A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE TWENTYNINE PALMS WATER DISTRICT

This meeting will be open to the public with limited seating due to social distancing restrictions in an effort to protect public health and prevent the spread of COVID-19.

October 28, 2020 / 6:00 P.M.

AGENDA

Next Resolution #20-06
Next Ordinance #99

Call to Order and Roll Call

Pledge of Allegiance

Additions/Deletions to the Agenda

Public Comments
Please complete a "Request to be Heard" form prior to the start of the meeting. The public may address the Board for 3 minutes on District-related matters. Government Code prohibits the Board from taking action on matters that are not on the agenda. However, the Board may refer matters for future consideration.

1. Presentation and Discussion of NBS Capital Impact Fees for New Service Connections

2. Discussion of NBS Rate Study Alternatives and Possible Action to Direct Staff to Begin the Prop 218 Process

3. Consent Calendar
   Matters under the Consent Calendar are to be considered routine and will be enacted in a single motion. There will be no separate discussion of these items unless the Board, staff or the public requests specific items be removed for separate discussion and action before the Board votes on the motion to adopt.

   - Minutes of the Regular Meeting held on September 23, 2020 and Minutes of a Special Meeting held on October 14, 2020
   - Audit List

4. Items Removed from the Consent Calendar for Discussion or Separate Action

5. Management Reports

   5.1 Maintenance

   5.2 Water Quality

   5.3 Finance

5.4 General Manager

6. Closed Session-Conference with Labor Negotiators Pursuant to Government Code section 54957.6

Agency designated representative: Ray Kolisz, General Manager

Employee Organization: American Federation of State, County and Municipal Employees ("AFSCME") Local 1902

7. Future Agenda Items and Staff Tasks/Directors' Comments and Reports

8. Adjournment

The Board reserves the right to discuss only or take action on any item on the agenda.

Notice of agenda was posted on or before 4:00 p.m., October 23, 2020.

Ray Kolisz, General Manager

Upon request, this Agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to Cindy Fowlkes at (760) 367-7546 at least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that: (1) is a public record; (2) relates to an agenda item for an open session of a regular meeting of the Board of Directors; and (3) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at the District offices located at 72401 Hatch Road, Twentynine Palms, CA 92277. In addition, any such writing may also be posted on the District's website.

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TWENTYNINE PALMS WATER DISTRICT

72401 HATCH ROAD, TWENTYNINE PALMS, CA 92277-2935
760.367.7546 PHONE 760.367.6612 FAX

TO:	BOARD OF DIRECTORS
DATE:	OCTOBER 22, 2020
FROM:	RAY KOLISZ, GENERAL MANAGER
SUBJECT:	PRESENTATION AND DISCUSSION OF NBS CAPITAL IMPACT FEES FOR NEW SERVICE CONNECTIONS

BACKGROUND AND DISCUSSION

The District currently has a cost structure for a new service connection that includes installation cost, primary capital impact fees, and secondary capital impact fees. Below is a summary of these fees.

1. Installation Cost – This fee is for the actual cost of the meter installation which includes materials, labor, and equipment to physically install the service connection to the property requesting water. This cost varies due to the actual size of the service connection, if the service connection needs to be bored under the existing road, and if pavement replacement is involved.

2. Primary Capital Impact Fees – The primary capital impact fee is based on the size of the meter that is being installed and are used to fund primary infrastructure repairs and maintenance. Primary infrastructure includes production wells, water reservoirs, booster pumps, treatment plants, and large transmission water lines. Current primary impact fees for meters are as follows:

5/8" meter	$ 650.00
1" meter	$1,625.00
1 ½" meter	$3,250.00
2" meter	$5,200.00

   All other meter sizes are charged an amount that is based on $32.50 per gallon per minute of the meter water flow rating.

3. Secondary Capital Impact Fees – This component includes fire hydrants, water distribution pipelines and appurtenances, typically six and eight inch pipelines that provide water to the property. The method in which this fee is calculated is based on the linear footage of the subject property times $6.00 per foot. Frontage is defined as the side of the property to which the property address has been assigned by the city or county.

All three of these components make up the cost of a new service connection. In evaluating this current structure that has been in place since 2003 and through staff discussions it was determined that the current structure needed to be re-evaluated. The District requested that NBS perform a Capacity Fee Study to determine appropriate fees that should be charged when obtaining a new water service connection.

The NBS report findings recommend new proposed capital impact fees based on the analysis and are outlined on page 7 (Fig. 10) of the report. These capital impact fees do not include any installation cost which would be added to the overall cost of a new service connection.

RECOMMENDATION

This item is not for adoption at today's meeting.

Staff recommends that the Board approve and accept the NBS report and direct staff to schedule a public hearing at a regular scheduled Board of Directors meeting where the new capital impact fees could be adopted.

NBS
helping communities fund tomorrow

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Temecula, CA 92592

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DRAFT TECHNICAL MEMORANDUM

TO: RAY KOLISZ, GENERAL MANAGER, TWENTYNINE PALMS WATER DISTRICT
CINDY BYERRUM, MPA, CPA, EIDE BAILLY CONSULTING GROUP

FROM: KIM BOEHLER, NBS DIRECTOR
JORDAN TAYLOR, NBS CONSULTANT

SUBJECT: WATER CAPITAL FACILITY FEE STUDY FINDINGS

DATE: OCTOBER 21, 2020

SECTION 1. INTRODUCTION

A. BACKGROUND

Twentynine Palms Water District (District) retained NBS to conduct a water capital impact fee study in conjunction with the water rate study update for two primary reasons: (1) to ensure that the fees are updated to comply with legal requirements and industry standards, and (2) that these fees reflect the cost of capital infrastructure needed to serve new connections, or any person requesting additional capacity in the District's water system (referred to throughout as "future customers").

Please note, the types of fees reviewed in this study are referred to in the California Government Code as "capacity charges" and the terms are often used interchangeably with other terms such as "capacity fees" or in the District's case, they are referred to as "capital impact fees." To be consistent with the District's terminology, we refer to these fees as "capital impact fees" throughout this memo; however, they are considered "capacity charges" per the California Government Code.

California Government Code Section 66013 defines a capacity charge as a one-time "charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities." It authorizes public agencies to impose "capital impact fees" which are more appropriately called system capacity charges, on customers connecting to or upsizing their connection to the water system, to ensure that they pay their fair share of water utility assets, plus the costs of new facilities

needed to serve them. In its simplest form, capital impact fees are the result of dividing the cost (or value) of the Utility's current system assets plus planned capital improvements, by the expected number of future customers. As a result, future customers connecting to the District's water utility would enter as equal participants, along with current customers, regarding their financial commitment and obligations to the District.

SECTION 2. WATER CAPITAL IMPACT FEE STUDY

A. STUDY METHODOLOGY

Capital impact fees are one-time fees intended to reflect the cost of existing infrastructure and planned improvements available to new services, and place new utility customers on equal basis from a financial perspective with existing customers. Once new customers are added to the system, they then incur the obligation to pay the same water rates that existing customers pay.

Various methodologies have been and are currently used to calculate capital impact fees. The most common methodologies are based on the following:

- The value of existing (historical) system assets, often called a "system buy-in" methodology.
- The value of planned future improvements, also called the "incremental" or "system development" methodology.
- A combination of these two approaches.

This analysis uses the "System Buy-In Approach"[1] which requires new customers to pay their fair share of existing system assets that have capacity to serve new customers. In their simplest form, capital impact fees are calculated by dividing the costs of infrastructure allocated to future development by the number of units of new development anticipated, further defined as follows:

- The cost of existing assets that have capacity to serve new development are those that can reasonably be allocated to future development.
- The number of new units (i.e., growth) are those units projected to occur within the timeframe covered by the capital impact fee analysis.

B. EXISTING CONNECTIONS AND PROJECTED FUTURE GROWTH

NBS calculated that there are currently about 8,500 equivalent 5/8-3/4-inch meter units connected to the water utility. **Figure 1** shows the number of current water meter connections and the equivalent meter units.

[1] Method of calculating capital impact fees (also known as System Development Fees, Connection Fees, Capacity Fees) are set forth in the American Water Works Association's *Principles of Water Rates, Fees and Charges* Seventh Edition (2017) pages 311 to 347.

Figure 1. Estimated Existing Equivalent Meter Units

Meter Size	Existing Potable Water Meters [1]	Meter Equivalence		Potable Water Meter Equivalent Units
		Maximum Flow (gpm) [2]	Equivalency to 3/4 inch meter	
Standard Meters:				
5/8-3/4 inch	7,269	30	1.00	7,269
1 inch	281	50	1.67	468
1.5 inch	48	100	3.33	160
2 inch	47	160	5.33	251
3 inch	3	350	11.67	35
4 inch	16	630	21.00	336
6 inch	0	1,300	43.33	0
8 inch	0	2,800	93.33	0
10 inch	0	4,200	140.00	0
Total	**7,664**			**8,519**

1. Number of meters from source file: 29PalmsWD_Billing data_Manipulated_08.20.20.xlsx, Account # Pivot tab.
2. Source: AWWA M1, Table B-2. Assumes displacement meters for 5/8" through 2", Turbine Class I for 8" through 10".

Capacity in the District's water utility is allocated to current and future customers, as shown in **Figure 2**. Using the average 5-year customer growth rate of 1.68% annually, the estimated number of new connections is calculated for a ten-year period. The percentage of capacity assigned to current and future customers is based upon the number of equivalent meter units that are estimated to connect in the next ten years.

Figure 2. Allocation of Capacity to Current and Future Customers

Demographic Statistics Potable System	Existing Total	Projected Service Total [1] (thru FY2029/30)	% Allocation Factors		Cumulative Change	
			Existing Customers	New Customers	Number of Units	% Increase
Equivalent 5/8-3/4-inch meters	8,519	10,060	84.7%	15.3%	1,541	18.1%

1. Customer growth estimated at historical growth from 2015 to 2020.

C. EXISTING AND PLANNED ASSETS

The capital assets addressed in this study include existing assets and planned capital improvements (i.e., the system buy-in and incremental assets). An important aspect of this study is how the value of existing utility assets is determined. For example, purchase price does not account for wear and tear, and current book value (purchase price less accumulated depreciation) typically underestimates the true value of facilities, as it does not account for cost increases over time. Therefore, this study uses the replacement cost (RC) approach summarized in **Figure 3** to estimate existing asset values, because it provides an up-to-date asset value that reflects estimated cost inflation.[2]

[2] The RC approach was used to estimate all existing asset values, except for land, which does not depreciate.

Figure 3. Summary of Existing Asset Values

Asset Category [1]	Original Asset Cost	Replacement Cost [2]	System Buy-In Cost Basis [3]
Water Fund			
Infrastructure	1,194,722	2,287,255	2,287,255
Land	165,044	165,044	165,044
Equipment	495,894	651,109	651,109
Water Mains and Pipelines	23,839,643	62,111,079	62,111,079
Meters and Hydrants	182,368	354,205	354,205
Office Equipment	488,015	624,709	624,709
Pumping	312,359	413,919	413,919
Wells	1,810,913	3,829,143	3,829,143
Reservoirs	4,771,127	13,170,661	13,170,661
Treatment Plant	11,567,918	18,869,823	18,869,823
Vehicle	1,106,518	1,183,383	1,183,383
Water Supply/Engineering Studies	518,443	594,849	594,849
AMI Meter System	1,983,897	1,983,897	1,983,897
Total Capital Facilities & Equipment	**$ 48,436,861**	**$ 106,239,074**	**$ 106,239,074**

1. Source file for current assets as of June 30, 2019: *29PWD_Asset Listing 6.30.19_manipulated.xlsx, Manipulated tab.*
   Additional assets added 08.25.20 per source file: FY19-20 Additionals - For Rate Study NOT FINAL.xlsx
2. Takes into account estimated cost inflation, noted in Footnote 3.
3. System Buy-In Cost Basis values are calculated by escalating the District's book values from service date to current year values using historical cost inflation factors from the Handy-Whitman Index of Public Utility Construction Costs for Water Utility Construction in the Pacific Region. The percentage change in the asset cost is shown in column Q of the Existing Assets Detail tab, labeled "Adjusted % of Original Value".

The Engineering News Record (ENR) Construction Cost Index and Handy-Whitman Index of Public Utility Construction Costs are cost inflation indices that track construction costs and were used to estimate the replacement value of the District's existing assets. The replacement cost is calculated by escalating the book value of existing assets to current-day values using the ENR Construction Cost or Handy-Whitman Index values. Figure 3 also summarizes the system buy-in cost basis by Asset Category for the District. For this analysis, assets that are no longer in service were excluded from the analysis. This approach was used for all assets, except land, which does not depreciate.

Most of the asset costs were allocated to current customers based on the 84.7 percent allocation factor previously shown in Figure 2 (and the 15.3 percent allocation factor for future customers). **Figure 4** shows the allocation of the $106 million in total existing assets to current and future customers. Future customers are allocated about $15.9 million of the existing water utility assets, or about 15% of the total. Some assets are excluded from the cost basis because they were contributed to the District and not funded by current ratepayers.

Figure 4. Existing Asset Values Allocated to Current and Future Customers

Asset Category[1]	System Buy-In Cost Basis	Allocation Basis (%)[2]			Distribution of Cost Basis ($)		
		Exclude from Analysis[3]	Existing Customers	Future Customers	Exclude from Analysis[3]	Existing Customers	Future Customers
Water Fund							
Infrastructure	$ 2,287,255	0.0%	84.7%	15.3%	$ -	$ 1,936,914	$ 350,340
Land	$ 165,044	0.0%	84.7%	15.3%	$ -	$ 139,764	$ 25,280
Equipment	$ 651,109	0.0%	84.7%	15.3%	$ -	$ 551,378	$ 99,731
Water Mains and Pipelines	$ 62,111,079	1.5%	83.4%	15.1%	$ 904,659	$ 51,831,389	$ 9,375,031
Meters and Hydrants	$ 354,205	0.0%	94.3%	5.7%	$ -	$ 334,158	$ 20,047
Office Equipment	$ 624,709	0.0%	84.7%	15.3%	$ -	$ 529,022	$ 95,687
Pumping	$ 413,919	0.0%	84.7%	15.3%	$ -	$ 350,519	$ 63,400
Wells	$ 3,829,143	0.0%	84.7%	15.3%	$ -	$ 3,242,630	$ 586,513
Reservoirs	$ 13,170,661	0.0%	84.7%	15.3%	$ -	$ 11,153,301	$ 2,017,360
Treatment Plant	$ 18,869,823	0.0%	84.7%	15.3%	$ -	$ 15,979,519	$ 2,890,304
Vehicle	$ 1,183,383	0.0%	84.7%	15.3%	$ -	$ 1,002,123	$ 181,260
Water Supply/Engineering Studies	$ 594,849	0.0%	100.0%	0.0%	$ -	$ 594,849	$ -
AMI Meter System	$ 1,983,897	0.0%	90.0%	10.0%	$ -	$ 1,784,967	$ 198,930
Total Capital Facilities & Equipment	**$ 106,239,074**	**0.9%**	**84.2%**	**15.0%**	**$ 904,659**	**$ 89,430,352**	**$ 15,903,982**

1. Source file for current assets as of June 30, 2019: *29PWD_Asset Listing 6.30.19_manipulated.xlsx, Manipulated tab.*
   Additional assets added 08.25.20 per source file: *FY19-20 Additionals - For Rate Study NOT FINAL.xlsx*
2. Based on proportionate allocation between existing and future users for most assets (see Table 2 in Exhibit 1 for demographic expectations).
   Contributed assets are excluded and meters/services are allocated 100% to existing customers. See Existing Assets Detail tab for information for each asset.

The District's capital improvement plans extend to FY 2029/30. **Figure 5** shows a summary of the District's future capital projects, all of which are needed to rehabilitate existing assets. Because of this, planned project costs were excluded from the capital impact fee calculation. Future customers will pay for these project in rates once connected to the water system. For a complete list of the District's planned capital projects, refer to the *Appendix*.

Figure 5. Planned Assets Allocated to Current and Future Customers

Capital Project Description[1]	Future Cost Estimate (2019-2034)	External Funding[2]	System Development Cost Basis[3]	% Allocation		Distribution of Cost Basis ($)	
				Existing Customers	Future Customers	Existing Customers	Future Customers
District Projects	$ 1,085,000	$ -	$ 1,085,000	100.0%	0.0%	$ 1,085,000	$ -
Capital Improvement Plan	$ 4,917,500	$ 1,700,000	$ 3,217,500	87.5%	0.0%	$ 3,217,500	$ -
Repairs, Rehabilitation, & Maintenance	$ 6,235,000	$ -	$ 6,235,000	100.0%	0.0%	$ 6,235,000	$ -
Capital Outlay	$ 1,623,000	$ -	$ 1,623,000	100.0%	0.0%	$ 1,623,000	$ -
Total	**$ 13,860,500**	**$ 1,700,000**	**$ 12,160,500**	**86.0%**	**0.0%**	**$ 12,160,500**	**$ -**

1. Capital project cost data was provided by District Staff in the following file: 29PWD_CIP Schedule 2020-21,V3.xlsx
2. The AMI / AMR project is funded by debt proceeds received by the District in May 2019.
3. Project cost allocated to existing customers since it is for meter replacement.

The District may have additional capital projects that are needed to serve future developments, and the costs of such projects may be recovered through a development agreement. This will be evaluated on a case by case basis as part of the development review process.

D. ADJUSTMENTS TO THE COST BASIS

Before the capital impact fees are developed, a credit is applied to the cost basis to account for outstanding principal on the current bond issue that funded capital projects that serve future customers. **Figure 6** shows the percent allocation between current and future customers in the AMI project costs for the outstanding bond. Approximately 10% of the project costs are deemed to serve future customers.

Figure 6. AMI Project Costs Allocated to Future Customers

AMI System Component	Project Cost Allocation[1]		
	Existing	Future	Total
AMI Meter System - Meters	$ 685,151	$ -	$ 685,151
AMI Meter System - Poles/Repeaters	826,326	149,462	975,788
AMI Meter System - Other Equipment	273,490	49,468	322,958
Total	$ 1,784,967	$ 198,930	$ 1,983,897
Percentage of Project Costs	90%	10%	100%

1. Project cost allocation is based on the *AMI Disbursements Detail.xlsx* . Meter costs are allocated 100% to existing customers, the poles/repeaters and other Equipment is shared by existing and future customers based on the allocations in Table 2.

Using the allocations calculated in Figure 6, 10% of the $2 million bond issue is credited to future customers, as they will be paying for debt service through bi-monthly water rates. A summary of the calculation of the credit for debt service payments is shown in **Figure 7**, and future customers are credited about $200,000 of the outstanding principal debt

Figure 7. Debt Service Allocated to Future Customers

Bond Issue	Outstanding Principal	% Allocation		$ - Allocation[2]	
		Existing Customers	Future Customers	Existing Customers	Future Customers
2019 AMR & AMI Project Bond [1]	$ 2,000,000	90.0%	10.0%	$ 1,799,455	$ 200,545
Grand Total	$ 2,000,000	90.0%	10.0%	$ 1,799,455	$ 200,545

1. 2019 Bond Issuance detail and payment schedule found in source files: *29PWD_3.25.19 AMI debt.pdf, 29PWD_Revised Rental Payment Schedule- final.pdf* .
2. Debt issue is allocated to existing and future customers proportionately based on the AMI System Component allocations for the project as shown in Table 6.

