

ATTACHMENT A

PASADENA WATER AND POWER

PROPOSED ADJUSTMENTS TO THE WATER RATES

Updated: January 2019

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1 INTRODUCTION

This report was prepared to document the results of an internal water cost-of-service analysis and rate design study completed by the City of Pasadena Water and Power Department (“PWP”). It provides a detailed description of the current water rate structure and the proposed adjustments to the water rates.

The main objectives of the study:

- a) Implement the formal settlement terms approved by the Los Angeles County Superior Court (“Court”) in the class-action lawsuit *Howard Jarvis Taxpayer Association et al. vs City of Pasadena* regarding the rate differential for Commodity Charges and Distribution and Customer (“D&C”) charges applied to customers outside of the city limits; and
- b) Develop a fiscally responsible three-year financial plan for the Water Fund to:
 - (i) allocate the revenue requirements to the various customer classes in accordance with the cost-of-service analysis
 - (ii) evaluate the adequacy of projected D&C and Commodity revenues under existing rates to meet projected revenue requirements; and
 - (iii) make recommendations for D&C and Commodity revenue adjustments as determined by the analysis.

1.1 BACKGROUND

PWP has been distributing water to the City of Pasadena’s utility customers since 1912. The area currently served by PWP encompasses approximately 26.2 square miles, including 3.2 square miles that lie outside of the incorporated city boundary, with 37,554 water meter connections. A total of 31,171 meters, or 83% of services, are within the city limits and 6,383 meters, or 17% of services, are outside the city limits. For the period starting July 2017 through June 2018 (“FY 2018”), PWP provided water service to a total population of approximately 170,000.

The major facilities of the water system consist of:

- (i) 17 groundwater wells (of which nine are active) with a production capacity of 33,800 acre-feet per year
- (ii) five imported water connections on the Metropolitan Water District (“MWD”) Upper Feeder
- (iii) 110 million gallons of treated water storage capacity in 14 storage reservoirs
- (iv) 19 booster pumping stations supplying 23 unique pressure zones
- (v) 21 chlorination stations
- (vi) 30 pressure-reducing stations
- (vii) approximately 520 miles of transmission and distribution pipelines. A majority of the water system infrastructure was installed between 1912 and 1965 and consists largely of unlined cast-iron pipelines.

There were several requirements to complete an update of the water cost-of-service and rate design analysis. First, in October 2018, the City of Pasadena (“City”) completed a negotiated settlement of a lawsuit with the Howard Jarvis Taxpayers Association where it was agreed that the City would eliminate the outside city rate differential for the D&C and Commodity Charges within one year.

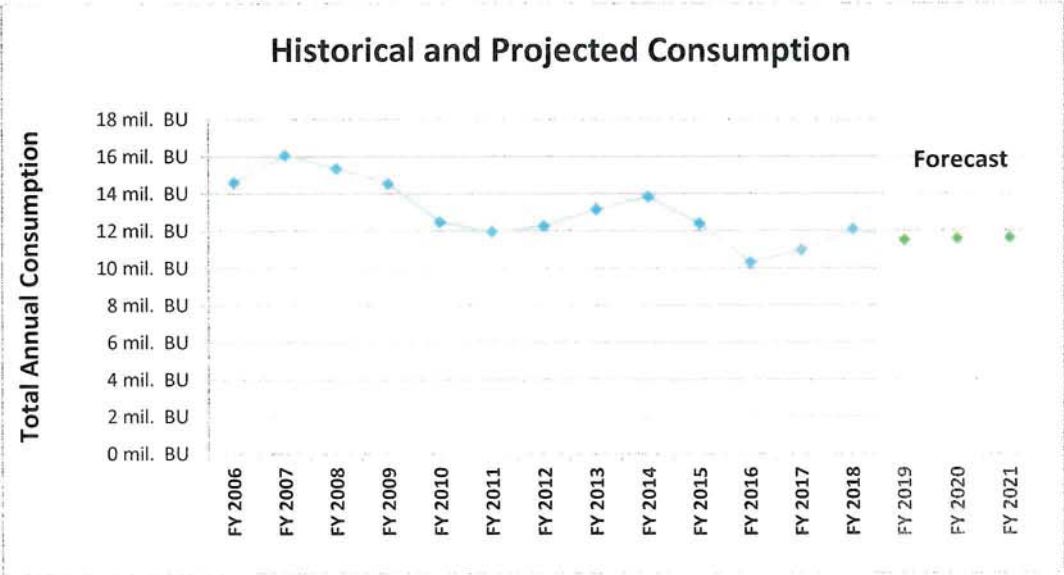
Within the same year, the City is required to adopt a Capital Improvements Charge rate that eliminates the differential. However, if any differential is imposed on customers of PWP who reside outside the City of Pasadena, the CIC shall be calculated based on bona fide projected costs that the City would not otherwise incur when it makes capital improvements but for the fact that such improvements are located in unincorporated County of Los Angeles. In addition, if the approved rates do eliminate the twenty-five percent (25%) surcharge, the City agrees it will not adopt a rate differential for Commodity or D&C charges unless the rationale for the differential applies consistently to customer classes without regard to whether the customers are located inside or outside the city limits. The City also agrees not to base any differential on the theory that inside city customers have superior rights to the City's adjudicated groundwater rights.

Secondly, the continuing statewide drought over the past few years has made it necessary to increase water conservation efforts, and Pasadena's customers have responded favorably. The State had previously imposed a mandatory reduction in consumption, resulting in further reduction in usage. With the continued reduction of approximately 20-30%, the coverage of fixed costs with existing rate revenues is no longer sustainable. The focus of this analysis is on the Commodity charge and the D&C charge because these two rate components provide revenue to support the operating budget of the Water System.

PWP's last cost-of-service study was conducted in 2008. At the time of the study, the projected five-year water sales averaged approximately 15 million billing units annually. Actual water sales have been consistently lower than were projected due to the recession that followed completion of the study and the strong response by Pasadena customers to water conservation measures and the continuing statewide drought.

The current view of water consumption for the next several years is one of relatively flat growth (Chart 1). Economic development in Pasadena will elevate consumption but this is expected to be offset by the "new normal" perspective of efficient usage by customers.

Chart 1: Historical and Projected Water Consumption (in Billing Units)



This document serves as the record for the analysis performed that has led to a recommended water rate update. Policy issues that were reviewed as part of the cost analysis and rate design were:

- Inside/Outside city rate differentials
- Seasonal rates
- Revenue adequacy and requirements

1.2 COST-OF-SERVICE PRINCIPLES

In general, water rates must adhere to cost-of-service principles. PWP’s rate setting process conforms to cost-of-service standards set by the American Water Works Association as follows:

- In providing adequate service to its customers, each utility must receive sufficient total revenue to ensure proper operation and maintenance, development and perpetuation of the system, and preservation of the utility’s financial integrity;
- Development of the rate structure should recover the cost of providing the service to various classes of customers in an equitable manner.

