
Twentynine Palms Water District

2025 Water Rate Study
Final Report – December 11, 2025

Prepared by: Water Resources Economics, LLC



This page intentionally left blank



December 11, 2025

Matthew Shragge
General Manager
Twentynine Palms Water District
72401 Hatch Road
Twentynine Palms, CA 92277

Subject: Twentynine Water District 2025 Water Rate Study Report

Dear Mr. Shragge,

Water Resources Economics, LLC (WRE) is pleased to submit this 2025 Water Rate Study Report to Twentynine Palms Water District (District). This report documents the results and recommendations of the 2025 Water Rate Study. The goal of the study was to develop an updated five-year schedule of water rates that will sufficiently fund the District's water system expenses, help the District to meet its financial goals, and comply with cost-of-service principles.

This study utilized industry-standard rate-setting methodology in accordance with guidelines developed by the American Water Works Association. Our project team has a proven record of developing fair and equitable water rates for numerous public water agencies in California over the past 25 years. We are confident in our ability to develop sound water rates that satisfy the requirements of Proposition 218.

It has been a pleasure assisting the District, and we appreciate the support provided by District staff during this study.

Sincerely,

A handwritten signature in black ink, appearing to read "Sanjay Gaur".

Sanjay Gaur
Founder / President
Water Resources Economics, LLC

This page intentionally left blank

TABLE OF CONTENTS

1. Executive Summary	1
1.1 Overview	1
1.2 Financial Plan	2
1.3 Cost-of-Service Analysis	5
1.4 Rate Design	6
2. Introduction	11
2.1 Water System Overview	11
2.2 Rate Study Overview	11
2.3 Legal Requirements	11
2.4 Rate-Setting Methodology	12
2.5 Additional Information and Disclaimers	12
3. Financial Plan	14
3.1 Financial Plan Methodology	14
3.2 Revenues	14
3.3 Operations and Maintenance Expenses	20
3.4 Debt Service	21
3.5 Capital Expenditures	21
3.6 Financial Policies	22
3.7 Status Quo Financial Plan	23
3.8 Proposed Financial Plan	30
4. Cost-of-Service Analysis	36
4.1 Cost-of-Service Methodology	36
4.2 Revenue Requirement	36
4.3 Cost Functionalization	37
4.4 Cost Causation Components	40
4.5 Unit Cost Development	52
5. Water Rate Design	55
5.1 Rate Design Methodology	55
5.2 Proposed Changes to Rate Structure	55
5.3 Proposed Potable Fixed Meter Service Charges	55
5.4 Proposed Potable Commodity Charges	57
5.5 Proposed Non-Potable Charges	57
5.6 Proposed Commercial Fire Monthly Fixed Service Charges	58
5.7 Proposed Water Rate Schedule	59
5.8 Residential Bill Impacts	61
6. Appendices	63
6.1 Financial Plan Appendices	63
6.2 Cost-of-Service Analysis Appendices	69

LIST OF TABLES

Table 1-1: Reserve Policy Targets	3
Table 1-2: Proposed Financial Plan Scenario	4
Table 1-3: Current Water Rates	6
Table 1-4: Proposed Water Rate Schedule	8
Table 1-5: Sample Residential Monthly Bill Impacts in FY 2025/26	9
Table 1-6: Five-Year Monthly Bill Impacts for Average Residential Customer	9
Table 3-1: Current Water Rates	15
Table 3-2: Projected Number of Water Meters	16
Table 3-3: Projected Number of Commercial Fire Lines	16
Table 3-4: Projected Customer Water Usage (HCF)	17
Table 3-5: Calculated Rate Revenues at Current Rates	18
Table 3-6: Non-Rate Revenue Assumptions	18
Table 3-7: Projected Non-Rate Revenues	19
Table 3-8: Revenue Summary	20
Table 3-9: O&M Expense Inflationary Assumptions	20
Table 3-10: O&M Expense Summary	21
Table 3-11: Existing Debt Service	21
Table 3-12: Planned Capital Expenditures	22
Table 3-13: Status Quo Financial Plan Scenario	23
Table 3-14: Projected Cash Flows (Status Quo Financial Plan)	25
Table 3-15: Projected Fund Balances (Status Quo Financial Plan)	27
Table 3-16: Forecasted Financial Performance (Status Quo Financial Plan)	28
Table 3-17: Proposed Financial Plan Scenario	30
Table 3-18: Projected Cash Flows (Proposed Financial Plan)	31
Table 3-19: Projected Fund Balances (Proposed Financial Plan)	33
Table 3-20: Forecasted Financial Performance (Proposed Financial Plan)	34
Table 4-1: FY 2025/26 Revenue Requirement	37
Table 4-2: Operating Costs by System Functions	38
Table 4-3: Capital Assets by System Functions	39
Table 4-4: Non-Rate Revenues by System Functions	39
Table 4-5: System-Wide Capacity Allocation	41
Table 4-6: Service Type Allocation	41
Table 4-7: System Function Allocation to Cost Components	43
Table 4-8: Operating Allocation by Cost Component	44
Table 4-9: Capital Allocation by Cost Component	45
Table 4-10: Non-Rate Revenue Allocation by Cost Component	46
Table 4-11: Preliminary Cost-of-Service Allocation	47
Table 4-12: General Cost Reallocation	48
Table 4-13: Customer Demand Capacity	49
Table 4-14: Equivalent Fire Lines	49
Table 4-15: Capacity Allocation by Fire and Customer Demand	50
Table 4-16: Extra Capacity Reallocation	51

Twentynine Palms Water District 2025 Water Rate Study

Table 4-17: Final Cost-of-Service Allocation.....	51
Table 4-18: Fixed Revenue Recovery.....	52
Table 4-19: Equivalent Meter Units	53
Table 4-20: Units of Service Definitions	53
Table 4-21: Unit Cost by Cost Component	54
Table 5-1: Proposed FY 2025/26 Potable Fixed Meter Service Charge Calculation	56
Table 5-2: Comparison to Current Potable Fixed Meter Service Charges	56
Table 5-3: Proposed FY 2025/26 Potable Commodity Charge Calculations	57
Table 5-4: Comparison to Current Potable Commodity Charges	57
Table 5-5: Proposed FY 2025/26 Non-Potable Charges	58
Table 5-6: Comparison to Current Non-Potable Charges.....	58
Table 5-7: Proposed FY 2025/26 Commercial Fire Fixed Service Charge Calculation	59
Table 5-8: Comparison to Current Commercial Fire Fixed Service Charges	59
Table 5-9: Proposed Potable Monthly Fixed Service Charges	60
Table 5-10: Sample Residential Monthly Bill Impacts in FY 2025/26	61
Table 5-11: Five-Year Monthly Bill Impacts for Average Residential Customer	61
Table 6-1: O&M Expenses (Detail).....	63
Table 6-2: Planned Capital Projects (Detail)	67
Table 6-3: O&M Expenses by System Functions (Detail)	69
Table 6-4: Capital Assets by System Functions (Detail)	72

LIST OF FIGURES

Figure 1-1: Projected Fund Balances (Status Quo Financial Plan)	4
Figure 1-2: Projected Fund Balances (Proposed Financial Plan).....	5
Figure 1-3: Monthly Bill Comparison to Neighboring Water Districts.....	10
Figure 3-2: Revenue Requirements vs. Revenues (Status Quo Financial Plan).....	29
Figure 3-3: Projected Fund Balances (Status Quo Financial Plan)	29
Figure 3-4: Revenue Requirements vs. Revenues (Proposed Financial Plan)	35
Figure 3-5: Projected Fund Balances (Proposed Financial Plan).....	35
Figure 5-1: Residential Monthly Bill Comparison to Neighboring Water Districts	62

LIST OF ABBREVIATIONS

AMI: Advanced Metering Infrastructure
AWWA: American Water Works Association
District: Twentynine Palms Water District
EMU: Equivalent meter unit
FY: Fiscal year (July 1st – June 30th)
GPM: Gallons per minute
HCF: One hundred cubic feet
M1 Manual: <i>Manual of Water Supply Practices M1: Principles of Water Rates, Fees and Charges, Seventh Edition</i>
WRE: Water Resources Economics, LLC

1. EXECUTIVE SUMMARY

1.1 OVERVIEW

RATE STUDY OVERVIEW

Twentynine Palms Water District (District) is primarily funded by rates paid by customers. Public retail water agencies in California typically conduct a rate study every five years to ensure that customers are appropriately charged for water service and to reestablish the cost-of-service nexus that is required by Proposition 218. The District's currently adopted five-year rate schedule was developed in 2020 during a prior rate study and adopted in January 2021. The final year of the currently adopted five-year rate schedule went into effect in January 2025.

The District engaged Water Resources Economics, LLC (WRE) in 2025 to conduct a comprehensive water rate study, with the following objectives:

- Develop a five-year financial plan to meet financial targets for Fiscal Year (FY) 2025/26¹ to FY 2029/30
- Conduct a cost-of-service analysis based on the most recent data and customer water use characteristics
- Develop a proposed five-year water rate schedule for FY 2025/26 through FY 2029/30

LEGAL REQUIREMENTS

Legal considerations relating to retail water rates in California focus heavily on Proposition 218, which was enacted in 1996 and is now reflected in Article XIII C and Article XIII D of the California Constitution. Proposition 218 states that “property related fees and charges” (which include retail water rates) may not exceed the proportional cost of providing the service to the customer and may not be used for any purpose other than providing said service. The practical implication is that public retail water agencies in California must demonstrate a sufficient nexus between the costs incurred by the agency to provide service and the rates charged to customers.

RATE-SETTING METHODOLOGY

This study was conducted using industry-standard methodology outlined by the American Water Works Association (AWWA) in its *Manual of Water Supply Practices M1: Principles of Water Rates, Fees and Charges, Seventh Edition* (M1 Manual). The rate study process includes the following steps:

1. **Financial Plan:** Annual revenues and expenses are projected over the rate-setting period to determine the magnitude of rate increases needed to maintain financial sufficiency. Financial policies, such as reserve targets, are also evaluated and updated if necessary.

¹ FY 2025/26 is the fiscal year starting July 1, 2025 and ending June 30, 2026.

2. **Cost-of-Service Analysis:** Costs are allocated to customers in proportion to use of and burden on the water system. The overall goal is to establish a robust nexus between the costs incurred by an agency and the rates charged to customers, as required by Proposition 218.
3. **Rate Design:** The existing rate structure is evaluated, and potential changes are identified. A multi-year proposed rate schedule is then calculated directly from the results of the financial plan and cost-of-service analysis.
4. **Rate Study Documentation:** A rate study report is developed to document the proposed rate development process. This provides transparency and enhances legal defensibility in light of Proposition 218 requirements. This document serves as the report for this rate study.

1.2 FINANCIAL PLAN

WRE worked closely with District staff to develop a proposed financial plan that best suits the District's needs. The results and recommendations of the water rate study are driven by the District's financial performance, input from District staff, and feedback and direction from the Board of Directors.

FACTORS AFFECTING FINANCIAL PERFORMANCE

The District's financial performance is driven by the ability of water rates to meet the District's funding needs. To maintain financial sufficiency, water rates must recover District expenses and help satisfy any relevant financial policies, which typically include target reserve balances and debt coverage requirements. The key factors affecting financial performance over the rate-setting period include:

- **Planned capital investment:** The District plans to spend approximately \$13 million over the next five years on capital projects, including significant well and reservoir improvements. The planned capital projects represent critical investments in the District's water system infrastructure needed for the District to continue to provide clean and reliable water service to customers. All capital projects are expected to be funded by rates and reserves.
- **Ongoing inflation:** Operations and maintenance (O&M) expenses are expected to increase by approximately 4% on average each year of the study period due to inflationary pressures.
- **Water Demand:** Projected water demand over the rate-setting period is approximately 6% below the five-year historical average from 2020-2024. This reflects District staff's expectation that water demand will not fully rebound to prior levels after recent periods of water supply shortage and conservation. Despite some cost savings, the predominant impact from reduced water demand is the decline in revenue from rates.

Twentynine Palms Water District 2025 Water Rate Study

PROPOSED CHANGES TO RESERVE POLICY

The District's current reserve policy, which is shown in **Table 1-1** (Lines 1-4), includes targets for operating and capital reserves. The District's current reserve policy maintains cash on hand to meet short-term cash flow imbalances and to execute capital projects. The current reserve target ranges from approximately \$6.5 million to \$7.5 million over the five-year study period.

WRE recommends that the District implement a new reserve policy to maintain cash on hand to meet short-term cash imbalances, execute capital projects, and strengthen the District's ability to respond to unexpected events such as critical asset failure. The overall goal of the proposed reserve policy is to effectively mitigate financial risks and to align with industry norms. The proposed reserve policy includes two key changes to the current policy, which are outlined in **Table 1-1** (Lines 6-10) and described below.

Firstly, we recommend changing the capital reserve target from 6% of depreciable capital assets plus annual capital expenditures to the annual average of five-year planned capital expenditures. This updated target provides a more realistic estimate of capital spending and is better aligned with changing industry norms.

Secondly, we recommend the introduction of a new “emergency reserve” target to mitigate the risk to the District of an unexpected capital asset failure such as total well failure. The emergency reserve fund will provide an additional cash buffer to reduce the associated financial risk to the District. The recommended emergency reserve target is based on the estimated cost of a critical asset failure. Based on discussion with District staff, it was determined that a \$2 million emergency reserve target based on the cost of complete well failure is most appropriate.

Table 1-1: Reserve Policy Targets

Line	Reserve Policies	Reserve Target Basis	FY 2025/26
1	Current		
2	Operating Target	180 days of annual operating expenses	\$2,936,200
3	Capital Target	6% of depreciable capital assets plus annual capital expenditures	\$3,541,400
4	Total Reserve Target		\$6,477,600
5			
6	Proposed		
7	Operating Target	180 days of annual operating expenses	\$2,936,200
8	Capital Target	Annual average of five-year planned capital expenditures	\$2,595,400
9	Emergency Target	\$2 million (cost of unexpected well failure)	\$2,000,000
10	Total Reserve Target		\$7,531,600

STATUS QUO FINANCIAL PLAN

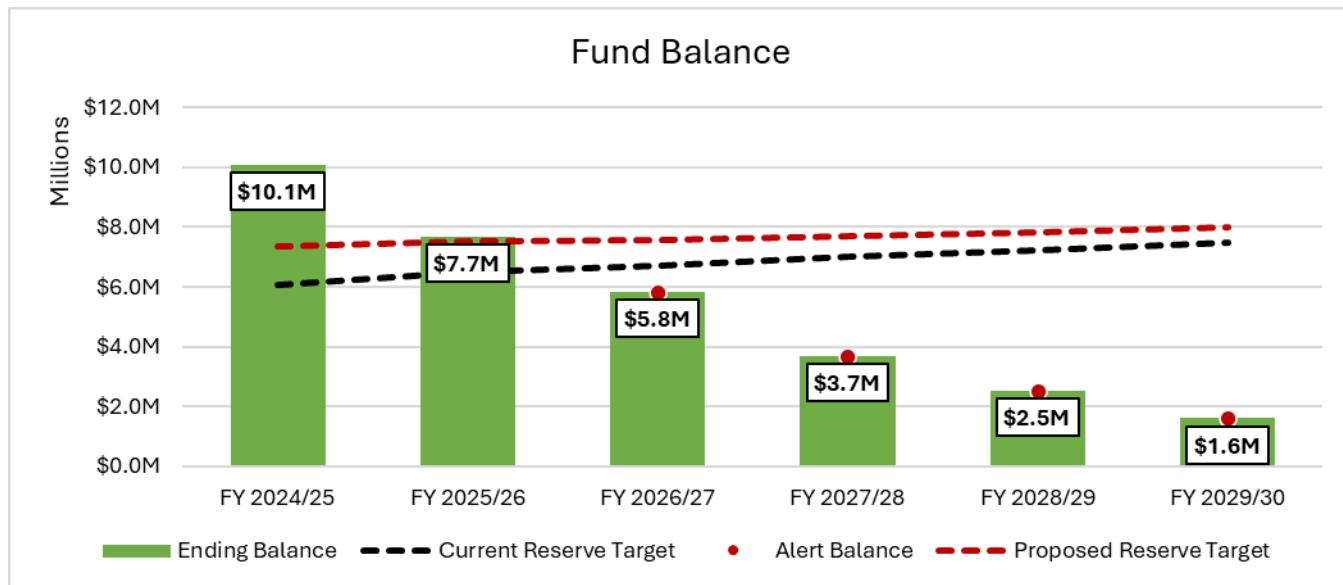
The first step in evaluating the District's financial performance is to develop a “status quo financial plan,” which is the scenario in which the District does not increase its water rate

Twentynine Palms Water District 2025 Water Rate Study

revenues over the rate-setting period. This exercise is to determine whether the District's current water rates are sufficient to meet key financial performance metrics.

Figure 1-1 shows the projected fund balances under the status quo scenario. The green bars represent the ending fund balances, the black dashed line represents the current reserve policy targets, and the dashed red line represents the proposed reserve policy targets. In this scenario the District is not able to meet its current nor proposed reserve policy target starting in FY 2026/27. Reserves are depleted to cover a significant portion of planned capital expenditures.

Figure 1-1: Projected Fund Balances (Status Quo Financial Plan)



PROPOSED REVENUE ADJUSTMENTS

Overall annual increases in water rate revenues resulting from rate increases are referred to as “revenue adjustments.” WRE worked with District staff to develop a proposed financial plan scenario, which is shown in **Table 1-2**. The proposed financial plan scenario includes 7% annual revenue adjustments each year of the study period (FY 2025/26 to FY 2029/30). The first year of rates is expected to be implemented in March and the following four years of rates are expected to be implemented each January. The proposed financial plan is projected to meet the District’s proposed reserve policy targets by the end of the study period.

Table 1-2: Proposed Financial Plan Scenario

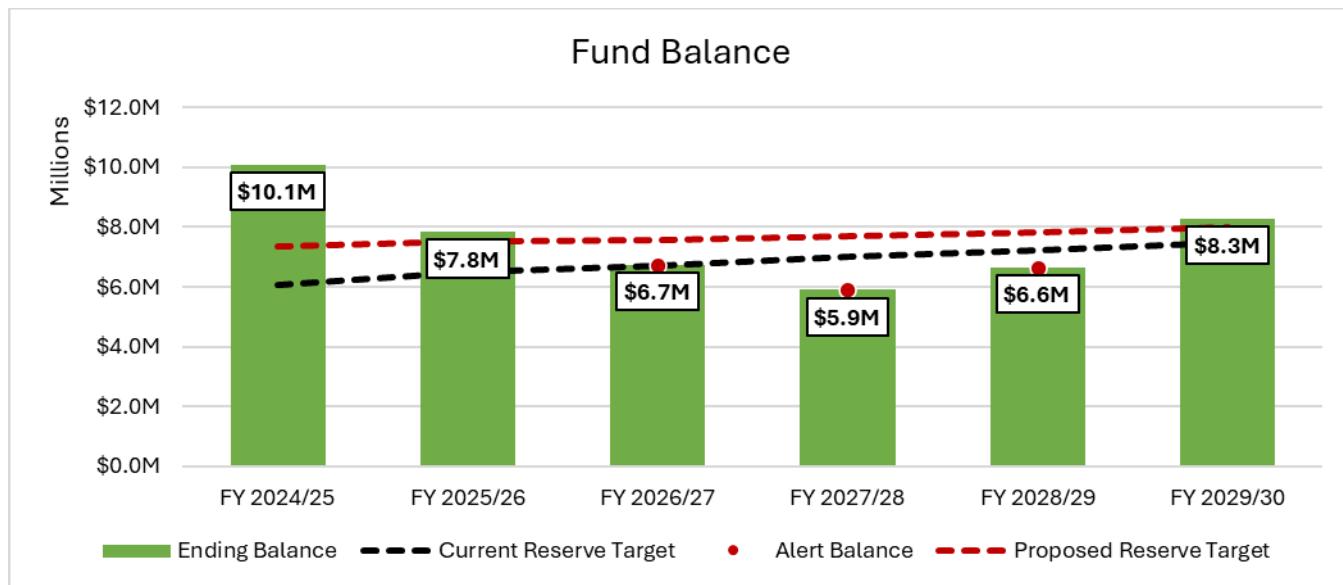
Line	Fiscal Year	Effective Date	Revenue Adjustments
1	FY 2025/26	3/1/2026	7%
2	FY 2026/27	1/1/2027	7%
3	FY 2027/28	1/1/2028	7%
4	FY 2028/29	1/1/2029	7%
5	FY 2029/30	1/1/2030	7%

Twentynine Palms Water District 2025 Water Rate Study

PROPOSED FINANCIAL PLAN

The proposed financial plan applies the revenue adjustments from **Table 1-2** to reevaluate financial performance. **Figure 1-2** shows the projected fund balances under the proposed scenario. In this scenario, the District will meet its proposed reserve targets by the end of the study period in FY 2029/30. Reserve levels fluctuate from year to year based on uneven capital project spending which varies from \$4.0 million to \$1.3 million each year. The District anticipates higher capital project spending in the first three years of the study period which draws down reserve levels (FY 2025/26 to FY 2027/28) before reserves are gradually built up in the following years (FY 2028/29 to FY 2029/30) to meet proposed reserve targets in the final year of the study period.

Figure 1-2: Projected Fund Balances (Proposed Financial Plan)



1.3 COST-OF-SERVICE ANALYSIS

A cost-of-service analysis is a technical process used to determine the cost of providing water service to the District's customers based on each customer's use of and burden on the water system. The cost-of-service analysis is the basis of the nexus between the costs incurred by the utility to provide water service and the water rates charged to customers, which is a requirement of Proposition 218.

The cost-of-service analysis conducted in this water rate study is consistent with the Base-Extra Capacity Method outlined by the AWWA in its M1 Manual. The overall goal of the cost-of-service analysis is to develop "unit costs," which provide the basis from which proposed rates are directly calculated from. Note that although the study period spans five years, the cost-of-service analysis is limited to a single representative year referred to as the "test year." The test year in this study is FY 2025/26.

1.4 RATE DESIGN

CURRENT RATE STRUCTURE

The District's current water rate structure includes fixed meter service charges by meter size, commodity charges per unit of water delivered, and commercial fire fixed service charges by fire line diameter (charged to commercial fire lines only). Nearly all District customers are subject to potable rates only, as only one permanent customer connection currently receives non-potable water service. **Table 1-3** shows current rates effective in January 2025, which represents the fifth year of the currently adopted five-year rate schedule. Note that the currently adopted rate schedule included 10% annual rate increases over the five-year period.

Table 1-3: Current Water Rates

Line	Current Water Rates	Effective Jan. 2025
1	Fixed Meter Service Charges (Monthly)	
2	5/8-inch	\$20.05
3	3/4-inch	\$20.05
4	1-inch Dual Service - Residential	\$20.05
5	1-inch	\$28.31
6	1.5-inch	\$48.94
7	2-inch	\$73.71
8	3-inch	\$152.12
9	4-inch	\$267.68
10	6-inch	\$544.19
11	2-inch Non-Potable	\$495.74
12		
13	Commodity Charges	
14	Potable (per hundred cubic feet)	\$5.24
15	Non-Potable (per hundred cubic feet)	\$0.92
16	Utah Trail Pay Station (per gallon) ²	\$0.0121
17		
18	Commercial Fire Fixed Service Charges (Monthly)	
19	2-inch	\$65.06
20	3-inch	\$91.37
21	4-inch	\$127.25
22	6-inch	\$246.84
23	8-inch	\$390.36
24	10-inch	\$1,060.10

² The District's Utah Trail Pay Station is an onsite metered filling station available to the public.

PROPOSED RATE STRUCTURE CHANGES

WRE and District staff evaluated the current rate structure and did not identify any need for significant proposed changes. However, one small refinement to the fixed meter service charges is recommended. The District's current rate schedule does not include fixed meter service charges for 8-inch or 10-inch meters, as no current customers have meters of either size. Because there is a possibility that future connections will require an 8-inch or 10-inch meter, we recommend adding fixed service charges for these meter sizes to the proposed rate schedule.

PROPOSED FIVE-YEAR WATER RATE SCHEDULE

Table 1-4 shows proposed monthly fixed meter service charges, commodity charges, and commercial fire fixed service charges over the five-year rate-setting period. The proposed five-year water rate schedule is based on the proposed rate structure changes, the updated cost-of-service analysis, and the proposed revenue adjustments for the five-year study period. The rate schedule shows the proposed water rates to be implemented in March 2026 through January 2030.

Note that while the overall proposed rate revenue increase in FY 2025/26 is 7%, proposed charges increase by different percentages due to the updated cost-of-service allocations. In subsequent years, all proposed charges increase uniformly by 7% per year. Proposed FY 2025/26 fixed meter service charges for 3-inch through 6-inch meter sizes increase significantly due to the increased meter capacity of new advanced metering infrastructure (AMI) meters. Additionally, proposed FY 2025/26 commercial fire fixed service charges decrease significantly due to adherence to more up-to-date methodological guidance from the AWWA regarding cost allocation to private fire lines.