E. CALCULATED CAPITAL IMPACT FEES

The sum of the existing and planned asset values (that is, the system buy-in and system development costs), along with the adjustment for cash reserves and debt service, defines the total cost basis allocated to future customers as shown in **Figure 8.**

Figure 8. Summary of Cost Basis Allocated to Future Customers

System Asset Values Allocated to Future Development	Total Costs
Costs Included in Existing System Buy-In:	
Existing Assets	$ 15,903,883
Planned, Future Capital Projects	-
Credit for Outstanding Debt (Principal)	(200,545)
Total Adjusted Cost Basis for New Development	$ 15,703,338

The Total Adjusted Cost Basis for future customers is divided by the planned customer growth (measured in equivalent meter units) over the next 10 years. This represents the maximum capital impact fee that the District can charge per 5/8 or 3/4-inch meter for future customers. The calculation is shown in **Figure 9**.

Figure 9. Summary of New Base Capacity Charges

Summary of Fee Calculation	Adjusted System Cost Basis	Planned New Meter Equivalents *(thru FY2029/30)*	Base Capital Impact Fee (per Meter Equivalent)
Water Capital Impact Fee per Meter Equivalent	**$ 15,703,338**	**1,541**	**$10,191**

The capital impact fees for meters greater than 5/8 or 3/4-inch connecting to the District's water system will be calculated by the equivalency to 3/4-inch meters. NBS has provided the District with a fee schedule for meter sizes up to 10-inch, which is shown in **Figure 10**.

Figure 10. Capital Impact Fee for All Meter Sizes

Meter Size	Equivalency Factor		Updated Capital Impact Fee Per Meter
	Maximum Continuous Flow (gpm) [1]	Equivalency to 3/4 inch meter	
5/8-3/4 inch	30	1.00	$10,191
1 inch	50	1.67	$16,985
1.5 inch	100	3.33	$33,971
2 inch	160	5.33	$54,353
3 inch	350	11.67	$118,897
4 inch	630	21.00	$214,014
6 inch	1,300	43.33	$441,617
8 inch	2,800	93.33	$951,175
10 inch	4,200	140.00	$1,426,762

1. Source: *AWWA M1, Table B-2.* Assumes displacement meters for 5/8" through 2", Turbine Class I for 3" through 6", and Turbine Class II for 8" through 10".

SECTION 3. RECOMMENDATIONS AND NEXT STEPS

Consultant Recommendations

The following are NBS' recommendations for the District's consideration:

- **Approve and Accept This Study Report:** NBS recommends the District Board formally approve and adopt this report, its recommendations, and accompanying appendix as documentation of the capital impact fee analyses and the basis for adopting the capital impact fees.
- **Implement Recommended Capital Impact Fee Charges:** Based on the analyses presented in this report, the District Board should implement the proposed water capital impact fees shown in Figure 10. These adjustments are structured based on industry standards and are

necessary to ensure that the capital impact fees that reflect the cost of capacity needed to serve future customers connecting to the District's water system.

Next Steps

Periodically Review Water Capital Impact Fees – Any time an Agency adopts new utility rates or capacity charges, those new rates and fees should be closely monitored over the next several years to ensure the revenue generated is sufficient to meet the annual revenue requirements and reviewed to incorporate new capital facility plans and/or significant repair and replacement projects. Changing economic factors, water consumption patterns, new regulatory mandates, and unplanned capital improvements all underscore the need for this annual review.

Note: The attached Technical Appendix provides more detailed information on the analysis of the water capital impact fee studies summarized in this report.

Principal Assumptions and Considerations

In preparing this report and the recommendations included herein, NBS has relied on a number of principal assumptions and considerations with regard to financial matters, number of customer accounts, billing and asset records, planned capital improvements, and other conditions and events that may occur in the future. This information and assumptions were provided by sources we believe to be reliable, although NBS has not independently verified this data.

While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report and its recommendations, some assumptions will invariably not materialize as stated herein or may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by NBS or provided to NBS by others.

APPENDIX – WATER CAPITAL IMPACT FEE ANALYSIS

Twentynine Palms Water District
Water Capital Impact Fee Analysis
Demographic Data and Projections

EXHIBIT 1

TABLE 1 - METER EQUIVALENT UNITS

Meter Size	Existing Potable Water Meters [1]	Meter Equivalence		Potable Water Meter Equivalent Units
		Maximum Flow (gpm) [2]	Equivalency to 3/4 inch meter	
Standard Meters:				
5/8-3/4 inch	7,269	30	1.00	7,269
1 inch	281	50	1.67	468
1.5 inch	48	100	3.33	160
2 inch	47	160	5.33	251
3 inch	3	350	11.67	35
4 inch	16	630	21.00	336
6 inch	0	1,300	43.33	0
8 inch	0	2,800	93.33	0
10 inch	0	4,200	140.00	0
Total	**7,664**			**8,519**

1. Number of meters from source file: *29PalmsWD_Billing data_Manipulated_08.20.20.xlsx, Account # Pivot tab.*
2. Source: *AWWA M1, Table B-2.* Assumes displacement meters for 5/8" through 2", Turbine Class I for 8" through 10".

TABLE 2 - EXISTING AND PROJECTED SERVICE NUMBERS

Demographic Statistics Potable System	Existing Total	Projected Service Total [1] *(thru FY2029/30)*	% Allocation Factors		Cumulative Change	
			Existing Customers	New Customers	Number of Units	% Increase
Equivalent 5/8-3/4-inch meters	8,519	10,060	84.7%	15.3%	1,541	18.1%

1. Customer growth estimated at historical growth from 2015 to 2020.

Twentynine Palms Water District
Water Capital Impact Fee Analysis
Existing Capital Facilities and Equipment for Consideration (System Buy-In)

EXHIBIT 2

TABLE 3 - EXISTING ASSETS, ORIGINAL AND REPLICATION VALUE

Asset Category [1]	Original Asset Cost	Replacement Cost [2]	System Buy-In Cost Basis [3]
Water Fund			
Infrastructure	1,194,722	2,287,255	2,287,255
Land	165,044	165,044	165,044
Equipment	495,894	651,109	651,109
Water Mains and Pipelines	23,839,643	62,111,079	62,111,079
Meters and Hydrants	182,368	354,205	354,205
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Reservoirs	4,771,127	13,170,661	13,170,661
Treatment Plant	11,567,918	18,869,823	18,869,823
Vehicle	1,106,518	1,183,383	1,183,383
Water Supply/Engineering Studies	518,443	594,849	594,849
AMI Meter System	1,983,897	1,983,897	1,983,897
Total Capital Facilities & Equipment	**$ 48,436,861**	**$ 106,239,074**	**$ 106,239,074**

1. Source file for current assets as of June 30, 2019: *29PWD_Asset Listing 6.30.19_manipulated.xlsx, Manipulated tab.* Additional assets added 08.25.20 per source file: FY19-20 Additionals - For Rate Study NOT FINAL.xlsx
2. Takes into account estimated cost inflation, noted in Footnote 3.
3. System Buy-In Cost Basis values are calculated by escalating the District's book values from service date to current year values using historical cost inflation factors from the Handy-Whitman Index of Public Utility Construction Costs for Water Utility Construction in the Pacific Region. The percentage change in the asset cost is shown in column Q of the Existing Assets Detail tab, labeled "Adjusted % of Original Value".

Twentynine Palms Water District
Water Capital Impact Fee Analysis
Existing Capital Facilities and Equipment for Consideration (System Buy-In)

EXHIBIT 2

TABLE 4 - EXISTING ASSETS, ALLOCATION TO EXISTING AND FUTURE CUSTOMERS

Asset Category [1]	System Buy-In Cost Basis	Allocation Basis (%) [2]			Distribution of Cost Basis ($)		
		Exclude from Analysis [3]	Existing Customers	Future Customers	Exclude from Analysis [3]	Existing Customers	Future Customers
Water Fund							
Infrastructure	$ 2,287,255	0.0%	84.7%	15.3%	$ -	$ 1,936,914	$ 350,340
Land	$ 165,044	0.0%	84.7%	15.3%	$ -	$ 139,764	$ 25,280
Equipment	$ 651,109	0.0%	84.7%	15.3%	$ -	$ 551,378	$ 99,731
Water Mains and Pipelines	$ 62,111,079	1.5%	83.4%	15.1%	$ 904,659	$ 51,831,389	$ 9,375,031
Meters and Hydrants	$ 354,205	0.0%	94.3%	5.7%	$ -	$ 334,158	$ 20,047
Office Equipment	$ 624,709	0.0%	84.7%	15.3%	$ -	$ 529,022	$ 95,687
Pumping	$ 413,919	0.0%	84.7%	15.3%	$ -	$ 350,519	$ 63,400
Wells	$ 3,829,143	0.0%	84.7%	15.3%	$ -	$ 3,242,630	$ 586,513
Reservoirs	$ 13,170,661	0.0%	84.7%	15.3%	$ -	$ 11,153,301	$ 2,017,360
Treatment Plant	$ 18,869,823	0.0%	84.7%	15.3%	$ -	$ 15,979,519	$ 2,890,304
Vehicle	$ 1,183,383	0.0%	84.7%	15.3%	$ -	$ 1,002,123	$ 181,260
Water Supply/Engineering Studies	$ 594,849	0.0%	100.0%	0.0%	$ -	$ 594,849	$ -
AMI Meter System	$ 1,983,897	0.0%	90.0%	10.0%	$ -	$ 1,784,967	$ 198,930
Total Capital Facilities & Equipment	**$ 106,239,074**	**0.9%**	**84.2%**	**15.0%**	**$ 904,659**	**$ 89,430,532**	**$ 15,903,883**

1. Source file for current assets as of June 30, 2019: *29PWD_Asset Listing 6.30.19_manipulated.xlsx, Manipulated tab.*
   Additional assets added 08.25.20 per source file: *FY19-20 Additionals - For Rate Study NOT FINAL.xlsx*
2. Based on proportionate allocation between existing and future users for most assets (see Table 2 in Exhibit 1 for demographic expectations).
   Contributed assets are excluded and meters/services are allocated 100% to existing customers. See Existing Assets Detail tab for information for each asset.

Twentynine Palms Water District
Water Capital Impact Fee Analysis
Handy-Whitman Categories and Asset Allocation

TABLE 5 - Asset Categories for Inflation

Category	Type of Asset
ENR-LA	**Engineering News Record Average Construction Inflation - Los Angles**
ENR-SF	**Engineering News Record Average Construction Inflation - San Francisco**
	Source of Supply Plant
1	Collecting & Impounding Res.
	Pumping Plant
2	Structures & Improvements
3	Electric Pumping Equipment
	Water Treatment Plant
4	Structures & Improvements
5	Large Treatment Plant Equipment
6	Small Treatment Plant Equipment
	Transmission Plant
7	Steel Reservoirs
8	Elevated Steel Tanks
9	Concrete Reservoirs
10	Cast Iron Mains
11	Steel Mains
12	Concrete Cylinder Mains
	Distribution Plant
13	Mains-Average All Types
14	Cast Iron Mains
15	Cement Asbestos Mains
16	Steel Mains
17	PVC Mains
18	Services Installed
19	Meters
20	Meter Installations
21	Hydrants Installed
	Miscellaneous Items
22	Flocculating Equipment - Installed
23	Clarifier Equipment - Installed
24	Filter Gallery Piping - Installed

TABLE 6 - ALLOCATION OF AMI PROJECT COSTS TO EXISTING AND FUTURE USERS

AMI System Component	Project Cost Allocation[1]		
	Existing	Future	Total
AMI Meter System - Meters	$ 685,151	$ -	$ 685,151
AMI Meter System - Poles/Repeaters	826,326	149,462	975,788
AMI Meter System - Other Equipment	273,490	49,468	322,958
Total	**$ 1,784,967**	**$ 198,930**	**$ 1,983,897**
Percentage of Project Costs	**90%**	**10%**	**100%**

1. Project cost allocation is based on the *AMI Disbursements Detail.xlsx*. Meter costs are allocated 100% to existing customers, the poles/repeaters and other Equipment is shared by existing and future customers based on the allocations in Table 2.

TABLE 7 - ALLOCATION OF DEBT TO EXISTING AND FUTURE USERS

Bond Issue	Outstanding Principal	% Allocation			$ - Allocation[2]		
		Exclude from Analysis	Existing Customers	Future Customers	Exclude from Analysis	Existing Customers	Future Customers
2019 AMR & AMI Project Bond [1]	$ 2,000,000	0%	90.0%	10.0%	$ -	$ 1,799,455	$ 200,545
Grand Total	**$ 2,000,000**	**0.0%**	**90.0%**	**10.0%**	**$ -**	**$ 1,799,455**	**$ 200,545**

1. 2019 Bond Issuance detail and payment schedule found in source files: *29PWD_3.25.19 AMI debt.pdf, 29PWD_Revised Rental Payment Schedule- final.pdf*.
2. Debt issue is allocated to existing and future customers proportionately based on the AMI System Component allocations for the project as shown in Table 6.

TABLE 8 - PLANNED CAPITAL IMPROVEMENT COSTS, ALLOCATED TO EXISTING AND FUTURE CUSTOMERS

Capital Project Description [1]	Future Cost Estimate (2020-2030) [1]	External Funding [2]	System Development Cost Basis [3]	% Allocation			Distribution of Cost Basis ($)		
				Exclude from Analysis	Existing Customers	Future Customers	Exclude from Analysis	Existing Customers	Future Customers
District Projects									
GW Mgmt. Plan & Urban Water Mgmt. Plan	$ 250,000	$ -	$ 250,000	0.0%	100.0%	0.0%	$ -	$ 250,000	$ -
Treatment Feasibility & Exploration Costs	$ 185,000	$ -	$ 185,000	0.0%	100.0%	0.0%	$ -	$ 185,000	$ -
Vulnerability Assessment AWIA	$ 45,000	$ -	$ 45,000	0.0%	100.0%	0.0%	$ -	$ 45,000	$ -
Standard Drawings Update	$ 25,000	$ -	$ 25,000	0.0%	100.0%	0.0%	$ -	$ 25,000	$ -
Salt Nutrient Monitoring Wells\Sampling	$ 270,000	$ -	$ 270,000	0.0%	100.0%	0.0%	$ -	$ 270,000	$ -
Asset Management Plan	$ 100,000	$ -	$ 100,000	0.0%	100.0%	0.0%	$ -	$ 100,000	$ -
USGS Study\Feasibility Study	$ 25,000	$ -	$ 25,000	0.0%	100.0%	0.0%	$ -	$ 25,000	$ -
Centralized Sewer Planning\Groundwater Analysis	$ 100,000	$ -	$ 100,000	0.0%	100.0%	0.0%	$ -	$ 100,000	$ -
Master Plan Updates	$ 85,000	$ -	$ 85,000	0.0%	100.0%	0.0%	$ -	$ 85,000	$ -
Capital Improvement Plan									
Chromium VI and Fluoride for Well 11B	$ 1,025,000	$ -	$ 1,025,000	0.0%	100.0%	0.0%	$ -	$ 1,025,000	$ -
Fluoride Variance (Expiring) - TP-2, W12, W16	$ 1,800,000	$ -	$ 1,800,000	0.0%	100.0%	0.0%	$ -	$ 1,800,000	$ -
AMI/AMR [2,3]	$ 1,700,000	$ 1,700,000	$ -	100.0%	0.0%	0.0%	$ -	$ -	$ -
Well 11-B Construction/Professional Services	$ 17,500	$ -	$ 17,500	0.0%	100.0%	0.0%	$ -	$ 17,500	$ -
Emergency Intertie Connection	$ 250,000	$ -	$ 250,000	0.0%	100.0%	0.0%	$ -	$ 250,000	$ -
Campbell 2 Reservoir	$ -	$ -	$ -	0.0%	100.0%	0.0%	$ -	$ -	$ -
New Well	$ -	$ -	$ -	0.0%	100.0%	0.0%	$ -	$ -	$ -
Pay Meter Station Upgrade	$ 125,000	$ -	$ 125,000	0.0%	100.0%	0.0%	$ -	$ 125,000	$ -
Repairs, Rehabilitation, & Maintenance									
Plant 6 Electrical and Well Upgrade	$ 25,000	$ -	$ 25,000	0.0%	100.0%	0.0%	$ -	$ 25,000	$ -
Emergency Repairs, Unspecified	$ 1,740,000	$ -	$ 1,740,000	0.0%	100.0%	0.0%	$ -	$ 1,740,000	$ -
Repiping/Distribution System Upgrades	$ 1,685,000	$ -	$ 1,685,000	0.0%	100.0%	0.0%	$ -	$ 1,685,000	$ -
Reservoir Recoating / Cathodic Protection	$ 405,000	$ -	$ 405,000	0.0%	100.0%	0.0%	$ -	$ 405,000	$ -
Large Meter Replacement Program[3]	$ 130,000	$ -	$ 130,000	0.0%	100.0%	0.0%	$ -	$ 130,000	$ -
Well Rehabilitation	$ 370,000	$ -	$ 370,000	0.0%	100.0%	0.0%	$ -	$ 370,000	$ -
Fluoride Plant Instrumentation\Coating\SCADA Upgrades	$ 490,000	$ -	$ 490,000	0.0%	100.0%	0.0%	$ -	$ 490,000	$ -
Distribution SCADA System	$ 150,000	$ -	$ 150,000	0.0%	100.0%	0.0%	$ -	$ 150,000	$ -
Treated Water Reservoir Coating	$ 650,000	$ -	$ 650,000	0.0%	100.0%	0.0%	$ -	$ 650,000	$ -
Campbell Reservoir Road Paving\Seal Coating	$ 160,000	$ -	$ 160,000	0.0%	100.0%	0.0%	$ -	$ 160,000	$ -
Hansen Booster Station	$ 150,000	$ -	$ 150,000	0.0%	100.0%	0.0%	$ -	$ 150,000	$ -
Stockwell Booster Station	$ 35,000	$ -	$ 35,000	0.0%	100.0%	0.0%	$ -	$ 35,000	$ -
Cactus Booster Station	$ 40,000	$ -	$ 40,000	0.0%	100.0%	0.0%	$ -	$ 40,000	$ -
Lupine Booster Station	$ 40,000	$ -	$ 40,000	0.0%	100.0%	0.0%	$ -	$ 40,000	$ -
2400 Booster Station	$ 165,000	$ -	$ 165,000	0.0%	100.0%	0.0%	$ -	$ 165,000	$ -

TABLE 9 - PLANNED CAPITAL IMPROVEMENT COSTS, ALLOCATED TO EXISTING AND FUTURE CUSTOMERS

Capital Project Description [1]	Future Cost Estimate (2020-2030) [1]	External Funding [2]	System Development Cost Basis [3]	% Allocation			Distribution of Cost Basis ($)		
				Exclude from Analysis	Existing Customers	Future Customers	Exclude from Analysis	Existing Customers	Future Customers
Capital Outlay									
Vehicle/Equipment Replacements	$ 680,000	$ -	$ 680,000	0.0%	100.0%	0.0%	$ -	$ 680,000	$ -
Computer/Technology Replacements	$ 195,000	$ -	$ 195,000	0.0%	100.0%	0.0%	$ -	$ 195,000	$ -
GIS	$ 70,000	$ -	$ 70,000	0.0%	100.0%	0.0%	$ -	$ 70,000	$ -
Administrative Building\Office Remodel	$ 100,000	$ -	$ 100,000	0.0%	100.0%	0.0%	$ -	$ 100,000	$ -
Energy Efficiency Projects	$ 75,000	$ -	$ 75,000	0.0%	100.0%	0.0%	$ -	$ 75,000	$ -
One-Time Existing Conditions Sampling Event	$ 95,000	$ -	$ 95,000	0.0%	100.0%	0.0%	$ -	$ 95,000	$ -
Parking Lot Seal\Paving	$ 408,000	$ -	$ 408,000	0.0%	100.0%	0.0%	$ -	$ 408,000	$ -
Total	**$ 13,860,500**	**$ 1,700,000**	**$ 12,160,500**	**0.0%**	**100.0%**	**0.0%**	**$ -**	**$ 12,160,500**	**$ -**

1. Capital project cost data was provided by District Staff in the following file: 29PWD_CIP Schedule 2020-21,V3.xlsx
2. The AMI / AMR project is funded by debt proceeds received by the District in May 2019.
3. Project cost is excluded from the cost basis since it is accounted for in the Existing Assets (Tables 3 and 4).