In parallel with the annual budgeting process, PWP conducts an internal analysis of its revenue requirements and cost of service that is consistent with industry-accepted cost-of-service principles and legal requirements.

1.3 CURRENT RATES

PWP’s current rate structure is composed of three water service components: the Commodity charge, the D&C charge, and the CIC. The Commodity charge and CIC are both volumetric charges and the D&C charge is a fixed monthly or bi-monthly charge that varies by meter size. The D&C charge also includes the Fire Protection Surcharge (“FPS”). Currently, all three charges include varied rates for inside and outside city customers; and the Commodity charge and CIC include seasonal winter and summer rates.

Commodity Rates

The current water block allocation and rates are presented below. Table 1 shows the current water block allocations; Table 2 shows the current existing Commodity rates.

Table 1: Current Water Block Allocations by Meter Size

Meter Size	Block 1	Block 2	Block 3	Block 4
5/8"-3/4"	0 - 8	9 - 24	25 - 34	35+
1"	0 - 12	13 - 40	41 - 60	61+
1 1/2"	0 - 22	23 - 86	87 - 132	133+
2"	0 - 48	49 - 188	189 - 290	291+
3"	0 - 116	117 - 500	501 - 860	861+
4"	0 - 225	226 - 1,000	1,001 - 1,800	1,801+
6"	0 - 500	501 - 5,600	5,601 - 8,800	8,801+
8"	0 - 500	501 - 5,600	5,601 - 10,000	10,001+
10"	0 - 500	501 - 24,000	24,001 - 32,000	32,001+

The Commodity Charge covers the cost to purchase water from the MWD and to extract groundwater from local supplies. It also recovers the cost of performing water quality testing and treatment to ensure that only the highest-quality water is delivered to Pasadena’s customers.

Table 2: Current Commodity Rates

Commodity		
Per BU	Inside City (Area A)	Outside City (Area B)
Summer		
Block 1	\$1.39537	\$1.62296
Block 2	\$2.98851	\$3.61438
Block 3	\$3.48921	\$4.24026
Block 4	\$4.24026	\$5.17907
Winter		
Block 1	\$1.36885	\$1.58981
Block 2	\$2.91559	\$3.52323
Block 3	\$3.40171	\$4.13088
Block 4	\$4.13089	\$5.04235

D&C Rates

The D&C charge recovers the cost of operating and maintaining the infrastructure that treats, stores and reliably delivers water to the City’s customers. This includes distribution mains and lateral pipes connecting to individual homes and businesses, pumping stations that boost water across various elevations in the City, and reservoirs where water is stored and treated. The D&C also covers the costs of customer service functions, including the call center services, meter reading, billing and collections. Table 3 shows the current D&C rates.

Table 3: Current D&C Rates

Meter Size	Existing Rates	
	Inside City (Area A)	Outside City (Area B)
5/8”–3/4”	\$17.13	\$21.41
1”	\$32.55	\$40.68
1 1/2”	\$65.73	\$82.17
2”	\$154.21	\$192.76
3”	\$376.95	\$471.19
4”	\$582.55	\$728.18
6”	\$890.95	\$1,113.69
8”	\$1,456.35	\$1,820.43
10”	\$1,895.40	\$2,369.26

CIC Rates

The CIC charge includes recovery of CIC-eligible capital improvement projects as well as recovery of debt service on bonds issued by PWP. Table 4 shows the current CIC rates.

Table 4: Current CIC Rates

Per BU	Existing Rates	
	Inside City (Area A)	Outside City (Area B)
Summer	\$0.98506	\$1.32983
Winter	\$0.92930	\$1.25456

2 FINANCIAL FORECAST

2.1 FINANCIAL PLAN

The five-year Financial Plan used for the cost-of-service analysis is provided below. The study focuses on the first three years of the plan. Table 5 below is the five-year projection.

Table 5: Financial Plan FY 2019 – FY 2023

	FY 2019 Budget	FY 2020 Projected	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected
Retail Sales (Billing Unit)	11,500,000	11,557,500	11,615,300	11,673,400	11,731,800
Revenues:					
Distribution and Customer	\$18,952,882	\$18,952,882	\$22,386,754	\$26,145,208	\$26,645,208
<i>Proposed D&C Rate Increase</i>	\$0	\$3,147,717	\$3,758,454	\$500,000	\$800,000
Commodity	\$27,664,120	\$27,802,491	\$27,881,816	\$28,501,923	\$29,649,516
<i>Proposed Commodity (PWAC) Increase</i>	\$0	\$0	\$478,249	\$1,000,000	\$1,000,000
Non-potable Commodity Sales	\$0	\$0	\$0	\$300,000	\$600,000
CIC Revenue	\$10,915,741	\$10,914,292	\$10,857,807	\$10,797,554	\$10,736,120
<i>Proposed CIC Rate Increase / (Decrease)</i>		\$0	\$0	\$0	\$0
Fire Protection Surcharge	\$426,073	\$426,073	\$426,073	\$426,073	\$426,073
Fire Protection Service	\$1,000,000	\$1,025,000	\$1,025,000	\$1,025,000	\$1,025,000
Service Connection Fees	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000
Water Leases	\$283,000	\$268,850	\$255,408	\$242,637	\$230,505
Total Operating Revenues	\$59,397,816	\$62,693,305	\$67,225,561	\$69,094,395	\$71,268,423
Operating Expenses:					
Purchased Water	\$20,312,483	\$21,138,832	\$22,006,975	\$22,930,138	\$24,002,136
Purchased Power	\$2,587,860	\$2,593,721	\$2,614,800	\$2,636,600	\$2,662,106
- <i>Pumping (Commodity)</i>	\$1,221,177	\$1,223,943	\$1,233,890	\$1,244,177	\$1,256,213
- <i>Boosting (D&C)</i>	\$1,366,683	\$1,369,778	\$1,380,910	\$1,392,423	\$1,405,893
Direct Operating Expenses	\$11,031,126	\$11,378,239	\$11,722,765	\$12,022,156	\$12,329,483
- <i>Commodity</i>	\$3,433,040	\$3,539,277	\$3,648,933	\$3,742,124	\$3,837,785
- <i>Distribution and Customer</i>	\$7,598,086	\$7,838,962	\$8,073,833	\$8,280,032	\$8,491,698
General & Administrative Expenses	\$14,099,356	\$14,543,016	\$14,993,595	\$15,376,520	\$15,769,596
- <i>Commodity</i>	\$1,473,868	\$1,521,027	\$1,568,152	\$1,608,201	\$1,649,312
- <i>Distribution and Customer</i>	\$12,625,488	\$13,021,990	\$13,425,443	\$13,768,319	\$14,120,283
Non-potable Commodity and O&M	\$0	\$0	\$0	\$300,000	\$600,000
Interest Expense	\$3,272,510	\$4,066,957	\$4,016,831	\$3,976,999	\$3,827,078
- <i>Distribution and Customer</i>	\$491,189	\$466,044	\$448,380	\$428,289	\$409,319
- <i>CIC</i>	\$2,781,321	\$3,600,913	\$3,568,452	\$3,548,711	\$3,417,759
Depreciation and Amortization	\$7,635,771	\$7,788,486	\$7,944,256	\$8,103,141	\$8,265,204
Total Operating Expenses	\$58,939,106	\$61,509,252	\$63,299,223	\$65,345,554	\$67,455,602
Operating Income	\$458,710	\$1,184,053	\$3,926,338	\$3,748,841	\$3,812,821
Non-Operating Revenue	\$5,364,079	\$5,838,568	\$5,828,209	\$5,505,517	\$3,933,009
Income Before Fund Reimb. from Water Services	\$5,822,789	\$7,022,621	\$9,754,547	\$9,254,358	\$7,745,830
Reimbursement to General Fund	\$1,894,139	\$1,894,139	\$1,894,139	\$1,894,139	\$1,894,139
Net Income	\$3,928,650	\$5,128,482	\$7,860,408	\$7,360,219	\$5,851,691

