhibit 11.1  
Allocation of the Revenue Requirement

	FY 2026	Volume (VOL)	Strength Related		Customer Related		Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
			Bio-Oxygen Demand (BOD)	Suspended Solids (SS)	Actual Customer (AC)	Cust Srvc & Acct (WCA)			
<b>Sewer Department Expenses</b>									
<b>Salaries &amp; Wages</b>									
Salaries-Sewer	\$380,652	\$304,521	\$0	\$0	\$0	\$76,130	\$0	\$0	As Net Plant in Service
Salaries-Sick Leave / Vacation	48,031	38,424	0	0	0	9,606	0	0	As Net Plant in Service
Salaries-Special Projects	0	0	0	0	0	0	0	0	As Net Plant in Service
Sewer Salaries Billed	(21,434)	(17,147)	0	0	0	(4,287)	0	0	As Net Plant in Service
<b>Total Salaries &amp; Wages</b>	<b>\$407,248</b>	<b>\$325,799</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$81,450</b>	<b>\$0</b>	<b>\$0</b>	
<b>Employee Benefits</b>									
Benefit-Fed/State Taxes	\$33,496	\$26,797	\$0	\$0	\$0	\$6,699	\$0	\$0	As Net Plant in Service
Benefit-Health/Life Insurance	102,132	81,705	0	0	0	20,426	0	0	As Net Plant in Service
PERS-Retirement Program	47,969	38,375	0	0	0	9,594	0	0	As Net Plant in Service
Worker's Comp Insurance	25,931	20,745	0	0	0	5,186	0	0	As Net Plant in Service
Sewer Benefits Billed	(10,380)	(8,304)	0	0	0	(2,076)	0	0	As Net Plant in Service
<b>Total Employee Benefits</b>	<b>\$199,147</b>	<b>\$159,317</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$39,829</b>	<b>\$0</b>	<b>\$0</b>	
<b>Materials and Supplies</b>									
Sewer-Material/Supplies	\$10,080	\$8,064	\$0	\$0	\$0	\$2,016	\$0	\$0	As Net Plant in Service
Sewer - Uniforms	2,756	2,205	0	0	0	551	0	0	As Net Plant in Service
Sewer - Safety	3,176	2,541	0	0	0	635	0	0	As Net Plant in Service
<b>Total Materials and Supplies</b>	<b>\$16,013</b>	<b>\$12,810</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,203</b>	<b>\$0</b>	<b>\$0</b>	
<b>Maintenance Equipment</b>									
Sewer-Equipment Rental	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Net Plant in Service
Sewer- SCADA Repairs & Maint	5,460	4,368	0	0	0	1,092	0	0	As Net Plant in Service
Swr-Cell Phone & Ans Service	1,539	1,231	0	0	0	308	0	0	As Net Plant in Service
Sewer Meter Repair/Replace	1,300	1,040	0	0	0	260	0	0	As Net Plant in Service
Sewer-Equip Repair/Replace	4,160	3,328	0	0	0	832	0	0	As Net Plant in Service
Sewer-Equip Maint Contracts	0	0	0	0	0	0	0	0	As Net Plant in Service
<b>Total Maintenance Equipment</b>	<b>\$12,459</b>	<b>\$9,967</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,492</b>	<b>\$0</b>	<b>\$0</b>	

Olympic Valley PSD  
Sewer Cost of Service Study  
Exhibit 11.1  
Allocation of the Revenue Requirement

	FY 2026	Volume (VOL)	Strength Related		Customer Related		Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
			Bio-Oxygen Demand (BOD)	Suspended Solids (SS)	Actual Customer (AC)	Cust Srvc & Acct (WCA)			
<b>Facilities-Maint/Repair</b>									
Swr- Generators Air Quality Fee	\$1,575	\$1,260	\$0	\$0	\$0	\$315	\$0	\$0	As Net Plant in Service
Air Quality-Mobil Equip Permit	1,050	840	0	0	0	210	0	0	As Net Plant in Service
Swr-Emergency Repair	0	0	0	0	0	0	0	0	As Net Plant in Service
Sewer-Computer Repair	525	420	0	0	0	105	0	0	As Net Plant in Service
East-B/Grnds-Interior Mnt/Rpr	3,150	2,520	0	0	0	630	0	0	As Net Plant in Service
East-B/Grnds-Exterior Mnt/Rpr	2,625	2,100	0	0	0	525	0	0	As Net Plant in Service
East B&G - Elevator Inspection	1,575	1,260	0	0	0	315	0	0	As Net Plant in Service
East B&G-HVAC Filtering	840	672	0	0	0	168	0	0	As Net Plant in Service
E Bldg Fire Alarm System Maint	0	0	0	0	0	0	0	0	As Net Plant in Service
West B&G Interior M/R	1,120	896	0	0	0	224	0	0	As Net Plant in Service
West-B&G Exterior M/R	1,750	1,400	0	0	0	350	0	0	As Net Plant in Service
West-B&G Elevator Inspection	1,400	1,120	0	0	0	280	0	0	As Net Plant in Service
Sewer - Easement Abatement	0	0	0	0	0	0	0	0	As Net Plant in Service
<b>Total Facilities-Maint/Repair</b>	<b>\$15,610</b>	<b>\$12,488</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,122</b>	<b>\$0</b>	<b>\$0</b>	
<b>Training &amp; Memberships</b>									
Sewer-Certifications	\$3,090	\$2,472	\$0	\$0	\$0	\$618	\$0	\$0	As Net Plant in Service
Training - Meetings/Classes	4,120	3,296	0	0	0	824	0	0	As Net Plant in Service
Sewer-Membership/Subscripts	8,910	7,128	0	0	0	1,782	0	0	As Net Plant in Service
Sewer-Spec Licenses-Drug Tests	773	618	0	0	0	155	0	0	As Net Plant in Service
<b>Total Training &amp; Memberships</b>	<b>\$16,892</b>	<b>\$13,514</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,378</b>	<b>\$0</b>	<b>\$0</b>	

Olympic Valley PSD  
Sewer Cost of Service Study  
Exhibit 11.1  
Allocation of the Revenue Requirement

	FY 2026	Volume (VOL)	Strength Related		Customer Related		Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
			Bio-Oxygen Demand (BOD)	Suspended Solids (SS)	Actual Customer (AC)	Cust Srvc & Acct (WCA)			
<b>Vehicle Maintenance &amp; Repair</b>									
Sewer-Vehicle-Fuel/Oil	\$14,700	\$11,760	\$0	\$0	\$0	\$2,940	\$0	\$0	As Net Plant in Service
Sewer-Vehicles-Tires/Reprs	9,713	7,770	0	0	0	1,943	0	0	As Net Plant in Service
Sewer-Vehicles-Mileage Reimb	1,103	882	0	0	0	221	0	0	As Net Plant in Service
<b>Total Vehicle Maintenance &amp; Repair</b>	<b>\$25,515</b>	<b>\$20,412</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,103</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Sewer Department Expenses</b>	<b>\$692,884</b>	<b>\$554,307</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$138,577</b>	<b>\$0</b>	<b>\$0</b>	
<b>Administration Expenses</b>									
<b>Salaries &amp; Wages (50% Allocation)</b>									
Salaries-G&A	\$616,261	\$493,009	\$0	\$0	\$0	\$123,252	\$0	\$0	As Net Plant in Service
Salaries-Admin-S/L & Vacation	75,341	60,273	0	0	0	15,068	0	0	As Net Plant in Service
Admin-Salaries Billed	(162,460)	(129,968)	0	0	0	(32,492)	0	0	As Net Plant in Service
<b>Total Salaries &amp; Wages</b>	<b>\$529,142</b>	<b>\$423,314</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$105,828</b>	<b>\$0</b>	<b>\$0</b>	
<b>Employee Benefits (50% Allocation)</b>									
Benefit-Fed/State Taxes	\$49,127	\$39,301	\$0	\$0	\$0	\$9,825	\$0	\$0	As Net Plant in Service
Benefit-Health/Life Insurance	127,748	102,198	0	0	0	25,550	0	0	As Net Plant in Service
Benefit - Retiree Health	5,820	4,656	0	0	0	1,164	0	0	As Net Plant in Service
PERS-Retirement Program	52,720	42,176	0	0	0	10,544	0	0	As Net Plant in Service
PERS Unfunded Liability Exp	52,000	41,600	0	0	0	10,400	0	0	As Net Plant in Service
Worker's Comp Insurance	8,898	7,118	0	0	0	1,780	0	0	As Net Plant in Service
Veh/Fuel Personal Use	0	0	0	0	0	0	0	0	As Net Plant in Service
Admin Benefits-Billed	(59,604)	(47,683)	0	0	0	(11,921)	0	0	As Net Plant in Service
<b>Total Employee Benefits</b>	<b>\$236,709</b>	<b>\$189,367</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$47,342</b>	<b>\$0</b>	<b>\$0</b>	
<b>Board Expenses (50% Allocation)</b>									
Board-Regular/Committee Mtgs	\$25,493	\$20,394	\$0	\$0	\$0	\$5,099	\$0	\$0	As Net Plant in Service
Board-Workshops & Training	773	618	0	0	0	155	0	0	As Net Plant in Service
Board-Food/Supply/Advertising	773	618	0	0	0	155	0	0	As Net Plant in Service
Board-Election Expenses	194	155	0	0	0	39	0	0	As Net Plant in Service
<b>Total Board Expenses</b>	<b>\$27,231</b>	<b>\$21,785</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,446</b>	<b>\$0</b>	<b>\$0</b>	



Olympic Valley PSD  
Sewer Cost of Service Study  
Exhibit 11.1  
Allocation of the Revenue Requirement

	FY 2026	Volume (VOL)	Strength Related		Customer Related		Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
			Bio-Oxygen Demand (BOD)	Suspended Solids (SS)	Actual Customer (AC)	Cust Srvc & Acct (WCA)			
<b>Consulting (50% Allocation)</b>									
Accounting-Audit	\$9,357	\$7,485	\$0	\$0	\$0	\$1,871	\$0	\$0	As Net Plant in Service
Cafeteria Plan Administration	773	618	0	0	0	155	0	0	As Net Plant in Service
Special Projects & Studies	29,225	23,380	0	0	0	5,845	0	0	As Net Plant in Service
Legal-General	13,133	10,506	0	0	0	2,627	0	0	As Net Plant in Service
<b>Total Consulting</b>	<b>\$52,487</b>	<b>\$41,989</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,497</b>	<b>\$0</b>	<b>\$0</b>	
<b>Insurance (50% Allocation)</b>									
Insurance-Commercial Package	\$49,155	\$39,324	\$0	\$0	\$0	\$9,831	\$0	\$0	As Net Plant in Service
Insurance-Old Firehouse	3,515	2,812	0	0	0	703	0	0	As Net Plant in Service
Insurance West Liability Insurance	2,271	1,817	0	0	0	454	0	0	As Net Plant in Service
<b>Total Insurance</b>	<b>\$54,941</b>	<b>\$43,953</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,988</b>	<b>\$0</b>	<b>\$0</b>	
<b>Special Fees (50% Allocation)</b>									
Annual Dues/Memberships	\$3,359	\$2,687	\$0	\$0	\$0	\$672	\$0	\$0	As Net Plant in Service
G&A-Subscriptions	4,159	3,327	0	0	0	832	0	0	As Net Plant in Service
G&A-Annual Maint Contracts	10,455	8,364	0	0	0	2,091	0	0	As Net Plant in Service
Bank Fees	7,210	5,768	0	0	0	1,442	0	0	As Net Plant in Service
Placer Recording Fees & Maps	0	0	0	0	0	0	0	0	As Net Plant in Service
G&A-Licenses/Notary	0	0	0	0	0	0	0	0	As Net Plant in Service
<b>Total Special Fees</b>	<b>\$25,182</b>	<b>\$20,146</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,036</b>	<b>\$0</b>	<b>\$0</b>	

Olympic Valley PSD  
Sewer Cost of Service Study  
Exhibit 11.1  
Allocation of the Revenue Requirement

FY 2026	Volume (VOL)	Strength Related		Customer Related		Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
		Bio-Oxygen Demand (BOD)	Suspended Solids (SS)	Actual Customer (AC)	Cust Srvcs & Acct (WCA)				
<b>Office Expenses (50% Allocation)</b>									
G&A-Office Supplies	\$7,875	\$6,300	\$0	\$0	\$0	\$1,575	\$0	\$0	As Net Plant in Service
Computer Expenses-Repair	3,938	3,150	0	0	0	788	0	0	As Net Plant in Service
Advertising Public Notices	1,260	1,008	0	0	0	252	0	0	As Net Plant in Service
Advertising-Recruitment ads	263	210	0	0	0	53	0	0	As Net Plant in Service
Newsletter Printing	2,625	2,100	0	0	0	525	0	0	As Net Plant in Service
Postage/Meter Expenses	1,444	1,155	0	0	0	289	0	0	As Net Plant in Service
Office & Mtg Room Cleaning	5,250	4,200	0	0	0	1,050	0	0	As Net Plant in Service
Sm Equip Repair/Replacement	1,838	1,470	0	0	0	368	0	0	As Net Plant in Service
Name Change Costs	0	0	0	0	0	0	0	0	As Net Plant in Service
Hardware/Software Upgrades	2,756	2,205	0	0	0	551	0	0	As Net Plant in Service
Annual Record Archival	236	189	0	0	0	47	0	0	As Net Plant in Service
Website Expenses	3,848	3,079	0	0	0	770	0	0	As Net Plant in Service
<b>Total Office Expenses</b>	<b>\$31,332</b>	<b>\$25,066</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,266</b>	<b>\$0</b>	<b>\$0</b>	
<b>Travel &amp; Meetings (50% Allocation)</b>									
Training & Travel	\$4,893	\$3,914	\$0	\$0	\$0	\$979	\$0	\$0	As Net Plant in Service
Employee Recognition	4,635	3,708	0	0	0	927	0	0	As Net Plant in Service
Recruitment/Backgrnd cks/Tests	1,030	824	0	0	0	206	0	0	As Net Plant in Service
<b>Total Travel &amp; Meetings</b>	<b>\$10,558</b>	<b>\$8,446</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,112</b>	<b>\$0</b>	<b>\$0</b>	
<b>Utilities (50% Allocation)</b>									
Water-Pumping Electric	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Net Plant in Service
West - Admin Electricity	1,854	1,483	0	0	0	371	0	0	As Net Plant in Service
West - Admin Heating Fuel	13,104	10,483	0	0	0	2,621	0	0	As Net Plant in Service
West - Admin TTSA	578	462	0	0	0	116	0	0	As Net Plant in Service
East Office Electricity	29,988	23,990	0	0	0	5,998	0	0	As Net Plant in Service
East Office Heating Fuel	11,907	9,526	0	0	0	2,381	0	0	As Net Plant in Service
East Office T-TSA	2,888	2,310	0	0	0	578	0	0	As Net Plant in Service
Telephone	5,250	4,200	0	0	0	1,050	0	0	As Net Plant in Service
West-Power Old Firehouse	2,888	2,310	0	0	0	578	0	0	As Net Plant in Service
West-TTSA Fees-Old Firehouse	219	176	0	0	0	44	0	0	As Net Plant in Service
<b>Total Utilities</b>	<b>\$68,675</b>	<b>\$54,940</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,735</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Administration Expenses</b>	<b>\$1,036,257</b>	<b>\$829,005</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$207,251</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Operations &amp; Maintenance</b>	<b>\$1,729,141</b>	<b>\$1,383,313</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$345,828</b>	<b>\$0</b>	<b>\$0</b>	

Olympic Valley PSD  
Sewer Cost of Service Study  
Exhibit 11.1  
Allocation of the Revenue Requirement

	FY 2026	Volume (VOL)	Strength Related		Customer Related		Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
			Bio-Oxygen Demand (BOD)	Suspended Solids (SS)	Actual Customer (AC)	Cust Srvc & Acct (WCA)			
<b>Annual Debt Service</b>									
Facility Loan	\$38,691	\$30,953	\$0	\$0	\$0	\$7,738	\$0	\$0	As Net Plant in Service
CalPERS Additional UAL Payments	0	0	0	0	0	0	0	0	As Net Plant in Service
CalPERS Pension Adjustment	0	0	0	0	0	0	0	0	As Net Plant in Service
New SRF Loans	0	0	0	0	0	0	0	0	As Net Plant in Service
New Revenue Bonds	0	0	0	0	0	0	0	0	As Net Plant in Service
<b>Total Annual Debt Service</b>	<b>\$38,691</b>	<b>\$30,953</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,738</b>	<b>\$0</b>	<b>\$0</b>	
Less Connection Fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Net Plant in Service
<b>Net Annual Debt Service</b>	<b>\$38,691</b>	<b>\$30,953</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,738</b>	<b>\$0</b>	<b>\$0</b>	
<b>Rate Funded Capital (CRP)</b>	<b>\$445,000</b>	<b>\$356,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$89,000</b>	<b>\$0</b>	<b>\$0</b>	As Net Plant in Service
<b>Transfer To / (From) Reserves</b>									
To/(From) Operating Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As O&M
To/(From) Capital Reserve	0	0	0	0	0	0	0	0	As O&M
To/(From) FARF	4,236	3,389	0	0	0	847	0	0	As O&M
<b>Total Transfer To / (From) Reserves</b>	<b>\$4,236</b>	<b>\$3,389</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$847</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Revenue Requirement</b>	<b>\$2,217,068</b>	<b>\$1,773,654</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$443,414</b>	<b>\$0</b>	<b>\$0</b>	
<b>Less: Non-Operating Revenues</b>									
Interest	\$105,799	\$84,639	\$0	\$0	\$0	\$21,160	\$0	\$0	As Total Rev Req
Residential - Pool / Spa	4,235	3,388	0	0	0	847	0	0	As Total Rev Req
Property Tax Revenue	205,000	164,000	0	0	0	41,000	0	0	As Total Rev Req
Administration Revenue	14,000	11,200	0	0	0	2,800	0	0	As Total Rev Req
Rental Income	43,539	34,831	0	0	0	8,708	0	0	As Total Rev Req
Miscellaneous Income	0	0	0	0	0	0	0	0	As Total Rev Req
<b>Total Non-Operating Revenues</b>	<b>\$372,573</b>	<b>\$298,058</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$74,515</b>	<b>\$0</b>	<b>\$0</b>	
<b>Net Revenue Requirement</b>	<b>\$1,844,495</b>	<b>\$1,475,596</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$368,899</b>	<b>\$0</b>	<b>\$0</b>	