TABLE 10 - DEVELOPMENT OF THE COST BASIS FOR NEW CUSTOMERS

System Asset Values Allocated to Future Developme	Total Costs
Costs Included in Existing System Buy-In:	
Existing Assets [1]	$ 15,903,883
Planned, Future Capital Projects [2]	-
Credit for Outstanding Debt (Principal) [3]	(200,545)
Total Adjusted Cost Basis for New Development	**$ 15,703,338**

TABLE 11 - DEVELOPMENT OF THE CAPITAL IMPACT FEE PER METER EQUIVALENT

Summary of Fee Calculation	Adjusted System Cost Basis	Planned New Meter Equivalents *(thru FY2029/30)* [4]	Base Capital Impact Fee (per Meter Equivalent)
Water Capital Impact Fee per Meter Equivalent	**$ 15,703,338**	**1,541**	**$10,191**

1. Refer to Exhibits 2 and 4 for detail of existing assets.
2. Refer to Exhibit 6 for detail related to planned assets.
3. Refer to Exhibit 5 for detail related to outstanding debt.
4. Refer to Exhibit 1 (Demographics) for growth projections.

EXHIBIT 8

TABLE 12 - WATER CAPITAL FACILITY FEE BASED ON METER SIZE

Meter Size	Equivalency Factor		Unit Cost ($/3/4-inch meter)	Updated Capital Impact Fee Per Meter
	Maximum Continuous Flow (gpm) [1]	Equivalency to 3/4 inch meter		
5/8-3/4 inch	30	1.00	$10,191	$10,191
1 inch	50	1.67	$10,191	$16,985
1.5 inch	100	3.33	$10,191	$33,971
2 inch	160	5.33	$10,191	$54,353
3 inch	350	11.67	$10,191	$118,897
4 inch	630	21.00	$10,191	$214,014
6 inch	1,300	43.33	$10,191	$441,617
8 inch	2,800	93.33	$10,191	$951,175
10 inch	4,200	140.00	$10,191	$1,426,762

1. Source: *AWWA M1, Table B-2.* Assumes displacement meters for 5/8" through 2", Turbine Class I for 3" through 6", and Turbine Class II for 8" through 10".

2

TWENTYNINE PALMS WATER DISTRICT

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TO:	BOARD OF DIRECTORS
DATE:	OCTOBER 22, 2020
FROM:	RAY KOLISZ, GENERAL MANAGER
SUBJECT:	DISCUSSION OF NBS RATE STUDY ALTERNATIVES AND POSSIBLE ACTION TO DIRECT STAFF TO BEGIN THE PROP 218 PROCESS

BACKGROUND AND DISCUSSION

At the October 14, 2020, Board of Directors Meeting, NBS presented the updated rate study that established two financial models for discussion and review. The rate models factored in the changes to District policies that maintain an Operating Reserve of 180 days of budgeted expenses and Capital Reserve levels of 6% of capital assets. These changes to reserves were adjusted with Resolution 19-09, adopted on June 26, 2019, to bring the District to the ideal level of reserves rather than the minimum level used in the 2015 rate study.

NBS developed two rate revenue increase scenarios for consideration:

- Financial Plan Alternative 1 – 8% increases
- Financial Plan Alternative 2 – 10% increases

Any rate option is a maximum level and can be decreased year to year dependent on the financial status of the District and review of Capital Improvement Projects scheduled.

NEXT STEPS

The Board will need to determine which Financial Plan Alternative is desired and direct staff to start the Prop 218 process. Under Prop 218 requirements, a public hearing will be scheduled and notices of the proposed rate increase must be mailed to property owners and tenants directly liable to the District for payment 45 days before the public hearing. At the public hearing any written protests received will be recorded and considered.

RECOMMENDATION

Staff recommends to schedule a public hearing and possible action to adopt proposed rate increases outlined in Financial Plan #1 (8%) or Financial Plan #2 (10%) at the regular scheduled Board of Directors Meeting on January 27, 2021.

NBS
helping communities fund tomorrow

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DRAFT TECHNICAL MEMORANDUM

TO: RAY KOLISZ, GENERAL MANAGER, TWENTYNINE PALMS WATER DISTRICT
CINDY BYERRUM, MPA, CPA, EIDE BAILLY CONSULTING GROUP

FROM: KIM BOEHLER, NBS DIRECTOR
JORDAN TAYLOR, NBS CONSULTANT

SUBJECT: WATER RATE STUDY FINDINGS

DATE: OCTOBER 2, 2020

SECTION 1. PURPOSE

Twentynine Palms Water District (District, Utility) retained NBS to update the 2015 Water Rate Study that we completed for the District. This memo summarizes the updated rate analyses, including projected revenues and expenditures, net revenue requirements, cost-of-service analyses, and the new water rate alternatives. Findings documented in this memo focus on strategies for meeting the District's revenue requirements in order to fully fund the forecasted operations and planned capital improvement expenditures in a manner that is fiscally sustainable, complies with industry standard cost-of-service principles, and minimizes projected rate increases.

Tables and descriptions of the financial plan, along with the resulting rates, are presented in this technical memo. More detailed results of this rate study are provided in the appendix.

SECTION 2. OVERVIEW OF THE RATE STUDY

Comprehensive rate studies such as this one typically include three components: (1) preparation of a financial plan which identifies the net revenue requirements for the utility; (2) analysis of the cost to serve each customer class, and; (3) the rate structure design. These steps are shown in **Figure 1** and are intended to follow industry standards and reflect the fundamental principles of cost-of-service rate making embodied in the American Water Works Association (AWWA) Principles of Water Rates, Fees,

and Charges[1], also referred to as the Manual M1. They also address requirements under California Constitution article XIII D, section 6 (commonly referred to as Proposition 218) that rates not exceed the cost of providing the service and be proportionate to the cost of service for all customers.

FIGURE 1. PRIMARY COMPONENTS OF A RATE STUDY

Step 1: Financial Plan/ Revenue Requirements - Compares current sources and uses of funds and determines the revenue needed from rates and

Step 2: Cost-of-Service Analysis – Proportionately allocates the revenue requirements to the customer classes in compliance with State Law.

Step 3: Rate Design - Considers what rate structure alternatives will best meet the District's needs to collect rate revenue and to proportionately allocate the costs of service from each customer class.

In terms of the chronology of the rate study, these three steps represent the order in which they are generally performed. Tables for each of the water rate study components are provided in the Appendix included at the end of this technical memorandum.

SECTION 3. KEY RATE STUDY FINDINGS

3.1 FINANCIAL PLAN

It is important for municipal utilities to follow sound financial management practices. This includes developing and adopting water rates that are fair and equitable, meet annual revenue requirements, maintain reasonable reserves, adequately fund working capital, promote good credit ratings, and comply with industry standards.

The following is a summary of the current financial state of the water utility:

- **Meeting Revenue Requirements:** The Water Utility is in a financial position where there is currently enough revenue to cover operating expenses; however, the District is not able to pay for necessary capital improvement projects over the long-term and maintain reserves at sufficient levels. Under its adopted budget and implicit levels of service, operating expenses are projected to be approximately $4.6 million and planned capital expenditures are $3.3 million for Fiscal Year 2020/21. Annual revenues that may be applied toward these expenditures are projected to total just over $5 million, which is primarily from water rates and the water

[1] *Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices*, M1, AWWA, seventh edition, 2017.

availability assessment. Without changes to current water rates, the District is faced with a deficit of nearly $2.9 million in the current fiscal year, because current rates will not be able to fully fund the District's capital improvement program and the annual deficit is projected to continue in future years. It is important for the District to ensure rates will be sufficient to fund capital improvements and investments in the long run. Without an increase to existing rates, this will not be possible. This is not a sustainable position and it should be remedied.

- **Maintaining Reserve Funds:** The District should maintain sufficient operating and capital reserves. Currently, reserves are not adequate to meet the adopted reserve targets. The District should adopt a plan that will provide the revenue necessary to build reserves up to the appropriate levels over time. NBS recommends the following reserve targets:
    - **Operating Reserve** – An Operating Reserve is intended to maintain financial viability by providing a "cash cushion" for normal operations in the event of any short-term or unanticipated fluctuation in revenues and/or expenditures. The District should maintain an Operating Reserve equal to six-months (or 50%) of the annual operating expenses for the utility, or $2.17 million (in 2020 dollars).
    - **Capital Rehabilitation and Replacement Reserve** – It is a best management practice to annually set aside funds in a Capital Replacement Reserve for ongoing and future system repair, rehabilitation, and replacement. The District should maintain a minimum of six percent of the Utility's net assets plus the annual capital improvement budget in this reserve. If ratepayers can generate revenues to maintain the reserve balance at this level, they will have reserved a cash resource that can be applied toward future replacement and rehabilitation needs. This six percent of net assets plus the annual capital improvement budget equates to approximately $3.36 million (in 2020 dollars).
- **Capital Improvement Program:** The District must also be able to fund necessary capital improvements for the District to maintain current service levels. District staff has identified roughly $7 million (current year value) in planned capital improvements for the District's water system for FY 2020/21 through 2024/25. Without the rate adjustments recommended in this study, the District will not be able to sufficiently fund planned capital improvements.

3.2 WATER UTILITY REVENUE REQUIREMENTS

To identify the District's long-term financial needs, NBS developed a 20-year financial plan that forecasts water utility revenues and expenditures, including reserves. The financial plans are based on the District's Fiscal Year 2020/21 operating budget for the Utility, discussions with District staff, and related information such as financial statements and capital improvement plans. The rate alternatives proposed in this study are inclusive of the projected costs of inflation. The cost inflation factors used in this study were developed in conjunction with District Staff and are shown in **Figure 2**.

Figure 2. Cost Inflation Assumptions

Cost Inflation Factors [1]	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Customer Growth [2]	0.00%	0.00%	0.00%	0.00%	0.00%
General Cost Inflation	2.00%	2.00%	2.00%	2.00%	2.00%
Salary Cost Inflation	0.00%	5.00%	5.00%	5.00%	5.00%
Benefit Cost Inflation	5.00%	5.00%	5.00%	5.00%	5.00%
OPEB Liability Cost Inflation	6.00%	6.00%	6.00%	6.00%	6.00%
Past Unfunded OPEB Liability Cost Inflation	6.00%	6.00%	6.00%	6.00%	6.00%
Electricity Cost Inflation - Source of Supply	3.00%	3.00%	3.00%	3.00%	3.00%
Electricity Cost Inflation - Pumping	3.00%	3.00%	3.00%	3.00%	3.00%
Electricity Cost Inflation - Other	3.00%	3.00%	3.00%	3.00%	3.00%
Chemical Cost Inflation - Treatment Wells	3.00%	3.00%	3.00%	3.00%	3.00%
Chemical Cost Inflation - Treatment Facility	3.00%	3.00%	3.00%	3.00%	3.00%
Conservation (Water sales decline)	0.00%	0.00%	0.00%	0.00%	0.00%

1. Inflation factors are per District 2020/21 Adopted Budget (source file: 29 Palms Adopted Budget FY 2020-21.xlsm, Assumptions tab).
2. Customer growth is preliminarily estimated at 0%.

Figure 3 summarizes the five-year financial plan, showing a more traditional "sources and uses" of funds, along with the estimated annual surplus or deficit; **Figure 4** summarizes water revenues for the next seven years under currents rates and proposed rate increase alternatives compared to the District's expenses. There are two Financial Plan alternatives for the District's consideration that are structured to collect additionl revenue as follows:

- Alternative 1 – the goal is to collect 8% more revenue from rates overall each year through FY 2024/25.
- Alternative 2 – the goal is to collect 10% more revenue from rates overall each year through FY 2024/25.

Figure 5 summarizes seven years of projected ending cash balances compared to recommended reserve targets for the two proposed rate increase alternatives. The additional two years past the Prop 218 rate period are shown to demonstrate that cash reserves are projected to meet targets levels in FY 2026/27 under the 8% rate increase alternative. Under the 10% rate increase alternative, cash reserves are projected to meet target levels in FY 2025/26.

Figure 3. Summary of Five-Year Financial Plan

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	Projected			
	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Sources of Water Funds					
Rate Revenue Under Prevailing Rates[1]	$ 4,640,400	$ 4,640,400	$4,640,400	$4,640,400	$ 4,640,400
Water Availability Assessment	578,900	578,900	578,900	578,900	578,900
Miscellaneous Fees	124,100	158,900	177,300	191,800	201,600
Interest Earnings	110,000	110,600	111,200	111,800	112,400
Total Sources of Funds	**$ 5,453,400**	**$ 5,488,800**	**$5,507,800**	**$5,522,900**	**$ 5,533,300**
Uses of Water Funds					
Operating Expenses	$ 4,669,100	$ 4,956,100	$5,034,200	$5,378,700	$ 5,423,600
Debt Service	243,732	243,732	243,733	243,734	243,735
Rate-Funded Capital Expenses	2,995,000	1,400,800	965,419	704,809	979,193
Total Use of Funds	**$ 7,907,832**	**$ 6,600,632**	**$6,243,352**	**$6,327,243**	**$ 6,646,527**
Surplus (Deficiency) before Rate Increase	**$(2,454,432)**	**$(1,111,832)**	**$ (735,552)**	**$ (804,343)**	**$(1,113,227)**
Net Revenue Requirement[2]	$ 7,526,132	$ 5,782,832	$5,408,952	$5,480,443	$ 5,792,127

1. Includes projected reductions in water sales due to conservation.
2. Total Use of Funds less non-rate revenues and interest earnings. This is the annual amount needed from water rates.

Figure 4. Summary of Revenue Requirements and Existing vs. Increased Rates

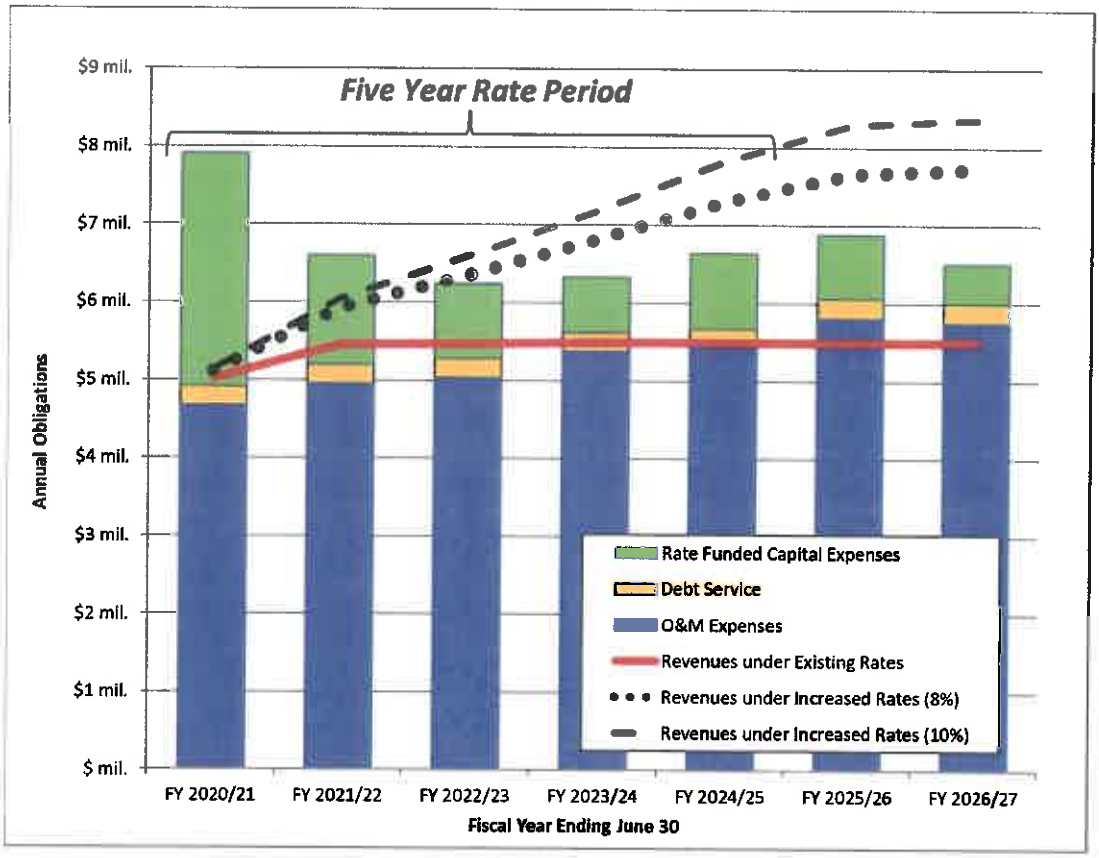
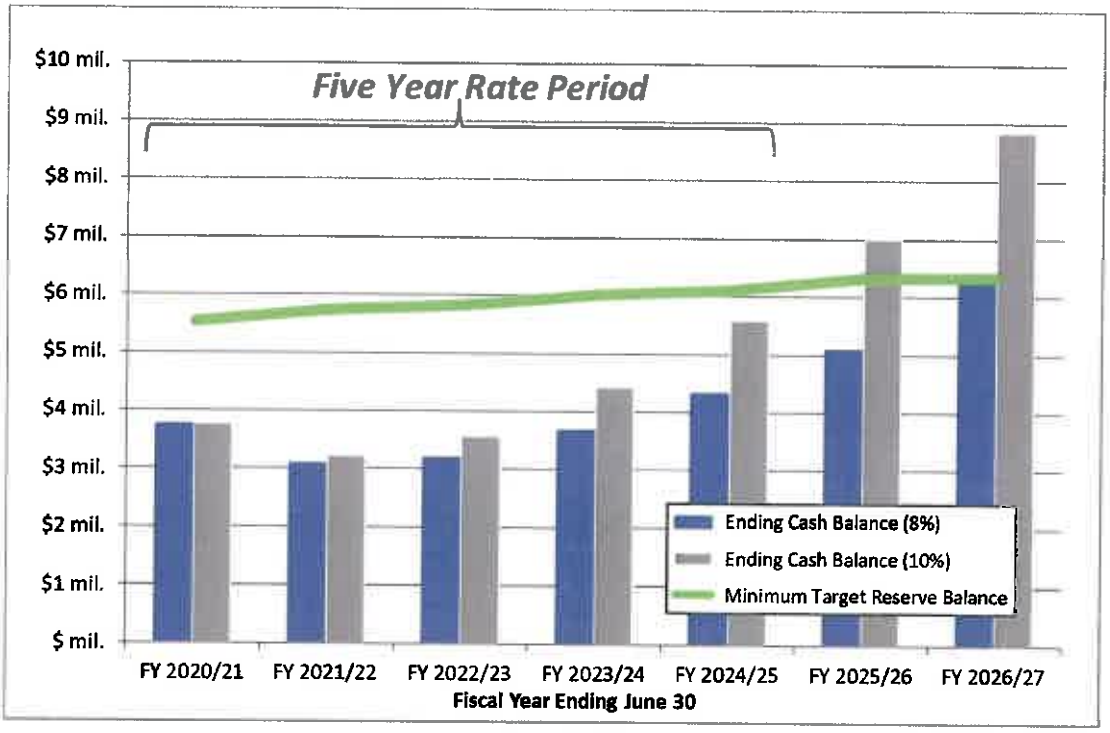


Figure 5. Summary of Ending Cash Balances vs. Recommended Reserve Targets



3.3 CAPITAL IMPROVEMENT PROGRAM

The District has a five-year Capital Improvement Program with approximately $7 million (current value) in planned capital projects for the District's water system. **Figure 6** shows the list of capital projects that were factored into the financial plans and the amount planned for Fiscal Year 2020/21 through 2024/25. Project costs are listed in current and future values; future values reflect the estimated cost of each project in the year the project is planned, including projected cost inflation of 3% per year, per the Engineering News Record Construction Cost Inflation Index[2].