The financial outlook includes growth in operating expenses largely due to increases in purchased water from MWD and personnel and internal service charges incurred by the utility.

The Commodity and D&C operating expenses are expected to increase for FY 2019 through FY 2021 as shown in Table 6.

Table 6: FY 2019 – FY 2021 D&C and Commodity Operating Expenses

Expense Type	FY 2019	FY 2020	FY 2021
Distribution & Customer	\$31,208,721	\$31,964,399	\$32,751,961
Commodity	\$26,442,353	\$27,423,078	\$28,457,949
Totals	\$57,651,074	\$59,387,478	\$61,209,910

Due to the timing of the cost-of-service analysis, the FY 2019 approved Water Fund budget was used as the base year for the analysis. The calculations and forecasts are based on a reasonable projection of existing service costs, water demands, and system operations using available information, and on existing legal requirements. The projected water sales used for the study are provided in Appendix A. Significant changes in PWP’s operations or California water law, or further regulatory actions by the Governor or the State Water Resources Control Board in regard to water use may require the Water System to revisit the cost-of-service analysis in the near future.

3 REVENUE REQUIREMENT

Staff analyzed PWP’s water rate revenues individually to assess the ability of each to meet its revenue requirement. The analysis compared the forecasted revenues generated from each rate to its forecasted operating and maintenance costs in order to determine the rate’s adequacy to recover the utility’s costs. Tables 7 and 8 provides the details of the rate revenues expected from D&C, Commodity, as well as the related allocated expenses for FY 2019 through FY 2021.

Table 7: Net Revenue Requirement – D&C

Cost of Service	FY 2019 Budget	FY 2020 Projected	FY 2021 Projected
Distribution and Customer			
Purchased Power	\$1,366,683	\$1,369,778	\$1,380,910
Direct Operating Expense	\$7,604,100	\$7,838,962	\$8,073,833
General & Administrative	\$12,631,839	\$13,021,990	\$13,425,443
Interest Expense	\$491,189	\$466,044	\$448,380
Depreciation and Amortization	\$7,635,771	\$7,788,486	\$7,944,256
Reimbursement to General Fund	\$1,894,139	\$1,894,139	\$1,894,139
Less: Fire Protection Surcharge	(\$415,000)	(\$415,000)	(\$415,000)
Total D&C Cost of Service	\$31,208,721	\$31,964,399	\$32,751,961

Table 7: Net Revenue Requirement – D&C (cont'd)

D&C Net Revenue Requirement			
D&C Cost of Service	\$31,208,721	\$31,964,399	\$32,751,961
Less: Non-Op. Inc. - Invest Earnings	(\$472,128)	(\$442,050)	(\$422,933)
Less: Non-Op. Inc. - Private Fire Service	(\$1,000,000)	(\$1,025,000)	(\$1,025,000)
Less: Non-Op. Inc. - Service Connect. Fee	(\$156,000)	(\$156,000)	(\$156,000)
Less: Non Op. Inc. - Depreciation	(\$7,635,771)	(\$7,788,486)	(\$7,944,256)
Add: Capital Fund Needs (PAYGO)	\$1,621,927	\$1,833,891	\$1,941,436
Net D&C Revenue Requirement	\$23,566,750	\$24,386,754	\$25,145,208
D&C Revenue Collection	\$18,952,882	\$22,088,913	\$26,145,208
Revenue Sufficiency	(\$4,613,868)	(\$2,297,841)	\$1,000,000

Table 8: Net Revenue Requirement – Commodity

Cost of Service	FY 2019 Budget	FY 2020 Projected	FY 2021 Projected
Commodity			
Purchased Water	\$20,312,483	\$21,138,832	\$22,006,975
Purchased Power	\$1,221,177	\$1,223,943	\$1,233,890
Direct Operating Expense	\$3,433,237	\$3,539,277	\$3,648,933
General & Administrative	\$1,475,455	\$1,521,027	\$1,568,152
Total Commodity Cost of Service	\$26,442,353	\$27,423,078	\$28,457,949
Commodity Net Revenue Requirement			
Commodity Cost of Service	\$26,442,353	\$27,423,078	\$28,457,949
Less: Non Op Inc. - Invest Earnings	(\$182,034)	(\$140,878)	(\$113,619)
Net Commodity Revenue Requirement	\$26,260,319	\$27,282,201	\$28,344,330
Commodity Revenue Collection	\$27,664,120	\$27,802,491	\$28,360,065
Revenue Sufficiency	\$1,403,802	\$520,291	\$15,735

The net revenue requirement is the sum of the Operating Budget expenses, minus non-cash expenditures (Depreciation), plus the capital fund needs (funds that are not recovered through the CIC), and offset by the non-rate related revenues and income. The difference between the expected revenue collected through the rate and its revenue requirement shows the adequacy of each existing rate.

PWP's distribution costs pertain to pumping, distribution, and storage costs incurred to deliver each unit of water. Customer costs are fixed expenditures that relate to operational support activities including customer service, billing, administrative, and technical support. In accordance with PWP's Water Rate Ordinance, these costs should be recovered through the D&C charge. PWP has two water sources, groundwater and water purchased from the MWD. In accordance with PWP's Water Rate Ordinance, the Commodity charge should recover the costs of purchased water, purchased water administration, and groundwater delivery.

The CIC is not included in the analysis above. The CIC revenue requirement is calculated based on the five-year capital improvement plan and projected debt service requirements.