Twentynine Palms Water District 2025 Water Rate Study

Table 1-4: Proposed Water Rate Schedule

Water Rates	Current	Proposed FY 2025/26 (Mar. 2026)	Proposed FY 2026/27 (Jan. 2027)	Proposed FY 2027/28 (Jan. 2028)	Proposed FY 2028/29 (Jan. 2029)	Proposed FY 2029/30 (Jan. 2030)
Fixed Meter Service Charges (Monthly)						
5/8-inch	\$20.05	\$20.72	\$22.18	\$23.74	\$25.41	\$27.19
3/4-inch	\$20.05	\$20.72	\$22.18	\$23.74	\$25.41	\$27.19
1-inch Dual Service - Residential	\$20.05	\$20.72	\$22.18	\$23.74	\$25.41	\$27.19
1-inch	\$28.31	\$30.67	\$32.82	\$35.12	\$37.58	\$40.22
1.5-inch	\$48.94	\$55.54	\$59.43	\$63.60	\$68.06	\$72.83
2-inch	\$73.71	\$85.38	\$91.36	\$97.76	\$104.61	\$111.94
3-inch	\$152.12	\$229.62	\$245.70	\$262.90	\$281.31	\$301.01
4-inch	\$267.68	\$503.19	\$538.42	\$576.11	\$616.44	\$659.60
6-inch	\$544.19	\$1,000.58	\$1,070.63	\$1,145.58	\$1,225.78	\$1,311.59
8-inch	N/A	\$1,746.66	\$1,868.93	\$1,999.76	\$2,139.75	\$2,289.54
10-inch	N/A	\$2,741.44	\$2,933.35	\$3,138.69	\$3,358.40	\$3,593.49
2-inch Non-Potable	\$495.74	\$534.77	\$572.21	\$612.27	\$655.13	\$700.99
Commodity Charges						
Potable (per HCF)	\$5.24	\$5.80	\$6.21	\$6.65	\$7.12	\$7.62
Non-Potable (per HCF)	\$0.92	\$1.00	\$1.07	\$1.15	\$1.24	\$1.33
Utah Trail Pay Station (per gallon)	\$0.0121	\$0.0133	\$0.0143	\$0.0154	\$0.0165	\$0.0177
Commercial Fire Fixed Service Charges (Monthly)						
2-inch	\$65.06	\$10.52	\$11.26	\$12.05	\$12.90	\$13.81
3-inch	\$91.37	\$19.51	\$20.88	\$22.35	\$23.92	\$25.60
4-inch	\$127.25	\$35.02	\$37.48	\$40.11	\$42.92	\$45.93
6-inch	\$246.84	\$90.68	\$97.03	\$103.83	\$111.10	\$118.88
8-inch	\$390.36	\$186.69	\$199.76	\$213.75	\$228.72	\$244.74
10-inch	\$1,060.10	\$331.11	\$354.29	\$379.10	\$405.64	\$434.04

Twentynine Palms Water District 2025 Water Rate Study

RESIDENTIAL BILL IMPACTS

Table 1-5 shows proposed bill impacts in FY 2025/26 for a residential customer with a 5/8-inch meter (the most common meter size) at various water use levels. For a residential customer with average water use of 7 HCF per month, the monthly bill increase will be \$4.59 or 8.1% in the first year of the proposed rate schedule, which reflects the impact of the cost-of-service analysis and proposed revenue adjustments.

Table 1-5: Sample Residential Monthly Bill Impacts in FY 2025/26

Water Use Level	Monthly Water Use (HCF)	Current Monthly Bill	Proposed Monthly Bill	Difference (\$)	Difference (%)
Very Low	3	\$35.77	\$38.12	\$2.35	6.6%
Low	5	\$46.25	\$49.72	\$3.47	7.5%
Average	7	\$56.73	\$61.32	\$4.59	8.1%
High	12	\$82.93	\$90.32	\$7.39	8.9%
Very High	15	\$98.65	\$107.72	\$9.07	9.2%

Table 1-6 shows monthly bills for a residential customer with a 5/8-inch meter and average water use of 7 HCF per month over the five-year rate-setting period. By the final year of the proposed rate-setting period, monthly bills will increase to \$80.53.

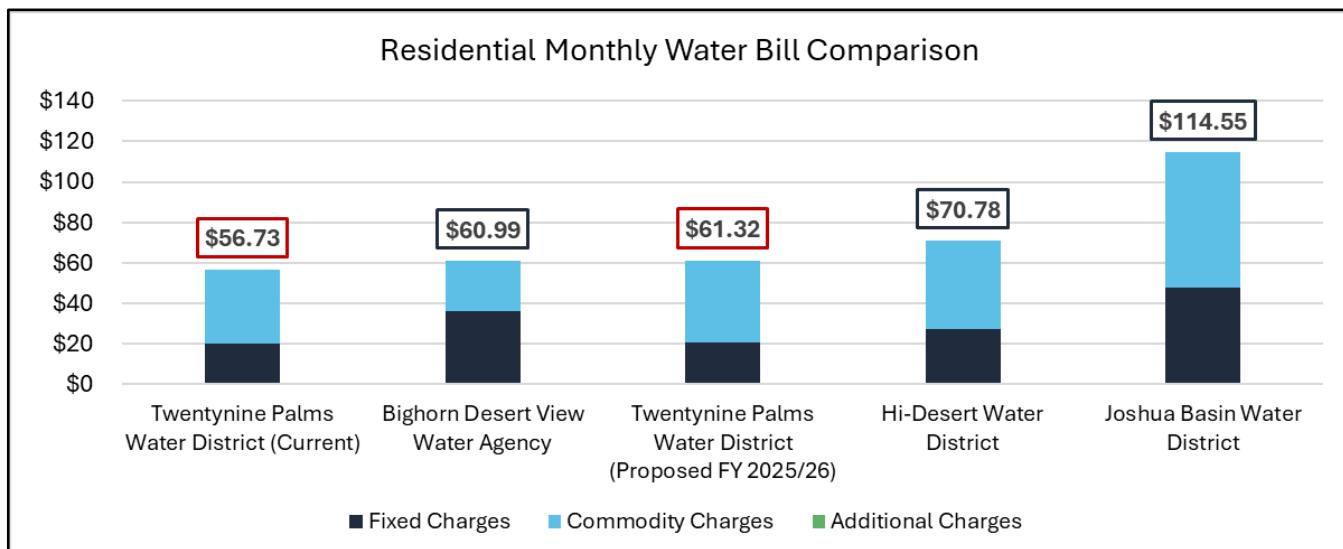
Table 1-6: Five-Year Monthly Bill Impacts for Average Residential Customer

Year	Monthly Bill for Average Residential Customer	Monthly Bill Increase (\$)	Monthly Bill Increase (%)
Current	\$56.73		
Proposed FY 2025/26	\$61.32	\$4.59	8.1%
Proposed FY 2026/27	\$65.65	\$4.33	7.1%
Proposed FY 2027/28	\$70.29	\$4.64	7.1%
Proposed FY 2028/29	\$75.25	\$4.96	7.1%
Proposed FY 2029/30	\$80.53	\$5.28	7.0%

Figure 1-3 shows a comparison of current and proposed FY 2025/26 residential monthly bills to three neighboring water districts. All bills shown are for a residential customer with the smallest available meter size using 7 HCF of water per month. Bills for the three neighboring water districts are based on each agency's current rates and do not account for potential future rate increases in FY 2025/26 or later.

Twentynine Palms Water District 2025 Water Rate Study

Figure 1-3: Monthly Bill Comparison to Neighboring Water Districts



2. INTRODUCTION

2.1 WATER SYSTEM OVERVIEW

Twentynine Palms Water District (District) provides potable and non-potable water service to over 7,600 metered connections. The District's service area encompasses the City of Twentynine Palms and unincorporated areas of San Bernardino County and covers approximately 87 square miles.

The water system, which is owned and operated by the District, consists of 10 groundwater production wells, one groundwater treatment facility, 360 miles of distribution pipelines assisted by multiple booster pump stations, and 17 million gallons of water storage facilities and tanks. The District's only water supply source is local groundwater produced from the District's wells.

2.2 RATE STUDY OVERVIEW

The District is primarily funded by customer rates. Public retail water agencies in California typically conduct a rate study every five years to ensure that customers are appropriately charged for water service and to reestablish the cost-of-service nexus that is required by Proposition 218. The District's currently adopted five-year rate schedule was developed in 2020 during a prior rate study and adopted in January 2021. The final year of the currently adopted five-year rate schedule went into effect in January 2025.

The District engaged Water Resources Economics, LLC (WRE) in 2025 to conduct a comprehensive water rate study, with the following objectives:

- Develop a five-year financial plan to meet financial targets for Fiscal Year (FY) 2025/26³ to FY 2029/30
- Conduct a cost-of-service analysis based on the most recent data and customer use characteristics
- Develop a five-year water rate schedule for FY 2025/26 through FY 2029/30

2.3 LEGAL REQUIREMENTS

Legal considerations relating to retail water rates in California focus heavily on Proposition 218, which was enacted in 1996 and is now reflected in Article XIII C and Article XIII D of the California Constitution. Proposition 218 states that "property related fees and charges" (which include retail water rates) may not exceed the proportional cost of providing the service to the customer and may not be used for any purpose other than providing said service. The practical implication is that public retail water agencies in California must demonstrate a sufficient nexus between the costs incurred by the agency to provide water service and the rates charged to customers.

³ FY 2025/26 is the fiscal year starting July 1, 2025 and ending June 30, 2026.

Twentynine Palms Water District 2025 Water Rate Study

The primary means by which retail water agencies address this requirement is by conducting a “cost-of-service analysis.”

Proposition 218 also affects the rate adoption process by requiring agencies to hold a public hearing to adopt rates. The agency must mail public hearing notices to all customers no fewer than 45 days prior to the public hearing. The public hearing notices must clearly show all proposed rate changes, provide information on the public hearing date/time/location, and provide instructions on how customers may protest the proposed rate changes. If a majority of customers submit a protest, the proposed rate changes cannot be adopted.

2.4 RATE-SETTING METHODOLOGY

This study was conducted using industry-standard methodology outlined by the American Water Works Association (AWWA) in its *Manual of Water Supply Practices M1: Principles of Water Rates, Fees and Charges, Seventh Edition* (M1 Manual). The rate study process includes the following steps:

1. **Financial Plan:** Annual revenues and expenses are projected over the rate-setting period to determine the magnitude of rate increases needed to maintain financial sufficiency. Financial policies, such as reserve targets, are also evaluated and updated if necessary.
2. **Cost-of-Service Analysis:** Costs are allocated to customers in proportion to use of and burden on the water system. The overall goal is to establish a robust nexus between the costs incurred by an agency and the rates charged to customers, as required by Proposition 218.
3. **Rate Design:** The existing rate structure is evaluated, and potential changes are identified. A multi-year proposed rate schedule is then calculated directly from the results of the financial plan and cost-of-service analysis.
4. **Rate Study Documentation:** A rate study report is developed to document the proposed rate development process. This provides transparency and enhances legal defensibility in light of Proposition 218 requirements. This document serves as the report for this rate study.

2.5 ADDITIONAL INFORMATION AND DISCLAIMERS

This report summarizes the data, analyses, processes, and results of the 2025 Water Rate Study. Some important information to consider includes the following:

- All study projections are based on the best available data provided by District staff to WRE between August 2025 and October 2025. Note that FY 2024/25 actuals shown are unaudited preliminary values.
- Revenue and expense projections presented in Section 3 are rounded to the nearest one hundred dollars. All other table values are rounded to the nearest digit shown unless stated otherwise. However, many calculations are based on precise rather than rounded

Twentynine Palms Water District 2025 Water Rate Study

values. Attempting to manually replicate the calculations described in this report from the values displayed in tables may therefore produce slightly different results.

- The District's currently adopted five-year rate schedule shows all fixed charges on a bimonthly basis. However, the District transitioned from bimonthly to monthly billing since current rates were adopted in 2021 due to the installation of advanced metering infrastructure (AMI). Therefore, all current and proposed fixed charges are shown on a monthly basis in this report.

3. FINANCIAL PLAN

3.1 FINANCIAL PLAN METHODOLOGY

The purpose of a financial plan is to project revenues, expenses, cash flows, reserve balances, and debt coverage over a multi-year period to assess financial sufficiency and performance and to determine the amount of required rate revenue. For this study, the planning period is from FY 2025/26 through FY 2029/30; data for FY 2024/25 or earlier is shown only for reference. The key steps in developing a financial plan are:

- **Revenue projections:** Annual revenues from rates and other miscellaneous sources are projected over the planning period. Rate revenues are projected based on current rates to establish baseline revenues from which the need for additional rate increases can be evaluated.
- **Expense projections:** Annual expenses are projected over the study period, including O&M expenses, debt service, and capital expenditures. Capital funding options (grants, debt, etc.) are evaluated.
- **Financial policy evaluation:** Key financial policies include debt coverage requirements and reserve targets. Debt coverage requirements are typically explicitly stated in official agreements on outstanding debt issuances. The District's existing debt does not contain any official debt coverage requirements so debt coverage requirements are not evaluated. Reserve targets are typically set by an agency's elected officials and may need to be periodically evaluated and updated.
- **Status quo financial plan projections:** Cash flow, reserve balances, and debt coverage (if applicable) are projected over the study period in the absence of additional rate increases (this scenario is called the "status quo"). Projected reserve balances and debt coverage (if applicable) are then compared to the agency's financial policy requirements and targets. The status quo financial plan provides a baseline to evaluate the need for rate increases.
- **Proposed financial plan projections:** The magnitude and timing of annual proposed revenue increases over the study period are evaluated and determined based on the agency's financial policies, financial performance, and policy objectives. Proposed rate increases (referred to as "revenue adjustments") should generate sufficient revenue to recover the agency's expenses, maintain adequate reserves, and meet any debt coverage requirements. The proposed financial plan determines the total annual rate revenue requirement over the study period.

3.2 REVENUES

CURRENT WATER RATES

The District's current water rate structure for potable and non-potable customers includes fixed meter service charges by meter size, commodity charges per unit of water delivered, and commercial fire fixed service charges by fire line diameter (charged to commercial fire customers only). The commodity charges for all potable and non-potable customers are

Twentynine Palms Water District 2025 Water Rate Study

measured in one hundred cubic feet (HCF), except for the Utah Trail Pay Station⁴ commodity charge which is measured in gallons. Nearly all District customers are subject to potable rates only, as only one permanent customer connection currently receives non-potable water service.

Table 3-1 shows the current fixed meter service charges, commodity charges, and commercial fire fixed service charges. Current rates effective in January 2025 represent the fifth year of the currently adopted five-year rate schedule. Note that the currently adopted rate schedule included 10% annual rate increases over the five-year period.

Table 3-1: Current Water Rates

Line	Current Water Rates	Effective Jan. 2025
1	Fixed Meter Service Charges (Monthly)	
2	5/8-inch	\$20.05
3	3/4-inch	\$20.05
4	1-inch Dual Service - Residential	\$20.05
5	1-inch	\$28.31
6	1.5-inch	\$48.94
7	2-inch	\$73.71
8	3-inch	\$152.12
9	4-inch	\$267.68
10	6-inch	\$544.19
11	2-inch Non-Potable	\$495.74
12		
13	Commodity Charges	
14	Potable (per hundred cubic feet)	\$5.24
15	Non-Potable (per hundred cubic feet)	\$0.92
16	Utah Trail Pay Station (per gallon)	\$0.0121
17		
18	Commercial Fire Fixed Service Charges (Monthly)	
19	2-inch	\$65.06
20	3-inch	\$91.37
21	4-inch	\$127.25
22	6-inch	\$246.84
23	8-inch	\$390.36
24	10-inch	\$1,060.10

CUSTOMER ACCOUNTS AND USAGE

This section details the customer accounts and water usage for all years of the study, which are referred to as the units of service. Units of service represent the quantity of billing units that are subject to the District's water rates and charges.

⁴ The District's Utah Trail Pay Station is an onsite metered filling station available to the public.

Twentynine Palms Water District 2025 Water Rate Study

Table 3-2 shows the projected number of potable and non-potable water meters for the study period. District staff provided actual data for FY 2025/26; this study assumes no changes in metered connections for the study period. The number of metered connections is the unit of service for the District's potable and non-potable monthly fixed service charges.

Table 3-2: Projected Number of Water Meters

Line	Water Meters	FY 2025/26 Actual	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	Potable Meters					
2	5/8-inch	6,988	6,988	6,988	6,988	6,988
3	3/4-inch	83	83	83	83	83
4	1-inch Dual Service - Residential	2	2	2	2	2
5	1-inch	376	376	376	376	376
6	1.5-inch	53	53	53	53	53
7	2-inch	34	34	34	34	34
8	3-inch	8	8	8	8	8
9	4-inch	8	8	8	8	8
10	6-inch	0	0	0	0	0
11	Subtotal	7,552	7,552	7,552	7,552	7,552
12						
13	Non-potable Meters					
14	2-inch	1	1	1	1	1
15	Subtotal	1	1	1	1	1
16						
17	Total	7,553	7,553	7,553	7,553	7,553

Table 3-3 shows the projected number of commercial fire lines for the study period. District staff provided actual data for FY 2025/26; this study assumes no growth in commercial fire lines for the period. The number of commercial fire lines is the unit of service for the District's commercial fire fixed service charges.

Table 3-3: Projected Number of Commercial Fire Lines

Line	Commercial Fire Lines	FY 2025/26 Actual	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	2-inch	82	82	82	82	82
2	3-inch	4	4	4	4	4
3	4-inch	8	8	8	8	8
4	6-inch	17	17	17	17	17
5	8-inch	9	9	9	9	9
6	10-inch	0	0	0	0	0
7	Total	120	120	120	120	120

Table 3-4 shows projected potable and non-potable water usage. Total water use over the five-year study period is projected to remain level at FY 2024/25 actual demand levels. Water

Twentynine Palms Water District 2025 Water Rate Study

demand in FY 2024/25 was about 6% lower than the five-year historical average from 2020-2024, reflecting lower baseline demand resulting from recent periods of drought and conservation. District staff indicated that a rebound in demands to historical levels is not anticipated. Additionally, for the purposes of a rate study it is critical to conservatively estimate future water demands to reduce the risk of insufficient revenue recovery.

Table 3-4: Projected Customer Water Usage (HCF)

Line	Potable Water Consumption (HCF)	FY 2024/25 Actual	FY 2025/26 Projected	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	Potable						
2	Potable Customers	859,867	859,867	859,867	859,867	859,867	859,867
3	Utah Trail Pay Station	6,958	6,958	6,958	6,958	6,958	6,958
4	Non-Revenue Water ⁵	31,439	31,439	31,439	31,439	31,439	31,439
5	Subtotal	898,265	898,265	898,265	898,265	898,265	898,265
6							
7	Non-Potable						
8	Non-Potable Customers	35,268	35,268	35,268	35,268	35,268	35,268
9	Subtotal	35,268	35,268	35,268	35,268	35,268	35,268
10							
11	Total (HCF)	933,533	933,533	933,533	933,533	933,533	933,533

REVENUES FROM CURRENT RATES

Table 3-5 shows the calculated water rate revenues for the study period based on current water rates and the projected units of service. The potable monthly fixed service charge revenue (Line 2) is calculated by multiplying the current monthly fixed meter service charges (**Table 3-1**, Lines 2-10) by the projected potable meter connections (**Table 3-2**, Lines 2-10) for 12 monthly billing periods. The non-potable monthly fixed monthly service charge revenue (Line 3) is calculated by multiplying the current non-potable monthly fixed service charge (**Table 3-1**, Line 11) by the projected non-potable meter connections (**Table 3-2**, Line 14) for 12 monthly billing periods. The commercial fire fixed service charge revenue (Line 4) is calculated by multiplying the current commercial fire monthly fixed service charges (**Table 3-1**, Lines 19-24) by the projected commercial fire lines (**Table 3-3**, Lines 1-6) for 12 monthly billing periods.

Potable commodity charge revenue (Line 8) is calculated by multiplying the current potable commodity charge (**Table 3-1**, Line 14) by projected potable customer water usage (**Table 3-4**, Line 2). Utah Trail Pay Station commodity charge revenue (Line 9) is calculated by multiplying the current Utah Trail Pay Station commodity charge (**Table 3-1**, Line 16) by the projected Utah Trail water usage (**Table 3-4**, Line 3), accounting for the conversion of Utah trail water usage from HCF to gallons (1 HCF = 748.05 gallons). Non-potable commodity charge revenue (Line 10) is

⁵ Non-revenue water includes water used by the District in its operations (e.g., water lube wells) and other unbilled water use.

Twentynine Palms Water District 2025 Water Rate Study

calculated by multiplying the current non-potable commodity charge (**Table 3-1**, Line 15) by the projected non-potable water usage (**Table 3-4**, Line 8).

Table 3-5: Calculated Rate Revenues at Current Rates

Line	Calculated Rate Revenues	FY 2025/26 Projected	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	Fixed Service Charges					
2	Potable	\$1,931,000	\$1,931,000	\$1,931,000	\$1,931,000	\$1,931,000
3	Non-Potable	\$5,900	\$5,900	\$5,900	\$5,900	\$5,900
4	Commercial Fire	\$173,100	\$173,100	\$173,100	\$173,100	\$173,100
5	Subtotal	\$2,110,000	\$2,110,000	\$2,110,000	\$2,110,000	\$2,110,000
6						
7	Commodity Charges					
8	Potable	\$4,505,700	\$4,505,700	\$4,505,700	\$4,505,700	\$4,505,700
9	Utah Trail Pay Station	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000
10	Non-Potable	\$32,400	\$32,400	\$32,400	\$32,400	\$32,400
11	Subtotal	\$4,601,100	\$4,601,100	\$4,601,100	\$4,601,100	\$4,601,100
12						
13	Total	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200

NON-RATE REVENUES

WRE worked with District staff to determine annual inflationary assumptions to apply to the District's non-rate revenues. District staff provided actual revenues for FY 2024/25 and budgeted revenues for FY 2025/26; certain future year projections are dependent on the assumptions shown in **Table 3-6**. Late fees/ penalties assumptions (Line 3) are applied to rate revenues each year, assuming an additional 2.2% of rate revenues is collected from customer late payments. Bad debt expense assumptions (Line 4) are applied to operating revenues each year, assuming that 0.4% of operating revenues will not be collected.

Table 3-6: Non-Rate Revenue Assumptions

Line	Non-Rate Revenue Assumptions	
1	General Inflation	3.0% annual increase
2	Interest Earnings	2.5% annual interest rate
3	Late Fees/ Penalties	2.2% of rate revenues
4	Bad Debt Expense	-0.4% operating revenue

Table 3-7 shows projected non-rate revenues over the study period. Meter installation (Line 2) and reconnection fees (Line 6) are non-recurring in future years, accounting for the District's projection of no new growth in metered connections for the study period. Credit card processing fees (Line 5) and reimbursed expenses (Line 24) are inflated based on a 3% general inflation rate (**Table 3-6**, Line 1). Late fees/ penalties (Line 4) are calculated based multiplying total rate

Twentynine Palms Water District 2025 Water Rate Study

revenues by 2.2% (**Table 3-6**, Line 3).⁶ Bad debt expense (Line 7) is calculated based on multiplying the sum of total operating revenues by -0.4% (**Table 3-6**, Line 4).

Capital impact fees (Line 11) are reduced from \$75,000 to \$50,000 starting in FY 2026/27 based on updated projections from District staff. Interest income (Line 20) is calculated based on average fund balances and a 2.5% interest rate (**Table 3-6**, Line 2). All other non-rate revenues are held constant at FY 2025/26 budgeted amounts in future years to ensure sufficiently conservative revenue projections.

Table 3-7: Projected Non-Rate Revenues

Line	Non-Rate Revenues	FY 2025/26 Budget	FY 2026/27 Projected	FY 20/2728 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	Other Operating Revenue					
2	Meter Installation Fees	\$15,000	\$0	\$0	\$0	\$0
3	New Account Fees	\$50,100	\$50,100	\$50,100	\$50,100	\$50,100
4	Late Fees (penalties)	\$150,600	\$163,500	\$175,000	\$187,200	\$200,300
5	Credit Card Processing Fees	\$73,600	\$75,800	\$78,100	\$80,400	\$82,800
6	Reconnection Fees	\$15,800	\$0	\$0	\$0	\$0
7	Bad Debt Expense	(\$31,900)	(\$30,900)	(\$33,000)	(\$35,300)	(\$37,800)
8	Subtotal	\$273,200	\$258,500	\$270,200	\$282,400	\$295,400
9						
10	Capital Impact Fees					
11	Capital Impact-Primary	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000
12	Subtotal	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000
13						
14	Property Tax					
15	Property Tax Revenue	\$592,000	\$592,000	\$592,000	\$592,000	\$592,000
16	Property Tax Penalties	\$28,900	\$28,900	\$28,900	\$28,900	\$28,900
17	Subtotal	\$620,900	\$620,900	\$620,900	\$620,900	\$620,900
18						
19	Interest Revenue					
20	Interest Earnings	\$357,200	\$180,000	\$156,100	\$154,900	\$184,400
21	Subtotal	\$357,200	\$180,000	\$156,100	\$154,900	\$184,400
22						
23	Other Miscellaneous Non-Operating Revenue					
24	Reimbursed Expense	\$20,000	\$20,600	\$21,200	\$21,800	\$22,500
25	Miscellaneous	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
26	Subtotal	\$30,000	\$30,600	\$31,200	\$31,800	\$32,500
27						
28	Total Revenues	\$1,356,300	\$1,140,000	\$1,128,400	\$1,140,000	\$1,183,200

REVENUE SUMMARY

Table 3-8 shows a summary of projected revenues for the study period. Current rate revenues (Line 1) are equal to calculated rate revenues at current rates (**Table 3-5**, Line 13). All other

⁶ Note that total revenues include revenue adjustments shown in **Section 3.8**.

Twentynine Palms Water District 2025 Water Rate Study

revenues were projected in **Table 3-7**. Note that projected FY 2025/26 revenues match the adopted FY 2025/26 budget, except for current rate revenues which are based on WRE's detailed projections. Projected revenue from current rates comprises over 80% of total District revenues over the study period.