[2] *See Appendix Tables 13 for the detailed capital project costs that include projected cost inflation and Table 14 for the cost inflation factors applied to project costs.*

Figure 6. Five-Year Capital Improvement Program

Project Description	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
District Projects					
GW Mgmt. Plan & Urban Water Mgmt. Plan	$ 100,000	$ -	$ 47,741	$ -	$ -
Treatment Feasibility & Exploration Costs	35,000	-	-	-	168,826
Vulnerability Assessment AWIA	45,000	-	-	-	-
Standard Drawings Update	25,000	-	-	-	-
Salt Nutrient Monitoring Wells\Sampling	50,000	-	106,090	-	112,551
Asset Management Plan	50,000	-	-	-	-
USGS Study\Feasibility Study	25,000	-	-	-	-
Centralized Sewer Planning\Groundwater Analysis	-	-	106,090	-	-
Master Plan Updates	85,000	-	-	-	-
Subtotal : District Projects	***$ 415,000***	***$ -***	***$ 259,921***	***$ -***	***$ 281,377***
Capital Improvement Plan					
Chromium VI and Fluoride for Well 11B	$ 1,000,000	$ -	$ -	$ -	$ -
Fluoride Variance (Expiring) - TP-2, W12, W16	1,000,000	-	-	-	-
AMI/AMR* (see footnote)	300,000	-	-	-	-
Emergency Intertie Connection	-	257,500	-	-	-
Pay Meter Station Upgrade	-	-	132,613	-	-
Subtotal : Capital Improvement Plan	***$ 2,300,000***	***$ 257,500***	***$ 132,613***	***$ -***	***$ -***
Repairs, Rehabilitation, & Maintenance					
Plant 6 Electrical and Well Upgrade	$ 25,000	$ -	$ -	$ -	$ -
Emergency Repairs, Unspecified	75,000	61,800	79,568	81,955	90,041
Repiping/Distribution System Upgrades	75,000	77,250	79,568	87,418	90,041
Reservoir Recoating / Cathodic Protection	20,000	-	-	-	196,964
Large Meter Replacement Program	30,000	-	-	-	-
Well Rehabilitation	-	92,700	-	98,345	-
Fluoride Plant Instrumentation\Coating\ SCADA Upgrades	10,000	25,750	106,090	27,318	28,138
Distribution SCADA System	-	-	-	163,909	-
Treated Water Reservoir Coating	50,000	618,000	-	-	-
Campbell Reservoir Road Paving\Seal Coating	100,000	-	-	21,855	-
Hansen Booster Station	-	-	159,135	-	-
Stock well Booster Station	-	36,050	-	-	-
Cactus Booster Station	-	-	42,436	-	-
Lupine Booster Station	-	-	-	43,709	-
2400 Booster Station	-	128,750	-	-	45,020
Subtotal : Total Repairs & Maintenance	***$ 385,000***	***$ 1,040,300***	***$ 466,796***	***$ 524,509***	***$ 450,204***
Capital Outlay					
Vehicle/Equipment Replacements	$ 40,000	$ 46,350	$ 63,654	$ 65,564	$ 45,020
Computer/Technology Replacements	30,000	10,300	10,609	49,173	22,510
GIS	20,000	10,300	21,218	-	-
Administrative Building\Office Remodel	35,000	10,300	10,609	-	11,255
Energy Efficiency Projects	35,000	-	-	27,318	-
One-Time Existing Conditions Sampling Event	20,000	-	-	38,245	-
Parking Lot Seal\Paving	15,000	25,750	-	-	168,826
Subtotal : Total Capital Outlay	***$ 195,000***	***$ 103,000***	***$ 106,090***	***$ 180,300***	***$ 247,612***
Total Capital Improvement Program Costs (Future-Year Dollars)	**$ 3,295,000**	**$ 1,400,800**	**$ 965,419**	**$ 704,809**	**$ 979,193**

The District is planning to fully cash-fund the planned capital expenditures with a combination of existing reserves and rates, thereby avoiding the need for debt financing.

SECTION 4. CURRENT VS. UPDATED WATER RATE

4.1 FIXED AND VARIABLE COSTS

The updated water rates developed in this study are structurally the same as the District's existing rates, which consist of a fixed service charge by meter size and a uniform commodity charge per one hundred cubic foot (HCF) of consumption that is the same for all customers. However, there is a different commodity charge for customers receiving non-potable water and those using potable water from the

District's pay station, in addition to a different *fixed charge* for non-potable customers. The non-potable and pay station commodity rates reflect the differences in the cost of service for those customers, which is described in Section 4.3 of this technical memo.

Ideally, utilities should recover all of their fixed costs from fixed charges and all of their variable costs from volumetric charges, because fluctuations in water sales revenues would be directly offset by reductions or increases in variable expenses. Additionally, it also provides greater revenue stability. However, other factors are often considered when designing water rates such as community values, water conservation goals, ease of understanding, and ease of administration.[3]

Fixed costs generally consist of costs that a utility incurs to serve customers irrespective of the amount of water they use.[4] These include (1) the infrastructure (capacity-related facilities) required to provide service to customers, (2) costs associated with the peaking requirements, or maximum demand which affects the maximum size of water supply, treatment and delivery system, and (3) administrative and billing costs associated with meter reading, postage and billing.

Variable costs are those that change as the volume of water produced and delivered changes. These commonly include the costs of chemicals used in the treatment process, energy related to pumping for transmission and distribution, and source of supply.

Appendix Tables 15-17 show how the District's expenses were classified and allocated to the different functions of water service, which translate to fixed and variable charges. Most costs are allocated to multiple functions of water service because costs are rarely 100% allocable to fixed or variable categories. For example, the majority of the source of supply labor costs are allocated equally to commodity and capacity costs and a small portion is allocated to non-potable and pay station water based on the amount of water delivered to these customers, which is shown in Appendix Table 18. The classification (i.e., functionalization) of costs allows us to better allocate the classified costs to the cost causation components, as described in Section 4.2 of this memo. **Figure 7** below shows the types of costs that are fixed vs. variable.

Figure 7. Fixed vs. Variable Costs

Fixed Costs	Variable Costs
Capacity	Commodity
Customer	Non-Potable
Fire Protection	Pay Station

Capacity related costs are those costs associated the maximum demand required at one point in time or the maximum size of facilities required to meet this demand. **Customer** related costs are costs associated with having a customer on the water system, such as meter reading, postage and billing. **Fire protection** costs are those costs associated with providing sufficient capacity in the system for fire

[3] *Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1, American Water Works Association, Seventh Edition, see pp. 5 and 96.*
[4] *Ibid, pp. 137-138.*

meters and other operations and maintenance costs of providing water to properties for private fire service protection. **Commodity** related costs are those costs associated with the total consumption (i.e., flow) of water over a specified period of time (e.g., annual). **Non-potable** related costs are costs associated with operation and maintenance of the non-potable well, source of supply, billing customers and the eventual replacement of the well. **Pay Station** costs are costs related to operating and maintaining the pay station, delivering water to the pay station that customers purchase from the District.

4.2 FUNCTIONALIZATION AND CLASSIFICATION METHODOLOGY

The methodology used in this study to allocate costs to each function of water service is described below. While many of these costs have joint-purposes, and therefore can be allocated to several functional categories, there are no exact or widely accepted industry standards that can be applied. NBS professional judgment and District staff input were considered in developing these allocations. See Appendix Tables 15-17 for the detailed listing for each budget line item.

- **Source of Supply Costs** (excluding electricity) are allocated to pay station and non-potable customers based on the percentage of water these customers consume compared to potable users, which totals 6.88% of source of supply costs. The remaining costs are split evenly between the commodity and capacity component of the rate, because the costs are related to the amount of water sold (commodity) and the size of the supply required to meet customer demand (capacity). Electricity costs are the exception, where they are allocated entirely to the commodity component of the rate, with direct allocations made to non-potable that is based on the actual amount of electricity required to operate the well, and to the pay station based on the amount of water consumed.
- **Pumping Costs** related to labor and supplies are allocated to the pay station customers based on the percentage of water these customers consume compared to potable users, which totals 2.31%. The remaining costs are allocated 67.69% to commodity and 30% to capacity components of the rate, because the costs are closely tied to the size of the system (capacity), and amount of water sold (commodity). Pumping electricity costs are allocated to the pay station based on the amount of water consumed, which is 2.31%, and the other 97.69% is allocated to the commodity component of the rate because they are entirely related to the amount of water consumed.
- **Transmission and Distribution Costs** are allocated 5% to the pay station due to their actual impact on the distribution system, and the remaining is allocated 30% to commodity, 52% to capacity, 5% to customer and 8% to fire protection, based on estimated impacts to the water system. Non-potable customers don't share in these costs because they have a totally separate system that is not connected to the potable water system.
- **Treatment Wells Costs** are allocated overall 30% to commodity, 54.69% to capacity, 5% to customer, 8% to fire protection and 2.31% to the pay station. The allocation percentages are based on the estimated impact to each function of water service.

- **Treatment Facilities Costs** are split equally between commodity and capacity since it is a shared cost for both functions of water service, with the other 2.31% allocated to the pay station, based on the amount of water consumed by these customers.
- **Customer Account Costs** are allocated entirely to the customer component with a small portion allocated to the pay station and non-potable system based on the number of customers each has compared to all other users.
- **General Administration Costs** are allocated 17.65% to commodity, 50% to capacity and 30% to customer since most costs are related to the number of customers and size of the system, and partially related to the amount of water consumed, since they won't change drastically if customers increase or decrease consumption in line with normal consumption patterns. A small portion of these costs are allocated to the pay station and non-potable components based on the number of customers each has compared to all other users.
- **Payouts and Retiree Medical Costs** are allocated 37.65% to commodity, 50% to capacity and 10% to customer based on the approximate amount of impact each function of water service has on operations staff time. A portion of these costs are also allocated to the pay station and non-potable components based on the number of customers each has compared to all other users.
- **Board of Director Costs** are allocated entirely to the customer component, since the Board's purpose is to serve the customers of the water system. A small portion of these costs are allocated to pay station and non-potable components based on the number of customers each has compared to all other users.
- **Non-Operating Expenditures** consist of Unfunded PERS and OPEB liabilities. These costs are allocated 30% to commodity, 54.65% to capacity, 5% to customer, 8% to fire protection, 0.04% to the non-potable system, and 2.31% to the pay station. These allocations are based on the estimated impact to each function of water service.

4.3 ALLOCATION OF COSTS TO CUSTOMER CLASSES

Customer classes are typically determined by grouping customers with similar demand characteristics into categories that reflect the cost differentials to serve each type of customer. The District currently uses meter sizes as customer classes, but also differentiates fixed charges for standard water service, fire service and non-potable water customers.

Variable Charges

There are three separate variable charges for potable, non-potable and pay station customers based on the costs to provide water service to each of these types of customers. The differences in how costs are allocated to each volumetric charge are based on the amount of each type of water consumed, the number of customers, and specific cost differences, such as the amount of electricity required to deliver water to non-potable water customers, as described below.

Once the total amount of revenue to collect from potable water rates is determined (based on the functionalization and classification process described in Section 4.2 of this memo), costs are allocated to each customer class. For **potable water** customers (e.g. single-family, multi-family, commercial, irrigation and fire), the total costs allocated to the commodity component of the rate are then allocated to these customer classes based on the amount of water they consume, which is shown in Appendix Table 22.

For **non-potable** water customers, a direct allocation is made in the functionalization and classification process that reflects this system's fair share of system-wide costs that is primarily based on the number of customers that receive non-potable water, and the amount of water they consume in relation to other customers. The non-potable system operates independently of the District's main potable water system, which is the reason a separate cost of service is determined for this customer class.

As with non-potable customers, a direct allocation is made in the functionalization and classification process to the **pay station rate** that reflects this group of customers share of system-wide costs. Most expenses are allocated to these customers based on the portion of water purchased from the pay station in relation to all other customers, and their share of transmission and distribution costs, as determined by District Staff. A detailed breakdown of how costs are allocated to each of these components is shown in Appendix Tables 14-18, and a summary of this information is shown in Appendix Table 25.

Fixed Charges

Meter sizes have different fixed charges based on the capacity requirements of each size meter connected to the system. This is because larger meters have the potential to use more of the system's capacity, or said differently, they have higher peaking factors compared to smaller meters. The potential capacity demanded (peaking) is proportional to the maximum hydraulic flow through each meter size as established by the AWWA hydraulic capacity ratios shown in **Figure 8**[5]. This figure shows the ratio of potential flow through each meter size compared to the flow of a 3/4-inch meter, which is the base meter size in the District. For the purpose of maintaining continuity in the rate structure, District staff recommends keeping 5/8-3/4-inch meters both equivalent to one meter; which is a common practice in rate setting for meters serving small water users.

As an example, a 2-inch meter has a greater capacity, or potential peak demand than a 3/4-inch meter; therefore the fixed charge for a 2-inch meter is larger than a 3/4-inch meter based on their proportionate capacity requirements[6]. A "hydraulic capacity factor" is calculated by dividing the maximum capacity or flow of large meters by the capacity of the base meter size, which is typically the most common residential meter size (in this case a 3/4-inch meter).

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[5] *See American Water Works Association, Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1, page 386, Appendix B (7th ed. 2017).*

[6] *This is reflected in the fixed charge calculations by using the AWWA hydraulic capacity factors to represent the maximum volume each meter size is capable of delivering.*

The actual number of meters by size is multiplied by the corresponding capacity ratios to calculate equivalent meters. The number of equivalent meters is used as a proxy for the potential demand that each customer can place on the water system. A significant portion of a water system's peak capacity and in turn, the utility's fixed operating and capital costs are related to meeting system capacity requirements[7]. The fixed charges developed in this study reflect current hydraulic capacity factors based on AWWA standards, as shown in Figure 8[7].

Figure 8. Hydraulic Capacity Factors Used in Fixed Charge Calculations

Meter Size	Standard Meters		Fire Service	
	Meter Capacity (gpm)	Hydraulic Capacity Factor	Meter Capacity (gpm)	Hydraulic Capacity Factor
	Displacement Meters		Displacement Meters	
5/8 inch	20	1.00	20	1.00
3/4 inch	30	1.00	N/A	N/A
1 inch	50	1.67	N/A	N/A
1.5 inch	100	3.33	N/A	N/A
2 inch	160	5.33	160	8.00
	Turbine Class 1		Fire Service Type I	
3 inch	350	11.67	350	11.67
			Compound Class I	
4 inch	630	21.00	500	16.67
6 inch	1,300	43.33	1,000	33.33
	Turbine Class 2			
8 inch	2,800	93.33	1,600	53.33
			Fire Service Type I	
10 inch	4,200	140.00	4,400	146.67
12 inch	5,300	176.67	N/A	N/A

1. *Source: AWWA Manual M1, "Principles of Water Rates, Fees and Charges", Table VI 2-5.*
2. *Source: AWWA Manual M6, "Water Meters - Selection, Installation, Testing, and Maintenance" Table 5-3 for 10 inch fire service meter capacity only.*

The District's existing rates reflect different fixed charges for commercial fire meters than for standard water service customers. Fire service customers differ from other water service customers because their service is more of a standby nature, where a readiness-to-serve charge is appropriate. Except in the event of a fire, these users are not intended to use water on a regular basis. However, the District still needs to provide sufficient capacity for fire meters and recover other operations and maintenance costs of providing water to such properties for private fire service protection.

Based on the cost of service analysis and the standby nature of fire meters, the overall cost to serve these users is less than that of a standard service; therefore, the fixed charges are less. Please note that no capacity factors are shown in Figure 8 for 3/4 through 1 ½ inch meters because the District does not have any, nor does it plan to add any fire service meters of those sizes.

[7] See American Water Works Association, Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1, page 386, Appendix B (7th ed. 2017).