3.1 RATE ADEQUACY

Based on the revenue requirement analysis of the FY 2019 adopted operating budget, the revenue collected from the existing D&C charge under-collects its revenue requirement by about \$4.6 million. Revenue collected from the existing commodity charge over-collects its revenue requirement by about \$1.4 million. This is a result of a shift in resources from maintenance work on water well pumps to distribution work, and changes in actual costs versus the projections built into the 2008 cost-of-service analysis.

This cost-of-service analysis of the FY2019 operating budget provides the foundation for developing rates that are expected to generate adequate revenues by FY 2021.

4 COST-OF-SERVICE ANALYSIS

4.1 COST-OF-SERVICE APPROACH

Rate analyses are performed by PWP staff each fiscal year in order to establish the adequacy of the existing cost recovery levels to provide system revenues sufficient to fund utility operations, maintenance, and for future replacement and enhancement of capital needs. PWP utilizes the “cash needs” approach for projecting revenue requirements to ensure that utility revenues are sufficient to recover total cash needs. The methodology that PWP applies to establish annual rate revenue needs is consistent with industry standards established by the Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1 (the “M1 Manual”), which is published by the American Water Works Association (AWWA). AWWA is a national industry trade group that makes recommendations on generally accepted practices in the water industry.

The services of Colantuono, Highsmith & Whatley, PC (“Colantuono”) were procured to review each component of PWP staff analyses in order to validate the appropriateness of revenue requirements and cost-of-service allocations. Colantuono found the allocation methodology that PWP has developed is thorough, in line with industry standard practices and is Proposition 218 compliant.

4.2 FUNCTIONALIZATION / ALLOCATION OF COSTS

To determine the appropriate allocation of costs to each of PWP’s rate elements, PWP staff reviewed costs, interviewed Water Division engineering and operations staff responsible for the associated activity (e.g. Source of Supply, Pumping and Boosting, Distribution, etc.). Costs were classified and allocated based on current and projected work plans which established the revenue requirement for each of the rate elements with updated expectations of how costs will be incurred.

The cost classification factors determined as a result of the analysis are presented in Table 9. These cost classification factors were applied to the most granular level of detail in the accounting records, the Public Utility Commission (“PUC”) account level. The following allocation percentages were applied to the specified expense grouping to determine the allocation of the operating budget into the Commodity or D&C categories.

Table 9: Cost Classification Factors

Operations & Maintenance Account	Commodity	Transmission & Distribution	Customer	Total
SOURCE OF SUPPLY				
Supervision & Engineering-Supply	41%	59%		100%
Labor & Expense-Supply	41%	59%		100%
Misc. Expense-Supply	100%			100%
Purchased Water	100%			100%
Maint. of Structures-Supply	100%			100%
Maint. of Springs/Tunnels-Supply	100%			100%
Maint. of Wells-Supply	100%			100%
Maint. of Mains-Supply	100%			100%
PUMPING EXPENSES				
Operation Sup'n & Eng'g-Pump	6%	94%		100%
Labor & Expense-Pump	6%	94%		100%
Miscellaneous Expense-Pump	100%			100%
Fuel/Power Purchased for Pumping	47%	53%		100%
Maint. of Struct. & Improvem-Pump	100%			100%
Maint. of Pumping Equip-Pump	100%			100%
WATER TREATMENT				
Supervision & Engineering-Wtr.Treat	92%	8%		100%
Labor And Expenses-Wtr.Treat	92%	8%		100%
Misc Expense-Wtr.Treat	100%			100%
Chemicals & Filters-Wtr.Treat	100%			100%
Maint. Struct. & Impr.-Wtr.Treat	92%	8%		100%
Maint. Water Treatment Equip	100%			100%
TRANSMISSION & DISTR.				
Supervision & Engineering-Trans/Distr	3%	97%		100%
Transmission & Distribution Lines	3%	97%		100%
Cust. Installation Exp.-Trans/Distr	3%	97%		100%
Misc. Expense-Trans/Distr		100%		100%
Misc. & Maint. Struct. & Impr.-T&D		100%		100%
Maint. Reservirs&Tanks-Trns/Distr		100%		100%
Maint.Trans. & Distr		100%		100%
Maint. of Meters / Services-Trans/Distr		100%		100%
Maint. & Misc. Plant-Trans/Distr		100%		100%
Merch. & Jobbing-Trans/Distr		100%		100%
Six Inch F.H.Install-Trns/Distr		100%		100%
Fire Hydrant Heads-Trans/Distr		100%		100%
Fire Dept. Charges-Trans/Distr		100%		100%
Hydrant Upgr./HeavyMain-TrnDist		100%		100%

Table 9: Cost Classification Factors (cont'd)

Operations & Maintenance Account	Commodity	Transmission & Distribution	Customer	Total
CUSTOMER ACCT EXPENSES				
Customer Account Expenses			100%	100%
SALES EXPENSES				
Sales Expenses			100%	100%
ADMIN & GENERAL EXPENSES				
Administrative & Gen. Salaries		30%	70%	100%
Office Supplies & Other Expense		30%	70%	100%
Property Insurance / Injuries & Damages		30%	70%	100%
Franchise Requirements		30%	70%	100%
Outside Services Employed-A&G	20%	30%	50%	100%
Misc. General Exp.- Adm & Gen		30%	70%	100%
Maint. Of Gen Plant - Adm & Gen		30%	70%	100%
Rent Expense – Misc.		30%	70%	100%
Conservation Expense – Adm. & Gen.	100%			100%
Transportation Exp. - Adm. & Gen. / Cust.		30%	70%	100%
Division Applied Material Offset		30%	70%	100%
Division Applied Equip offset		30%	70%	100%

Table 10 below shows the allocation of the FY 2019 operating budget by function.

Table 10: Allocation of FY 2019 Budget

Budget Item	Commodity	D&C	CIC	Total
Purchased Water	\$20,312,483			\$20,312,483
Purchased Power	\$1,221,177	\$1,366,683		\$2,587,860
Operating Expenses				
Source of Supply	\$625,774	\$730,309		\$1,356,083
Pumping	\$298,808	\$896,846		\$1,195,654
Water Treatment	\$2,409,657	\$151,559		\$2,561,216
Trans & Distribution	\$98,801	\$5,819,373		\$5,918,174
Total Operating Exp.	\$3,433,040	\$7,598,087		\$11,031,127
Admin. & General				
Customer Expenses		\$1,784,256		\$1,784,256
Sales Expense		\$974,430		\$974,430
A&G – Conservation	\$748,614			\$748,614
A&G - Other	\$725,254	\$9,866,802		\$10,592,056
Total Admin. & General	\$1,473,868	\$12,625,488		\$14,099,356
Interest Expense		\$491,189	\$2,781,321	\$3,272,510
Reimbursement to GF		\$1,894,138		\$1,894,138
Depreciation		\$7,635,771		\$7,635,771
Grand Total	\$26,440,568	\$31,611,356	\$2,781,321	\$60,833,245

4.3 ALLOCATION OF COSTS BY METER SIZE

Conversion of meter connection sizes to meter equivalents using the hydraulic capacity percentage provides a unit basis for assessing the demand and stress that each account places on the distribution system. Application of the conversion helps to identify the total potential quantity of water that can flow through each meter size.