Table 3-8: Revenue Summary

Line	Revenues	FY 2024/25 Actual	FY 2025/26 Projected	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	Current Rate Revenues	\$6,366,372	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200
2	Other Operating Revenue	\$301,970	\$273,200	\$258,500	\$270,200	\$282,400	\$295,400
3	Capital Impact Fees	\$124,514	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000
4	Property Tax	\$629,887	\$620,900	\$620,900	\$620,900	\$620,900	\$620,900
5	Interest Revenue	\$438,797	\$357,200	\$180,000	\$156,100	\$154,900	\$184,400
6	Miscellaneous Non-Operating Revenue	\$208,958	\$30,000	\$30,600	\$31,200	\$31,800	\$32,500
7	Total	\$8,070,498	\$8,067,500	\$7,851,200	\$7,839,600	\$7,851,200	\$7,894,400

3.3 OPERATIONS AND MAINTENANCE EXPENSES

INFLATIONARY ASSUMPTIONS

WRE worked with District staff to determine annual inflationary assumptions to apply to the District's O&M expense budget. District staff provided actual O&M expenses for FY 2024/25 and budgeted O&M expenses for FY 2025/26; most future year projections are based on the inflationary assumptions shown in **Table 3-9**.

Table 3-9: O&M Expense Inflationary Assumptions

Line	Annual Inflationary Increases
1	General
2	Capital
3	Vacation Sick Payout
4	Electricity
5	Fuel
6	Chemicals
7	Insurance

O&M EXPENSE SUMMARY

Table 3-10 shows the summary of O&M expenses for the study period. District staff provided actual expenses for FY 2024/25 and budgeted expenses for FY 2025/26; expenses for other years are projections. All expenses are inflated based on the assumptions in **Table 3-9**, except for labor, benefits, and non-operating expenses which were provided by District staff for the study period. Detailed O&M expense projections on a line item basis are included in the **Appendix (Table 6-1)**. O&M expenses are projected to increase by about 4% annually on average over the study period primarily due to inflationary impacts.

Table 3-10: O&M Expense Summary

Line	O&M Expenses	FY 2024/25 Actual	FY 2025/26 Budget	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	Source of Supply	\$471,670	\$543,600	\$603,100	\$635,800	\$670,400	\$707,100
2	Pumping	\$184,487	\$207,700	\$219,400	\$232,000	\$245,300	\$259,400
3	Transmission & Distribution	\$1,928,358	\$1,924,200	\$1,943,600	\$2,027,400	\$2,114,900	\$2,206,500
4	Treatment Wells	\$227,135	\$211,900	\$211,500	\$220,400	\$229,800	\$239,500
5	Treatment Facility	\$761,978	\$799,000	\$817,900	\$855,900	\$895,700	\$937,400
6	Customer Accounts	\$400,414	\$448,100	\$437,900	\$457,000	\$477,000	\$497,900
7	General & Administration	\$1,502,268	\$1,638,400	\$1,603,400	\$1,683,200	\$1,731,200	\$1,856,700
8	Payouts & Retiree Medical	\$87,550	\$155,600	\$162,900	\$170,500	\$178,400	\$186,700
9	Board of Directors	\$17,948	\$25,500	\$26,300	\$27,100	\$27,900	\$28,700
10	Non-Operating Expenses	\$274,994	\$326,100	\$402,900	\$375,200	\$477,500	\$432,200
11	Total	\$5,856,800	\$6,280,100	\$6,428,900	\$6,684,500	\$7,048,100	\$7,352,100
12	% Change		7.2%	2.4%	4.0%	5.4%	4.3%

3.4 DEBT SERVICE

EXISTING DEBT SERVICE

Table 3-11 shows the District's annual debt service for the study period. The District has existing debt service payments on one outstanding loan for the completed advanced meter reading/infrastructure (AMR/AMI) project, totaling approximately \$852,000 over the study period. This outstanding loan is anticipated to be retired in FY 2028/29. The proposed financial plan scenario includes no new debt issuances to finance any planned capital projects.

Table 3-11: Existing Debt Service

Line	Existing Debt Service	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	AMR and AMI Project Loan					
2	Principal	\$220,900	\$227,700	\$234,700	\$119,100	\$0
3	Interest	\$22,800	\$16,000	\$9,000	\$1,800	\$0
4	Total	\$243,700	\$243,700	\$243,700	\$120,900	\$0

3.5 CAPITAL EXPENDITURES

Table 3-12 shows the District's five-year planned capital expenditures by category; all project costs are inflated based on the Capital factor (**Table 3-9**, Line 2) starting in FY 2026/27. All capital projects are expected to be cash funded by rates and reserves (i.e., no grants or debt

Twentynine Palms Water District 2025 Water Rate Study

funding). Detailed capital project costs are included in the **Appendix (Table 6-2)**. Significant capital improvement plan spending includes \$3.4 million for the water reservoir at treatment plant project and \$2.2 million for a new well. Total five-year planned capital projects amount to \$13.0 million, which is about \$2.6 per year on average. The planned capital projects represent critical investments in the District's water system infrastructure needed for the District to continue to provide clean and reliable water service to customers.

Table 3-12: Planned Capital Expenditures

Line	Capital Projects	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	District Projects	\$580,800	\$317,200	\$108,200	\$191,100	\$234,000
2	Capital Improvement Plan	\$1,920,300	\$1,768,000	\$2,163,200	\$0	\$0
3	Repairs, Rehabilitation, & Maintenance	\$920,100	\$520,000	\$562,400	\$1,180,900	\$877,500
4	Capital Outlay	\$540,000	\$390,000	\$162,200	\$365,600	\$175,400
5	Total	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900

3.6 FINANCIAL POLICIES

RESERVE POLICY

The District's current reserve policy maintains cash on hand to meet short-term cash flow imbalances and to execute capital projects. The current reserve target ranges from approximately \$6.5 million to \$7.5 million over the five-year study period.

The District currently has an adopted reserve policy that consists of the following components:

- Operating Reserve Target: 180 days of operating expenses
- Capital Reserve Target: 6% of depreciable capital assets plus annual capital expenditures

WRE recommends that the District implement a new reserve policy to maintain cash on hand to meet short-term cash imbalances, execute capital projects, and strengthen the District's ability to respond to unexpected events such as critical asset failure. The overall goal of the proposed reserve policy is to effectively mitigate financial risks and to align with industry norms. The proposed reserve policy includes two key changes to the current policy.

Firstly, we recommend changing the capital reserve target from 6% of depreciable capital assets plus annual capital expenditures to the annual average of five-year planned capital expenditures. This updated target provides a more realistic estimate of capital spending and is better aligned with changing industry norms.

Secondly, we recommend the introduction of a new "emergency reserve" target to mitigate the risk to the District of an unexpected capital asset failure such as total well failure. The emergency reserve fund will provide an additional cash buffer to reduce the associated financial risk to the District. The recommended emergency reserve target is based on the estimated cost

Twentynine Palms Water District 2025 Water Rate Study

of a critical asset failure. Based on discussion with District staff, it was determined that a \$2 million emergency reserve target based on the cost of complete well failure is most appropriate.

The proposed total reserve target for the study period ranges from approximately \$7.5 million to \$8.0 million in the District's reserve funds. The District's proposed reserve policy consists of the following components:

- Operating Reserve Target: 180 days of operating expenses
- Capital Reserve Target: Annual average of five-year planned capital expenditures
- Emergency Reserve Target: Estimated cost of unexpected well failure (\$2 million)

3.7 STATUS QUO FINANCIAL PLAN

STATUS QUO FINANCIAL PLAN SCENARIO

Table 3-13 shows the status quo financial plan scenario, which assumes no revenue adjustments (i.e., overall rate revenue increases) over the five-year study period. This scenario is used to evaluate the ability of the current water rates to meet the District's financial targets and to determine the need for revenue adjustments.

Table 3-13: Status Quo Financial Plan Scenario

Line	Fiscal Year	Effective Date	Revenue Adjustments
1	FY 2025/26	3/1/2026	0%
2	FY 2026/27	1/1/2027	0%
3	FY 2027/28	1/1/2028	0%
4	FY 2028/29	1/1/2029	0%
5	FY 2029/30	1/1/2030	0%

STATUS QUO CASH FLOW PROJECTIONS

Table 3-14 shows the cash flow projections for the status quo financial plan. Revenues⁷ (Lines 1-9) are from **Table 3-8**. In this scenario there is no additional revenue from revenue adjustments (Line 3). O&M expenses (Lines 11-22) are from **Table 3-10**. Net operating revenue (Line 24) is equal to the difference between total revenues (Line 9) and total O&M expenses (Line 22). Debt service (Lines 26-29) is from **Table 3-11**. Net operating revenue less debt (Line 31) is equal to the difference between net operating revenue (Line 24) and total debt service (Line 29). Rate funded capital projects (Lines 33-35) are from **Table 3-12**. The status quo scenario assumes no new

⁷ Interest revenues (Line 7) and other operating revenue (Line 4) are different in the status quo financial plan scenario because interest revenues are based on projected fund balances and some components of other operating revenue including bad debt expense and late fees/ penalties are based on projected rate revenues. The status quo scenario results in lower fund balances and lower rate revenues; therefore, the District has less interest income, bad debt expense, and late fees/ penalties. **Table 3-8** shows the interest income, bad debt expense, and late fees/ penalties for the proposed financial plan scenario.

Twentynine Palms Water District 2025 Water Rate Study

debt; all planned capital projects are expected to be rate funded. Net cash flow (Line 37) is equal to net operating revenue less debt (Line 31) less rate funded capital expenditures (Line 34).

The net operating revenue less debt in this scenario is positive for all years, meaning that the District's current revenues are sufficient to fund its O&M expenses and debt service. However, the net cash flow in the status quo scenario is negative each year, meaning that the District's current revenues are not sufficient to fund all capital projects.

Twenty-nine Palms Water District 2025 Water Rate Study

Table 3-14: Projected Cash Flows (Status Quo Financial Plan)

Line	Cash Flow Projections	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	Revenues					
2	Rate Revenues at Existing Rates	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200
3	Revenue Adjustments	\$0	\$0	\$0	\$0	\$0
4	Other Operating Revenue	\$273,200	\$245,600	\$247,900	\$250,100	\$252,500
5	Capital Impact Fees	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000
6	Property Tax	\$620,900	\$620,900	\$620,900	\$620,900	\$620,900
7	Interest Revenues	\$357,200	\$166,900	\$117,700	\$76,800	\$51,100
8	Miscellaneous Non-Operating Revenues	\$30,000	\$30,600	\$31,200	\$31,800	\$32,500
9	Total	\$8,067,500	\$7,825,200	\$7,778,900	\$7,740,800	\$7,718,200
10						
11	O&M Expenses					
12	Source of Supply	\$543,600	\$603,100	\$635,800	\$670,400	\$707,100
13	Pumping	\$207,700	\$219,400	\$232,000	\$245,300	\$259,400
14	Transmission & Distribution	\$1,924,200	\$1,943,600	\$2,027,400	\$2,114,900	\$2,206,500
15	Treatment Wells	\$211,900	\$211,500	\$220,400	\$229,800	\$239,500
16	Treatment Facility	\$799,000	\$817,900	\$855,900	\$895,700	\$937,400
17	Customer Accounts	\$448,100	\$437,900	\$457,000	\$477,000	\$497,900
18	General & Administration	\$1,638,400	\$1,603,400	\$1,683,200	\$1,731,200	\$1,856,700
19	Payouts & Retiree Medical	\$155,600	\$162,900	\$170,500	\$178,400	\$186,700
20	Board of Directors	\$25,500	\$26,300	\$27,100	\$27,900	\$28,700
21	Non-Operating Expenses	\$326,100	\$402,900	\$375,200	\$477,500	\$432,200
22	Total	\$6,280,100	\$6,428,900	\$6,684,500	\$7,048,100	\$7,352,100
23						
24	Net Revenue	\$1,787,400	\$1,396,300	\$1,094,400	\$692,700	\$366,100
25						
26	Debt Service					
27	Existing Debt	\$243,700	\$243,700	\$243,700	\$120,900	\$0
28	Proposed Debt	\$0	\$0	\$0	\$0	\$0
29	Total	\$243,700	\$243,700	\$243,700	\$120,900	\$0
30						
31	Net Revenue Less Debt	\$1,543,700	\$1,152,600	\$850,700	\$571,800	\$366,100

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Cash Flow Projections	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
32						
33	Capital Expenditures					
34	Rate Funded	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900
35	Total	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900
36						
37	Net Cash Flow	(\$2,417,500)	(\$1,842,600)	(\$2,145,300)	(\$1,165,800)	(\$920,800)

Twenty-nine Palms Water District 2025 Water Rate Study

STATUS QUO FUND BALANCE PROJECTIONS

Table 3-15 shows the fund balance projections for the status quo financial plan. Sources of funds include revenues and uses of funds include O&M expenses, debt service, and rate funded capital expenditures. Overall reserves are projected to be drawn down by approximately \$8.49 million over the study period.

Table 3-15: Projected Fund Balances (Status Quo Financial Plan)

Line	Fund Balance Projections	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	Beginning Fund Balance	\$10,100,000	\$7,682,500	\$5,839,900	\$3,694,600	\$2,528,800
2						
3	Sources of Funds					
4	Rate Revenues at Existing Rates	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200
5	Revenue Adjustments	\$0	\$0	\$0	\$0	\$0
6	Other Operating Revenue	\$273,200	\$245,600	\$247,900	\$250,100	\$252,500
7	Capital Impact Fees	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000
8	Property Tax	\$620,900	\$620,900	\$620,900	\$620,900	\$620,900
9	Interest Revenues	\$357,200	\$166,900	\$117,700	\$76,800	\$51,100
10	Miscellaneous Non-Operating Revenues	\$30,000	\$30,600	\$31,200	\$31,800	\$32,500
11	Total	\$8,067,500	\$7,825,200	\$7,778,900	\$7,740,800	\$7,718,200
12						
13	Uses of Funds					
14	O&M Expenses	\$6,280,100	\$6,428,900	\$6,684,500	\$7,048,100	\$7,352,100
15	Debt Service	\$243,700	\$243,700	\$243,700	\$120,900	\$0
16	Capital Expenditures	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900
17	Total	\$10,485,000	\$9,667,800	\$9,924,200	\$8,906,600	\$8,639,000
18						
19	Ending Fund Balance	\$7,682,500	\$5,839,900	\$3,694,600	\$2,528,800	\$1,608,000

Twentynine Palms Water District 2025 Water Rate Study

STATUS QUO FINANCIAL PERFORMANCE

The District's financial performance is evaluated based on the current and proposed reserve targets, as shown in **Table 3-16**. Under the status quo financial plan, the District will not meet its current nor proposed reserve targets starting in FY 2026/27.

Table 3-16: Forecasted Financial Performance (Status Quo Financial Plan)

Line	Financial Performance	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	Current Financial Policies					
2	Operating Target	\$2,936,200	\$2,971,700	\$3,111,400	\$3,240,300	\$3,412,600
3	Capital Target	\$3,541,400	\$3,721,100	\$3,900,900	\$4,005,100	\$4,082,400
4	Combined Reserve Target	\$6,477,600	\$6,692,800	\$7,012,300	\$7,245,400	\$7,495,000
5						
6	Projected Ending Fund Balance	\$7,682,500	\$5,839,900	\$3,694,600	\$2,528,800	\$1,608,000
7	<i>Meets Target?</i>	Yes	No	No	No	No
8						
9	Proposed Financial Policies					
10	Operating Target	\$2,936,200	\$2,971,700	\$3,111,400	\$3,240,300	\$3,412,600
11	Capital Target	\$2,595,400	\$2,595,400	\$2,595,400	\$2,595,400	\$2,595,400
12	Emergency Target	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
13	Combined Reserve Target	\$7,531,600	\$7,567,100	\$7,706,800	\$7,835,700	\$8,008,000
14						
15	Projected Ending Fund Balance	\$7,682,500	\$5,839,900	\$3,694,600	\$2,528,800	\$1,608,000
16	<i>Meets Target?</i>	Yes	No	No	No	No

Figure 3-1 shows a comparison of revenues and the revenue requirements for the status quo scenario. The stacked bars represent the revenue requirements, or costs: green for O&M expenses, orange for debt service, and blue for rate funded capital expenditures. The current revenue, shown as a solid line, is lower than the revenue requirements in all years, meaning that revenues are insufficient to fund all costs.

Twentynine Palms Water District 2025 Water Rate Study

Figure 3-1: Revenue Requirements vs. Revenues (Status Quo Financial Plan)

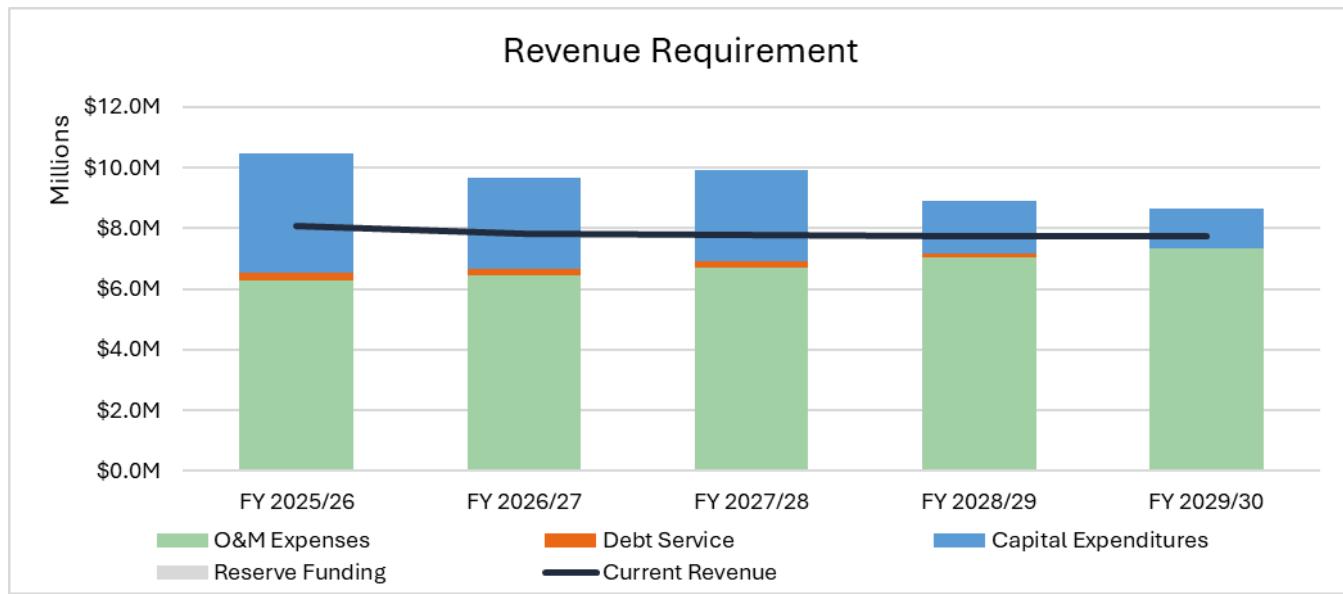
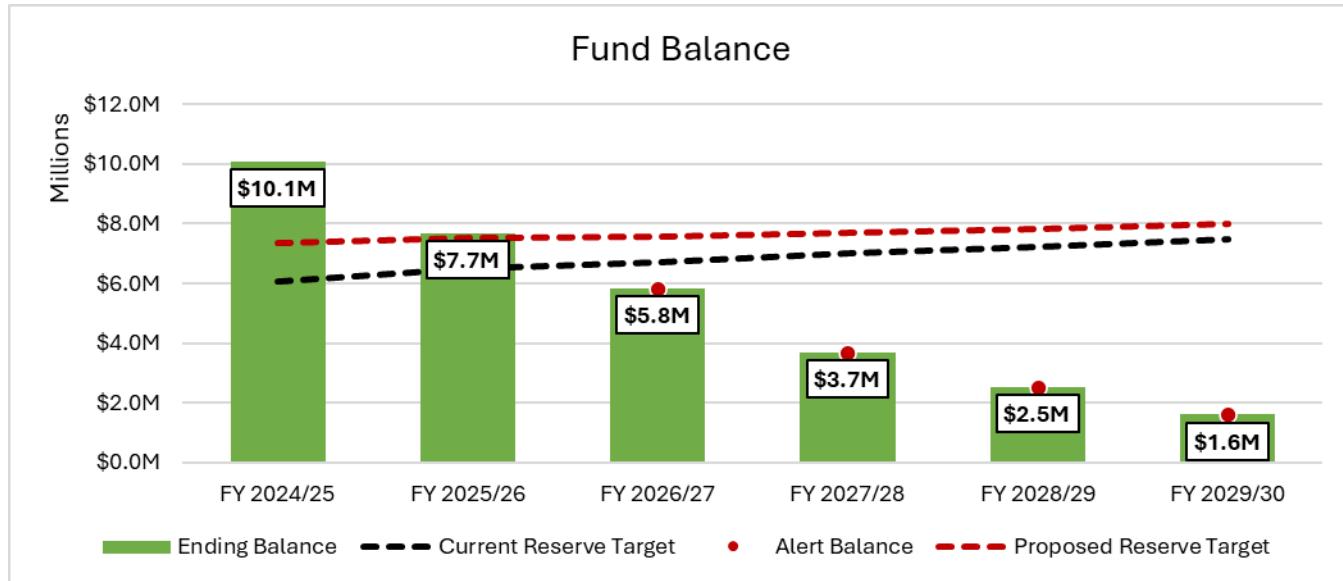


Figure 3-2 shows the fund balance projections in the status quo financial plan. The District's ending balance (green bars) will not meet its current (dashed black line) nor proposed reserve targets (dashed red line) starting in FY 2026/27.

Figure 3-2: Projected Fund Balances (Status Quo Financial Plan)



3.8 PROPOSED FINANCIAL PLAN

PROPOSED FINANCIAL PLAN SCENARIO

Overall annual increases in water rate revenues resulting from rate increases are referred to as “revenue adjustments.” WRE worked with District staff to determine the proposed revenue adjustment scenario, which is shown in **Table 3-17**. The proposed revenue adjustments, as demonstrated in this subsection, are necessary for the District to meet its proposed reserve targets while minimizing impacts to customers. The proposed financial plan scenario includes 7% annual revenue adjustments in all years of the study period (FY 2025/26 through FY 2029/30). All rates are effective in January of each year except for the first year (FY 2025/26) when rates are effective in March.

Table 3-17: Proposed Financial Plan Scenario

Line	Fiscal Year	Effective Date	Revenue Adjustments
1	FY 2025/26	3/1/2026	7%
2	FY 2026/27	1/1/2027	7%
3	FY 2027/28	1/1/2028	7%
4	FY 2028/29	1/1/2029	7%
5	FY 2029/30	1/1/2030	7%

PROPOSED CASH FLOW PROJECTIONS

Table 3-18 shows the cash flow projections for the proposed financial plan. Revenues (Lines 1-9) are from **Table 3-8**. Revenue adjustments (Line 3) are based on the proposed financial plan scenario in **Table 3-17**. O&M expenses (Lines 11-22) are from **Table 3-10**. Net operating revenue (Line 24) is equal to the difference between total revenues (Line 9) and total O&M expenses (Line 22). Debt service (Lines 26-29) is from **Table 3-11**. Net operating revenue less debt (Line 31) is equal to the difference between net operating revenue (Line 24) and total debt service (Line 29). Rate funded capital expenditures (Lines 33-35) are from **Table 3-12**. No new debt is proposed; all capital projects are expected to be rate funded. Net cash flow (Line 37) is equal to net operating revenue less debt (Line 31) less rate funded capital projects (Line 34).

The District anticipates higher capital spending in the first three years of the study period during which current reserves are drawn down to cover capital projects, indicated by the negative net cash flow from FY 2025/26 to FY 2027/28. The net cash flow is positive from FY 2028/29 to FY 2029/30 as annual capital spending decreases, indicating that the proposed revenues are sufficient to cover O&M expenses, debt service, and capital projects, and ensuring that the District is in a healthy financial position at the end of the study period.

Twenty-nine Palms Water District 2025 Water Rate Study

Table 3-18: Projected Cash Flows (Proposed Financial Plan)

Line	Cash Flow Projections	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	Revenues					
2	Rate Revenues at Existing Rates	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200
3	Revenue Adjustments	\$156,600	\$721,100	\$1,241,400	\$1,798,100	\$2,393,700
4	Other Operating Revenue	\$273,200	\$258,500	\$270,200	\$282,400	\$295,400
5	Capital Impact Fees	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000
6	Property Tax	\$620,900	\$620,900	\$620,900	\$620,900	\$620,900
7	Interest Revenues	\$357,200	\$180,000	\$156,100	\$154,900	\$184,400
8	Miscellaneous Non-Operating Revenues	\$30,000	\$30,600	\$31,200	\$31,800	\$32,500
9	Total	\$8,224,100	\$8,572,300	\$9,081,000	\$9,649,300	\$10,288,100
10						
11	O&M Expenses					
12	Source of Supply	\$543,600	\$603,100	\$635,800	\$670,400	\$707,100
13	Pumping	\$207,700	\$219,400	\$232,000	\$245,300	\$259,400
14	Transmission & Distribution	\$1,924,200	\$1,943,600	\$2,027,400	\$2,114,900	\$2,206,500
15	Treatment Wells	\$211,900	\$211,500	\$220,400	\$229,800	\$239,500
16	Treatment Facility	\$799,000	\$817,900	\$855,900	\$895,700	\$937,400
17	Customer Accounts	\$448,100	\$437,900	\$457,000	\$477,000	\$497,900
18	General & Administration	\$1,638,400	\$1,603,400	\$1,683,200	\$1,731,200	\$1,856,700
19	Payouts & Retiree Medical	\$155,600	\$162,900	\$170,500	\$178,400	\$186,700
20	Board of Directors	\$25,500	\$26,300	\$27,100	\$27,900	\$28,700
21	Non-Operating Expenses	\$326,100	\$402,900	\$375,200	\$477,500	\$432,200
22	Total	\$6,280,100	\$6,428,900	\$6,684,500	\$7,048,100	\$7,352,100
23						
24	Net Revenue	\$1,944,000	\$2,143,400	\$2,396,500	\$2,601,200	\$2,936,000
25						
26	Debt Service					
27	Existing Debt	\$243,700	\$243,700	\$243,700	\$120,900	\$0
28	Proposed Debt	\$0	\$0	\$0	\$0	\$0
29	Total	\$243,700	\$243,700	\$243,700	\$120,900	\$0
30						
31	Net Revenue Less Debt	\$1,700,300	\$1,899,700	\$2,152,800	\$2,480,300	\$2,936,000

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Cash Flow Projections	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
32						
33	Capital Expenditures					
34	Rate Funded	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900
35	Total	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900
36						
37	Net Cash Flow	(\$2,260,900)	(\$1,095,500)	(\$843,200)	\$742,700	\$1,649,100

Twenty-nine Palms Water District 2025 Water Rate Study

PROPOSED FUND BALANCE PROJECTIONS

Table 3-19 shows the fund balance projections for the proposed financial plan. Based on the sources (revenues) and uses (O&M expenses, debt service, and rate funded capital projects) of funds, the District's fund balance is projected to be approximately \$8.3 million by the end of the study period.

