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# DEL PASO MANOR WATER DISTRICT

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## WATER RATE STUDY DRAFT REPORT

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*August 8, 2023*

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**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS



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INDEPENDENT PUBLIC FINANCE ADVISORS

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August 8, 2023

Del Paso Manor Water District  
1817 Maryal Drive  
Suite 300  
Sacramento, CA 95864

Attention: Adam Coyan, General Manager

Re: Water Rate Study

Bartle Wells Associates is pleased to submit to Del Paso Manor Water District the attached Draft Water Rate Study. The study presents BWA's analysis of the operating and non-operating expenses of DPMWD's water system and provides a five-year cash flow projection. The primary purpose of this study was to analyze DPMWD's water enterprise and make recommendations that would achieve financial sustainability. Another important purpose of this study was to review rates to ensure that they adhere to the State's legal requirements.

BWA finds that the rates and charges proposed in our report reflect the cost-of-service for each customer, follow generally accepted rate design criteria, and adhere to the substantive requirements of Proposition 218. BWA believes the proposed rates are fair and reasonable to DPMWD's customers.

Please contact us with any future questions about this study and the recommended water rates.

Sincerely,

Douglas Dove, PE, CIPMA  
Principal/ President

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# 1 EXECUTIVE SUMMARY

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## 1.1 Introduction

Del Paso Manor Water District (DPMWD) supplies water to 1,864 residential and 111 commercial connections within its service area in Sacramento, CA. The operating and maintenance (O&M) water rates were last increased in 2018 and are no longer adequate to fully cover DPMWD operating costs. Additionally, the System Maintenance Charge (SMC), now referred to as the Capital Improvement Plan (CIP) Charge, was last increased in 2010 and is projected to fall short of adequately funding upcoming DPMWD capital costs. The proposed water rates were developed with considerable input received from the community, Board of Directors, and staff.

## 1.2 Purpose of the Study

The purpose of this study is to develop new rates that will meet projected future costs and put DPMWD on a solid financial footing as it addresses its substantial capital needs. Funding for capital projects comes from ongoing CIP Charges, formerly known as system maintenance charges. DPMWD also levies capacity fees on new connections to the water system. These fees are one-time fees charged to ensure that new customers pay for the value of the system that was already in place to provide them with water service. DPMWD anticipates very low growth and capacity fees are not being modified as a part of this study.

## 1.3 Summary of Current and Proposed Rates

Tables 1 and 2 summarize the current water rates which were adopted by DPMWD Board in 2018. The need for the new rate increase is being driven by significant capital infrastructure improvement needs and basic inflationary operating cost increases. DPMWD's current revenues are not sufficient to cover projected costs. The purpose of this study is to develop new rates that will meet projected future costs and put DPMWD on a solid financial footing as it addresses its substantial capital needs.

Table 1 shows the current residential rates as established in 2018.

**Table 1 – Current Residential Water Rates**

Residential <sup>[1][2]</sup>	
<b>Single Family Residential Fixed Rate<sup>[3]</sup></b>	
	<b>\$ per Month</b>
0 - 5,000 sq. ft. lot	\$26.90
5,001 - 8,000 sq. ft. lot	\$35.20
8,001 - 11,000 sq. ft. lot	\$41.40
11,001 - 14,000 sq. ft. lot	\$47.60
14,001 - 17,000 sq. ft. lot	\$53.80
17,001 - 20,000 sq. ft. lot	\$60.05
Over 20,000 sq. ft. lot	\$60.05 + \$2.07 per 1k sqft
<b>Duplex/Multi-Family Fixed Rate</b>	
	<b>\$ per Month</b>
5,001 - 8,000 sq. ft. lot	\$56.90
8,001 - 11,000 sq. ft. lot	\$63.15
11,001 - 14,000 sq. ft. lot	\$69.35
<b>Capital Improvement Plan Charge<sup>[4]</sup></b>	
	<b>\$ per Month</b>
Residential up to 1"	\$23.05
Residential over 1" (per 1")	\$23.05
Duplex/Multifamily (each side)	\$23.05
Additional Connection (per 1") <sup>[5]</sup>	\$23.05

[1] Rates Effective 7/1/18

[2] All single family residences pay (1) a fixed rate and (2) a CIP Charge.

[3] DPMWD was formed 70+ years ago and its records do not contain the connection size for most single family residential accounts. Currently, it is cost prohibitive to physically dig and determine exact connection size for each user. Therefore, the District has and will continue to use parcel/lot size as the basis for these SFR fixed charges.

[4] Formerly known as System Maintenance Charge

[5] For ADUs or additional development on a parcel.

Table 2 shows the current commercial rates as established in 2018.

**Table 2 – Current Commercial Water Rates**

Commercial <sup>[1][2]</sup>	
<b>Flat Rate Commercial</b>	<b>\$ per Month</b>
3/4" - 5/8"	\$45.50
1"	\$62.85
1 1/2"	\$90.90
2"	\$184.00
<b>Volumetric Rate Commercial</b>	<b>\$ per CCF</b>
\$ per 100 cubic ft	\$1.39
<b>Meter Readiness-to-Serve Charge</b>	<b>\$ per Month</b>
5/8"	\$15.10
1"	\$37.80
1 1/2"	\$75.60
2"	\$120.95
3"	\$226.80
4"	\$378.00
6"	\$756.00
8"	\$1,209.60
10"	\$1,738.80
<b>Capital Improvement Plan Charge<sup>[3]</sup></b>	<b>\$ per Month</b>
Commercial up to 1" meter	\$23.05
Commercial 1 1/2" meter	\$46.10
Commercial 2" meter	\$73.75
Commercial 3" meter	\$138.30
Commercial 4" meter	\$230.50
Commercial 6" meter	\$461.00
Other	
<b>Temporary Construction Water</b>	<b>\$ per CCF</b>
\$ per 100 cubic ft	\$1.43
<b>Fire Sprinkler Readiness Rate<sup>[4]</sup></b>	<b>\$ per month</b>
4"	\$75.60
6"	\$151.20
8"	\$241.90
10"	\$347.75

[1] Rates Effective 7/1/18

[2] Most commercial accounts pay (1) a fixed meter charge, (2) a volumetric charge, and (3) a CIP charge.

[3] Formerly known as System Maintenance Charge.

[4] Only applies to dedicated fire service lines.

## 1.4 Rate Study Objectives

DPMWD has historically adopted rate increases to keep revenues in-line with the escalating costs of providing service. Therefore, in 2022, DPMWD retained BWA to develop a cost-of-service based water rate study. Key goals and objectives of this study include developing water rates that:

- Recover the costs of providing service, including operating, capital, and debt funding needs.
- Are proportionate and fair to all customers.
- Are easy to understand and implement.
- Comply with the substantive requirements of the California Constitution, Article 13D, Section 6 (which was adopted by the voters as Proposition 218 in 1996) and the general mandate of Article 10, Section 2 that prohibits the wasteful use of water.
- Support the long-term operational and financial stability of DPMWD.

BWA worked closely with DPMWD staff to incorporate information and input, evaluate alternatives, and develop recommendations. This report summarizes key findings and recommendations for water rates over the next five years.

## 1.5 Key Drivers of Rate Increases

The need for the new rate increase is being driven by significant capital infrastructure improvement needs and basic inflationary operating cost increases. DPMWD's current revenues are not sufficient to cover projected costs. DPMWD is facing several manageable financial challenges that will drive the need for rate increases in upcoming years. Key drivers of future rate increases are summarized below.

### *Capital Improvement Funding Needs*

DPMWD is taking a proactive approach to maintaining its water system, which requires ongoing repair and improvement projects. DPMWD is estimating that over the next five years, its core capital projects will cost about \$9.23 (rounded) million which will need to be debt funded.

### *Ongoing Operating Cost Inflation*

DPMWD faces annual cost inflation due to annual increases in a range of expenses including utilities, insurance, regulatory costs, supplies, etc. Recently, inflation has reached forty-year highs with the CPI and Engineering News Record – Construction Cost Index (ENR CCI) exceeding 7% in 2022. It is not expected that inflation will remain at such high levels in the future and for the purposes of this rate study average annual inflation is projected to be 5% in FYs 2025 and 2026, while dropping to 4% in FYs 2027 and 2028; in-line with DPMWD's budget inflationary projections.

### *Water Reserve Funds*

Industry best practices include establishing reserves to fund unplanned infrastructure repairs, emergency replacement for catastrophic events, responding to force majeure situations like fire, flood, or earthquake, along with unanticipated changes to the operating budget. DPMWD's Reserve Fund Policy is to ensure that DPMWD maintains about 6 months of operating expenses in reserve.



### Debt Service Coverage

DPMWD’s municipal debt requires that it generate net operating revenues of 1.20 times the total annual debt service payment or greater. This study assumes that the debt pursued by DPMWD will have debt service payments calculated based on a 30-year repayment period, incur \$200,000 in costs associated with the issuance, and bear interest at 4%.

## 1.6 Financial Plan and Debt Issuance

This report develops a financial plan and rates assuming a debt issuance of \$9.23M for upcoming capital projects.

## 1.7 Water Rate Recommendations

The current rate structure will be maintained with minor adjustments. DPMWD will continue to collect two fixed rate charges from their residential customers: 1) a fixed monthly O&M rate based on lot size which recovers DPMWD’s O&M expenses; and 2) a flat fixed monthly CIP Charge to recover the capital and debt service expenditures. While the current rate structure will be maintained, this study proposes annual increases over the next five years. Although charges are calculated and shown on a monthly basis in this report, it should be noted that DPMWD bills its customers on a bimonthly basis (once every two months).

**Table 3 – Proposed Water Rates for a Single Family Residence; 5,001-8,000 Sq. Ft. Lot**

	<u>Current</u>	<u>2023-24</u>	<u>2024-25</u>	<u>2025-26</u>	<u>2026-27</u>	<u>2027-28</u>
Fixed Monthly O&M Rate <sup>[1]</sup>	\$35.20	\$54.56	\$57.29	\$60.15	\$63.16	\$66.32
Capital Improvement Plan Charge <sup>[2]</sup> - Base Level	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05
Increase in CIP Charge over Base Level	\$0.00	\$0.00	\$21.12	\$21.12	\$21.12	\$21.12
Total Fixed CIP Charge	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
<b>Monthly Charge<sup>[1]</sup></b>	<b>\$58.25</b>	<b>\$77.61</b>	<b>\$101.46</b>	<b>\$104.33</b>	<b>\$107.33</b>	<b>\$110.49</b>
<i>Increase in Monthly Charge</i>		\$19.36	\$23.85	\$2.86	\$3.01	\$3.16
<i>% Monthly Charge Increase</i>		33.2%	30.7%	2.8%	2.9%	2.9%

[1] Rate for single family residence on 5,001 - 8,000 SF lot (the most common single family rate code).

[2] Capital Improvement Plan Charge, formerly known as System Maintenance Charge.

DPMWD will continue to collect two fixed rate charges from their metered commercial customers: 1) a fixed monthly Meter Readiness-to-Serve rate based on meter size which recovers O&M expenses; and 2) a flat fixed monthly CIP Charge. Metered commercial customers will also be assessed a volumetric O&M charge assessed per hundred cubic feet (CCF). Please note that DPMWD currently serves four unmetered customers. They are charged a flat rate fixed charge based on service line size instead of both the fixed Meter Readiness-to-Serve charge and the volumetric rate.

**Table 4 – Proposed Water Rates for a Commercial Account; 1” Meter**

	<u>Current</u>	<u>2023-24</u>	<u>2024-25</u>	<u>2025-26</u>	<u>2026-27</u>	<u>2027-28</u>
Volumetric Rate, \$/CCF	\$1.39	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
Meter Readiness to Serve Charge	\$37.80	\$58.59	\$61.52	\$64.60	\$67.83	\$71.22
CIP Charge <sup>[1]</sup> - Base Level	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05
Increase in CIP Charge over Base Level		\$0.00	\$21.12	\$21.12	\$21.12	\$21.12
Total CIP Charge	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
<b>Monthly Charge: Volumetric, 18 CCF<sup>[2]</sup></b>	<b>\$85.87</b>	<b>\$120.42</b>	<b>\$146.41</b>	<b>\$151.53</b>	<b>\$156.89</b>	<b>\$162.53</b>
Year-to-Year Increase in Monthly Charge		\$34.55	\$25.99	\$5.11	\$5.37	\$5.64
% Monthly Charge Increase		40.2%	21.6%	3.5%	3.5%	3.6%

[1] Capital Improvement Plan Charge, formerly known as System Maintenance Charge.

[2] Commercial accounts with meters charged the Volumetric Rate for 18 CCF + the Meter Readiness-to-Serve Charge + the CIP Charge.

DPMWD’s O&M costs include expenses for power, minor repairs, insurance, administration, bank fees, legal fees, health care, and retirement benefits, among others. The water rates are designed to provide sufficient revenues to fund these costs projected over five years. Detailed O&M expenses can be found in Appendix A.

The CIP charge was similarly developed to provide sufficient revenues to fund capital expenditures and the projected debt service on both the existing debt and the new projected debt issuance.

### 1.8 Monthly Charges Summary

The current rate structure will be maintained with minor adjustments. DPMWD will continue to collect two fixed rate charges from their residential customers: 1) a fixed monthly O&M rate based on lot size which recovers DPMWD’s O&M expenses; and 2) a flat fixed monthly CIP Charge to recover the capital and debt service expenditures. While the current rate structure will be maintained, this study proposes annual increases over the next five years. The following tables show the projected rates and charges in monthly form.