The number of total equivalent meters is determined by multiplying the hydraulic capacity factor times the number of meters within each size category. Costs are allocated based on the percentage share of the specific size as a fraction of the total sum of all meters. For example, using a 1-inch meter, its percentage is $22,536 / 89,734 = 25.114\%$. Next, applying 25.114% to $\$18,952,882 =$ D&C cost allocation of $\$4,759,800$.

Table 11 shows the conversion of meter sizes to meter equivalents and the allocation of the proposed June 1, 2019 Distribution and Customer costs of $\$18,952,882$. The monthly rate calculated in the last column is the D&C Cost Allocation, divided by the number of Accounts, divided by 12 months.

Table 11: Calculation of Equivalent Meters

Meter Size	Hydraulic Capacity %	# of Connections	Total Equivalent Meters	D&C Cost Allocation	Monthly D&C Rate
5/8" – 3/4"	1.0	21,133	21,133	\$4,463,540	\$17.60
1"	1.9	11,861	22,536	\$4,759,869	\$33.44
1 1/2"	3.9	2,198	8,572	\$1,810,508	\$68.64
2"	9.0	1,741	15,669	\$3,309,478	\$158.41
3"	22.0	252	5,544	\$1,170,958	\$387.22
4"	33.8	228	7,706	\$1,627,598	\$594.88
6"	52.2	107	5,585	\$1,179,618	\$918.71
8"	84.9	30	2,547	\$537,957	\$1,494.33
10"	110.5	4	442	\$93,356	\$1,944.92
Totals		37,554	89,734	\$18,952,882	

5 PROPOSED CHANGES TO THE WATER RATES

To meet the projected revenue requirements, staff is proposing revenue increases for the three-year period FY 2019 through FY 2021. Table 12 and Table 13 shows the projected D&C and Commodity rate plan actions and the associated revenues.

Table 12: FY 2019 – FY 2021 D&C and Commodity Rate Plan Actions

Revenue Type	FY 2019	FY 2020	FY 2021
Distribution & Customer	\$0	\$3,136,031	\$3,766,454
Commodity	\$0	\$0	\$478,249
Totals	\$0	\$3,136,031	\$4,244,703

Table 13: FY 2019 – FY 2021 Proposed D&C and Commodity Rate Plan Revenues

Revenue Type	FY 2019	FY 2020	FY 2021
Distribution & Customer	\$18,952,882	\$22,088,913	\$26,145,208
Commodity	\$27,664,120	\$27,802,491	\$28,360,066

Totals	\$46,617,002	\$49,891,404	\$54,505,274
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The recommended revenue increases are the amounts necessary to meet revenue requirements and are intended to minimize the customer bill impacts associated with the rate redesign, the removal of the Inside/Outside rate differential, and the increased Operating and Maintenance (“O&M”) costs. The proposed rate plan will result in a revenue shortfall of \$3.2 million in FY 2019 and \$1.5 million in FY 2020. The gap between the revenue requirements and the rate revenues is projected to decrease over the next two years, and the funds are projected to generate positive cash flow by the end of FY 2021. Staff will closely monitor the financial results of these increases and the subsequent financial outlook. If PWP incurs unforeseen costs, additional revenue increases may be required.

In summary, PWP is proposing the following changes to its water rate structure in order to comply with the legal settlement, to simplify water rates, and to ensure that rate revenues are sufficient to sustain the Water System:

- Eliminate the Inside/Outside city differentials for the D&C and Commodity Charges
- Eliminate the Inside/Outside city differentials for the CIC
- Eliminate seasonal rates
- Update the Commodity charge
- Update the D&C charge for two consecutive fiscal years

5.1.1 Eliminate the Inside City/Outside City differentials for the Distribution and Customer Charge and the Commodity Charge

The existing rate structure assigns a 25% rate differential to the D&C and Commodity charges to customers who require water service outside of the city limits. As a result of the October 2018 settlement, PWP is proposing to discontinue the practice of charging a differential for the D&C, Commodity, and the CIC charges to water customers located outside of city limits. The updated rates have been determined through an equitable allocation of costs to customers, regardless of their service area. Table 14 shows the proposed D&C rates and Table 15 shows the proposed Commodity rates.

Table 14: Proposed D&C Monthly Rates

Meter Size	June 1, 2019	August 1, 2019	July 1, 2020
	Inside / Outside Areas A/B	Inside / Outside Areas A/B	Inside / Outside Areas A/B
5/8”-3/4”	\$17.60	\$20.79	\$24.28
1”	\$33.44	\$39.50	\$46.13
1 1/2”	\$68.64	\$81.08	\$94.69
2”	\$158.42	\$187.11	\$218.54
3”	\$387.26	\$457.39	\$534.18
4”	\$594.93	\$702.67	\$820.64
6”	\$918.77	\$1,085.17	\$1,267.37
8”	\$1,494.41	\$1,765.08	\$2,061.45
10”	\$1,944.97	\$2,297.34	\$2,683.01

Table 15: Proposed Commodity Rates

Per BU	June 1, 2019	August 1, 2019	July 1, 2020
	Inside / Outside Areas A / B	Inside / Outside Areas A / B	Inside / Outside Areas A / B
	Summer	All Seasons	
Block 1	\$1.42537	\$1.41199	\$1.44852
Block 2	\$3.07344	\$3.03984	\$3.07637
Block 3	\$3.60377	\$3.56962	\$3.60615
Block 4	\$4.38395	\$4.33916	\$4.37569
	Winter		
Block 1	\$1.39801		
Block 2	\$2.99570		
Block 3	\$3.51934		
Block 4	\$4.27991		

5.1.2 Eliminate the Inside/Outside city differentials for the CIC

The existing rate structure assigns a 35% rate differential to the CIC to customers who receive water service outside of the city limits. Settlement of the litigation regarding the D&C charge and Commodity charge did not specifically include the differential applied to the CIC charge. However, the City may impose a differential on the CIC charge on customers who reside outside of the city limits, but such a charge must be calculated based on a bona fide projected cost the City would not otherwise incur when it makes capital improvements but for the fact that such improvements are located in the unincorporated County of Los Angeles. Staff does not believe the current projected costs are adequately documented to meet the requirements of the litigation settlement. Table 16 presents the proposed CIC rates after the differential is removed.