Table 3-19: Projected Fund Balances (Proposed Financial Plan)

Line	Fund Balance Projections	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	Beginning Fund Balance	\$10,100,000	\$7,839,100	\$6,743,600	\$5,900,400	\$6,643,100
2						
3	Sources of Funds					
4	Rate Revenues at Existing Rates	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200	\$6,711,200
5	Revenue Adjustments	\$156,600	\$721,100	\$1,241,400	\$1,798,100	\$2,393,700
6	Other Operating Revenue	\$273,200	\$258,500	\$270,200	\$282,400	\$295,400
7	Capital Impact Fees	\$75,000	\$50,000	\$50,000	\$50,000	\$50,000
8	Property Tax	\$620,900	\$620,900	\$620,900	\$620,900	\$620,900
9	Interest Revenues	\$357,200	\$180,000	\$156,100	\$154,900	\$184,400
10	Miscellaneous Non-Operating Revenues	\$30,000	\$30,600	\$31,200	\$31,800	\$32,500
11	Total	\$8,224,100	\$8,572,300	\$9,081,000	\$9,649,300	\$10,288,100
12						
13	Uses of Funds					
14	O&M Expenses	\$6,280,100	\$6,428,900	\$6,684,500	\$7,048,100	\$7,352,100
15	Debt Service	\$243,700	\$243,700	\$243,700	\$120,900	\$0
16	Capital Expenditures	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900
17	Total	\$10,485,000	\$9,667,800	\$9,924,200	\$8,906,600	\$8,639,000
18						
19	Ending Fund Balance	\$7,839,100	\$6,743,600	\$5,900,400	\$6,643,100	\$8,292,200

PROPOSED FINANCIAL PERFORMANCE

Table 3-20 shows the forecasted financial performance for the proposed financial plan. Under this plan, the District will meet its proposed reserve targets by the end of the study period in FY 2029/30. The projected drawdown in reserves to levels below the proposed reserve target in the middle of the study period is due to substantial capital projects in the first three years. Note that the magnitude of revenue adjustments necessary to meet the proposed reserve target in all years of the study period would require unacceptably high rate increases in the first year.

Table 3-20: Forecasted Financial Performance (Proposed Financial Plan)

Line	Financial Performance	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	Current Financial Policies					
2	Operating Target	\$2,936,200	\$2,971,700	\$3,111,400	\$3,240,300	\$3,412,600
3	Capital Target	\$3,541,400	\$3,721,100	\$3,900,900	\$4,005,100	\$4,082,400
4	Combined Reserve Target	\$6,477,600	\$6,692,800	\$7,012,300	\$7,245,400	\$7,495,000
5						
6	Projected Ending Fund Balance	\$7,839,100	\$6,743,600	\$5,900,400	\$6,643,100	\$8,292,200
7	<i>Meets Target?</i>	Yes	Yes	No	No	Yes
8						
9	Proposed Financial Policies					
10	Operating Target	\$2,936,200	\$2,971,700	\$3,111,400	\$3,240,300	\$3,412,600
11	Capital Target	\$2,595,400	\$2,595,400	\$2,595,400	\$2,595,400	\$2,595,400
12	Emergency Target	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
13	Combined Reserve Target	\$7,531,600	\$7,567,100	\$7,706,800	\$7,835,700	\$8,008,000
14						
15	Projected Ending Fund Balance	\$7,839,100	\$6,743,600	\$5,900,400	\$6,643,100	\$8,292,200
16	<i>Meets Target?</i>	Yes	No	No	No	Yes

Figure 3-3 shows a comparison of revenues and the revenue requirements for the proposed scenario. The stacked bars represent the revenue requirements, or costs: green for O&M expenses, orange for debt service, and blue for rate funded capital expenditures. The current revenue, shown as a solid line, is lower than the revenue requirements starting in FY 2025/26. The proposed revenue, shown as a dashed line, is lower than the revenue requirements from FY 2025/26 to FY 2027/28, indicating where current reserves are drawn down to fund the District's front loaded capital projects in the first three years. The proposed revenue is higher than the revenue requirements starting in FY 2028/29, indicating that proposed revenues are sufficient to cover all revenue requirements. In this scenario reserves (gray stacked bars) are funded in FY 2028/29 and FY 2029/30.

Twentynine Palms Water District 2025 Water Rate Study

Figure 3-3: Revenue Requirements vs. Revenues (Proposed Financial Plan)

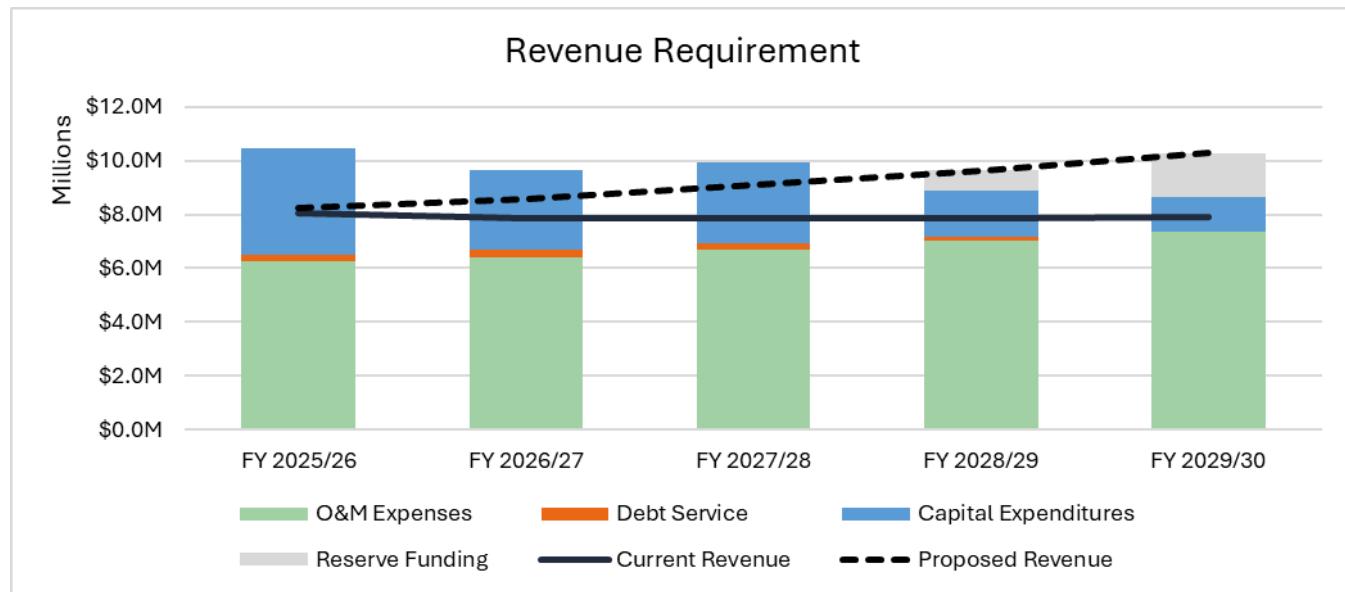
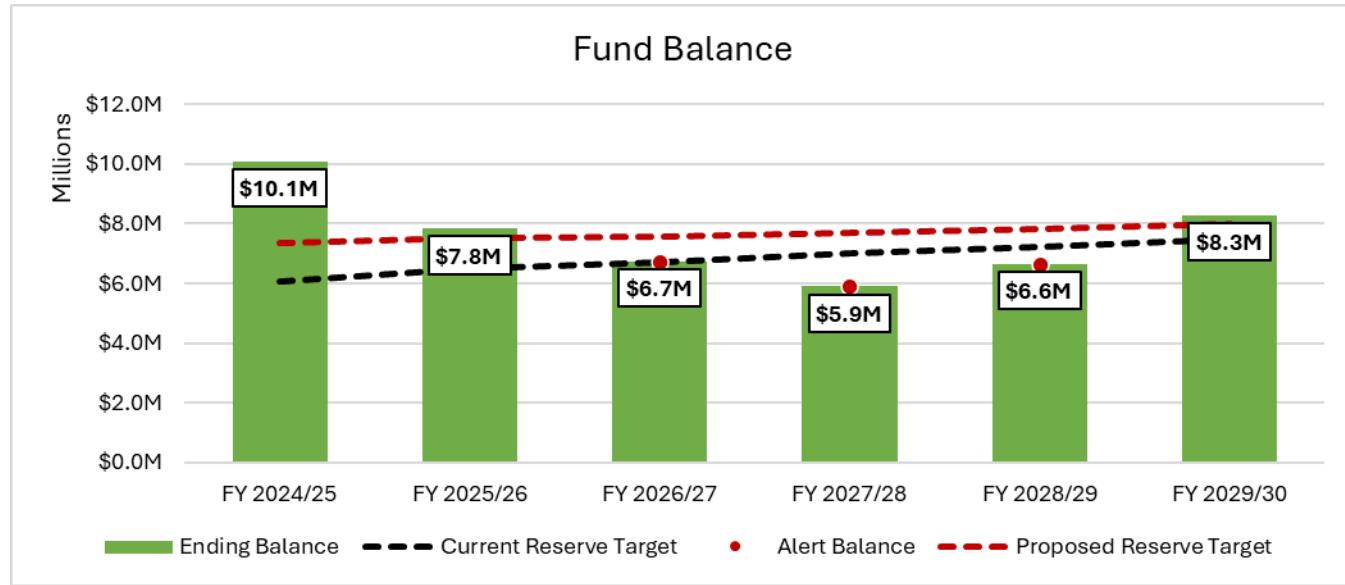


Figure 3-4 shows the fund balance projections in the proposed financial plan. The District's ending balance (green bars) will meet the proposed reserve targets (red dashed line) by the end of the study period in FY 2029/30.

Figure 3-4: Projected Fund Balances (Proposed Financial Plan)



4. COST-OF-SERVICE ANALYSIS

4.1 COST-OF-SERVICE METHODOLOGY

A cost-of-service analysis was conducted to allocate the proposed FY 2025/26 rate revenue requirement to customers in proportion to use of and burden on the District's water system. The overall goal of the cost-of-service analysis is to develop "unit costs," which provide the basis from which proposed rates are directly calculated from. Note that although the study period spans five years, the cost-of-service analysis is limited to a single representative year referred to as the "test year." The test year in this study is FY 2025/26.

The key steps in conducting a water cost-of-service analysis are outlined below:

- **Revenue requirement determination:** The total rate revenue requirement for the test year is determined based on the results of the proposed financial plan and divided into primary sub-components (operating, capital, etc.).
- **Cost functionalization:** Operating and capital costs are evaluated and assigned to "functional categories" in the water system (e.g., customer service, groundwater wells, distribution, etc.). This provides a proportional breakdown of system costs by functional category.
- **Revenue requirement allocation to cost causation components:** Functionalized costs are allocated to "cost causation components" (e.g., water supply, base delivery, max day delivery, etc.), which are used to attribute customers' use of the system to the District's incurrence of costs.
- **Unit cost development:** The rate revenue requirement allocation for each individual cost causation component is divided by the appropriate units of service to establish unit costs for the test year. Unit costs provide the basis from which proposed rates are calculated.

4.2 REVENUE REQUIREMENT

REVENUE REQUIREMENT DETERMINATION

The total rate revenue requirement for the test year, FY 2025/26, is based on the proposed financial plan projections (**Table 3-18**) and is allocated between the Operating, Capital, and Non-Rate Revenue components (see **Table 4-1**):

- The **Operating revenue requirement** consists of FY 2025/26 O&M expenses (Line 2; from **Table 3-18**, Line 22).
- The **Capital revenue requirement** includes debt service (Line 3; from **Table 3-18**, Line 29), rate funded capital expenditures (Line 4; from **Table 3-18**, Line 34), capital impact fees (Line 9; from **Table 3-18**, Line 5) used to offset the total capital revenue requirement, projected contribution to/(draw from) reserves (Line 16; from **Table 3-18**, Line 37), and an adjustment to annualize the mid-year rate revenue adjustment (Line 17).

Twentynine Palms Water District 2025 Water Rate Study

- The **Non-rate revenues** include all non-rate revenues (except for capital impact fees) and reduce the overall rate revenue requirement by offsetting a portion of the total revenue requirement (Lines 8,10-12; from **Table 3-18**, Lines 4, 6-8).

The total revenue requirement (Line 20) less the revenue adjustment annualization (Line 17) is equal to the amount of rate revenue collected in FY 2025/26 (**Table 3-18**, Lines 2-3).

Table 4-1: FY 2025/26 Revenue Requirement

Line	FY 2025/26 Revenue Requirement	Operating	Capital	Non-Rate Revenues	Total
1	Revenue Requirements				
2	O&M Expenses	\$6,280,100	\$0	\$0	\$6,280,100
3	Debt Service	\$0	\$243,700	\$0	\$243,700
4	Rate Funded Capital Expenditures	\$0	\$3,961,200	\$0	\$3,961,200
5	Subtotal	\$6,280,100	\$4,204,900	\$0	\$10,485,000
6					
7	Non-Rate Revenues				
8	Other Operating Revenue	\$0	\$0	(\$273,200)	(\$273,200)
9	Capital Impact Fees	\$0	(\$75,000)	\$0	(\$75,000)
10	Property Tax	\$0	\$0	(\$620,900)	(\$620,900)
11	Interest Revenues	\$0	\$0	(\$357,200)	(\$357,200)
12	Miscellaneous Non-Operating Revenue	\$0	\$0	(\$30,000)	(\$30,000)
13	Subtotal	\$0	(\$75,000)	(\$1,281,300)	(\$1,356,300)
14					
15	Adjustments				
16	Cash to/ (from) Reserves	\$0	(\$2,260,900)	\$0	(\$2,260,900)
17	Revenue Adjustment Annualization	\$0	\$313,189	\$0	\$313,189 ⁸
18	Subtotal	\$0	(\$1,947,711)	\$0	(\$1,947,711)
19					
20	Total	\$6,280,100	\$2,182,189	(\$1,281,300)	\$7,180,989

4.3 COST FUNCTIONALIZATION

FUNCTIONAL CATEGORY DEFINITIONS

After determining the revenue requirement, the next step in the cost-of-service analysis is to allocate the District's costs to various functional categories. These categories represent the main functions of the District's water system and include:

- Billing & Customer Service:** costs related to customer service and billing
- Meter Maintenance & Replacement:** costs of meter maintenance and replacement
- Water Supply:** costs related to plans and studies for management of the District's groundwater supply
- Treatment:** costs related to the treatment of water to potable standards

⁸ \$156,600 (from **Table 3-18**, Line 3) / 4 months (number of months rate adjustment will be effective for in FY 2025/26 based on March effective date) x 8 months (remaining months in year).

Twentynine Palms Water District 2025 Water Rate Study

- **Wells:** costs related to operation and maintenance of groundwater wells (except for electricity costs)
- **Well Electricity:** costs related to electricity for groundwater wells
- **Pumping:** costs related to pumping to move water through the service area
- **Storage:** costs related to water storage facilities (such as reservoirs and tanks)
- **Distribution:** costs related to the distribution of water to customers
- **Conservation:** costs related to conservation and efficiency efforts
- **Pay Station:** costs exclusively associated with serving the Utah Trail Pay Station
- **General:** costs that are not directly attributable to any other functional category, such as administrative and overhead costs

OPERATING COST FUNCTIONALIZATION

WRE evaluated and allocated projected O&M expenses for FY 2025/26 (from **Table 3-10**) to the most closely associated functional categories within the water system, as shown in **Table 4-2**. The detailed allocation of each O&M line item expense to the functional categories is included in the **Appendix (Table 6-3)**.

Table 4-2: Operating Costs by System Functions

Line	Functional Category	FY 2025/26 O&M expenses	Percent of Total
1	Billing & Customer Service	\$448,100	7.1%
2	Meter Maintenance & Replacement	\$0	0.0%
3	Water Supply	\$0	0.0%
4	Treatment	\$1,010,900	16.1%
5	Wells	\$86,700	1.4%
6	Well Electricity	\$456,900	7.3%
7	Pumping	\$207,700	3.3%
8	Storage	\$0	0.0%
9	Distribution	\$1,924,100	30.6%
10	Conservation	\$74,700	1.2%
11	Pay Station	\$0	0.0%
12	General	\$2,071,000	33.0%
13	Total	\$6,280,100	100.0%

CAPITAL ASSET FUNCTIONALIZATION

WRE evaluated and allocated the District's current capital assets to the most closely associated functional categories within the water system, as shown in **Table 4-3**. The detailed allocation of each individual capital asset to the functional categories is included in the **Appendix (Table 6-4)**. It is standard practice in most water cost-of-service studies to functionalize current capital assets rather than planned capital project costs, since the latter can fluctuate more significantly from year to year. The current capital asset base provides a more stable representation of long-term capital needs and their associated costs. The asset valuation methodology used in the

Twentynine Palms Water District 2025 Water Rate Study

study is replacement cost, which accounts for inflation. WRE estimated the replacement cost of each asset by escalating original costs using the Engineering News-Record Construction Cost Index (20-City average). Note that land assets are excluded from the totals shown in **Table 4-3**.

Table 4-3: Capital Assets by System Functions

Line	Functional Category	Replacement Cost	Percent of Total
1	Billing & Customer Service	\$1,499,927	1.2%
2	Meter Maintenance & Replacement	\$3,748,795	3.0%
3	Water Supply	\$1,117,428	0.9%
4	Treatment	\$21,227,236	17.2%
5	Wells	\$8,386,988	6.8%
6	Well Electricity	\$0	0.0%
7	Pumping	\$482,296	0.4%
8	Storage	\$13,805,838	11.2%
9	Distribution	\$70,015,419	56.8%
10	Conservation	\$0	0.0%
11	Pay Station	\$30,865	0.0%
12	General	\$2,915,205	2.4%
13	Total	\$123,229,997	100.0%

NON-RATE REVENUE FUNCTIONALIZATION

Table 4-4 shows the non-rate revenues allocated by functional categories. All non-rate revenues are allocated to the General functional category because they are typically not associated with any specific system function.

Table 4-4: Non-Rate Revenues by System Functions

Line	Functional Category	FY 2025/26 Non-Rate Revenues	Percent of Total
1	Billing & Customer Service	\$0	0.0%
2	Meter Maintenance & Replacement	\$0	0.0%
3	Water Supply	\$0	0.0%
4	Treatment	\$0	0.0%
5	Wells	\$0	0.0%
6	Well Electricity	\$0	0.0%
7	Pumping	\$0	0.0%
8	Storage	\$0	0.0%
9	Distribution	\$0	0.0%
10	Conservation	\$0	0.0%
11	Pay Station	\$0	0.0%
12	General	\$1,281,300	100.0%
13	Total	\$1,281,300	100.0%

4.4 COST CAUSATION COMPONENTS

COST COMPONENT DEFINITIONS

While the functional categories represent the costs of system functions, cost causation components represent the reasons for why and how costs are incurred within the system (thus, cost causation). Cost causation components will be referred to as cost components in this report. The next step of the cost-of-service analysis is to allocate the Operating, Capital, and Non-Rate Revenue requirements by functional category to each cost component. The cost components in this study include the following:

- **Billing & Customer Service:** costs associated with potable Billing & Customer Service costs (excluding non-potable and pay station service)
- **Meter Capacity:** costs such as meter maintenance and replacement that are generally incurred in proportion to meter capacity (excluding non-potable and pay station service)
- **Private Fire Protection:** costs associated with providing system capacity to dedicated commercial fire line connections
- **Base Delivery:** costs associated with delivering water to potable customers during average water demand conditions (excluding non-potable and pay station service)
- **Max Day Delivery:** costs associated with delivering water to potable customers during maximum day demand conditions (excluding non-potable and pay station service)
- **Max Hour Delivery:** costs associated with delivering water to potable customers during maximum hour demand conditions (excluding non-potable and pay station service)
- **Pay Station:** costs associated with providing water service to the Utah Trail Pay Station
- **Non-Potable:** costs associated with providing non-potable water service
- **General:** directly corresponds to the General functional category

SYSTEM-WIDE CAPACITY FACTORS

System-wide capacity factors for the District's water system, shown in **Table 4-5** are used to allocate costs associated within the Treatment, Wells, Pumping, Storage, and Distribution functional categories to the Base, Max Day, and Max Hour cost components. Capacity factors represent the ratio of maximum to average water demand over the course of one year for the entire system. This provides a basis to identify costs incurred to provide water service during average demand conditions and to provide additional capacity during peak demand conditions. The percentage allocations to the Base, Max Day, and Max Hour cost components based on the average day, maximum day, and maximum demand capacity factors are calculated as follows:

- Average day demand is allocated entirely to Base
- Max day demand is allocated proportionately to Base⁹ and Max Day¹⁰

⁹ 1.00/1.87 = 53.53%

¹⁰ (1.87-1.00)/1.87 = 46.47%

Twentynine Palms Water District 2025 Water Rate Study

- Max hour demand is allocated proportionately to Base¹¹, Max Day¹², and Max Hour¹³

Table 4-5: System-Wide Capacity Allocation

Line	System-Wide Capacity	Capacity Factor	Base Delivery	Max Day Delivery	Max Hour Delivery	Total
1	Max Day Demand	1.87 ¹⁴	53.53%	46.47%	N/A	100.00%
2	Max Hour Demand	2.80 ¹⁵	35.69%	30.98%	33.33%	100.00%

SERVICE TYPE ALLOCATION

The allocations in **Table 4-6** are used to allocate costs of functional categories between each service type (potable, pay station, and non-potable). Lines 1-4 show the metrics used to compute the percentages in Lines 6-9 to allocate system functions to cost components.

Table 4-6: Service Type Allocation

Line	Service Type Allocation	Potable	Pay Station	Non-Potable	Total
1	# of Accounts	7,672	N/A	1	7,673
2	# of EMUs ¹⁶	8,444	N/A	5	8,450
3	Potable Water Use (HCF)	859,867	6,958	N/A	866,826
4	Total Water Use (HCF)	859,867	6,958	35,268	902,094
5					
6	% of Accounts	99.99%	N/A	0.01%	100.00%
7	% of Meter Capacity	99.94%	N/A	0.06%	100.00%
8	% of Potable Water Use	99.20%	0.80%	N/A	100.00%
9	% of Total Water Use	95.32%	0.77%	3.91%	100.00%

COST COMPONENT ALLOCATION FACTORS

Table 4-7 shows the factors used to allocate the functionalized costs to the cost components. Functional costs are allocated based on the following methodology for non-potable and pay station services:

- Costs are allocated to Non-Potable based on:
 - The percentage of accounts (**Table 4-6**, Line 6) for the Billing & Customer Service function (Line 1).
 - The percentage of meter capacity/EMUs (**Table 4-6**, Line 7) for the Meter Maintenance & Replacement function (Line 2).
 - The percentage of total water usage (**Table 4-6**, Line 9) for Water Supply and Well functions (Lines 3 and 5).

¹¹ $1.00/2.80 = 35.69\%$

¹² $(1.87-1.00)/2.80 = 30.98\%$

¹³ $(2.80-1.87)/2.80 = 33.33\%$

¹⁴ Calculated based on five-year average ratio of max day to average day demand values provided by District staff.

¹⁵ Calculated based on multiplying max day demand ratio by 1.50.

¹⁶ EMUs are “equivalent meter units,” which are explained in detail in **Section 4.5**.

Twentynine Palms Water District 2025 Water Rate Study

- The percentage of non-potable well electricity costs provided by District staff for FY 2024/25 for Well Electricity (Line 6). The District has one well that is used for non-potable service, and the remainder are used for potable service.
- Costs are allocated to the Utah Trail Pay Station based on:
 - The percentage of total water usage (**Table 4-6**, Line 9) for Billing & Customer Service, Meter Maintenance & Replacement, Water Supply, and Wells functions (Lines 1-3, 5).
 - The percentage of total potable water usage (**Table 4-6**, Line 8) for Treatment, Pumping, Storage, Distribution, Well Electricity, and Conservation (Lines 4, 6-10).

After accounting for costs incurred through non-potable and pay station service, all other cost components represent the portion allocated to potable service (excluding the Utah Trail Pay Station). These remaining costs are allocated as follows:

- Treatment, Wells, Pumping, and Storage facilities are sized based on maximum day demand; the associated functions (Lines 4-5, 7-8) are therefore allocated (after accounting for non-potable and pay station allocations) based on the Max Day capacity factor (**Table 4-5**, Line 1).
- Distribution facilities are sized based on maximum hour demand and the remainder; the Distribution function (Line 9) is therefore allocated (after accounting for non-potable and pay station allocations) based on the Max Hour capacity factor (**Table 4-5**, Line 2).
- All other remaining functions are allocated to the most closely associated cost component.