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 12  
 Distribution of Revenue Requirement

	Total	Residential	Residential (Multi-Unit)	Commercial	Factor
<b>Volume</b>	<b>\$1,475,596</b>	\$443,694	\$626,822	\$405,080	(VOL)
<b>Bio-Oxygen Demand</b>	<b>\$0</b>	\$0	\$0	\$0	(BOD)
<b>Suspended Solids</b>	<b>\$0</b>	\$0	\$0	\$0	(SS)
<b>Customer</b>					
Actual Customer	\$0	\$0	\$0	\$0	(AC)
Cust Srvcs & Acct	368,899	120,466	241,843	6,591	(WCA)
<b>Total Customer</b>	<b>\$368,899</b>	<b>\$120,466</b>	<b>\$241,843</b>	<b>\$6,591</b>	
<b>Revenue Related</b>	<b>\$0</b>	\$0	\$0	\$0	(RR)
<b>Direct Assign.</b>	<b>\$0</b>	\$0	\$0	\$0	(DA)
<b>Net Revenue Requirement</b>	<b>\$1,844,495</b>	<b>\$564,160</b>	<b>\$868,664</b>	<b>\$411,671</b>	

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 13  
 Summary of Cost of Service

	FY 2026	Residential	Residential (Multi-Unit)	Commercial	Notes
Revenues at Present Rates	\$1,756,662	\$535,870	\$846,428	\$374,364	
Net Revenue Requirement	\$1,844,495	\$564,160	\$868,664	\$411,671	
<i>Bal./(Def.) of Funds</i>	<b>(\$87,833)</b>	<b>(\$28,290)</b>	<b>(\$22,236)</b>	<b>(\$37,307)</b>	
Required % Change in Rates	5.0%	5.3%	2.6%	10.0%	

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Olympic Valley PSD  
 Sewer Cost of Service Study  
 Exhibit 14  
 Summary of Unit Costs

		Residential	Residential (Multi-Unit)	Commercial
<b>Fixed Customer Charge (\$ / Unit)</b>		\$853.12	\$654.32	
<b>Variable Consumption Charge (\$ / 1,000 gal)</b>		N/A	N/A	\$21.05
			76.7%	
<b>Current Rates (FY 2025)</b>				
Fixed Customer Charge (\$ / Unit)		\$810.34	\$637.57	\$1,434.51
Variable Consumption Charge (\$ / 1,000 gal)		N/A	N/A	\$19.14
			78.7%	
<b>Basic Data</b>				
Volume	71,256	21,426	30,269	19,561
Billed	16,848	0	0	16,848
Fixed Volume (75,000 / cust / yr)				2,714
Accounts	1,046	661	349	36
Living Units	2,025	661	1,328	36

Olympic Valley PSD  
 Sewer Cost of Service Study  
 Proposed Rates

	<i>Present Rates</i>	<i>Proposed</i>				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>	<b>\$/Year</b>					
Residential	\$810.34	\$853.12	\$895.78	\$940.57	\$987.60	\$1,036.98
Residential (Multi-Unit)	\$637.57	\$654.32	\$687.04	\$721.39	\$757.46	\$795.33
Commercial	\$1,434.51	\$1,578.75	\$1,657.69	\$1,740.57	\$1,827.60	\$1,918.98
Residential - Pool / Spa	\$1,058.71	\$1,111.65	\$1,167.23	\$1,225.59	\$1,286.87	\$1,351.21
<b>Consumption Charge</b>	<b>\$/1,000 gal</b>					
Commercial > 75,000	\$19.14	\$21.05	\$22.10	\$23.21	\$24.37	\$25.59

**DRAFT REPORT**



**Olympic Valley Public Service District**  
**Water Connection Fees**  
January 2025







January 10, 2025

Mr. Charley Miller  
General Manager  
Olympic Valley Public Service District  
305 Olympic Valley Road  
Olympic Valley, CA 96146

**Subject: Development of the District's Water Connection Fee**

Dear Mr. Miller:

HDR Engineering, Inc. (HDR) was retained by the Olympic Valley Public Service District (District) to conduct a study to develop cost-based water connection fee (Study). Enclosed please find HDR's draft report for the Study. The conclusions and recommendations contained within this report provides the District with the cost basis to implement a water connection fee that meets the District's growth and financial policy objectives.

The report has been prepared using generally accepted financial, connection fee setting, and engineering principles. The District's financial, budgeting, and engineering data were the primary sources for the information contained in the report.

HDR appreciates the opportunity to assist the District again with these services. We look forward to continuing to provide financial and professional services to the District.

Sincerely,  
HDR Engineering, Inc.

A handwritten signature in black ink that reads "Josiah Close". The signature is written in a cursive style.

Josiah Close  
Utility Rates Project Manager

[hdrinc.com](http://hdrinc.com)

500 108<sup>th</sup> Ave NE, Suite 1200, Bellevue, WA 98004  
T 425-450-6200



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# Executive Summary

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## Introduction

HDR Engineering, Inc. was retained by the Olympic Valley Public Service District to conduct a comprehensive study to review and update the District’s water connection fees. The purpose of a connection fee is to recover the costs of public facilities in existence at the time the fee is imposed or for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged. These fees are charged to new customers connecting to the system, or to existing customers increasing their demands (i.e., capacity use).

By establishing cost-based connection fees, the District will be taking an important step in providing adequate infrastructure to meet growth-related needs and, more importantly, providing this required infrastructure to new customers in a cost-based and proportional manner. The existing water connection fee was last updated in 2017. The report provides a summary of the findings, conclusions, and recommendations from HDR’s water connection fee study. The report provides the basis for the District to implement a cost-based water connection fee.

## Conclusions

Connection fees must be based on, and implemented according to the capacity requirement, or impact, each new customer has on the utility system. By doing so, the connection fee is directly related to the impact the customer places on the system, and to the proportional benefit the customer derives from the service provided.

In very simplistic terms, the District’s water connection fee is based on the replacement value of the District’s existing system, costs from the District’s Capital Replacement Plan (CRP) report, and future capital infrastructure needed to accommodate future growth, divided by the number of equivalent residential units (ERU’s) served by that capacity. The calculations also take into account the financing mechanisms of capital improvements. Based on the sum of the existing and future component costs, the net allowable utility connection fee is determined. “Net” refers to the calculated “gross” connection fee, less any debt service credits. “Max allowable” refers to the concept that the calculated connection fee is the District’s maximum cost-based charge. The District, as a matter of policy, may charge any amount up to the cost-based connection fee, but not in excess of that amount. Charging an amount greater than the max allowable water connection fee would not meet the nexus test of a cost-based connection fee related to the benefit derived by the customer.

The District charges new customers connecting to the water system a one-time connection fee. The fee is intended to reimburse the existing water system customers for their portion of the system use that has been funded through rates over time on a per equivalent residential unit (ERU) basis. Additionally, the fee is for new public facilities to be built in the future to provide capacity for new customer connecting to or existing customers wanting to purchase additional capacity in District’s the water system.

The District currently implements and assesses the water connection fee based on the size of the customer meter providing service. Based on the fire protection requirements, a 1-inch meter is the typical size for a residential customer and is the meter size used to develop an ERU. Equivalent meter weighting factors are then applied to larger size meters to recognize the capacity of the larger sized meter in relation to the 1-inch meter. A residential customer is presently charged \$10,981, which is the same as a 1-inch meter charge for a commercial customer. The fee is applied to commercial customers based on the water service meter size and the connection fee is proportioned based on the American Water Works Association (AWWA) safe operating capacity ratios.

To calculate the proposed maximum allowable connection fee for the water system, the value of the existing water system was reviewed and developed using a replacement cost new less depreciation expenses. In this way, the existing system was valued at today’s value and reduced to reflect the depreciated value. In addition to the existing system, future improvements related to providing capacity, or service, to new customers connecting to the water system were added. As a note, the future projects were minimal, and the cost included only reflects the proportional costs of the District related to new capacity or growth share. The District also noted many of the improvements are driven by the size and timing of development in the District’s service area and are not concrete at this time. In addition, the value of the existing water system was reduced to reflect the contributions from developers, or those projects that were not funded by the District. Finally, the connection fee was reduced to reflect outstanding debt that was used to fund existing system improvements so that customers do not pay twice, once through the connection fee and again through water rates. Based on this analysis, which is discussed in more detail later in this report, the maximum allowable water connection fee can be developed.

Provided in Table ES - 1 is a summary of the existing fee for a typical residential customer, and the proposed maximum allowable fee for the water system.

<b>Table ES – 1</b> <b>Existing and Maximum Allowable Water Connection Fee</b> <b>(Single Family Residential and 1-inch Meter)</b>		
	<b>Existing</b> <b>Connection Fee</b>	<b>Maximum</b> <b>Allowable</b>
Water Connection Fee	\$10,981	\$14,539

The maximum allowable water connection fee is based on a 1-inch meter, which reflects the typical minimum meter size for future customers. In discussion with the District, given the variability of development and unknown concrete timing of needed improvements on the water system to serve future growth, it is proposed to keep the existing water connection fee and annually adjust it by the Engineering News Record Construction Cost Index (ENR CCI) 20-City Average for five years. The detailed development of the District’s water connection fee are presented in Section 3. Technical appendices are included within this report to document the technical analyses which were undertaken as a part of the Study.

## Consultant Recommendations

Based on our review and analysis of the District’s water connection fee, HDR provides the following recommendations:

- The adopted water connection fee shall not exceed the calculated max allowable water connection fee as set forth in this report. The water connection fee is applicable for new customers connecting to the water system, or an existing customer requesting/requiring additional capacity.
- The District should make periodic (annual) adjustments to the water connection fee based on changes in the Engineering News Record Construction Cost Index 20-City Average.
- The District should update the actual calculations for the water connection fee based on the methodology as approved by the resolution or ordinance setting forth the methodology for water connection fee at such time when a new capital plan, facilities plan, master plan or a comparable plan is approved or updated by the District for the water system.

## Summary

This report documents the development of the District’s water connection fee. The development of the fee utilized generally accepted engineering and fee principles, while applying District specific planning, asset and customer information. HDR would recommend that the District have its legal counsel review the water connection fee before any adjustments are made for compliance with California law.

# 1 Overview of Connection Fees

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An important starting point in establishing connection fees is to have a basic understanding of the purpose of these fees, along with the criteria and general methodologies that are used to establish cost-based water connection fees. Presented in this section of the report is an overview of these fees and the criteria and general methodologies that may be used to develop cost-based connection fees.

HDR Engineering, Inc. was retained by the District to review and update its water connection fee. The objective of the Study is to calculate cost-based water connection fee for new customers connecting to the water utility system, or existing customers requesting additional capacity. The connection fee provides the means of balancing the cost requirements for utility infrastructure between existing customers and new customers. The portion of existing infrastructure and future capital improvements that will provide service (i.e., capacity) to new customers is included in the calculation of the water connection fee. In contrast to this, the District has future capital improvement projects that are related to renewal and replacement of existing infrastructure in service. These infrastructure costs are included within the rates of the water service charges for the District’s customers and are not included within the calculation of the proposed water connection fee. By establishing a cost-based water connection fee the District maintains an approach of having “growth pay for growth” and existing utility customers should, for the most part, be sheltered from the financial impacts of growth.

## 1.1 Organization of Report

This report documents the methodology, approach, and technical analysis undertaken by HDR and the District to develop the District’s water connection fee. The report is divided into two sections.

- Section 1 provides a general overview of the development of connection fees and the criteria and general methodology that should be used to calculate and establish cost-based water connection fee. Additionally, Section 1 provides an overview of the requirements under California law for determining connection fee
- Section 2 reviews the District specific calculations of the cost-based water connection fee

## 1.2 Defining Connection Fees

The first step in establishing cost-based connection fees is to gain a better understanding of the definition of a system development charge (SDC) (i.e., a connection fee). For the purposes of this report, an SDC or connection fee is defined as follows:

*“System development charges (connection fees) are one-time charges paid by new development to finance construction of public facilities needed to serve them.”<sup>1</sup>*

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<sup>1</sup> Arthur C. Nelson, System Development Charges for Water, Wastewater, and Stormwater Facilities, Lewis Publishers, New York, 1995, p. 1,

Simply stated, connection fees are a contribution of capital to reimburse existing customers for the available capacity in the existing system, and help finance planned future growth-related capacity improvements. At some utilities, connection fees may be referred to as system development charges, impact fees, connection charges, plant investment fees, etc. Regardless of the label used to identify them, their objective is the same. That is, these charges are intended to provide funds to the utility to finance all or a part of the existing system or new capital improvements needed to serve and accommodate new customer growth. Absent those fees, many utilities would likely be unwilling to build growth-related facilities (i.e., burden existing rate payers with the entire cost of growth-related capacity expansion).

### 1.3 Economic Theory and Connection Fees

Connection fees are generally imposed as a condition of service. The objective of a connection fee is not merely to generate revenue for a utility, but to ensure that all customers seeking to connect to or requiring additional capacity in the utility’s system bear a proportional share of the cost of capacity that is invested in both the existing system and any future growth-related expansions. Through the implementation of a cost-based and proportional water connection fee, existing customers should not be unduly burdened with the cost of new development.

By establishing a cost-based water connection fee, the District will be taking an important step in providing adequate infrastructure to meet growth-related needs, and more importantly, providing this required infrastructure to new customers in a cost-based and proportional manner.

### 1.4 Connection Fee Criteria

In the determination and establishment of the water connection fee, a number of different criteria are often utilized. The criteria often used by utilities to establish a connection fee are as follows:

- Customer understanding
- System planning criteria
- Financing criteria, and
- State/local laws

The component of customer understanding implies that the connection fee is easy to understand. This criterion has implications on the way that the fees are implemented and assessed to the customer. For water systems, the fee is generally based on specific customer usage (demands) or meter size. The other implication of this criterion is that the methodology is clear and concise in its calculation of the amount of infrastructure necessary to provide service.

The use of system planning criteria is one of the more important aspects in the determination of a connection fee. System planning criteria provides the “rational nexus” between the amount of infrastructure necessary to provide service and the charge to the customer. The rational nexus test requires that there be a connection (nexus) established between the burden of new development on the existing or new or expanded facilities required to accommodate new or

expanded development, and the appropriate apportionment of the cost to the new or expanded development in relation to benefits reasonably received.

To comply with the rational nexus test the calculated water connection fee require the following:

1. *“A connection be established between new development and the new or expanded facilities required to accommodate such development. This establishes the rational basis of public policy.*
2. *Identification of the cost of these new or expanded facilities needed to accommodate new development. This establishes the burden to the public of providing new facilities to new development and the rational basis on which to hold new development accountable for such costs. This may be determined using the so-called Banberry factors. [Banberry Development Company v. South Jordan City (631 P.2d 899, Utah 1981)].*
3. *Appropriate apportionment of that cost to new development in relation to benefits it reasonably receives. This establishes the nexus between the fees being paid to finance new facilities that accommodate new development and benefit new development receives from such new facilities.”<sup>2</sup>*

The first bullet of the rational nexus test requires the establishment of a rational basis of public policy. This implies the planning and capital improvement studies that are used to establish the need for new facilities to accommodate growth. Adopted capital plans, master plans, or facility plans should firmly meet this first test since these plans assess existing facilities and capacity, project future capacity requirements, and determine the future capital infrastructure and new facilities needed to accommodate growth.

The second portion of the rational nexus test discusses the Banberry Factors. In summary, *“consideration must be given to seven factors to determine the proportionate share of costs to be borne by new development:*

1. *The cost of existing facilities*
2. *The means by which existing facilities have been financed*
3. *The extent to which new development has already contributed to the cost of providing existing excess capacity*
4. *The extent to which existing development will, in the future, contribute to the cost of providing existing facilities used community wide or non-occupants of new development*
5. *The extent to which new development should receive credit for providing, at its cost, facilities the community has provided in the past without charge to other development in the service area.*
6. *Extraordinary costs incurred in serving new development*
7. *The time-price differential inherent in fair comparisons of amount of money paid at different times.”<sup>3</sup>*

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<sup>2</sup> Ibid, p. 16 and 17.

<sup>3</sup> Ibid, P. 18 and 19.



The final portion of the rational nexus test is the reasonable apportionment of the cost to new development in relation to benefits it reasonably receives. This is accomplished in the methodology to establish the connection fee, which is discussed in more detail within this section.

One of the driving forces behind establishing cost-based a connection fee is that “growth pays for growth”. Therefore, these fees are typically established as a means of having new customers, and those requiring additional capacity in the utility system, pay a proportional share of the cost of the required infrastructure. The financing criteria for establishing the connection fee relates to the method used to finance infrastructure on the system and assures that customers are not paying twice for infrastructure – once through the connection fees and again through water service fees (e.g., rates). The double payment can come in through the imposition of growth-related infrastructure debt service within a customer’s rates. The financing criteria also reviews the basis under which system extensions were provided so that that the customer is not charged for infrastructure that was provided (contributed) by developers.

