

Final
Cost of Service
And
Water Rate Plan
December 2015



PARADISE IRRIGATION DISTRICT

Submitted by:

Paradise Irrigation District

6332 Clark Road

Paradise, CA 95969

Prepared by: George Barber, General Manager

Registered Civil Engineer # 51332

Assistance by: Kevin Phillips, CFO #84827

530.877.4971 [Fax 530.876.0483]

www.paradiseirrigation.com

THIS PAGE LEFT INTENTIONALLY BLANK

INTRODUCTION

The purpose of this report is to provide an analysis of the cost for Paradise Irrigation District (PID) to provide service to its customers. This report is intended to guide the PID Board of Directors in proposing a new rate structure for the consideration of customers of PID in accordance with Proposition 218.

This report is organized as follows:

- 1.0 Introduction
- 2.0 Executive Summary
- 3.0 Water Supply and Historical Demands
- 4.0 Revenue Requirements
- 5.0 Cost of Service Calculation
- 6.0 Local Agency and Irrigation
- 7.0 Drought Rate Structure
- 8.0 Recommended Rate Structure

BACKGROUND

Located in central Butte County, California, the PID was established in 1916 to supply water to an area of approximately 11,250 acres. The PID was established as a special district under Division 11 of the California Water Code and currently serves treated water to approximately 26,000 persons within the Town of Paradise, including residential, commercial, and some agricultural water users.

The PID currently relies predominately on surface water sourced from the Little Butte Creek watershed, a minor stream in the Sacramento Valley drainage that rises in the northwestern foothills of the Sierra Nevada and lies wholly within Butte County. Although a perennial creek, Little Butte Creek typically receives of the majority of its precipitation and resulting runoff in the winter months. Little Butte Creek conveys surface water and storm runoff into the Paradise Reservoir and Magalia Reservoir; the latter is located approximately one half mile north of the community of Magalia and approximately one mile north of the PID's service area. PID has three water rights permits allowing diversion of water from Little Butte Creek: two storage permits and a direct diversion right. The average runoff for the watershed is approximately 15,750 acre-feet per year.

Storage is provided by two reservoirs impounded by the Paradise and Magalia Dams located north of Paradise. The upstream Paradise Reservoir is the main storage facility with a storage capacity of approximately 11,500 acre-feet. Downstream of Paradise Dam, the current capacity of Magalia Reservoir is approximately 2,570 acre-feet, but storage behind the Magalia Dam has been restricted to approximately 800 acre-feet since 1997, by the State of California due to dam seismic stability concerns. PID has approximately 6,000 acre-feet of additional water rights that are not currently capable of being utilized due to a lack of storage.

INTRODUCTION

Due to the reduced water level behind Magalia Dam, gravity feed to the water treatment plant was no longer possible and a pump station was installed at the base of Magalia Reservoir to pump raw water from the reservoir to the treatment plant. In 2007, a bypass pipeline was installed to provide gravity water to the treatment plant in addition to serving as an alternative source location if Magalia is contaminated. Treated water is stored at the water treatment plant prior to distribution to the community via a 42-inch diameter gravity pipeline. PID supplies the majority of the Town's residents using a gravity distribution system and storage facilities with a total capacity of approximately 9.5 million gallons.

LEGAL REQUIREMENTS IN RATE SETTING

The California Constitution has two articles that bear on water, its use and its cost. The Water Code and the Government Code also contains the Legislature's direction, consistent with the foregoing Articles, regarding the use of water and the charges for water.

CALIFORNIA CONSTITUTION ARTICLE 13D, SECTION 6 (PROPOSITION 218)

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 such as rates for water. It further establishes procedural requirements for proposing new or increased charges and establishes the substantive requirements for those charges. Stated succinctly, water charges must reflect the cost of the supplier to deliver that water. Water charges do not require voter approval, but written protest from a majority of the customers may prevent new water rates and charges from being implemented. Under Proposition 218, PID is only authorized to propose new or increased rates and charges and its customers are ultimately empowered to accept or reject the proposed rate change.

CALIFORNIA CONSTITUTION ARTICLE 10, SECTION 2

Article 10, Section 2 of the California Constitution was established by voter approval in 1928 and Section 2 says in part:

It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.

When considered in the context of the foregoing Article, PID's rates must not encourage the waste and unreasonable use of water, and PID should encourage the beneficial and efficient use of its water supplies.

WATER CODE AND GOVERNMENT CODE

Division 11 of the California Water Code, under which PID is formed and existing, establishes that all PID owned property (water included) is held in trust for the benefit of landowners (Water Code Section 22437). Water Code Section 22252 requires the PID to "distribute equitably" water to those offering to make payment (customers).

The California Government Code, Section 53750 et seq, clarifies the procedural and substantive rules applicable to changes in rates under Proposition 218. PID has established through studies and modeling that its watershed and storage reservoirs provide a safe yield of about 5,500 acre-feet can be reliably delivered to PID customers in virtually all years. This constitutes its safe yield and that safe yield is used in the development of the proposed rate structure to “distribute equitably” the water to PID customers while securing the revenues required to operate and maintain PID’s system, and to fund the capital improvements needed to meet its customers’ demands into the future. More information is provided later in this study.

GOALS

The proposed rate structure meet the goals established in setting rates by providing for:

- Adequate revenue to meet PID’s costs of continuing to serve its customers.
- The prevention of waste and unreasonable use and the encouragement of the wise use of water of PID customers.
- The financial incentive to install water efficient devices.
- Implement a rate structure that complied with Proposition 218 and other applicable legal requirements.

THIS PAGE LEFT INTENTIONALLY BLANK

2.1 EXECUTIVE SUMMARY

PID's existing rate structure is inadequate to reliably fund the costs incurred by PID to operate and maintain its system to meet its customers' needs and it does not encourage the efficient and beneficial use of water. The proposed rate change is the best option for recovery by PID of its costs when fixed costs dominate the cost of service and in legally defensible manner that meets the requirements of Proposition 218. To accommodate the varying demands of PID customers, optional rate structures are developed to provide an opportunity for users with lower needs to have a reduced monthly service charge and to make water available for users with higher needs at a rate which will recover the costs incurred to meet those demands that exceed PID's safe yield.

2.2 WATER SUPPLY AND HISTORICAL DEMANDS

PID has a productive watershed, but has a high exposure to drought. In evaluating the reliability levels for PID's current water supply, PID can safely supply 5,500 acre-feet annually. At this level of supply, PID can safely provide water in most years without having to develop expensive new supplies of water, impose costly conservation requirements and reduce deliveries to customers.

Use of water above 5,500 acre-feet annually will result in the exceedance of the safe yield of PID's current facilities, meaning there would be years in which the PID does not have enough supply to meet customer demands. PID customers with usage patterns that would cause PID to exceed the safe yield are justified in paying a higher price reflecting the higher costs to increase water supply, while customers that commit to use less water result in savings to the PID.

2.3 REVENUE REQUIREMENTS

The cost of service calculation for the five years of this report is based upon the PID budget, new estimated debt service, and the building of an emergency reserve of \$3,000,000 over a five year period.

The largest increase in total cost of service comes from new debt for capital projects mandated by the State of California and the reestablishment of an emergency reserve due to residual effects from the downturn in the economy and emergency drought regulations that were required by the State of California.

2.4 COST OF SERVICE CALCULATION

The cost of service is calculated on an annual basis by dividing the annual expenses by the total number of equivalent meters in PID. An "equivalent meter" represents the meter size of a typical residential customer, or a 5/8x3/4" meter. It is important to note that because of the varied use patterns over a calendar year, the cost of service calculation is based upon an annual calculation, not month to month.

The first year rate proposed for adoption will be a \$54.31 monthly service charge that includes an allotment of 13 units of water per month. This is known as the "10K" plan. A "unit of water" is the basic unit of delivered water that is billed by PID and shown on the bill as HCF. A unit of water is equal to one hundred cubic feet (HCF) and equal to 748 gallons.