As described in Section 4.2 of this memo, the District has separate variable charges for non-potable water users. The non-potable system is separate from the District's potable water system and therefore, has distinct costs such as electricity, staff time and the eventual replacement of the non-potable well, which is used only to serve these customers. In this study, separate fixed charges were also developed for non-potable water customers that are based on the estimated costs[8] of serving these customers, which is approximately $40,500 for Fiscal Year 2020/21, as shown in **Figure 9.**

Figure 9. Non-Potable Costs

Costs Allocated to Non-Potable Charges	2020/21 Cost
Allocated System-Wide Costs	11,195
Operations Staff Time	5,040
Billing Staff Time	840
Well Replacement Cost	23,449
Total Annual Non-Potable Cost	**$40,524**

4.4 PROPOSED RATES

In this study, NBS developed several rate structures for the District to consider that reflect various allocations of fixed and variable charges. The rates that are presented in this memo collect approximately 70% of revenue from variable charges and 30% of revenue from fixed charges, which is the same allocation as the existing water rates. The five-year rate schedules for the Financial Plan alternatives (e.g. the 8% and 10% increases in total rate revenue) are shown in **Figure 10 and Figure 11.**

[8] *Costs for staff time were the District's estimate for both the staff time required to serve these customers and a fully burdened hourly rate of $70/hr. The estimated $290,000 cost (in 2020 dollars) for eventual replacement of the well is also included in the total cost basis for the non-potable rates.*

Figure 10. Current and Proposed Water Rates – Financial Plan Alternative 1 (8% increases)

Water Rate Schedule	Current Rates	Proposed Water Rates				
		Effective 1/1/2021	Effective 1/1/2022	Effective 1/1/2023	Effective 1/1/2024	Effective 1/1/2025
Fixed Service Charge						
5/8-inch	$27.70	$27.13	$29.30	$31.64	$34.17	$36.90
3/4-inch	$27.70	$27.13	$29.30	$31.64	$34.17	$36.90
1-inch Dual Service-Residential	$27.70	$27.13	$29.30	$31.64	$34.17	$36.90
1-inch	$38.69	$38.29	$41.35	$44.66	$48.23	$52.09
1.5-inch	$66.18	$66.21	$71.51	$77.23	$83.41	$90.08
2-inch	$99.17	$99.72	$107.70	$116.32	$125.63	$135.68
3-inch	$203.63	$205.82	$222.29	$240.07	$259.28	$280.02
4-inch	$357.57	$362.17	$391.14	$422.43	$456.22	$492.72
6-inch	$725.93	$736.30	$795.20	$858.82	$927.53	$1,001.73
Commercial Fire Meters - Fixed Service Charge						
2-inch meter	$64.61	$88.02	$95.06	$102.66	$110.87	$119.74
3-inch meter	$128.11	$123.62	$133.51	$144.19	$155.73	$168.19
4-inch meter	$178.24	$172.17	$185.94	$200.82	$216.89	$234.24
6-inch meter	$345.33	$333.98	$360.70	$389.56	$420.72	$454.38
8-inch meter	$545.84	$528.16	$570.41	$616.04	$665.32	$718.55
10-inch meter	$1,481.57	$1,434.34	$1,549.09	$1,673.02	$1,806.86	$1,951.41
Non-Potable Meters - Fixed Service Charge						
2-inch meter	$1,027.33	$675.39	$729.42	$787.77	$850.79	$918.85
Commodity Charges for All Water Consumed						
Commodity Charge Per HCF - Potable	$3.33	$3.55	$3.83	$4.14	$4.47	$4.83
Commodity Charge Per HCF - Non-Potable	$0.61	$0.63	$0.68	$0.73	$0.79	$0.85
Pay Station, Utah Trail Charge Per Gallon	$0.0122	$0.0082	$0.0089	$0.0096	$0.0104	$0.0112

Figure 11. Current and Proposed Water Rates – Financial Plan Alternative 2 (10% increases)

Water Rate Schedule	Current Rates	Proposed Water Rates				
		Effective 1/1/2021	Effective 1/1/2022	Effective 1/1/2023	Effective 1/1/2024	Effective 1/1/2025
Fixed Service Charge						
5/8-inch	$27.70	$27.39	$30.13	$33.14	$36.45	$40.10
3/4-inch	$27.70	$27.39	$30.13	$33.14	$36.45	$40.10
1-inch Dual Service-Residential	$27.70	$27.39	$30.13	$33.14	$36.45	$40.10
1-inch	$38.69	$38.66	$42.53	$46.78	$51.46	$56.61
1.5-inch	$66.18	$66.85	$73.54	$80.89	$88.98	$97.88
2-inch	$99.17	$100.68	$110.75	$121.83	$134.01	$147.41
3-inch	$203.63	$207.79	$228.57	$251.43	$276.57	$304.23
4-inch	$357.57	$365.65	$402.22	$442.44	$486.68	$535.35
6-inch	$725.93	$743.38	$817.72	$899.49	$989.44	$1,088.38
Commercial Fire Meters - Fixed Service Charge						
2-inch meter	$64.61	$88.87	$97.76	$107.54	$118.29	$130.12
3-inch meter	$128.11	$124.81	$137.29	$151.02	$166.12	$182.73
4-inch meter	$178.24	$173.82	$191.20	$210.32	$231.35	$254.49
6-inch meter	$345.33	$337.19	$370.91	$408.00	$448.80	$493.68
8-inch meter	$545.84	$533.24	$586.56	$645.22	$709.74	$780.71
10-inch meter	$1,481.57	$1,448.13	$1,592.94	$1,752.23	$1,927.45	$2,120.20
Non-Potable Meters - Fixed Service Charge						
2-inch meter	$1,027.33	$677.19	$744.91	$819.40	$901.34	$991.47
Commodity Charges for All Water Consumed						
Commodity Charge Per HCF - Potable	$3.33	$3.58	$3.94	$4.33	$4.76	$5.24
Commodity Charge Per HCF - Non-Potable	$0.61	$0.63	$0.69	$0.76	$0.84	$0.92
Pay Station, Utah Trail Charge Per Gallon	$0.0122	$0.0083	$0.0091	$0.0100	$0.0110	$0.0121

Figures 12 and 13 show bill comparison charts for residential and commercial customers under current and proposed rates. **Figure 14** shows a comparison of single family residential bi-monthly bills compared to other regional water districts.

Figure 12. Residential Bi-Monthly Bill Comparison

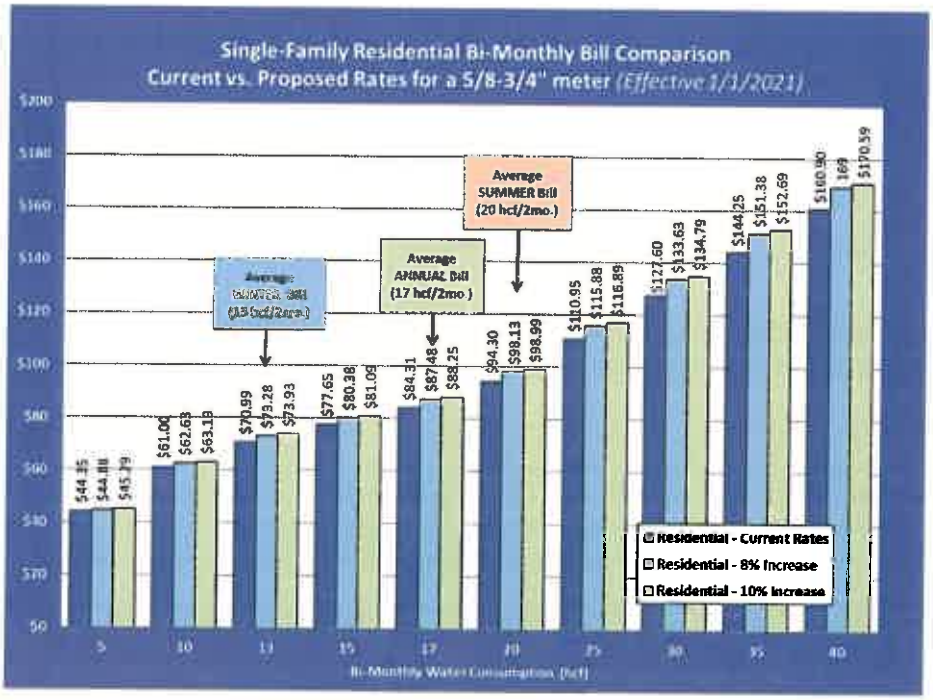


Figure 13. Commercial Bi-Monthly Bill Comparison

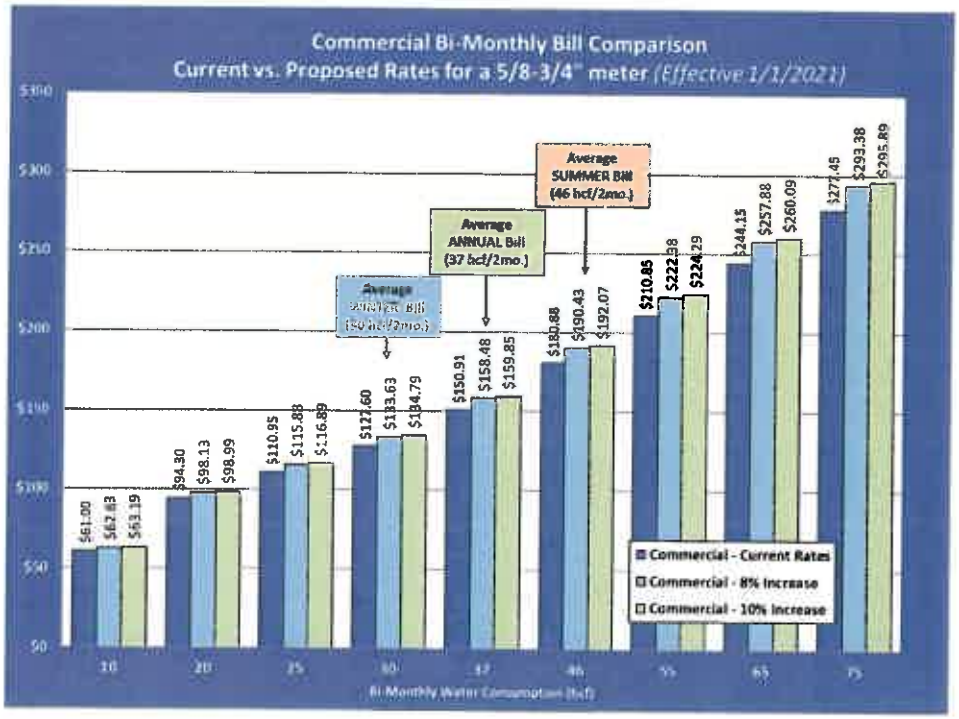
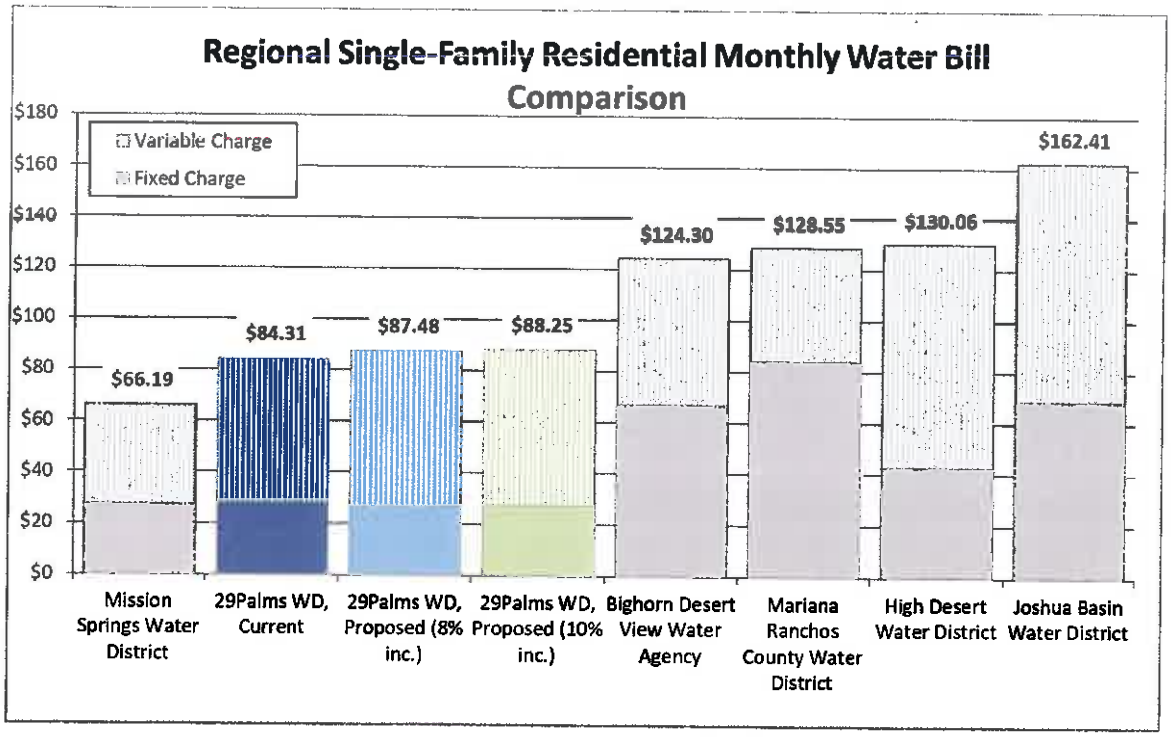


Figure 14. Regional Bi-Monthly Water Bill Comparison for Single Family Residential



SECTION 5. RECOMMENDATIONS AND NEXT STEPS

5.1 CONSULTANT RECOMMENDATIONS

NBS recommends the District's Board of Directors accept this report and its recommendations, and select a rate alternative (shown in Figures 10 and 11) and proceed with next steps outlined below in order to adopt and implement new rates.

5.2 NEXT STEPS

If the Board of Directors chooses to move forward with implementing the proposed financial plan and water rates, the following steps will be required:

1. Schedule a Public Hearing, which requires adequate public noticing, to consider moving forward with the Proposition 218 process to adopt new water rates.
2. Direct Staff to mail a notice describing the proposed changes to the rates to all customers and/or property owners receiving water service from the District.
3. Allow for a 45-day period during which the District receives written protests from customers and/or property owners (protests can be received until the end of the Public Hearing).
4. Conduct a Public Hearing after at least 45-days after the notices have been mailed.
5. Assuming there is not a majority protest, the Board of Directors will need to formally adopt the new rates at the end of the Public Hearing.

5.3 PRINCIPAL ASSUMPTIONS AND CONSIDERATIONS

In preparing this technical memo and the opinions and recommendations included herein, NBS has relied on various assumptions and data with regard to financial matters, conditions, and events that may occur in the future. We believe the information and assumptions, including the budgets, projected capital improvement costs, and customer data received from District staff, were provided by reliable sources.

While we believe the use of such information and assumptions is reasonable for the purpose of this rate study, NBS has not independently verified this information and data. Additionally, some assumptions will invariably not materialize as stated herein and may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others. Given that, the District should closely monitor future revenues, costs and capital plans to determine any significant variances from the results shown in this report and take appropriate action to reconcile differences as needed.

Note: The attached Technical Appendices provide more detailed information on the analysis of the water revenue requirements, cost-of-service analysis and the rate design analyses that have been summarized above in this Technical Memorandum.

3

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE TWENTYNINE PALMS WATER DISTRICT 72401 HATCH ROAD, TWENTYNINE PALMS, CA 92277

September 23, 2020 / 4:00 P.M.

In accordance with the Governor's Executive Order N-29-20, in an effort to protect the public health and prevent the spread of COVID-19, there was no public location for attending the meeting. The meeting was held telephonically with members of the Board present and the public calling in.

Call to Order and Roll Call
President Giannini called the telephonic Board meeting to order at 4:00 p.m. Those responding to roll call were Directors Michael Arthur, Bob Coghill, Suzi Horn, and Carol Giannini. Director Randy Leazer was absent for roll call. Also present were General Manager Ray Kolisz, Treatment/Production Superintendent Mike Minatrea, Maintenance Superintendent Matt Shragge, Financial Consultant Cindy Byerrum, and District Secretary Cindy Fowlkes.

Pledge of Allegiance
Director Arthur led the pledge.

Additions/Deletions to the Agenda
None

Public Comments
None

1. Discussion of Upcoming Board Meeting Schedule and Time Change
   Staff recommends changing the October Regular Board meeting time to 6:00 pm for rate study discussion, adjusting the November date to the 18th, and the December date to the 16th to accommodate the holidays. The Board was in favor of a Special Meeting on October 14th at 6:00 pm for a Rate Study presentation and changing the November and December meeting time to 6:00 pm, if need be.

   Director Coghill made a motion to change October's meeting time to 6:00 pm, move the November meeting to the 18th, and move the December meeting to the 16th, seconded by Director Horn, and unanimously approved by all those present. Director Leazer was absent.

2. Consent Calendar

   - Minutes of a Regular Meeting held on August 26, 2020
   - Audit List

   Director Horn, moved to approve the Minutes and Audit List, seconded by Director Arthur, and unanimously approved by those present. Director Leazer was absent.

3. Items Removed from the Consent Calendar for Discussion or Separate Action
None

4. Management Reports

4.1 Maintenance
Matt Shragge reported that the District responded to 66 Underground Service Alerts, had 0 water main leaks, 0 water meter leaks, 1 service line leak, 0 fire hydrant repairs/maintenance, performed 7 customer pressure checks, replaced 1 meter, replaced 0 customer gate valves, performed 2 leak audits, and installed 5 new services, and painted 112 fire hydrants. 0 water waste inquiries were received. 510 work orders were generated and performed during the month. There were no shut offs due to COVID-19. 30 AMI/AMR meters were installed. The old water truck and forklift went to auction netting the District a combined total of $19,700.

4.2 Water Quality
Mike Minatrea reported Water production was up 4.93% as compared to the same month in 2013. 48 routine and 6 special water samples were taken. All samples tested negative for Colilert. The fluoride variance of 3.0 mg/L will expire in 2023. All current wells meet the 2.0 mg/L standard variance set by the State Water Resource Control Board. The District produced 95,265,000,000 gallons during the month. Well 12 was damaged by a car wreck with the driver's coverage only allowing for 64% of the repair costs.

4.3 Finance
Ms. Byerrum reported operating revenues are ahead of schedule during the summer months. LAIF was down as anticipated.

4.4 General Manager
Mr. Kolisz reported the first draft of the Rate Study will be presented to the board on October 14th. A barrier at the front counter was installed with ballistic rated material which also provides protection from COVID-19. There have been no complaints from the public regarding the closure of the front office. The last disbursement request was made from the bank, $1.6 million for AMI/AMR and $322,000 was spent on heavy equipment.

Director Leazer joined the meeting via telephone at 4:31 p.m. and was present a few minutes later for the Closed Session.

5. Closed Session-Conference with Labor Negotiators Pursuant to Government Code section 54957.6

Agency Designated Representative: Ray Kolisz, General Manager

Employee Organization: American Federation of State, County and Municipal Employees ("AFSCME") Local 1902

Director Arthur moved to enter closed session at 4:33 p.m., seconded by Director Coghill, and unanimously approved.

The Board returned to open session at 5:34 p.m. Director Giannini announced there was no reportable action.

6. Future Agenda Items and Staff Tasks/Directors' Comments and Reports
None

7. Adjournment
On motion by Director Horn, seconded by Director Coghill, and approved by the Board, the meeting was adjourned at: 5:35 p.m.

_____
Carol Giannini, President
Board of Directors

Attest:

_____
Ray Kolisz, Board Secretary
Twentynine Palms Water District

MINUTES OF A SPECIAL MEETING OF THE BOARD OF DIRECTORS OF THE TWENTYNINE PALMS WATER DISTRICT 72401 HATCH ROAD, TWENTYNINE PALMS, CA 92277

October 14, 2020 / 6:00 P.M.

Call to Order and Roll Call
President Giannini called the meeting to order at 6:00 p.m., 72401 Hatch Road, Twentynine Palms, California. Those responding to roll call were Directors Michael Arthur, Bob Coghill, Carol Giannini, Suzi Horn, and Randy Leazer. Also present were General Manager Ray Kolisz, Treatment/Production Superintendent Mike Minatrea, Maintenance Superintendent Matt Shragge, Financial Consultant Cindy Byerrum, and District Secretary Cindy Fowlkes.

Pledge of Allegiance
Bob Stevenson led the pledge.