**Table 5 – Proposed Monthly Residential Water Rates**

<b>Single Family O&amp;M Rate, \$ per month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
0 - 5,000 sq. ft. lot	\$26.90	\$41.70	\$43.78	\$45.97	\$48.27	\$50.68
5,001 - 8,000 sq. ft. lot	\$35.20	\$54.56	\$57.29	\$60.15	\$63.16	\$66.32
8,001 - 11,000 sq. ft. lot	\$41.40	\$64.17	\$67.38	\$70.75	\$74.28	\$78.00
11,001 - 14,000 sq. ft. lot	\$47.60	\$73.78	\$77.47	\$81.34	\$85.41	\$89.68
14,001 - 17,000 sq. ft. lot	\$53.80	\$83.39	\$87.56	\$91.94	\$96.53	\$101.36
17,001 - 20,000 sq. ft. lot	\$60.05	\$93.08	\$97.73	\$102.62	\$107.75	\$113.14
Over 20,000 sq. ft. lot	\$60.05	\$93.08	\$97.73	\$102.62	\$107.75	\$113.14
Per 1k sq. ft. of lot above 20k	\$2.07	\$3.21	\$3.37	\$3.54	\$3.71	\$3.90
<b>Duplex/Multi-Family O&amp;M Rate, \$ per month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5,001 - 8,000 sq. ft. lot	\$56.90	\$88.20	\$92.60	\$97.23	\$102.10	\$107.20
8,001 - 11,000 sq. ft. lot	\$63.15	\$97.88	\$102.78	\$107.92	\$113.31	\$118.98
11,001 - 14,000 sq. ft. lot	\$69.35	\$107.49	\$112.87	\$118.51	\$124.44	\$130.66
<b>Capital Improvement Plan (CIP) Charge, \$ per month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Residential, up to 1"	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Residential, 1.25"	\$28.81	\$34.58	\$66.26	\$66.26	\$66.26	\$66.26
Residential, 1.5"	\$34.58	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Residential, 2"	\$46.10	\$73.76	\$141.36	\$141.36	\$141.36	\$141.36
Duplex	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Residential over 1" (per 1")	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Additional Connection, per 1"	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17

DPMWD will continue to collect two fixed rate charges from their metered commercial customers: 1) a fixed monthly Meter Readiness-to-Serve rate based on meter size which recovers O&M expenses; and 2) a flat fixed monthly CIP Charge. Metered commercial customers will also be assessed a volumetric O&M charge assessed per hundred cubic feet (CCF). Please note that DPMWD currently serves four unmetered customers. They are charged a flat rate fixed charge based on service line size instead of both the fixed Meter Readiness-to-Serve charge and the volumetric rate. The following tables shows all proposed commercial water rates as well as the volumetric Temporary Construction Water rate and fixed Fire Sprinkler Readiness Rate.

**Table 6 – Proposed Monthly Commercial Water Rates**

<b>Flat Rate Commercial, \$ per month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
3/4" - 5/8"	\$45.50	\$70.53	\$74.05	\$77.75	\$81.64	\$85.72
1"	\$62.85	\$97.42	\$102.29	\$107.40	\$112.77	\$118.41
1 1/2"	\$90.90	\$140.90	\$147.94	\$155.34	\$163.10	\$171.26
2"	\$184.00	\$285.20	\$299.46	\$314.43	\$330.15	\$346.66
<b>Volumetric Rate, \$ per CCF</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.39	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Meter Readiness-to-Service Charge, \$ per month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5/8"	\$15.10	\$23.41	\$24.58	\$25.80	\$27.09	\$28.45
1"	\$37.80	\$58.59	\$61.52	\$64.60	\$67.83	\$71.22
1 1/2"	\$75.60	\$117.18	\$123.04	\$129.19	\$135.65	\$142.43
2"	\$120.95	\$187.47	\$196.85	\$206.69	\$217.02	\$227.87
3"	\$226.80	\$351.54	\$369.12	\$387.57	\$406.95	\$427.30
4"	\$378.00	\$585.90	\$615.20	\$645.95	\$678.25	\$712.17
6"	\$756.00	\$1,171.80	\$1,230.39	\$1,291.91	\$1,356.50	\$1,424.33
8"	\$1,209.60	\$1,874.88	\$1,968.62	\$2,067.06	\$2,170.41	\$2,278.93
10"	\$1,738.80	\$2,695.14	\$2,829.90	\$2,971.39	\$3,119.96	\$3,275.96
<b>Capital Improvement Plan (CIP) Charge, \$ per montl</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Commercial up to 1"	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Commercial 1 1/2"	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Commercial 2"	\$73.75	\$73.75	\$141.34	\$141.34	\$141.34	\$141.34
Commercial 3"	\$138.30	\$138.30	\$265.05	\$265.05	\$265.05	\$265.05
Commercial 4"	\$230.50	\$230.50	\$441.75	\$441.75	\$441.75	\$441.75
Commercial 6"	\$461.00	\$461.00	\$883.50	\$883.50	\$883.50	\$883.50
<b>Temporary Construction Water, \$ per CCF</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.43	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Fire Sprinkler Readiness Rate, \$ per month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
4"	\$75.60	\$117.18	\$123.04	\$129.19	\$135.65	\$142.43
6"	\$151.20	\$234.36	\$246.08	\$258.38	\$271.30	\$284.87
8"	\$241.90	\$374.95	\$393.69	\$413.38	\$434.05	\$455.75
10"	\$347.75	\$539.01	\$565.96	\$594.26	\$623.97	\$655.17

## 1.9 Projected BiMonthly Billing Summary

The follow tables show the rates and charges as they will appear on customers' bimonthly bills.

**Table 7 – Proposed Bimonthly Residential Water Rates**

<b>Single Family O&amp;M Rate, \$ per two months</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
0 - 5,000 sq. ft. lot	\$53.80	\$83.39	\$87.56	\$91.94	\$96.53	\$101.36
5,001 - 8,000 sq. ft. lot	\$70.40	\$109.12	\$114.58	\$120.30	\$126.32	\$132.64
8,001 - 11,000 sq. ft. lot	\$82.80	\$128.34	\$134.76	\$141.49	\$148.57	\$156.00
11,001 - 14,000 sq. ft. lot	\$95.20	\$147.56	\$154.94	\$162.68	\$170.82	\$179.36
14,001 - 17,000 sq. ft. lot	\$107.60	\$166.78	\$175.12	\$183.87	\$193.07	\$202.72
17,001 - 20,000 sq. ft. lot	\$120.10	\$186.16	\$195.46	\$205.24	\$215.50	\$226.27
Over 20,000 sq. ft. lot	\$120.10	\$186.16	\$195.46	\$205.24	\$215.50	\$226.28
Per 1k sq. ft. of lot above 20k	\$4.14	\$6.42	\$6.74	\$7.08	\$7.42	\$7.80
<b>Duplex/Multi-Family O&amp;M Rate, \$ per two months</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5,001 - 8,000 sq. ft. lot	\$113.80	\$176.39	\$185.21	\$194.47	\$204.19	\$214.40
8,001 - 11,000 sq. ft. lot	\$126.30	\$195.77	\$205.55	\$215.83	\$226.62	\$237.95
11,001 - 14,000 sq. ft. lot	\$138.70	\$214.99	\$225.73	\$237.02	\$248.87	\$261.32
<b>Capital Improvement Plan (CIP) Charge, \$ per two months</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Residential, up to 1"	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Residential, 1.25"	\$57.63	\$69.15	\$132.52	\$132.52	\$132.52	\$132.52
Residential, 1.5"	\$69.15	\$92.20	\$176.70	\$176.70	\$176.70	\$176.70
Residential, 2"	\$92.20	\$147.52	\$282.72	\$282.72	\$282.72	\$282.72
Duplex	\$92.20	\$92.20	\$176.70	\$176.70	\$176.70	\$176.70
Residential over 1" (per 1")	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Additional Connection, per 1"	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35

**Table 8 – Proposed Bimonthly Commercial Water Rates**

<b>Flat Rate Commercial, \$ per two months</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
3/4" - 5/8"	\$91.00	\$141.05	\$148.10	\$155.51	\$163.28	\$171.45
1"	\$125.70	\$194.84	\$204.58	\$214.81	\$225.55	\$236.82
1 1/2"	\$181.80	\$281.79	\$295.88	\$310.67	\$326.21	\$342.52
2"	\$368.00	\$570.40	\$598.92	\$628.87	\$660.31	\$693.32
<b>Volumetric Rate, \$ per CCF</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.39	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Meter Readiness-to-Service Charge, \$ per two mont</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5/8"	\$30.20	\$46.81	\$49.15	\$51.61	\$54.19	\$56.90
1"	\$75.60	\$117.18	\$123.04	\$129.19	\$135.65	\$142.43
1 1/2"	\$151.20	\$234.36	\$246.08	\$258.38	\$271.30	\$284.87
2"	\$241.90	\$374.95	\$393.69	\$413.38	\$434.05	\$455.75
3"	\$453.60	\$703.08	\$738.23	\$775.15	\$813.90	\$854.60
4"	\$756.00	\$1,171.80	\$1,230.39	\$1,291.91	\$1,356.50	\$1,424.33
6"	\$1,512.00	\$2,343.60	\$2,460.78	\$2,583.82	\$2,713.01	\$2,848.66
8"	\$2,419.20	\$3,749.76	\$3,937.25	\$4,134.11	\$4,340.82	\$4,557.86
10"	\$3,477.60	\$5,390.28	\$5,659.79	\$5,942.78	\$6,239.92	\$6,551.92
<b>Capital Improvement Plan (CIP) Charge, \$ per two m</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Commercial up to 1"	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Commercial 1 1/2"	\$92.20	\$92.20	\$176.70	\$176.70	\$176.70	\$176.70
Commercial 2"	\$147.50	\$147.50	\$282.68	\$282.68	\$282.68	\$282.68
Commercial 3"	\$276.60	\$276.60	\$530.10	\$530.10	\$530.10	\$530.10
Commercial 4"	\$461.00	\$461.00	\$883.50	\$883.50	\$883.50	\$883.50
Commercial 6"	\$922.00	\$922.00	\$1,766.99	\$1,766.99	\$1,766.99	\$1,766.99
<b>Temporary Construction Water, \$ per CCF</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.43	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Fire Sprinkler Readiness Rate, \$ per two months</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
4"	\$151.20	\$234.36	\$246.08	\$258.38	\$271.30	\$284.87
6"	\$302.40	\$468.72	\$492.16	\$516.76	\$542.60	\$569.73
8"	\$483.80	\$749.89	\$787.38	\$826.75	\$868.09	\$911.50
10"	\$695.50	\$1,078.03	\$1,131.93	\$1,188.52	\$1,247.95	\$1,310.35

DPMWD practices sound financial planning which has provided for the financial health of the water enterprise. Historically, DPMWD has increased rate revenue to keep up with inflationary cost increases and to fund system upgrades and maintenance. The adoption of these rates reflects DPMWD’s commitment to providing reliable, high quality water service that will benefit the community for many years into the future.

DPMWD can re-evaluate its finances and revenue requirements in future years and adjust rates as needed based on updated projections. However, while DPMWD always has the flexibility to implement rate adjustments that are lower than adopted pursuant to Proposition 218, future rates cannot exceed adopted increases without going through the Proposition 218 process again. Rates adopted pursuant to Proposition 218 are essentially future rate caps.

## 1.10 Rate Study Process

The general process used for this cost-of-service rate study is summarized in the following diagram.

**Table 9 – Cost-of-Service Rate Study Process**



### *Key Elements of the Study:*

- 1) **Project Initiation and Data Collection** – Review financial policies; collect financial and other relevant data; and review rate structures.
- 2) **Long Range Financial Plans** – Develop financial projections to evaluate annual revenue requirements from rates and the overall level of rate increases needed to fund the costs of providing service and support long-term financial stability.
- 3) **Cost Allocation** – Group DPMWD’s costs in terms of the function they serve as a basis to proportionally allocate the revenue requirement from rates.
- 4) **Cost-of-Service Rate Design** – Develop rates that proportionately recover costs; and
- 5) **Prop 218 Process** – Ensure compliance with the substantive and procedural requirements of Proposition 218.

## 1.11 Constitutional Requirements for Rates

The water rates proposed in this report are designed to comply with the California Constitution: Article 13D as explained below.

### 1.11.1 Article 13D, Section 6

Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court has ruled, includes rates imposed for water delivered through pipes connected to property. Article 13D, Section 6 establishes both a) procedural requirements for imposing or increasing property related charges, and b) substantive requirements for those charges. Article 13D requires voter approval for new or increased property-related charges but exempts rates for water, wastewater, and garbage service from this voting requirement if

rates are adopted by the appropriate procedure and meet the substantive requirements. This report recommends water rates designed to comply with the substantive requirements of Proposition 218.

The substantive requirements of Article 13D, section 6 require property-related charges, such as DPMWD's water rates, to meet the following conditions:

- 1) Revenues derived from the fee or charge shall not exceed the costs required to provide the property-related service.
- 2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- 3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost-of-the-service attributable to the parcel.
- 4) No fee or charge may be imposed for a service unless that service is used by, or immediately available to the property in question.
- 5) No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

Any adopted fees represent the maximum allowable rate increase for a given fiscal year. DPMWD always has the flexibility to implement rate adjustments that are lower than adopted pursuant to Proposition 218. Future rates cannot exceed adopted increases without going through the Proposition 218 process again. Rates adopted pursuant to Proposition 218 are essentially future rate caps.



## 2 WATER CUSTOMER CHARACTERISTICS

### 2.1 Customer Accounts Summary

Because DPMWD’s infrastructure was installed many years ago, DPMWD does not have individual water meters for the residential customers (about 94% of all DPMWD customers). Instead, the residential accounts are classified according to their lot size. In the absence of water meters, and data showing water usage per account, lot size is perhaps the best approximation of water demand available. The following table contains the number of accounts for Single Family Residential, Duplex/Multi-Family, and Commercial customers.

For metered Commercial customers, the monthly fixed charges are based on meter size. The use of meter size to proportionally allocate the fixed O&M costs of the water system among its users is an accepted best practice industry wide and is a methodology consistent with the guidelines published by the American Water Works Association (AWWA) in their widely followed M1 Manual. The fixed monthly rate is allocated on a meter size basis to ensure that accounts with higher demand on DPMWD’s water system will pay a proportionately higher rate.

BWA estimates that a single-family residence on a 5,001 to 8,000 SF lot is approximately equivalent to a commercial customer with a 5/8” meter. Virtually all commercial accounts are metered, so the standard AWWA meter ratio system can be used to determine proportional charges for larger meters. The meter ratios are based on the AWWA maximum safe water flow capacities for each meter. This meter ratio system is the same that has been used for determining the current commercial O&M rates since 2018.