Many states and local communities have enacted laws which govern the calculation and imposition of these types of development fees. These laws must be followed in the development of these types of fees. Most statutes require a “reasonable relationship” between the fee charged and the cost associated with providing service capacity to the customer. (California legal requirements are described in Section 1 of this report.) The connection fee does not need to be mathematically exact but must bear a reasonable relationship to the cost burden imposed and benefits received. As discussed above, the utilization of the planning and financing criteria and the actual costs of construction and the planned costs of construction provide the nexus for the reasonable relationship requirement.

## 1.5 Overview of the Connection Fee Methodology

In establishing connection fees, there are differing methodologies. The AWWA M-1 Manual discusses three generally accepted connection fee methods;

- “The *buy-in method* is based on the value of the existing system’s capacity. This method is typically used when the existing system has sufficient capacity to serve new development now and into the future.
- The *incremental cost method* is based on the value or cost to expand the existing system’s capacity. This method is typically used when the existing system has limited or no capacity to serve new development now and into the future.
- The *combined approach* is based on a blended value of both the existing and expanded system’s capacity. This method is typically used where some capacity is available in parts of the existing system (e.g. source of supply), but new or incremental capacity will need to be built in other parts (e.g., treatment plant) to serve new development at some point in the future.”<sup>4</sup>

For the development and calculation of the District’s water connection fee, the “combined approach” was used since there is available capacity in the existing system, but the need for

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<sup>4</sup> AWWA M-1 Manual, p 6<sup>th</sup> Edition, p. 265-266.

future (capacity) expansion also exists. Accordingly, the value of District assets and future projects will be determined and then be divided by the total number of existing and future ERU's. The result will be the maximum allowed total water connection fee.

Regardless of the overall methodology selected, a common denominator of the technical analyses is the various steps undertaken. These steps are as follows:

- Determination of system planning criteria
- Determination of ERU's
- Calculation of existing system costs
- Determination of any credits

The first step in establishing connection fee is the determination of the system planning criteria. This implies calculating the amount of water capacity required by a single family residential customer. For water systems, water demand per equivalent meter is most often used, since this represents the basis for system design, and subsequent customer demands that are placed on the system. The number of existing customers is expressed in equivalent meter units. The AWWA has a standardized method for determining meter equivalency for larger meter sizes. These equivalency factors are based on the maximum safe operating capacity of the meters. It is important to note that the establishment of the existing ERU's is based on a ¾" equivalency as this is the minimum size for existing customers. Due to fire protection requirements, new customers are required to have additional capacity which results in a 1" meter as the smallest size and subsequently new customers are then charge on a 1" meter equivalency basis.

Provided below in Table 1 - 1 is a summary of the meter equivalency factors used to establish the District's existing equivalent meters or ERU's.

Table 1 – 1 Existing Meter Equivalency Factors		
Meter Size	Safe Operating Capacity (gpm)	Meter Equivalency
¾"	30	1.00
1"	50	1.67
1- 1/2"	100	3.33
2"	160	5.33
3"	300	10.00
4"	500	16.67
6"	1,000	53.33

For example, a 2-inch meter is the equivalent of eight (8) - ¾-inch meters based on the safe operating capacity (160 gpm / 20 gpm = 8). These equivalency factors, for each meter size, are then used to develop the proposed water connection fee for customers based on the meter size

which reflects the demands they place on the system when compared to a typical single family customer.

Once the number of equivalent units or capacity components for the water system is determined, a component-by-component system analysis is undertaken to determine the portion of the water connection fee attributable in dollars per ERU. In this process, the existing assets must be valued. Existing assets may be valued in a number of different ways. These methods may include the following:

- Original Cost (OC)
- Original Cost Less Depreciation (OCLD)
- Replacement Cost New (RCN)
- Replacement Cost New Less Depreciation (RCNLD)

Given these four different methods for valuing the assets, the selection of the valuation method certainly arises. The American Water Works Association M-1 manual notes the following concerning these various generally accepted valuation methods:

*“Using the OC and OCLD valuations, the [connection fee] reflects the original investment in the existing capacity. The new customer “buys in” to the capacity at the OC or the net book value cost (OCLD) for the facilities and as a result pays an amount similar to what the existing customers paid for the capacity (OC) or the remaining value of the original investment (OCLD).*

Using the RCN and the RCNLD valuations, the [connection fee] reasonably reflects the cost of providing new expansion capacity to customers as if the capacity was added at the time the new customers connected to the water system. It may be also thought of as a valuation method to fairly compensate the existing customers for the carrying costs of the excess capacity built into the system in advance of when the new customers connect to the system. This is because, up to the point of the new customer connecting to the system, the existing customers have been financially responsible for the carrying costs of that excess capacity that is available to development.”<sup>5</sup>

As a point of reference for the Study, the District’s water connection fee analysis will use a RCNLD methodology for existing assets. The District’s assets will be valued at replacement value based on the District’s CRP report. The future capital infrastructure needed to accommodate future growth will be based on the District’s current capital plan. The existing infrastructure and future expansion projects are then added to the total cost component. This total future cost is divided by the total equivalent residential units to determine the “gross connection fee”. Based on the sum of the existing and future component costs, the net allowable utility connection fee is determined. “Net” refers to the calculated “gross” connection fee, net of any debt service credits. “Allowable” refers to the concept that the calculated water connection fee is the District’s maximum cost-based charge. The District, as a matter of policy, may charge any amount up to the cost-based water connection fee, but not in excess of that amount. Charging an amount greater than the “allowable” water connection fee would not meet the nexus test of a cost-based water connection fee related to the benefit derived by the customer.

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<sup>5</sup> Ibid., p. 268

## 1.6 Legal Considerations for Connection Fees

An important consideration in developing a connection fee are the legal requirements at the state or local level. The legal requirements often provide the authority to establish a connection fee, and also may provide a general methodology around which a connection fee must be calculated or how the funds must be used. Given that, it is important for the District to understand these legal requirements and develop and adopt a connection fee which complies with those legal requirements. This section of the report provides an overview of the legal requirements for establishing a connection fee under California law. A discussion of the applicability of Proposition 218 and Proposition 26, as it relates to a connection fee is also provided.

### 1.6.1 Requirements Under California Law

Many states have specific laws regarding the establishment, calculation and implementation of a connection fee. The main objective of most state laws is to assure that the connection fee is established in such a manner that it is proportional and cost-based. In other cases, state legislation may have been needed to provide the legislative powers to the utility to establish the charges.

The laws for the enactment of connection fees in California are codified in California Government Code sections 66013, 66016, and 66022, which are interspersed within the ‘Mitigation Fee Act.’ The Mitigation Fee Act is comprehensive legislation dealing mainly with development impact fees, although the above sections set forth the various requirements for imposition of connection fees in California: calculation of the fees, noticing, accounting and reporting requirements, and processes for judicial review. Although contained within the Mitigation Fee Act, connection fees are not development fees.

A summary of the relevant statutes required in the calculation of connection fees is as follows:

*“66013 (a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.”*

*“66013 (b) (3) ‘Capacity charge’ means a charge for facilities in existence at the time a charge is imposed or charges for new facilities to be constructed in the future that are of benefit to the person or property being charged. . . .”*

In addition to the determination of “the estimated reasonable cost of providing the service for which the fee is imposed,” California law also requires the following:

- That notice (of the time and place of the meeting, including a general explanation of the matter to be considered) and a statement that certain data is available be mailed to those who filed a written request for such notice;

- That certain data (the estimated cost to provide the service and anticipated revenue sources) be made available to the public;
- That the public agency provide an opportunity for public input at an open and public meeting to adopt or modify the fee; and
- That revenue in excess of actual cost be used to reduce the fee creating the excess

The basic principle that needs to be followed under California law is that the charge be based on a proportionate share of the costs of the system required to provide service and that the requirements for adoption and accounting be followed in compliance with California law.

### **1.6.2 Propositions 218 and 26 and Connection Fees**

In 1996, the voters of California approved Proposition 218, which required that the imposition of certain fees and assessments by municipal governments require a vote of the people to change or increase the fee or assessment. Of interest in the Study is the applicability of Proposition 218 to the establishment of the water connection fee for the District.

In *Richmond v. Shasta Community Services Dist.*, 32 Cal.4th 409 (2004), the California Supreme Court held that connection fees are not “assessments” under Proposition 218 because they are imposed only on those who are voluntarily seeking service, rather than being charged to particular identified parcels, and therefore such fees are not subject to the procedural or substantive requirements of Proposition 218. Additionally, the court held that a connection fee is not a development fee. The court also held that such fees can properly be enacted by either ordinance or resolution.

In November 2010 the voters of California passed Proposition 26, an initiative based state constitutional amendment, which provided a new definition of the term “tax” in the California Constitution. Under Proposition 26 a fee or charge imposed by a public agency is a tax unless it meets one of seven exceptions. Connection fees fall within exception 2 – i.e., it is a charge imposed for a specific government service. Provided that a connection fee does not charge one fee payor more in order to charge another fee payor less (i.e., a cross-subsidy), and it does not exceed the reasonable costs to the local government of providing the service, then the fee is not a tax within the meaning of Proposition 26. Under Proposition 26, the local government bears the burden of proving, by a preponderance of the evidence, that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor’s burdens on, or benefits received from, the governmental activity.

## **1.7 Summary**

This section of the report has provided an overview of connection fees; the basis for establishing cost-based connection fees, considerations in establishing the connection fees, the burden development places on the water system and the technical or analytical steps typically taken in the development of the connection fees. In the development of the District’s water connection fee study, the issues identified in this section of the report have been addressed and will be discussed in more detail in later sections of the report.

This section of the report has provided an overview of the legal requirements under California law for the establishment of connection fees. As was noted above, an important legal requirement is that the fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed. Again, HDR's summary of the legal requirements in no way constitutes a legal interpretation of California law by HDR. HDR recommends that the District's legal counsel review the development of the proposed water connection fee.

The following section of the report provides the District's calculation of the water connection fee and provides the basis for the establishment of a reasonable, cost based connection fee.

## 1.8 Disclaimer

HDR, in its calculation of the water connection fee presented in this report, has used "generally accepted" engineering and rate and fee making principles. This should not be construed as a legal opinion with respect to California law. HDR recommends that the District have its legal counsel review the water connection fee as set forth in this report to ensure compliance with California law.

## **2 Determination of the Water Connection Fee**

This section of the report presents the details and key assumptions in the calculation of the District’s water connection fees. The calculation of the District’s water connection fees is based on District specific accounting and planning information. Specifically, the connection fees are based on the District’s capital replacement plan (CRP) which details the value of the assets; the District’s water capital improvement plan; existing equivalent residential units and the projection of future ERU’s. As was noted in Section 1 of this report, the District’s planning documents and projections of future ERU’s provide the required support for a “rationally based public policy” to support the imposition of cost-based connection fee.

To the extent that the cost and timing of future capital improvements change, then the connection fees presented in this section of the report should be updated to reflect the changes.

### **2.1 Overview of the District’s Water System**

The District was formed in 1964, consists of a 15 square miles, and serves the community of Olympic Valley in Eastern Placer County, California. Olympic Valley was the site of the 1960 Olympic Winter Games. The original wells and pipes in the Valley were built by the State of California to service the games and many of these original facilities are still in use today. Olympic Valley’s primary industry is winter snow sports and related services, and the area is a major tourist destination. Year-round population in the Valley is estimated to be approximately 1,000 people, with a maximum overnight population of approximately 7,000. During the peak winter holiday period; the daily population can swell to 25,000.

### **2.2 Existing Water Connection Fees**

The District’s existing water connection fee is based a flat fixed charge for single family residential and for commercial based on the size of water service meter. The District’s existing water connection fees are shown below in Table 2 - 1.

**Table 2 - 1  
Existing Water Connection Fee**

	<b>Water Connection Fee <sup>[1]</sup></b>
<b>Residential</b>	
Single Family Units <sup>[2]</sup>	\$10,981
Multi-Family Units <sup>[3]</sup>	6,589
Hotel Units <sup>[4]</sup>	4,392
5/8 x 3/4" Meter <sup>[5]</sup>	4,392
3/4" Meter <sup>[5]</sup>	6,589
<b>Commercial</b>	
1" Meter	\$10,981
1.5" Meter <sup>[6]</sup>	21,962
2" Meter	35,139
3" Meter	65,886
4" Meter	109,810
6" Meter	219,620

[1] – District connection fees for 2024-25

[2] – Single Family Dwelling, first unit of a duplex, halfplex

[3] – Condominiums, Apartments, 2<sup>nd</sup> unit of Duplex, ADU, Hotel or Lock-Off Unit with cooking facility

[4] – Hotel Room or Lock-Off Unit with kitchenette or no cooking facility

[5] – Applies to residential remodels or additions that are not required to install a fire suppression system

[6] – Connection fees for meters larger than one-inch shall be determined by the General Manager on a case-by-case basis

## 2.3 Calculation of the Max Allowable Water Connection Fee

As was discussed in Section 1, the process of calculating the water connection fee is based on a four-step process. These steps are as follows:

1. Determination of system planning criteria
2. Determination of equivalent residential units
3. Calculation of the connection fee for system costs
4. Determination of any connection fee credits

Each of these areas is discussed in more detail below.

### 2.3.1 Water System Planning Criteria

System planning criteria typically involves calculating the amount of water required by a single family residential customer and forms the basis for system design. The American Water Works Association has a standardized method for determining demand factors for larger meter sizes. The number of equivalent meters can be determined based on AWWA demand factors.



The number of customers by meter size was based on data from the District’s utility billing system for FY 2024. Table 2 - 2 shows a summary of the District’s 2024 water service customers by meter size.

Table 2 - 2 Existing Water Meters					
Meter Size	Residential	Residential (Multi-Unit)	Commercial	Irrigation	Total
3/4"	302	325	19	18	664
1"	116	3	5	6	131
1-1/2"	2	4	6	5	17
2"	0	9	11	12	32
3"	0	4	4	0	8
4"	0	2	0	0	2
6"	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
<b>Total</b>	<b>421</b>	<b>347</b>	<b>46</b>	<b>41</b>	<b>885</b>

The total number of water service customers by meter size is 885 units.

### 2.3.2 Equivalent Residential Units

For system planning the number of existing customers, by meter size, is converted to the total number of equivalent residential units. This provides the total number of ERU’s currently active and reflects the total demands placed on the water system regardless of the size of the meter. This is an important point as the District does not specifically know what type (class) of customer, or size of meter, will connect to the water system in the future. Rather, the District is able to develop a projection of demands and resulting capacity needs based on the projection of the ERU’s.

To determine the current number of ERU’s on the water system, the AWWA meter demand factor (See Table 1 - 1) and the current number of meters by size (Table 2 - 2) are used. The number of equivalent residential units can be determined based on a single family residential meter size which is defined as a ¾" meter, for current District customers. Table 2 - 3 shows the water service customers by meter size converted to equivalent residential units.

**Table 2 - 3  
Water Equivalent Meters**

<b>Meter Size</b>	<b>AWWA Meter Equivalency</b>	<b>Total Customers</b>	<b>Total Equivalent Residential Units</b>
3/4"	1.00	664	664
1"	1.67	131	219
1-1/2"	3.33	17	57
2"	5.33	32	171
3"	10.00	8	80
4"	16.67	2	33
6"	33.33	<u>1</u>	<u>33</u>
<b>Total</b>		<b>855</b>	<b>1,257</b>

The total number of equivalent residential units for the District is 1,257 units. This total will be used in determination of the max allowable water connection fee.

Based on the total equivalent units currently and the planning horizon of 10 years, the total ERU's were projected to the year 2034 based on an annual growth rate of 0.5% per year. The District's total equivalent meters of 1,257 were projected to be 1,321 in 2034 based on this assumption. Exhibit 1 of the water Technical Appendix details this calculation.

### **2.3.3 Calculation of the Water Connection Fee by Components**

The next step of the analysis is to review the major functional system infrastructure to determine the connection fee for the system. In calculating the connection fees for the District, existing infrastructure, debt service for existing facilities, and future capital improvements relating to expansion were included. The methodology used to calculate each of these components is described below.

#### **2.3.3.1 Existing or Buy-In Component**

To calculate the value of the existing assets for the buy-in component, the District's methodology considered the replacement cost of each asset based on the District's capital replacement plan. The replacement cost of each asset was then depreciated for the remaining useful life (i.e., replacement cost less depreciation). As noted in industry manuals, the replacement cost method "is appropriate when the system has been completely built out or possesses substantial excess capacity to accommodate new development on a fill-in basis."<sup>6</sup>

The District provided a listing, as part of the capital replacement plan, for the various existing components and their installation dates of the water system infrastructure. As was noted, there are different methods for valuing existing assets. In this case, a replacement cost new, less depreciation method was used. To accomplish this, the replacement value of the District's

<sup>6</sup> Arthur C. Nelson, System Development Charges for Water, Wastewater, and Stormwater Facilities, Lewis Publishers, New York, 1995, P. 77

existing system was based on costs from the District’s CRP report. Then, based on the installation date for each asset and an estimated useful life provided by the District, the replacement cost for each asset was depreciated.

Given the value of the assets, the next step was to determine the portion of the costs that were deemed eligible to be included in the calculation of the water connection fee. Within the Study, contributions (i.e., donated or contributed assets) were also excluded from the calculation of the water connection fee. This is an important point, as the District did not fund these improvements, and they are therefore “backed out” of the connection fee and not included.

The final value of the assets was reduced by the amount of future principal on the debt associated with the assets as the principal will be recovered via the debt component within the District’s current water rates. As described below (see Debt Service Component discussion), the remaining principal portion of the debt associated with the assets was deducted from the total eligible asset value prior to calculating the water connection fee. This inclusion of a “debt service credit” avoids double charging the customer for the asset value in the existing or buy-in component of the connection fee, and also in the debt service component of the rates. The principal portion of the debt service balance on existing assets is removed from the value prior to calculating the buy-in portion of the water connection fee.