The recommended rate plan focuses only on cost recovery consistent with Proposition 218 and does not allow for the varying demands of PID customers. Customer Choice Rate Plans provide the opportunity for

customers with a lesser demand for water to agree to use a lower monthly allotment for a lower monthly service charge. This provides an opportunity for customers with a greater monthly demand to pay a higher monthly service charge in exchange for a larger monthly allotment of water.

The plans were named for the approximate amount of gallons the allotment provides each month. (4 units = 2,992 gallons is the “3K” plan.)

2.5 LOCAL AGENCY AND IRRIGATION CUSTOMERS

PID receives revenue from sources other than customer rates, and these revenues maybe used as a credit against costs of specific classes of customers without shifting those costs to other customers. PID may by policy (but is not legally required) to offset rates with these revenues. The proposed rate plan provides the PID Board the option of reducing the rates for local agencies and irrigation customers with the non-rate revenue.

The service charge for these customers would be on a meter size, (the same as for business customers) and a reduction is provided because the 3K option plan is anticipated to be the most likely choice because of the reduced per unit cost due to the use of non-rate revenue (reducing the per unit cost from \$1.35 per unit to \$0.35 per unit.

2.6 DROUGHT RATES

In addition to adopting standard rates, PID has the opportunity to adopt drought rates to prepare for future droughts. The proposed drought rates change the allotment for customers in the 10K, 16K and 30K plans, based upon PID Board action.

2.7 RECOMMENDED RATE STRUCTURE

The following is the recommended rate structure for 2016:

Proposed Residential Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$54.31	\$1.35	\$3.70
Customer Choice Residential Rate Plans						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$35.51	\$1.35	\$3.70
6K	8	8-16	16+	\$43.87	\$1.35	\$3.70
16K	21	21-42	42+	\$64.75	\$1.35	\$3.70
30K	41	41-82	82+	\$73.11	\$1.35	\$3.70

Proposed business plans are on the same basis as the proposed residential rate plans, but the allotment and service charge is adjusted proportionally by meter size.

Proposed Residential Irrigation Proposed Rate Plan				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Res. Irrigation	41	41+	\$73.11	\$0.35
Irrigation and Local Agency Rate Proposed Rate Plan Monthly Service Charge and Allotment Adjusted for Meter Size				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Irrigation	4	4+	\$35.51	\$0.35
Local Agency	4	4+	\$35.51	\$0.35

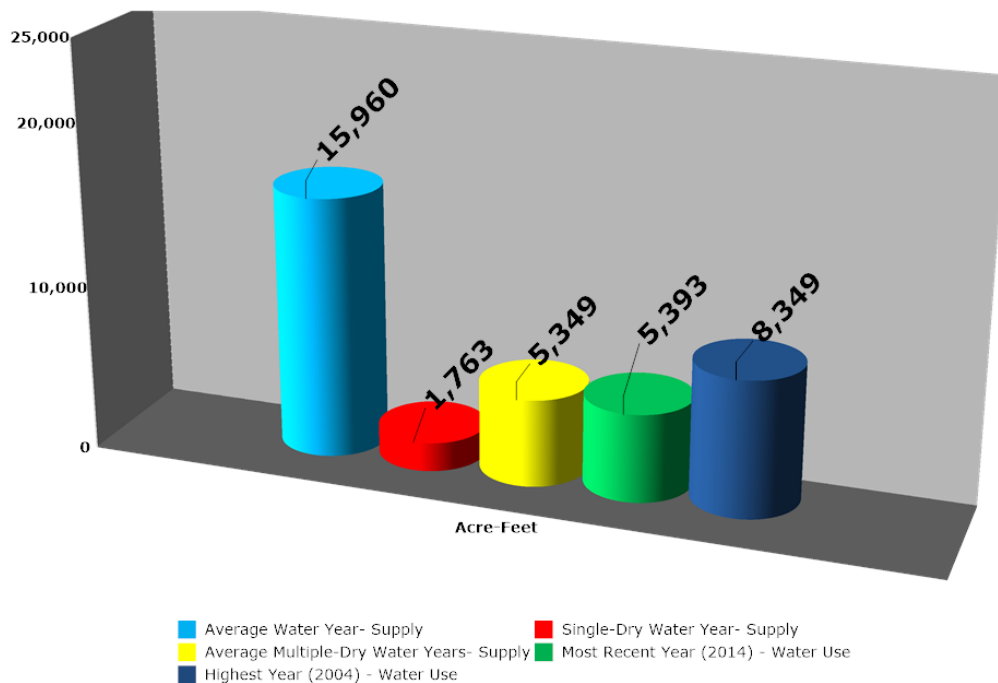
THIS PAGE LEFT INTENTIONALLY BLANK

3.1 WATER SUPPLY BACKGROUND

PID currently has a maximum storage capacity of approximately 12,300 acre-feet in its two reservoirs. The average run-off into the reservoirs is 15,960 acre-feet per year. In normal years, PID has an adequate supply to meet customer demands. The main concern is PID's exposure to dry and critically dry years, particularly successions of such years. Since there is no way of knowing what type of winter is coming in the next year or years, it is necessary to use our water supply as conservatively. That requires an estimate of the supply that PID can reliably supply, in all years, in all water supply scenarios—the safe yield.

The single driest year in our 100+ years of data provided only a calculated 1,763 acre-feet of runoff into our reservoirs. The driest consecutive three years on record provided a calculated annual average of 5,349 acre-feet into PID reservoirs (16,047 acre-feet total).

PID Water Supply



3.2 DROUGHT SUPPLY OPTIONS

PID has been investigating drought supply options for some time. No option is readily available or inexpensive. While PID will continue to analyze and consider the best course of action moving forward, PID and its customers need to focus on living within their existing supply.

The four alternatives identified are:

- Wells with in the District boundaries.
- Miocene Canal water pumped to water treatment plant.
- Lake Oroville via interconnection with Del Oro Water Company.
- Intertie connection with Cal Water Chico.

3.0 WATER SUPPLY AND HISTORICAL DEMANDS

3.3 SAFE YIELD ANALYSIS

PID has a model to calculate the expected reductions in supply to its customers based upon the demands of its customers. This analysis established the safe yield of PID's water supply. If PID's total customer demand was 5,500 acre-feet or less, we anticipate delivering water without restrictions in almost all years. At this usage rate, customers could expect a reduction of 15% in only 1 out of 20 years.

After the customers experience in 2014 with a 21% reduction and 2015 with a 36% reduction due to state requirements, planning for only a 15% reduction in a 1 year in 20 scenario is appropriate.

The calculations in this study use 2014 actual data from customers. In 2014, customer demand was 5,369 acre-feet which is within the safe yield of PID's current facilities.

Analysis of Customer Demand Effects

Demand	% of Customer Demand Supplied				
	100%	85%	80%	70%	50%
	% of Time Supplied				
7,000 acre-feet	81.00%	85.20%	89.80%	98.10%	100.00%
6,500 acre-feet	85.20%	88.00%	91.70%	100.00%	100.00%
6,000 acre-feet	88.00%	90.70%	97.20%	99.10%	100.00%
5,500 acre-feet	91.70%	94.40%	98.10%	100.00%	100.00%
5,000 acre-feet	94.40%	97.20%	99.10%	100.00%	100.00%

4.1 INTRODUCTION – REVENUE REQUIREMENTS

Every entity delivering water has a unique justification and unique cost basis, and therefore a unique rate structure. Some agencies must pay for water prior to treating and delivering it to their customers. Other agencies use large amounts of power to pump their water from its source or they may purchase water from others and deliver to customers. Some agencies pay a wholesaler to treat their water. In these cases, a reduction in customer use, significantly results in a reduction in costs to the retail supplier as well.

These previous examples differ from PID which delivers the majority of its water by gravity without large electricity costs. PID also treats its water under a system where treatment costs do not vary significantly with demand. The variable cost of delivering water to PID customers is typically less than 3% of the total budget, reflecting a small amount of power and chemicals for the treatment and delivery of water. This means that the cost to produce and deliver half as much water as has historically been delivered is about the same as producing and delivering the full historical average amount.