Table 16: Proposed CIC Rates

	Revenue	Sales	CIC Rate \$/BU
June 1, 2019 – Eliminate Inside / Outside Differentials			
Summer	\$5,836,100	5,656,130	\$1.03182
Winter	\$4,615,969	4,743,870	\$0.97304
August 1, 2019 – Eliminate Seasonal Rate			
All months	\$10,452,069	10,400,000	\$1.00501

5.1.3 Eliminate Seasonal Rates

PWP recommends replacing seasonal rates with a normalized rate that will be revenue-neutral and will have no fiscal impact on the utility. The new normalized rates for Commodity and CIC are shown in Tables 15 and 16, respectively. This action will reflect that unit costs incurred by PWP do not currently differ based on seasonality. The change will also simplify rates and make it easier for customers to budget monthly use and expected billing.

5.1.4 Recommended Rates

This proposal will maintain all existing customer classifications and will maintain the practice of allocating water based on meter size. PWP will continue the methodology of calculating the D&C charge based on the capacity factor of each meter connection size, following standard industry practices. PWP will also maintain the existing water block pricing structure for both Commodity and D&C, including the

purchased water adjustment mechanism used to pass-through incremental water costs. The details of the recommended rates are provided in Appendix 2.

6 CUSTOMER BILL IMPACT

The customer bill impacts of the proposed changes to the water rates are provided in Table 17 and Table 18 below.

Table 17: Monthly Customer Bill Impact – Inside City customers

Meter Size	Number of Customers	Avg. Monthly Usage	Monthly Billing	June 1, 2019		August 1, 2019		July 1, 2020		3 Year Total	
				\$ chg.	% chg.	\$ chg.	% chg.	\$ chg.	% chg.	\$ chg.	% chg.
5/8 & 3/4	16,996	11	\$48.47	\$1.48	3.1%	\$2.69	5.4%	\$3.89	7.4%	\$8.06	16.6%
1"	10,012	17	\$81.58	\$2.57	3.2%	\$5.28	6.3%	\$7.25	8.1%	\$15.10	18.5%
1½"	1,935	32	\$160.32	\$6.11	3.8%	\$10.80	6.5%	\$14.77	8.4%	\$31.68	19.8%
2"	1,641	59	\$315.41	\$9.56	3.0%	\$26.10	8.0%	\$33.61	9.6%	\$69.27	22.0%
3"	235	143	\$767.97	\$23.30	3.0%	\$63.85	8.1%	\$82.14	9.6%	\$169.29	22.0%
4"	220	251	\$1,230.53	\$33.58	2.7%	\$97.15	7.7%	\$127.35	9.4%	\$258.08	21.0%
6"	99	463	\$2,015.09	\$63.36	3.1%	\$147.83	7.1%	\$199.41	9.0%	\$410.60	20.4%
8"	29	620	\$3,150.51	\$94.61	3.0%	\$243.38	7.5%	\$319.52	9.2%	\$657.51	20.9%
10"	4	2,608	\$11,458.66	\$406.99	3.6%	\$205.15	1.7%	\$481.48	4.0%	\$1,093.62	9.5%

Table 18: Monthly Customer Bill Impact – Outside City customers

Meter Size	Number of Customers	Avg. Monthly Usage	Monthly Billing	June 1, 2019		August 1, 2019		July 1, 2020		3 Year Total	
				\$ chg.	% chg.	\$ chg.	% chg.	\$ chg.	% chg.	\$ chg.	% chg.
5/8 & 3/4	4,137	11	\$60.24	(\$10.29)	-17.1%	\$2.69	5.4%	\$3.89	7.4%	(\$3.71)	-6.2%
1"	1,849	17	\$101.53	(\$17.38)	-17.1%	\$5.28	6.3%	\$7.25	8.1%	(\$4.85)	-4.8%
1½"	263	32	\$199.25	(\$32.82)	-16.5%	\$10.80	6.5%	\$14.77	8.4%	(\$7.25)	-3.6%
2"	100	59	\$392.33	(\$67.36)	-17.2%	\$26.10	8.0%	\$33.61	9.6%	(\$7.65)	-1.9%
3"	17	143	\$955.34	(\$164.07)	-17.2%	\$63.85	8.1%	\$82.14	9.6%	(\$18.08)	-1.9%
4"	8	251	\$1,530.69	(\$266.58)	-17.4%	\$97.15	7.7%	\$127.35	9.4%	(\$42.08)	-2.7%
6"	8	463	\$2,502.83	(\$424.38)	-17.0%	\$147.83	7.1%	\$199.41	9.0%	(\$77.14)	-3.1%
8"	1	620	\$3,919.61	(\$674.49)	-17.2%	\$243.38	7.5%	\$319.52	9.2%	(\$111.59)	-2.8%

7 APPENDIX A – PROJECTED WATER SALES

7.1 PROJECTED WATER SALES – FY 2019

FY 2019 Water Sales										
Inside City						Outside City				
Month	Block 1	Block 2	Block 3	Block 4	Total	Block 1	Block 2	Block 3	Block 4	Total
July 2018	391,550	445,440	69,261	53,499	959,750	59,968	71,780	11,923	10,730	154,401
August 2018	396,136	467,797	73,660	59,578	997,171	60,280	77,004	12,527	11,059	160,870
September 2018	398,366	491,881	84,191	74,045	1,048,483	60,498	77,302	14,077	10,918	162,795
October 2018	392,192	446,012	67,515	53,781	959,500	59,943	73,493	12,330	10,114	155,880
November 2018	384,501	379,029	51,870	46,511	861,911	57,505	52,936	8,836	8,055	127,332
December 2018	364,802	287,059	34,685	34,277	720,823	55,901	44,104	6,916	6,930	113,851
January 2019	357,601	262,751	29,980	30,973	681,305	54,353	40,137	6,062	6,698	107,250
February 2019	357,625	257,869	28,240	29,585	673,319	54,445	38,059	5,834	6,172	104,510
March 2019	350,889	238,359	23,822	27,049	640,119	53,515	35,415	5,441	5,454	99,825
April 2019	358,189	279,095	30,558	27,867	695,709	53,330	36,627	5,395	5,377	100,729
May 2019	374,174	341,459	36,803	32,863	785,299	56,801	54,310	7,881	7,088	126,080
June 2019	387,893	422,027	56,817	49,735	916,472	59,313	67,267	11,426	8,610	146,616
Total	4,513,918	4,318,778	587,402	519,763	9,939,861	685,852	668,434	108,648	97,205	1,560,139

Total FY 2019 Sales					
Month	Block 1	Block 2	Block 3	Block 4	Total
July 2018	451,518	517,220	81,184	64,229	1,114,151
August 2018	456,416	544,801	86,187	70,637	1,158,041
September 2018	458,864	569,183	98,268	84,963	1,211,278
October 2018	452,135	519,505	79,845	63,895	1,115,380
November 2018	442,006	431,965	60,706	54,566	989,243
December 2018	420,703	331,163	41,601	41,207	834,674
January 2019	411,954	302,888	36,042	37,671	788,555
February 2019	412,070	295,928	34,074	35,757	777,829
March 2019	404,404	273,774	29,263	32,503	739,944
April 2019	411,519	315,722	35,953	33,244	796,438
May 2019	430,975	395,769	44,684	39,951	911,379
June 2019	447,206	489,294	68,243	58,345	1,063,088
Total	5,199,770	4,987,212	696,050	616,968	11,500,000