### **2.3.3.2 Debt Service Component**

The debt service component accounts for remaining (outstanding) principal for debt used to fund existing assets. By segregating the debt service costs, the cost can be clearly identified and calculated appropriately. To avoid double-counting of the assets financed with debt, the future principal associated with those assets was deducted from the existing infrastructure value.

The District has one outstanding issuance for the water system, the Facility Loan. The water enterprise fund is responsible for 69.0% of the debt service and total debt service principal eligible is \$166,198 for the water connection fee. Further detail can be seen on Exhibit 8 of the Technical Appendix.

### **2.3.3.3 Future Components**

An important requirement for a connection fee study is the linking of the anticipated future growth on the system and the required facilities needed to accommodate that growth. For purposes of the Study, the District’s current water Capital Improvement Plan (CIP) for a ten year planning period was provided and District staff reviewed capital improvements which were growth related. Other CIP projects will also be included in developer agreements and are excluded from the calculation of the fee. Should the District participate, or fund, portions of these CIP projects, the water connection fee analysis should be updated to reflect the District funded portion. Capital improvements that were growth-related totaled \$874,000. Exhibit 3 of the Technical Appendix contains the details of this component of the water connection fee.

## **2.4 Net Allowable Water Connection Fee**

Based on the sum of the component costs calculated above, the net allowable water connection fee was determined. “Allowable” refers to the concept that the calculated connection fee

provided in Table 3 - 4 are the District’s cost-based water connection fee. The District, as a matter of policy, may charge any amount up to the max allowable connection fee, but not in excess of that amount. Charging an amount greater than the max allowable water connection fee would not meet the nexus test of a cost-based water connection fee. Details are provided in the Technical Appendix.

<b>Table 3 - 4</b>	
<b>Summary of Max Allowable Water Connection Fee (\$/ERU)</b>	
	<b>Total</b>
<b>Existing Plant (RCNLD)</b>	
Source Plant	\$3,073,770
Pumping Plant	180,000
Storage Plant	1,415,200
Transmission & Distribution Plant	7,903,601
Existing General Plant	<u>5,925,629</u>
<b>Total Existing Plant</b>	<b>\$18,498,200</b>
Less: Outstanding Debt Principal	(\$166,198)
<b>Net Total Existing Plant</b>	<b>\$18,332,002</b>
<b>Future Plant</b>	
Source	\$664,477
Pumping Plant	111,649
Transmission & Distribution Plant	<u>97,554</u>
<b>Total Future Plant</b>	<b>\$873,679</b>
<b>Total Existing and Future Plant</b>	<b>\$19,205,682</b>
Total ERU’s	1,321
<b>Net Allowable Water Connection Fee (\$/ERU)</b>	<b>\$14,539</b>

As can be seen in Table 3 - 4, the calculated water connection fee was determined to be \$14,539 per ERU. These fees are stated as one (1) ERU or a 1-inch meter. The District has implemented a policy for fire requirements that the standard meter size will start at a 1-inch meter unless otherwise noted. In discussion with the District, given the variability of development and unknown concrete timing of needed improvements on the water system to serve future growth, it is proposed to keep the existing water connection fee and annually adjust it by the Engineering News Record Construction Cost Index (ENR CCI) 20-City Average for five years.

Table 3 - 5 provides a summary of the proposed water connection fees by meter size.

**Table 3 - 5  
Calculated Water Connection Fee**

	<b>Connection Fee</b>
<b>Residential</b>	
Single Family Units <sup>[1]</sup>	\$10,981
Multi-Family Units <sup>[2]</sup>	6,589
Hotel Units <sup>[3]</sup>	5,816
¾" Meter <sup>[4]</sup>	6,589
<b>Commercial</b>	
1" Meter	\$10,981
1.5" Meter <sup>[5]</sup>	21,962
2" Meter	35,139
3" Meter	65,886
4" Meter	109,810
6" Meter	219,620

[1] – Single Family Dwelling, first unit of a duplex, halfplex

[2] – Condominiums, Apartments, 2<sup>nd</sup> unit of Duplex, ADU, Hotel or Lock-Off Unit with cooking facility

[3] – Hotel Room or Lock-Off Unit with kitchenette or no cooking facility

[4] – Applies to residential remodels or additions that are not required to install a fire suppression system

[5] – Connection fees for meters larger than one-inch shall be determined by the General Manager on a case-by-case basis

As can be seen in Table 3 - 5, the proposed water connection fee is maintained at \$10,981 for a 1-inch meter. The connection fee varies based on the safe maximum operating capacity of the customer’s meter. The capacity charges for the larger meter sizes are determined by multiplying the capacity charge for a 1-inch meter by the meter equivalency factors (i.e., relative capacities). As noted, the connection fee for meter sizes 2-inch or greater will be reviewed and calculated by the District. This review is necessary to ensure that the flow assumptions for the customers with larger meters reflect the base assumptions of an ERU and the customer is not imposing greater capacity demands on the system.

## 2.5 Key Water Assumptions

In the development of the District’s water connection fees, a number of key assumptions were utilized. These are as follows:

- The water connection fees were developed on the basis of the District’s planning documents, anticipated future connections (ERUs), and the needed capital improvements to serve those future connections
- The assumed equivalent residential unit is a 1-inch meter based on District policy to address fire protection capacity
- The District’s asset records were used to determine the existing infrastructure assets and their value

- The analysis excluded prior developer contributions from the analysis
- The District provided financial records related to future water debt service payments
- The District provided the most recent water CIP for future expansion improvements over a ten year planning period
- The District aided in the determination of the portion of future improvements that were growth-related
- The base year for the CIP was assumed at 2024
- The calculation of the debt credit component included current outstanding principal on existing assets.

## 2.6 Consultant Recommendations

Based on our review and analysis of the District’s water connection fee, HDR provides the following recommendations:

- The adopted water connection fee shall not exceed the calculated max allowable water connection fee as set forth in this report. The water connection fee is applicable for new customers connecting to the water system, or an existing customer requesting/requiring additional capacity.
- The District should make periodic (annual) adjustments to the water connection fee based on changes in the Engineering News Record Construction Cost Index 20-City Average.
- The District should update the actual calculations for the water connection fee based on the methodology as approved by the resolution or ordinance setting forth the methodology for water connection fee at such time when a new CIP, facilities plan, master plan or a comparable plan is approved or updated by the District for the water system.

## 2.7 Summary

The development of the water connection fee study by HDR utilized generally accepted engineering and connection fee establishing principles, while applying District specific planning, asset and customer information. HDR would recommend that the District have its legal counsel review the water connection fee and the report before any adjustments are made to ensure compliance with California law.



## 3 Technical Appendix

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**Olympic Valley  
Water Connection Fee  
ERU Projections  
Exhibit 1**

<b>Summary Totals</b>	<b>ERUs</b>
2024 totals <sup>[1]</sup>	1,257
Projected 2034 ERUs <sup>[2]</sup>	1,321
Add'l ERUs 2025 - 2034	64

<b>Year</b>	<b>ERUs<sup>[2]</sup></b>	<b>Add'l ERUs</b>
2024	1,257	
2025	1,263	6
2026	1,270	6
2027	1,276	6
2028	1,282	6
2029	1,289	6
2030	1,295	6
2031	1,302	6
2032	1,308	7
2033	1,315	7
2034	1,321	7

**Notes**

[1] - Calculated using existing meters and AWWA meter equivalencies

[2] - 0.5% annual growth rate, 2025 to 2034



Olympic Valley  
Water Connection Fee  
Development of Equivalent Residential Units  
Exhibit 2

Class of Service	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12"	Total
Residential	302	117	2	0	0	0	0	0	0	0	421
Residential (Multi-Unit)	325	3	4	9	4	2	0	0	0	0	347
Commercial	19	5	6	11	4	0	1	0	0	0	46
Irrigation	18	6	5	12	0	0	0	0	0	0	41
<b>Total Meters<sup>[1]</sup></b>	<b>664</b>	<b>131</b>	<b>17</b>	<b>32</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>855</b>
<b>AWWA Weighting - 3/4" Meter<sup>[2]</sup></b>	<b>1.00</b>	<b>1.67</b>	<b>3.33</b>	<b>5.33</b>	<b>10.00</b>	<b>16.67</b>	<b>33.33</b>	<b>53.33</b>	<b>76.67</b>	<b>143.33</b>	<b>Total</b>
Residential	302	195	7	0	0	0	0	0	0	0	504
Residential (Multi-Unit)	325	5	13	48	40	33	0	0	0	0	465
Commercial	19	8	20	59	40	0	33	0	0	0	179
Irrigation	18	10	17	64	0	0	0	0	0	0	109
<b>Meter Equivalency</b>	<b>664</b>	<b>219</b>	<b>57</b>	<b>171</b>	<b>80</b>	<b>33</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,257</b>
										<b>2024</b>	<b>1,257</b>
<b>Projected 2034 ERUs<sup>[3]</sup></b>											<b>1,321</b>
<b>Net 2025 - 2034 ERUs<sup>[3]</sup></b>											<b>64</b>

**Notes**

[1] - Based on data from the utility billing system as of FY 2024

[2] - Based on AWWA meter equivalency from AWWA M1 Manual, Sixth Edition, Table VI.2-5, page 274

Olympic Valley  
Water Connection Fee  
Capital Improvement Projects  
Exhibit 3

	Total 2024\$ <sup>[1]</sup>	Connection Fee Eligible	Cost 2024\$
<b>Future Source Related Assets</b>			
SVPSD/SVMWC Intertie	\$815,000	4.8%	\$39,477
PlumpJack Well	1,250,000	50.0%	625,000
	<u>\$2,065,000</u>		<u>\$664,477</u>
<b>Future Storage Related Assets</b>			
		0.0%	\$0
		0.0%	0
	<u>\$0</u>		<u>\$0</u>
<b>Future Transmission / Distribution Related Assets</b>			
10" West Tank Water Transmission Line Replacement	\$1,750,000	4.8%	\$84,766
Victor/Hidden Lake 2" Waterline Replacement Project	264,000	4.8%	12,788
	<u>\$2,014,000</u>		<u>\$97,554</u>
<b>Future Pumping Related Assets</b>			
East Booster Replacement Project	\$1,005,000	4.8%	\$48,680
Pressure Zone 1A Project	1,300,000	4.8%	62,969
	<u>\$2,305,000</u>		<u>\$111,649</u>
<b>Future General Plant Assets</b>			
			\$0
			0
	<u>\$0</u>		<u>\$0</u>
<b>Total Future Capital Improvements</b>	<b>\$6,384,000</b>		<b>\$873,679</b>

**Notes**

[1] - Future assets based on District ten-year capital plan

Olympic Valley  
Water Connection Fee  
Source  
Exhibit 4

Asset	Replacement Cost New <sup>[1]</sup>	Depreciation Percent	Connection Fee Eligible	RCNLD <sup>[2]</sup>
<b>Existing Source Related Assets</b>				
Horizontal Wells	\$157,962	66.0%	100.0%	\$53,707
Horizontal Wells	157,962	64.0%	100.0%	56,866
Well 1R	1,003,997	40.0%	100.0%	602,398
Well 2R	2,427,168	28.0%	100.0%	1,747,561
Well 3	912,725	100.0%	100.0%	0
Well 5R	1,179,302	48.0%	100.0%	613,237
Pumps, Painting, & Others (2025 - 2075)	1,874,440	50.0%	0.0%	0
<b>Total Existing Source Related Assets</b>	<b>\$7,713,557</b>			<b>\$3,073,770</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Existing Source Related Buy-in (\$ / ERU )</b>	<b>\$5,839.18</b>			<b>\$2,326.85</b>
<b>Total Source Related Buy-in (\$ / ERU)</b>	<b>\$5,839.18</b>			<b>\$2,326.85</b>
<b>Future Source Related Assets</b>				
SVPSD/SVMWC Intertie	\$815,000		4.8%	\$39,477
PlumpJack Well	1,250,000		50.0%	625,000
<b>Total Future Source Related Assets</b>	<b>\$2,065,000</b>			<b>\$664,477</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Future Source Related Expansion (\$ / ERU)</b>				<b>\$503.01</b>
<b>Total Future Source Related Expansion (\$ / ERU)</b>				<b>\$503.01</b>
<b>Total Source - Related Buy-in and Expansion (\$ / ERU)</b>	<b>\$6,342.19</b>			<b>\$2,829.86</b>

**Notes**

[1] - Replacement cost based on District Capital Replacement Plan (CRP) Report  
[2] - Methodology is Replacement Cost New Less Depreciation (RCNLD)

Olympic Valley  
 Water Connection Fee  
 Pumping  
 Exhibit 5

Asset	Replacement Cost New <sup>[1]</sup>	Depreciation Percent	Connection Fee Eligible	RCNLD <sup>[2]</sup>
<b>Existing Pumping Related Assets</b>				
Zone 3 Booster PS	\$300,000	40.0%	100.0%	\$180,000
<b>Total Existing Pumping Related Assets</b>	<b>\$300,000</b>			<b>\$180,000</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Existing Pumping Related Buy-in (\$ / ERU )</b>	<b>\$227.10</b>			<b>\$136.26</b>
<b>Total Pumping Related Buy-in (\$ / ERU)</b>	<b>\$227.10</b>			<b>\$136.26</b>
<b>Future Pumping Related Assets (2)</b>				
East Booster Replacement Project	\$1,005,000		4.8%	\$48,680
Pressure Zone 1A Project	1,300,000		4.8%	62,969
<b>Total Future Pumping Related Assets (2)</b>	<b>\$2,305,000</b>			<b>\$111,649</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Future Pumping Related Expansion (\$ / ERU)</b>				<b>\$84.52</b>
<b>Total Future Pumping Related Expansion (\$ / ERU)</b>				<b>\$84.52</b>
<b>Total Pumping - Related Buy-in and Expansion (\$ / ERU)</b>	<b>\$311.62</b>			<b>\$220.78</b>

**Notes**

[1] - Replacement cost based on District Capital Replacement Plan (CRP) Report

[2] - Future plant based on District 10-year capital plan

Olympic Valley  
Water Connection Fee  
Storage  
Exhibit 6

Asset	Replacement Cost New <sup>[1]</sup>	Depreciation Percent	Connection Fee Eligible	RCNLD <sup>[2]</sup>
<b>Existing Storage Related Assets</b>				
West Tank Replacement	\$1,800,000	46.7%	100.0%	\$960,000
East Tank Replacement	1,130,000	60.0%	100.0%	452,000
Zone 3 Tank Replacement	6,000	46.7%	100.0%	3,200
West Tank Recoat	625,000	70.7%	0.0%	0
East Tank Recoat	380,000	97.3%	0.0%	0
Zone 3 Tank Recoat	345,000	69.3%	0.0%	0
<b>Total Existing Storage Related Assets</b>	<b>\$4,286,000</b>			<b>\$1,415,200</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Existing Storage Related Buy-in (\$ / ERU )</b>	<b>\$3,244.51</b>			<b>\$1,071.31</b>
<b>Total Storage Related Buy-in (\$ / ERU)</b>	<b>\$3,244.51</b>			<b>\$1,071.31</b>
<b>Future Storage Related Assets</b>				
0	\$0		0.0%	\$0
0	0		0.0%	0
<b>Total Future Storage Related Assets</b>	<b>\$0</b>			<b>\$0</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Future Storage Related Expansion (\$ / ERU)</b>				<b>\$0.00</b>
<b>Total Future Storage Related Expansion (\$ / ERU)</b>				<b>\$0.00</b>
<b>Total Storage - Related Buy-in and Expansion (\$ / ERU)</b>	<b>\$3,244.51</b>			<b>\$1,071.31</b>

**Notes**

[1] - Replacement cost based on District Capital Replacement Plan (CRP) Report

Olympic Valley  
Water Connection Fee  
Transmission & Distribution  
Exhibit 7

Asset	Replacement Cost New <sup>[1]</sup>	Depreciation Percent	Connection Fee Eligible	RCNLD <sup>[2]</sup>
<b>Existing Transmission &amp; Distribution Related Assets</b>				
Mains (80 yrs) <sup>[2]</sup>	\$20,597,308	52.4%	50.0%	\$4,903,495
Meters (20 yrs)	330,310	50.0%	0.0%	0
Laterals (60 yrs) <sup>[2]</sup>	9,083,081	49.0%	64.8%	3,000,106
<b>Total Existing Transmission &amp; Distribution Related Assets</b>	<b>\$30,010,699</b>			<b>\$7,903,601</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Existing Transmission &amp; Distribution Related Buy-in (\$ / I</b>	<b>\$22,718.17</b>			<b>\$5,983.04</b>
<b>Total Transmission &amp; Distribution Related Buy-in (\$ / ERU</b>	<b>\$22,718.17</b>			<b>\$5,983.04</b>
<b>Future Transmission &amp; Distribution Related Assets</b>				
10" West Tank Water Transmission Line Replacement	\$1,750,000		4.8%	\$84,766
Victor/Hidden Lake 2" Waterline Replacement Project	264,000		4.8%	12,788
<b>Total Future Transmission &amp; Distribution Related Assets</b>	<b>\$2,014,000</b>			<b>\$97,554</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Future Transmission &amp; Distribution Related Expansion (\$ / ERU)</b>				<b>\$73.85</b>
<b>Total Future Transmission &amp; Distribution Related Expansion (\$ / ERU)</b>				<b>\$73.85</b>
<b>Total Transmission &amp; Distribution - Related Buy-in and Expansion</b>	<b>\$22,792.02</b>			<b>\$6,056.89</b>

**Notes**

[1] - Replacement cost based on District Capital Replacement Plan (CRP) Report

[2] - Mains assumed 50% developer contributed. Laterals 35.2% contributed based on pipes > 8" or 64.8% eligible (100% -35.2% = 64.8%)

Olympic Valley  
 Water Connection Fee  
 General Plant  
 Exhibit 8

Asset	Replacement Cost New <sup>[1]</sup>	Depreciation Percent	Connection Fee Eligible	RCNLD <sup>[2]</sup>
<b>Existing General Plant Related Assets</b>				
Hydrants (25 yrs)	\$1,525,750	50.2%	100.0%	\$759,776
Gate / BF Valves (55 yrs)	1,312,713	49.1%	100.0%	668,290
ARV / BO Valves (50 yrs)	344,521	49.0%	100.0%	175,706
PRV (50 yrs)	0	0.0%	100.0%	0
Equipment	0	0.0%	100.0%	0
Shared Expenses - 305 (50 yrs) <sup>[2]</sup>	20,603,986	50.0%	32.5%	3,348,148
Shared Expenses - 1810 (50 yrs) <sup>[2]</sup>	5,992,055	50.0%	32.5%	973,709
<b>Total Existing General Plant Related Assets</b>	<b>\$29,779,025</b>			<b>\$5,925,629</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Existing General Plant Related Buy-in (\$ / ERU)</b>	<b>\$22,542.79</b>			<b>\$4,485.71</b>
<b>Total General Plant Related Buy-in (\$ / ERU)</b>	<b>\$22,542.79</b>			<b>\$4,485.71</b>
<b>Future General Plant Related Assets</b>				
0	\$0		0.0%	\$0
0	0		0.0%	0
<b>Total Future General Plant Related Assets</b>	<b>\$0</b>			<b>\$0</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,321</b>
<b>Future General Plant Related Expansion (\$ / ERU)</b>				<b>\$0.00</b>
<b>Total Future General Plant Related Expansion (\$ / ERU)</b>				<b>\$0.00</b>
<b>Total General Plant - Related Buy-in and Expansion (\$ / E</b>	<b>\$22,542.79</b>			<b>\$4,485.71</b>

**Notes:**

(1) - Replacement cost based on District Capital Replacement Plan (CRP) Report.