The only way for the District to cut costs is to reduce the number of employees or cut capital projects. PID is properly sized and equipped to run an efficient organization and, therefore, a reduction in demand does not result in a need or justification for fewer employees or fewer capital projects. The capital project with the highest impact on the future revenue needs is the pending Process Water Recycle Project which is being mandated by state requirements and is not an optional project for PID.

PID has not adjusted rates since January of 2014. Additionally, the drought has impacted revenues in 2014 and 2015 resulting in revenues not recovering PID's cost of service by about \$700,000. PID used cash reserves to make up for the lost revenue. These reserves must be replenished to account for possible future droughts, emergencies and uncertainties.

Additional detailed financial information can be found in the recent PID Budgets.

The following section provides the financial information that is used as a basis for the proposed rate structure.

4.2 PID EXPENSES

The proposed rate structure is based upon the budgeted expenditures through 2020. The first three years are developed from the current PID budget. Years 2019 and 2020 are based upon an escalation using a CPI-W estimated at 3% per year which, as compared to historical average, should be a good approximation of the change in cost of providing service in future years. PID has agreements with employee bargaining units that tie cost of living adjustments to changes in Social Security payments that are tied directly to the CPI_W. Personnel costs are a large portion of PID's budget. These budgets do not include anticipated expenses associated with complying with the Water Conservation Act of 2009 (SBx7-7). PID and other local public agencies are currently pursuing reimbursement from the state of California for the costs of complying with that Act.

4.0 REVENUE REQUIREMENTS

The recommended rate structure would set rates and incrementally increase revenue up to the 2018 estimate of expenses.

EXPENDITURES:	2016 Budget	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate
Operating	5,371,090	5,388,907	5,472,259	5,536,427	5,602,520
Pipeline	765,615	806,647	823,310	848,009	873,450
Conservation	100,000	100,000	100,000	100,000	100,000
Debt Service	1,199,243	1,197,307	1,199,670	1,199,670	1,199,670
New Estimated Debt Service	-	40,121	1,203,639	1,203,639	1,203,639
Non Major Capital	167,443	150,000	150,000	150,000	150,000
Emergency Reserve	600,000	600,000	600,000	600,000	600,000
TOTAL	8,203,391	8,282,982	9,548,878	9,637,746	9,729,279

4.3 PID REVENUE PROJECTION

The revenue projections were developed through an analysis of anticipated customer choices for the various plans. These projections will highly vary based upon the actual customer usage. The revenue projections below are for the proposed rate structure:

	2016	2017	2018	2019	2020
Rate Revenue	\$7,882,200	\$7,937,100	\$9,038,200	\$9,309,300	\$9,588,600

4.4 FIXED RATE CALCULATION

With PID's expenses largely fixed, PID's Board has the option of adopting a rate that is completely fixed. The following, based upon the anticipated expenses of PID, shows what the monthly service charge per equivalent meter would be if there were no charges for consumption.

EXPENDITURES:	2016 Budget	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate
TOTAL	8,203,391	8,282,982	9,548,878	9,637,746	9,729,279
Monthly per Equivalent Meter	\$60.72	\$61.31	\$70.68	\$71.33	\$72.01

4.4 EMERGENCY RESERVES

The proposed rate plan provides for the collection of \$600,000 each year for the next five years to reestablish an emergency reserve. The current drought depleted PID's previous reserves and highlighted the need to replenish reserves in the event PID revenue is again impacted in the future by circumstances outside of its control.

The \$3 million target for the fund is to allow PID to operate for four months with no income or many months or even years in the event of reduced income due to drought, emergency conditions, or other unforeseen circumstances. In a catastrophic emergency, PID may not be able to collect revenue. Although PID may receive assistance from the state and federal government, the funds won't be made available immediately.

4.5 LONG TERM CAPITAL COSTS ASSOCIATED WITH HIGH DEMANDS

The water usage of PID customers varies widely. If all customers demanded water at the levels of our top 40% of customer use, PID would be unable to sustain their demands without significant capital investments and development of new supplies. It is justifiable to collect funds for these potential projects in the future from customers that have demands that cause PID to exceed their safe yield.

The following projects have been identified as major capital projects to increase the water supply capacity of the PID:

Projects	Estimated Cost
Drought Supply Project	\$7,000,000
New Storage Dam Feasibility Study	\$3,000,000
New Storage Dam Preliminary Engineering, CEQA, Permits	\$10,000,000
Paradise Lake Bladder Dam	\$2,500,000
New Well	\$500,000
Escalated Pipeline Replacement	\$1,500,000 per year

The demands of the top 40% of the customers cause the need to continue to develop these water supply alternatives. The cost of these projects has not been included in the cost of service calculation for the recommended 10K Plan base rate, but is attributable to the increased cost to serve customers on the optional plans with higher usage values.

THIS PAGE LEFT INTENTIONALLY BLANK

5.1 INTRODUCTION

The goals in the rate setting process are:

- Adequate revenue to meet PID's costs of continuing to serve its customers.
- The encouragement of the wise use of water by PID customers and to avoid customers wasting or unreasonably using water.
- Provide a financial incentive to PID customers to install water efficient devices.
- Implement a rate structure that complies with Proposition 218 and other applicable legal requirements.

The proposed rate structure provides a stable revenue stream while recognizing the differing water use patterns of customers and the cost of providing service to them.

5.2 RATE CLASSES

There are two separate rate classes established in these rates.

- Residential, Business, Multiple Units and Residential Care Facilities customers are one rate class because their demand can be calculated and costs allocated using equivalent meters, and the service charge and water allotments are proportionally increased to reflect the equivalent meters consistent with their larger meter size.
- Irrigation, Residential Irrigation, Outdoor Recreation and Local Agency are one rate class.

5.3 RATE PLAN

Principles of the Rate Plan:

- PID has limited supply of water and has determined a safe yield of 5,500 acre-feet per year.
- Customer water usage varies significantly throughout PID.
- Customers whose usage causes PID to exceed its safe yield should fund in their rates those measures needed to expand PID's safe yield.
- Customers should have a choice in determining their needs and pay accordingly.
- With a majority of PID expenses fixed, and its customers' usage patterns highly variable and dependent on weather, a stable revenue stream is required.
- With a limited readily available water supply resource, the rates should encourage the efficient use of water and discourage the waste and unreasonable use of water.
- The Water Code provides for the equitable distribution of water.

5.0 COST OF SERVICE

Basis of the Rate Design:

- If all customers water needs were similar to our middle tier usage, the total demand would be at or near PID's safe yield.
- A larger service charge with an allocation of water, coupled with a per unit charge for consumption in excess of the basic allocation, provides for a more stable revenue stream while still encouraging the efficient use of water.
- The allocation of water included in the service charge is based upon the May through June average of residential users in PID. Most customers are anticipated to pay a consumption charge in these summer months when outdoor irrigation begins in earnest.
- The proposed rate plan (10K) is calculated based upon the annual operational revenue required per equivalent meter.
- The first tier is based upon 2014 usage, the most recent year that had demands nearly equal to the safe yield of 5,500 acre-feet.
- The first tier water charge is calculated by dividing the revenue requirements for pipeline and conservation efforts by the 2014 calculated first tier usage with all customers on the proposed 10K rate plan.
- The second tier of water charge is calculated by dividing the cost of accelerating pipeline replacement through contracting out additional pipe replacement by the 2014 calculated second tier usage with all customers on the proposed 10K rate plan.
- The optional plans are set based upon the exchange of higher or lower service charge for acquiring an alternate allotment of water.
- A customer can choose a different plan at any time in the year. The difference in charges will be calculated to the beginning of the calendar year, or to the first month in effect in the first year of inception, and the difference will be debited or credited on the customer's account.
- Customers will be allowed to choose a rate plan with a higher or lower allotment of water than available under the basic service charge. The lower allotment customers reduced usage would free up available water for higher demand customers. The customers with a higher need are agreeing to pay an additional service charge to use that water freed up. This is just one of the options shown in section 4.5 for the development of additional supplies and would likely be the first effort at creating new supply if the need materializes.
- The rates are based upon the revenue requirement provided in the PID budget for the first three years. The fourth and fifth year would be adjusted based upon CPI-W which is a good approximation of the increase in cost of service.