Twenty-nine Palms Water District 2025 Water Rate Study

Table 4-7: System Function Allocation to Cost Components

Line	Cost Function	Billing & Customer Service	Meter Capacity	Private Fire Protection	Base Delivery	Max Day Delivery	Max Hour Delivery	Pay Station	Non-Potable	General	Total
1	Billing & Customer Service	99.22%						0.77%	0.01%		100.00%
2	Meter Maintenance & Replacement		99.17%					0.77%	0.06%		100.00%
3	Water Supply			95.32%				0.77%	3.91%		100.00%
4	Treatment			53.10%	46.10%			0.80%			100.00%
5	Wells			51.03%	44.29%			0.77%	3.91%		100.00%
6	Well Electricity			93.62%				0.76% ¹⁷	5.62% ¹⁸		100.00%
7	Pumping			53.10%	46.10%			0.80%			100.00%
8	Storage			53.10%	46.10%			0.80%			100.00%
9	Distribution			35.40%	30.73%	33.07%		0.80%			100.00%
10	Conservation			99.20%				0.80%			100.00%
11	Pay Station							100.00%			100.00%
12	General								100.00%		100.00%

¹⁷ Calculated based multiplying the remainder of well electricity costs for potable service (1-5.62%) by the percentage of pay station potable usage (**Table 4-6**, Line 8).

¹⁸ Based on actual well electricity costs in FY 2024/25 provided by District staff.

Twentynine Palms Water District 2025 Water Rate Study

OPERATING COST COMPONENT ALLOCATION

Table 4-8 shows the operating cost allocation by cost component. The functionalized O&M expenses from **Table 4-2** are allocated based on the cost component allocation factors in **Table 4-7**. The operating allocation (Line 14) is derived from the total O&M expenses by cost component (Line 13) and represents the proportion of the Operating revenue requirement that will be allocated to each cost component.

Table 4-8: Operating Allocation by Cost Component

Line	O&M expenses	Billing & Customer Service	Meter Capacity	Private Fire Protection	Base Delivery	Max Day Delivery	Max Hour Delivery	Pay Station	Non-Potable	General	Total
1	Billing & Customer Service	\$444,586	\$0	\$0	\$0	\$0	\$0	\$3,456	\$58	\$0	\$448,100
2	Meter Maintenance & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Water Supply	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Treatment	\$0	\$0	\$0	\$536,810	\$465,975	\$0	\$8,115	\$0	\$0	\$1,010,900
5	Wells	\$0	\$0	\$0	\$44,240	\$38,402	\$0	\$669	\$3,390	\$0	\$86,700
6	Well Electricity	\$0	\$0	\$0	\$427,747	\$0	\$0	\$3,462	\$25,692	\$0	\$456,900
7	Pumping	\$0	\$0	\$0	\$110,293	\$95,740	\$0	\$1,667	\$0	\$0	\$207,700
8	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Distribution	\$0	\$0	\$0	\$681,159	\$591,277	\$636,218	\$15,446	\$0	\$0	\$1,924,100
10	Conservation	\$0	\$0	\$0	\$74,100	\$0	\$0	\$600	\$0	\$0	\$74,700
11	Pay Station	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,071,000	\$2,071,000
13	Total	\$444,586	\$0	\$0	\$1,874,348	\$1,191,394	\$636,218	\$33,414	\$29,139	\$2,071,000	\$6,280,100
14	<i>Operating Revenue Requirement Allocation</i>	7.1%	0.0%	0.0%	29.8%	19.0%	10.1%	0.5%	0.5%	33.0%	100.0%

Twenty-nine Palms Water District 2025 Water Rate Study

CAPITAL COST COMPONENT ALLOCATION

Table 4-9 shows the capital cost allocation by cost component. The functionalized capital assets from **Table 4-3** are allocated based on the cost component allocation factors in **Table 4-7**. The capital allocation (Line 14) is derived from the total capital asset value by cost component (Line 13) and represents the proportion of the Capital revenue requirement that will be allocated to each cost component.

Table 4-9: Capital Allocation by Cost Component

Line	Capital Assets	Billing & Customer Service	Meter Capacity	Private Fire Protection	Base Delivery	Max Day Delivery	Max Hour Delivery	Pay Station	Non-Potable	General	Total
1	Billing & Customer Service	\$1,488,163	\$0	\$0	\$0	\$0	\$0	\$11,570	\$194	\$0	\$1,499,927
2	Meter Maintenance & Replacement	\$0	\$3,717,530	\$0	\$0	\$0	\$0	\$28,917	\$2,348	\$0	\$3,748,795
3	Water Supply	\$0	\$0	\$0	\$1,065,122	\$0	\$0	\$8,619	\$43,687	\$0	\$1,117,428
4	Treatment	\$0	\$0	\$0	\$11,272,116	\$9,784,718	\$0	\$170,401	\$0	\$0	\$21,227,236
5	Wells	\$0	\$0	\$0	\$4,279,551	\$3,714,848	\$0	\$64,694	\$327,895	\$0	\$8,386,988
6	Well Electricity	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Pumping	\$0	\$0	\$0	\$256,110	\$222,315	\$0	\$3,872	\$0	\$0	\$482,296
8	Storage	\$0	\$0	\$0	\$7,331,195	\$6,363,816	\$0	\$110,826	\$0	\$0	\$13,805,838
9	Distribution	\$0	\$0	\$0	\$24,786,457	\$21,515,791	\$23,151,124	\$562,047	\$0	\$0	\$70,015,419
10	Conservation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	Pay Station	\$0	\$0	\$0	\$0	\$0	\$0	\$30,865	\$0	\$0	\$30,865
12	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,915,205	\$2,915,205
13	Total	\$1,488,163	\$3,717,530	\$0	\$48,990,551	\$41,601,489	\$23,151,124	\$991,811	\$374,124	\$2,915,205	\$123,229,997
14	<i>Capital Revenue Requirement Allocation</i>	1.2%	3.0%	0.0%	39.8%	33.8%	18.8%	0.8%	0.3%	2.4%	100.0%

Twenty-nine Palms Water District 2025 Water Rate Study

NON-RATE REVENUE COST COMPONENT ALLOCATION

Table 4-10 shows the allocation of non-rate revenues to each cost component. The functionalized non-rate revenues from **Table 4-4** are allocated based on the cost component allocation factors in **Table 4-7**. All non-rate revenues are allocated to the General cost component.

Table 4-10: Non-Rate Revenue Allocation by Cost Component

Line	Non-Rate Revenues	Billing & Customer Service	Meter Capacity	Private Fire Protection	Base Delivery	Max Day Delivery	Max Hour Delivery	Pay Station	Non-Potable	General	Total
1	Billing & Customer Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Meter Maintenance & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Water Supply	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Treatment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Wells	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Well Electricity	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Pumping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	Conservation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	Pay Station	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	General	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,281,300	\$1,281,300
13	Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,281,300	\$1,281,300
14	Non-Rate Revenue Allocation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

Twentynine Palms Water District 2025 Water Rate Study

PRELIMINARY COST-OF-SERVICE ALLOCATION

Table 4-11 shows the preliminary cost-of-service allocation prior to any adjustments. The total Operating revenue requirement (**Table 4-1**, Line 20) is allocated to each cost component based on the Operating allocation (**Table 4-8**, Line 13). The total Capital revenue requirement (**Table 4-1**, Line 20) is allocated to each cost component based on the Capital allocation percentages (**Table 4-9**, Line 14). The total Non-Rate revenue requirement (**Table 4-1**, Line 20) is allocated based on the Non-Rate Revenue allocation (**Table 4-10**, Line 13). Note that the total cost-of-service allocation (Line 10) is equal to the total rate revenue requirement for FY 2025/26 (**Table 4-1**, Line 20).

Table 4-11: Preliminary Cost-of-Service Allocation

Line	Cost Causation Component	Operating Revenue Requirement	Capital Revenue Requirement	Non-Rate Revenues	Total
1	Billing & Customer Service	\$444,586	\$26,353	\$0	\$470,938
2	Meter Capacity	\$0	\$65,831	\$0	\$65,831
3	Private Fire Protection	\$0	\$0	\$0	\$0
4	Base Delivery	\$1,874,348	\$867,538	\$0	\$2,741,886
5	Max Day Delivery	\$1,191,394	\$736,690	\$0	\$1,928,085
6	Max Hour Delivery	\$636,218	\$409,966	\$0	\$1,046,184
7	Pay Station	\$33,414	\$17,563	\$0	\$50,978
8	Non-Potable	\$29,139	\$6,625	\$0	\$35,764
9	General	\$2,071,000	\$51,623	(\$1,281,300)	\$841,323
10	Total	\$6,280,100	\$2,182,189	(\$1,281,300)	\$7,180,989

GENERAL REALLOCATION

General costs are not attributable to specific system functions and are therefore proportionally reallocated to all other cost components. **Table 4-12** shows the reallocation of General costs (**Table 4-11**, Line 9) in proportion to the preliminary allocation to each cost component. The total revenue requirement (Line 10) remains unchanged after the General cost reallocation.

Table 4-12: General Cost Reallocation

Line	Cost Causation Component	Preliminary Allocation	General Cost Reallocation	Total
1	Billing & Customer Service	\$470,938	\$62,497	\$533,436
2	Meter Capacity	\$65,831	\$8,736	\$74,567
3	Private Fire Protection	\$0	\$0	\$0
4	Base Delivery	\$2,741,886	\$363,870	\$3,105,756
5	Max Day Delivery	\$1,928,085	\$255,872	\$2,183,956
6	Max Hour Delivery	\$1,046,184	\$138,837	\$1,185,021
7	Pay Station	\$50,978	\$6,765	\$57,743
8	Non-Potable	\$35,764	\$4,746	\$40,510
9	General	\$841,323	(\$841,323)	\$0
10	Total	\$7,180,989	\$0	\$7,180,989

CUSTOMER DEMAND AND FIRE CAPACITY REALLOCATION

Cost-of-service allocations consider system-wide capacity (which is the combination of customer demand and fire protection). For the purposes of the cost-of-service analysis, Max Day Delivery and Max Hour Delivery cost components are further allocated between customer demand and fire protection based on their proportional share of required capacity within the water system.

Table 4-13 shows the customer demand capacity calculations for Max Day and Max Hour. Annual water usage for each service class is from **Table 3-4**.¹⁹ The daily use is equal to the annual use divided by 365 days. The system-wide Max Day capacity factor is from **Table 4-5** (Line 1). Max Day demand is calculated by multiplying the daily use in HCF by the Max Day capacity factor for each service class. Max Day extra capacity is equal to Max Day demand less daily use. The system-wide Max Hour capacity factor is from **Table 4-5** (Line 2). Similarly, Max Hour demand is calculated by multiplying the daily use in HCF by the Max Hour capacity factor for each customer class and tier. Max Hour extra capacity is equal to the Max Hour demand less Max Day demand.

The total Max Day and Max Hour extra capacity (Line 4) represent the capacity required to meet customer demand. Note that non-potable water use is excluded from the extra capacity calculations below because the District's non-potable system functions independently from the potable water system.

¹⁹ Note that non-revenue water is excluded from the cost-of-service analysis.

Twenty-nine Palms Water District 2025 Water Rate Study

Table 4-13: Customer Demand Capacity

Line	Service Class	Annual Water Use (HCF)	Daily Use (HCF)	Max Day Capacity Factor	Max Day Demand (HCF/Day)	Max Day Extra Capacity (HCF/Day)	Max Hour Capacity Factor	Max Hour Demand (HCF/Day)	Max Hour Extra Capacity (HCF/Day)
1	Potable	859,867	2,356	1.87	4,401	2,045	2.80	6,601	2,200
2	Non-Potable	35,268	97	N/A	N/A	N/A	N/A	N/A	N/A
3	Utah Trail	6,958	19	1.87	36	17	2.80	53	18
4	Total	902,094	2,471		4,436	2,061		6,655	2,218

Costs related to fire protection capacity increase exponentially based on fire line diameter and are attributable to both public fire hydrants and private fire connections. Therefore, equivalent fire lines are calculated to provide a basis from which to allocate costs in proportion to fire line size, and between public and private fire connections. Equivalent fire line calculations are shown in **Table 4-14**; private fire line counts are from **Table 3-3** and public fire line counts were provided by District staff.

The capacity of a fire line is based on the diameter of the connection and is equal to the connection diameter in inches raised to the power of 2.63 based on the Hazen-Williams equation in the AWWA's M1 Manual. The fire line ratio is the fire capacity of each diameter size divided by the base fire line size, which is 2-inch in diameter. Equivalent fire lines are calculated by multiplying the fire line ratio of each diameter size by the number of connections by size.

The concept of equivalent fire lines provides a basis from which to compare the capacity requirements of both private fire protection and public hydrants. The fire protection capacity attributed to private fire connections is equal to 3.0%; the remaining 97.0% is attributed to public fire hydrants (Line 8).

Table 4-14: Equivalent Fire Lines

Line	Fire Line Size	Fire Demand Units	Fire Demand Ratio	Private Fire Lines	Public Fire Lines	Equivalent Private Fire Lines	Equivalent Public Fire Lines
1	2-inch	6.19	1.00	82	0	82	0
2	3-inch	17.98	2.90	4	0	12	0
3	4-inch	38.32	6.19	8	6	50	37
4	6-inch	111.31	17.98	17	1,421	306	25,552
5	8-inch	237.21	38.32	9	0	345	0
6	10-inch	426.58	68.91	0	0	0	0
7	Total			120	1,427	794	25,589
8	<i>Percent of Total</i>			7.8%	92.2%	3.0%	97.0%

Table 4-15 shows the calculation of fire capacity requirements in the District's system and the capacity allocation between fire and customer demand. The extra capacity required for fire is based on assumed fire flow requirements of 3,500 gpm for 3 hours. The fire capacity is allocated between public hydrants (Line 9) and private fire (Line 8) using the proportion of equivalent fire lines attributed to each service (**Table 4-14**, Line 8).

The customer (from **Table 4-13**), private fire, and public hydrant extra capacity (Lines 7-9) are added together to form the total extra capacity requirements of the system. From there, the capacity allocation factors (Lines 13-15) are calculated based on the proportion of the total capacity requirements related to each service. These allocations are used to reallocate Max Day and Max Hour costs.

Table 4-15: Capacity Allocation by Fire and Customer Demand

Line	Fire Capacity	Max Day	Max Hour
1	Fire Protection Assumptions		
2	Hours for Fire	3	3
3	Capacity for Fire (gpm)	3,500	3,500
4	Fire Extra Capacity ²⁰	842	5,896
5			
6	Extra Capacity (HCF/Day)		
7	Customer Demand	2,061	2,218
8	Private Fire	25	177
9	Public Hydrants	817	5,718
10	Total	2,904	8,114
11			
12	Extra Capacity (%)		
13	Customer Demand	71.0%	27.3%
14	Private Fire	0.9%	2.2%
15	Public Hydrants	28.1%	70.5%
16	Total	100.0%	100.0%

Public Fire costs within the Max Day and Max Hour components are reallocated based on the proportion of capacity related to public fire protection (**Table 4-15**, Line 15). All Public Fire costs are reallocated to the Meter Capacity component (Line 2). Public Fire costs are also reallocated to pay station and non-potable services based on percentage of total water usage and number of EMUs, respectively (from **Table 4-6**).

Private Fire costs are reallocated from Max Day and Max Hour to the Private Fire Protection cost component based on the proportion of capacity related to private fire service (**Table 4-15**, Line 14). The Max Day and Max Hour components now represent the capacity requirements of customer water demand only and do not include costs related to fire protection capacity.

²⁰ Max Day Extra Capacity = 3 hours × 3,500 gpm × 60 minutes per hour ÷ 748.05 gallons per HCF; Max Hour Extra Capacity = 24 hours × 3,500 gpm × 60 minutes per hour ÷ 748.05 gallons per HCF – Max Day Extra Capacity.

Twenty-nine Palms Water District 2025 Water Rate Study

Table 4-16: Extra Capacity Reallocation

Line	Cost Components	Allocation Adjusted for General	Public Fire Reallocation	Private Fire Reallocation	Total
1	Billing & Customer Service	\$533,436	\$0	\$0	\$533,436
2	Meter Capacity	\$74,567	\$1,437,478	\$0	\$1,512,045
3	Private Fire Protection	\$0	\$0	\$44,962	\$44,962
4	Base Delivery	\$3,105,756	\$0	\$0	\$3,105,756
5	Max Day Delivery	\$2,183,956	(\$614,412)	(\$19,057)	\$1,550,487
6	Max Hour Delivery	\$1,185,021	(\$835,156)	(\$25,904)	\$323,961
7	Pay Station	\$57,743	\$11,181	\$0	\$68,924
8	Non-Potable	\$40,510	\$908	\$0	\$41,418
9	Total	\$7,180,989	\$0	\$0	\$7,180,989

FINAL COST-OF-SERVICE ALLOCATION

Table 4-17 shows the final cost-of-service allocation after adjustments for General and Fire Capacity from the prior report tables. The associated charges that each cost component is to be recovered from are specified below.

Table 4-17: Final Cost-of-Service Allocation

Line	Cost Components	Final Cost-of- Service Allocation	Recovered by:
1	Billing & Customer Service	\$533,436	<i>Potable Fixed Meter Service Charges; Commercial Fire Fixed Service Charges</i>
2	Meter Capacity	\$1,512,045	<i>Potable Fixed Meter Service Charges</i>
3	Private Fire Protection	\$44,962	<i>Commercial Fire Fixed Service Charges</i>
4	Base Delivery	\$3,105,756	<i>Potable Commodity Charges</i>
5	Max Day Delivery	\$1,550,487	<i>Potable Commodity Charges</i>
6	Max Hour Delivery	\$323,961	<i>Potable Commodity Charges</i>
7	Pay Station	\$68,924	<i>Utah Trail Pay Station Commodity Charges</i>
8	Non-Potable	\$41,418	<i>Non-Potable Fixed Meter Service Charges; Non-Potable Commodity Charges</i>
9	Total	\$7,180,989	

Table 4-18 shows the fixed and variable revenue recovery based on the final cost-of-service allocation (**Table 4-17**) and recovery of non-potable costs (Lines 1-4). The total Non-Potable cost allocation from **Table 4-17** (Line 8) is broken down between portions to be recovered through fixed and commodity charges to provide the same level of fixed revenue recovery as current non-potable rates (15.5%).

Based on the final cost-of-service allocation (**Table 4-17**) and recovery of non-potable costs (Lines 1-4), the District will maintain a similar level of fixed revenue recovery, recovering approximately 29% of revenues as fixed compared to 31% based on the current rates effective in

Twentynine Palms Water District 2025 Water Rate Study

FY 2025/26 (Line 7). Total system fixed charges (Line 7) include potable Billing & Customer Service costs (**Table 4-17**, Line 1), potable Meter Capacity costs (**Table 4-17**, Line 2), Private Fire Protection costs (**Table 4-17**, Line 3), and non-potable fixed charges (Line 2). The remainder is recovered through variable charges, and the total allocation (Line 9) is equal to the final cost-of-service allocation in **Table 4-17** (Line 9).

Table 4-18: Fixed Revenue Recovery

Line	Revenue Recovery	Allocation	Proposed Revenue Recovery	Current Revenue Recovery
1	Non-Potable			
2	Fixed Charges	\$6,417	15.5%	15.5%
3	Commodity Charges	\$35,001	84.5%	84.5%
4	Total	\$41,418	100.0%	100.0%
5				
6	Total System			
7	Fixed Charges	\$2,096,860	29.2%	31.4%
8	Commodity Charges	\$5,084,130	70.8%	68.6%
9	Total	\$7,180,989	100.0%	100.0%

4.5 UNIT COST DEVELOPMENT

EQUIVALENT METER UNITS

Costs related to meter capacity increase based on meter size. Therefore, equivalent meter units are calculated to provide a basis from which to allocate costs in proportion to meter capacity. Equivalent meter calculations are shown in **Table 4-19**.

Equivalent meters are calculated based on meter capacity ratios, which represent the safe operating capacity of a water meter relative to the base meter size. For this study, the base meter size is 3/4-inch. Capacity in gallons per minute (gpm) for each meter size was provided by District staff. The meter ratio for a 1.5-inch meter is 3.33, which means that the capacity of a 1.5-inch meter is 3.33 times that of a 3/4-inch meter. The number of meters at each meter size are from **Table 3-2**. Equivalent meters are calculated by multiplying the meter counts by the meter capacity ratio for each size.

Twentynine Palms Water District 2025 Water Rate Study

Table 4-19: Equivalent Meter Units

Line	Meter Size	Safe Operating Capacity (gpm)	Meter Capacity Ratio	Number of Meters	Number of EMUs
1	Potable				
2	5/8-inch	30	1.00	6,988	6,988
3	3/4-inch	30	1.00	83	83
4	1-inch Dual Service - Residential	30	1.00	2	2
5	1-inch	50	1.67	376	627
6	1.5-inch	100	3.33	53	177
7	2-inch	160	5.33	34	181
8	3-inch	450	15.00	8	120
9	4-inch	1,000	33.33	8	267
10	6-inch	2,000	66.67	0	0
11	8-inch	3,500	116.67	0	0
12	10-inch	5,500	183.33	0	0
13	Subtotal			7,552	8,444
14					
15	Non-Potable				
16	2-inch	160	5.33	1	5
17	Subtotal			1	5
18					
19	Total			7,553	8,450

UNITS OF SERVICE DEFINITIONS

The appropriate units of service are then established for each cost component based on cost causation, which is shown in **Table 4-20**. Cost components to be recovered by fixed charges are assigned units of service based on the number of connections, EMUs, or equivalent fire lines and are annualized based on 12 billing periods per year. Cost components to be recovered by commodity charges are assigned units of service based on annual water use in HCF or gallons.

Table 4-20: Units of Service Definitions

Line	Cost Components	Units of Service	Units of Service Definition
1	Billing & Customer Service	92,064	Potable Meters/Fire Lines x 12 months
2	Meter Capacity	101,332	Potable EMUs x 12 months
3	Private Fire Protection	9,524	Equivalent Fire Lines x 12 months
4	Base Delivery	859,867	Annual potable water use in HCF
5	Max Day Delivery	859,867	Annual potable water use in HCF
6	Max Hour Delivery	859,867	Annual potable water use in HCF
7	Pay Station	5,205,246	Annual Pay Station water use in gallons
8	Non-Potable Fixed	12	Non-Potable Meters x 12 months
9	Non-Potable Commodity	35,268	Annual non-potable water use in HCF

Twentynine Palms Water District 2025 Water Rate Study

UNIT COST BY COST COMPONENT

Table 4-21 shows the calculation of unit costs by each cost component. The final cost-of-service allocation (**Table 4-17**) is divided by the units of service (**Table 4-20**) for each cost component to derive the unit cost. These unit costs will be used to calculate proposed rates for the test year in **Section 5**.

Table 4-21: Unit Cost by Cost Component

Line	Cost Components	Final Cost of Service Allocation	Units of Service	Unit Cost	Service Type	Revenue Type
1	Billing & Customer Service	\$533,436	92,064	\$5.79	Potable	Fixed
2	Meter Capacity	\$1,512,045	101,332	\$14.92	Potable	Fixed
3	Private Fire Protection	\$44,962	9,524	\$4.72	Private Fire	Fixed
4	Base Delivery	\$3,105,756	859,867	\$3.61	Potable	Commodity
5	Max Day Delivery	\$1,550,487	859,867	\$1.80	Potable	Commodity
6	Max Hour Delivery	\$323,961	859,867	\$0.38	Potable	Commodity
7	Pay Station	\$68,924	5,205,246	\$0.01324	Pay Station	Commodity
8	Non-Potable Fixed	\$6,417	12	\$534.77	Non-Potable	Fixed
9	Non-Potable Commodity	\$35,001	35,268	\$1.00	Non-Potable	Commodity
10	Total	\$7,180,989				

5. WATER RATE DESIGN

5.1 RATE DESIGN METHODOLOGY

A five-year proposed water rate schedule was developed based on the results of the proposed financial plan and cost-of-service analysis. The key steps in developing the proposed rate schedule are outlined below:

- **Rate structure evaluation:** The existing rate structure is evaluated, and any proposed changes are identified. Proposed rate structure changes are typically intended to address specific policy objectives or to improve legal defensibility.
- **Test year rate development:** Rates are calculated for the proposed rate structure for the cost-of-service test year (FY 2025/26). Rate calculations directly incorporate the unit costs developed in the cost-of-service analysis. Although total rate revenues in the first year of adjustments (FY 2025/26) are designed to increase by the proposed revenue adjustment percentage, the proposed percentage increase to each rate/charge varies due to the updated cost-of-service allocations.
- **Five-year rate schedule development:** Proposed rates for the full five-year period are calculated by increasing the test year rates by the proposed annual revenue adjustment percentages from the proposed financial plan.

5.2 PROPOSED CHANGES TO RATE STRUCTURE

The District's current rate structure includes fixed meter service charges, commodity charges per unit of water delivered, and commercial fire fixed service charges. WRE and District staff evaluated the current rate structure and did not identify any need for significant proposed changes. However, one small refinement to the fixed meter service charges is recommended, as outlined below:

- **Fixed service charges for 8-inch and 10-inch meters:** The District's current rate schedule does not include fixed meter service charges for 8-inch or 10-inch meters, as no current customers have meters of either size. Because there is a possibility that future connections will require an 8-inch or 10-inch meter, we recommend adding fixed service charges for these meter sizes to the proposed rate schedule.