(2) - Shared general plant is 50% Fire / 50% Water & Sewer; split is 65% Water / 35% Sewer or 32.5% Water (50% \* 65% = 32.5%).

Olympic Valley  
 Water Connection Fee  
 Debt Service Component  
 Exhibit 9

Year	Principal	Interest	Total Debt	ERUs <sup>[1]</sup>	\$ / ERU	Basis
<b>Facility Loan</b>						
FY 2025	\$81,738	\$4,672	\$86,410			
FY 2026	84,460	1,660	86,119			
	-----	-----	-----			
	\$166,198	\$6,332	\$172,529	1,321	\$125.81	Current + Future (2034 ERUs)
<b>Total Debt Service Credit</b>					\$125.81	

**Notes**

(1) - The 50% of shared general plant is split 65% water and 35% sewer or 32.5% water (50% X 65% = 32.5%).



Olympic Valley  
 Water Connection Fee  
 Max Allowable Water Connection Fees  
 Exhibit 10

Component	Calculation Results <sup>[1]</sup>		
	Existing	Future	Total
Source	\$2,326.85	\$503.01	\$2,829.86
Pumping	136.26	84.52	220.78
Storage	1,071.31	0.00	1,071.31
Transmission & Distribution	5,983.04	73.85	6,056.89
General Plant	4,485.71	0.00	4,485.71
Debt Service	(125.81)	N/A	(125.81)
<b>Total</b>	<b>\$13,877.37</b>	<b>\$661.38</b>	<b>\$14,538.74</b>

**Net Water Connection Fee ≤ 1" Meter [Rounded] \$14,539**

**Current Water Connection Fee \$10,981**

**Difference \$3,558**

Meter Size	Ratio	Cost <sup>[2]</sup>
Hotel Units <sup>[3]</sup>	0.40	\$5,816
3/4" Meter <sup>[4]</sup>	0.60	6,589
1" Meter	1.00	10,981
1.5" Meter	2.00	21,962
2" Meter	3.20	35,139
3" Meter	6.00	65,886
4" Meter	10.00	109,810
6" Meter	20.00	219,620

**Notes**

- [1] - Methodology is Replacement Cost New Less Depreciation (RCNLD)
- [2] - Connection Fee for meters ≥ 2" may be calculated by the District on a case by case basis
- [3] - Hotel room or lock-off unit with kitchenette or no cooking facility
- [4] - Applies to residential remodels or additions that are not required to install a fire suppression system

**DRAFT REPORT**



**Olympic Valley Public Service District**  
**Sewer Connection Fee**  
January 2025





January 10, 2025

Mr. Charley Miller  
General Manager  
Olympic Valley Public Service District  
305 Olympic Valley Road  
Olympic Valley, CA 96146

**Subject: Development of the District's Sewer Connection Fee**

Dear Mr. Miller:

HDR Engineering, Inc. (HDR) was retained by the Olympic Valley Public Service District (District) to conduct a study to develop cost-based sewer connection fee (Study). Enclosed please find HDR's draft report for the Study. The conclusions and recommendations contained within this report provides the District with the cost basis to implement a sewer connection fee that meets the District's growth and financial policy objectives.

The report has been prepared using generally accepted financial, connection fee setting, and engineering principles. The District's financial, budgeting, and engineering data were the primary sources for the information contained in the report.

HDR appreciates the opportunity to assist the District again with these services. We look forward to continuing to provide financial and professional services to the District.

Sincerely,  
HDR Engineering, Inc.

A handwritten signature in black ink that reads "Josiah Close".

Josiah Close  
Utility Rates Project Manager

[hdrinc.com](http://hdrinc.com)

500 108<sup>th</sup> Ave NE, Suite 1200, Bellevue, WA 98004

T 425-450-6200



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## Introduction

HDR Engineering, Inc. (HDR) was retained by the Olympic Valley Public Service District (District) to conduct a comprehensive study to review and update the District’s sewer connection fee (Study). The purpose of a connection fee is to recover the costs of public facilities in existence at the time the fee is imposed or for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged. These fees are charged to new customers connecting to the system, or to existing customers increasing their demands (i.e., capacity use).

By establishing a cost-based sewer connection fee, the District will be taking an important step in providing adequate infrastructure to meet growth-related needs and, more importantly, providing this required infrastructure to new customers in a cost-based and proportional manner. The current sewer connection fee was last updated in 2017. According to industry best practice, it is recommended to update the sewer connection fee every three to five years. This is increasingly important when comprehensive planning documents for the sewer system have been updated or significant sewer infrastructure projects have been completed. The report provides a summary of the findings, conclusions, and recommendations from HDR’s sewer connection fee study. The report provides the basis for the District to implement a cost-based sewer connection fee.

## Conclusions

Cost-based and proportional connection fees are calculated in conformance with industry standard and generally accepted rate and fee making practices which are tailored to the District’s planning and design criteria. Connection fees must be implemented according to the capacity requirement, or impact, each new customer has on the utility system. By doing so, the connection fee is directly related to the impact the customer places on the system, and to the proportional benefit the customer derives from the service provided.

The District’s sewer connection fee is based on the replacement value of the District’s existing system, costs from the District’s Capital Replacement Plan (CRP) report, and future capital infrastructure needed to accommodate future growth, divided by the number of equivalent residential units (ERU’s) served by that capacity. The calculations also take into account the financing mechanisms of capital improvements. Based on the sum of the existing and future component costs, the net allowable utility connection fee is determined. “Net” refers to the calculated “gross” connection fee, less debt service credits. “Max allowable” refers to the concept that the calculated connection fee is the District’s maximum cost-based fee. The District, as a matter of policy, may charge any amount up to the cost-based connection fee, but not in excess of that amount. Charging an amount greater than the max allowable connection fee would not meet the nexus test of a cost-based connection fee related to the benefit derived by the customer.

The District charges new customers connecting to the sewer system a one-time connection fee. The connection fee is intended to reimburse the existing sewer system customers for their portion of the system use that has been funded through rates over time on a per equivalent residential unit basis. Additionally, the fee is for new public facilities to be built in the future to provide capacity for new customer connecting to or existing customers wanting to purchase additional capacity in District’s the sewer system. The District currently implements and assesses the sewer connection fee based on an ERU. A single family residential customer is assumed to have a 1” water meter as per District policy due to fire flow and capacity requirements. AWWA equivalent meter weighting factors are then applied to larger size meters to recognize the capacity of the larger sized meter in relation to one ERU.

To calculate the proposed maximum allowable connection fee for the sewer system, the value of the existing system was reviewed and developed using a replacement cost new less depreciation expenses. In this way, the existing system was valued at today’s value and reduced to reflect the depreciated value. In addition to the existing system, future improvements related to providing capacity, or service, to new customers connecting to the sewer system were added. As a note, the future projects were minimal and only reflect the costs (projects) of the District’s share if it will be part of a developer agreement improvement. In addition, the value of the existing water system was reduced to reflect the contributions from developers, or those projects that were not funded by the District. Finally, the connection fee was reduced to reflect outstanding debt that was used to fund existing system improvements so that customers do not pay twice, once through the connection fee and again through water rates. Based on this analysis, which is discussed in more detail later in this report, the maximum allowable water connection fee can be developed.

Provided in Table ES - 1 is a summary of the existing fee for a typical single family residential customer, and the proposed maximum allowable connection fee for the sewer system.

<b>Table ES – 1 Existing and Maximum Allowable Sewer Connection Fee</b>		
	<b>Existing Connection Fee</b>	<b>Maximum Allowable</b>
Sewer Connection Fee (1” Meter)	\$5,627	\$5,664

Table ES – 1 shows the maximum allowable sewer connection fee for the District. In discussion with the District, it was decided to maintain the current sewer connection fee as the calculated max allowable sewer connection fee was not significantly different. The detailed development of the District’s sewer connection fee is presented in Section 2. The Technical Appendix included within this report document the technical analyses which were undertaken as a part of the Study.

## Consultant Recommendations

Based on the review and analysis of the District’s sewer connection fee, HDR provides the following recommendations:

- The adopted sewer connection fee shall not exceed the calculated max allowable sewer connection fee as set forth in this report. The sewer connection fee is applicable for new customers connecting to the sewer system, or an existing customer requesting/requiring additional capacity.
- The District should make periodic (annual) adjustments to the sewer connection fee based on changes in the Engineering News Record Construction Cost Index 20-City Average.

The District should update the actual calculations for the sewer connection fee based on the methodology as approved by the resolution or ordinance setting forth the methodology for sewer connection fee at such time when a new CIP, facilities plan, master plan or a comparable plan is approved or updated by the District for the sewer system.

## Summary

This report documents the development of the District's sewer connection fee. The development of the sewer connection fee utilized generally accepted engineering and fee principles, while applying District specific planning, asset and customer information. HDR would recommend that the District have its legal counsel review the sewer connection fee before any adjustments are made to ensure compliance with California law.

# 1 Overview of Connection Fees

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An important starting point in establishing connection fees is to have a basic understanding of the purpose of these fees, along with the criteria and general methodologies that are used to establish cost-based connection fees. Presented in this section of the report is an overview of these fees and the criteria and general methodologies that may be used to develop cost-based connection fees.

HDR Engineering, Inc. was retained by the District to review and update its sewer connection fee. The objective of the Study is to calculate cost-based sewer connection fee for new customers connecting to the sewer utility system, or those customers requesting additional capacity. The connection fee provides the means of balancing the cost requirements for utility infrastructure between existing customers and new customers. The portion of existing infrastructure and future capital improvements that will provide service (i.e., capacity) to new customers is included in the calculation of the sewer connection fee. In contrast to this, the District has future capital improvement projects that are related to renewal and replacement of existing infrastructure in service. These infrastructure costs are included within the rates of the sewer service charges for the District’s customers and are not included within the calculation of the proposed sewer connection fee. By establishing a cost-based sewer connection fee the District maintains an approach of having “growth pay for growth” and existing utility customers should, for the most part, be sheltered from the financial impacts of growth.

## 1.1 Organization of Report

This report documents the methodology, approach, and technical analysis undertaken by HDR and the District to develop the District’s sewer connection fee. The report is divided into two sections.

- Section 1 provides a general overview of the development of connection fees and the criteria and general methodology that should be used to calculate and establish cost-based sewer connection fee. Additionally, Section 1 provides an overview of the requirements under California law for determining the District’s sewer connection fee.
- Section 2 reviews the District specific calculations of the cost-based sewer connection fee

## 1.2 Defining Connection Fees

The first step in establishing cost-based sewer connection fees is to gain a better understanding of the definition of a system development charge (SDC) (i.e., a connection fee). For the purposes of this report, an SDC or connection fee is defined as follows:

*“System development charges (connection fees) are one-time charges paid by new development to finance construction of public facilities needed to serve them.”<sup>1</sup>*

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<sup>1</sup> Arthur C. Nelson, System Development Charges for Water, Wastewater, and Stormwater Facilities, Lewis Publishers, New York, 1995, p. 1,



Simply stated, connection fees are a contribution of capital to reimburse existing customers for the available capacity in the existing system, and help finance planned future growth-related capacity improvements. At some utilities, connection fees may be referred to as system development charges, impact fees, connection charges, plant investment fees, etc. Regardless of the label used to identify them, their objective is the same. That is, these charges are intended to provide funds to the utility to finance all or a part of the existing system or new capital improvements needed to serve and accommodate new customer growth. Absent those fees, many utilities would likely be unwilling to build growth-related facilities (i.e., burden existing rate payers with the entire cost of growth-related capacity expansion).

### 1.3 Economic Theory and Connection Fees

Connection fees are generally imposed as a condition of service. The objective of a connection fee is not merely to generate revenues for a utility, but to ensure that all customers seeking to connect to or requiring additional capacity in the utility's system bear a proportional share of the cost of capacity that is invested in both the existing system and future growth-related expansions. Through the implementation of a cost-based and proportional sewer connection fee, existing customers should not be unduly burdened with the cost of new development.

By establishing a cost-based sewer connection fee, the District will be taking an important step in providing adequate funding for sewer related infrastructure designed to meet growth-related needs - and more importantly - providing this required infrastructure to new customers in a cost-based and proportional manner.

### 1.4 Connection Fee Criteria

In the determination and establishment of the sewer connection fee, a number of different criteria are often utilized. The criteria often used by utilities to establish a connection fee are as follows:

- Customer understanding
- System planning criteria
- Financing criteria, and
- State/local laws

Many states and local communities have enacted laws that govern the calculation and imposition of a sewer connection fee. These laws must be followed in the development of connection fees. Most states require a reasonable relationship between the charge or fee assessed and the cost associated with providing service (capacity) to the customer. The charges do not need to be mathematically exact, only a practical basis for the charge is required. The utilization of the planning criteria, the actual costs of construction, and the planned costs of construction provide the practical basis necessary to establish the reasonable relationship requirement. For utilities in California, the requirements have been codified in the California Government Code sections 66013, 66016, and 66022, which are interspersed within the 'Mitigation Fee Act.' This will be further discussed in the next chapter, Section 2.

The use of system planning criteria is one of the more important aspects in the determination of a connection fee. System planning criteria provides the “rational nexus” between the amount of infrastructure necessary to provide service and the charge to the customer. The rational nexus test requires that there be a connection (nexus) established between the burden of new development on the existing or new or expanded facilities required to accommodate new or expanded development, and the appropriate apportionment of the cost to the new or expanded development in relation to benefits reasonably received.

To comply with the rational nexus test the District’s calculated sewer connection fee requires the following:

1. *“A connection be established between new development and the new or expanded facilities required to accommodate such development. This establishes the rational basis of public policy.*
2. *Identification of the cost of these new or expanded facilities needed to accommodate new development. This establishes the burden to the public of providing new facilities to new development and the rational basis on which to hold new development accountable for such costs. This may be determined using the so-called Banberry factors. [Banberry Development Company v. South Jordan City (631 P.2d 899, Utah 1981)].*
3. *Appropriate apportionment of that cost to new development in relation to benefits it reasonably receives. This establishes the nexus between the fees being paid to finance new facilities that accommodate new development and benefit new development receives from such new facilities.”<sup>2</sup>*

The first bullet of the rational nexus test requires the establishment of a rational basis of public policy. This implies the planning and capital improvement studies that are used to establish the need for new facilities to accommodate growth. Adopted capital plans, master plans, or facility plans should firmly meet this first test since these plans assess existing facilities and capacity, project future capacity requirements, and determine the future capital infrastructure and new facilities needed to accommodate growth.

The second portion of the rational nexus test discusses the Banberry Factors. In summary, “consideration must be given to seven factors to determine the proportionate share of costs to be borne by new development:

1. *The cost of existing facilities*
2. *The means by which existing facilities have been financed*
3. *The extent to which new development has already contributed to the cost of providing existing excess capacity*
4. *The extent to which existing development will, in the future, contribute to the cost of providing existing facilities used community wide or non-occupants of new development*
5. *The extent to which new development should receive credit for providing, at its cost, facilities the community has provided in the past without charge to other development in the service area.*

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<sup>2</sup> Ibid, p. 16 and 17.

6. *Extraordinary costs incurred in serving new development*
7. *The time-price differential inherent in fair comparisons of amount of money paid at different times.*<sup>3</sup>

The final portion of the rational nexus test is the reasonable apportionment of the cost to new development in relation to benefits it reasonably receives. This is accomplished in the methodology to establish the District’s sewer connection fee, which is discussed in more detail within this section.