5.4 COST OF SERVICE CALCULATION DETAIL

Fixed and Variable Expense Allocation

Although the expenses of PID do not vary significantly in relationship to amount of water delivered, there is a portion of the expenses that relate to the use of water. The pipeline replacement program and the water conservation expenses are undertaken to use water more wisely. It is appropriate for those expenses to be born more based upon use of water rather than evenly spread between customers.

If all customers used water in the manner of PID's lowest users, the need for pipe replacement or conservation efforts would be reduced or eliminated. Conversely, pipeline replacement, enhanced conservation efforts, and other supply creating costs would be incurred if PID customers used more than PID can safely provide on a year-to-year basis.

The service charge is based upon a calculation of the expenses of the PID, less the expenses for pipeline replacement and water conservation.

Equivalent Meter Calculation

PID has 10,138 meters for water delivery. Although most of those meters are residential, the business, local agencies, multi-family and irrigation accounts typically have larger meters than a residential size meter. The calculation was performed to determine equivalent residential meters. Adjustments were made for larger meters based upon their capacity. This calculation puts all customers on an even cost basis.

This calculation provides the basis for determining the cost of service to each meter. The following shows the breakdown of the calculation:

Meter Capacity			
Type	Multiplier	Count	Total
Residential	1	9,700	9,700
1"	1.67	212	354
1.5"	3.33	95	316
2"	5.33	113	602
3"	10	22	220
4"	16.67	4	66.7
TOTAL			11,259

Annual Revenue Required per Equivalent Meter

To illustrate how the cost of service is calculated, the following example will use the 2016 costs from Section 4.2 of this report in the amount of \$7,337,776 (2016 Total Expense less Pipeline and Conservation Expenses).

5.0 COST OF SERVICE

Annual Expenses/Equivalent Meters = Annual Cost of Service per Equivalent Meter

$$\text{\$7,337,776} \div 11,259 = \text{\$651.73} = \text{\$54.31 per month}$$

Water Allotment Allowed

A water allotment was created to provide for the majority of the cost recovery coming from a fixed amount.

To provide for the majority of the cost of water being fixed, the water amount included in the service charge was set at the average of April – June use (May-July billing) for the customers in the middle 20% of usage, the basis for the cost of service.

Based upon the average use of the customers in this middle class, the customer will exceed the allotment in five months of the year.

Middle 20% Use May – 8.52 June – 13.11 July – 16.90 Average – **12.84**

2014 Residential Use													
Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	Tot.
Units Mid 20%	8.58	8.56	5.83	6.97	8.52	13.11	16.90	18.09	15.32	13.45	9.38	6.59	131.30
Over Allotment	0	0	0	0	0	0.11	3.90	5.09	2.32	0.45	0	0	11.87

Unit Cost Calculation

(1 unit =100 cubic feet=748 gallons)

The first tier unit cost revenue is calculated to provide the necessary funding for the expenses associated with pipeline replacement and conservation efforts. The pipeline replacement is undertaken in-house by PID staff and typically involves about one to two miles of replacement. Conservation expenses would be a combination of consultant expenses, outreach to customers, and water savings device programs.

The units in the calculation were derived from 2014 usage of PID customers which is a year that approximated the safe yield of 5,500 acre-feet. The number of units that would be billed in the first tier was determined by the customer use in the proposed rate plan. The first tier includes usage over 13 units up to 26 units per month. Usages in excess of 26 units per month are elevated to the second tier unit cost (described below).

First Tier

2016 Pipeline and Conservation budgeted Expense = \\$865,615

2014 New Tier 1 Units = 642,135

Cost per Unit = \\$1.35

The use of water above the second tier will cause PID to exceed safe yield or would demonstrate use outside the agreed reduction for those customers that choose the lower cost plan.

Section 4.5 of this report identifies a multitude of potential capital projects associated with increasing water supply to provide for higher demands. Inclusion of all the expenses associated with these potential projects would result in a cost for water that is very high and potentially unreasonable. This is due to the fact that these projects would not necessary be implemented immediately or concurrently.

The cost calculation for the second tier of water is to allow PID to implement an expedited pipeline replacement project by outside contractors. The \$1.5 million cost estimate is derived from two miles of replacement at an estimated \$150 per foot, which is consistent with recent construction costs for similar work in and around the PID area. This is a project that could be implemented quickly and provide additional water supply in the most responsive manner. In PID's case, this is the most feasible and immediately available project to enhance supply if PID's customers are exceeding PID's safe yield.

The second tier unit cost is calculated by dividing the cost of two miles of pipeline replacement by the number of new tier two units in 2014. The number of units that would be billed in the second tier was determined by assuming that all customers would be included in the proposed 10K base rate plan.

Second Tier

2016 Cost = \$1,500,000

2014 New Tier 2 Units = 405,452

Cost per Unit = \$3.70

The collection of higher consumption charges for use that will cause PID to exceed PID's safe yield and trigger a need for PID to develop new supply is justified by capital expenses necessary to develop new supplies of water that would allow PID to increase its safe yield.

Monthly Service Charge

The monthly service charge is calculated based upon the annual revenue required per equivalent meter.

The calculated monthly service charge based upon the cost of service is as follows:

Monthly Service Charge = Annual Revenue per Equivalent Meter ÷ 12

\$54.31 = \$651.73 ÷ 12

5.0 COST OF SERVICE

Recommended Cost of Service Rate

The following is the rate proposed for adoption:

Monthly Service Charge -	\$54.31
Monthly Allotment –	13 units (1 unit =100 cubic feet=748 gallons)
Use Charge 13.01-26 units -	\$1.35 per unit
Use Charge greater than 26 units -	\$3.70 per unit

Business, Multi-Family and Residential Care Facilities rates will have the service charge and monthly allotment increased proportionally to the meter size based upon the Meter Capacity Multiplier shown in the chart in equivalent meter section above.

Customer Choice Rate Plans

The recommended rate plan satisfies the legal requirements of Proposition 218, but does not accommodate for the varying needs of PID customers. Customer Choice Rate Plans provide the opportunity for customers with a lesser need for water to commit to a lower monthly usage allotment and corresponding lower monthly service charge. This provides an opportunity for customers that wish to use more water on a monthly basis than allocated under the base 10K plan with the option to pay a higher service charge in exchange for a larger allotment of water.

Calculation of Choice Rate Options

The optional rate plans were calculated with a blend of a fixed amount and an amount based upon the allotment allowed for each choice. The calculation is as follows:

The allotments are set based upon the Apr – June (May-July Billing) average for five customer classes based upon 2014 data.

Plan	May-July Average	Allotment	Tier 1	Tier 2
3K	3.53	4	4-8	8+
6K	7.98	8	8-16	16+
10K- Proposed for Adoption	12.84	13	13-26	26+
16K	20.30	21	21-42	42+
30K	41.01	41	41-82	82+

3K and 6K Rate Options

In 2014, the winter month's demand was 48.7% of the summer months demand (576 MG/1183MG). It was determined based upon this ratio that it is appropriate to make half of the service charge fixed, and to adjust the other half of the service charge.

Fixed - One half of the service charge for the lower rate plans will be 50% of the Cost of Service Monthly Charge (CSMC).

$$\text{Fixed Portion 3K \& 6K Plans} = 0.50 \times \$54.31 = \$27.15$$

Allotment - The other half of the service charge is adjusted based upon proportionality to the Cost of Service Monthly Allotment (CSMA). The plan allotment (PA) is divided by the CSMA then multiplied by the CSMC and then by 50%.

$$\text{Allotment Portion} = 0.50 \times \text{CSMC} \times (\text{PA}/\text{CSMA})$$

$$\text{3K Allotment} = 0.5 \times \$54.31 \times (4/13) = \$8.36$$

$$\text{3K Rate} = \$27.15 + \$8.36 = \$35.51$$

$$\text{6K Allotment} = 0.5 \times \$54.31 \times (8/13) = \$16.72$$

$$\text{6K Rate} = \$27.15 + \$16.72 = \$43.87$$

16K and 30K Rate Options

The higher rate plans will pay PID for the reduction in service charge of the lower rate plans to provide higher users with the ability to use more water.