**Table 10 – Water Accounts**

Residential Lot Size	Single-Family Residential	Duplex/ Multi-Family	Total Residential
	Accounts	Accounts	Accounts
0 - 5,000 sq. ft. lot	2	0	2
5,001 - 8,000 sq. ft. lot	808	12	820
8,001 - 11,000 sq. ft. lot	776	61	837
11,001 - 14,000 sq. ft. lot	141	6	147
14,001 - 17,000 sq. ft. lot	23	0	23
17,001 - 20,000 sq. ft. lot	7	0	7
Over 20,000 sq. ft. lot	28	0	28
<b>Total</b>	<b>1,785</b>	<b>79</b>	<b>1,864</b>
			<b>Commercial</b>
<b>Commercial</b>			<b>Accounts</b>
Flat Rate			4
Metered Accounts (size in inches):			
5/8"			1
1"			17
1 1/2"			27
2"			40
3"			13
4"			7
6"			2
<b>Total</b>			<b>111</b>
<b>Total Water Accounts</b>			<b>1,975</b>

### 3 DPMWD FINANCIAL PLAN

#### 3.1 Water Financial Overview

DPMWD relies almost solely on revenues from water rates to fund the costs of providing service. As such, water rates must be set at levels adequate to fund the costs of operating and maintaining the water system, necessary debt service to repay debt issued to cover capital expenses and meet DPMWD’s financial policies.

#### 3.2 Key Drivers of Rate Increases

DPMWD is facing several manageable financial challenges that will drive the need for rate increases in upcoming years. Key drivers of future rate increases are summarized below.

##### Capital Improvement Funding Needs

DPMWD is taking a proactive approach to maintaining its water system, which requires ongoing repair and improvement projects. This report explores the financial plan and Capital Improvement Charge necessary to pay for the debt projected to be issued to cover debt for capital projects. DPMWD is estimating that over the next five years, its core capital projects will cost about \$9.23 (rounded) million which will need to be debt funded. Table 11 shows DPMWD’s core projects totaling \$9.23M and Table 12 shows possible alternative projects that may be substituted in lieu of a core project. Table 11 also shows the break-out of project expenses of the Adopted CIP for FY 2023-24. Because the adopted CIP only contains project costs for the first year of the five-year project, this study assumes that the remaining project costs are allocated evenly across the second and third year of the projection. The study also estimates \$270,000 in repair and replacement projects in the fourth and fifth years of the projection. This amount is an estimate based on current funding levels.

**Table 11 – Five-Year Capital Improvement Plan**

Fund - Category	Project	Adopted CIP <sup>[1]</sup>				
		2023-24	2024-25	2025-26	2026-27	2027-28
<b>Core Projects<sup>[2]</sup></b>						
	Well 7 Rehabilitation	\$2,986,200	\$1,493,100	\$1,493,100		
	Well 4 Rehabilitation	\$958,000	\$479,000	\$479,000		
	Hydraulic Model	\$40,000	\$20,000	\$20,000		
	2D-3 Pipeline Rpmnt.	\$5,250,000	\$2,625,000	\$2,625,000		
		<b>\$9,234,200</b>	<b>\$4,617,100</b>	<b>\$4,617,100</b>		
<b>6760 - Pipes</b>						
	6760.05 Miscellaneous		\$50,000			
<b>6770 - Wells</b>						
	6770.05 #2 New Well/Well Addition/Generators		\$950,000			
	6770.05 #6B New Well/Well Addition/Generator		\$50,000			
	6770.05 #9 New Well/Well Addition/Generators		\$360,000			
<b>Equipment</b>						
	2022 Chevrolet 2500 Half Ton <sup>[3]</sup>					
<b>Repair and Replacement</b>					\$270,000	\$270,000
<b>Total Capital Projects</b>		<b>\$1,410,000</b>	<b>\$4,617,100</b>	<b>\$4,617,100</b>	<b>\$270,000</b>	<b>\$270,000</b>

[1] Because the adopted CIP only contains project costs for the first year of the five-year project, this study assumes that the \$9.234M Core Projects' costs are allocated evenly across the second and third year of the projection. The study also assumes \$270,000 in repair and replacement projects in the fourth and fifth years of the projection. Budgeted project costs for 2023/24 provided by DPMWD.

[2] Approved funding is for the listed core projects or alternatives previously approved by the board.

[3] The \$60,000 cost of this item is included in O&M expenses.

While the previously shown core capital projects are what DPMWD has determined are the most likely, it is possible that if conditions change, DPMWD may implement some or all of the alternative projects shown in Table 12.

**Table 12 – Alternative Capital Projects**

<b><u>Project</u></b>	<b><u>Estimated Cost</u></b>
2D-1 Pipeline Replacement	\$2.69M
2D-2 Pipeline Replacemnt	\$2.64M
2C Pipeline Replacement	\$1.69M
Well 3 Treatment Evaluation	\$0.05M
Survey Existing Sites	\$0.10M

*Ongoing Operating Cost Inflation*

DPMWD faces annual cost inflation due to annual increases in a range of expenses including utilities, insurance, regulatory costs, supplies, etc. On top of rate increases needed for capital improvements, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Water cost inflation has historically been higher than the Consumer Price Index (CPI) for consumer goods and services. Historically inflation has typically remained consistently around 3%, but recently inflation has reached forty-year highs with the CPI and Engineering News Record – Construction Cost Index (ENR CCI) exceeding 7% in 2022. It is not expected that inflation will remain at such high levels in the future and for the purposes of this rate study average annual inflation is projected to be 5% in FYs 2025 and 2026, while dropping to 4% in FYs 2027 and 2028; in-line with DPMWD’s budget inflationary projections.

*Water Reserve Funds*

Industry best practices include establishing reserves to fund unplanned infrastructure repairs, emergency replacement for catastrophic events, responding to force majeure situations like fire, flood, or earthquake, along with unanticipated changes to the operating budget. The DPMWD’s Reserve Fund Policy was adopted in 2018. In adopting that policy, the Board found that reserves protect the District’s long-term organizational and operational stability and enables DPMWD to minimize significant rate fluctuations due to unforeseen and expected cash flow requirements. This Reserve Fund Policy is to ensure that the District accumulates, manages, maintains, and uses certain financial resources only for specific purposes. Specifically, it targets 6 months of operating expenses, and 120% of debt service coverage.

*Debt Service Coverage*

Debt service is a regular payment required to pay off a debt issuance. Terms and conditions vary depending on the debt issuance. DPMWD’s municipal debt requires that it generate net operating revenues of 1.20 times the total annual debt service payment or greater. This is referred to as “debt service coverage.” To support a strong credit rating and good financial health, the projections developed in this report generate net operating revenues of at least 1.20 times annual debt service. This study assumes that the debt pursued by DPMWD will have debt

service payments calculated based on a 30-year repayment period of a \$9,230,000 debt issuance, incur \$200,000 in costs associated with the issuance, and bear interest at 4%.

### 3.3 Financial Plan Assumptions

The financial projections incorporate the latest information available and a number of reasonable and slightly conservative assumptions for planning purposes. Key assumptions include:

#### Revenue Assumptions

- Water rate revenues are based on estimated revenues for the current fiscal year.
- Rates proposed to be adopted on September 18, 2023 will be effective on November 1, 2023, with rate adjustments planned to become effective on July 1 of each of the subsequent four years.
- Water sales revenues are based on projected water rates.
- DPMWD is anticipating minimal growth because DPMWD is built out. To be conservative and ensure revenues will be sufficient, BWA assumed 0% annual growth over the next five years.
- Interest earnings are projected based on the annual beginning fund balance multiplied by the projected interest rate. The interest rate projections are based on recent and anticipated interest rates.

#### Expense Assumptions

- Operating and maintenance costs are primarily based on the 2022/23 and 2023/24 budgets.
- Operating costs are projected to escalate at 5% in 2024/25 and 2025/26 and 4% per year thereafter to account for cost inflation.
- Debt service projections are based on outstanding debt schedules and projected debt issuances.
- Capital improvement costs are based on the most recent engineering cost estimates.

### 3.4 Cash Flow Projections

Long-term cash-flow projections were developed based on assumptions and key drivers of future rate increases described above. The projections were used to determine the water utility's annual revenue requirements and project the necessary water rate revenue increases. The long-term cash-flow projections incorporate the latest information available from DPMWD's budget, annual reports, and capital spending projections, as well as a number of reasonable assumptions developed with input from DPMWD. The overall rate revenue increases are designed to fund DPMWD's cost of providing service, maintain balanced budgets, maintain healthy debt service coverage, and maintain prudent reserves. The projections indicate the need for increases for water rate revenues for each of the next five fiscal years. Actual impacts to customers' water bills will vary based on residential lot size or commercial water use, due to the outcome of the updated cost-of-service analysis.

This report explores the financial plan and rates with a debt issuance of \$9.23M. This study projects inflation adjusted capital spending on core projects to total \$9.23M over the next five years, which will be fully funded by the debt proceeds.

It should be noted that in FY 2023/24, although the district is obtaining \$9.23M in debt proceeds, the O&M reserve balance may drop down to \$792,000, which is below the 6-month reserve policy target. However, operating funds will exceed the 6 month target beginning in FY2024/25. Additionally, DPMWD may do a temporary interfund loan from the capital reserves to cover the O&M reserve shortfall if necessary, in order to meet liquidity requirements.

A summary of the key elements of the long-term cash-flow projections is displayed in the following table.

**Table 13 – Cash Flow Projection Summary**

	Projection->					
	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>1) Beginning Fund Balance</b>	<b>\$3,147,454</b>	<b>\$2,106,752</b>	<b>\$10,022,242</b>	<b>\$5,891,728</b>	<b>\$1,725,939</b>	<b>\$1,893,795</b>
2) Total Revenues	\$1,985,357	\$2,476,970	\$3,452,120	\$3,521,391	\$3,595,838	\$3,719,427
3) Debt Proceeds		\$9,230,000				
4) Available Funds	\$5,132,811	\$13,813,723	\$13,474,362	\$9,413,119	\$5,321,777	\$5,613,222
5) O&M	\$2,214,745	\$2,057,151	\$2,097,009	\$2,201,859	\$2,289,933	\$2,381,531
6) Debt Service Payments	\$324,278	\$324,330	\$868,525	\$868,221	\$868,049	\$868,049
7) Capital Expenditure	\$487,036	\$1,410,000	\$4,617,100	\$4,617,100	\$270,000	\$270,000
8) Total Expenses	\$3,026,059	\$3,791,481	\$7,582,633	\$7,687,180	\$3,427,983	\$3,519,580
<b>9) Ending Fund Balance</b>	<b>\$2,106,752</b>	<b>\$10,022,242</b>	<b>\$5,891,728</b>	<b>\$1,725,939</b>	<b>\$1,893,795</b>	<b>\$2,093,642</b>
10) Minimum O&M Balance	\$1,107,372	\$1,028,576	\$1,048,504	\$1,100,929	\$1,144,967	\$1,190,765

Detailed, long-term, cash-flow projections are shown in the following table as well as in Appendix A.

**Table 14 – Detailed Cash Flow Projections**

	Projection->					
	2022-23	2023-24 <sup>[1]</sup>	2024-25	2025-26	2026-27	2027-28
<b>BEGINNING FUND BALANCE</b>	<b>\$3,147,454</b>	<b>\$2,106,752</b>	<b>\$10,022,242</b>	<b>\$5,891,728</b>	<b>\$1,725,939</b>	<b>\$1,893,795</b>
<b>REVENUE</b> <sup>[1]</sup>						
Fixed Rate Revenue	1,077,040	1,471,955	1,752,883	1,840,527	1,932,554	2,029,181
Volumetric Rate Revenue	281,807	385,137	458,641	481,573	505,652	530,935
CIP Charge Revenue <sup>[3]</sup>	595,035	598,811	1,140,373	1,140,373	1,140,373	1,140,373
Interest Earnings <sup>[2]</sup>	31,475	21,068	100,222	58,917	17,259	18,938
<b>Total Operating Revenue</b>	<b>\$1,985,357</b>	<b>\$2,476,970</b>	<b>\$3,452,120</b>	<b>\$3,521,391</b>	<b>\$3,595,838</b>	<b>\$3,719,427</b>
New Debt Proceeds		\$9,230,000				
<b>Total Other Revenue</b>	<b>\$0</b>	<b>\$9,230,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTAL REVENUE</b>	<b>\$1,985,357</b>	<b>\$11,706,970</b>	<b>\$3,452,120</b>	<b>\$3,521,391</b>	<b>\$3,595,838</b>	<b>\$3,719,427</b>
<b>O&amp;M EXPENSE</b>						
Total Operating & Maintenance Expense	\$2,214,745	\$2,057,151	\$2,097,009	\$2,201,859	\$2,289,933	\$2,381,531
<b>TOTAL O&amp;M EXPENSE</b>	<b>\$2,214,745</b>	<b>\$2,057,151</b>	<b>\$2,097,009</b>	<b>\$2,201,859</b>	<b>\$2,289,933</b>	<b>\$2,381,531</b>
<i>Net Operating Revenues</i>	<i>(229,388)</i>	<i>419,819</i>	<i>1,355,111</i>	<i>1,319,532</i>	<i>1,305,905</i>	<i>1,337,896</i>
Annual Surplus/(Deficit)	(229,388)	9,649,819	1,355,111	1,319,532	1,305,905	1,337,896
Total Debt Service	324,278	324,330	868,525	868,221	868,049	868,049
Capital Expenditure	487,036	1,410,000	4,617,100	4,617,100	270,000	270,000
<b>ENDING FUND BALANCE</b>	<b>\$2,106,752</b>	<b>\$10,022,242</b>	<b>\$5,891,728</b>	<b>\$1,725,939</b>	<b>\$1,893,795</b>	<b>\$2,093,642</b>
# Months O&M in Reserves	<i>11 months</i>	<i>58 months</i>	<i>34 months</i>	<i>9 months</i>	<i>10 months</i>	<i>11 months</i>
Reserve Policy Minimum <sup>[4]</sup>	\$1,107,372	\$1,028,576	\$1,048,504	\$1,100,929	\$1,144,967	\$1,190,765
Target Met	yes	yes	yes	yes	yes	yes
<i>Debt Service Coverage</i> <sup>[5]</sup> ( $\geq 1.20x$ )		<i>1.29</i>	<i>1.56</i>	<i>1.52</i>	<i>1.50</i>	<i>1.54</i>

[1] 2023/24 revenue projections based on new rates effective November 1, 2023

[2] Interest earnings - 1% estimated earnings on beginning fund balance

[3] 2022/23 value is estimated based on 2021/22 actual revenue generated. 2023/24 value provided by District staff.