One of the driving forces behind establishing a cost-based connection fee is that “growth pays for growth”. Therefore, these fees are typically established as a means of having new customers, and those requiring additional capacity in the utility system, pay a proportional share of the cost of the required infrastructure. The financing criteria for establishing the connection fee relates to the method used to finance infrastructure on the system and assures that customers are not paying twice for infrastructure – once through the connection fees and again through sewer service fees (e.g., rates). The double payment can come in through the imposition of growth-related infrastructure debt service within a customer’s rates. The financing criteria also reviews the basis under which system extensions were provided so that the customer is not charged for infrastructure that was provided (contributed) by developers.

## 1.5 Overview of the Connection Fee Methodology

In establishing connection fees, there are differing methodologies. There are three generally accepted connection fee methods;

- “The *buy-in method* is based on the value of the existing system’s capacity. This method is typically used when the existing system has sufficient capacity to serve new development now and into the future.
- The *incremental cost method* is based on the value or cost to expand the existing system’s capacity. This method is typically used when the existing system has limited or no capacity to serve new development now and into the future.
- The *combined approach* is based on a blended value of both the existing and expanded system’s capacity. This method is typically used where some capacity is available in parts of the existing system, but new or incremental capacity will need to be built in other parts to serve new development at some point in the future.”<sup>4</sup>

For the development and calculation of the District’s sewer connection fee, the “combined approach” was used since there is available capacity in the existing system, but the need for future (capacity) expansion also exists. Accordingly, the value of District assets and future projects will be determined and then be divided by the total number of existing and future ERU’s. The result will be the maximum allowed total sewer connection fee.

Regardless of the overall methodology selected, a common denominator of the technical analyses is the various steps undertaken. These steps are as follows:

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<sup>3</sup> Ibid, P. 18 and 19.

<sup>4</sup> AWWA M-1 Manual, p 6<sup>th</sup> Edition, p. 265-266.

- Determination of system planning criteria
- Determination of ERU's
- Calculation of existing system costs
- Determination of any credits

The first step in establishing connection fee is the determination of the system planning criteria. This implies calculating the amount of capacity required by a single family residential customer. For the Study, sewer ERUs were developed based on total sewer living units where the multi-family living units were adjusted based on the relationship of single family to multi-family for the proposed sewer rates.

Once the number of equivalent units or capacity components for the District's system is determined, a component-by-component system analysis is undertaken to determine the portion of the sewer connection fee attributable in dollars per ERU. In this process, the existing assets must be valued. Existing assets may be valued in a number of different ways. These methods may include the following:

- Original Cost (OC)
- Original Cost Less Depreciation (OCLD)
- Replacement Cost New (RCN)
- Replacement Cost New Less Depreciation (RCNLD)

Given these four different methods for valuing the assets, the selection of the valuation method certainly arises. The American Water Works Association M-1 manual notes the following concerning these various generally accepted valuation methods:

*"Using the OC and OCLD valuations, the [connection fee] reflects the original investment in the existing capacity. The new customer "buys in" to the capacity at the OC or the net book value cost (OCLD) for the facilities and as a result pays an amount similar to what the existing customers paid for the capacity (OC) or the remaining value of the original investment (OCLD).*

Using the RCN and the RCNLD valuations, the [connection fee] reasonably reflects the cost of providing new expansion capacity to customers as if the capacity was added at the time the new customers connected to the sewer system. It may be also thought of as a valuation method to fairly compensate the existing customers for the carrying costs of the excess capacity built into the system in advance of when the new customers connect to the system. This is because, up to the point of the new customer connecting to the system, the existing customers have been financially responsible for the carrying costs of that excess capacity that is available to development."<sup>5</sup>

As a point of reference for the Study, the District's sewer connection fee analysis will use a RCNLD methodology for existing infrastructure (assets). The District's assets will be valued at replacement value based on the District's CRP report. The future capital infrastructure needed to accommodate future growth will be based on the District's sewer capital plan. The existing infrastructure and future expansion projects are then added to the total cost component. This

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<sup>5</sup> Ibid., p. 268

total future cost is divided by the total equivalent residential units to determine the “gross connection fee”. Based on the sum of the existing and future component costs, the net allowable utility connection fee is determined. “Net” refers to the calculated “gross” connection fee, net of any debt service credits. “Allowable” refers to the concept that the calculated sewer connection fee is the District’s maximum cost-based charge. The District, as a matter of policy, may charge any amount up to the cost-based sewer connection fee, but not in excess of that amount. Charging an amount greater than the “allowable” sewer connection fee would not meet the nexus test of a cost-based sewer connection fee related to the benefit derived by the customer.

## 1.6 Legal Considerations for Connection Fees

An important consideration in developing a connection fee are the legal requirements at the state or local level. The legal requirements often provide the authority to establish the fees, and also may provide a general methodology around which a connection fee must be calculated or how the funds must be used. Given that, it is important for the District to understand these legal requirements and develop and adopt a connection fee which complies with those legal requirements. This section of the report provides an overview of the legal requirements for establishing a connection fee under California law. A discussion of the applicability of Proposition 218 and Proposition 26, as it relates to these fees is also provided.

The discussion within this section of the report is intended to be a summary of HDR’s understanding of the relevant California law as it relates to establishing a connection fee. It in no way constitutes a legal interpretation of California law by HDR.

### 1.6.1 Requirements Under California Law

Many states have specific laws regarding the establishment, calculation and implementation of a connection fee. The main objective of most state laws is to assure that the connection fee is established in such a manner that it is proportional and cost-based. In other cases, state legislation may have been needed to provide the legislative powers to the utility to establish the charges.

The laws for the enactment of connection fees in California are codified in California Government Code sections 66013, 66016, and 66022, which are interspersed within the ‘Mitigation Fee Act.’ The Mitigation Fee Act is comprehensive legislation dealing mainly with development impact fees, although the above sections set forth the various requirements for imposition of connection fees in California: calculation of the fees, noticing, accounting and reporting requirements, and processes for judicial review. Although contained within the Mitigation Fee Act, connection fees are not development fees.

A summary of the relevant statutes required in the calculation of a connection fee is as follows:

*“66013 (a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the*

*estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.”*

*“66013 (b) (3) ‘Capacity charge’ means a charge for facilities in existence at the time a charge is imposed or charges for new facilities to be constructed in the future that are of benefit to the person or property being charged. . . .”*

In addition to the determination of “the estimated reasonable cost of providing the service for which the fee is imposed,” California law also requires the following:

- That notice (of the time and place of the meeting, including a general explanation of the matter to be considered) and a statement that certain data is available be mailed to those who filed a written request for such notice;
- That certain data (the estimated cost to provide the service and anticipated revenue sources) be made available to the public;
- That the public agency provide an opportunity for public input at an open and public meeting to adopt or modify the fee; and
- That revenue in excess of actual cost be used to reduce the fee creating the excess

The basic principle that needs to be followed under California law is that the connection fee be based on a proportionate share of the costs of the system required to provide service and that the requirements for adoption and accounting be followed in compliance with California law.

### **1.6.2 Propositions 218 and 26 and Connection Fees**

In 1996, the voters of California approved Proposition 218, which required that the imposition of certain fees and assessments by municipal governments require a vote of the people to change or increase the fee or assessment. Of interest in the Study is the applicability of Proposition 218 to the establishment of the sewer connection fee for the District.

In *Richmond v. Shasta Community Services Dist.*, 32 Cal.4th 409 (2004), the California Supreme Court held that connection fees are not “assessments” under Proposition 218 because they are imposed only on those who are voluntarily seeking service, rather than being charged to particular identified parcels, and therefore such fees are not subject to the procedural or substantive requirements of Proposition 218. Additionally, the court held that a connection fee is not a development fee. The court also held that such fees can properly be enacted by either ordinance or resolution.

In November 2010 the voters of California passed Proposition 26, an initiative based state constitutional amendment, which provided a new definition of the term “tax” in the California Constitution. Under Proposition 26 a fee or charge imposed by a public agency is a tax unless it meets one of seven exceptions. Connection fees fall within exception 2 – i.e., it is a charge imposed for a specific government service. Provided that a connection fee does not charge one fee payor more in order to charge another fee payor less (i.e., a cross-subsidy), and it does not exceed the reasonable costs to the local government of providing the service, then the fee is not a tax within the meaning of Proposition 26. Under Proposition 26, the local government bears the burden of proving, by a preponderance of the evidence, that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the

governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity.

## 1.7 Summary

This section of the report has provided an overview of connection fees; the basis for establishing a cost-based connection fee, considerations in establishing a connection fee, the burden development places on the sewer system, and the technical or analytical steps typically taken in the development of a connection fee. In the development of the District's sewer connection fee study, the issues identified in this section of the report have been addressed and will be discussed in more detail in later sections of the report.

This section of the report has also provided an overview of the legal requirements under California law for the establishment of connection fees. As was noted above, an important legal requirement is that the fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed.

The following section of the report provides the District's calculation of the sewer connection fee and provides the basis for the establishment of a reasonable, cost based connection fee. Again, HDR's summary of the legal requirements in no way constitutes a legal interpretation of California law by HDR. HDR recommends that the District's legal counsel review the development of the proposed sewer connection fee.

## 1.8 Disclaimer

HDR, in its calculation of the sewer connection fee presented in this report, has used "generally accepted" engineering and rate and fee making principles. This should not be construed as a legal opinion with respect to California law. HDR recommends that the District have its legal counsel review the sewer connection fee as set forth in this report to ensure compliance with California law.



## 2 Determination of the Sewer Connection Fee

This section of the report presents the details and key assumptions in the calculation of the District’s sewer connection fees. The calculation of the District’s sewer connection fees is based on District specific accounting and planning information. Specifically, the connection fees are based on the District’s capital replacement plan which details the value of the assets; the District’s sewer capital improvement plan; existing equivalent residential units and the projection of future ERU’s. As was noted in Section 2 of this report, the District’s planning documents and projections of future ERU’s provide the required support for a “rationally based public policy” to support the imposition of cost-based connection fee.

To the extent that the cost and timing of future capital improvements change, then the connection fees presented in this section of the report should be updated to reflect the changes.

### 2.1 Overview of the District

The District was formed in 1964, consists of a 15 square miles, and serves the community of Olympic Valley in Eastern Placer County, California. Olympic Valley was the site of the 1960 Olympic Winter Games. The original wells and pipes in the Valley were built by the State of California to service the games and many of these original facilities are still in use today. Olympic Valley’s primary industry is winter snow sports and related services, and the area is a major tourist destination. Year-round population in the Valley is estimated to be approximately 1,000 people, with a maximum overnight population of approximately 7,000. During the peak winter holiday period, the daily population can swell to 25,000.

### 2.2 Current Sewer Connection Fees

The District’s current sewer connection fees are shown below in Table 2 - 1.

Meter Size	Connection Fee
1"	\$5,627
1.5"	11,254
2"	18,006
3"	33,762
4"	56,270
6"	112,540

### 2.3 Net Allowable Sewer Connection Fees

In calculating the sewer connection fees for the District, existing infrastructure costs, debt service for existing facilities, future capital improvements relating to expansion were included. The methodology used to calculate each of these components is described below.



### 2.3.1 Equivalent ERUs

The total sewer ERUs were based the living units from the sewer rate study. For residential, one living unit is assumed to be one ERU. For residential (multi-unit) and commercial, the living units were adjusted based on the relationship of the proposed sewer rate for each class to the residential proposed sewer rate. Exhibit 1 in the Sewer Technical Appendix provides the assumptions used to develop the sewer ERU’s. Table 2 – 2 shows the development of the existing ERU’s.

Table 2 – 2 Existing Sewer ERU’s			
	# of Accounts / Units	Adjustment Factor	ERUs
Single Family Residential	661	1.000	661
Multi-Family Residential	1328	0.767	1,019
Commercial	<u>36</u>	1.303	<u>47</u>
	<b>2,025</b>		

The projected total sewer ERU’s to the year 2034 were based on an annual growth rate of 0.5% per year. The annual growth rate was used to project ERU’s from 2025 to 2034. The District’s total ERU’s of 1,726 were projected to be 1,815 by 2034 based on the assumed growth. Exhibit 1 of the Technical Appendix details this calculation.

### 2.3.2 Existing or Buy-In Component

To calculate the value of the existing assets for the buy-in component, the District’s methodology considered the replacement cost of each asset as developed in the CRP report. The replacement cost of each asset was then depreciated for the remaining useful life (i.e., replacement cost less depreciation).

The replacement value of the District’s existing system was based on costs from the District’s CRP report. Based on the installation date for each asset and an estimated useful life provided by the District, the replacement cost for each asset was depreciated. Existing facilities funded by developers, or not funded by the District, were excluded from the connection fee as these contributions do not reflect the investment made by the District.

The inclusion of a “debt service credit” avoids double charging the customer for the asset value in the existing or buy-in component of the connection fee, and also in the debt service component of the rates. The principal portion of the debt service balance on existing assets is removed from the value prior to calculating the buy-in portion of the fee.

### 2.3.3 Debt Service Component

This component accounts for the principal on existing assets. By segregating the debt service costs, the cost can be clearly identified and calculated appropriately. To avoid double-counting

of the assets financed with debt, the future principal associated with those assets was deducted from the existing infrastructure value.

The District has two outstanding issues for both the water and sewer system. They are the Facility Loan and the Snow Blower loan. The Sewer fund is responsible for 31.0% of the debt service on the two issues. The total debt service eligible is \$71,952 for sewer. Further detail can be seen on Exhibit 5 of the Sewer Technical Appendix.

### 2.3.4 Future Components

An important requirement for a connection fee study is the connection between the anticipated future growth on the system and the required facilities needed to accommodate that growth. For purposes of this study, the District’s current sewer Capital Improvement Plan (CIP) for a ten year planning period was provided and District staff reviewed capital improvements which were growth related. Capital improvements that were growth-related totaled \$276,000. Exhibit 2 of the Technical Appendix contains the details of this portion of the fee. Table 2 – 3 shows the calculation of the max allowable sewer connection fee.

Table 2 - 3 Summary of the Max Allowable Sewer Connection Fee (\$/ERU)	
<b>Existing Plant (RCNLD)</b>	
Total Collection Plant	\$7,746,639
Total Existing General Plant	<u>2,327,154</u>
<b>Total Existing Plant</b>	<b>\$10,073,793</b>
Less: Outstanding Debt Principal	<u>(\$71,952)</u>
<b>Total Net Existing Plant</b>	<b>\$10,001,841</b>
<b>Future Plant</b>	
Total Collection Plant	\$276,157
Total Future General Plant	<u>0</u>
<b>Total Net Existing and Future Plant</b>	<b>\$10,277,998</b>
<b>Total ERUs</b>	<b>1,815</b>
<b>Net Allowable Sewer Connection Fee (\$/ERU)</b>	<b>\$5,664</b>

Based on the sum of the component costs calculated above, the net max allowable sewer connection fee was determined. “Max allowable” refers to the concept that the calculated sewer connection fee shown on Table 2 - 3 are the District’s cost-based sewer connection fees. The District, as a matter of policy, may charge any amount up to the max allowable connection fee, but not in excess of that amount. Charging an amount greater than the max allowable sewer connection fee would not meet the nexus test of a cost-based connection fee. Details of the calculation are provided in the Sewer Technical Appendix.

As can be seen in Table 2 - 3, the calculated max allowable sewer connection fee was determined to be \$5,664 per ERU. In discussion with the District, because the calculated max allowable sewer connection fee was a few dollars different than the current sewer connection fee, it was decided to keep the current fee and include a provision to annually increase the sewer connection fee based on the ENR CCI 20-City Average. The proposed application of the sewer connection fee is on the customer water meter size. These fees are stated as one (1) ERU or a 1-inch meter.

Table 2 - 4 provides a summary of the District’s proposed sewer connection fees by meter size.

Table 2 - 4 Summary of Allowable Sewer Connection Fee by Meter Size		
Meter Size <sup>[1]</sup>	Meter Equivalency <sup>[2]</sup>	Sewer Connection Fee
1"	1.0	\$5,627
1- 1/2"	2.0	11,254
2"	3.2	18,006
3"	6.0	33,762
4"	10.0	56,270
6"	20.0	112,540

[1] Connection fees for meters ≥ 2-inch meters may be calculated by the District on a case by case basis.

[2] Meter equivalency set to 1-inch meter equivalency.

As can be seen in Table 2 - 4, the Sewer Connection Fee is \$5,627 for a 1-inch meter. The connection fee varies based on the size of the customer’s meter. The capacity charges for the larger meter sizes are determined by multiplying the capacity charge for a 1-inch meter by the meter equivalency factors (i.e., relative capacities). Similar to the water connection fee for those connections with a meter size greater than 2-inch will be reviewed by the District to ensure that the capacity reflects the assumptions used to establish the sewer connection fee.

## 2.4 Key Sewer Assumptions

In the development of the District’s sewer connection fees, a number of key assumptions were utilized. These are as follows:

- The sewer connection fees were developed on the basis of the District’s planning documents, anticipated future connections and the needed capital improvements to serve those future connections
- The District’s asset records were used to determine the existing infrastructure assets and their value. Assets were valued based on the District’s capital replacement plan data in 2024 dollars
- Contributions were excluded from the analysis and calculation of the sewer connection fee
- The District provided financial records related to future sewer debt service payments
- The District provided the most recent sewer CIP for future expansion improvements over a ten year planning period

- The District determined the portion of future improvements that were growth-related
- The base year for the CIP was assumed 2024
- The calculation of the debt credit component included current outstanding principal on existing assets

## 2.5 Implementation of the Proposed Sewer Connection Fee

HDR would recommend that the District adjust the sewer connection fees on an annual basis using the Engineering News Record Construction Cost Index (ENR-CCI) 20-City Average to reflect the cost of interest and inflation. This method of escalating the District’s sewer connection fee should be used for no more than a five-year period. After five years, HDR recommends that the District update the sewer connection fees based on the actual cost of infrastructure and any new planned facilities that would be contained in an updated master plan or CIP.