The rate options provide for the 16K customers to pay the reduction provided to the 6K customers and the 30K customers to pay the reduction in the 3K customers.

$$\text{16K MSC} = \text{CSMC} + (\text{CSMC} - \text{6K MSC})$$

$$\text{16K MSC} = \$54.31 + (\$54.31 - \$43.87) = \$64.75$$

$$\text{30K MSC} = \text{CSMC} + (\text{CSMC} - \text{3K MSC})$$

$$\text{30K MSC} = \$54.31 + (\$54.31 - \$35.51) = \$73.11$$

Customer Choice Rate Plans

Plan	Allotment	<i>Multiplier</i>	Allotment Portion	Fixed Portion	Total Monthly Service Charge
3K	4	0.31	\$8.36	\$27.15	\$35.51
6K	8	0.62	\$16.71	\$27.15	\$43.87
10K (recommended base plan)	13	1			\$54.31
16K	21	N/A	\$10.44	\$54.31	\$64.75
30K	41	N/A	\$18.80	\$54.31	\$73.11

Customers are allowed to change plans at any time. The change will be implemented back to the beginning of the calendar year, or the first month in effect for the first year of implementation. A credit or charge will be applied to the account based upon the change.

Sealed Meter Rates

Customers with sealed meters will be charged at one-half the 10K rate for residential service to cover the cost for PID to continue to operate and maintain the service line to the sealed meter.

2016 Proposed Rates

Account Type	Service Charge	Quantity Charge
Residential Rate Plan Proposed for Adoption		
10 K Plan	\$54.31 First 13 HCF Included	\$1.35 (13-26 HCF) / \$3.70 (above 26)
Customer Choice Rate Plans		
3 K Plan	\$35.51 First 4 HCF Included	\$1.35 (4-8 HCF) / \$3.70 (above 8)
6 K Plan	\$43.87 First 8 HCF Included	\$1.35 (8-16 HCF) / \$3.70 (above 16)
16 K Plan	\$64.75 First 21 HCF Included	\$1.35 (21-42 HCF) / \$3.70 (above 42)
30 K Plan	\$73.11 First 41 HCF Included	\$1.35 (41-82 HCF) / \$3.70 (above 82)

(1 HCF = 1 unit = 100 cubic feet = 748 gallons)

THIS PAGE LEFT INTENTIONALLY BLANK

6.1 INTRODUCTION-LOCAL AGENCY AND IRRIGATION

Local Agency and Irrigation accounts are addressed in the same chapter because they provide a local benefit to all PID customers.

Local Agencies all provide facilities or outdoor areas that are open and available to the public. If a residential customer chooses to forgo a lawn to conserve water and have the ability to choose a lower tier, local agencies provide parks and balls fields to still enjoy a lawn setting.

Irrigation customers provide a historical and local heritage as well as open space that benefits all customers. They also do not require the treatment process to drinking water standards.

Most importantly, both of these types of customers have the ability to use additional water in years when PID has adequate supply and to cut back quickly in times of drought. This helps PID to increase the use of its permitted water rights before those rights go to license.

PID can, and historically has, offset a portion of the cost to serve such customers with non-water charge revenues. In this way, the costs otherwise recoverable from those customers are not shifted to other customers through their monthly water bill. The following non-water charge revenues are identified in the PID budget:

Non Rate Revenues	
Outside Water Sales	\$111,183
Taxes 1%	\$240,000
Rents	\$15,000
Total	\$366,183

In 2014, these groups of customers used 166,140 units of water. With a reduction in per unit cost, the Irrigation and Local Agency customers will use \$166,140 of the non-rate revenues.

$$166,140 \times (\$1.35 - \$0.35) = \$166,140.00$$

The service charge will likely provide a reduction as well because most of these customers will choose the lowest optional plan. Residential Irrigation customers are proposed to be required to be place in the highest residential plan.

$$30K \text{ MSC} - 3K \text{ MSC} = \$73.11 - \$35.51 = \$37.60 \text{ per equivalent meter}$$

$$263.24 \text{ equivalent meters} \times \$37.60 \times 12 \text{ months} = \$118,771.46$$

These reductions do not equate to the total non-rate revenues received by PID leaving a portion of this revenue available for other PID purposes.

$$\$366,183.00 - \$166,140.00 - \$118,771.46 = \$81,271.54$$

6.0 LOCAL AGENCY AND IRRIGATION RATE PLAN

6.2 LOCAL AGENCY AND IRRIGATION PROPOSED RATE STRUCTURE

Residential Irrigation				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	41	41+	\$73.11	\$0.35
Irrigation, Outdoor Recreation and Local Agency Based on Meter Size				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	Business 3K Allotment	All Water over Allotment	Business 3K Service Charge	\$0.35

(1 HCF = 1 unit = 100 cubic feet = 748 gallons)

7.1 DROUGHT RATES

The proposed drought rate structure would reduce the allotment based upon the significance and impact of a possible future drought or other water supply shortage.

The proposed normal year allotments are:

Plan	Allotment	Tier 1	Tier 2
3K	4	4-8	8+
6K	8	8-16	16+
10K- Proposed for Adoption	13	13-26	26+
16K	21	21-42	42+
30K	41	41-82	82+

Each year, the Board of Directors of PID makes a determination if the water supply on April 1st is adequate for full deliveries, or if a reduction is required that calendar year. The proposed drought rate structure would reduce the allotment for 10K, 16K and 30K based upon that action. The 3K and 6K plans will not be reduced, since they provide ongoing conservation for the PID.

For example, if it is determined that PID requires a 20% reduction in deliveries, then the allotments will be reduced based upon the calculation of the amount of reductions necessary in the 10K, 16K, and 30K plans to reduce deliveries to the required level.

Irrigation, Local Agencies, and Outdoor Recreation accounts will be required to reduce at the same level as that would be required of the 30K plan. Any usage above that will be charged at the Business rate tier 1 charge.

THIS PAGE LEFT INTENTIONALLY BLANK

8.0 RECOMMENDED RATE STRUCTURE

8.1 PROPOSED RATES

The recommended rates for 2016 are:

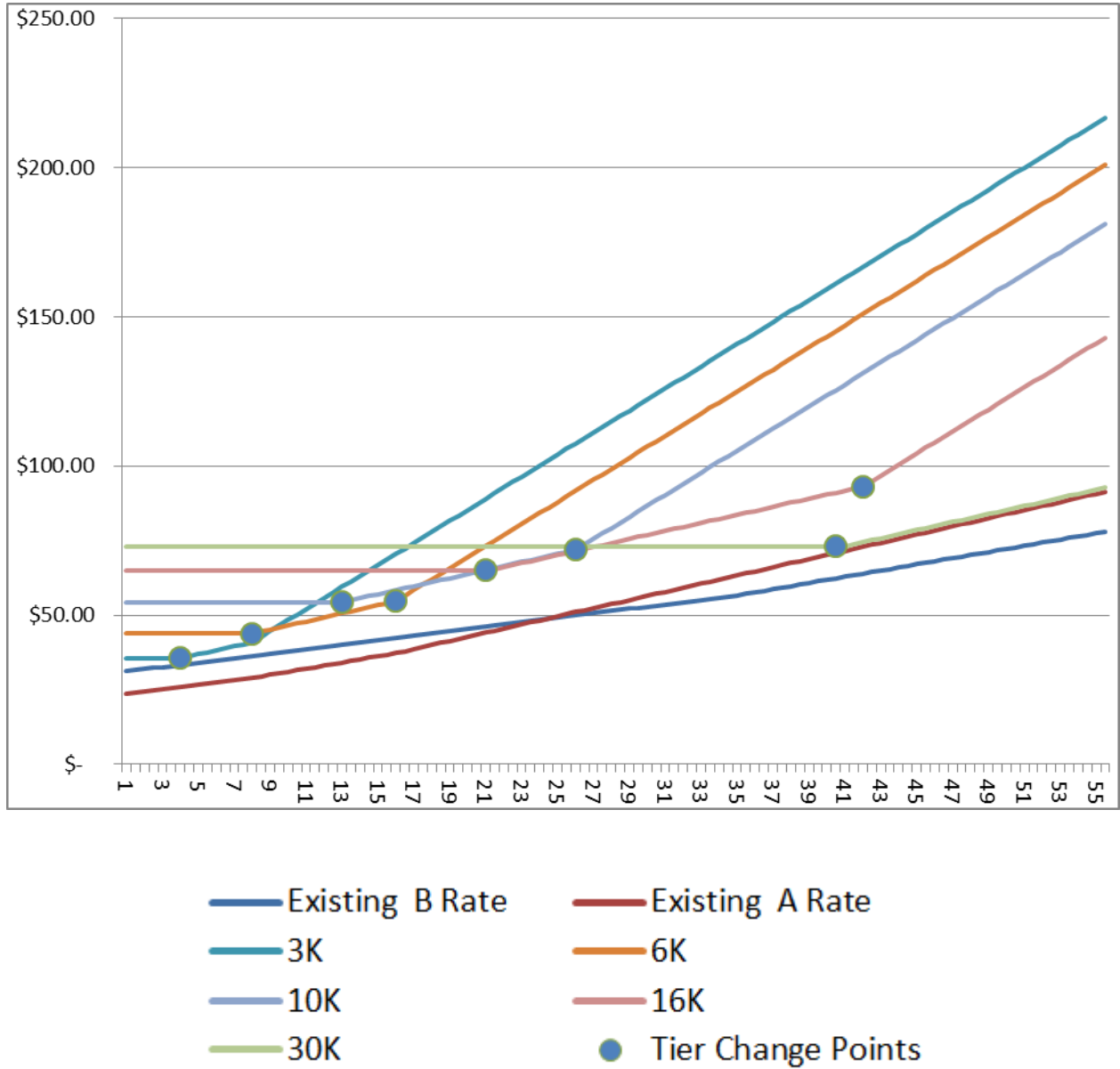
Proposed Residential Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$54.31	\$1.35	\$3.70
Customer Choice Residential Rate Plans						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$35.51	\$1.35	\$3.70
6K	8	8-16	16+	\$43.87	\$1.35	\$3.70
16K	21	21-42	42+	\$64.75	\$1.35	\$3.70
30K	41	41-82	82+	\$73.11	\$1.35	\$3.70

Proposed business plans are on the same basis as the proposed residential rate plans, but the allotment and service charge is adjusted proportionally by meter size. Business, Local Agency and Irrigation Rates are shown at end of section.

(1 HCF = 1 unit = 100 cubic feet = 748 gallons)

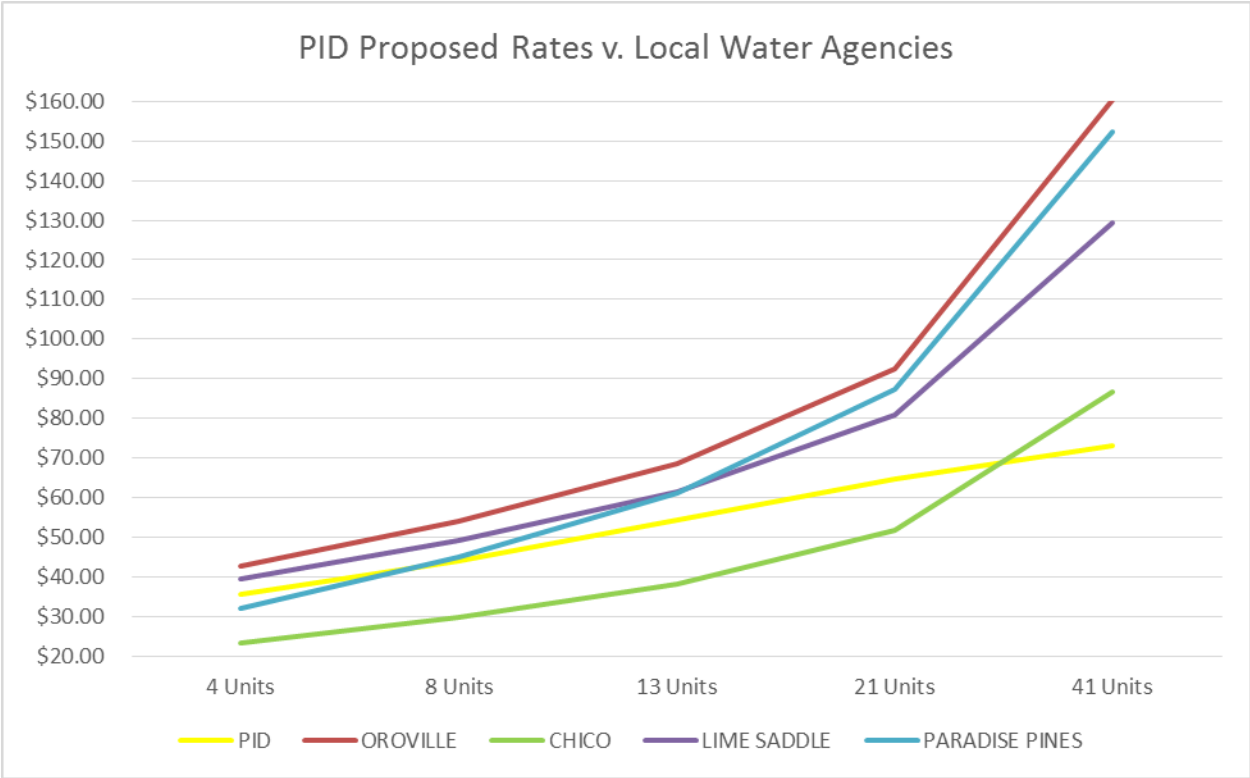
The following pages show charts comparing current rates with the proposed and optional rates.

Rate Comparison



8.0 RECOMMENDED RATE STRUCTURE

Rate Comparison vs. Local Agencies



2016**All Allotments to be Reduced for Drought Response by Board Action**

2016-Proposed Residential Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$54.31	\$1.35	\$3.70
2016-Customer Choice Residential Rate Plans						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$35.51	\$1.35	\$3.70
6K	8	8-16	16+	\$43.87	\$1.35	\$3.70
16K	21	21-42	42+	\$64.75	\$1.35	\$3.70
30K	41	41-82	82+	\$73.11	\$1.35	\$3.70

2016-Proposed Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$54.31	\$1.35	\$3.70
2016-Customer Choice Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$35.51	\$1.35	\$3.70
6K	8	8-16	16+	\$43.87	\$1.35	\$3.70
16K	21	21-42	42+	\$64.75	\$1.35	\$3.70
30K	41	41-82	82+	\$73.11	\$1.35	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2016-Proposed Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	21.71	21.71-43.42	43.42+	\$90.70	\$1.35	\$3.70
2016-Customer Choice Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	6.68	6.68-13.36	13.36+	\$59.30	\$1.35	\$3.70
6K	13.36	13.36-26.72	26.72+	\$73.26	\$1.35	\$3.70
16K	35.07	35.07-70.14	70.14+	\$108.13	\$1.35	\$3.70
30K	68.47	68.47-136.94	136.94+	\$122.09	\$1.35	\$3.70

2016-Proposed Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	43.29	43.29-86.58	86.58+	\$180.85	\$1.35	\$3.70
Customer Choice Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	13.32	13.32-26.64	26.64+	\$118.25	\$1.35	\$3.70
6K	26.64	26.64-53.28	53.28+	\$146.09	\$1.35	\$3.70
16K	69.93	69.93-139.86	139.86+	\$215.62	\$1.35	\$3.70
30K	136.53	136.53-273.06	273.06+	\$243.46	\$1.35	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2016-Proposed Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	69.29	69.29-138.58	138.58+	\$289.47	\$1.35	\$3.70
2016-Customer Choice Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	21.32	21.32-42.64	42.64+	\$189.27	\$1.35	\$3.70
6K	42.64	42.64-85.28	85.28+	\$233.83	\$1.35	\$3.70
16K	111.93	111.93-223.86	223.86+	\$345.12	\$1.35	\$3.70
30K	218.53	218.53-437.06	437.06+	\$389.68	\$1.35	\$3.70