Additions/Deletions to the Agenda
None

Public Comments
There were none.

1. Presentation and Discussion of NBS Rate Study Updates and Findings
Kim Boehler with NBS presented the Board with an analysis of the cost of services, capital improvement projects, and reserve funds. Two alternative rate models, 8% and 10%, were presented with an anticipated effective date of January 2021 through 2025. 70% of the District's funds come from variable costs with 30% from fixed costs. The following items were reviewed:

   - Analysis of current and proposed water rates
   - Residential and Commercial comparison
   - Monthly water bill comparison with local water districts

   Mr. Hinderliter inquired about the salaries of Water District employees and voiced concerns regarding the over watering of the nearby school's fields.

   Mr. Ahler asked about future projects that may change the proposed rates.

   Mr. Estrada asked when the District last received grant money.

2. Future Agenda Items and Staff Tasks/Directors' Comments and Reports
Mr. Kolisz stated the District will bring this discussion back at the October 28th Board meeting.

3. Adjournment

On motion by Director Horn seconded by Director Arthur, and approved by the Board, the meeting was adjourned at: 6:46 p.m.

_____
Carol Giannini, President
Board of Directors

Attest:

_____
Ray Kolisz, Board Secretary
Twentynine Palms Water District

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

Ck No	Ck Date	Payable To	Ck Amt	Ck Detail	GL Acct No	Description
15256	09/02/2020	ACWA/JPIA	35,600.35	33,032.85	100-310-0000-5140	Health Benefits Sept 2020
				1,989.83	100-310-0000-5141	Health Benefits Sept 2020
				577.67	100-310-0000-5142	Health Benefits Sept 2020
15257	09/02/2020	Alternative Hose Inc.	141.45	141.45	100-130-0000-5222	Veh. #81-Hose.
15258	09/02/2020	Autozone Inc.	79.87	14.00	100-130-0000-5220	Shop Supplies-10pc Hex Bit Set.
				53.85	100-130-0000-5220	Shop Supplies-Air Filters.
				24.97	100-130-0000-5220	Shop Supplies-Light Bulbs.
				(12.95)	100-130-0000-5220	Shop Supplies-Credit Light Bulbs.
15259	09/02/2020	Customer Refund	33.06	33.06	100-000-0000-2000	Refund Check
15260	09/02/2020	Beck Oil Inc.	722.84	722.84	100-110-0000-5220	Summit HYPAR FG-32 6 1/5 GAL PAIL
15261	09/02/2020	Builders Supply - 29 Palms	15.16	15.16	100-130-0000-5220	Sakrete concrete
15262	09/02/2020	Burrtec Waste & Recycling Svcs	220.04	70.61	100-150-0000-5406	Amboy
				149.43	100-600-0000-5406	Hatch
15263	09/02/2020	Customer Refund	34.51	34.51	100-000-0000-2000	Refund Check
15264	09/02/2020	Centurylink Business Services	22.79	22.79	100-600-0000-5203	Hatch
15265	09/02/2020	Customer Refund	41.02	41.02	100-000-0000-2000	Refund Check
15266	09/02/2020	Clinical Lab of San Bern.	1,864.50	1,864.50	100-140-0000-5405	Water Samples July 2020
15267	09/02/2020	Customer Refund	48.16	48.16	100-000-0000-2000	Refund Check
15268	09/02/2020	Customer Refund	24.91	24.91	100-000-0000-2000	Refund Check
15269	09/02/2020	Customer Refund	75.00	75.00	100-000-0000-2000	Refund Check
15270	09/02/2020	County Of San Bernardino	552.17	61.14	100-130-0000-5406	dump truck runs with asphalt trans
				34.06	100-130-0000-5406	dump truck runs with asphalt trans
				98.90	100-150-0000-5406	Treatment Plant Waste
				142.66	100-130-0000-5406	Shop waste
				94.71	100-150-0000-5406	Treatment Plant Waste
				43.98	100-150-0000-5406	Treatment Plant Waste
				76.72	100-130-0000-5406	Shop waste
15271	09/02/2020	Customer Refund	9.38	9.38	100-000-0000-2000	Refund Check
15272	09/02/2020	Customer Refund	55.97	55.97	100-000-0000-2000	Refund Check
15273	09/02/2020	Desert Hardware	244.54	52.09	100-130-0000-5220	Shop Supplies-Chain Saw Blades.

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

				4.79	100-150-0000-5220	Wire Brush
				59.07	100-150-0000-5220	Misc 2" Galv Part Low F Pump
				52.37	100-150-0000-5220	WTP1 Cooler Pump, Oil , Cooler Hose
				6.57	100-130-0000-5220	sched 40 pvc parts
				15.21	100-130-0000-5220	brass vacuum breaker
				37.42	100-130-0000-5220	roofing material
				17.02	100-130-0000-5220	ball vlv cmp 600psi 3/4"
15274	09/02/2020	Diebold Nixdorf, Inc.	164.32	164.32	100-160-0000-5301	Mosler Deposit Envelopes
15275	09/02/2020	Eide Bailly LLP	6,250.00	6,250.00	100-600-0000-5401	Monthly Retainer - Consulting Services July 2020
15276	09/02/2020	Customer Refund	14.46	14.46	100-000-0000-2000	Refund Check
15277	09/02/2020	Ellison Systems Inc. Shoplet.Com	149.65	149.65	100-600-0000-5301	Office Supplies
15278	09/02/2020	Customer Refund	13.21	13.21	100-000-0000-2000	Refund Check
15279	09/02/2020	Frontier Communications	148.72	148.72	100-600-0000-5203	Hatch
15280	09/02/2020	Grainger	302.73	13.18	100-150-0000-5220	Exit Light Battery (Order # 1392028122)
				155.54	100-150-0000-5220	Exit Light Battery,Resin Comp Splice Kit (Order # 1391757296)
				134.01	100-150-0000-5220	Dry Wipe, 9" x 9" White T.P Quantity 6 (Order # 1391351353)
15281	09/02/2020	Customer Refund	52.00	52.00	100-000-0000-2000	Refund Check
15282	09/02/2020	Customer Refund	29.43	29.43	100-000-0000-2000	Refund Check
15283	09/02/2020	Customer Refund	7.44	7.44	100-000-0000-2000	Refund Check
15284	09/02/2020	Customer Refund	33.93	33.93	100-000-0000-2000	Refund Check
15285	09/02/2020	Customer Refund	24.52	24.52	100-000-0000-2000	Refund Check
15286	09/02/2020	Customer Refund	19.27	19.27	100-000-0000-2000	Refund Check
15287	09/02/2020	Customer Refund	21.12	21.12	100-000-0000-2000	Refund Check
15288	09/02/2020	Inland Water Works	46,182.05	45,945.00	100-000-0000-1800	Itron Project Management, Network, Integration/Configuration
				237.05	100-000-0000-1800	Iton Collector and Repeater
15289	09/02/2020	Kennedy/Jenks Consultants	115.00	115.00	100-600-0000-5412	Professional Services Rendered Aug 2020
15290	09/02/2020	Customer Refund	43.97	43.97	100-000-0000-2000	Refund Check
15291	09/02/2020	Customer Refund	62.07	62.07	100-000-0000-2000	Refund Check
15292	09/02/2020	Customer Refund	14.92	14.92	100-000-0000-2000	Refund Check
15293	09/02/2020	Customer Refund	66.49	66.49	100-000-0000-2000	Refund Check
15294	09/02/2020	Customer Refund	23.23	23.23	100-000-0000-2000	Refund Check
15295	09/02/2020	Mccall's Meter Sales & Service	1,207.11	1,207.11	100-110-0000-5406	Well 14 Flowmeter Repair, Electronic Register Face S/N 93-8-4305

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

15296	09/02/2020	Customer Refund	42.75	42.75	100-000-0000-2000	Refund Check
15297	09/02/2020	Mcmaster-Carr Supply Co.	99.08	99.08	100-150-0000-5220	4' Gasket With Bolt Holes, 3 " Gasket With Bolt Holes, Weather P
15298	09/02/2020	Customer Refund	27.95	27.95	100-000-0000-2000	Refund Check
15299	09/02/2020	Minolta Business Systems	228.19	228.19	100-600-0000-5223	07/23/2020 - 08/22/2020
15300	09/02/2020	Customer Refund	42.58	42.58	100-000-0000-2000	Refund Check
15301	09/02/2020	NorthStar Chemical	18,570.74	6,512.57	100-150-0000-5211	Load of 93% Sulfuric Acid NSF 60 (2700 Gallon)
				6,666.22	100-150-0000-5211	Load of 50% NaOH Caustic NSF 60. (3750gallons)
				5,391.95	100-150-0000-5211	Load of 93% Sulfuric Acid NSF 60 (2700 Gallon)
15302	09/02/2020	Customer Refund	34.36	34.36	100-000-0000-2000	Refund Check
15303	09/02/2020	Customer Refund	528.20	528.20	100-000-0000-2000	AR Refund
15304	09/02/2020	Customer Refund	63.16	63.16	100-000-0000-2000	Refund Check
15305	09/02/2020	Customer Refund	15.81	15.81	100-000-0000-2000	Refund Check
15306	09/02/2020	Palm Springs Motors Inc.	166.46	166.46	100-130-0000-5222	Veh. #26-Front & Rear Brake Pads.
15307	09/02/2020	Customer Refund	504.11	504.11	100-000-0000-2000	AR Refund
15308	09/02/2020	Prudential Overall Supply	959.11	141.25	100-130-0000-5253	Uniforms
				95.78	100-130-0000-5253	Uniforms
				95.78	100-130-0000-5253	Uniforms
				322.31	100-130-0000-5253	Uniforms
				86.14	100-130-0000-5253	Uniforms
				217.85	100-130-0000-5253	Uniforms
15309	09/02/2020	Customer Refund	15.45	15.45	100-000-0000-2000	Refund Check
15310	09/02/2020	S.C.E.	11,226.98	532.94	100-110-0000-5201	Well 11
				14.00	100-110-0000-5201	Michel's
				1,843.64	100-150-0000-5201	Plant
				102.30	100-120-0000-5201	D. H. Resv. & Hydro
				1,274.15	100-120-0000-5201	Booster - Sullivan
				2,153.59	100-120-0000-5201	Booster - Lupine
				283.60	100-110-0000-5201	Well 15
				911.13	100-120-0000-5201	Booster 11A, 11B
				47.07	100-110-0000-5201	Well 9, Booster 6A, 6B
				4,064.56	100-120-0000-5201	Booster TP-1
15311	09/02/2020	San Bernardino Co. Fire	2,556.00	2,556.00	100-000-0000-1600	Hazardous Materials Cupa Permits

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

15312	09/02/2020	Satmodo LLC	149.66	149.66	100-600-0000-5203	Iridium Monthly Minute Plans
15313	09/02/2020	Customer Refund	59.57	59.57	100-000-0000-2000	Refund Check
15314	09/02/2020	Customer Refund	36.45	36.45	100-000-0000-2000	Refund Check
15315	09/02/2020	Susan L. Simmons	1,425.00	1,425.00	100-600-0000-5406	Janitorial Services Sept. 2020
15316	09/02/2020	Customer Refund	58.89	58.89	100-000-0000-2000	Refund Check
15317	09/02/2020	Customer Refund	59.32	59.32	100-000-0000-2000	Refund Check
15318	09/02/2020	Spectrum Business	149.99	149.99	100-150-0000-5203	Joe Davis
15319	09/02/2020	Customer Refund	74.08	74.08	100-000-0000-2000	Refund Check
15320	09/02/2020	Customer Refund	14.10	14.10	100-000-0000-2000	Refund Check
15321	09/02/2020	Customer Refund	26.46	26.46	100-000-0000-2000	Refund Check
15322	09/02/2020	Customer Refund	27.70	27.70	100-000-0000-2000	Refund Check
15323	09/02/2020	Customer Refund	55.40	55.40	100-000-0000-2000	Refund Check
15324	09/02/2020	Customer Refund	67.98	67.98	100-000-0000-2000	Refund Check
15325	09/02/2020	U.S. Postal Service	7,000.00	7,000.00	100-160-0000-5302	Permit 620
15326	09/02/2020	Underground Service Alert	136.56	27.56	100-130-0000-5406	CA state fee/regulatory costs
				109.00	100-130-0000-5406	60 new ticket charges
15327	09/02/2020	Union Bank	1,616.96	32.00	100-600-0000-5330	Charges
				387.85	100-130-0000-5220	Charges
				30.08	100-130-0000-5220	Charges
				5.00	100-600-0000-5303	Charges
				206.87	100-150-0000-5221	Charges
				495.54	100-150-0000-5221	Charges
				64.58	100-600-0000-5203	Charges
				103.43	100-130-0000-5220	Charges
				37.70	100-150-0000-5221	Charges
				30.30	100-130-0000-5220	Charges
				99.73	100-130-0000-5220	Charges
				70.88	100-600-0000-5301	Charges
				53.00	100-600-0000-5330	Charges
15328	09/02/2020	United Cerebral Palsy Assoc.	255.30	255.30	100-160-0000-5406	Mail Production
15329	09/02/2020	Usa Blue Book	463.88	245.62	100-150-0000-5220	10ppm Fluoride Standard
				218.26	100-150-0000-5220	Misc Diecut Lettering, Hazardours Material Signals

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

15330	09/02/2020	Verizon Wireless	587.92	587.92	100-600-0000-5203	Wireless
15331	09/02/2020	Customer Refund	23.90	23.90	100-000-0000-2000	Refund Check
15332	09/11/2020	Benjamen D. Brewer	3,965.00	3,965.00	100-600-0000-5406	Level 1, Bullet Proof Acrylic Barrier For Front Desk/Reception
15333	09/14/2020	Sturdivan Emergency Management Consulting	3,174.00	3,174.00	100-600-0000-5406	Communicator tool for FY 20/21
15334	09/16/2020	Ansafone Contact Centers	127.17	127.17	100-160-0000-5406	Answering Service
15335	09/16/2020	Autozone Inc.	114.52	24.01	100-130-0000-5220	Shop Supplies-Glass Cleaner.
				28.04	100-130-0000-5220	Shop Supplies-Shop Towells.
				11.01	100-130-0000-5220	Shop Supplies-DEF.
				51.46	100-130-0000-5220	Shop Supplies-Brake Parts Cleaner.
15336	09/16/2020	Beck Oil Inc.	7,511.33	4,290.51	100-000-0000-1401	gasoline, 87 carb w 10% ethanol
				1,337.28	100-000-0000-1401	diesel, clear
				6.59	100-000-0000-1401	compliance fee
				1,871.08	100-000-0000-1401	taxes n fees
				5.87	100-000-0000-1401	fuel surcharge
15337	09/16/2020	Customer Refund	64.15	64.15	100-000-0000-2000	Refund Check
15338	09/16/2020	Best Best & Krieger	9,993.60	144.00	100-600-0000-5403	Professional Services Aug 2020
				691.20	100-600-0000-5403	Professional Services Aug 2020
				9,158.40	100-600-0000-5403	Professional Services Aug 2020
15339	09/16/2020	Benjamen D. Brewer	5,105.00	785.00	100-600-0000-5406	Install access switch inside knox box per County Fire inspection
				1,235.00	100-150-0000-5406	Relocate Knox Box and install switch per County Fire inspection
				3,085.00	100-120-0000-5406	Plant 11 Electrical Building Strip old siding, Install T-111, N
15340	09/16/2020	Builders Supply - 29 Palms	42.48	4.84	100-130-0000-5220	1 gal spiral paint mixer
				19.56	100-130-0000-5220	1.5" pvc parts
				1.93	100-130-0000-5220	Coupling
				16.15	100-130-0000-5220	Filter
15341	09/16/2020	California Community Water Systems Alliance	2,500.00	2,500.00	100-600-0000-5303	Aug 2020 Monthly Charter Sponsorship
15342	09/16/2020	Desert Fire Extinguisher Co. Inc.	650.00	650.00	100-600-0000-5406	Sprinkler Inspection Repair
15343	09/16/2020	Desert Hardware	391.19	50.20	100-130-0000-5220	trenching shovel
				76.45	100-150-0000-5220	Misc Bolt Parts
				10.39	100-150-0000-5220	Hooks
				29.93	100-150-0000-5220	Misc Paint Supplies
				37.18	100-130-0000-5220	hula hoe 7"

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

				187.04	100-130-0000-5220	portland cement
15344	09/16/2020	Ellison Systems Inc. Shoplet.Com	140.22	140.22	100-600-0000-5301	Office Supplies
15345	09/16/2020	Customer Refund	248.48	248.48	100-000-0000-2000	Refund Check
15346	09/16/2020	Frontier Communications	159.84	159.84	100-150-0000-5203	Plant
15347	09/16/2020	Customer Refund	6.05	6.05	100-000-0000-2000	Refund Check
15348	09/16/2020	Customer Refund	15.29	15.29	100-000-0000-2000	Refund Check
15349	09/16/2020	HASA, INC.	882.77	882.77	100-140-0000-5211	Carboy's of Sodium Hypochlorite 12.5% NSF 60 5 gallon Muti Chlor
15350	09/16/2020	Customer Refund	26.99	26.99	100-000-0000-2000	Refund Check
15351	09/16/2020	Home Depot Credit Services	931.41	931.41	100-130-0000-5220	Charges
15352	09/16/2020	Customer Refund	67.61	67.61	100-000-0000-2000	Refund Check
15353	09/16/2020	Identifix	1,428.00	1,428.00	100-600-0000-5303	Identifix Direct Hit Govt Subscription
15354	09/16/2020	Inland Water Works	1,393.89	32.71	100-000-0000-1499	1.5" x close brass nipple
				49.20	100-130-0000-5220	1.5" X 3" BRASS NIPPLE
				59.65	100-130-0000-5220	1.5" X 4" BRASS NIPPLE
				95.04	100-000-0000-1499	1.5" X 6" BRASS NIPPLE
				673.87	100-130-0000-5220	1.5" x 2" meter adapter
				126.18	100-130-0000-5220	1.5" X 8" BRASS NIPPLE
				169.60	100-130-0000-5220	1.5" X 10" BRASS NIPPLE
				187.64	100-000-0000-1499	1.5" BRASS COUPLING
15355	09/16/2020	Customer Refund	14.20	14.20	100-000-0000-2000	Refund Check
15356	09/16/2020	Konica Minolta Premier	318.03	318.03	100-600-0000-5223	09/01/2020 - 09/30/2020
15357	09/16/2020	Customer Refund	33.42	33.42	100-000-0000-2000	Refund Check
15358	09/16/2020	Customer Refund	57.52	57.52	100-000-0000-2000	Refund Check
15359	09/16/2020	Mcmaster-Carr Supply Co.	1,235.92	415.99	100-150-0000-5220	Pleated Panel Air Filters
				255.46	100-150-0000-5220	Vermiculite Sorbent
				66.39	100-150-0000-5220	Stainless Steel Shower Curtain Hooks
				330.59	100-150-0000-5220	Chemical-Resistant Tarp
				167.49	100-150-0000-5220	Stretch Wrap, Squeeze Bottle
15360	09/16/2020	NBS	9,483.75	2,825.00	100-600-0000-5406	Professional Services Aug 2020
				6,658.75	100-600-0000-5406	Professional Services Aug 2020
15361	09/16/2020	Customer Refund	22.06	22.06	100-000-0000-2000	Refund Check
15362	09/16/2020	Ortega Strategies Group	1,500.00	1,500.00	100-600-0000-5350	Aug 2020 Consulting