## 2.6 Consultant Recommendations

Based on our review and analysis of the District’s sewer connection fee, HDR provides the following recommendations:

- The District should revise and update its sewer connection fee to the calculated maximum allowable sewer connection fee shown in the Study. The fees are applicable for any new customers connecting to the sewer system, or existing customer requesting/requiring additional capacity. The adopted sewer connection fee shall not exceed the calculated fees as set forth in this report.
- The District should make periodic (annual) adjustments to the sewer connection fee based on changes in the Engineering News Record Construction Cost Index 20-City Average.
- The District should update the actual calculations for the sewer connection fee based on the methodology as approved by the resolution or ordinance setting forth the methodology for water connection fee at such time when a new capital plan, facilities plan, master plan or a comparable plan is approved or updated by the District for the sewer system.

## 2.7 Summary

The development of the sewer connection fee by HDR utilized generally accepted engineering and connection fee establishing principles, while applying District specific planning, asset and customer information. HDR would recommend that the District have its legal counsel review the sewer connection fee and the report before any adjustments are made to ensure compliance with California law.



## 3 Technical Appendix

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**Olympic Valley  
Sewer Connection Fee Study  
ERU Projections  
Exhibit 1**

<b>Summary Totals</b>	<b>ERUs</b>
2024 totals <sup>[1]</sup>	1,726
Projected 2034 ERUs <sup>[2]</sup>	1,815
Add'l ERUs 2025 - 2034	88

<b>Year</b>	<b>ERUs<sup>[2]</sup></b>	<b>Add'l ERUs</b>
2024	1,726	
2025	1,735	9
2026	1,744	9
2027	1,753	9
2028	1,761	9
2029	1,770	9
2030	1,779	9
2031	1,788	9
2032	1,797	9
2033	1,806	9
2034	1,815	9

**Notes**

- [1] - Sewer ERUs developed based on sewer rate study living units; MF adjusted by 76.7% and Commercial by 130.3% based on the proposed sewer rates  
 [2] - 0.5% annual growth rate

Olympic Valley  
 Sewer Connection Fee Study  
 Capital Improvement Projects  
 Exhibit 2

	Total 2024\$	Connection Fee Eligible	Cost 2024\$
<b>Future Collection Related Assets</b>			
Sewer Flow Meter Project	\$90,000	0.0%	\$0
Sewer System Rehab Project	4,500,000	5.1%	230,131
Backyard Easement Sewer Rplmnt	900,000	5.1%	46,026
	\$5,490,000		\$276,157
<b>Future General Plant Related Assets</b>			
	\$0		\$0
<b>Total Future Capital Improvements</b>	\$5,490,000		\$276,157
<b>Notes</b>			

Olympic Valley  
Sewer Connection Fee Study  
Collection  
Exhibit 3

Asset	Replacement Cost New <sup>[1]</sup>	Depreciation Percent	Connection Fee Eligible	RCNLD
<b>Existing Collection Related Assets</b>				
Gravity Mains (50 yrs)	\$22,176,021	56.6%	50.0%	\$4,815,954
Laterals (50 yrs) <sup>[2]</sup>	3,932,125	52.1%	50.0%	940,959
Manholes (15 yrs)	6,409,238	37.9%	50.0%	1,989,726
Cleanouts (25 yrs)	0	0.0%	0.0%	0
Flow Meters (50 yrs)	522,508	50.0%	0.0%	0
<b>Total</b>	<b>\$33,039,892</b>			<b>\$7,746,639</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,815</b>
<b>Existing Collection Related Buy-in (\$ / ERU )</b>	<b>\$18,206.04</b>			<b>\$4,268.65</b>
<b>Total Collection Related Buy-in (\$ / ERU)</b>	<b>\$18,206.04</b>			<b>\$4,268.65</b>
<b>Future Collection Related Assets</b>				
Sewer Flow Meter Project	\$90,000		0.0%	\$0
Sewer System Rehab Project	4,500,000		5.1%	230,131
Backyard Easement Sewer Rplmnt	900,000		5.1%	46,026
<b>Total Future Collection Related Assets</b>	<b>\$5,490,000</b>			<b>\$276,157</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,815</b>
<b>Future Collection Related Expansion (\$ / ERU)</b>				<b>\$152.17</b>
<b>Total Future Collection Related Expansion (\$ / ERU)</b>				<b>\$152.17</b>
<b>Total Collection - Related Buy-in and Expansion (\$ / ERU)</b>	<b>\$18,358.21</b>			<b>\$4,420.82</b>

**Notes**

[1] - Replacement cost based on District Capital Replacement Plan (CRP) Report

[2] - Main/Laterals assumed 50% developer contributed.



Asset	Replacement Cost New <sup>[1]</sup>	Depreciation Percent	Connection Fee Eligible	RCNLD
<b>Existing General Plant Related Assets</b>				
Shared Expenses - 305 <sup>[2]</sup>	20,603,986	50.0%	17.5%	\$1,802,849
Shared Expenses - 1810 <sup>[2]</sup>	5,992,055	50.0%	17.5%	524,305
<b>Total</b>	<b>\$26,596,041</b>			<b>\$2,327,154</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,815</b>
<b>Existing General Plant Related Buy-in (\$ / ERU )</b>	<b>\$14,655.27</b>			<b>\$1,282.34</b>
<b>Total General Plant Related Buy-in (\$ / ERU)</b>	<b>\$14,655.27</b>			<b>\$1,282.34</b>
<b>Future General Plant Related Assets</b>				
0	\$0		0%	\$0
0	0		0%	0
<b>Total Future General Plant Related Assets</b>	<b>\$0</b>			<b>\$0</b>
<b>Current + Future (2034 ERUs)</b>				<b>1,815</b>
<b>Total Future General Plant Related Expansion (\$ / ERU)</b>				<b>\$0.00</b>
<b>Total General Plant - Related Buy-in and Expansion (\$ / ERU)</b>	<b>\$14,655.27</b>			<b>\$1,282.34</b>

**Notes**

[1] - Replacement cost based on District Capital Replacement Plan (CRP) Report

[2] - Shared general plant is 50% Fire / 50% Water & Sewer; split is 65% Water / 35% Sewer or 17.5% Sewer (50% X 35% = 17.5%)

Olympic Valley  
 Sewer Connection Fee Study  
 Debt Service Component  
 Exhibit 5

Year	Principal	Interest	Total Debt	ERUs	\$ / ERU	Basis
<b>Facility Loan</b>						
FY 2025	\$34,737	\$1,986	\$36,723			
FY 2026	37,214	731	37,946			
	-----	-----	-----			
	\$71,952	\$2,717	\$74,669	1,815	\$39.65	Current + Future (2034 ERUs)
<b>Total Debt Service Credit</b>					\$39.65	
<b>Notes</b>						

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Olympic Valley  
 Sewer Connection Fee Study  
 Allowable Sewer Connection Fees  
 Exhibit 6

Component	Calculation Results (\$ / ERU) <sup>[1]</sup>		
	Existing	Future	Total
Collection	\$4,268.65	\$152.17	\$4,420.82
General Plant	1,282.34	0.00	1,282.34
Debt Service	(39.65)	N/A	(39.65)
<b>Total</b>	<b>\$5,511.33</b>	<b>\$152.17</b>	<b>\$5,663.51</b>
<b>Net Sewer Connection Fee [Rounded]</b>			<b>\$5,664</b>
<b>Current Sewer Connection Fee</b>			<b>\$5,627</b>
<b>Difference</b>			<b>\$37</b>
Meter Size	Ratio	Cost <sup>[2]</sup>	
1" Meter	1.00	\$5,627	
1.5" Meter	2.00	11,254	
2" Meter	3.20	18,006	
3" Meter	6.00	33,762	
4" Meter	10.00	56,270	
6" Meter	20.00	112,540	

**Notes**

[1] - Methodology is Replacement Cost New Less Depreciation (RCNLD)

[2] - Connection Fee for meters ≥ 2" may be calculated by the District

# Olympic Valley Public Service District Water and Sewer Rate & Fee Study








January 28, 2025



1

## Overview of the Presentation

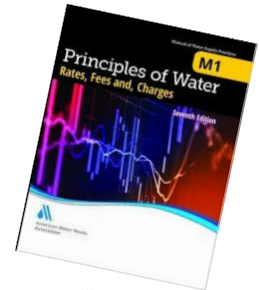
-  Purpose of the Study
-  Overview of the Rate Study Process
-  Draft Study Results
-  Summary & Next Steps
-  Questions & Discussion

2

2

## Purpose of the Study

- Provide sufficient revenue to operate and maintain the District's water and sewer utilities
- Meet requirements of Proposition 218
  - Develop cost-based and proportional rates that reflect customer and system characteristics
  - Provide an administrative record
- Reflect prudent financial planning criteria
  - Funding capital improvement and replacement needs
  - Maintain target minimum reserve levels
- Develop the Study using generally accepted methodologies tailored to the District's system and customer characteristics



3

3

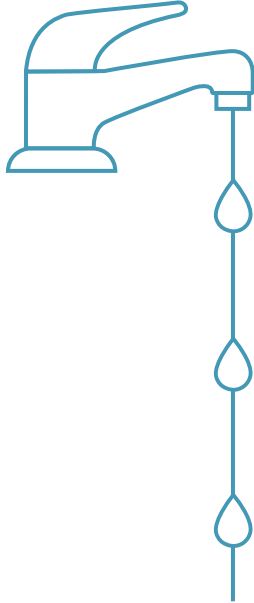
## Proposition 218 – Establishing Cost Based Rates

- Proposition 218 is a California constitutional amendment designed to protect taxpayers by limiting the methods in which local governments can create or increase taxes, fees and charges without taxpayer consent
- Proposition 218 is not prescriptive in defining a “cost-based” rate
  - Fees shall not exceed the **reasonable cost** of providing the service
  - Fees shall not exceed the **proportional cost** of providing the service
- Cost of service analysis results (unit costs) are the foundation of the proposed rates
  - Nexus between cost to provide service (expenses) and rates (fixed and variable) charge to customers (revenues)

4

4

## Developing Cost-Based Rates



### REVENUE REQUIREMENT

Compares the revenue of the utility to the expenses to evaluate the level of the current rates

### COST OF SERVICE

Proportionally distributes the revenue requirement to the customer classes of service

### RATE DESIGN

Design rates for each class of service to meet the revenue requirement, cost of service results, and rate design goals and objectives

5

5

## Revenue Requirement Analysis



6

## Revenue Requirement – Overview

Compares utility revenues to expenses	<ul style="list-style-type: none"> <li>Determines the level of rate revenue adjustment necessary</li> </ul>
Uses prudent financial planning criteria	<ul style="list-style-type: none"> <li>Adequate funding of renewal and replacements</li> <li>Maintaining sufficient ending reserve balances</li> </ul>
Reviews a specific time period	<ul style="list-style-type: none"> <li>Typically, five-to-ten-year period</li> <li>Rate setting is often 2 – 5 years</li> </ul>
Utilities are analyzed on a “stand-alone basis”	<ul style="list-style-type: none"> <li>No transfer of funds from other District funds</li> <li>Rates need to support operations and capital</li> </ul>
Utilizes the “cash basis” methodology	<ul style="list-style-type: none"> <li>Generally accepted method for publicly owned utilities</li> </ul>

7

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## Revenue Requirement – Key Assumptions

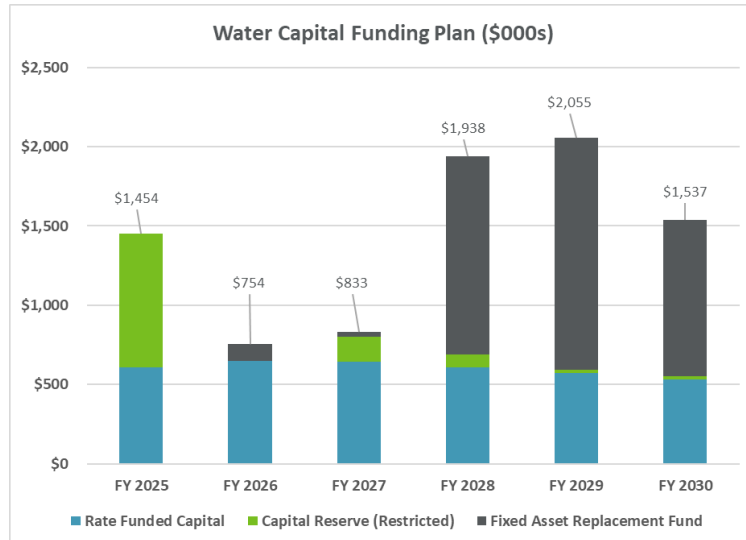
- Revenues independently calculated based on the specific customer characteristics of each utility
- Expenses based on FY 2025 budget for each utility
  - Projected through FY 2034 based on annual inflationary factors
- Capital funding plan addresses need for improvements as well as renewal and replacement
  - Utilizes the District’s Capital Improvement and Capital Replacement Plans for each utility
- Target annual rate funding of capital (FY 2025 – FY 2030)
  - Water: averages \$600,000 per year
  - Sewer: averages \$500,000 per year



8

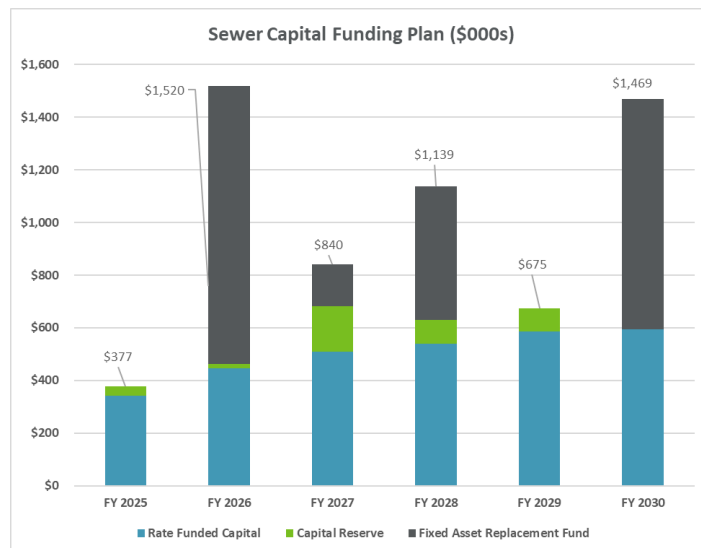
8

# Water Capital Funding Plan



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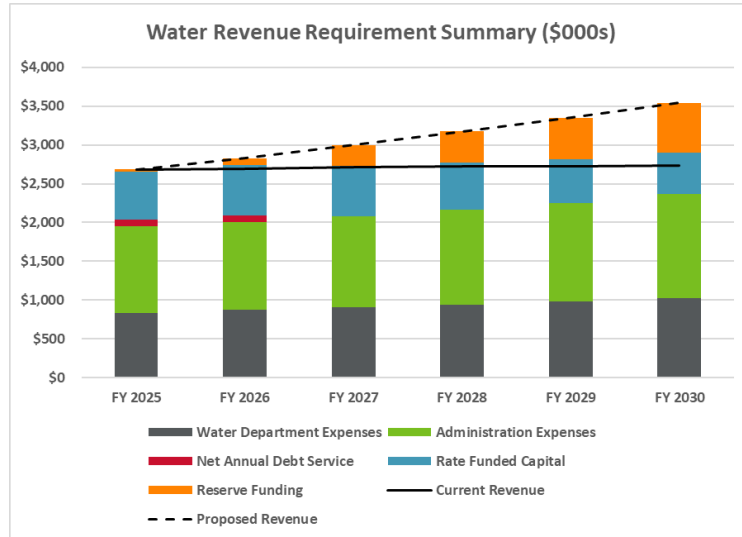
# Sewer Capital Funding Plan



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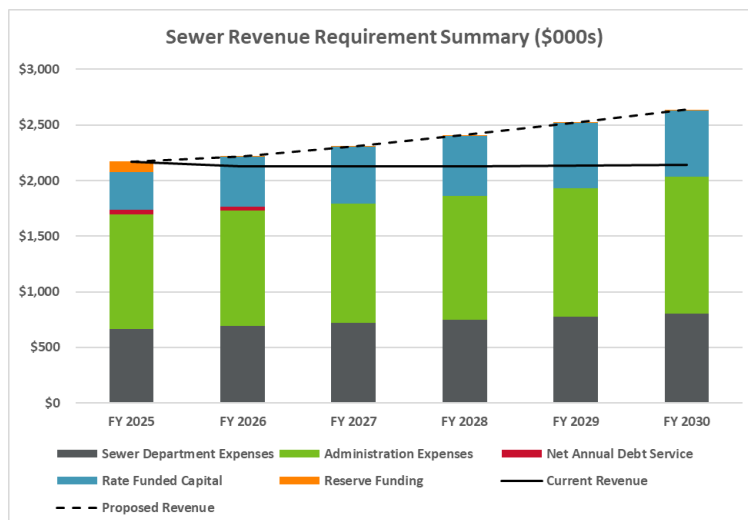