[4] Minimum O&M reserve policy requires 6 months of O&M expenses (not including that year's debt service).

[5] The 2018 debt covenant, pg 56, prescribes that net revenue must equal 120% of the annual debt service in the fiscal year.

## 4 COST OF SERVICE RATE DERIVATION

Water utilities employ a wide range of approaches or perspectives for allocating and recovering their costs for providing service. Del Paso Manor Water District charges each residential water customer a monthly fixed charge for O&M and a monthly fixed CIP charge. Commercial customers are charged a monthly fixed Meter Readiness-to-Serve charge to cover O&M expenses, a monthly fixed CIP charge, and a volumetric O&M rate. There are four commercial customers that are unmetered and pay a flat rate charge.

### Rate Setting Methodology

As described in the prior sections of this report, the majority of DPMWD’s customers are unmetered and pay flat rates for their water service and the minority of customers are metered. The flat rate charges are based on the number of dwelling units and the size of the customer’s lot. Metered commercial charges are based on the meter size and the volume of water consumed as measured by the meter. This combination of flat rate and metered customers lends itself to a simplified rate setting approach which is used in this study.

The basic methodology is to levy O&M charges to recover O&M-related costs and capital charges to recover capital-related costs. The cash flow projection shown in Table 14 projects DPMWD’s O&M and capital costs and how much O&M rate revenue and capital charge revenue will be required each year to cover the costs.

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Revenue Requirements</b>						
O&M Revenue Requirement	\$1,358,848	\$1,857,092	\$2,211,525	\$2,322,101	\$2,438,206	\$2,560,116
Capital Revenue Requirement	595,035	598,811	1,140,373	1,140,373	1,140,373	1,140,373
Total Revenue Requirement	\$1,953,883	\$2,455,903	\$3,351,897	\$3,462,474	\$3,578,579	\$3,700,489

### Calculation of O&M Rates - Residential

Residential flat rates are based on the number of dwellings served and account lot size. They include a base charge (per dwelling unit) and a charge for outdoor water use based on lot size. For example, in 2023/24, a typical single-family residential customer with a 5,001 to 8,000 SF lot will be charged a base charge of \$33.69 and a lot size charge of \$20.87 which corresponds to 9.7 CCF for outdoor use (9.7 CCF \*\$2.1515 = \$20.87) See Table 15. Similarly, duplex rates include two base charges and a lot size charge. Please note that the calculated 2023/24 volumetric rate of \$2.1515/CCF is rounded to \$2.15/CCF for billing purposes. Overall, residential fixed O&M charges are projected to generate the following annual revenues:

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Residential O&M Revenue (Fixed Only)	\$896,722	\$1,192,462	\$1,459,415	\$1,532,386	\$1,609,006	\$1,689,454

### Calculation of O&M Rates - Commercial

Commercial O&M rates include a fixed meter charge and a volumetric charge. The meter charges are based on meter size and reflect each user’s relative proportional demand on the system (I.e., larger meters can place larger demands on the water system than smaller meters so therefore are charged a higher fixed charge than smaller meters).

The AWWA capacity based meter ratios used in this study are summarized below:

Meter Size	Rated Capacity (gpm)	Ratio to 1" Meter
5/8"	20	0.4
1'	50	1
1.5"	100	2
2"	160	3.2
3"	300	6
4"	500	10
6"	1,000	20

Commercial revenues (fixed and variable) are projected to be:

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Commercial O&M Revenue (Fixed and Variable)	\$462,125	\$664,630	\$752,109	\$789,714	\$829,200	\$870,662

#### Calculation of CIP Charges

The capital revenue requirements shown above and in the cash flows are what need to be recovered from CIP charges. CIP charges are allocated based on Equivalent Charge Units (ECUs). A single family home or a commercial customer with a meter up to 1" is one ECU. Duplexes are assigned two ECUs. Commercial customers with meters larger than 1" are assigned ECUs in proportion to their AWWA capacity ratio shown above. The DPMWD customer base currently comprises approximately 2,151 ECUs.

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Total CIP Charge Revenue Requirement	\$595,035	\$598,811	\$1,140,373	\$1,140,373	\$1,140,373	\$1,140,373
Equivalent Charge Units	2,151	2,165	2,151	2,151	2,151	2,151
<b>Total Monthly CIP Charge</b>	<b>\$23.05</b>	<b>\$23.05</b>	<b>\$44.17</b>	<b>\$44.17</b>	<b>\$44.17</b>	<b>\$44.17</b>

## 4.1 Residential

Residential bills include two components: an O&M fixed charge and a CIP Charge.

### 4.1.1 Residential O&M Charge

#### Residential Flat Rate Fixed O&M Charge

Residential customers comprise about 94% of DPMWD customers. The residential flat rate fixed O&M charges cover all O&M costs of providing water to residential customers. The O&M expenses include costs necessary for operating DPMWD's wells, distribution system, pumps, vehicles, and administration.

#### Lot Size Water-Use Estimates

Since residential customers are unmetered, the flat rates are based on lot size (larger lots are assumed to use more water than smaller lots). As shown in Table 15, the estimated outdoor water use for each size lot varies from 3.7 CCF/month for a residential customer with a 0 - 5,000 SF lot to 27.6 CCF/month for a customer with a 17,001 – 20,000 SF lot. Lots over 20,000 SF are assessed additional charges assuming about 1.5 CCF of outdoor use per



month use per 1,000 SF. This is equivalent to about 13 – 14 gallons per square foot per year which is consistent with efficient landscaping.

**Table 15 – Residential Lot Water Use Estimates**

Residential Lot Size	Estimated Average Lot Size SF	2023/24 Fixed O&M Charge	Estimated Base Share of Charge	Estimated Lot Size Share of Charge	Estimated Outdoor Lot Use CCF <sup>[1]</sup>
0-5,000 SF	2,500	\$41.70	\$33.67	\$8.03	3.7
5,001-8,000 SF <sup>[2]</sup>	6,500	\$54.56	\$33.69	\$20.87	9.7
8,001-11,000 SF	9,500	\$64.17	\$33.67	\$30.50	14.2
11,001-14,000 SF	12,500	\$73.78	\$33.65	\$40.13	18.7
14,001-17,000 SF	15,500	\$83.39	\$33.63	\$49.76	23.1
17,001-20,000 SF	18,500	\$93.08	\$33.69	\$59.39	27.6
Over 20,000 SF, +\$3.21/1,000 SF	Varies	Varies	Varies	Varies	Varies
2023/24 per CCF Chg:	\$2.15				
\$/1,000 SF Lot Charge:	\$3.21				

[1] Average monthly outdoor use per 1,000 SF lot is 1.49 CCF which is consistent with efficient landscaping (13 to 14 gallons/SF/year).

[2] Average monthly CCF use for a typical 5,001 - 8,000 SF Residential lot (2018 Rate Study): 18.0

### 4.1.2 Capital Improvement Plan Charge

#### *Capital Improvement Plan Charge (Formerly the System Maintenance Charge)*

This charge funds capital project expenditures and debt service payments for both the existing \$4.34M loan and the proposed \$9.23M debt issue. The projected debt issuance is planned to fund core capital improvement projects such as Well 7 Rehabilitation, Well 4 Rehabilitation, the Hydraulic Model, and 2D-3 Pipeline Replacement or approved alternate capital improvement plan projects (see Table 11). The capital improvement plan charge applies to both residential and commercial customers. Table 16 summarizes the calculation of the CIP Charge for single family residences and commercial customers with meters 1” or smaller. See Appendix Tables A-12 and A-13 for the recommended CIP Charges for other customer categories. Note that the current CIP Charge already recovers the existing debt service payments. The increase in the CIP Charge is calculated to recover the new projected debt service payments.

**Table 16 – CIP Charge Calculation: Single Family Residence**

	Current 2022-23	Budget 2023-24	2024-25	2025-26	2026-27	2027-28
Base Capital Charge Requirement	\$595,035	\$598,811	\$595,035	\$595,035	\$595,035	\$595,035
Equivalent Charge Units	2,151	2,165	2,151	2,151	2,151	2,151
Current Monthly CIP Charge <sup>[1]</sup>	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05
Estimated New Debt Service	\$0	\$0	\$545,338	\$545,338	\$545,338	\$545,338
Monthly CIP Chg Increase for debt service <sup>[1]</sup>	\$0.00	\$0.00	\$21.12	\$21.12	\$21.12	\$21.12
Total Annual Capital Requirement	\$595,035	\$598,811	\$1,140,373	\$1,140,373	\$1,140,373	\$1,140,373
<b>Monthly CIP Charge Calculation<sup>[1]</sup></b>						
Current Monthly CIP Charge	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05
Monthly Charge Increase for Debt	\$0.00	\$0.00	\$21.12	\$21.12	\$21.12	\$21.12
<b>Total Monthly CIP Charge<sup>[1]</sup></b>	<b>\$23.05</b>	<b>\$23.05</b>	<b>\$44.17</b>	<b>\$44.17</b>	<b>\$44.17</b>	<b>\$44.17</b>

[1] Base CIP Charge for residential or commercial user with service size up to 1". CIP Charges for larger meters are set proportional to the flow capacity of the meter as rated by American Water Works Association.

## 4.2 Commercial

Commercial bills include three components: an O&M fixed charge (also known as the Meter Readiness-to-Serve charge), a CIP charge, and a volumetric rate.

### 4.2.1 Operations & Maintenance (O&M) Charges – Meter Readiness-to-Serve Charge

#### *Commercial Fixed “Meter Readiness-to-Serve” O&M Charge*

Charges based on water meter size are set proportional to the flow capacity of the meter as rated by AWWA. These charges recover fixed O&M costs of providing water to each metered commercial account. Fixed costs are those that do not vary regardless of water consumption and include fixed capital, operating and maintenance and administrative costs.

### 4.2.2 Capital Improvement Plan (CIP) Charge

#### *Capital Improvement Plan Charge (formerly the System Maintenance Charge)*

This charge funds capital project expenditures and debt service payments for both the existing \$4.34M loan and the proposed \$9.23M debt issue. The projected debt issuance is planned to fund core capital improvement projects such as Well 7 Rehabilitation, Well 4 Rehabilitation, the Hydraulic Model, and 2D-3 Pipeline Replacement (see Table 11) or approved alternate capital improvement plan projects (see Table 12). The capital improvement plan charge applies to both residential and commercial customers.

### 4.2.3 Volumetric Charge

#### *Commercial Volumetric O&M Charge*

These charges recover the variable and a portion of the fixed components of O&M costs of providing water to commercial accounts. A commercial account's volumetric charge is calculated based on its metered water usage.

Variable costs are generally those that vary in proportion to water consumption and typically include utilities, variable maintenance, chemicals, and other costs.

#### 4.2.4 Fixed vs. Variable Revenues

Residential customers are almost entirely unmetered so essentially 100% of the residential revenues are fixed. Commercial customers are almost all metered and pay volumetric rates in addition to their fixed charges. Table 17 shows that commercial charges are projected to produce about 50% fixed revenue and 50% variable revenue. For a small water system like DPMWD, this is considered to be an ideal mix; the 50/50 commercial revenue recovery provides adequate revenue stability while also providing a strong conservation incentive to customers.

**Table 17 – Fixed vs. Variable Commercial Revenues**

Commercial Fixed O&M Rate "Meter RTS" Revenues		2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
	<u>Accounts</u>						
Flat Rate	4	\$4,599	\$7,128	\$7,485	\$7,859	\$8,252	\$8,665
<i>Metered Accounts (inches)</i>							
5/8"	1	\$181	\$281	\$295	\$310	\$325	\$341
1"	17	\$7,711	\$11,952	\$12,550	\$13,177	\$13,836	\$14,528
1.5"	27	\$24,494	\$37,966	\$39,865	\$41,858	\$43,951	\$46,148
2"	40	\$58,056	\$89,987	\$94,486	\$99,210	\$104,171	\$109,380
3"	13	\$35,381	\$54,840	\$57,582	\$60,461	\$63,484	\$66,659
4"	7	\$31,752	\$49,216	\$51,676	\$54,260	\$56,973	\$59,822
6"	2	\$18,144	\$28,123	\$29,529	\$31,006	\$32,556	\$34,184
<b>Total Commercial Fixed O&amp;M Revenue</b>	<b>111</b>	<b>\$180,318</b>	<b>\$279,493</b>	<b>\$293,468</b>	<b>\$308,141</b>	<b>\$323,548</b>	<b>\$339,727</b>
Commercial Fixed CIP Charge Revenues		2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
	<u>Accounts</u>						
Flat Rate	4	\$1,991	\$1,991	\$3,816	\$3,816	\$3,816	\$3,816
<i>Metered Accounts (inches)</i>							
5/8"	1	\$277	\$277	\$530	\$530	\$530	\$530
1"	17	\$4,702	\$4,702	\$9,012	\$9,012	\$9,012	\$9,012
1.5"	27	\$14,936	\$14,936	\$28,625	\$28,625	\$28,625	\$28,625
2"	40	\$35,400	\$35,400	\$67,843	\$67,843	\$67,843	\$67,843
3"	13	\$21,575	\$21,575	\$41,348	\$41,348	\$41,348	\$41,348
4"	7	\$19,362	\$19,362	\$37,107	\$37,107	\$37,107	\$37,107
6"	2	\$11,064	\$11,064	\$21,204	\$21,204	\$21,204	\$21,204
<b>Total Commercial Fixed CIP Revenue</b>	<b>111</b>	<b>\$109,307</b>	<b>\$109,307</b>	<b>\$209,485</b>	<b>\$209,485</b>	<b>\$209,485</b>	<b>\$209,485</b>
<b>Commercial Fixed Rate Revenues</b>							
Fixed O&M Revenue		\$180,318	\$279,493	\$293,468	\$308,141	\$323,548	\$339,727
CIP Revenue		\$109,307	\$109,307	\$209,485	\$209,485	\$209,485	\$209,485
<b>Total Commercial Fixed Revenues</b>		<b>\$289,625</b>	<b>\$388,800</b>	<b>\$502,953</b>	<b>\$517,626</b>	<b>\$533,033</b>	<b>\$549,212</b>
<b>Commercial Volumetric Revenues</b>							
Volumetric Revenue Requirement from Cash Flow		281,807	385,137	458,641	481,573	505,652	530,935
<b>Total Commercial Volumetric Revenues</b>		<b>\$281,807</b>	<b>\$385,137</b>	<b>\$458,641</b>	<b>\$481,573</b>	<b>\$505,652</b>	<b>\$530,935</b>
<b>Total Commercial Revenue</b>		<b>\$571,433</b>	<b>\$773,937</b>	<b>\$961,595</b>	<b>\$999,200</b>	<b>\$1,038,686</b>	<b>\$1,080,147</b>
<b>Fixed Percent</b>		51%	50%	52%	52%	51%	51%
<b>Variable Percent</b>		49%	50%	48%	48%	49%	49%

#### 4.2.5 Flat Rate vs. Metered Customer Comparison

Table 18 shows a comparison of the estimated costs borne by a flat rate residential customer and by a metered commercial customer. The costs are estimated to be equivalent, which indicates the flat rate residential and metered commercial structures are fair and proportional.