7.2 PROJECTED WATER SALES – FY 2020

FY 2020 Water Sales										
Inside City						Outside City				
Month	Block 1	Block 2	Block 3	Block 4	Total	Block 1	Block 2	Block 3	Block 4	Total
July 2019	393,226	447,760	69,756	53,718	964,460	60,251	72,116	11,993	10,902	155,262
August 2019	397,790	470,215	74,132	59,932	1,002,069	60,559	77,356	12,612	11,236	161,763
September 2019	400,023	494,292	84,792	74,524	1,053,631	60,778	77,617	14,199	11,102	163,696
October 2019	393,884	448,395	67,940	53,991	964,210	60,227	73,824	12,412	10,286	156,749
November 2019	386,244	381,195	52,081	46,613	866,133	57,806	53,198	8,865	8,187	128,056
December 2019	366,628	288,861	34,692	34,159	724,340	56,212	44,329	6,930	7,038	114,509
January 2020	359,456	264,441	29,923	30,804	684,624	54,670	40,342	6,066	6,796	107,874
February 2020	359,489	259,565	28,152	29,392	676,598	54,764	38,257	5,833	6,267	105,121
March 2020	352,790	239,963	23,675	26,802	643,230	53,839	35,598	5,435	5,541	100,413
April 2020	360,064	280,870	30,507	27,657	699,098	53,652	36,817	5,389	5,463	101,321
May 2020	375,972	343,552	36,863	32,751	789,138	57,103	54,581	7,912	7,204	126,800
June 2020	389,621	424,361	57,120	49,866	920,968	59,607	67,537	11,547	8,746	147,437
Total	4,535,187	4,343,470	589,633	520,209	9,988,499	689,468	671,572	109,193	98,768	1,569,001

Total FY 2020 Water Sales					
Month	Block 1	Block 2	Block 3	Block 4	Total
July 2019	453,477	519,876	81,749	64,620	1,119,722
August 2019	458,349	547,571	86,744	71,168	1,163,832
September 2019	460,801	571,909	98,991	85,626	1,217,327
October 2019	454,111	522,219	80,352	64,277	1,120,959
November 2019	444,050	434,393	60,946	54,800	994,189
December 2019	422,840	333,190	41,622	41,197	838,849
January 2020	414,126	304,783	35,989	37,600	792,498
February 2020	414,253	297,822	33,985	35,659	781,719
March 2020	406,629	275,561	29,110	32,343	743,643
April 2020	413,716	317,687	35,896	33,120	800,419
May 2020	433,075	398,133	44,775	39,955	915,938
June 2020	449,228	491,898	68,667	58,612	1,068,405
Total	5,224,655	5,015,042	698,826	618,977	11,557,500

7.3 PROJECTED WATER SALES - FY 2021

FY 2021 Water Sales										
Inside City						Outside City				
Month	Block 1	Block 2	Block 3	Block 4	Total	Block 1	Block 2	Block 3	Block 4	Total
July 2020	395,267	449,638	70,216	54,049	969,170	60,567	72,363	12,172	11,049	156,151
August 2020	399,807	472,191	74,569	60,400	1,006,967	60,872	77,619	12,805	11,389	162,685
September 2020	402,046	496,268	85,364	75,117	1,058,795	61,093	77,841	14,433	11,261	164,628
October 2020	395,940	450,319	68,344	54,314	968,917	60,544	74,065	12,605	10,432	157,646
November 2020	388,353	382,915	52,256	46,827	870,351	58,141	53,370	9,005	8,294	128,810
December 2020	368,819	290,222	34,657	34,152	727,850	56,556	44,463	7,055	7,120	115,194
January 2021	361,679	265,685	29,826	30,744	687,934	55,022	40,457	6,180	6,868	108,527
February 2021	361,720	260,814	28,026	29,308	679,868	55,117	38,366	5,942	6,335	105,760
March 2021	355,054	241,124	23,491	26,665	646,334	54,198	35,691	5,537	5,602	101,028
April 2021	362,300	282,207	30,415	27,558	702,480	54,008	36,918	5,492	5,523	101,941
May 2021	378,135	345,203	36,882	32,751	792,971	57,439	54,762	8,051	7,295	127,547
June 2021	391,712	426,248	57,391	50,108	925,459	59,936	67,717	11,777	8,857	148,287
Total	4,560,832	4,362,834	591,437	521,993	10,037,096	693,493	673,632	111,054	100,025	1,578,204

Total FY 2021 Water Sales					
Month	Block 1	Block 2	Block 3	Block 4	Total
July 2020	455,834	522,001	82,388	65,098	1,125,321
August 2020	460,679	549,810	87,374	71,789	1,169,652
September 2020	463,139	574,109	99,797	86,378	1,223,423
October 2020	456,484	524,384	80,949	64,746	1,126,563
November 2020	446,494	436,285	61,261	55,121	999,161
December 2020	425,375	334,685	41,712	41,272	843,044
January 2021	416,701	306,142	36,006	37,612	796,461
February 2021	416,837	299,180	33,968	35,643	785,628
March 2021	409,252	276,815	29,028	32,267	747,362
April 2021	416,308	319,125	35,907	33,081	804,421
May 2021	435,574	399,965	44,933	40,046	920,518
June 2021	451,648	493,965	69,168	58,965	1,073,746
Total	5,254,325	5,036,466	702,491	622,018	11,615,300

8 APPENDIX B – PROPOSED RATES AND CALCULATIONS

8.1 RECOMMENDED RATES – DISTRIBUTION AND CUSTOMER SUPPORTING CALCULATIONS

Calculation of Existing FY 2019 D&C Annual Revenue

Inside Customers			
Meter Size	# of Meters	Existing Rate	Annual Revenue
5/8" & 3/4"	16,996	\$17.13	\$3,493,903
1"	10,012	\$32.55	\$3,910,687
1 1/2"	1,935	\$65.73	\$1,526,251
2"	1,641	\$154.21	\$3,036,703
3"	235	\$376.95	\$1,062,999
4"	220	\$582.55	\$1,537,932
6"	99	\$890.95	\$1,058,449
8"	29	\$1,456.35	\$506,810
10"	4	\$1,895.40	\$68,234
Total Inside	31,171		\$16,201,968
Outside Customers			
5/8" & 3/4"	4,137	\$21.41	\$1,062,878
1"	1,849	\$40.68	\$902,608
1 1/2"	263	\$82.17	\$259,329
2"	100	\$192.76	\$231,312
3"	17	\$471.19	\$96,123
4"	8	\$728.18	\$69,905
6"	8	\$1,113.69	\$106,914
8"	1	\$1,820.43	\$21,845
Total Outside	6,383		\$2,750,914
Total Rate Plan Revenue			\$18,952,882