5.3 PROPOSED POTABLE FIXED METER SERVICE CHARGES

PROPOSED FY 2025/26 RATE CALCULATION

Table 5-1 shows the proposed potable fixed meter service charge calculations. The Billing & Customer Service and Meter Capacity unit costs are from **Table 4-21** (Lines 1-2). Billing & Customer Service costs do not vary based on meter size and thus are the same for all meter sizes. Meter Capacity unit costs are multiplied by the meter capacity ratio (**Table 4-19**) to ensure that Meter Capacity costs are recovered in proportion to customers' meter capacity. Proposed

Twentynine Palms Water District 2025 Water Rate Study

FY 2025/26 potable fixed meter service charges equal the sum of the Billing & Customer Service and Meter Capacity components rounded up to the nearest cent.

Table 5-1: Proposed FY 2025/26 Potable Fixed Meter Service Charge Calculation

Line	Potable Fixed Meter Service Charges	Meter Capacity Ratio	Number of Accounts	Billing & Customer Service	Meter Capacity	Proposed FY 2025/26 Monthly Charge
1	5/8-inch	1.00	6,988	\$5.79	\$14.92	\$20.72
2	3/4-inch	1.00	83	\$5.79	\$14.92	\$20.72
3	1-inch Dual Service - Residential	1.00	2	\$5.79	\$14.92	\$20.72
4	1-inch	1.67	376	\$5.79	\$24.87	\$30.67
5	1.5-inch	3.33	53	\$5.79	\$49.74	\$55.54
6	2-inch	5.33	34	\$5.79	\$79.58	\$85.38
7	3-inch	15.00	8	\$5.79	\$223.83	\$229.62
8	4-inch	33.33	8	\$5.79	\$497.39	\$503.19
9	6-inch	66.67	0	\$5.79	\$994.78	\$1,000.58
10	8-inch	116.67	0	\$5.79	\$1,740.86	\$1,746.66
11	10-inch	183.33	0	\$5.79	\$2,735.64	\$2,741.44

COMPARISON TO CURRENT RATES

Table 5-2 shows the proposed potable fixed meter service charges for FY 2025/26 compared to current charges. Note that while the overall proposed rate revenue increase in FY 2025/26 is 7%, proposed charges increase by different percentages due to the updated cost-of-service allocations. Additionally, proposed 3-inch through 6-inch charges increase significantly due to the increased meter capacity of new AMI meters at these sizes.

Table 5-2: Comparison to Current Potable Fixed Meter Service Charges

Line	Potable Fixed Meter Service Charges	Proposed FY 2025/26 Monthly Charge	Current Monthly Charge	Difference (\$)	Difference (%)
1	5/8-inch	\$20.72	\$20.05	\$0.67	3.3%
2	3/4-inch	\$20.72	\$20.05	\$0.67	3.3%
3	1-inch Dual Service - Residential	\$20.72	\$20.05	\$0.67	3.3%
4	1-inch	\$30.67	\$28.31	\$2.37	8.4%
5	1.5-inch	\$55.54	\$48.94	\$6.60	13.5%
6	2-inch	\$85.38	\$73.71	\$11.68	15.8%
7	3-inch	\$229.62	\$152.12	\$77.51	51.0%
8	4-inch	\$503.19	\$267.68	\$235.52	88.0%
9	6-inch	\$1,000.58	\$544.19	\$456.39	83.9%
10	8-inch	\$1,746.66	N/A	N/A	N/A
11	10-inch	\$2,741.44	N/A	N/A	N/A

5.4 PROPOSED POTABLE COMMODITY CHARGES

PROPOSED FY 2025/26 RATE CALCULATION

Table 5-3 shows the proposed FY 2025/26 potable commodity charge calculations. The Base Delivery and Pay Station unit costs are from **Table 4-21** (Lines 4 and 7). The Extra Capacity unit cost is equal to the sum of Max Day and Max Hour Delivery unit costs (**Table 4-21**; sum of lines 5-6). The proposed potable commodity charge equals the sum of the Base Delivery and Extra Capacity components rounded up to the nearest cent. The proposed Utah Trail Pay Station commodity charge simply equals the Pay Station unit cost rounded up to the nearest one-hundredth of one cent.

Table 5-3: Proposed FY 2025/26 Potable Commodity Charge Calculations

Line	Potable Commodity Charges	Base Delivery	Extra Capacity	Pay Station	Proposed FY 2025/26 Charge
1	Potable Commodity Charge (per HCF)	\$3.61	\$2.18	N/A	\$5.80
2	Utah Trail Pay Station Commodity Charge (per gallon)	N/A	N/A	\$0.01324	\$0.0133

COMPARISON TO CURRENT RATES

Table 5-4 shows the proposed potable commodity charges for FY 2025/26 compared to current charges. Note that while the overall proposed rate revenue increase in FY 2025/26 is 7%, proposed charges increase by different percentages due to the updated cost-of-service allocations.

Table 5-4: Comparison to Current Potable Commodity Charges

Line	Potable Commodity Charges	Proposed FY 2025/26 Charge	Current Charge	Difference (\$)	Difference (%)
1	Potable Commodity Charge (per HCF)	\$5.80	\$5.24	\$0.56	10.7%
2	Utah Trail Pay Station Commodity Charge (per gallon)	\$0.0133	\$0.0121	\$0.0012	9.9%

5.5 PROPOSED NON-POTABLE CHARGES

PROPOSED FY 2025/26 RATE CALCULATION

Table 5-5 shows the proposed FY 2025/26 non-potable charge calculations. The Non-Potable Fixed and Non-Potable Commodity unit costs are from **Table 4-21** (Lines 8 and 9). The proposed fixed charge simply equals the Non-Potable Fixed unit cost rounded up to the nearest cent. The

Twentynine Palms Water District 2025 Water Rate Study

proposed commodity charge simply equals the Non-Potable Commodity unit cost rounded up to the nearest cent.

Table 5-5: Proposed FY 2025/26 Non-Potable Charges

Line	Non-Potable Charges	Non-Potable Fixed	Non-Potable Commodity	Proposed FY 2025/26 Charge
1	Non-Potable Fixed Meter Service Charge – 2-inch (per Month)	\$534.77	N/A	\$534.77
2	Non-Potable Commodity Charge (per HCF)	N/A	\$1.00	\$1.00

COMPARISON TO CURRENT RATES

Table 5-6 shows the proposed non-potable charges for FY 2025/26 compared to current charges. Note that while the overall proposed rate revenue increase in FY 2025/26 is 7%, proposed charges increase by different percentages due to the updated cost-of-service allocations.

Table 5-6: Comparison to Current Non-Potable Charges

Line	Non-Potable Charges	Proposed FY 2025/26 Charge	Current Charge	Difference (\$)	Difference (%)
1	Non-Potable Fixed Meter Service Charge – 2-inch (per Month)	\$534.77	\$495.74	\$39.04	7.9%
2	Non-Potable Commodity Charge (per HCF)	\$1.00	\$0.92	\$0.08	8.7%

5.6 PROPOSED COMMERCIAL FIRE MONTHLY FIXED SERVICE CHARGES

PROPOSED FY 2025/26 RATE CALCULATION

Table 5-7 shows the proposed FY 2025/26 commercial fire monthly fixed service charge calculations. The Billing & Customer Service and Private Fire Protection unit costs are from **Table 4-21** (Lines 1 and 3). Billing & Customer Service costs do not vary based on fire line size and thus are the same for all fire line sizes. Private Fire Protection unit costs are multiplied by the fire demand ratio (**Table 4-14**). The proposed monthly charge equals the sum of the Billing & Customer Service and Private Fire Protection components rounded up to the nearest cent.

Twentynine Palms Water District 2025 Water Rate Study

Table 5-7: Proposed FY 2025/26 Commercial Fire Fixed Service Charge Calculation

Line	Commercial Fire Fixed Service Charges	Fire Demand Ratio	Billing & Customer Service	Private Fire Protection	Proposed FY 2025/26 Monthly Charge
1	2-inch	1.00	\$5.79	\$4.72	\$10.52
2	3-inch	2.90	\$5.79	\$13.71	\$19.51
3	4-inch	6.19	\$5.79	\$29.22	\$35.02
4	6-inch	17.98	\$5.79	\$84.89	\$90.68
5	8-inch	38.32	\$5.79	\$180.89	\$186.69
6	10-inch	68.91	\$5.79	\$325.31	\$331.11

COMPARISON TO CURRENT RATES

Table 5-8 shows the proposed commercial fire monthly fixed service charges for FY 2025/26 compared to current charges. Note that while the overall proposed rate revenue increase in FY 2025/26 is 7%, proposed commercial fire service fixed charges decrease significantly relative to current charges. This is due to the updated cost-of-service allocations, as well as adherence to more up-to-date methodological guidance from the AWWA regarding the cost allocation to private fire lines. Note that commercial fire fixed service charges only apply to 120 dedicated private fire lines.

Table 5-8: Comparison to Current Commercial Fire Fixed Service Charges

Line	Commercial Fire Fixed Service Charges	Proposed FY 2025/26 Monthly Charge	Current Monthly Charge	Difference (\$)	Difference (%)
1	2-inch	\$10.52	\$65.06	(\$54.54)	-83.8%
2	3-inch	\$19.51	\$91.37	(\$71.86)	-78.6%
3	4-inch	\$35.02	\$127.25	(\$92.23)	-72.5%
4	6-inch	\$90.68	\$246.84	(\$156.16)	-63.3%
5	8-inch	\$186.69	\$390.36	(\$203.67)	-52.2%
6	10-inch	\$331.11	\$1,060.10	(\$728.99)	-68.8%

5.7 PROPOSED WATER RATE SCHEDULE

PROPOSED FIVE-YEAR WATER RATE SCHEDULE

Table 5-9 shows proposed fixed meter service charges, commodity charges, and commercial fire fixed service charges over the full five-year rate-setting period. Proposed FY 2025/26 charges were calculated previously in **Table 5-2**, **Table 5-4**, **Table 5-6**, and **Table 5-8**. Proposed charges in FY 2026/27 through FY 2029/30 are calculated by increasing the FY 2025/26 proposed charges

Twentynine Palms Water District 2025 Water Rate Study

by the proposed 7% annual revenue adjustments (from **Table 3-17**) and rounding up to the nearest cent.²¹

Table 5-9: Proposed Potable Monthly Fixed Service Charges

Water Rates	Current	Proposed FY 2025/26 (Mar. 2026)	Proposed FY 2026/27 (Jan. 2027)	Proposed FY 2027/28 (Jan. 2028)	Proposed FY 2028/29 (Jan. 2029)	Proposed FY 2029/30 (Jan. 2030)
Fixed Meter Service Charges (Monthly)						
5/8-inch	\$20.05	\$20.72	\$22.18	\$23.74	\$25.41	\$27.19
3/4-inch	\$20.05	\$20.72	\$22.18	\$23.74	\$25.41	\$27.19
1-inch Dual Service - Residential	\$20.05	\$20.72	\$22.18	\$23.74	\$25.41	\$27.19
1-inch	\$28.31	\$30.67	\$32.82	\$35.12	\$37.58	\$40.22
1.5-inch	\$48.94	\$55.54	\$59.43	\$63.60	\$68.06	\$72.83
2-inch	\$73.71	\$85.38	\$91.36	\$97.76	\$104.61	\$111.94
3-inch	\$152.12	\$229.62	\$245.70	\$262.90	\$281.31	\$301.01
4-inch	\$267.68	\$503.19	\$538.42	\$576.11	\$616.44	\$659.60
6-inch	\$544.19	\$1,000.58	\$1,070.63	\$1,145.58	\$1,225.78	\$1,311.59
8-inch	N/A	\$1,746.66	\$1,868.93	\$1,999.76	\$2,139.75	\$2,289.54
10-inch	N/A	\$2,741.44	\$2,933.35	\$3,138.69	\$3,358.40	\$3,593.49
2-inch Non-Potable	\$495.74	\$534.77	\$572.21	\$612.27	\$655.13	\$700.99
Commodity Charges						
Potable (per HCF)	\$5.24	\$5.80	\$6.21	\$6.65	\$7.12	\$7.62
Non-Potable (per HCF)	\$0.92	\$1.00	\$1.07	\$1.15	\$1.24	\$1.33
Utah Trail Pay Station (per gallon)	\$0.0121	\$0.0133	\$0.0143	\$0.0154	\$0.0165	\$0.0177
Commercial Fire Fixed Service Charges (Monthly)						
2-inch	\$65.06	\$10.52	\$11.26	\$12.05	\$12.90	\$13.81
3-inch	\$91.37	\$19.51	\$20.88	\$22.35	\$23.92	\$25.60
4-inch	\$127.25	\$35.02	\$37.48	\$40.11	\$42.92	\$45.93
6-inch	\$246.84	\$90.68	\$97.03	\$103.83	\$111.10	\$118.88
8-inch	\$390.36	\$186.69	\$199.76	\$213.75	\$228.72	\$244.74
10-inch	\$1,060.10	\$331.11	\$354.29	\$379.10	\$405.64	\$434.04

²¹ The Utah Trail Pay Station commodity charges are rounded up to the nearest one-hundredth of a cent.

5.8 RESIDENTIAL BILL IMPACTS

WRE calculated sample monthly bills for typical residential connections receiving potable water service to evaluate the impact of proposed rates increases on the District's customers. **Table 5-10** shows the proposed impacts in FY 2025/26 for a residential customer with a 5/8-inch meter (the most common meter size within this class, representing over 93% of customers) at various water use levels. For a residential customer with average water use of 7 HCF per month, the monthly bill increase will be \$4.59 or 8.1% in the first year of the proposed rate schedule, which reflects the impact of the cost-of-service analysis and proposed revenue adjustments.

Table 5-10: Sample Residential Monthly Bill Impacts in FY 2025/26

Water Use Level	Monthly Water Use (HCF)	Current Monthly Bill	Proposed Monthly Bill	Difference (\$)	Difference (%)
Very Low	3	\$35.77	\$38.12	\$2.35	6.6%
Low	5	\$46.25	\$49.72	\$3.47	7.5%
Average	7	\$56.73	\$61.32	\$4.59	8.1%
High	12	\$82.93	\$90.32	\$7.39	8.9%
Very High	15	\$98.65	\$107.72	\$9.07	9.2%

Table 5-11 shows monthly bills for a residential customer with a 5/8-inch meter and average water use of 7 HCF per month over the five-year rate-setting period. By the final year of the proposed rate-setting period, monthly bills will increase to \$80.53.

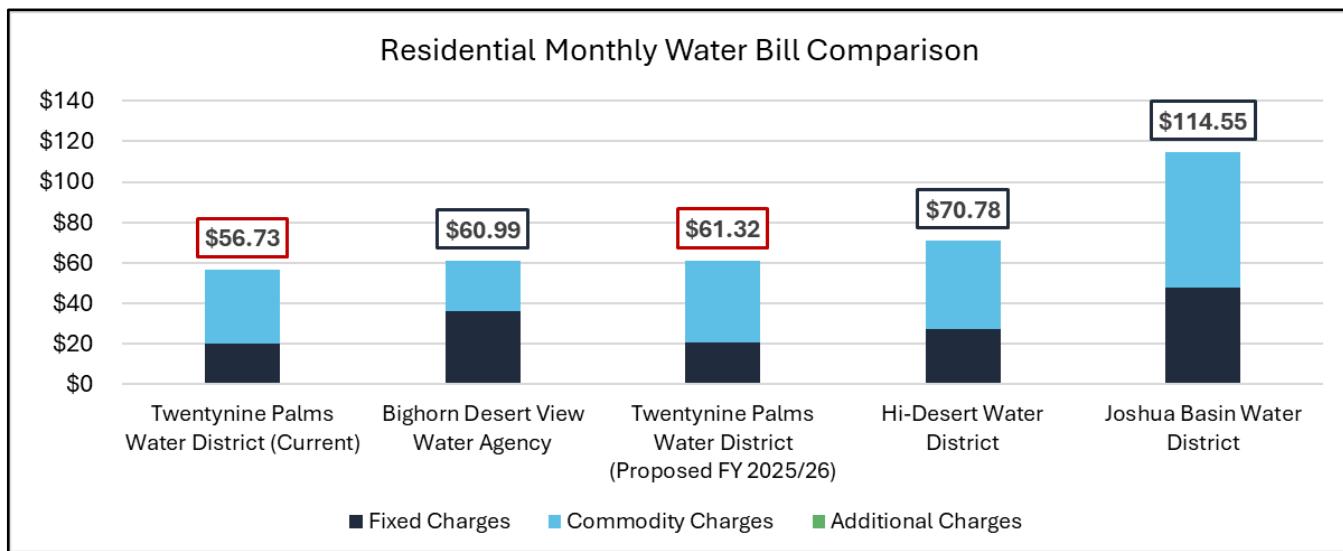
Table 5-11: Five-Year Monthly Bill Impacts for Average Residential Customer

Year	Monthly Bill for Average Residential Customer	Monthly Bill Increase (\$)	Monthly Bill Increase (%)
Current	\$56.73		
Proposed FY 2025/26	\$61.32	\$4.59	8.1%
Proposed FY 2026/27	\$65.65	\$4.33	7.1%
Proposed FY 2027/28	\$70.29	\$4.64	7.1%
Proposed FY 2028/29	\$75.25	\$4.96	7.1%
Proposed FY 2029/30	\$80.53	\$5.28	7.0%

Figure 5-1 shows a comparison of current and proposed FY 2025/26 residential monthly bills to three neighboring water districts. All bills shown are for a residential customer with the smallest available meter size using 7 HCF of water per month. Bills for the three neighboring water districts are based on each agency's current rates and do not account for potential future rate increases in FY 2025/26 or later.

Twentynine Palms Water District 2025 Water Rate Study

Figure 5-1: Residential Monthly Bill Comparison to Neighboring Water Districts



6. APPENDICES

6.1 FINANCIAL PLAN APPENDICES

Table 6-1: O&M Expenses (Detail)

Line	Detailed O&M Expenses	FY 2024/25 Actuals	FY 2025/26 Budget	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
1	Source of Supply						
2	Labor	\$4,773	\$6,800	\$7,100	\$7,400	\$7,800	\$8,200
3	Benefits Allocated	\$1,679	\$2,900	\$2,400	\$2,500	\$2,600	\$2,700
4	Electric	\$392,388	\$456,900	\$484,300	\$513,400	\$544,200	\$576,900
5	Field Supplies	\$1,222	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600
6	Radio Equipment	\$109	\$100	\$100	\$100	\$100	\$100
7	Permits and Fees	\$64,875	\$66,200	\$68,200	\$70,200	\$72,300	\$74,500
8	Outside Services	\$6,625	\$9,100	\$39,400	\$40,600	\$41,800	\$43,100
9	Subtotal	\$471,670	\$543,600	\$603,100	\$635,800	\$670,400	\$707,100
10							
11	Pumping						
12	Labor	\$1,330	\$1,900	\$1,900	\$2,000	\$2,100	\$2,200
13	Benefits Allocated	\$513	\$800	\$700	\$700	\$700	\$700
14	Electric	\$177,115	\$187,200	\$198,400	\$210,300	\$222,900	\$236,300
15	Field Supplies	\$3,522	\$2,800	\$2,900	\$3,000	\$3,100	\$3,200
16	Outside Services	\$2,006	\$15,000	\$15,500	\$16,000	\$16,500	\$17,000
17	Subtotal	\$184,487	\$207,700	\$219,400	\$232,000	\$245,300	\$259,400
18							
19	Transmission & Distribution						
20	Labor	\$1,020,335	\$1,016,800	\$1,067,700	\$1,121,100	\$1,177,200	\$1,236,000
21	Conservation Labor	\$51	\$100	\$0	\$0	\$0	\$0
22	Mechanic Fees	(\$28,758)	(\$30,000)	(\$30,900)	(\$31,800)	(\$32,800)	(\$33,800)
23	Benefits Allocated	\$409,551	\$428,800	\$382,300	\$397,100	\$412,400	\$428,500
24	Fuel	\$78,874	\$90,500	\$94,100	\$97,900	\$101,800	\$105,900
25	Field Supplies	\$186,837	\$156,900	\$161,600	\$166,400	\$171,400	\$176,500
26	Repair Vehicles	\$119,760	\$136,600	\$140,700	\$144,900	\$149,200	\$153,700

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Detailed O&M Expenses	FY 2024/25 Actuals	FY 2025/26 Budget	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
27	Equipment Rental	\$2,000	\$7,000	\$7,200	\$7,400	\$7,600	\$7,800
28	Safety Equipment	\$13,090	\$5,400	\$5,600	\$5,800	\$6,000	\$6,200
29	Small Tools	\$11,480	\$11,400	\$11,700	\$12,100	\$12,500	\$12,900
30	Licenses & Certificates	\$4,255	\$4,400	\$4,500	\$4,600	\$4,700	\$4,800
31	Uniform	\$22,525	\$23,600	\$24,300	\$25,000	\$25,800	\$26,600
32	Inventory Gain & Loss	\$2,778	\$0	\$0	\$0	\$0	\$0
33	Office Supplies	\$471	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
34	Permits & Fees	\$10,183	\$10,700	\$11,000	\$11,300	\$11,600	\$11,900
35	Training Travel Meetings	\$6,494	\$4,300	\$4,400	\$4,500	\$4,600	\$4,700
36	Engineering Fees	\$0	\$0	\$0	\$0	\$0	\$0
37	Outside Services	\$45,183	\$39,200	\$40,400	\$41,600	\$42,800	\$44,100
38	Outside Repairs	\$23,248	\$17,500	\$18,000	\$18,500	\$19,100	\$19,700
39	Subtotal	\$1,928,358	\$1,924,200	\$1,943,600	\$2,027,400	\$2,114,900	\$2,206,500
40							
41	Treatment Wells						
42	Labor	\$131,467	\$105,200	\$110,500	\$116,000	\$121,800	\$127,900
43	Benefits Allocated	\$54,532	\$44,400	\$36,700	\$38,100	\$39,600	\$41,100
44	Chemicals	\$1,312	\$3,800	\$4,000	\$4,200	\$4,400	\$4,600
45	Lab Testing & Professional Fees	\$39,823	\$58,500	\$60,300	\$62,100	\$64,000	\$65,900
46	Subtotal	\$227,135	\$211,900	\$211,500	\$220,400	\$229,800	\$239,500
47							
48	Treatment Facility						
49	Labor	\$192,974	\$201,200	\$211,200	\$221,800	\$232,800	\$244,500
50	Benefits Allocated	\$78,353	\$84,900	\$70,100	\$72,800	\$75,700	\$78,600
51	Arsenic-Outside Services	\$0	\$10,000	\$10,300	\$10,600	\$10,900	\$11,200
52	Electric	\$25,628	\$33,200	\$35,200	\$37,300	\$39,500	\$41,900
53	Telephone	\$2,139	\$2,300	\$2,400	\$2,500	\$2,600	\$2,700
54	Chemicals	\$370,617	\$361,100	\$379,200	\$398,200	\$418,100	\$439,000
55	Field Supplies & Testing	\$56,667	\$46,900	\$48,300	\$49,700	\$51,200	\$52,700
56	Repairs & Maintenance	\$13,573	\$16,800	\$17,300	\$17,800	\$18,300	\$18,800
57	Equipment Rental	\$0	\$2,300	\$2,400	\$2,500	\$2,600	\$2,700
58	Permits & Fees	\$2,054	\$400	\$400	\$400	\$400	\$400

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Detailed O&M Expenses	FY 2024/25 Actuals	FY 2025/26 Budget	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
59	Outside Services	\$19,973	\$39,900	\$41,100	\$42,300	\$43,600	\$44,900
60	Subtotal	\$761,978	\$799,000	\$817,900	\$855,900	\$895,700	\$937,400
61							
62	Customer Accounts						
63	Labor	\$224,878	\$252,500	\$265,100	\$278,300	\$292,200	\$306,800
64	Benefits Allocated	\$90,342	\$106,500	\$81,100	\$84,200	\$87,500	\$90,900
65	Office Supplies	\$14,478	\$17,900	\$18,400	\$19,000	\$19,600	\$20,200
66	Postage	\$38,783	\$10,000	\$10,300	\$10,600	\$10,900	\$11,200
67	Outside Services	\$31,933	\$61,200	\$63,000	\$64,900	\$66,800	\$68,800
68	Subtotal	\$400,414	\$448,100	\$437,900	\$457,000	\$477,000	\$497,900
69							
70	General & Administration						
71	Labor	\$405,532	\$451,300	\$474,100	\$497,900	\$522,800	\$548,900
72	Benefits Allocated	\$160,666	\$190,300	\$150,700	\$156,700	\$162,700	\$169,100
73	Accounting	\$91,242	\$86,600	\$84,000	\$86,500	\$89,100	\$99,500
74	Auditor	\$30,000	\$30,900	\$31,800	\$32,800	\$33,800	\$34,800
75	Legal	\$24,764	\$25,500	\$26,300	\$44,100	\$27,900	\$28,700
76	Outside Services	\$240,220	\$303,100	\$265,800	\$273,800	\$282,000	\$340,500
77	Banking, Credit Card & Payroll Fees	\$145,213	\$147,200	\$151,600	\$156,100	\$160,800	\$165,600
78	Electric	\$23,388	\$26,800	\$28,400	\$30,100	\$31,900	\$33,800
79	Gas	\$1,421	\$1,900	\$2,000	\$2,100	\$2,200	\$2,300
80	Telephone	\$38,145	\$38,500	\$39,700	\$40,900	\$42,100	\$43,400
81	Equipment Rental	\$3,365	\$3,400	\$3,500	\$3,600	\$3,700	\$3,800
82	Office Supplies	\$9,252	\$9,100	\$9,400	\$9,700	\$10,000	\$10,300
83	Postage	\$2,352	\$1,900	\$2,000	\$2,100	\$2,200	\$2,300
84	Dues & Subscriptions	\$106,474	\$65,600	\$67,600	\$69,600	\$71,700	\$73,900
85	Property & Liability Insurance	\$117,904	\$123,800	\$130,000	\$136,500	\$143,300	\$150,500
86	Training Travel Meetings	\$4,741	\$10,000	\$10,300	\$10,600	\$10,900	\$11,200
87	Landscaping	\$0	\$5,000	\$5,200	\$5,400	\$5,600	\$5,800
88	Conservation	\$74,950	\$74,600	\$76,800	\$79,100	\$81,500	\$83,900
89	Printing	\$7,078	\$5,000	\$5,200	\$5,400	\$5,600	\$5,800
90	Grant Writer	\$15,561	\$37,900	\$39,000	\$40,200	\$41,400	\$42,600