**Table 18 – Flat Rate vs. Metered Customer Monthly Charge Comparison**

	Current					
	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Flat Rate Residential Customer</b>						
Flat Rate 5,001 -8,000 SF Lot	35.20	54.56	57.29	60.15	63.16	66.32
Est. Avg Use 18 CCF <sup>[1]</sup>	incl	incl	incl	incl	incl	incl
CIP Charge	23.05	23.05	44.17	44.17	44.17	44.17
<b>Total Monthly Charge</b>	<b>58.25</b>	<b>77.61</b>	<b>101.46</b>	<b>104.32</b>	<b>107.33</b>	<b>110.49</b>
<b>Metered Commercial Customer</b>						
5/8" Meter Charge	15.10	23.41	24.58	25.8	27.09	28.45
Water Charge - 18 CCF	25.02	38.70	40.68	42.84	44.82	47.16
CIP Charge	23.05	23.05	44.17	44.17	44.17	44.17
Less Est. Meter Costs <sup>[2]</sup>	(4.92)	(7.55)	(7.97)	(8.49)	(8.75)	(9.29)
<b>Equivalent Monthly Charge</b>	<b>58.25</b>	<b>77.61</b>	<b>101.46</b>	<b>104.32</b>	<b>107.33</b>	<b>110.49</b>

[1] Average consumption of 18 CCF per month by a residential customer with 5,001 - 8,000 SF Lot from 2018 Water Rate Study.

[2] Includes estimated meter reading, maintenance, and replacement costs.

## 4.2.6 Proposed Rates

**Table 19 – Proposed Residential Monthly Water Rates**

<b>Single Family O&amp;M Rate, \$ per Month<sup>[1]</sup></b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
0 - 5,000 sq. ft. lot	\$26.90	\$41.70	\$43.78	\$45.97	\$48.27	\$50.68
5,001 - 8,000 sq. ft. lot <sup>[2]</sup>	\$35.20	\$54.56	\$57.29	\$60.15	\$63.16	\$66.32
8,001 - 11,000 sq. ft. lot	\$41.40	\$64.17	\$67.38	\$70.75	\$74.28	\$78.00
11,001 - 14,000 sq. ft. lot	\$47.60	\$73.78	\$77.47	\$81.34	\$85.41	\$89.68
14,001 - 17,000 sq. ft. lot	\$53.80	\$83.39	\$87.56	\$91.94	\$96.53	\$101.36
17,001 - 20,000 sq. ft. lot	\$60.05	\$93.08	\$97.73	\$102.62	\$107.75	\$113.14
Over 20,000 sq. ft. lot	\$60.05	\$93.08	\$97.73	\$102.62	\$107.75	\$113.14
Per 1k sq. ft. of lot above 20k <sup>[1]</sup>	\$2.07	\$3.21	\$3.37	\$3.54	\$3.71	\$3.90
<b>Duplex/Multi-Family O&amp;M Rate, \$ per Month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5,001 - 8,000 sq. ft. lot	\$56.90	\$88.20	\$92.60	\$97.23	\$102.10	\$107.20
8,001 - 11,000 sq. ft. lot	\$63.15	\$97.88	\$102.78	\$107.92	\$113.31	\$118.98
11,001 - 14,000 sq. ft. lot	\$69.35	\$107.49	\$112.87	\$118.51	\$124.44	\$130.66
<b>Capital Improvement Plan Charge (CIP Charge) [3]</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Residential, up to 1" <sup>[2]</sup>	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Residential, 1.25"	\$28.81	\$34.58	\$66.26	\$66.26	\$66.26	\$66.26
Residential, 1.5"	\$34.58	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Residential, 2"	\$46.10	\$73.76	\$141.36	\$141.36	\$141.36	\$141.36
Duplex	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Residential over 1" (per 1")	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Additional Connection, per 1"	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
<b>Total Single Family Residential Charge (O&amp;M + CIP)</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Residential, 5,001 - 8,000 sq. ft. lot [2]	\$58.25	\$77.61	\$101.46	\$104.33	\$107.33	\$110.49

[1] Charges based on size of residential lot. For lots over 20,000 SF, there is a charge per 1,000 SF over 20,000.

[2] Most common residential rate code.

[3] Formerly known as System Maintenance Charge.

**Table 20 – Proposed Commercial Monthly Water Rates**

<b>Flat Rate Commercial, \$ per Month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
3/4" - 5/8"	\$45.50	\$70.53	\$74.05	\$77.75	\$81.64	\$85.72
1"	\$62.85	\$97.42	\$102.29	\$107.40	\$112.77	\$118.41
1 1/2"	\$90.90	\$140.90	\$147.94	\$155.34	\$163.10	\$171.26
2"	\$184.00	\$285.20	\$299.46	\$314.43	\$330.15	\$346.66
<b>Volumetric Rate, \$ per CCF</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.39	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Meter Readiness-to-Service Charge, \$ per Month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5/8"	\$15.10	\$23.41	\$24.58	\$25.80	\$27.09	\$28.45
1"	\$37.80	\$58.59	\$61.52	\$64.60	\$67.83	\$71.22
1 1/2"	\$75.60	\$117.18	\$123.04	\$129.19	\$135.65	\$142.43
2"	\$120.95	\$187.47	\$196.85	\$206.69	\$217.02	\$227.87
3"	\$226.80	\$351.54	\$369.12	\$387.57	\$406.95	\$427.30
4"	\$378.00	\$585.90	\$615.20	\$645.95	\$678.25	\$712.17
6"	\$756.00	\$1,171.80	\$1,230.39	\$1,291.91	\$1,356.50	\$1,424.33
8"	\$1,209.60	\$1,874.88	\$1,968.62	\$2,067.06	\$2,170.41	\$2,278.93
10"	\$1,738.80	\$2,695.14	\$2,829.90	\$2,971.39	\$3,119.96	\$3,275.96
<b>Capital Improvement Plan Charge (CIP Charge)<sup>[1]</sup></b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Commercial up to 1"	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Commercial 1 1/2"	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Commercial 2"	\$73.75	\$73.75	\$141.34	\$141.34	\$141.34	\$141.34
Commercial 3"	\$138.30	\$138.30	\$265.05	\$265.05	\$265.05	\$265.05
Commercial 4"	\$230.50	\$230.50	\$441.75	\$441.75	\$441.75	\$441.75
Commercial 6"	\$461.00	\$461.00	\$883.50	\$883.50	\$883.50	\$883.50
<b>Temporary Construction Water<sup>[2]</sup></b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.43	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Fire Sprinkler Readiness Rate</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
4"	\$75.60	\$117.18	\$123.04	\$129.19	\$135.65	\$142.43
6"	\$151.20	\$234.36	\$246.08	\$258.38	\$271.30	\$284.87
8"	\$241.90	\$374.95	\$393.69	\$413.38	\$434.05	\$455.75
10"	\$347.75	\$539.01	\$565.96	\$594.26	\$623.97	\$655.17

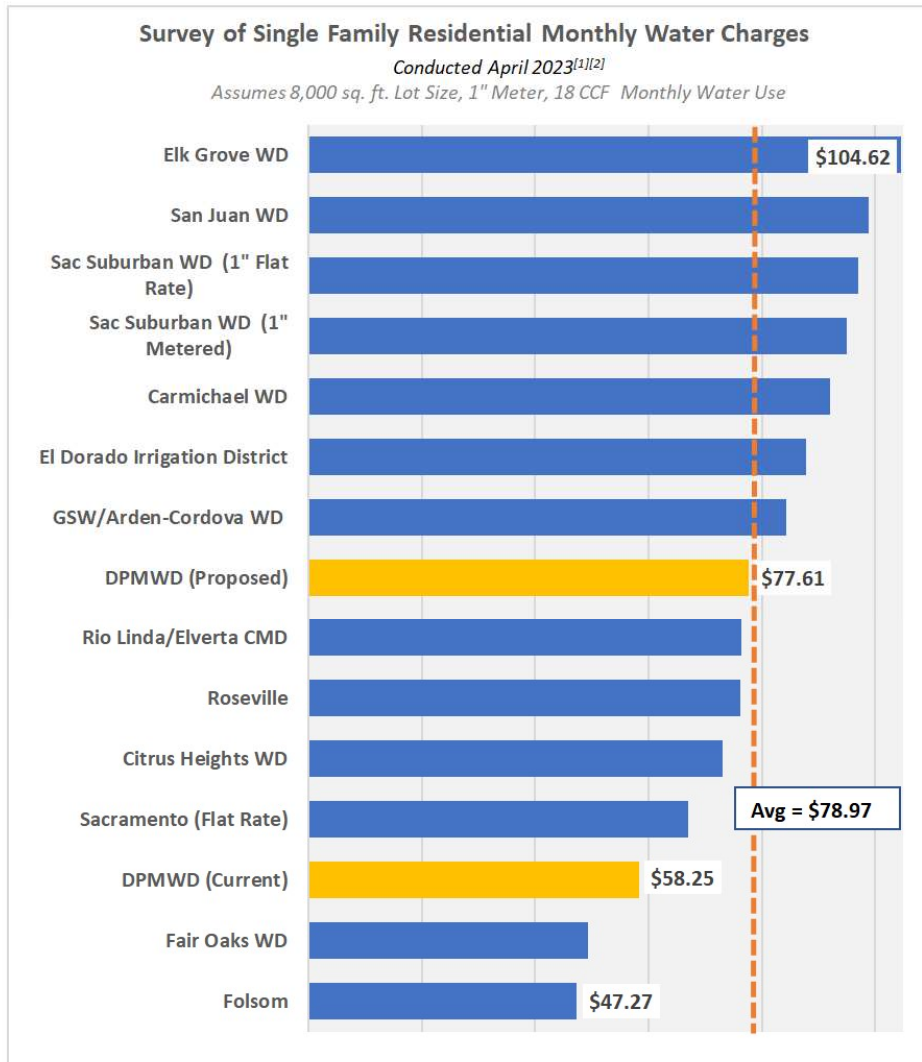
[1] Capital Improvement Plan Charge, formerly known as System Maintenance Charge.

[2] Temporary Construction Water will pay the same volumetric rate as metered commercial accounts beginning 11/1/2023.

### 4.3 Regional Residential Charge Comparison

Table 21 provides a residential water charge survey comparing Del Paso Manor Water District’s current and proposed monthly water charge with the charges of other local agencies. Even with the proposed rate increases, Del Paso Manor Water District’s typical charge remains competitive.

**Table 21 – Residential Monthly Charge Comparison Snapshot**



[1] The proposed DPMWD rates shown in the chart above only depict the first year (FY 2023/24) of proposed rate increases.

[2] This survey represents a snapshot of current rates. Some of the water agencies listed above are in, or may soon begin, the process of reviewing and updating their rates.

## 5 CONCLUSION AND RECOMMENDATIONS

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This water rate study report presents a comprehensive review of Del Paso Manor Water District's water revenue requirements and rate structures. DPMWD will need regular annual rate increases to keep up with cost inflation and be able to complete necessary capital projects while maintaining prudent reserves.

### 5.1 Conclusion

DPMWD practices sound financial planning which has provided for the financial health of the water enterprise. Historically, DPMWD has increased rate revenue to keep up with inflationary cost increases and fund system upgrades and maintenance. The adoption of these rates reflects DPMWD's commitment to stewarding financially sound utilities and providing reliable, high quality water service that will benefit the community for many years into the future.

### 5.2 Recommendations

BWA recommends that DPMWD adopt the rates shown in this report. Rates were developed as part of a collaborative process. At minimum, BWA recommends that DPMWD review and update its water rate study every five years and/or concurrent with 2009 Master Plan and Technical Memorandum Updates. Proposition 218 allows public agencies to adopt rates over a five-year planning period. Any further rate increases must be proposed as part of a new Proposition 218 process.

As mentioned above, DPMWD can re-evaluate its finances and revenue requirements in future years and adjust rates as needed based on updated projections. However, while DPMWD always has the flexibility to implement rate adjustments that are lower than adopted pursuant to Proposition 218, future rates cannot exceed adopted increases without going through the Proposition 218 process again. Rates adopted pursuant to Proposition 218 are essentially future rate caps.



# APPENDIX A

DRAFT

# Del Paso Manor Water District



DRAFT Proposed Water Rate Tables for 2023  
Water Rate Study  
7/7/2023

**Table A-1**  
**Del Paso Manor Water District**  
**Summary of Proposed Single-Family Residential Rates**

Based on Single Family Residential customer with 5,001 to 8,000 sq. ft. lot.