Calculation of Proposed June 1, 2019 Monthly D&C Rates

FY 2019 Rate Plan Revenue \$18,952,882						
All Customers						
Meter Size	Hydraulic Capacity	# Meters	Equivalent Meters	D&C Costs Allocated	Proposed D&C Rate	Expected Annual Revenue
5/8" & 3/4"	1.0	21,133	21,133	\$4,463,540	\$17.60	\$4,463,291
1"	1.9	11,861	22,536	\$4,759,869	\$33.44	\$4,759,581
1 1/2"	3.9	2,198	8,572	\$1,810,508	\$68.64	\$1,810,449
2"	9.0	1,741	15,669	\$3,309,478	\$158.42	\$3,309,711
3"	22.0	252	5,544	\$1,170,958	\$387.26	\$1,171,074
4"	33.8	228	7,706	\$1,627,598	\$594.93	\$1,627,728
6"	52.2	107	5,585	\$1,179,618	\$918.77	\$1,179,701
8"	84.9	30	2,547	\$537,957	\$1,494.41	\$537,988
10"	110.5	4	442	\$93,356	\$1,944.97	\$93,359
Total		37,554	89,734	\$18,952,882		\$18,952,882

Calculation of Proposed August 1, 2019 Monthly D&C Rates

FY 2020 Rate Plan Revenue \$22,386,755						
All Customers						
Meter Size	Hydraulic Capacity	# Meters	Equivalent Meters	D&C Costs Allocated	Proposed D&C Rate	Expected Annual Revenue
5/8" & 3/4"	1.0	21,133	21,133	\$5,272,241	\$20.79	\$5,272,261
1"	1.9	11,861	22,536	\$5,622,260	\$39.50	\$5,622,114
1 1/2"	3.9	2,198	8,572	\$2,138,535	\$81.08	\$2,138,566
2"	9.0	1,741	15,669	\$3,909,087	\$187.11	\$3,909,102
3"	22.0	252	5,544	\$1,383,112	\$457.39	\$1,383,147
4"	33.8	228	7,706	\$1,922,486	\$702.67	\$1,922,505
6"	52.2	107	5,585	\$1,393,341	\$1,085.17	\$1,393,358
8"	84.9	30	2,547	\$635,423	\$1,765.08	\$635,429
10"	110.5	4	442	\$110,270	\$2,297.34	\$110,272
Total		37,554	89,734	\$22,386,755		\$22,386,755

Calculation of Proposed July 1, 2020 Monthly D&C Rates

FY 2021 Rate Plan Revenue \$26,145,208						
All Customers						
Meter Size	Hydraulic Capacity	# Meters	Equivalent Meters	D&C Costs Allocated	Proposed D&C Rate	Expected Annual Revenue
5/8" & 3/4"	1.0	21,133	21,133	\$6,157,384	\$24.28	\$6,157,311
1"	1.9	11,861	22,536	\$6,566,165	\$46.13	\$6,565,775
1 1/2"	3.9	2,198	8,572	\$2,497,568	\$94.69	\$2,497,543
2"	9.0	1,741	15,669	\$4,565,374	\$218.54	\$4,565,738
3"	22.0	252	5,544	\$1,615,319	\$534.18	\$1,615,360
4"	33.8	228	7,706	\$2,245,247	\$820.64	\$2,245,271
6"	52.2	107	5,585	\$1,627,265	\$1,267.37	\$1,627,303
8"	84.9	30	2,547	\$742,103	\$2,061.45	\$742,122
10"	110.5	4	442	\$128,783	\$2,683.01	\$128,784
Total		37,554	89,734	\$26,145,208		\$26,145,208

8.2 RECOMMENDED RATES - COMMODITY

Calculation of Proposed June 1, 2019 Commodity Rates

FY 2019 Rate Plan Revenue \$27,664,120					
Water Rate per BU	Block 1	Block 2	Block 3	Block 4	Total
Summer Rate	\$1.42537	\$3.07344	\$3.60377	\$4.38395	
Winter Rate	\$1.39801	\$2.99570	\$3.51934	\$4.27991	
Average Rate	\$1.41199	\$3.03984	\$3.56962	\$4.33916	
Revenues					
Summer	\$3,786,501	\$8,703,942	\$1,493,831	\$1,540,379	\$15,524,653
Winter	\$3,555,531	\$6,456,400	\$990,795	\$1,136,741	\$12,139,467
Total Revenues	\$7,342,032	\$15,160,342	\$2,484,626	\$2,677,120	\$27,664,120
Water Sales					
Summer	2,656,500	2,831,988	414,519	351,367	6,254,374
Winter	2,543,276	2,155,222	281,528	265,600	5,245,626
Total Sales	5,199,776	4,987,210	696,047	616,967	11,500,000

Calculation of Proposed August 1, 2019 Commodity Rates

FY 2020 Rate Plan Revenue \$27,802,491					
	Block 1	Block 2	Block 3	Block 4	Total
Water Rate per BU	\$1.41199	\$3.03984	\$3.56962	\$4.33916	
Total Revenues	\$7,377,160	\$15,244,961	\$2,494,541	\$2,685,829	\$27,802,491
Total Sales	5,224,655	5,015,046	698,825	618,974	11,557,500

Calculation of Proposed August 1, 2020 Commodity Rates

FY 2021 Rate Plan Revenue \$28,360,065					
	Block 1	Block 2	Block 3	Block 4	Total
Water Rate per BU	\$1.44852	\$3.07637	\$3.60615	\$4.37569	
Total Revenues	\$7,610,982	\$15,494,036	\$2,533,287	\$2,721,760	\$28,360,065
Total Sales	5,254,325	5,036,467	702,490	622,018	11,615,300

8.3 RECOMMENDED RATES – CAPITAL IMPROVEMENT CHARGE

FY 2019 CIC Rate	Revenue	Sales	CIC Rate \$/BU
Existing Rate			
Area A – Summer	\$4,815,988	4,889,030	\$0.98506
Area B – Summer	\$1,020,113	767,100	\$1.32983
Area A – Winter	\$3,815,658	4,105,949	\$0.92930
Area B - Winter	\$800,310	637,921	\$1.25456
Total	\$10,452,069	10,400,000	\$1.00501
June 1, 2019 – Eliminate Inside / Outside Differentials			
Summer	\$5,836,100	5,656,130	\$1.03182
Winter	\$4,615,969	4,743,870	\$0.97304
Total	\$10,452,069	10,400,000	\$1.00501
August 1, 2019 – Non-seasonal Rate			
Revenue	\$10,452,069		
Sales		10,400,000	
Average Rate			\$1.00501