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Detailed O&M Expenses	FY 2024/25 Actuals	FY 2025/26 Budget	FY 2026/27 Projected	FY 2027/28 Projected	FY 2028/29 Projected	FY 2029/30 Projected
91	Subtotal	\$1,502,268	\$1,638,400	\$1,603,400	\$1,683,200	\$1,731,200	\$1,856,700
92							
93	Payouts & Retiree Medical						
94	Vacation Sick Payout	\$69,853	\$127,100	\$133,500	\$140,200	\$147,200	\$154,600
95	Retiree Medical	\$17,697	\$28,500	\$29,400	\$30,300	\$31,200	\$32,100
96	Subtotal	\$87,550	\$155,600	\$162,900	\$170,500	\$178,400	\$186,700
97							
98	Board of Directors						
99	Board Fees	\$11,044	\$15,000	\$15,500	\$16,000	\$16,500	\$17,000
100	Office Supplies	\$442	\$500	\$500	\$500	\$500	\$500
101	Training Travel Meetings	\$6,461	\$10,000	\$10,300	\$10,600	\$10,900	\$11,200
102	Subtotal	\$17,948	\$25,500	\$26,300	\$27,100	\$27,900	\$28,700
103							
104	Non-Operating Expenses						
105	CalPERS UAL Payment (Required)	\$274,994	\$326,100	\$352,900	\$375,200	\$422,500	\$432,200
106	Pension & OPEB Trust Contribution	\$174,120	\$164,000	\$168,900	\$174,000	\$179,000	\$184,100
107	Transfers In - Special Revenue Fund	(\$174,120)	(\$164,000)	(\$168,900)	(\$174,000)	(\$179,000)	(\$184,100)
108	Election Expense	\$0	\$0	\$50,000	\$0	\$55,000	\$0
109	Subtotal	\$274,994	\$326,100	\$402,900	\$375,200	\$477,500	\$432,200
110							
111	Total	\$5,856,800	\$6,280,100	\$6,428,900	\$6,684,500	\$7,048,100	\$7,352,100

Twenty-nine Palms Water District 2025 Water Rate Study

Table 6-2: Planned Capital Projects (Detail)

Line	Capital Projects (Detailed)	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
1	District Projects					
2	Treatment Feasibility & Exploration Costs	\$50,200	\$0	\$0	\$0	\$175,500
3	Salt Nutrient Monitoring Wells/Sampling	\$45,600	\$52,000	\$54,100	\$56,200	\$58,500
4	USGS Study/Feasibility Study	\$200,000	\$104,000	\$54,100	\$0	\$0
5	Centralized Sewer Plan/Groundwater Analysis	\$50,000	\$52,000	\$0	\$56,200	\$0
6	Master Plan Updates	\$75,000	\$0	\$0	\$0	\$0
7	Campbell Reservoir Land Acquisition	\$30,000	\$0	\$0	\$78,700	\$0
8	Standard Drawings Update	\$10,000	\$0	\$0	\$0	\$0
9	Financial System Upgrade	\$0	\$31,200	\$0	\$0	\$0
10	Asset Management Plan	\$20,000	\$0	\$0	\$0	\$0
11	GW Mgmt. Plan & Urban Water Mgmt. Plan	\$100,000	\$78,000	\$0	\$0	\$0
12	Subtotal	\$580,800	\$317,200	\$108,200	\$191,100	\$234,000
13						
14	Capital Improvement Plan					
15	Chromium VI and Fluoride for Well 11B	\$250,000	\$0	\$0	\$0	\$0
16	Water Reservoir at Treatment Plant	\$1,670,300	\$1,768,000	\$0	\$0	\$0
17	New Well	\$0	\$0	\$2,163,200	\$0	\$0
18	Subtotal	\$1,920,300	\$1,768,000	\$2,163,200	\$0	\$0
19						
20	Repairs, Rehabilitation, & Maintenance					
21	Treated Water Reservoir Coating	\$0	\$0	\$0	\$562,400	\$292,500
22	Distribution SCADA System	\$195,100	\$0	\$54,100	\$112,500	\$117,000
23	Emergency Repairs, Unspecified	\$150,000	\$156,000	\$162,200	\$168,700	\$175,500
24	Campbell Reservoir Road Paving/Seal Coating	\$50,000	\$0	\$21,600	\$0	\$0
25	Treatment Plant Concrete	\$75,000	\$0	\$0	\$0	\$0
26	Repiping/Distribution System Upgrades	\$150,000	\$156,000	\$162,200	\$168,700	\$175,500
27	Cactus Booster Station (LHMP Generator)	\$40,000	\$0	\$0	\$0	\$0
28	Reservoir Recoating/Cathodic Protection	\$40,000	\$0	\$0	\$56,200	\$0
29	Soft Starts Wells/Boosters	\$50,000	\$52,000	\$54,100	\$0	\$0
30	Valve/CLA-Valve Replacement	\$150,000	\$52,000	\$54,100	\$56,200	\$58,500
31	Leer Booster (LHMP Generator)	\$15,000	\$0	\$0	\$0	\$0

Twentynine Palms Water District 2025 Water Rate Study

Line	Capital Projects (Detailed)	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30
32	Donnell Reservoir Altitude Valve	\$5,000	\$0	\$0	\$0	\$0
33	Well/Booster Rehabilitation	\$0	\$52,000	\$54,100	\$56,200	\$58,500
34	Plant 6 Electrical and Well Upgrade	\$0	\$52,000	\$0	\$0	\$0
35	Subtotal	\$920,100	\$520,000	\$562,400	\$1,180,900	\$877,500
36						
37	Capital Outlay					
38	Equipment Shade Structure	\$0	\$0	\$0	\$225,000	\$0
39	Vehicle/Equipment Replacements	\$150,000	\$78,000	\$81,100	\$84,400	\$87,700
40	Computer/Technology Replacements	\$75,000	\$52,000	\$54,100	\$56,200	\$58,500
41	Geographic Information System (GIS)	\$50,000	\$0	\$0	\$0	\$0
42	Administrative Building/Office Remodel	\$100,000	\$0	\$27,000	\$0	\$29,200
43	Energy Efficiency Projects	\$30,000	\$0	\$0	\$0	\$0
44	Parking Lot Seal/Paving	\$75,000	\$260,000	\$0	\$0	\$0
45	Electric Vehicle Station	\$60,000	\$0	\$0	\$0	\$0
46	Subtotal	\$540,000	\$390,000	\$162,200	\$365,600	\$175,400
47						
48	Total	\$3,961,200	\$2,995,200	\$2,996,000	\$1,737,600	\$1,286,900

Twentynine Palms Water District 2025 Water Rate Study

6.2 COST-OF-SERVICE ANALYSIS APPENDICES

Table 6-3: O&M Expenses by System Functions (Detail)

Line	O&M Expenses	FY 2025/26	Custo- mer ²²	Meter ²³	Water Supply	Treat- ment	Wells	Well Electr- icity	Pump- ing	Storage	Distribu- tion	Conser- vation	Pay Station	Non- Potable	General	Total
1	Source of Supply															
2	Labor	\$6,800	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
3	Benefits Allocated	\$2,900	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
4	Electric	\$456,900	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
5	Field Supplies	\$1,600	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
6	Radio Equipment	\$100	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
7	Permits and Fees	\$66,200	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
8	Outside Services	\$9,100	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
9	Subtotal	\$543,600														
10																
11	Pumping															
12	Labor	\$1,900	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
13	Benefits Allocated	\$800	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
14	Electric	\$187,200	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
15	Field Supplies	\$2,800	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
16	Outside Services	\$15,000	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%
17	Subtotal	\$207,700														
18																
19	Transmission & Distribution															
20	Labor	\$1,016,800	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
21	Conservation Labor	\$100	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
22	Mechanic Fees	(\$30,000)	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
23	Benefits Allocated	\$428,800	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
24	Fuel	\$90,500	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
25	Field Supplies	\$156,900	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
26	Repair Vehicles	\$136,600	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
27	Equipment Rental	\$7,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
28	Safety Equipment	\$5,400	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
29	Small Tools	\$11,400	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
30	Licenses & Certificates	\$4,400	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
31	Uniform	\$23,600	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
32	Office Supplies	\$1,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
33	Permits & Fees	\$10,700	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
34	Training Travel Meetings	\$4,300	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
35	Outside Services	\$39,200	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
36	Outside Repairs	\$17,500	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%

²² Refers to Billing & Customer Service.

²³ Refers to Meter Maintenance & Replacement.

Twenty-nine Palms Water District 2025 Water Rate Study

Line	O&M Expenses	FY 2025/26	Customer ²²	Meter ²³	Water Supply	Treatment	Wells	Well Electricity	Pumping	Storage	Distribution	Conservation	Pay Station	Non-Potable	General	Total
37	Subtotal	\$1,924,200														
38																
39	Treatment Wells															
40	Labor	\$105,200	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
41	Benefits Allocated	\$44,400	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
42	Chemicals	\$3,800	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
43	Lab Testing & Professional Fees	\$58,500	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
44	Subtotal	\$211,900														
45																
46	Treatment Facility															
47	Labor	\$201,200	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
48	Benefits Allocated	\$84,900	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
49	Arsenic-Outside Services	\$10,000	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
50	Electric	\$33,200	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
51	Telephone	\$2,300	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
52	Chemicals	\$361,100	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
53	Field Supplies & Testing	\$46,900	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
54	Repairs & Maintenance	\$16,800	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
55	Equipment Rental	\$2,300	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
56	Permits & Fees	\$400	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
57	Outside Services	\$39,900	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
58	Subtotal	\$799,000														
59																
60	Customer Accounts															
61	Labor	\$252,500	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
62	Benefits Allocated	\$106,500	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
63	Office Supplies	\$17,900	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
64	Postage	\$10,000	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
65	Outside Services	\$61,200	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
66	Subtotal	\$448,100														
67																
68	General & Administration															
69	Labor	\$451,300	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
70	Benefits Allocated	\$190,300	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
71	Accounting	\$86,600	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
72	Auditor	\$30,900	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
73	Legal	\$25,500	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
74	Outside Services	\$303,100	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
75	Banking, Credit Card & Payroll Fees	\$147,200	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
76	Electric	\$26,800	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
77	Gas	\$1,900	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
78	Telephone	\$38,500	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
79	Equipment Rental	\$3,400	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
80	Office Supplies	\$9,100	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
81	Postage	\$1,900	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%

Twenty-nine Palms Water District 2025 Water Rate Study

Line	O&M Expenses	FY 2025/26	Custo- mer ²²	Meter ²³	Water Supply	Treat- ment	Wells	Well Electr- icity	Pump- ing	Storage	Distribu- tion	Conser- vation	Pay Station	Non- Potable	General	Total
82	Dues & Subscriptions	\$65,600	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
83	Property & Liability Insurance	\$123,800	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
84	Training Travel Meetings	\$10,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
85	Landscaping	\$5,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
86	Conservation	\$74,600	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%
87	Printing	\$5,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
88	Grant Writer	\$37,900	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
89	Subtotal	\$1,638,400														
90																
91	Payouts & Retiree Medical															
92	Vacation Sick Payout	\$127,100	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
93	Retiree Medical	\$28,500	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
94	Subtotal	\$155,600														
95																
96	Board of Directors															
97	Board Fees	\$15,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
98	Office Supplies	\$500	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
99	Training Travel Meetings	\$10,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
100	Subtotal	\$25,500														
101																
102	Non-Operating Expenses															
103	CalPERS UAL Payment (Required)	\$326,100	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
104	Pension & OPEB Trust Contribution	\$164,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
105	Transfers In - Special Revenue Fund	(\$164,000)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
106	Subtotal	\$326,100														
107																
108	Total	\$6,280,100														

Twenty-nine Palms Water District 2025 Water Rate Study

Table 6-4: Capital Assets by System Functions (Detail)

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
1	Office Furn/Fixt	1451	1/1/1989	\$64,438	294%	\$189,494	General
2	Equipment	1454	1/1/1989	\$11,271	294%	\$33,143	General
3	Front Loader	1521	6/30/2001	\$73,940	214%	\$158,199	Distribution
4	Fuel Island With Tanks	1536	6/30/2004	\$113,448	191%	\$216,393	Distribution
5	Main Lines	1543	7/2/2003	\$5,034	203%	\$10,206	Distribution
6	2005 Ford F-350	1544	6/30/2005	\$22,774	182%	\$41,508	Distribution
7	Tp Build Improvement	1547	12/3/2003	\$23,750	203%	\$48,150	Treatment
8	Replace Roof Admin Building	1549	8/5/2013	\$22,236	142%	\$31,609	General
9	2006 F-250 Pickup	1550	6/30/2006	\$17,247	175%	\$30,197	Distribution
10	Software For Treatment Plant	1553	6/30/2005	\$6,825	182%	\$12,439	Treatment
11	2007 Ford F-250 Pickup	1555	6/30/2007	\$21,900	170%	\$37,310	Distribution
12	2008 Ford F250 Pickup	1560	6/30/2008	\$17,097	163%	\$27,922	Distribution
13	Arsenic Removal Package Plant Job 7003	1561	7/2/2007	\$246,353	170%	\$419,700	Treatment
14	Rehab Of Well 9 Job 8003	1562	7/1/2007	\$35,351	170%	\$60,226	Wells
15	1Mg & 2Mg Reservoirs With Boosters Job 20092	1563	7/1/2007	\$2,338,116	170%	\$3,983,339	Storage
16	Bore Under 29 Palms Highway Job 20093	1564	7/2/2007	\$99,497	170%	\$169,508	Distribution
17	Monitoring Wells At Treatment Plant Job 7007	1565	7/1/2007	\$21,599	170%	\$36,798	Wells
18	Mesquite Springs Pipeline	1566	7/1/2008	\$19,081	163%	\$31,162	Distribution
19	Villa Ford 2008 F-150	1568	6/30/2009	\$20,742	158%	\$32,846	Distribution
20	Villa Ford 11/25/2009	1572	6/30/2010	\$30,622	154%	\$47,231	Distribution
21	Johnson Machinery 11-14-2009	1573	6/30/2009	\$16,357	158%	\$25,903	Distribution
22	Big Tex Trailers	1576	6/30/2010	\$21,591	154%	\$33,302	Distribution
23	Villa Ford	1577	6/30/2010	\$23,901	154%	\$36,864	Distribution
24	Engineering For Hanson Res #2	1578	6/30/2010	\$58,334	154%	\$89,973	Storage
25	O&M Bldg	1580	6/30/2010	\$333,066	154%	\$513,711	General
26	Well 49 Palms Canyon	1581	6/30/2010	\$748,803	154%	\$1,154,930	Wells
27	Mesquite Springs Basin Study	1582	6/30/2010	\$229,731	154%	\$354,331	Water Supply
28	Jobs 8901 8902 8903	1583	7/1/2010	\$2,837,340	154%	\$4,376,223	Treatment
29	Jobs 20091200942009520096	1584	7/1/2010	\$1,811,507	154%	\$2,794,010	Distribution
30	Arnel Compressor	1585	6/30/2010	\$5,997	154%	\$9,249	Distribution
31	Tax Sale Sbco Apn 590-131-25	1586	1/19/2011	\$2,132	150%	\$3,191	General
32	Villa Ford	1587	7/1/2011	\$31,498	150%	\$47,130	Distribution
33	Job #1216	1588	7/1/2011	\$49,812	150%	\$74,533	Wells
34	Job #1205	1589	6/30/2011	\$74,915	150%	\$112,095	Distribution
35	Job #1207	1590	6/30/2011	\$53,033	150%	\$79,352	Distribution
36	Job 1112	1591	7/1/2011	\$197,997	150%	\$296,260	Wells
37	Job #1106	1592	6/30/2011	\$47,182	150%	\$70,598	Distribution
38	Job #1103	1593	6/30/2011	\$19,706	150%	\$29,486	Distribution
39	Villa Ford	1594	6/30/2011	\$23,492	150%	\$35,151	Distribution
40	Interactive Controls	1595	7/1/2011	\$6,285	150%	\$9,404	Treatment
41	2012 Ford F250 Regular Cab	1596	10/29/2012	\$20,843	146%	\$30,390	Distribution
42	Hwy 62 (Utah & 29 Palms Hwy) repiping	1598	6/30/2008	\$42,227	163%	\$68,963	Distribution

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
43	Lear Hydro Tank Replacement (67770 Pioneer Trl)	1599	7/1/2008	\$44,017	163%	\$71,886	Storage
44	Clare Ave. Main Line Replaceme	1600	7/1/2008	\$7,501	163%	\$12,250	Distribution
45	Well 14 Rehab.	1601	6/30/2012	\$55,617	146%	\$81,091	Wells
46	2012 John Deere 410K Backhoe	1602	6/30/2012	\$99,982	146%	\$145,776	Distribution
47	Vin 3Frnf65No5V141146	1605	7/30/2013	\$26,615	142%	\$37,834	Distribution
48	Vin 1Ftb2B69Eeb27554	1606	12/29/2013	\$24,122	142%	\$34,290	Distribution
49	Poweredge R620 Xeon E-2	1607	4/30/2014	\$28,319	138%	\$39,193	General
50	Springbook Financial System	1608	6/28/2014	\$123,567	138%	\$171,014	Billing & Customer Service
51	Fire Hydrant Valle Vista/Pampa	1609	4/30/2014	\$5,507	138%	\$7,622	Distribution
52	Treatment Plant Asphalt	1610	6/28/2014	\$10,570	138%	\$14,629	Treatment
53	Valve Maintenance Trailer	1611	4/30/2014	\$57,235	138%	\$79,212	Distribution
54	550 Gallon Chemical Day Tank	1612	4/30/2014	\$8,199	138%	\$11,347	Treatment
55	Groundwater Protection Plan	1613	6/28/2014	\$150,535	138%	\$208,337	Treatment
56	John Deere Backhoe Model 410E	1624	7/4/1998	\$40,209	229%	\$92,176	Distribution
57	6' Insta-Valve	1650	6/30/2016	\$13,673	131%	\$17,949	Distribution
58	Urban Water Management Plan	1651	6/30/2016	\$55,480	131%	\$72,832	Water Supply
59	MMG330 Genset Generator	1652	4/6/2016	\$365,895	131%	\$480,332	Distribution
60	Variable Frequency Drive Yaskawa IQ 1000 460v	1653	10/31/2015	\$5,326	135%	\$7,202	Wells
61	PLC Battery Scada Pack	1654	1/31/2016	\$7,939	131%	\$10,422	Wells
62	Hydrant Replacement	1655	5/18/2016	\$5,347	131%	\$7,020	Distribution
63	10" SCH80 PVC Static Mixer W/150# Flanges	1656	5/31/2016	\$5,605	131%	\$7,358	Treatment
64	Netting Garage	1657	6/30/2016	\$5,800	131%	\$7,614	Distribution
65	Cathodic Protection Reservoir	1658	1/31/2016	\$13,357	131%	\$17,535	Storage
66	GIR TIP Fuel Management System	1659	5/18/2016	\$15,245	131%	\$20,013	Distribution
67	Telephone system	1660	10/22/2015	\$13,079	135%	\$17,688	General
68	2016 Ford F250	1661	12/31/2015	\$29,266	135%	\$39,579	Distribution
69	Scada Computer	1662	10/31/2015	\$24,976	135%	\$33,778	Treatment
70	Treatment Plant Pond 3	1701	11/30/2016	\$1,524,130	131%	\$2,000,815	Treatment
71	Well 12 Electrical & connection to Plant 6	1702	6/28/2017	\$126,279	126%	\$159,613	Wells
72	Degassifier Media Lanpac	1703	8/22/2016	\$10,844	131%	\$14,236	Treatment
73	MMG330 Generator Cable	1704	8/31/2016	\$12,166	131%	\$15,971	Distribution
74	Cathodic Protection Lear Reservoir	1705	3/3/2017	\$17,294	126%	\$21,860	Storage
75	Cathodic Protection 2400 Reservoir	1706	6/9/2017	\$16,968	126%	\$21,448	Storage
76	Admin Office Asphalt Slurry	1707	3/31/2017	\$14,754	126%	\$18,649	General
77	2017 Ford F-250	1708	10/26/2016	\$51,020	131%	\$66,977	Distribution
78	Security Cameras-Treatment Plant	1710	5/31/2017	\$6,723	126%	\$8,497	Treatment
79	GIS Equipment	1711	8/31/2016	\$22,065	131%	\$28,966	Distribution
80	Customer Mainline Extension	1712	12/31/2016	\$6,100	131%	\$8,008	Distribution
81	TP Electrical Upgrades (Circuit Breakers)	1801	1/31/2018	\$14,347	123%	\$17,601	Treatment
82	Well 14 - Pull Ball & Motor	1802	5/16/2018	\$54,334	123%	\$66,659	Wells
83	Fluoride Plant Instrumentation & Coating	1803	4/30/2018	\$46,597	123%	\$57,167	Treatment
84	2017 Ford F-250	1804	9/30/2017	\$30,658	126%	\$38,751	Distribution
85	2017 John Deere 50G Compact Excavator	1805	11/30/2017	\$63,658	126%	\$80,462	Distribution
86	Fencing Upgrade - Privacy Link & Barbed Wire	1806	11/15/2017	\$16,000	126%	\$20,224	Treatment

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
87	TP-1 Well Motor	1901	5/29/2019	\$16,386	120%	\$19,712	Wells
88	Texas Pride Dump Trailer 7x8x12	1902	7/11/2018	\$12,759	123%	\$15,653	Distribution
89	F-550 Extra Cab	1903	9/30/2018	\$72,330	123%	\$88,737	Distribution
90	Dump Trailer 14LX-14BK7SIRPD	1904	9/19/2018	\$8,385	123%	\$10,287	Distribution
91	Water Trailer 535 Gallon	1905	10/11/2018	\$7,004	123%	\$8,592	Distribution
92	2019 Ford F-250	1906	11/28/2018	\$52,583	123%	\$64,511	Distribution
93	Kenworth Dump Truck	1907	6/30/2019	\$156,892	120%	\$188,744	Distribution
94	Laserfiche System	1908	10/17/2018	\$14,400	123%	\$17,666	General
95	SCADAPack 32 PLC Equipment	1909	12/31/2018	\$6,963	123%	\$8,542	Treatment
96	Treatment Plant Gate Upgrade	1910	9/19/2018	\$6,900	123%	\$8,465	Treatment
97	Well 12 Electrical Upgrade and Remodel	1911	12/31/2018	\$20,385	123%	\$25,010	Wells
98	Variable Frequency Drive Panel Replacement-Well1B	1912	3/7/2019	\$18,341	120%	\$22,064	Wells
99	Admin Roof Repairs 2018-19	1913	2/7/2019	\$14,000	120%	\$16,842	General
100	2018-19 District Office Addition (Add Office Room)	1914	8/31/2018	\$6,559	123%	\$8,047	General
101	Well 17 Pump Rehabilitation	1915	10/17/2018	\$45,796	123%	\$56,184	Wells
102	Well 14 Electrical Upgrade	1916	5/15/2019	\$12,650	120%	\$15,218	Wells
103	Mainline Extension - Gunderson	1917	5/21/2019	\$17,178	120%	\$20,665	Distribution
104	Soft Start Replacement	2000	12/15/2014	\$5,079	138%	\$7,029	Wells
105	12" Insta Valve	2001	6/30/2015	\$12,365	135%	\$16,722	Wells
106	Win 911 Software	2002	6/30/2015	\$7,378	135%	\$9,979	General
107	Cathodic Protection	2003	3/20/2015	\$16,460	135%	\$22,260	Storage
108	8" insta valve	2004	4/30/2015	\$5,650	135%	\$7,641	Distribution
109	Mainline extension	2005	3/23/2016	\$6,400	131%	\$8,402	Distribution
110	Springbrook UB Software	2006	11/7/2014	\$59,831	138%	\$82,804	Billing & Customer Service
111	Generator-Flouride Removal Plant	2007	9/3/2014	\$148,275	138%	\$205,210	Treatment
112	Meter Reading Handhelds	2008	10/30/2014	\$20,646	138%	\$28,574	Billing & Customer Service
113	Groundwater Management Plan	2009	7/1/2014	\$82,697	138%	\$114,451	Water Supply
114	2019 Ford Expedition	2010	7/1/2019	\$56,389	120%	\$67,837	Distribution
115	2019 Ford F-250	2011	9/25/2019	\$25,992	120%	\$31,269	Distribution
116	Big Tex - Dump Trailer	2012	10/18/2019	\$9,102	120%	\$10,950	Distribution
117	Well 14 - Emergency Generator Upgrade	2013	11/27/2019	\$11,700	120%	\$14,075	Wells
118	Server Upgrade	2014	12/30/2019	\$9,757	120%	\$11,738	General
119	LED Lighting Upgrades	2015	3/18/2020	\$12,986	118%	\$15,370	General
120	2020 Ford F-150	2016	4/23/2020	\$23,855	118%	\$28,236	Distribution
121	Valve Replacement (Phoenix) - Dist. System Upgrade	2017	4/24/2020	\$12,000	118%	\$14,204	Distribution
122	Office Emergency Battery Backup System	2018	4/20/2020	\$11,582	118%	\$13,709	General
123	2019 F-750 Water Truck	2019	6/3/2020	\$94,531	118%	\$111,891	Distribution
124	JCB Tele Handler	2020	6/3/2020	\$116,237	118%	\$137,583	Distribution
125	Air Conditioner Unit - Admin Building	2021	6/11/2020	\$6,705	118%	\$7,936	General
126	2020 Ford F250 4x4	2022	6/25/2020	\$51,723	118%	\$61,222	Distribution
127	2019 Ford F-250	2023	6/25/2020	\$30,233	118%	\$35,786	Distribution
128	2019 Ford F-250	2024	6/25/2020	\$30,233	118%	\$35,786	Distribution
129	AMI Meter System	2025	6/30/2020	\$742,289	118%	\$878,607	Meter Maintenance & Replacement
130	AMI Communication System	2026	6/30/2020	\$854,383	118%	\$1,011,287	Billing & Customer Service