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

15363	09/16/2020	Pacific Western Bank	2,139.08	217.45	100-130-0000-5226	Charges
				165.88	100-600-0000-5301	Charges
				108.00	100-600-0000-5406	Charges
				217.49	100-130-0000-5220	Charges
				97.58	100-150-0000-5203	Charges
				188.53	100-600-0000-5408	Charges
				409.17	100-150-0000-5212	Charges
				21.03	100-130-0000-5303	Charges
				39.99	100-600-0000-5406	Charges
				499.00	100-600-0000-5412	Charges
				144.97	100-130-0000-5220	Charges
				29.99	100-600-0000-5406	Charges
15364	09/16/2020	Paul Associates	267.63	267.63	100-160-0000-5301	Door Hangers
15365	09/16/2020	Pitney Bowes	474.09	474.09	100-600-0000-5223	06/30/2020 - 09/29/2020
15366	09/16/2020	Customer Refund	51.51	51.51	100-000-0000-2000	Refund Check
15367	09/16/2020	Powers Electric Products Co.	1,051.93	1,051.93	100-110-0000-5220	Well Sounding Device Cable and Jewels.
15368	09/16/2020	Pro Security Systems	432.00	144.00	100-130-0000-5406	Quarterly Monitoring Fees
				144.00	100-600-0000-5406	Quarterly Monitoring Fees
				144.00	100-150-0000-5406	Quarterly Monitoring Fees
15369	09/16/2020	Prudential Overall Supply	306.53	209.90	100-130-0000-5253	Uniforms
				96.63	100-130-0000-5253	Uniforms
15370	09/16/2020	Powerplan OIB Rdo Trust #80-5800	416.87	416.87	100-130-0000-5222	Veh. #33- Preventative Maintenance Parts.
15371	09/16/2020	Road Machinery LLC	147.26	147.26	100-130-0000-5222	Veh. #30 Cutting Edge Bolts.
15372	09/16/2020	Customer Refund	90.00	75.00	100-000-0000-2000	Refund Check
				15.00	100-000-0000-2000	Refund Check
15373	09/16/2020	S.C.E.	36,025.96	123.78	100-110-0000-5201	Donnell
				1,931.87	100-110-0000-5201	Well 16
				17,479.87	100-110-0000-5201	Well TP-1
				4,544.93	100-110-0000-5201	Well 17
				32.66	100-110-0000-5201	Well 4
				2,240.56	100-600-0000-5201	Hatch
				4,372.91	100-120-0000-5201	Booster TP-1

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

				3,135.98	100-110-0000-5201	Well 14
				1,631.66	100-110-0000-5201	Well 1
				531.74	100-120-0000-5201	Booster H1N, H2S
15374	09/16/2020	San Bernardino County	2,124.00	2,124.00	100-110-0000-5303	Permit No: P-61985047
15375	09/16/2020	San Bernardino County	2.00	2.00	100-130-0000-5301	Monthly Assessor parcel maps Sept 2020
15376	09/16/2020	Customer Refund	3.42	3.42	100-000-0000-2000	Refund Check
15377	09/16/2020	Spectrum Business	154.98	154.98	100-600-0000-5203	La Luna
15378	09/16/2020	Springbrook Holding Company LLC	1,758.00	1,758.00	100-600-0000-5408	CivicPay Transaction Fee Aug 2020
15379	09/16/2020	Sturdivan Emergency Management Consulting	5,250.00	5,250.00	100-800-0000-6001	Vulnerability Assessment AWIA
15380	09/16/2020	Tom Dodson & Associates	750.00	750.00	100-825-0000-6001	CEQA Support
15381	09/16/2020	TPX Communications	832.36	832.36	100-600-0000-5203	Hatch
15382	09/16/2020	Customer Refund	3.13	3.13	100-000-0000-2000	Refund Check
15383	09/16/2020	Usa Blue Book	1,138.62	914.97	100-140-0000-5211	Stenner #2 QuickPro Pump Head, Stenner 1/4" Injection Check Valv
				19.16	100-150-0000-5220	Repair Kit For Foot Valve Low F Res.
				204.49	100-130-0000-5220	caution blue marking paint
15384	09/16/2020	Vagabond Welding Supply	52.20	52.20	100-130-0000-5220	Shop Supplies-Oxy. Acetylene Welding Hose.
15385	09/16/2020	Customer Refund	11.34	11.34	100-000-0000-2000	Refund Check
15386	09/16/2020	Customer Refund	36.27	36.27	100-000-0000-2000	Refund Check
15387	09/16/2020	Benjamen D. Brewer	785.00	785.00	100-600-0000-5406	Install access switch inside knox box per County Fire inspection
15388	09/16/2020	Benjamen D. Brewer	1,235.00	1,235.00	100-150-0000-5406	Relocate Knox Box and install switch per County Fire inspection
15389	09/16/2020	Benjamen D. Brewer	3,085.00	3,085.00	100-120-0000-5406	Plant 11 Electrical Building Strip old siding, Install T-111. N
15390	09/16/2020	San Bernardino County	2,124.00	2,124.00	100-110-0000-5303	Permit No: P-61985047
15391	09/16/2020	Usa Blue Book	1,138.62	914.97	100-140-0000-5211	Stenner #2 QuickPro Pump Head, Stenner 1/4" Injection Check Valv
				19.16	100-150-0000-5220	Repair Kit For Foot Valve Low F Res.
				204.49	100-130-0000-5220	caution blue marking paint
15392	09/16/2020	Vagabond Welding Supply	52.20	52.20	100-130-0000-5220	Shop Supplies-Oxy. Acetylene Welding Hose.
15393	09/16/2020	Customer Refund	11.34	11.34	100-000-0000-2000	Refund Check
15394	09/16/2020	Customer Refund	36.27	36.27	100-000-0000-2000	Refund Check
15395	09/22/2020	29 Palms Electric Inc.	12,702.00	12,702.00	100-000-0000-1800	AMI poles/installation
15396	09/22/2020	Inland Water Works	20,619.00	3,810.00	100-000-0000-1800	IT AMI CLOUD
				8,404.50	100-000-0000-1800	ITRON Remote Ant Mount Kit
				8,404.50	100-000-0000-1800	ITRON Remote Ant Mount Kit

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

15397	09/24/2020	Benjamen D. Brewer	5,105.00	785.00	100-600-0000-5406	Install access switch inside knox box per County Fire inspection
				1,235.00	100-150-0000-5406	Relocate Knox Box and install switch per County Fire inspection
				3,085.00	100-120-0000-5406	Plant 11 Electrical Building Strip old siding, Install T-111, N
15398	09/30/2020	Jeff Arwick	9,930.00	585.00	100-110-0000-5406	Connect Flow Meters At Well 11-B x3
				360.00	100-150-0000-5406	Misc Electric at Treatment Plant, Repair HOA P4, Replace GFI
				8,985.00	100-850-0000-6001	Retrofit Emergency Generator Connections, Hansen, Lupine, 2Mile
15399	09/30/2020	ACWA	17,855.00	17,855.00	100-600-0000-5303	2021 Annual Agency Dues
15400	09/30/2020	Autozone Inc.	683.55	44.05	100-130-0000-5220	Shop Supplies-DEF.
				82.96	100-130-0000-5220	Shop Supplies-Relay Tester Kit.
				195.48	100-130-0000-5222	Veh. #25-Battery.
				45.26	100-130-0000-5222	Veh. #12-Transmission and Fuel Filters.
				144.49	100-130-0000-5222	Veh. #16-Rear Shocks.
				145.51	100-130-0000-5222	Veh. #16-Front Shocks.
				25.80	100-130-0000-5220	Shop Supplies-Windshield Washer Fluid.
15401	09/30/2020	Customer Refund	23.44	23.44	100-000-0000-2000	Refund Check
15402	09/30/2020	Banc of America Leasing	121,141.92	121,141.92	100-700-0000-5802	AMI Loan
15403	09/30/2020	Beyond Software Solutions	1,585.00	1,585.00	100-600-0000-5406	IT Consulting
15404	09/30/2020	Customer Refund	4.37	4.37	100-000-0000-2000	Refund Check
15405	09/30/2020	Customer Refund	50.60	50.60	100-000-0000-2000	Refund Check
15406	09/30/2020	Customer Refund	18.32	18.32	100-000-0000-2000	Refund Check
15407	09/30/2020	Customer Refund	57.82	57.82	100-000-0000-2000	Refund Check
15408	09/30/2020	Builders Supply - 29 Palms	166.90	136.95	100-130-0000-5220	1" x 10' galv pipe
				29.95	100-130-0000-5220	1" galv coupling
15409	09/30/2020	Burrtec Waste & Recycling Svcs	234.10	163.49	100-600-0000-5406	Hatch
				70.61	100-150-0000-5406	Amboy
15410	09/30/2020	Centurylink Business Services	21.37	21.37	100-600-0000-5203	Hatch
15411	09/30/2020	Customer Refund	32.50	32.50	100-000-0000-2000	Refund Check
15412	09/30/2020	Clinical Lab of San Bern.	1,869.50	1,869.50	100-140-0000-5405	Water Samples
15413	09/30/2020	County Of San Bernardino	62.24	48.85	100-130-0000-5406	waste from O&M shop
				13.39	100-130-0000-5406	O & M waste
15414	09/30/2020	Customer Refund	43.05	43.05	100-000-0000-2000	Refund Check
15415	09/30/2020	Desert Hardware	187.41	124.51	100-150-0000-5220	Misc Copper Fitting For Main Office Fire Sprinler System.

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

				22.42	100-150-0000-5220	Misc Galv Pipe For Acid Room Chemical-Resistant Tarps.
				9.18	100-150-0000-5220	Misc. Parts Acid Room Tarp
				28.70	100-150-0000-5220	Chain For Chemical Tarp Acid Room
				2.60	100-150-0000-5220	Hooks For Chemical Tarp Acid Room
15416	09/30/2020	ECS Imaging,Inc	4,575.00	4,575.00	100-600-0000-5303	Annual Renewal
15417	09/30/2020	Eide Bailly LLP	7,082.50	7,082.50	100-600-0000-5401	Retainer - August 2020
15418	09/30/2020	Ellison Systems Inc. Shoplet.Com	269.89	207.93	100-600-0000-5301	Office Supplies
				32.95	100-600-0000-5301	Office Supplies
				29.01	100-600-0000-5301	Office Supplies
15419	09/30/2020	Customer Refund	14.00	14.00	100-000-0000-2000	Refund Check
15420	09/30/2020	Customer Refund	56.80	56.80	100-000-0000-2000	Refund Check
15421	09/30/2020	Customer Refund	18.35	18.35	100-000-0000-2000	Refund Check
15422	09/30/2020	Frontier Communications	148.72	148.72	100-600-0000-5203	Hatch
15423	09/30/2020	Customer Refund	41.07	41.07	100-000-0000-2000	Refund Check
15424	09/30/2020	Customer Refund	31.08	31.08	100-000-0000-2000	Refund Check
15425	09/30/2020	Harrington Industrial	18,672.03	13,172.03	100-150-0000-5212	* 3199 Instrumentation Misc Krohne Optiflux 1000 4" Electromagne
				5,500.00	100-150-0000-5212	* 3199 Instrumentation Misc Krohne Optiflux 1000 3" Electromagne
15426	09/30/2020	Customer Refund	35.31	35.31	100-000-0000-2000	Refund Check
15427	09/30/2020	Hi-Desert Publishing Co.	42.00	42.00	100-600-0000-5303	The Desert Trail/Subscription renewal
15428	09/30/2020	Home Depot Credit Services	391.83	391.83	100-130-0000-5220	Charges
15429	09/30/2020	Customer Refund	33.93	33.93	100-000-0000-2000	Re-issue deposit refund
15430	09/30/2020	Inland Water Works	7,505.13	403.81	100-130-0000-5220	4" Plastic hydrant cap
				240.00	100-130-0000-5220	2.5" Plastic hydrant cap
				768.56	100-000-0000-1499	1" CORP STOP MIP X CTS
				839.64	100-000-0000-1499	3/4" BRASS GATE VLV
				152.73	100-000-0000-1499	3/4" X 1" MTR BUSHING
				982.51	100-000-0000-1499	2" FIP X MTR GATE VLV
				429.81	100-000-0000-1499	2" BRASS COUPLING
				1,117.83	100-000-0000-1499	6" X 1" AC SADDLE
				1,001.97	100-000-0000-1499	2" 90 ELBOW CTS X CTS
				1,373.79	100-000-0000-1499	1" SOFT COPPER 100' ROLLS
				75.42	100-130-0000-5220	6" RING GASKET

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

				67.34	100-130-0000-5220	2" full face meter gasket 1/16"
				51.72	100-130-0000-5220	1.5" full face meter gasket 1/16"
15431	09/30/2020	Customer Refund	75.00	75.00	100-000-0000-2000	Refund Check
15432	09/30/2020	Customer Refund	31.21	31.21	100-000-0000-2000	Refund Check
15433	09/30/2020	Customer Refund	66.61	66.61	100-000-0000-2000	Refund Check
15434	09/30/2020	Mcmaster-Carr Supply Co.	388.05	83.05	100-150-0000-5220	Strut Channel, Slotted Hole, Gavanized Steel. Strut Channel Nut.
				305.00	100-150-0000-5220	Compressed Air Regulator x2, Chemical-Resistant Tarp x2.
15435	09/30/2020	Minolta Business Systems	122.46	122.46	100-600-0000-5223	08/23/2020 - 09/22/2020
15436	09/30/2020	Customer Refund	60.59	60.59	100-000-0000-2000	Refund Check
15437	09/30/2020	Napa Auto Parts	110.79	110.79	100-130-0000-5220	Shop Supplies-Wire Brushes and Combination Wrenches.
15438	09/30/2020	Customer Refund	54.95	54.95	100-000-0000-2000	Refund Check
15439	09/30/2020	NorthStar Chemical	6,340.98	6,340.98	100-150-0000-5211	Load of 93% Acid NSF 60 3200 Gallons
15440	09/30/2020	O'Reilly Automotive Inc.	39.99	39.99	100-130-0000-5330	Webinar Class covering Automotive Communications.
15441	09/30/2020	Customer Refund	43.58	43.58	100-000-0000-2000	Refund Check
15442	09/30/2020	Customer Refund	64.28	64.28	100-000-0000-2000	Refund Check
15443	09/30/2020	Palm Springs Motors Inc.	1,235.74	586.51	100-130-0000-5222	Veh. #29 Hydro Booster w/Master Cylinder.
				247.34	100-130-0000-5222	Veh. #16-Front Brake Rotors.
				314.85	100-875-0000-6001	Veh. #16-Front Tie Rod Ends.
				87.04	100-130-0000-5220	Shop Supplies-Transmission Fluid.
15444	09/30/2020	Parkhouse Tire Inc.	675.09	158.70	100-130-0000-5222	Veh. #26-Tire.
				516.39	100-130-0000-5222	Veh. #42-Tires.
15445	09/30/2020	Customer Refund	70.56	70.56	100-000-0000-2000	Refund Check
15446	09/30/2020	Prudential Overall Supply	692.33	245.53	100-130-0000-5253	Uniforms
				96.63	100-130-0000-5253	Uniforms
				96.63	100-130-0000-5253	Uniforms
				253.54	100-130-0000-5253	Uniforms
15447	09/30/2020	Customer Refund	36.92	36.92	100-000-0000-2000	Refund Check
15448	09/30/2020	Customer Refund	31.04	31.04	100-000-0000-2000	Refund Check
15449	09/30/2020	S.C.E.	9,902.08	1,672.08	100-110-0000-5201	Well 6, 12
				1,275.81	100-120-0000-5201	Booster Two Mile
				577.96	100-110-0000-5201	Well 11
				94.65	100-120-0000-5201	D.H. Resv & Hydro

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

				275.09	100-110-0000-5201	Well 15
				951.13	100-120-0000-5201	Booster 11A, 11B
				1,285.94	100-120-0000-5201	Booster Sullivan
				2,181.10	100-120-0000-5201	Booster Lupine
				1,541.25	100-110-0000-5201	Well 6, 12
				47.07	100-110-0000-5201	Well 9 Booster 6A, 6B
15450	09/30/2020	Customer Refund	44.35	44.35	100-000-0000-2000	Refund Check
15451	09/30/2020	San Bernardino Co. Fire	2,009.00	2,009.00	100-000-0000-1600	Cupa Permits Amboy
15452	09/30/2020	Susan L. Simmons	1,425.00	1,425.00	100-600-0000-5406	Janitorial Services Oct 2020
15453	09/30/2020	Customer Refund	68.82	68.82	100-000-0000-2000	Refund Check
15454	09/30/2020	Southern Calif. Gas Co.	1.12	1.12	100-600-0000-5202	Hatch
15455	09/30/2020	Spectrum Business	149.99	149.99	100-150-0000-5203	Joe Davis
15456	09/30/2020	Customer Refund	21.68	21.68	100-000-0000-2000	Refund Check
15457	09/30/2020	Customer Refund	29.36	29.36	100-000-0000-2000	Refund Check
15458	09/30/2020	Union Bank	962.53	473.04	100-130-0000-5228	Charges
				30.57	100-120-0000-5220	Charges
				70.68	100-150-0000-5220	Charges
				5.00	100-600-0000-5406	Charges
				45.53	100-130-0000-5220	Charges
				64.58	100-600-0000-5203	Charges
				51.16	100-130-0000-5220	Charges
				144.97	100-150-0000-5220	Charges
				24.01	100-600-0000-5203	Charges
				32.33	100-600-0000-5408	Charges
				20.66	100-600-0000-5408	Charges
15459	09/30/2020	Usa Blue Book	484.50	242.71	100-150-0000-5220	1 ppm w/TISAB, Hand Sanitizer
				185.80	100-150-0000-5220	Beakers 100ml, Beakers 600ml
				55.99	100-150-0000-5220	Face Shield Headgear
15460	09/30/2020	Vagabond Welding Supply	971.15	160.52	100-150-0000-5220	10' Sq.120w. 4" Caps x2, Flap Disc, Cut Disc, Step Drill Bit.
				510.04	100-130-0000-5228	Small Tools-MIG Welder Spool Gun.
				300.59	100-130-0000-5220	Small Tools-MIG Welding Gas w/Aluminum 1" Angle.
15461	09/30/2020	Verizon Wireless	573.50	573.50	100-600-0000-5203	Wireless

Twentynine Palms Water District

Check Date Range: 9/1/2020 thru 9/30/2020

15462	09/30/2020	Customer Refund	14.00	14.00	100-000-0000-2000	Refund Check
15463	09/30/2020	Water System Optimization, Inc.	2,500.00	2,500.00	100-600-0000-5350	Level 1 Validation
15464	09/30/2020	Customer Refund	55.41	55.41	100-000-0000-2000	Refund Check
15465	09/30/2020	Customer Refund	47.30	47.30	100-000-0000-2000	Refund Check
			Total	**$516,402.60**		