2016-Proposed Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	130	130-260	260+	\$543.10	\$1.35	\$3.70
2016-Customer Choice Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	40	40-80	80+	\$355.10	\$1.35	\$3.70
6K	80	80-160	160+	\$438.70	\$1.35	\$3.70
16K	210	210-420	420+	\$647.50	\$1.35	\$3.70
30K	410	410-820	820+	\$731.10	\$1.35	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2016-Proposed Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	216.71	216.71-433.42	433.42+	\$905.35	\$1.35	\$3.70
2016-Customer Choice Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	66.68	66.68-133.36	133.36+	\$591.95	\$1.35	\$3.70
6K	133.36	133.36-266.72	266.72+	\$731.31	\$1.35	\$3.70
16K	350.07	350.07-700.14	700.14+	\$1,079.38	\$1.35	\$3.70
30K	683.47	683.47-1366.94	1366.94+	\$1,218.74	\$1.35	\$3.70

2016-Residential Irrigation				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	41	41+	\$73.11	\$0.35
Irrigation, Outdoor Recreation and Local Agency Based on Meter Size				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	Business 3K Allotment	All Water over Allotment	Business 3K Service Charge	\$0.35

8.0 RECOMMENDED RATE STRUCTURE**2017****All Allotments to be Reduced for Drought Response by Board Action**

2017-Proposed Residential Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$54.60	\$1.41	\$3.70
2017-Customer Choice Residential Rate Plans						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$35.70	\$1.41	\$3.70
6K	8	8-16	16+	\$44.10	\$1.41	\$3.70
16K	21	21-42	42+	\$65.10	\$1.41	\$3.70
30K	41	41-82	82+	\$73.50	\$1.41	\$3.70

2017-Proposed Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$54.60	\$1.41	\$3.70
2017-Customer Choice Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$35.70	\$1.41	\$3.70
6K	8	8-16	16+	\$44.10	\$1.41	\$3.70
16K	21	21-42	42+	\$65.10	\$1.41	\$3.70
30K	41	41-82	82+	\$73.50	\$1.41	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2017-Proposed Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	21.71	21.71-43.42	43.42+	\$91.18	\$1.41	\$3.70
2017-Customer Choice Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	6.68	6.68-13.36	13.36+	\$59.62	\$1.41	\$3.70
6K	13.36	13.36-26.72	26.72+	\$73.65	\$1.41	\$3.70
16K	35.07	35.07-70.14	70.14+	\$108.72	\$1.41	\$3.70
30K	68.47	68.47-136.94	136.94+	\$122.75	\$1.41	\$3.70

2017-Proposed Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	43.29	43.29-86.58	86.58+	\$181.82	\$1.41	\$3.70
2017-Customer Choice Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	13.32	13.32-26.64	26.64+	\$118.88	\$1.41	\$3.70
6K	26.64	26.64-53.28	53.28+	\$146.85	\$1.41	\$3.70
16K	69.93	69.93-139.86	139.86+	\$216.78	\$1.41	\$3.70
30K	136.53	136.53-273.06	273.06+	\$244.76	\$1.41	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2017-Proposed Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	69.29	69.29-138.58	138.58+	\$291.02	\$1.41	\$3.70
2017-Customer Choice Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	21.32	21.32-42.64	42.64+	\$190.28	\$1.41	\$3.70
6K	42.64	42.64-85.28	85.28+	\$235.05	\$1.41	\$3.70
16K	111.93	111.93-223.86	223.86+	\$346.98	\$1.41	\$3.70
30K	218.53	218.53-437.06	437.06+	\$391.76	\$1.41	\$3.70

2017-Proposed Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	130	130-260	260+	\$546.00	\$1.41	\$3.70
2017-Customer Choice Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	40	40-80	80+	\$357.00	\$1.41	\$3.70
6K	80	80-160	160+	\$441.00	\$1.41	\$3.70
16K	210	210-420	420+	\$651.00	\$1.41	\$3.70
30K	410	410-820	820+	\$735.00	\$1.41	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2017-Proposed Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	216.71	216.71-433.42	433.42+	\$910.18	\$1.41	\$3.70
2017-Customer Choice Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	66.68	66.68-133.36	133.36+	\$595.12	\$1.41	\$3.70
6K	133.36	133.36-266.72	266.72+	\$735.15	\$1.41	\$3.70
16K	350.07	350.07-700.14	700.14+	\$1,085.22	\$1.41	\$3.70
30K	683.47	683.47-1366.94	1366.94+	\$1,225.25	\$1.41	\$3.70

2017-Residential Irrigation				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	41	41+	\$73.50	\$0.41
2017-Irrigation, Outdoor Recreation and Local Agency Based on Meter Size				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	Business 3K Allotment	All Water over Allotment	Business 3K Service Charge	\$0.41

8.0 RECOMMENDED RATE STRUCTURE**2018****All Allotments to be Reduced for Drought Response by Board Action**

2018-Proposed Residential Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$63.84	\$1.44	\$3.70
2018-Customer Choice Residential Rate Plans						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$41.74	\$1.44	\$3.70
6K	8	8-16	16+	\$51.56	\$1.44	\$3.70
16K	21	21-42	42+	\$76.12	\$1.44	\$3.70
30K	41	41-82	82+	\$85.94	\$1.44	\$3.70

2018-Proposed Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$63.84	\$1.44	\$3.70
2018-Customer Choice Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$41.74	\$1.44	\$3.70
6K	8	8-16	16+	\$51.56	\$1.44	\$3.70
16K	21	21-42	42+	\$76.12	\$1.44	\$3.70
30K	41	41-82	82+	\$85.94	\$1.44	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2018-Proposed Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	21.71	21.71-43.42	43.42+	\$106.61	\$1.44	\$3.70
2018-Customer Choice Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	6.68	6.68-13.36	13.36+	\$69.71	\$1.44	\$3.70
6K	13.36	13.36-26.72	26.72+	\$86.11	\$1.44	\$3.70
16K	35.07	35.07-70.14	70.14+	\$127.12	\$1.44	\$3.70
30K	68.47	68.47-136.94	136.94+	\$143.52	\$1.44	\$3.70

2018-Proposed Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	43.29	43.29-86.58	86.58+	\$212.59	\$1.44	\$3.70
2018-Customer Choice Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	13.32	13.32-26.64	26.64+	\$139.00	\$1.44	\$3.70
6K	26.64	26.64-53.28	53.28+	\$171.71	\$1.44	\$3.70
16K	69.93	69.93-139.86	139.86+	\$253.47	\$1.44	\$3.70
30K	136.53	136.53-273.06	273.06+	\$286.18	\$1.44	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2018-Proposed Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	69.29	69.29-138.58	138.58+	\$340.27	\$1.44	\$3.70
2018-Customer Choice Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	21.32	21.32-42.64	42.64+	\$222.48	\$1.44	\$3.70
6K	42.64	42.64-85.28	85.28+	\$274.83	\$1.44	\$3.70
16K	111.93	111.93-223.86	223.86+	\$405.70	\$1.44	\$3.70
30K	218.53	218.53-437.06	437.06+	\$458.05	\$1.44	\$3.70

2018-Proposed Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	130	130-260	260+	\$638.40	\$1.44	\$3.70
2018-Customer Choice Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	40	40-80	80+	\$417.42	\$1.44	\$3.70
6K	80	80-160	160+	\$515.63	\$1.44	\$3.70
16K	210	210-420	420+	\$761.17	\$1.44	\$3.70
30K	410	410-820	820+	\$859.38	\$1.44	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2018-Proposed Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	216.71	216.71-433.42	433.42+	\$1,064.21	\$1.44	\$3.70
2018-Customer Choice Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	66.68	66.68-133.36	133.36+	\$695.83	\$1.44	\$3.70
6K	133.36	133.36-266.72	266.72+	\$859.56	\$1.44	\$3.70
16K	350.07	350.07-700.14	700.14+	\$1,268.87	\$1.44	\$3.70
30K	683.47	683.47-1366.94	1366.94+	\$1,432.59	\$1.44	\$3.70