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
131	Big Tex dump trailer	2101	7/31/2020	\$8,750	118%	\$10,357	Distribution
132	AMI Communication System - Additions	2102	9/30/2020	\$161,734	118%	\$191,436	Billing & Customer Service
133	Well 11-B	2103	7/1/2020	\$753,233	118%	\$891,562	Wells
134	Well 11B North Booster Pump	2104	10/31/2020	\$9,200	118%	\$10,890	Pumping
135	Well 11B South Booster Pump	2105	11/30/2020	\$9,875	118%	\$11,689	Pumping
136	Meter Installations FY21	2106	6/30/2021	\$118,035	112%	\$132,027	Meter Maintenance & Replacement
137	Well 14 Rehab	2201	4/27/2022	\$87,874	104%	\$91,688	Wells
138	Cactus Booster Transfer Switch	2202	1/19/2022	\$5,975	104%	\$6,234	Pumping
139	Fencing at Donnel Reservoir	2203	9/30/2021	\$8,500	112%	\$9,508	Storage
140	Privacy Fence- 6667 La Luna Ave	2204	12/14/2021	\$13,900	112%	\$15,548	Distribution
141	FY 22 Meter Replacements and Additions	2205	6/30/2022	\$23,498	104%	\$24,518	Meter Maintenance & Replacement
142	Office Ice Cube Machine	2206	4/30/2022	\$5,157	104%	\$5,381	General
143	Well TP2	2301	7/1/2022	\$2,099,181	104%	\$2,190,280	Wells
144	Paymeter Station Upgrade - FOB Reader	2302	6/22/2023	\$30,380	102%	\$30,865	Pay Station
145	8" Insta-Valve Sullivan & Bullion.	2303	6/30/2023	\$8,100	102%	\$8,229	Distribution
146	800' Of 8" C-900 DR18 PIPE	2304	6/22/2023	\$21,876	102%	\$22,225	Distribution
147	Well 15 Rehab	2305	3/31/2023	\$60,130	102%	\$61,090	Wells
148	Fence Replacement Campbell Reservoir	2306	4/30/2023	\$14,800	102%	\$15,036	Storage
149	Emergency Generator - Office	2307	6/22/2023	\$34,075	102%	\$34,619	General
150	Wacker Nuson LTV6L Light Towers - (2)	2308	6/22/2023	\$28,781	102%	\$29,241	Distribution
151	Equipment Shade Structure	2309	6/30/2023	\$233,119	102%	\$236,841	General
152	2023 Ford-F250 4x4 Truck	2310	6/30/2023	\$48,496	102%	\$49,270	Distribution
153	FY 23 Meter Replacements and Additions	2311	6/30/2023	\$26,473	102%	\$26,896	Meter Maintenance & Replacement
154	6" Insta Valve at Oasis/Outer Hwy 62	2401	1/31/2024	\$7,225	100%	\$7,225	Distribution
155	6" Insta Valve at Split Rock/Old Dale	2402	1/31/2024	\$7,225	100%	\$7,225	Distribution
156	Leer/2Mile PRS - Insta Valve and CLA Valve install	2403	5/22/2024	\$29,711	100%	\$29,711	Distribution
157	New Control Board Treatment Plant	2404	4/30/2024	\$11,355	100%	\$11,355	Treatment
158	P-4 South Booster Pump Motor - Treatment Plant	2405	6/30/2024	\$28,178	100%	\$28,178	Treatment
159	Emergency Generator - Lupine Booster Station	2406	3/31/2024	\$67,391	100%	\$67,391	Pumping
160	Emergency Generator - 2Mile Booster Station	2407	9/30/2024	\$44,583	100%	\$44,583	Pumping
161	Luckie Pk Main Line Replacements	2408	11/30/2023	\$10,024	102%	\$10,184	Distribution
162	Hansen Booster Rehab - Pump Upgrade & CLA Valves	2409	1/31/2024	\$67,262	100%	\$67,262	Pumping
163	Ditch Witch HX50A	2410	4/30/2024	\$142,806	100%	\$142,806	Distribution
164	District Wide Security System	2411	6/30/2024	\$27,516	100%	\$27,516	General
165	Bizhub C750I 75 PPM Color Copier	2412	1/31/2024	\$13,022	100%	\$13,022	General
166	Metal Walls for Equipment Shade Structure	2413	9/30/2023	\$14,200	102%	\$14,427	General
167	FY24 Meter Replacements & Additions	2414	6/30/2024	\$34,765	100%	\$34,765	Meter Maintenance & Replacement
168	AMI Communications System - FY24 Additions	2415	6/30/2024	\$14,812	100%	\$14,812	Billing & Customer Service
169	Cad Hardware & Software	ET30	1/1/1998	\$8,365	229%	\$19,177	General
170	As Built Drawings (Cad)	ET31	6/30/1999	\$6,945	224%	\$15,557	General
171	Pentax Total Station	ET8	1/1/1986	\$10,812	316%	\$34,164	Distribution
172	Portable Well Pump	FET124	1/1/1995	\$8,500	248%	\$21,085	Wells
173	Vehicle Hoist	FET133	7/4/1998	\$11,644	229%	\$26,693	Distribution
174	73204 Hatch Road	GP10	1/1/1989	\$468,805	294%	\$1,378,613	General

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
175	Auto Shop	GP12	1/1/1989	\$78,533	294%	\$230,941	Distribution
176	Xeroscape	GP13	1/1/1990	\$18,284	287%	\$52,438	General
177	District Fencing	GP14	1/1/1990	\$35,442	287%	\$101,648	General
178	Treat Plant Study #111 Alumina	GP21	7/3/1997	\$38,217	233%	\$89,023	Treatment
179	Replacement Of Office Carpet	GP24	6/30/2000	\$7,517	218%	\$16,398	General
180	Carport District Office	GP26	6/30/2002	\$16,449	208%	\$34,144	General
181	Residence Remodel	GP8	1/1/1985	\$5,397	324%	\$17,459	General
182	Transite	MH11	7/12/1962	\$10,585	1556%	\$164,735	Distribution
183	Transite	MH10	7/11/1966	\$45,087	1332%	\$600,478	Distribution
184	12 Inch Mainline Extension	MH104	7/3/2000	\$184,033	218%	\$401,473	Distribution
185	Main Line Ext Araby Ave	MH105	7/2/2000	\$8,291	218%	\$18,088	Distribution
186	Area 6 Repiping	MH106	7/2/2001	\$608,576	214%	\$1,302,092	Distribution
187	Area 5 Repiping From Job 978085	MH107	7/2/2001	\$468,430	214%	\$1,002,240	Distribution
188	Area 4 Repiping Job 978084 Misc pipe	MH108	7/3/2001	\$468,569	214%	\$1,002,536	Distribution
189	Area 3 Repiping	MH109	7/3/2001	\$441,844	214%	\$945,357	Distribution
190	Steel	MH11	1/1/1967	\$5,363	1264%	\$67,766	Distribution
191	Area 2 Repiping	MH110	7/2/2001	\$717,203	214%	\$1,534,507	Distribution
192	Area 1 Repiping	MH111	7/2/2001	\$502,617	214%	\$1,075,385	Distribution
193	Repiping Startup Costs	MH112	6/30/2002	\$20,986	208%	\$43,562	Distribution
194	Main Extension Sunrise & 2 Mile	MH115	7/2/2001	\$7,776	214%	\$16,638	Distribution
195	Main Extension Cottonail And Bullion Mtn	MH116	7/2/2001	\$13,156	214%	\$28,148	Distribution
196	Repiping Areas 7 8 & 9 Job 978087	MH117	7/3/2002	\$598,262	208%	\$1,241,846	Distribution
197	Mains 2004-05	MH118	7/2/2004	\$80,188	191%	\$152,952	Distribution
198	Main Lines Various Fy 0304 And Fy 0405	MH119	7/1/2006	\$27,654	175%	\$48,420	Distribution
199	Transite	MH12	7/11/1967	\$11,605	1264%	\$146,644	Distribution
200	Contributed Capital Developers Cost	MH120	7/1/2009	\$486,300	158%	\$770,097	Distribution
201	Contributed Capital By Sunwest	MH121	7/1/2009	\$16,152	158%	\$25,578	Distribution
202	Contrib Capital Bisram Hosp.	MH122	6/30/2009	\$10,000	158%	\$15,836	Distribution
203	Contrib Capital Vipassana Ctr Piping	MH123	7/1/2009	\$109,100	158%	\$172,769	Distribution
204	Contrib Capital 29 Palms Elem	MH124	7/1/2009	\$9,168	158%	\$14,518	Distribution
205	Steel	MH13	1/1/1968	\$7,217	1175%	\$84,800	Distribution
206	Transite	MH14	7/10/1968	\$31,877	1175%	\$374,556	Distribution
207	Transite	MH16	7/10/1969	\$10,601	1069%	\$113,368	Distribution
208	Transite	MH18	7/10/1970	\$143,261	983%	\$1,407,847	Distribution
209	Steel	MH2	1/1/1963	\$16,198	1506%	\$243,983	Distribution
210	Transite	MH20	7/11/1971	\$27,989	858%	\$240,256	Distribution
211	Transite	MH21	1/9/1972	\$45,120	774%	\$349,311	Distribution
212	Transite	MH22	1/8/1973	\$12,079	716%	\$86,505	Distribution
213	Transite	MH24	1/8/1974	\$11,276	672%	\$75,760	Distribution
214	Transite	MH26	1/8/1975	\$39,561	614%	\$242,717	Distribution
215	Transite	MH27	1/8/1976	\$32,309	565%	\$182,622	Distribution
216	Transite	MH28	1/23/1977	\$41,311	527%	\$217,640	Distribution
217	Transite	MH29	1/7/1978	\$22,204	489%	\$108,552	Distribution
218	Transite	MH3	7/12/1963	\$112,537	1506%	\$1,695,089	Distribution

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
219	Transite	MH30	7/9/1978	\$18,452	489%	\$90,206	Distribution
220	Transite	MH31	10/26/1979	\$18,413	452%	\$83,214	Distribution
221	Transite	MH32	5/6/1980	\$25,046	419%	\$105,007	Distribution
222	Transite (Ad3)	MH33	7/1/1982	\$253,822	355%	\$900,575	Distribution
223	Transite	MH34	1/6/1983	\$94,559	334%	\$315,614	Distribution
224	Transite	MH35	1/6/1984	\$12,318	327%	\$40,320	Distribution
225	Mains	MH37	11/13/1984	\$79,852	327%	\$261,383	Distribution
226	Mains	MH39	7/7/1985	\$351,992	324%	\$1,138,735	Distribution
227	Steel	MH4	1/1/1964	\$20,369	1450%	\$295,337	Distribution
228	Mains	MH41	7/7/1986	\$95,145	316%	\$300,638	Distribution
229	Mains	MH42	9/5/1986	\$47,899	316%	\$151,352	Distribution
230	Mains	MH43	12/6/1986	\$93,093	316%	\$294,154	Distribution
231	Mains	MH44	1/5/1987	\$128,137	308%	\$394,686	Distribution
232	Mains	MH45	2/4/1987	\$8,262	308%	\$25,447	Distribution
233	Mains	MH47	4/6/1987	\$134,830	308%	\$415,301	Distribution
234	Mains	MH48	5/7/1987	\$519,921	308%	\$1,601,455	Distribution
235	Mains	MH49	7/7/1987	\$137,404	308%	\$423,230	Distribution
236	Transite	MH5	7/10/1964	\$9,059	1450%	\$131,353	Distribution
237	Mains	MH50	7/7/1987	\$184,086	308%	\$567,019	Distribution
238	Mains	MH51	7/6/1987	\$18,152	308%	\$55,912	Distribution
239	Mains	MH52	7/6/1987	\$93,142	308%	\$286,896	Distribution
240	Mains	MH53	7/7/1987	\$207,254	308%	\$638,381	Distribution
241	Mains	MH54	7/6/1987	\$126,242	308%	\$388,849	Distribution
242	Mains	MH55	7/7/1987	\$201,861	308%	\$621,770	Distribution
243	Mains	MH56	7/6/1987	\$78,853	308%	\$242,881	Distribution
244	Mains	MH60	7/6/1988	\$343,865	300%	\$1,032,683	Distribution
245	Mains	MH61	7/5/1989	\$25,985	294%	\$76,414	Distribution
246	Mains/Hydrants; Lear	MH62	10/15/1989	\$6,501,810	294%	\$19,119,829	Distribution
247	Mains/Hydrants	MH63	7/5/1990	\$145,117	287%	\$416,193	Distribution
248	Mains/Hydrants; Lear	MH64	7/5/1990	\$22,328	287%	\$64,036	Distribution
249	Hansen Area #1	MH65	1/4/1992	\$783,590	272%	\$2,133,266	Distribution
250	Transmission Line	MH66	1/4/1992	\$31,469	272%	\$85,672	Distribution
251	2 Mile-Adobe Main Line	MH68	1/4/1992	\$49,926	272%	\$135,919	Distribution
252	Steel	MH7	1/1/1965	\$10,231	1398%	\$142,990	Distribution
253	8 inch Main Sullivan	MH71	7/5/1993	\$14,408	260%	\$37,532	Distribution
254	Dwr Loan	MH73	1/1/1993	\$64,266	260%	\$167,405	Distribution
255	Harmony Acres #3	MH74	7/5/1993	\$153,636	260%	\$400,200	Distribution
256	Post Office Area	MH75	7/4/1993	\$461,559	260%	\$1,202,296	Distribution
257	29 Palms Inn Repiping	MH76	7/4/1993	\$350,644	260%	\$913,377	Distribution
258	Adobe & Hwy 62	MH77	7/4/1993	\$259,050	260%	\$674,787	Distribution
259	Luckie Park Area 2A	MH78	7/4/1994	\$189,902	251%	\$476,557	Distribution
260	Harmony Acres Area	MH79	7/5/1994	\$10,160	251%	\$25,496	Distribution
261	Transite	MH8	7/11/1965	\$7,379	1398%	\$103,133	Distribution
262	Post Office Area 4	MH80	7/4/1994	\$31,085	251%	\$78,006	Distribution

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
263	Donnell Area 5 Repiping	MH81	7/4/1994	\$444,347	251%	\$1,115,081	Distribution
264	29 Palms Inn Area 6 repiping	MH82	7/5/1994	\$23,201	251%	\$58,223	Distribution
265	Adobe & Hwy 62 Area	MH83	7/4/1994	\$17,131	251%	\$42,989	Distribution
266	801 Housing Project	MH84	7/4/1994	\$15,257	251%	\$38,287	Distribution
267	Trans & Distrb Sys	MH86	7/5/1994	\$469,000	251%	\$1,176,949	Distribution
268	Hydrant Installations	MH87	3/21/1996	\$14,261	241%	\$34,437	Distribution
269	Laterals-Dwr Pipeline Replace	MH88	7/3/1996	\$570,004	241%	\$1,376,457	Distribution
270	Chocolate Drop Area 2-Dwr Pl Re	MH89	7/3/1996	\$431,238	241%	\$1,041,362	Distribution
271	Lower Hansen Area 8-Dwr Pl Re	MH90	7/4/1996	\$682,866	241%	\$1,648,999	Distribution
272	Section 30Tin.R9E-Dwr Pl Re	MH91	7/3/1996	\$1,246,312	241%	\$3,009,622	Distribution
273	Meter Installations	MH92	7/4/1996	\$7,569	241%	\$18,277	Meter Maintenance & Replacement
274	Main Install	MH95	7/3/1996	\$8,092	241%	\$19,540	Distribution
275	Dwr Repiping	MH96	7/4/1997	\$30,896	233%	\$71,969	Distribution
276	Unknown	MH97	7/4/1997	\$26,956	233%	\$62,792	Distribution
277	Main Installation	MH98	7/3/1997	\$9,225	233%	\$21,490	Distribution
278	Meters And Services	MS1	1/1/1982	\$108,621	355%	\$385,392	Meter Maintenance & Replacement
279	Meters And Services	MS10	1/1/1993	\$47,719	260%	\$124,301	Meter Maintenance & Replacement
280	Service Relocates/Reductions	MS13	7/4/1996	\$24,621	241%	\$59,455	Distribution
281	Meters And Services	MS2	1/1/1985	\$133,845	324%	\$433,002	Meter Maintenance & Replacement
282	Meters And Services	MS3	1/1/1986	\$88,467	316%	\$279,536	Meter Maintenance & Replacement
283	Meters And Services	MS4	1/1/1987	\$58,699	308%	\$180,803	Meter Maintenance & Replacement
284	Meters And Services	MS5	1/1/1988	\$59,774	300%	\$179,512	Meter Maintenance & Replacement
285	Meters And Services	MS6	1/1/1989	\$119,188	294%	\$350,495	Meter Maintenance & Replacement
286	Meters And Services	MS7	1/1/1990	\$203,092	287%	\$582,464	Meter Maintenance & Replacement
287	Meters And Services	MS8	1/1/1991	\$17,639	281%	\$49,512	Meter Maintenance & Replacement
288	Meters And Services	MS9	1/1/1992	\$25,231	272%	\$68,689	Meter Maintenance & Replacement
289	Plant 6 - 2 Booster Pumps	PE26	1/1/1970	\$6,000	983%	\$58,963	Pumping
290	Plant 11 - 2 Booster Pumps	PE27	1/1/1970	\$6,000	983%	\$58,963	Pumping
291	District Improvements	PE42	1/1/1981	\$12,114	384%	\$46,507	Pumping
292	Pr Station Hwy 62 & Utah	PE62	1/1/1990	\$5,477	287%	\$15,707	Pumping
293	Pr Station; Foothill	PE65	1/1/1991	\$8,756	281%	\$24,576	Pumping
294	Pressure Sta Tie In	PE66	1/1/1991	\$7,191	281%	\$20,185	Pumping
295	Pump Rehabilitation - Well 7	PE68	1/1/1993	\$21,998	260%	\$57,302	Wells
296	Mc Menamin Line Extension	PE70	7/5/1994	\$19,664	251%	\$49,348	Pumping
297	Well Chlorinator Building	PS12	1/1/1994	\$12,676	251%	\$31,809	Treatment
298	Pump House - Well 13	PS6	1/1/1986	\$5,165	316%	\$16,321	Wells
299	Telemetry System Software And Computer	RC17	6/30/2000	\$141,653	218%	\$309,020	Storage
300	Erosion Control Campbell Reservoir	TDS13	7/3/1999	\$28,895	224%	\$64,721	Storage
301	Flood Control Utah	TDS6	1/1/1980	\$9,043	419%	\$37,915	Storage
302	Capitalized Engineering Costs - Job 96201	TP1	7/3/1998	\$144,289	229%	\$330,776	Treatment
303	Water Treatment Plant With Equipment	TP3	7/3/2000	\$5,029,414	218%	\$10,971,819	Treatment
304	Electrical Upgrade Job 5604	TP4	6/30/2003	\$67,518	203%	\$136,885	Treatment
305	Water Discharge Project Job 5522 Irrigation & Plan	TP5	6/30/2003	\$163,761	203%	\$332,006	Treatment
306	Campbell Tank	TR10	1/5/1987	\$850,712	308%	\$2,620,351	Storage

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
307	Donnell Tank Rehab	TR12	1/5/1988	\$80,785	300%	\$242,609	Storage
308	Stockwell Tank	TR13	3/29/1989	\$146,502	294%	\$430,818	Storage
309	Stockwell Tank	TR14	1/4/1990	\$93,615	287%	\$268,486	Storage
310	So Hansen Tank	TR16	7/4/1992	\$191,592	272%	\$521,597	Storage
311	Worthing Res. Seismic Retrofit Job 96301	TR19	7/4/1998	\$13,936	229%	\$31,947	Storage
312	Donnell 1Mg Tank	TR2	1/1/1957	\$53,454	1874%	\$1,001,987	Storage
313	Recoating Of Hansen Reservoir Job 97352	TR20	7/4/1998	\$146,967	229%	\$336,913	Storage
314	Seismic Retrofit Campbell Reservoir	TR21	7/3/1999	\$27,156	224%	\$60,825	Storage
315	Seismic Retrofit Lear Reservoir	TR22	7/4/1999	\$19,890	224%	\$44,551	Storage
316	Seismic Retrofit Donnell Reservoir	TR23	7/4/1999	\$32,401	224%	\$72,575	Storage
317	Baywood Reservoir Seismic Retrofit Job 99004	TR24	6/30/2003	\$31,042	203%	\$62,934	Storage
318	Plant 11A Seismic Retrofit Job 99003	TR25	6/30/2003	\$25,450	203%	\$51,597	Storage
319	Stockwell Reservoir Seismic Retrofit Job 99005	TR26	6/30/2003	\$23,501	203%	\$47,646	Storage
320	Plant 6 42K Tank	TR3	1/1/1963	\$6,147	1506%	\$92,595	Storage
321	Plant 11 500K Tank	TR5	1/1/1970	\$42,562	983%	\$418,263	Storage
322	Hansen 1.5Mg Tank	TR6	1/1/1976	\$179,455	565%	\$1,014,342	Storage
323	Tank Fees	TR7	1/1/1981	\$11,756	384%	\$45,134	Storage
324	Land Stockwell Res.	UL141	12/7/1998	\$41,192	229%	\$94,430	Excluded
325	Booster Station Parcels (2) Utah Tr & Cactus	UL142	6/30/2000	\$9,582	218%	\$20,903	Excluded
326	Land - 2 Mile At Plaza	UL144	12/20/2000	\$60,354	218%	\$131,665	Excluded
327	Flood Wall Fencing And Grading	UL145	7/3/2000	\$37,405	218%	\$81,599	Storage
328	Land For 1Mg Reservoir 614-221-01	UL146	11/30/2001	\$20,266	214%	\$43,361	Excluded
329	Apn 612-221-01	UL147	6/30/2003	\$41,100	203%	\$83,325	Excluded
330	Fence - Plant 68 & 11	ULI20	1/1/1970	\$5,444	983%	\$53,503	Treatment
331	Well 11 613-131-10	ULI24	1/1/1978	\$17,691	489%	\$86,488	Wells
332	L32/33 Tr255	ULI32	1/1/1986	\$6,900	316%	\$21,803	Storage
333	Fence - Campbell Tank	ULI34	1/1/1985	\$8,010	324%	\$25,914	Storage
334	Lighting	ULI35	1/1/1989	\$6,714	294%	\$19,744	Storage
335	Well 9	W13	1/1/1970	\$15,955	983%	\$156,795	Wells
336	Well 11	W15	1/1/1978	\$184,615	489%	\$902,544	Wells
337	Well 16	W22	7/5/1990	\$142,388	287%	\$408,366	Wells
338	Well 15	W23	7/6/1990	\$35,857	287%	\$102,838	Wells
339	3 Mg Tank Plnt 11	W24	7/6/1990	\$382,926	287%	\$1,098,225	Storage
340	Lear Reservoir	W25	7/5/1990	\$178,182	287%	\$511,024	Storage
341	Test Well #1	W27	7/5/1990	\$41,602	287%	\$119,313	Wells
342	Lear Reservoir	W28	7/5/1990	\$6,228	287%	\$17,861	Storage
343	Recharge Study	W30	7/5/1991	\$205,144	281%	\$575,815	Water Supply
344	Well 16	W32	7/5/1991	\$126,614	281%	\$355,391	Wells
345	Plant 11 Emergency P	W33	7/5/1993	\$18,279	260%	\$47,614	Treatment
346	District Chlorination S	W34	7/5/1993	\$28,933	260%	\$75,365	Treatment
347	Treatment Facility We	W38	7/4/1994	\$85,393	251%	\$214,293	Treatment
348	Well #14	W39	7/4/1994	\$148,432	251%	\$372,488	Wells
349	Well 9 Rehabilitation	W44	7/4/1995	\$14,436	248%	\$35,810	Wells
350	Wtr Trtment Ph 1	W45	8/15/1995	\$344,654	248%	\$854,944	Treatment

Twenty-nine Palms Water District 2025 Water Rate Study

Line	Capital Asset Description	Asset Number	Purchase Date	Adjusted Cost	CCI Adjustment	Replacement Cost	Functional Category
351	New Well At Plant #11	W46	7/3/1996	\$13,913	241%	\$33,597	Wells
352	Wtr Treatment Phase Ii	W48	7/3/1996	\$235,024	241%	\$567,540	Treatment
353	Well 12 Rehab	W50	7/3/1997	\$10,388	233%	\$24,197	Wells
354	Housing & Piping Upgrade-Job 98828	W55	6/30/1999	\$10,826	224%	\$24,249	Wells
355	Well 6	W7	1/1/1964	\$8,500	1450%	\$123,244	Wells
356	Well 8	W8	1/1/1965	\$13,493	1398%	\$188,589	Wells
357	Total			\$54,019,389		\$123,603,680	

This page intentionally left blank