# Water Revenue Requirement



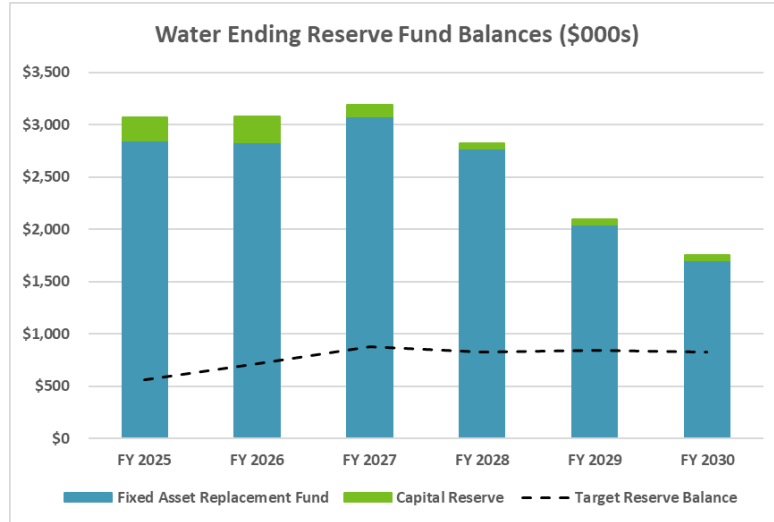
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# Sewer Revenue Requirement



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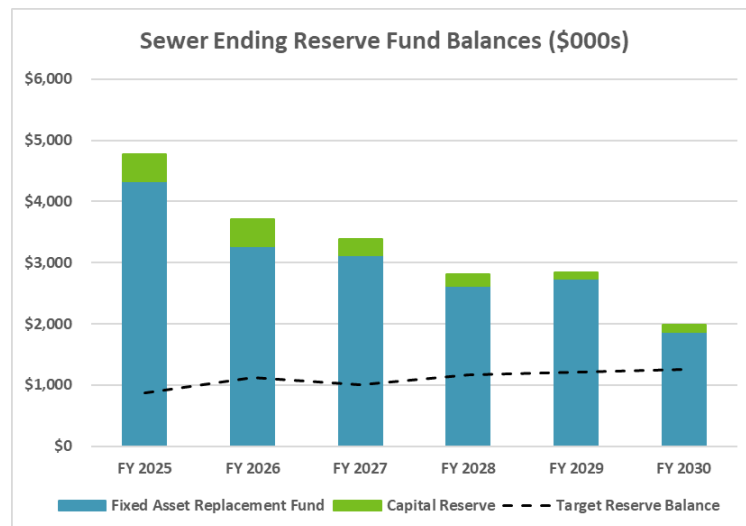
# Water Reserve Levels



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# Sewer Reserve Levels



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# Revenue Requirement Summary

- Annual rate adjustments are necessary to prudently fund the water and sewer utilities
  - **O&M** – fund current and future inflationary increases
  - **Capital** – increase rate funding for annual renewal and replacement and necessary system improvements
  - **Reserves** – maintain adequate funds for cash flow, emergency situations, and strong financials for credit ratings

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Water System Avg Rate Adjustment</b>	--	6.0%	6.0%	6.0%	6.0%	6.0%
Avg Annual Residential Customer Bill <sup>[1]</sup>	\$1,935.55	\$2,051.68	\$2,174.78	\$2,305.27	\$2,443.59	\$2,509.20
Annual Change		\$116.13	\$123.10	\$130.49	\$138.32	\$146.62
<b>Sewer System Avg Rate Adjustment</b>	--	5.0%	5.0%	5.0%	5.0%	5.0%
Avg Annual Residential Customer Bill <sup>[2]</sup>	\$810.34	\$850.86	\$893.40	\$938.07	\$984.97	\$1,034.22
Annual Change	--	\$40.52	\$42.54	\$44.67	\$46.90	\$49.25

[1] – 3/4-inch Meter Charge + 120,000 gallons; no cost of service changes are included

[2] – Annual Fixed Charge; no cost of service changes are included

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## Cost of Service Analysis



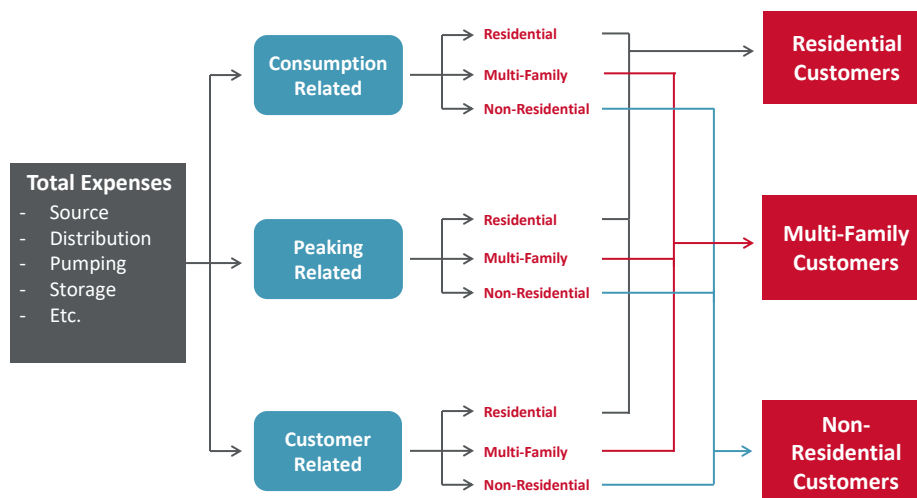
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## Cost of Service Assumptions

- Provides the basis to meet Proposition 218 requirements
  - Proportional distribution of costs between customer classes
- Customer classes of service were reviewed for each utility
  - Rates were adjusted based on cost of service results
- Revenue requirement distributed proportionally to customer classes of service based on:
  - Water:
    - ✓ Average usage
    - ✓ Peak usage
    - ✓ Number of customers
  - Sewer:
    - ✓ Assumed flow
    - ✓ Number of customers

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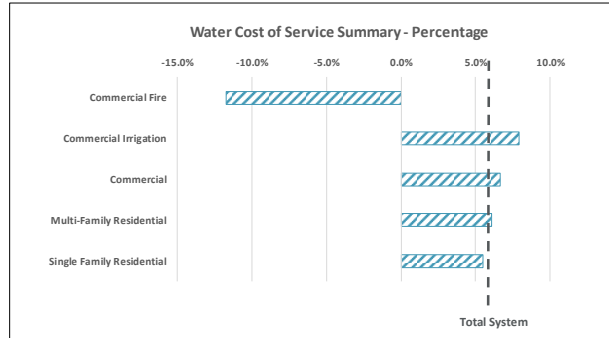
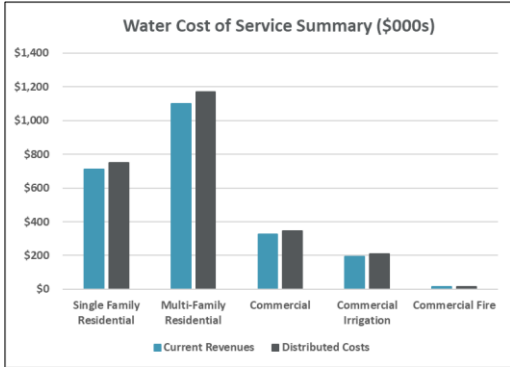
## Cost of Service EXAMPLE Process (water)



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# Water Cost of Service Results Summary

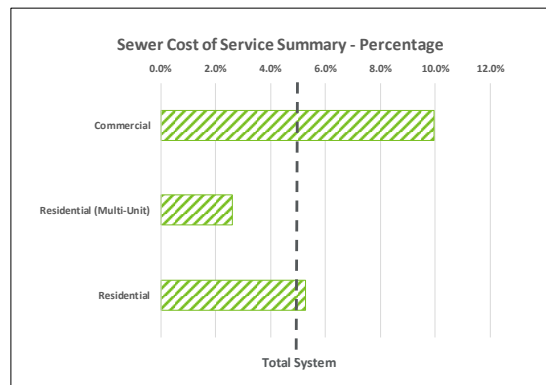
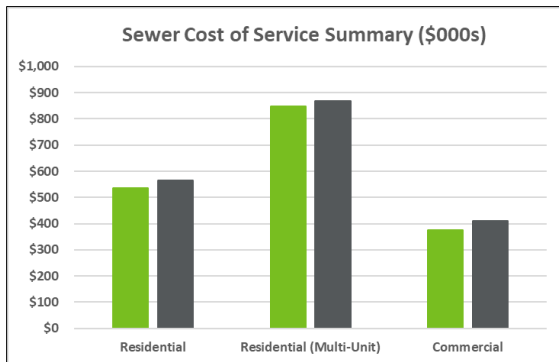


\* Cost of service results are implemented in Year 1 only \*

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# Sewer Cost of Service Results Summary



\* Cost of service results are implemented in Year 1 only \*

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## Cost of Service Summary

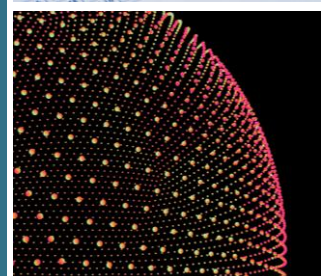
- Analysis reflects facility and service requirements of each customer class of each utility
- Minor cost differences exist for both the water and sewer systems
- Should be reviewed periodically to reflect changes in customer and system characteristics
- Snapshot in time based on current costs and system usage
- Cost of service average unit costs provide basis for proposed rate designs



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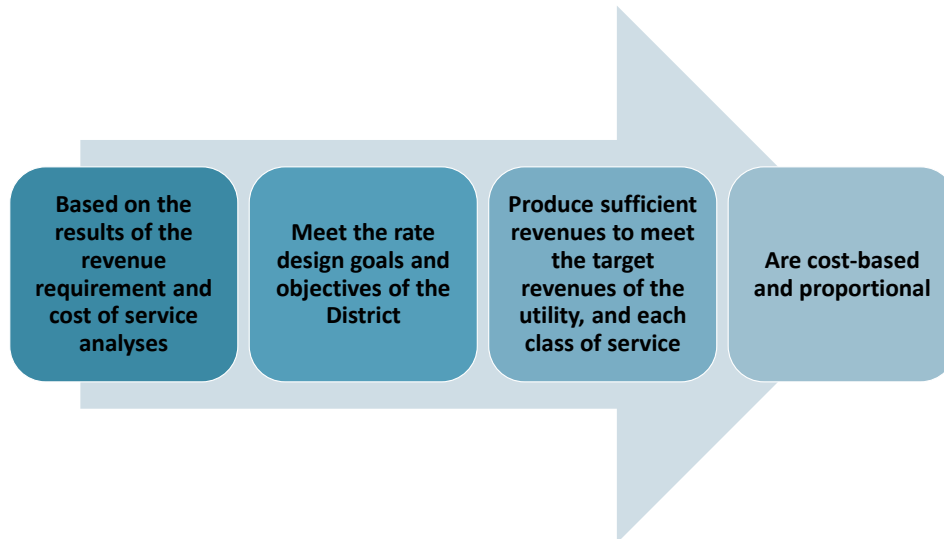
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## Rate Design



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## Rate Design - Overview



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## Overview of the Rate Design

### Proposed Water Rates

- Maintains current rate structure for all customer classes
- Commercial and commercial Irrigation fixed charge
  - Transitioned to a ¾" meter basis
  - Reflect AWWA safe operating capacity meter ratios by year 5
- Developed separate commercial fire rate schedule

### Proposed Sewer Rates

- No rate structure changes are proposed

Year 1 rate adjustments include cost of service results  
 Years 2 – 5 reflect annual overall system revenue adjustments

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# Water Rate Design – Single Family & Multi-Family Residential Rates

## Single Family Residential

	Present Rates	Proposed Rates				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
SFR	\$1,222.75	\$1,274.80	\$1,351.29	\$1,432.37	\$1,518.31	\$1,609.41
<b>Consumption Charge \$/1,000 gal</b>						
0 - 120 kgal	\$5.94	\$6.34	\$6.72	\$7.12	\$7.55	\$8.00
120 kgal - 220 kgal	12.08	14.76	15.64	16.58	17.58	18.62
220 kgal - 280 kgal	18.90	20.09	21.29	22.56	23.92	25.35
280 + kgal	41.86	42.96	45.53	48.25	51.16	54.21

## Multi-Family Residential

	Present Rates	Proposed Rates				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
MFR	\$592.77	\$665.59	\$705.53	\$747.86	\$792.73	\$840.29
<b>Consumption Charge \$/1,000 gal</b>						
All Usage	\$10.30	\$9.69	\$10.27	\$10.89	\$11.54	\$12.23

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# Water Rate Design – Commercial, Commercial Irrigation & Commercial Fire Rates

## Commercial

	Present Rates	Proposed Rates				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
5/8"	\$1,004.28	--	--	--	--	--
3/4"	1,095.90	1,025.00	1,025.00	1,025.00	1,030.00	1,040.00
1"	1,222.75	1,340.73	1,433.49	1,526.24	1,626.89	1,736.80
1 1/2"	2,456.00	2,687.99	2,869.30	3,050.62	3,247.70	3,463.20
2"	3,918.47	4,292.10	4,584.89	4,877.68	5,195.68	5,543.20
3"	7,357.70	8,057.60	8,605.70	9,153.80	9,749.23	10,400.00
4"	12,273.43	13,438.67	14,350.69	15,262.71	16,253.63	17,336.80
6"	24,550.37	26,878.16	28,699.43	30,520.70	32,499.74	34,663.20
<b>Consumption Charge \$/1,000 gal</b>						
All Usage	\$7.89	\$8.36	\$8.86	\$9.39	\$9.95	\$10.55

## Commercial Irrigation

	Present Rates	Proposed Rates				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
5/8"	\$1,004.28	--	--	--	--	--
3/4"	1,095.90	1,025.00	1,025.00	1,025.00	1,030.00	1,040.00
1"	1,222.75	1,340.73	1,433.49	1,526.24	1,626.89	1,736.80
1 1/2"	2,456.00	2,687.99	2,869.30	3,050.62	3,247.70	3,463.20
2"	3,918.47	4,292.10	4,584.89	4,877.68	5,195.68	5,543.20
3"	7,357.70	8,057.60	8,605.70	9,153.80	9,749.23	10,400.00
4"	12,273.43	13,438.67	14,350.69	15,262.71	16,253.63	17,336.80
6"	24,550.37	26,878.16	28,699.43	30,520.70	32,499.74	34,663.20
<b>Consumption Charge \$/1,000 gal</b>						
All Usage	\$14.28	\$14.85	\$15.74	\$16.68	\$17.68	\$18.74

## Commercial Fire

	Present Rates	Proposed Rates				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>						
5/8"	\$1,004.28	\$890.75	\$944.20	\$1,000.85	\$1,060.90	\$1,124.55

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# Sewer Rate Design

	<i>Present Rates</i>	<i>Proposed</i>				
		FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Fixed Charge</b>	<b>\$/Year</b>					
Residential	\$810.34	\$853.12	\$895.78	\$940.57	\$987.60	\$1,036.98
Residential (Multi-Unit)	\$637.57	\$654.32	\$687.04	\$721.39	\$757.46	\$795.33
Commercial	\$1,434.51	\$1,578.75	\$1,657.69	\$1,740.57	\$1,827.60	\$1,918.98
Residential - Pool / Spa	\$1,058.71	\$1,111.65	\$1,167.23	\$1,225.59	\$1,286.87	\$1,351.21
<b>Consumption Charge</b>	<b>\$/1,000 gal</b>					
Commercial > 75,000	\$19.14	\$21.05	\$22.10	\$23.21	\$24.37	\$25.59

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## Connection Fees



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## Overview of Connection Fees

- New connections pay a “buy-in” for existing assets and related facilities and an “incremental” fee for future or new, expansion related facilities
  - One time charge to pay into the system, a share equal to the value of the funds paid by others
  - New connections to pay a proportional share of facilities needed to serve them
  - Does not include O&M costs in calculation
- Based on the District’s planning documents, capital improvement plan (CIP), and existing assets

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## Connection Fee Methodology

- Determination of equivalent units
  - Links to infrastructure required to serve the District’s customers
- Calculation of system valuation for connection fee purposes
  - Includes both existing assets / infrastructure as well as planned future improvements (e.g., capital)
- Determination of any credits (e.g., debt service principal)
  - Avoid double charging – once through connection fees and again within rates
- District using combined approach (consistent with past practices/methodology)
  - Blended value of both existing and future system capacity
  - Debt credit for both water and sewer connection fees for facility loan
  - Asset replacement costs based on FY 2025 District Capital Replacement Plan (CRP) for each utility
    - ✓ Uses replacement cost new less depreciation (RCNLD)

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## Connection Fee Summary

- Based on the analysis for the District’s water and sewer connection fees, the current connection fees are justified and do not exceed the calculated maximum allowable connection fee for either utility
- Recommending the connection fees are annually adjusted by the Engineering News Record Construction Cost Index (ENR CCI) 20-City Average for no more than 5 consecutive years

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## Present and Proposed Water Connection Fees

Meter Size	Ratio	Fee <sup>[3]</sup>
Hotel Units <sup>[1]</sup>	0.40	\$5,816
3/4" Meter <sup>[2]</sup>	0.60	6,589
1" Meter	1.00	10,981
1 1/2" Meter	2.00	21,962
2" Meter	3.20	35,139
3" Meter	6.00	65,886
4" Meter	10.00	109,810
6" Meter	20.00	219,620

[1] – Hotel room or lock-off unit with kitchenette or no cooking facility

[2] – Applies to residential remodels or additions that are not required to install a fire suppression system

[3] – Connection fee for meters  $\geq 2$ " may be calculated by the District on a case-by-case basis

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## Present and Proposed Sewer Connection Fees

Meter Size	Ratio	Fee
1" Meter	1.00	\$5,627
1 1/2" Meter	2.00	11,254
2" Meter	3.20	18,006
3" Meter	6.00	33,762
4" Meter	10.00	56,270
6" Meter	20.00	112,540

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## Next Steps

- Receive Board feedback and input
  - Update the Study to reflect Board direction
- Set public hearing date
  - Present final study results, findings, and recommendations
  - If no majority protest (50% +1) Board may move to implement noticed rates



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Thank you for your input! Questions?



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