**Proposed Rate Increases**

	<u>Current</u>	<u>2023-24</u>	<u>2024-25</u>	<u>2025-26</u>	<u>2026-27</u>	<u>2027-28</u>
Fixed Monthly O&M Rate <sup>[1]</sup>	\$35.20	\$54.56	\$57.29	\$60.15	\$63.16	\$66.32
Capital Improvement Plan Charge <sup>[2]</sup> - Base Level	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05
Increase in CIP Charge over Base Level	\$0.00	\$0.00	\$21.12	\$21.12	\$21.12	\$21.12
Total Fixed CIP Charge	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
<b>Monthly Charge <sup>[1]</sup></b>	<b>\$58.25</b>	<b>\$77.61</b>	<b>\$101.46</b>	<b>\$104.33</b>	<b>\$107.33</b>	<b>\$110.49</b>
<i>Increase in Monthly Charge</i>		\$19.36	\$23.85	\$2.86	\$3.01	\$3.16
<i>% Monthly Charge Increase</i>		33.2%	30.7%	2.8%	2.9%	2.9%

[1] Rate for single family residence on 5,001 - 8,000 SF lot (the most common single family rate code).

[2] Capital Improvement Plan Charge, formerly known as System Maintenance Charge.

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**Table A-2**  
**Del Paso Manor Water District**  
**Description of Charges**

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**Residential Flat Rate Fixed O&M Charges:**

Residential is unmetered so these charges recover all fixed and variable O&M costs of providing water to residential customers. The O&M expenses include costs necessary for operating the DPMWD's water system as well as DPMWD administration.

**Commercial Fixed "Meter Readiness to Serve" Charges:**

These charges recover fixed O&M costs of providing water to each commercial account.

**Commercial Volumetric Charges:**

These charges recover the variable and a portion of the fixed component of O&M costs of providing water to commercial accounts. A commercial account's volumetric charge is calculated based on its water usage.

**Commercial Flat Rate Fixed Charges:**

(Applies to four remaining unmetered commercial customers.)

These flat rate charges recover all fixed and variable O&M costs of providing water to commercial unmetered customers. The O&M expenses include costs necessary for operating the DPMWD water system as well as administration.

**Capital Improvement Plan Charge (All Customers)<sup>[1]</sup>:**

This fixed charge funds capital expenditures including debt service payments for both the existing loan and the proposed \$9.23M loan. The projected debt issuance is planned to fund projects such as Well 7 Rehabilitation, Well 4 Rehabilitation, the Hydraulic Model, and 2D-3 Pipeline Replacement or approved alternate capital improvement plan

[1] Formerly known as System Maintenance Charge.

**Table A-3**  
**Del Paso Manor Water District**  
**Current Monthly Residential Water Rates<sup>[1]</sup>**

Residential <sup>[1][2]</sup>	
<b>Single Family Residential Fixed O&amp;M Rate<sup>[3]</sup></b>	<b>\$ per Month</b>
0 - 5,000 sq. ft. lot	\$26.90
5,001 - 8,000 sq. ft. lot	\$35.20
8,001 - 11,000 sq. ft. lot	\$41.40
11,001 - 14,000 sq. ft. lot	\$47.60
14,001 - 17,000 sq. ft. lot	\$53.80
17,001 - 20,000 sq. ft. lot	\$60.05
Over 20,000 sq. ft. lot	\$60.05 + \$2.07 per 1k sqft
<b>Duplex/Multi-Family Fixed O&amp;M Rate</b>	<b>\$ per Month</b>
5,001 - 8,000 sq. ft. lot	\$56.90
8,001 - 11,000 sq. ft. lot	\$63.15
11,001 - 14,000 sq. ft. lot	\$69.35
<b>Capital Improvement Plan Charge<sup>[4]</sup></b>	<b>\$ per Month</b>
Residential up to 1"	\$23.05
Residential over 1" (per 1")	\$23.05
Duplex/Multifamily (each side)	\$23.05
Additional Connection (per 1") <sup>[5]</sup>	\$23.05

[1] Rates Effective 7/1/18

[2] All single family residences pay (1) a fixed O&M rate and (2) a CIP Charge.

[3] DPMWD was formed 70+ years ago and its records do not contain the connection size for most single family residential accounts. Currently, it is cost prohibitive to physically dig and determine exact connection size for each user. Therefore, the District has and will continue to use parcel/lot size as the basis for these SFR fixed charges.

[4] Formerly known as System Maintenance Charge

[5] For ADUs or additional development on a parcel.

**Table A-4**  
**Del Paso Manor Water District**  
**Current Monthly Commercial Water Rates<sup>[1]</sup>**

<b>Commercial<sup>[1][2]</sup></b>	
<b>Flat Rate Commercial</b>	<b>\$ per Month</b>
3/4" - 5/8"	\$45.50
1"	\$62.85
1 1/2"	\$90.90
2"	\$184.00
<b>Volumetric Rate Commercial</b>	<b>\$ per CCF</b>
\$ per 100 cubic ft	\$1.39
<b>Meter Readiness-to-Serve Charge</b>	<b>\$ per Month</b>
5/8"	\$15.10
1"	\$37.80
1 1/2"	\$75.60
2"	\$120.95
3"	\$226.80
4"	\$378.00
6"	\$756.00
8"	\$1,209.60
10"	\$1,738.80
<b>Capital Improvement Plan Charge<sup>[3]</sup></b>	<b>\$ per Month</b>
Commercial up to 1" meter	\$23.05
Commercial 1 1/2" meter	\$46.10
Commercial 2" meter	\$73.75
Commercial 3" meter	\$138.30
Commercial 4" meter	\$230.50
Commercial 6" meter	\$461.00
<b>Other</b>	
<b>Temporary Construction Water</b>	<b>\$ per CCF</b>
\$ per 100 cubic ft	\$1.43
<b>Fire Sprinkler Readiness Rate<sup>[4]</sup></b>	<b>\$ per month</b>
4"	\$75.60
6"	\$151.20
8"	\$241.90
10"	\$347.75

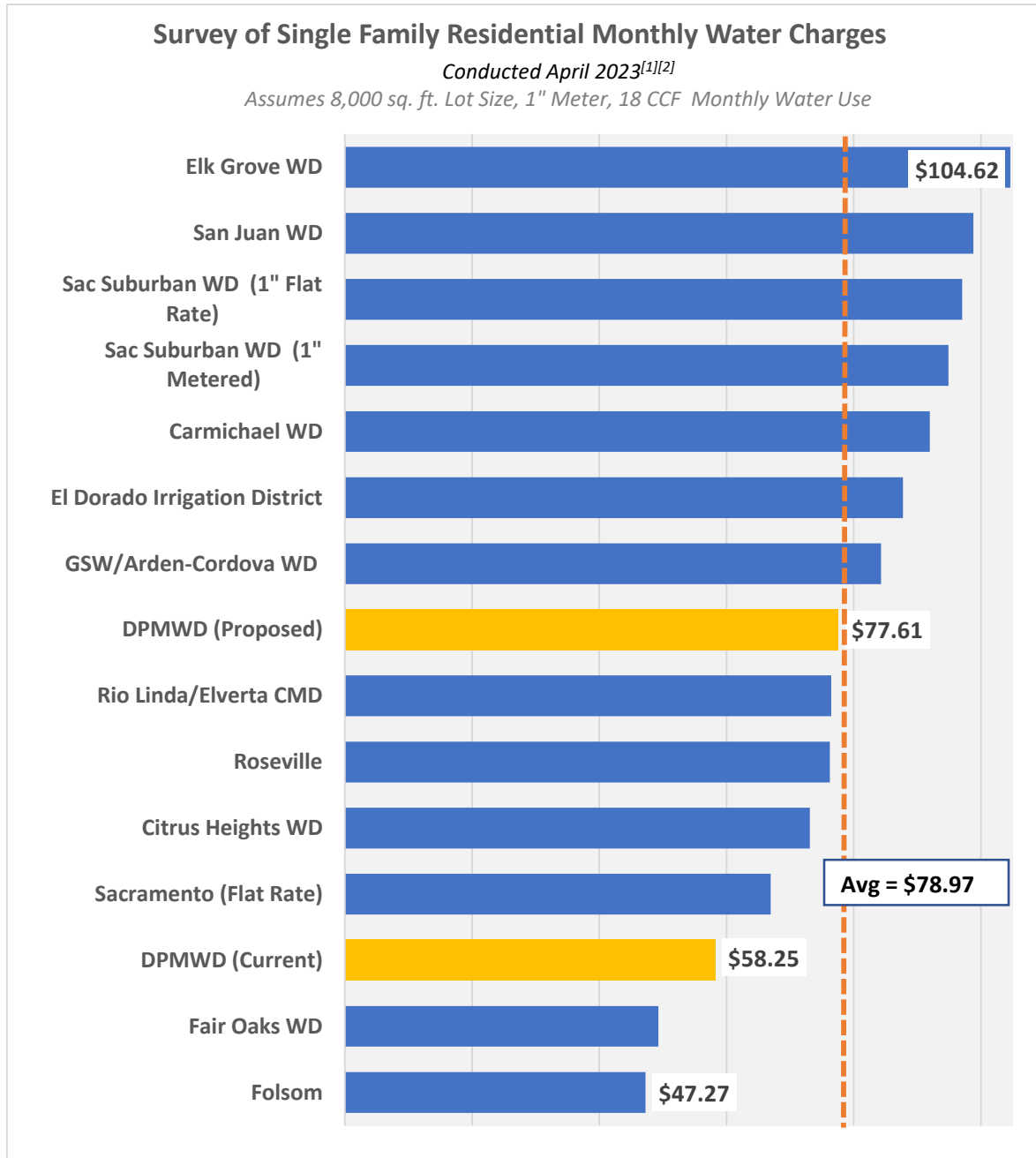
[1] Rates Effective 7/1/18

[2] Most commercial accounts pay (1) a fixed meter charge, (2) a volumetric charge, and (3) a CIP charge.

[3] Formerly known as System Maintenance Charge.

[4] Only applies to dedicated fire service lines.

**Table A-5**  
**Del Paso Manor Water District**  
**Water Rate Survey Snapshot**



[1] The proposed DPMWD rates shown in the chart above only depict the first year (FY 2023/24) of proposed rate increases.

[2] This survey represents a snapshot of current rates. Some of the water agencies listed above are in, or may soon begin, the process of reviewing and updating their rates.

**Table A-6**  
**Del Paso Manor Water District**  
**Current Water Customers**

<b>Residential Lot Size</b>	<b>Single-Family Residential Accounts</b>	<b>Duplex/ Multi-Family Accounts</b>	<b>Total Residential Accounts</b>
0 - 5,000 sq. ft. lot	2	0	2
5,001 - 8,000 sq. ft. lot	808	12	820
8,001 - 11,000 sq. ft. lot	776	61	837
11,001 - 14,000 sq. ft. lot	141	6	147
14,001 - 17,000 sq. ft. lot	23	0	23
17,001 - 20,000 sq. ft. lot	7	0	7
Over 20,000 sq. ft. lot	28	0	28
<b>Total</b>	<b>1,785</b>	<b>79</b>	<b>1,864</b>

<b>Commercial</b>	<b>Commercial Accounts</b>
Flat Rate	4
Metered Accounts (size in inches):	
5/8"	1
1"	17
1 1/2"	27
2"	40
3"	13
4"	7
6"	2
<b>Total</b>	<b>111</b>

<b>Total Water Accounts</b>	<b>1,975</b>
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**Table A-7**  
**Del Paso Manor Water District**  
**Annual Revenues**

<b>No.</b>	<b>Category</b>	Budget	Projection ->
		<b>Approved 2022-23<sup>[1]</sup></b>	<b>Projection 2023-24<sup>[2]</sup></b>
4101	Fixed Revenues	\$1,077,040	\$1,471,955
<u>4151</u>	<u>Volumetric/Usage Revenues</u>	<u>\$281,807</u>	<u>\$385,137</u>
Subtotal	O&M Revenue	\$1,358,848	\$1,857,092
<u>4501</u>	<u>Interest Income</u>		\$21,068
<u>4111</u>	<u>CIP Charge Revenue<sup>[3]</sup></u>	<u>\$595,035</u>	<u>\$598,811</u>
<b>Total Revenue</b>		<b>\$1,953,883</b>	<b>\$2,476,970</b>

[1] From the Approved 2022-23 Budget.

[2] Reflects the projected revenue from the recommended rate increases.

[3] Formerly known as System Maintenance Charge.