5

5.1

TWENTYNINE PALMS WATER DISTRICT
72401 Hatch Road/P. O. Box 1735
Twentynine Palms, CA 92277-1000
PHONE (760) 367-7546 FAX (760) 367-6612

TO: **Board of Directors**

FROM: **Matt Shragge, Maintenance Superintendent**

DATE: **October 8, 2020**

SUBJECT: **Management Report**

A. The Operations and Maintenance Department performed the following tasks during the month of September 2020:

1. Responded to 77 Underground Service Alerts
2. Responded to and repaired
   a. 1 water main leak
   b. 0 water meter leaks
   c. 0 service line leaks
   d. 3 fire hydrant repairs/maintenance
3. Installed 14 new services
4. Replaced 9 customer gate valves
5. Performed 7 leak audits
6. Painted 0 fire hydrants
7. Performed 7 customer pressure checks
8. Replaced 3 water meters
9. Tested and exercised emergency generators
10. Sounded wells for September
11. 0 water waste inquiry was reported
12. Installed 15 AMI/AMR meters

B. The following customer service tasks were performed:

1. 219 work orders were generated from reading meters
2. 66 work orders were generated from billing variance list
3. 216 work orders were generated for turn on or turn off
4. 209 termination notices were distributed
5. 0 non-pay turn offs were performed
6. 0 extensions were granted
7. 0 extensions were shut off for non-payment
8. 0 payment schedules have been granted
9. 0 payment schedules failed, total outstanding $0
10. 20 customer requests and 7 inquiries were logged and investigated

C. Valve and Hydrant Maintenance Update

	Valves Exercised (Began 07/19)	Dead Ends Flushed (Began 7/19)
Current Month	85	17
Year to Date *Triennial cycle	*1,378	271

D. Status of Cross-Connection Control Program (Quarterly)

	In District	2020 Test/Surveys
Cross-Connection Devices	341	299

Twentynine Palms Water District

Maintenance Report

FY 2020/21

	USA	Leak Audits	Fire Hydrant Painting	Shut Offs	Total Work Orders Completed	Valves Exercised	AMR/AMI Meter Exchange	New Service	Active Account	Prior Year	%Increase (Decrease)	Main
July	48	3	128	0	463	178	36	6				1
August	66	2	112	0	510	112	30	5				0
Sept.	77	7	0	0	501	85	15	14				0
October									N/A	N/A		
Nov.												
Dec.												
Jan.												
Feb.									N/A	N/A		
March												
April												
May												
June									N/A	N/A		
Totals	191	12	240	0	1474	375	81	25				1

Total Connections in Distric ct= 8,170

5.2

TWENTYNINE PALMS WATER DISTRICT
72401 Hatch Road/P. O. Box 1735
Twentynine Palms, CA 92277-1000
PHONE (760) 367-7546 FAX (760) 367-6612

TO: **Board of Directors**

FROM: **Mike Minatrea, Treatment/Production Superintendent**

DATE: **October 7, 2020**

SUBJECT: **Management Report**

1. ENGINEERING

A. No items to report.

2. WATER QUALITY

A. Chlorine Levels: Average levels maintained in the storage and distribution system ranged from a low of 0.08 mg/L to a high of 0.35 mg/L. Chlorination point (the point where chlorine is introduced into the distribution system) averages ranged from 0.08 mg/L to .65 mg/L.

B. Bacteria Samples: A total of 38 routine bacteria samples were collected at test points for the storage and distribution system during this past month. In addition 7 special bacteria samples were collected. All routine and special samples indicated ABSENT for Colilert.

C. Fluoride Samples: A total of 15 fluoride samples were collected at established test points for the storage and distribution system, and 7 fluoride samples were taken from potable water production wells. Fluoride levels in the distribution system ranged from a low of .82 mg/L to a high of 1.7 mg/L. Fluoride measurements collected at the wells ranged from a low of 0.34 to a high of 1.8 mg/L.

*Current fluoride variance of 3.0 mg/L expires in 2023.

D. General Physical: A total of 11 general physical samples were collected from established locations as a part of routine testing requirements. Levels reported for color are <3.0, 1 for threshold odor and <0.1-0.1 for turbidity.

TWENTYNINE PALMS WATER DISTRICT

Water Production Report

FY 2020/2021

Groundwater Source								
	Mesquite Springs Basin	Fortynine Palms Basin	Eastern Basin	Indian Cove Basin	Total Produced	Total Prior Yr	%Increase Decrease prior year	%Increase Decrease from 2013
July	151.697	103.759	33.891	21.190	310.537	259.777	19.54%	**0.19%**
August	147.948	104.079	32.972	21.648	306.647	260.066	17.91%	**4.93%**
Sept.	145.394	92.658	28.484	14.565	281.101	231.702	21.32%	**14.85%**
October					0.000			
Nov.					0.000			
Dec.					0.000			
Jan.					0.000			
Feb.					0.000			
March					0.000			
April					0.000			
May					0.000			
June					0.000			
Totals	**445.039**	**300.496**	**95.347**	**57.403**	**898.285**	**751.545**	19.53%	

Production Totals Expressed in Acre Feet

NOTE: Year to Date Mesquite Springs Basin regeneration production of **4.863** acre feet = **1.08%**

5.3

TWENTYNINE PALMS WATER DEPARTMENT

FINANCIAL REPORT

For The Month Of

Aug. 2020

PRELIMINARY -SUBJECT TO YEAR-END AND AUDIT ADJUSTMENTS

TWENTYNINE PALMS WATER DEPARTMENT
STATEMENT OF INVESTMENTS AND RESERVES
For the Period Ending August 31, 2020
(Unaudited)

Operating Funds & Internal Reserves:	Prior Balance	Deposits	Disbursements	Current Balance	Market
Operating Funds - LAIF	$ 5,171,640	$ -	$ (9,571)	$ 5,162,069	$ 5,187,429
Election Fund Reserve - LAIF	21,177	-	-	21,177	21,281
Capital Reserve - LAIF	899,260	-	-	899,260	903,678
Capital Funds for Primary Infrastructure - LAIF	111,915	6,175	-	118,090	118,670
Capital Funds for Secondary Infrastructure - LAIF	72,790	3,396	-	76,186	76,560
Total Investments	**$ 6,276,782**	**$ 9,571**	**$ (9,571)**	**$ 6,276,782**	**$ 6,307,618**

CERTIFICATION

I certify that (1) all investment actions executed since the last report have been made in full compliance with the District's Investment Policy and, (2) the District will meet its expenditure obligations for the next six months as required by California Government Code Sections 53646(b)(2) and (3), respectively.

Cindy Byerrum, CPA
Contract CPA

*** Market values are adjusted on this report on a quarterly basis and recorded in the District's financials statements at the end of the fiscal year*

Twentynine Palms Water Department
Statement of Revenues and Expenses
For the Period Ending August 31, 2020
(Unaudited)

		Aug. 2020	July 2020	YTD	Budget	YTD 17%	Prior YTD
1	Operating Revenues	$ 504,870	$ 471,081	$ 975,951	$ 4,294,100	23%	$ 847,340
2	Non-Operating Revenues	101,614	51,864	166,755	728,000	23%	106,602
3	**Total Revenue Available to Fund Operations & Capital/R&R**	**606,484**	**522,945**	**1,142,707**	**5,022,100**	**23%**	**953,942**
4	Operating Expenses	363,190	374,111	732,820	4,399,600	17%	844,489
5	Non-Operating Expenses	22,459	22,459	44,918	269,500	17%	48,108
6	Total Debt Service	-	-	-	243,500	0%	-
7	Total Expenses	385,649	396,570	777,738	4,912,600	16%	892,597
8	**Net Revenues Available to Fund Capital Related Expenditures**	**220,834**	**126,375**	**364,968**	**109,500**	**333%**	**61,345**
9	District Projects	-	(6,086)	(6,086)	(415,000)	1%	(12,686)
10	CIP Projects	(46,182)	(105,846)	(152,028)	(2,300,000)	7%	(91,813)
11	Repairs & Replacement	(8,985)	-	(8,985)	(385,000)	2%	(801)
12	Capital Outlay	-	(8,750)	(8,750)	(195,000)	4%	(61,179)
13	Election Expense	-	-	-	-	0%	-
	Sub-Total	**(55,167)**	**(120,682)**	**(175,849)**	**(3,295,000)**	**5%**	**(166,478)**
14	Transfers in from SRF for Election	6,482	11,237	17,719	137,400	13%	16,492
15	Transfers Out - PARS Trust Obligation	-	-	-	(40,000)	0%	-
16	**Increase (Decrease) in Fund Balance**	**$ 172,149**	**$ 16,930**	**$ 206,838**	**$ (3,088,100)**	**-7%**	**$ (88,641)**

No assurance is provided on these financial statements.
The financial statements do not include a statement of cash flows.
Substantially all disclosures required by accounting principles generally accepted in the United States are not included.

Twentynine Palms Water Department
Detail Statement of Revenues and Expenses
For the Period Ending August 31, 2020
(Unaudited)

	Aug. 2020	July 2020	YTD	Budget	YTD 17%	Prior YTD
1 **Operating Revenues**						
2 Water Sales	$ 382,486	$ 349,107	$ 731,593	$ 3,213,200	23%	$ 607,135
3 RTS	115,049	117,546	232,595	1,427,200	16%	217,786
4 Other Operating Revenue	7,335	4,428	11,763	85,000	14%	22,420
5 Bad Debt Expense	-	-	-	(431,300)	0%	-
6 **Total Operating Revenues**	**504,870**	**471,081**	**975,951**	**4,294,100**	**23%**	**847,340**
7 **Non-Operating Revenues**						
8 Capital Impact Fees	9,571	650	10,221	-	0%	720
9 Water Availability Assessment	48,242	48,242	96,483	578,900	17%	98,517
10 Interest Revenue	-	-	-	110,000	0%	2,714
11 Other Penalties	-	2,937	2,937	24,100	12%	2,323
12 Reimbursed Expenses	8,576	-	21,854	5,000	437%	1,879
13 Other Non-Operating Revenue	35,225	35	35,260	10,000	353%	449
14 **Total Non-Operating Revenues**	**101,614**	**51,864**	**166,755**	**728,000**	**23%**	**106,602**
15 **Total Revenues**	**606,484**	**522,945**	**1,142,707**	**5,022,100**	**23%**	**953,942**
16 **Operating Expenditures**						
17 **Source of Supply**						
18 Labor & Benefits	1,211	1,736	2,847	8,600	33%	1,359
19 Direct Expenses	33,876	36,028	69,904	326,500	21%	62,047
20 **Total Source of Supply**	**35,086**	**37,764**	**72,751**	**335,100**	**22%**	**63,405**
21 **Pumping**						
22 Labor & Benefits	346	637	947	2,400	39%	424
23 Direct Expenses	11,565	13,928	25,493	134,000	19%	22,228
24 **Total Pumping**	**11,911**	**14,565**	**26,440**	**136,400**	**19%**	**22,653**
25 **Transmission & Distribution**						
26 Labor & Benefits	113,233	86,503	194,472	1,196,400	16%	195,974
27 Direct Expenses	24,642	62,271	86,913	345,600	25%	69,834
28 **Total Transmission & Distribution**	**137,875**	**148,774**	**281,385**	**1,542,000**	**18%**	**265,808**
29 **Treatment Wells**						
30 Labor & Benefits	4,024	4,262	8,042	63,800	13%	12,449
31 Direct Expenses	1,870	4,931	6,800	26,200	26%	2,452
32 **Total Treatment Wells**	**5,894**	**9,193**	**14,842**	**90,000**	**16%**	**14,902**
33 **Treatment Facility**						
34 Labor & Benefits	22,281	24,556	45,426	243,300	19%	47,670
35 Direct Expenses	18,493	35,663	54,156	479,400	11%	184,985
36 **Total Treatment Facility**	**40,773**	**60,220**	**99,582**	**722,700**	**14%**	**232,655**
37 **Customer Accounts**						
38 Labor & Benefits	26,563	16,997	42,500	198,800	21%	50,330
39 AMI Temporary Labor	-	1,447	1,447	-	0%	4,737
40 Direct Expenses	761	1,342	2,103	55,500	4%	987
41 **Total Customer Accounts**	**27,324**	**19,785**	**46,049**	**254,300**	**18%**	**56,054**

Twentynine Palms Water Department
Detail Statement of Revenues and Expenses
For the Period Ending August 31, 2020
(Unaudited)

	Aug. 2020	July 2020	YTD	Budget	YTD 17%	Prior YTD
42 **General Administration**						
43 Outside Services	34,772	31,951	72,479	416,400	17%	46,424
44 Direct Expenses	21,265	14,956	36,221	299,700	12%	38,117
45 **Total General Admin.**	**56,037**	**46,907**	**108,700**	**716,100**	**15%**	**84,541**
46 **Employee Salaries**						
47 Direct Labor	151,567	111,518	263,085	1,509,800	17%	302,913
48 Less Transfer to Operations	(118,212)	(88,415)	(206,627)	(1,175,900)	18%	(232,466)
49 **Total General & Admin. Salaries**	**33,355**	**23,103**	**56,458**	**333,900**	**17%**	**70,447**
50 **District Benefits / G&A Benefits**						
51 District Benefits - (H/D/V)	31,910	30,258	62,168	385,100	16%	58,725
52 District Benefits - Taxes	11,339	8,341	19,680	121,600	16%	23,151
53 District Benefits - Workers Comp	4,159	4,159	8,318	61,700	13%	7,102
54 District Benefits - CalPERS	20,457	23,851	34,071	189,000	18%	27,288
55 Subtotal District Benefits	67,865	66,609	124,237	757,400	16%	116,265
56 Less: Transfer to Operations	(67,865)	(52,809)	(124,237)	(757,400)	16%	(116,265)
57 **Total G&A Benefits Allocated**	**14,935**	**13,799**	**26,613**	**167,500**	**16%**	**27,031**
58 **Payouts & Retiree Medical**						
59 Vacation / Sick Payouts	-	-	-	66,500	0%	2,337
60 Retiree Medical	-	-	-	2,600	0%	3,271
61 **Total Payouts & Retiree Medical**	**-**	**-**	**-**	**69,100**	**0%**	**5,608**
62 **Board of Directors**						
63 Directors' Fees	-	-	-	17,000	0%	1,375
64 Direct Expenses	-	-	-	15,500	0%	11
65 **Total Board of Directors**	**-**	**-**	**-**	**32,500**	**0%**	**1,386**
66 **Total Operating Expenditures**	**363,190**	**374,111**	**732,820**	**4,399,600**	**17%**	**844,489**
67 **Non-Operating Expenditures**						
68 **Debt Service**						
69 Principal	-	-	-	189,700	0%	-
70 Interest / Issuance Costs	-	-	-	53,800	0%	-
71 **Total Debt Service**	**-**	**-**	**-**	**243,500**	**0%**	**-**
72 **PERS Unfunded**						
73 Unfunded PERS Annual Payment	14,126	14,126	28,252	169,500	17%	14,775
74 Unfunded Pension & OPEB Trust Payments	8,333	8,333	16,667	100,000	17%	33,333
75 **Total PERS Unfunded**	**22,459**	**22,459**	**44,918**	**269,500**	**17%**	**48,108**
76 **Total Non-Operating Expenditures**	**22,459**	**22,459**	**44,918**	**513,000**	**9%**	**48,108**
77 **Total Expenditures**	**385,649**	**396,570**	**777,738**	**4,912,600**	**16%**	**892,597**
78 **Net Revenues Available to Fund Capital Related Expenditures**	**$ 220,834**	**$ 126,375**	**$ 364,968**	**$ 109,500**	**333%**	**$ 61,345**

No assurance is provided on these financial statements.

The financial statements do not include a statement of cash flows.

Substantially all disclosures required by accounting principles generally accepted in the United States are not included

Twentynine Palms Water Department
Carryover CIP/Current CIP and R&M/Capital Outlay
For the Period Ending August 31, 2020
(Unaudited)

		Budget FY 20/21	Current Year Expenditures	Remaining Budget / (Over Budget)
	Carryover Capital Approved in Previous Years			
1	GW Mgmt. Plan & Urban Water Mgmt. Plan	$ 100,000	$ -	$ 100,000
2	Treatment Feasibility & Exploration Costs	35,000	-	35,000
3	Vulnerability Assesment AWIA	45,000	5,250	39,750
4	Standard Drawings Update	25,000	-	25,000
5	Asset Management Plan	50,000	836	49,164
6	Salt Nutrient Monitoring Wells\Sampling	50,000	-	50,000
7	USGS Study\Feasibility Study	25,000	-	50,000
8	Master Plan Updates	85,000	-	50,000
9	**Total Carryover Capital Approved in Previous Years**	**415,000**	**6,086**	**398,914**
10	**Capital Improvement Plan**			
11	Chromium VI and Flouride for Well 11B	1,000,000	-	1,000,000
12	Fluoride Variance (Expiring) - TP-2, W12, W16	1,000,000	15,207	984,793
13	AMI / AMR Meters	300,000	136,821	163,179
14	**Total Capital Improvement Plan**	**2,300,000**	**152,028**	**2,147,972**
15	**Repairs, Rehabilitiation, & Maintenance**			
16	Plant 6 Electrical and Well Upgrade	25,000	-	25,000
17	Emergency Repairs, Unspecified	75,000	8,985	66,015
18	Repiping/Distribution System Upgrades	75,000	-	75,000
19	Reservoir Recoating / Cathodic Protection	20,000	-	20,000
20	Large Meter Replacement Program	30,000	-	30,000
21	Fluoride Plant Instrumentation\Coating	10,000	-	10,000
22	Treated Water Resevoir Coating	50,000	-	50,000
23	Campbell Reservoir Road Paving	100,000	-	100,000
24	**Total Repairs & Maintenance**	**385,000**	**8,985**	**376,015**
25	**Capital Outlay**			
26	Vehicle/Equipment Replacements	40,000	8,750	31,250
27	Computer/Technology Replacements	30,000	-	30,000
28	GIS	20,000	-	20,000
29	Administrative Building\Office Remodel	35,000	-	35,000
30	Energy Efficiency Projects	35,000	-	35,000
31	One-Time Existing Conditions Sampling Event	20,000	-	20,000
32	Parking Lot Seal\Paving	15,000	-	15,000
33	**Total Capital Outlay**	**195,000**	**8,750**	**186,250**
34	**TOTAL**	**$ 3,295,000**	**$ 175,849**	**$ 3,109,151**

Twentynine Palms Water Department
Special Revenue Fund
For the Period Ending August 31, 2020
(Unaudited)

	Aug. 2020	July 2020	YTD	Budget	YTD 17%	Prior YTD
1 Tower Revenues	$ 9,815	$ 14,570	$ 24,385	$ 131,100	19%	$ 23,159
3 Less Transfers Out To Water	(6,482)	(11,237)	(17,719)	(91,100)	19%	(16,492)
4 Transfer to PARS Trust	(3,333)	(3,333)	(6,667)	(40,000)	17%	(6,667)
Ending Balance	$ -	$ -	$ -	$ -		$ -

5.4

NO MATERIAL PROVIDED