2018-Residential Irrigation				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	41	41+	\$85.94	\$0.44
2018-Irrigation, Outdoor Recreation and Local Agency Based on Meter Size				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	Business 3K Allotment	All Water over Allotment	Business 3K Service Charge	\$0.44

8.0 RECOMMENDED RATE STRUCTURE

2019 Estimated (based upon COLA)
All Allotments to be Reduced for Drought Response by Board Action

2019-Proposed Residential Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$64.32	\$1.48	\$3.70
2019-Customer Choice Residential Rate Plans						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$42.06	\$1.48	\$3.70
6K	8	8-16	16+	\$51.95	\$1.48	\$3.70
16K	21	21-42	42+	\$76.69	\$1.48	\$3.70
30K	41	41-82	82+	\$86.58	\$1.48	\$3.70

2019-Proposed Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$64.32	\$1.48	\$3.70
2019-Customer Choice Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$42.06	\$1.48	\$3.70
6K	8	8-16	16+	\$51.95	\$1.48	\$3.70
16K	21	21-42	42+	\$76.69	\$1.48	\$3.70
30K	41	41-82	82+	\$86.58	\$1.48	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2019-Proposed Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	21.71	21.71-43.42	43.42+	\$107.41	\$1.48	\$3.70
2019-Customer Choice Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	6.68	6.68-13.36	13.36+	\$70.23	\$1.48	\$3.70
6K	13.36	13.36-26.72	26.72+	\$86.76	\$1.48	\$3.70
16K	35.07	35.07-70.14	70.14+	\$128.07	\$1.48	\$3.70
30K	68.47	68.47-136.94	136.94+	\$144.60	\$1.48	\$3.70

2019-Proposed Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	43.29	43.29-86.58	86.58+	\$214.19	\$1.48	\$3.70
2019-Customer Choice Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	13.32	13.32-26.64	26.64+	\$140.04	\$1.48	\$3.70
6K	26.64	26.64-53.28	53.28+	\$173.00	\$1.48	\$3.70
16K	69.93	69.93-139.86	139.86+	\$255.38	\$1.48	\$3.70
30K	136.53	136.53-273.06	273.06+	\$288.33	\$1.48	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2019-Proposed Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	69.29	69.29-138.58	138.58+	\$342.83	\$1.48	\$3.70
2019-Customer Choice Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	21.32	21.32-42.64	42.64+	\$224.16	\$1.48	\$3.70
6K	42.64	42.64-85.28	85.28+	\$276.90	\$1.48	\$3.70
16K	111.93	111.93-223.86	223.86+	\$408.75	\$1.48	\$3.70
30K	218.53	218.53-437.06	437.06+	\$461.50	\$1.48	\$3.70

2019-Proposed Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	130	130-260	260+	\$643.20	\$1.48	\$3.70
2019-Customer Choice Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	40	40-80	80+	\$420.55	\$1.48	\$3.70
6K	80	80-160	160+	\$519.51	\$1.48	\$3.70
16K	210	210-420	420+	\$766.89	\$1.48	\$3.70
30K	410	410-820	820+	\$865.85	\$1.48	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2019-Proposed Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	216.71	216.71-433.42	433.42+	\$1,072.21	\$1.48	\$3.70
2019-Customer Choice Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	66.68	66.68-133.36	133.36+	\$701.06	\$1.48	\$3.70
6K	133.36	133.36-266.72	266.72+	\$866.02	\$1.48	\$3.70
16K	350.07	350.07-700.14	700.14+	\$1,278.41	\$1.48	\$3.70
30K	683.47	683.47-1366.94	1366.94+	\$1,443.37	\$1.48	\$3.70

2019-Residential Irrigation				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	41	41+	\$86.58	\$0.48
2019-Irrigation, Outdoor Recreation and Local Agency Based on Meter Size				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	Business 3K Allotment	All Water over Allotment	Business 3K Service Charge	\$0.48

8.0 RECOMMENDED RATE STRUCTURE

2020 Estimated (based upon COLA)
All Allotments to be Reduced for Drought Response by Board Action

2020-Proposed Residential Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$64.81	\$1.52	\$3.70
2020-Customer Choice Residential Rate Plans						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$42.38	\$1.52	\$3.70
6K	8	8-16	16+	\$52.35	\$1.52	\$3.70
16K	21	21-42	42+	\$77.27	\$1.52	\$3.70
30K	41	41-82	82+	\$87.24	\$1.52	\$3.70

2020-Proposed Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	13	13-26	26+	\$64.81	\$1.52	\$3.70
2020-Customer Choice Business 5/8" & 3/4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	4	4-8	8+	\$42.38	\$1.52	\$3.70
6K	8	8-16	16+	\$52.35	\$1.52	\$3.70
16K	21	21-42	42+	\$77.27	\$1.52	\$3.70
30K	41	41-82	82+	\$87.24	\$1.52	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2020-Proposed Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	21.71	21.71-43.42	43.42+	\$108.23	\$1.52	\$3.70
2020-Customer Choice Business 1" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	6.68	6.68-13.36	13.36+	\$70.77	\$1.52	\$3.70
6K	13.36	13.36-26.72	26.72+	\$87.42	\$1.52	\$3.70
16K	35.07	35.07-70.14	70.14+	\$129.05	\$1.52	\$3.70
30K	68.47	68.47-136.94	136.94+	\$145.70	\$1.52	\$3.70

2020-Proposed Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	43.29	43.29-86.58	86.58+	\$215.82	\$1.52	\$3.70
2020-Customer Choice Business 1 1/2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	13.32	13.32-26.64	26.64+	\$141.11	\$1.52	\$3.70
6K	26.64	26.64-53.28	53.28+	\$174.31	\$1.52	\$3.70
16K	69.93	69.93-139.86	139.86+	\$257.32	\$1.52	\$3.70
30K	136.53	136.53-273.06	273.06+	\$290.52	\$1.52	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2020-Proposed Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	69.29	69.29-138.58	138.58+	\$345.44	\$1.52	\$3.70
2020-Customer Choice Business 2" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	21.32	21.32-42.64	42.64+	\$225.86	\$1.52	\$3.70
6K	42.64	42.64-85.28	85.28+	\$279.01	\$1.52	\$3.70
16K	111.93	111.93-223.86	223.86+	\$411.87	\$1.52	\$3.70
30K	218.53	218.53-437.06	437.06+	\$465.01	\$1.52	\$3.70

2020-Proposed Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	130	130-260	260+	\$648.10	\$1.52	\$3.70
2020-Customer Choice Business 3" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	40	40-80	80+	\$423.76	\$1.52	\$3.70
6K	80	80-160	160+	\$523.47	\$1.52	\$3.70
16K	210	210-420	420+	\$772.73	\$1.52	\$3.70
30K	410	410-820	820+	\$872.44	\$1.52	\$3.70

8.0 RECOMMENDED RATE STRUCTURE

2020-Proposed Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
10K- Proposed for Adoption	216.71	216.71-433.42	433.42+	\$1,080.38	\$1.52	\$3.70
2020-Customer Choice Business 4" Meter Rate Plan						
Plan	Allotment	Tier 1	Tier 2	Monthly Service Charge	Tier 1 Rate	Tier 2 Rate
3K	66.68	66.68-133.36	133.36+	\$706.40	\$1.52	\$3.70
6K	133.36	133.36-266.72	266.72+	\$872.62	\$1.52	\$3.70
16K	350.07	350.07-700.14	700.14+	\$1,288.15	\$1.52	\$3.70
30K	683.47	683.47-1366.94	1366.94+	\$1,454.36	\$1.52	\$3.70

2020-Residential Irrigation				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	41	41+	\$87.24	\$0.52
2020-Irrigation, Outdoor Recreation and Local Agency Based on Meter Size				
Plan	Allotment	Tier 1	Monthly Service Charge	Tier 1 Rate
Proposed for Adoption	Business 3K Allotment	All Water over Allotment	Business 3K Service Charge	\$0.52