**Table A-8  
Del Paso Manor Water District  
Water System O&M Expenses**

	4/22/23 Actual <sup>[1]</sup>	Extrapolated to full year <sup>[2]</sup>	Budgeted 2023-24 <sup>[3]</sup>	Projected				
				2024-25	2025-26	2026-27	2027-28	
				proj. CPI <sup>[4]</sup>	5.0%	5.0%	4.0%	4.0%
<b>5102 Payroll and Payroll Taxes</b>								
5102.05 Directors Fees	11,200	30,000	22,000	23,100	24,255	25,225	26,234	
5102.10 Management Salaries	179,684	221,570	160,000	168,000	176,400	183,456	190,794	
5102.15 Field Wages	110,000	215,162	250,000	262,500	275,625	286,650	298,116	
5102.20 Office Manages Wages	48,188	70,123	78,051	81,954	86,051	89,493	93,073	
5102.30 Payroll Tax Expense	26,704	38,000	41,000	43,050	45,203	47,011	48,891	
<b>5121 Conservation</b>	6,397	7,888	3,400	3,570	3,749	3,898	4,054	
<b>5151 Power</b>								
5151.05 PG&E	329	3,000	2,000	2,100	2,205	2,293	2,385	
5151.10 SMUD	62,543	120,000	110,000	115,500	121,275	126,126	131,171	
<b>5201 Repairs &amp; Maintenance</b>								
5201.05 Leak Repairs	51,601	104,000	104,000	109,200	114,660	119,246	124,016	
5201.10 Field Equipment	186	2,000	2,000	2,100	2,205	2,293	2,385	
5201.15 Field Supplies	14,682	35,000	35,000	36,750	38,588	40,131	41,736	
5201.20 Fuel for Vehicles	2,676	9,000	9,000	9,450	9,923	10,319	10,732	
5201.25 Vehicles Repair and Maintenance	1,827	3,000	3,000	3,150	3,308	3,440	3,577	
5201.35 Chlorine	6,087	11,000	11,000	11,550	12,128	12,613	13,117	
5201.45 Well Repair and Maintenance	4,763	5,873	6,000	6,300	6,615	6,880	7,155	
5201.55 Field Staff Cellular	3,716	6,000	6,000	6,300	6,615	6,880	7,155	
5201.00 Repairs & Maintenance - Other	9,433	11,632						
5201.70 SSWD Mutual Aide Field Staff	16,388	90,000	40,000	42,000	44,100	45,864	47,699	
<b>5251 Insurance</b>								
5251.05 Liability	33,750	41,617	40,000	42,000	44,100	45,864	47,699	
5251.10 Property	3,915	4,828	4,500	4,725	4,961	5,160	5,366	
5251.15 Workers Compensation	6,516	15,000	15,000	15,750	16,538	17,199	17,887	
<b>5301 Lab Testing</b>	5,756	7,098	7,000	7,350	7,718	8,026	8,347	
<b>5351 Engineering</b>	237,280	292,592	250,000	262,500	275,625	286,650	298,116	
<b>5451 City Water (Diversion Billing)</b>	3,231	6,000	7,000	7,350	7,718	8,026	8,347	
<b>5452 Backflow Program</b>	852	2,000	2,000	2,100	2,205	2,293	2,385	
<b>6151 Office Expense</b>								
6151.05 District Office Lease	24,980	33,000	32,000	33,600	35,280	36,691	38,159	
6151.10 Phone Service	3,276	4,300	4,500	4,725	4,961	5,160	5,366	
6151.15 Internet Provider	3,206	5,500	5,000	5,250	5,513	5,733	5,962	
6151.20 Sewer & Garbage (Lusk)	1,430	1,763	2,000	2,100	2,205	2,293	2,385	
6151.21 Miscellaneous (Office Other)	3,589	4,426						
6151.25 Postage	11,663	14,382	20,000	21,000	22,050	22,932	23,849	
6151.30 Printing	0	1,000	1,000	1,050	1,103	1,147	1,192	
6151.35 Computers and Supplies	4,085	5,037	3,500	3,675	3,859	4,013	4,174	
6151.40 Office Supplies	4,817	7,500	7,500	7,875	8,269	8,600	8,943	
6151.45 Answering Service	4,302	5,500	5,500	5,775	6,064	6,306	6,559	
6151.50 Office Furniture	0	2,000	2,000	2,100	2,205	2,293	2,385	
6151.55 Payroll Preparation	1,437	2,000	2,000	2,100	2,205	2,293	2,385	
6151.60 GASB 75 Valuations	675	2,000	2,000	2,100	2,205	2,293	2,385	
6151.70 Janitorial	1,440	2,500	2,500	2,625	2,756	2,867	2,981	
6152.00 Building Maintenance	628	2,000	2,000	2,100	2,205	2,293	2,385	
<b>6171 Bank Fees</b>	1,780	2,195	2,000	2,100	2,205	2,293	2,385	
<b>6251 Audit</b>	0	12,000	12,000	12,600	13,230	13,759	14,310	
<b>6255 Election Related</b>	1,887	3,000	3,000	3,150	3,308	3,440	3,577	
<b>6301 Legal</b>	163,555	236,000	200,000	210,000	220,500	229,320	238,493	

**Table A-8  
Del Paso Manor Water District  
Water System O&M Expenses - Continued**

6401	Misc.	462	5,000	5,000	5,250	5,513	5,733	5,962
6451	Pers Retirement	76,350	100,500	100,500	105,525	110,801	115,233	119,843
6501	Employee Health (JPIA & CalPERS)	59,698	80,000	90,000	94,500	99,225	103,194	107,322
6502	Retiree Health Ben (CalPERS)	49,888	70,000	80,000	84,000	88,200	91,728	95,397
6551	Conference & Travel	0	10,000	10,000	10,500	11,025	11,466	11,925
6561	Association Dues							
6561.05	ACWA	9,735	12,004	11,000	11,550	12,128	12,613	13,117
6561.10	AWWA	480	700	700	735	772	803	835
6561.15	CSDA	7,901	9,743	8,300	8,715	9,151	9,517	9,897
6561.20	CRWA	864	1,065	1,000	1,050	1,103	1,147	1,192
6561.25	RWA	4,106	9,700	9,500	9,975	10,474	10,893	11,328
6561.30	SGA	21,187	26,126	25,000	26,250	27,563	28,665	29,812
6561.35	SAWWA	0	1,000	1,000	1,050	1,103	1,147	1,192
6561.00	Professional Dues - Other	1,562	1,926	2,000	2,100	2,205	2,293	2,385
6601	Professional Admin / Regulatory Fees							
6601.05	SWRCB Annual Fees	14,740	18,176	16,000	16,800	17,640	18,346	19,079
6601.10	NDPES Permit	0	1,500	1,500	1,575	1,654	1,720	1,789
6601.15	Cal Pers Actuarial Reports	700	863	700	735	772	803	835
6601.25	Air Quality Permits	0	5,000	5,000	5,250	5,513	5,733	5,962
6601.30	Encroachment Permits	0	500	500	525	551	573	596
6601.35	CPA Fees	12,780	18,000	18,000	18,900	19,845	20,639	21,464
6601.00	Professional Admin Fees - Other	77,953	96,124	60,000	63,000	66,150	68,796	71,548
6601.50	Public Relations	0	30,000	30,000	31,500	33,075	34,398	35,774
6601.55	Salary & Staffing Level Study	10,000	12,331	0	0	0	0	0
6610	Certification / Continued Education	382	6,000	5,000	5,250	5,513	5,733	5,962
	Equipment							
	Half Ton Truck			60,000				
<b>Total</b>		<b>1,429,242</b>	<b>2,214,745</b>	<b>2,057,151</b>	<b>2,097,009</b>	<b>2,201,859</b>	<b>2,289,933</b>	<b>2,381,531</b>

[1] Total actual expenditure through 4/22/23 (not audited).

[2] Max of 'actuals so far in FY 22/23 extrapolated to full year' & 'FY 22/23 Budget'

[3] O&M data provided by District staff.

[4] "CPI" = Consumer Price Index

**Table A-9**  
**Del Paso Manor Water District**  
**Capital Improvement Plan**

Fund - Category	Project	Adopted CIP <sup>[1]</sup>				
		2023-24	2024-25	2025-26	2026-27	2027-28
<b>Core Projects<sup>[2]</sup></b>						
	Well 7 Rehabilitation	\$2,986,200	\$1,493,100	\$1,493,100		
	Well 4 Rehabilitation	\$958,000	\$479,000	\$479,000		
	Hydraulic Model	\$40,000	\$20,000	\$20,000		
	2D-3 Pipeline Rpmt.	\$5,250,000	\$2,625,000	\$2,625,000		
		<b>\$9,234,200</b>	<b>\$4,617,100</b>	<b>\$4,617,100</b>		
<b>6760 - Pipes</b>						
	6760.05 Miscellaneous		\$50,000			
<b>6770 - Wells</b>						
	6770.05 #2 New Well/Well Addition/Generators		\$950,000			
	6770.05 #6B New Well/Well Addition/Generators		\$50,000			
	6770.05 #9 New Well/Well Addition/Generators		\$360,000			
<b>Equipment</b>						
	2022 Chevrolet 2500 Half Ton <sup>[3]</sup>					
<b>Repair and Replacement</b>					\$270,000	\$270,000
<b>Total Capital Projects</b>		<b>\$1,410,000</b>	<b>\$4,617,100</b>	<b>\$4,617,100</b>	<b>\$270,000</b>	<b>\$270,000</b>

[1] Because the adopted CIP only contains project costs for the first year of the five-year project, this study assumes that the \$9.234M Core Projects' costs are allocated evenly across the second and third year of the projection. The study also assumes \$270,000 in repair and replacement projects in the fourth and fifth years of the projection. Budgeted project costs for 2023/24 provided by DPMWD.

[2] Approved funding is for the listed core projects or alternatives previously approved by the board.

[3] The \$60,000 cost of this item is included in O&M expenses.

**Table A-10**  
**Del Paso Manor Water District**  
**Debt Service - Existing and Proposed**

**Del Paso Manor WD**  
**Debt Service**

FY	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Existing Debt:</b>						
Bank Loan - Refinanced 2020						
Principal	\$183,000	\$189,000	\$194,000	\$200,000	\$220,200	\$220,200
Interest	\$141,278	\$135,330	\$129,187	\$122,883	\$102,511	\$102,511
<i>Subtotal of Existing Loan</i>	<i>\$324,278</i>	<i>\$324,330</i>	<i>\$323,187</i>	<i>\$322,883</i>	<i>\$322,711</i>	<i>\$322,711</i>
<b>Proposed Debt:</b>						
<u>One Loan, \$9.23M<sup>[1]</sup></u>		<b>\$9,430,000</b>				
Principal	\$0	\$0	\$168,138	\$174,863	\$181,858	\$189,132
Interest	\$0	\$0	\$377,200	\$370,474	\$363,480	\$356,206
<i>Subtotal of New Loan</i>	<i>\$0</i>	<i>\$0</i>	<i>\$545,338</i>	<i>\$545,338</i>	<i>\$545,338</i>	<i>\$545,338</i>
<b>Total Debt Service:</b>	<b>\$324,278</b>	<b>\$324,330</b>	<b>\$868,525</b>	<b>\$868,221</b>	<b>\$868,049</b>	<b>\$868,049</b>

[1] New debt issuance assumes \$200,000 in issuances costs, 4% annual interest, and a 30 year pay back period.  
(The debt proceeds will be \$9.23M and the total issuance amount will be \$9.43M with issuance costs included.)

**Table A-11**  
**Del Paso Manor Water District**  
**Reserves Balance**

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**District Reserve Balance**

<b>Fund</b>	<b>Balance 6/30/22</b>
Local Agency Investment Fund	\$2,252,932
Bank Balance	\$894,522
<b>Total</b>	<b>\$3,147,454</b>

[1] Source: DPMWD accountant.

**Table A-12  
Del Paso Manor Water District  
Proposed Residential Rates**

<b>O&amp;M Rates Increase</b>		<b>55%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>
<b>Single Family O&amp;M Rate, \$ per Month<sup>[1]</sup></b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
0 - 5,000 sq. ft. lot	\$26.90	\$41.70	\$43.78	\$45.97	\$48.27	\$50.68
5,001 - 8,000 sq. ft. lot <sup>[2]</sup>	\$35.20	\$54.56	\$57.29	\$60.15	\$63.16	\$66.32
8,001 - 11,000 sq. ft. lot	\$41.40	\$64.17	\$67.38	\$70.75	\$74.28	\$78.00
11,001 - 14,000 sq. ft. lot	\$47.60	\$73.78	\$77.47	\$81.34	\$85.41	\$89.68
14,001 - 17,000 sq. ft. lot	\$53.80	\$83.39	\$87.56	\$91.94	\$96.53	\$101.36
17,001 - 20,000 sq. ft. lot	\$60.05	\$93.08	\$97.73	\$102.62	\$107.75	\$113.14
Over 20,000 sq. ft. lot	\$60.05	\$93.08	\$97.73	\$102.62	\$107.75	\$113.14
Per 1k sq. ft. of lot above 20k <sup>[1]</sup>	\$2.07	\$3.21	\$3.37	\$3.54	\$3.71	\$3.90
<b>Duplex/Multi-Family O&amp;M Rate, \$ per Month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5,001 - 8,000 sq. ft. lot	\$56.90	\$88.20	\$92.60	\$97.23	\$102.10	\$107.20
8,001 - 11,000 sq. ft. lot	\$63.15	\$97.88	\$102.78	\$107.92	\$113.31	\$118.98
11,001 - 14,000 sq. ft. lot	\$69.35	\$107.49	\$112.87	\$118.51	\$124.44	\$130.66
<b>Capital Improvement Plan Charge (CIP Charge) [3]</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Residential, up to 1" <sup>[2]</sup>	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Residential, 1.25"	\$28.81	\$34.58	\$66.26	\$66.26	\$66.26	\$66.26
Residential, 1.5"	\$34.58	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Residential, 2"	\$46.10	\$73.76	\$141.36	\$141.36	\$141.36	\$141.36
Duplex	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Residential over 1" (per 1")	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Additional Connection, per 1"	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
<b>Total Single Family Residential Charge (O&amp;M + CIP)</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Residential, 5,001 - 8,000 sq. ft. lot [2]	\$58.25	\$77.61	\$101.46	\$104.33	\$107.33	\$110.49

[1] Charges based on size of residential lot. For lots over 20,000 SF, there is a charge per 1,000 SF over 20,000.

[2] Most common residential rate code.

[3] Formerly known as System Maintenance Charge.

**Table A-13  
Del Paso Manor Water District  
Proposed Commercial Rates**

<b>O&amp;M Rates Increase</b>		<b>55%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>
<b>Flat Rate Commercial, \$ per Month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
3/4" - 5/8"	\$45.50	\$70.53	\$74.05	\$77.75	\$81.64	\$85.72
1"	\$62.85	\$97.42	\$102.29	\$107.40	\$112.77	\$118.41
1 1/2"	\$90.90	\$140.90	\$147.94	\$155.34	\$163.10	\$171.26
2"	\$184.00	\$285.20	\$299.46	\$314.43	\$330.15	\$346.66
<b>Volumetric Rate, \$ per CCF</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.39	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Meter Readiness-to-Service Charge, \$ per Month</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
5/8"	\$15.10	\$23.41	\$24.58	\$25.80	\$27.09	\$28.45
1"	\$37.80	\$58.59	\$61.52	\$64.60	\$67.83	\$71.22
1 1/2"	\$75.60	\$117.18	\$123.04	\$129.19	\$135.65	\$142.43
2"	\$120.95	\$187.47	\$196.85	\$206.69	\$217.02	\$227.87
3"	\$226.80	\$351.54	\$369.12	\$387.57	\$406.95	\$427.30
4"	\$378.00	\$585.90	\$615.20	\$645.95	\$678.25	\$712.17
6"	\$756.00	\$1,171.80	\$1,230.39	\$1,291.91	\$1,356.50	\$1,424.33
8"	\$1,209.60	\$1,874.88	\$1,968.62	\$2,067.06	\$2,170.41	\$2,278.93
10"	\$1,738.80	\$2,695.14	\$2,829.90	\$2,971.39	\$3,119.96	\$3,275.96
<b>Capital Improvement Plan Charge (CIP Charge)<sup>[1]</sup></b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
Commercial up to 1"	\$23.05	\$23.05	\$44.17	\$44.17	\$44.17	\$44.17
Commercial 1 1/2"	\$46.10	\$46.10	\$88.35	\$88.35	\$88.35	\$88.35
Commercial 2"	\$73.75	\$73.75	\$141.34	\$141.34	\$141.34	\$141.34
Commercial 3"	\$138.30	\$138.30	\$265.05	\$265.05	\$265.05	\$265.05
Commercial 4"	\$230.50	\$230.50	\$441.75	\$441.75	\$441.75	\$441.75
Commercial 6"	\$461.00	\$461.00	\$883.50	\$883.50	\$883.50	\$883.50
<b>Temporary Construction Water<sup>[2]</sup></b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
\$ per 100 cubic ft	\$1.43	\$2.15	\$2.26	\$2.38	\$2.49	\$2.62
<b>Fire Sprinkler Readiness Rate</b>	<b>Current</b>	<b>11/1/2023</b>	<b>7/1/2024</b>	<b>7/1/2025</b>	<b>7/1/2026</b>	<b>7/1/2027</b>
4"	\$75.60	\$117.18	\$123.04	\$129.19	\$135.65	\$142.43
6"	\$151.20	\$234.36	\$246.08	\$258.38	\$271.30	\$284.87
8"	\$241.90	\$374.95	\$393.69	\$413.38	\$434.05	\$455.75
10"	\$347.75	\$539.01	\$565.96	\$594.26	\$623.97	\$655.17

[1] Capital Improvement Plan Charge, formerly known as System Maintenance Charge.

[2] Temporary Construction Water will pay the same volumetric rate as metered commercial accounts beginning 11/1/2023.



**Table A-14**  
**Del Paso Manor Water District**  
**Cash Flow Projection**

	2022-23	Projection-> 2023-24 <sup>[1]</sup>	2024-25	2025-26	2026-27	2027-28
<b>BEGINNING FUND BALANCE</b>	<b>\$3,147,454</b>	<b>\$2,106,752</b>	<b>\$10,022,242</b>	<b>\$5,891,728</b>	<b>\$1,725,939</b>	<b>\$1,893,795</b>
<b>REVENUE</b> <sup>[1]</sup>						
Fixed Rate Revenue	1,077,040	1,471,955	1,752,883	1,840,527	1,932,554	2,029,181
Volumetric Rate Revenue	281,807	385,137	458,641	481,573	505,652	530,935
CIP Charge Revenue <sup>[3]</sup>	595,035	598,811	1,140,373	1,140,373	1,140,373	1,140,373
Interest Earnings <sup>[2]</sup>	31,475	21,068	100,222	58,917	17,259	18,938
<b>Total Operating Revenue</b>	<b>\$1,985,357</b>	<b>\$2,476,970</b>	<b>\$3,452,120</b>	<b>\$3,521,391</b>	<b>\$3,595,838</b>	<b>\$3,719,427</b>
New Debt Proceeds		\$9,230,000				
<b>Total Other Revenue</b>	<b>\$0</b>	<b>\$9,230,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTAL REVENUE</b>	<b>\$1,985,357</b>	<b>\$11,706,970</b>	<b>\$3,452,120</b>	<b>\$3,521,391</b>	<b>\$3,595,838</b>	<b>\$3,719,427</b>
<b>O&amp;M EXPENSE</b>						
Total Operating & Maintenance Expense	\$2,214,745	\$2,057,151	\$2,097,009	\$2,201,859	\$2,289,933	\$2,381,531
<b>TOTAL O&amp;M EXPENSE</b>	<b>\$2,214,745</b>	<b>\$2,057,151</b>	<b>\$2,097,009</b>	<b>\$2,201,859</b>	<b>\$2,289,933</b>	<b>\$2,381,531</b>
<i>Net Operating Revenues</i>	<i>(229,388)</i>	<i>419,819</i>	<i>1,355,111</i>	<i>1,319,532</i>	<i>1,305,905</i>	<i>1,337,896</i>
Annual Surplus/(Deficit)	(229,388)	9,649,819	1,355,111	1,319,532	1,305,905	1,337,896
Total Debt Service	324,278	324,330	868,525	868,221	868,049	868,049
Capital Expenditure	487,036	1,410,000	4,617,100	4,617,100	270,000	270,000
<b>ENDING FUND BALANCE</b>	<b>\$2,106,752</b>	<b>\$10,022,242</b>	<b>\$5,891,728</b>	<b>\$1,725,939</b>	<b>\$1,893,795</b>	<b>\$2,093,642</b>
# Months O&M in Reserves	<i>11 months</i>	<i>58 months</i>	<i>34 months</i>	<i>9 months</i>	<i>10 months</i>	<i>11 months</i>
Reserve Policy Minimum <sup>[4]</sup>	\$1,107,372	\$1,028,576	\$1,048,504	\$1,100,929	\$1,144,967	\$1,190,765
Target Met	yes	yes	yes	yes	yes	yes
<i>Debt Service Coverage</i> <sup>[5]</sup> ( $\geq 1.20x$ )		<i>1.29</i>	<i>1.56</i>	<i>1.52</i>	<i>1.50</i>	<i>1.54</i>

[1] 2023/24 revenue projections based on new rates effective November 1, 2023

[2] Interest earnings - 1% estimated earnings on beginning fund balance

[3] 2022/23 value is estimated based on 2021/22 actual revenue generated. 2023/24 value provided by District staff.

[4] Minimum O&M reserve policy requires 6 months of O&M expenses (not including that year's debt service).

[5] The 2018 debt covenant, pg 56, prescribes that net revenue must equal 120% of the annual debt service in the fiscal year.

**Table A-15**  
**Del Paso Manor Water District**  
**Residential Flat Rate Lot Size Water Use Estimate**

<b>Residential Lot Size</b>	<b>Estimated Average Lot Size SF</b>	<b>2023/24 Fixed O&amp;M Charge</b>	<b>Estimated Base Share of Charge</b>	<b>Estimated Lot Size Share of Charge</b>	<b>Estimated Outdoor Lot Use CCF<sup>[1]</sup></b>
0-5,000 SF	2,500	\$41.70	\$33.67	\$8.03	3.7
5,001-8,000 SF <sup>[2]</sup>	6,500	\$54.56	\$33.69	\$20.87	9.7
8,001-11,000 SF	9,500	\$64.17	\$33.67	\$30.50	14.2
11,001-14,000 SF	12,500	\$73.78	\$33.65	\$40.13	18.7
14,001-17,000 SF	15,500	\$83.39	\$33.63	\$49.76	23.1
17,001-20,000 SF	18,500	\$93.08	\$33.69	\$59.39	27.6
Over 20,000 SF, +\$3.21/1,000 SF	Varies	Varies	Varies	Varies	Varies
2023/24 per CCF Chg:	\$2.15				
\$/1,000 SF Lot Charge:	\$3.21				

[1] Average monthly outdoor use per 1,000 SF lot is 1.49 CCF which is consistent with efficient landscaping (13 to 14 gallons/SF/year).

[2] Average monthly CCF use for a typical 5,001 - 8,000 SF Residential lot (2018 Rate Study): 18.0

**Table A-16**  
**Del Paso Manor Water District**  
**Capital Improvement Plan Charge Calculation**

	<b>Current</b>	<b>Budget</b>				
	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>
Base Capital Charge Requirement	\$595,035	\$598,811	\$595,035	\$595,035	\$595,035	\$595,035
Equivalent Charge Units	2,151	2,165	2,151	2,151	2,151	2,151
<i>Current Monthly CIP Charge</i> <sup>[1]</sup>	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05
Estimated New Debt Service	\$0	\$0	\$545,338	\$545,338	\$545,338	\$545,338
<i>Monthly CIP Chg Increase for Debt Service</i> <sup>[1]</sup>	\$0.00	\$0.00	\$21.12	\$21.12	\$21.12	\$21.12
Total Annual Capital Requirement	\$595,035	\$598,811	\$1,140,373	\$1,140,373	\$1,140,373	\$1,140,373
<b>Monthly CIP Charge Calculation</b> <sup>[1]</sup>						
Current Monthly CIP Charge	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05	\$23.05
Monthly Charge Increase for Debt	\$0.00	\$0.00	\$21.12	\$21.12	\$21.12	\$21.12
<b>Total Monthly CIP Charge</b> <sup>[1]</sup>	<b>\$23.05</b>	<b>\$23.05</b>	<b>\$44.17</b>	<b>\$44.17</b>	<b>\$44.17</b>	<b>\$44.17</b>

[1] Base CIP Charge for residential or commercial user with service size up to 1". CIP Charges for larger meters are set proportional to the flow capacity of the meter as rated by American Water Works Association.

**Table A-17**  
**Del Paso Manor Water District**  
**Commercial Fixed - Variable Revenue Split**

<b>Commercial Fixed O&amp;M Rate "Meter RTS" Revenues</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>	
	<u>Accounts</u>						
Flat Rate	4	\$4,599	\$7,128	\$7,485	\$7,859	\$8,252	\$8,665
<i>Metered Accounts (inches)</i>							
5/8"	1	\$181	\$281	\$295	\$310	\$325	\$341
1"	17	\$7,711	\$11,952	\$12,550	\$13,177	\$13,836	\$14,528
1.5"	27	\$24,494	\$37,966	\$39,865	\$41,858	\$43,951	\$46,148
2"	40	\$58,056	\$89,987	\$94,486	\$99,210	\$104,171	\$109,380
3"	13	\$35,381	\$54,840	\$57,582	\$60,461	\$63,484	\$66,659
4"	7	\$31,752	\$49,216	\$51,676	\$54,260	\$56,973	\$59,822
6"	2	\$18,144	\$28,123	\$29,529	\$31,006	\$32,556	\$34,184
<b>Total Commercial Fixed O&amp;M Revenue</b>	<b>111</b>	<b>\$180,318</b>	<b>\$279,493</b>	<b>\$293,468</b>	<b>\$308,141</b>	<b>\$323,548</b>	<b>\$339,727</b>
	<u>Accounts</u>						
Flat Rate	4	\$1,991	\$1,991	\$3,816	\$3,816	\$3,816	\$3,816
<i>Metered Accounts (inches)</i>							
5/8"	1	\$277	\$277	\$530	\$530	\$530	\$530
1"	17	\$4,702	\$4,702	\$9,012	\$9,012	\$9,012	\$9,012
1.5"	27	\$14,936	\$14,936	\$28,625	\$28,625	\$28,625	\$28,625
2"	40	\$35,400	\$35,400	\$67,843	\$67,843	\$67,843	\$67,843
3"	13	\$21,575	\$21,575	\$41,348	\$41,348	\$41,348	\$41,348
4"	7	\$19,362	\$19,362	\$37,107	\$37,107	\$37,107	\$37,107
6"	2	\$11,064	\$11,064	\$21,204	\$21,204	\$21,204	\$21,204
<b>Total Commercial Fixed CIP Revenue</b>	<b>111</b>	<b>\$109,307</b>	<b>\$109,307</b>	<b>\$209,485</b>	<b>\$209,485</b>	<b>\$209,485</b>	<b>\$209,485</b>
<b>Commercial Fixed Rate Revenues</b>							
Fixed O&M Revenue		\$180,318	\$279,493	\$293,468	\$308,141	\$323,548	\$339,727
CIP Revenue		\$109,307	\$109,307	\$209,485	\$209,485	\$209,485	\$209,485
<b>Total Commercial Fixed Revenues</b>		<b>\$289,625</b>	<b>\$388,800</b>	<b>\$502,953</b>	<b>\$517,626</b>	<b>\$533,033</b>	<b>\$549,212</b>
<b>Commercial Volumetric Revenues</b>							
Volumetric Revenue Requirement from Cash Flow		281,807	385,137	458,641	481,573	505,652	530,935
<b>Total Commercial Volumetric Revenues</b>		<b>\$281,807</b>	<b>\$385,137</b>	<b>\$458,641</b>	<b>\$481,573</b>	<b>\$505,652</b>	<b>\$530,935</b>
<b>Total Commercial Revenue</b>		<b>\$571,433</b>	<b>\$773,937</b>	<b>\$961,595</b>	<b>\$999,200</b>	<b>\$1,038,686</b>	<b>\$1,080,147</b>
<b>Fixed Percent</b>		51%	50%	52%	52%	51%	51%
<b>Variable Percent</b>		49%	50%	48%	48%	49%	49%

**Table A-18**  
**Del Paso Manor Water District**  
**Flat Rate to Metered Customer Charge Comparison**

	<b>Current</b>					
	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>
<b>Flat Rate Residential Customer</b>						
Flat Rate 5,001 -8,000 SF Lot	35.20	54.56	57.29	60.15	63.16	66.32
Est. Avg Use 18 CCF <sup>[1]</sup>	incl	incl	incl	incl	incl	incl
CIP Charge	23.05	23.05	44.17	44.17	44.17	44.17
<b>Total Monthly Charge</b>	<b>58.25</b>	<b>77.61</b>	<b>101.46</b>	<b>104.32</b>	<b>107.33</b>	<b>110.49</b>
<b>Metered Commercial Customer</b>						
5/8" Meter Charge	15.10	23.41	24.58	25.8	27.09	28.45
Water Charge - 18 CCF	25.02	38.70	40.68	42.84	44.82	47.16
CIP Charge	23.05	23.05	44.17	44.17	44.17	44.17
Less Est. Meter Costs <sup>[2]</sup>	(4.92)	(7.55)	(7.97)	(8.49)	(8.75)	(9.29)
<b>Equivalent Monthly Charge</b>	<b>58.25</b>	<b>77.61</b>	<b>101.46</b>	<b>104.32</b>	<b>107.33</b>	<b>110.49</b>

[1] Average consumption of 18 CCF per month by a residential customer with 5,001 - 8,000 SF Lot from 2018 Water Rate Study.

[2] Includes estimated meter reading, maintenance, and replacement costs.