

**COST OF SERVICE ANALYSIS
FOR
DURHAM IRRIGATION DISTRICT**

Prepared for:

**Durham Irrigation District
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Introduction

Durham Irrigation District (District) is committed to providing a safe, affordable, and reliable source of water supply for its customers. To accomplish this, the District levies a variety of water rates and charges for water services provided to customers. Water rates are required to be set at levels sufficient to cover the costs of: (1) ongoing operations and maintenance; (2) repair of water system facilities; (3) acquisition of materials and supplies; (4) labor and administration; (5) capital improvements, and (6) maintenance of adequate cash reserves.

Any rate increase(s) shall be governed by the need to meet operating and capital costs, maintain adequate debt coverage, and build reserve funds. It is critical for the District to maintain reasonable reserves in order to handle emergencies, fund working capital, maintain a good credit rating, and generally follow sound financial management practices.

The District is mandated to be self-sufficient. Self-sufficiency means revenues generated from utility sales, services, and other sources must meet all expenses, both operating and nonoperating, of the District.

User charges shall reflect the actual cost of providing services rendered. The rate structure must proportionally distribute the approximate cost of service to those benefited by the service. An equitable rate structure must consider all user classes, and rates must be placed according to benefit and use. There are a number of factors that should be considered when developing or updating a rate structure. The rate structure should :

- Generate sufficient revenue to pay for the total cost of the system,
- Distribute the costs of the system fairly across all user classes,
- Enable the customer accounting to be easily performed, and
- Be easily understood and accepted by the consumer.

Background

Durham Irrigation District (District) is an irrigation district of the State of California formed in 1948 pursuant to the provisions of Division 11 of the California Water Code for the purposes of delivering municipal, industrial, and irrigation water to the lands within its boundaries. The District was originally formed for the purposes of providing irrigation water for the farming operations in what was then primarily an agricultural community. However, since its formation the District's service area has changed from predominantly an agricultural community to predominantly a residential community.

DID relies solely on groundwater supplied through three wells. The District owns three parcels of land on which the wells are located. Water is pumped from the wells into a conveyance system owned by the District. In March 2008 the California Waterworks Standards were revised to include new methodology for determining minimum required source capacity and proof that water systems with fewer than 1,000 service connections had either storage capacity equal to maximum daily demand, or additional source supply that could meet the demand. Source capacity from any two of the District wells combined exceeds the maximum daily demand, so the third well is considered an additional source of supply. Therefore, *distribution storage is not required at this time*. The maximum pumping capacity of the three wells is approximately 3.456 MGD (million gallons per day) while the average daily use is 0.51 MGD or 15% of capacity. In 2018, an estimated 187 MG (million gallons) was delivered.

- Well pump #3 can deliver 800 gallons per minute (1.152 MGD)
- Well pump #4 can deliver 500 gallons per minute (0.72 MGD)
- Well pump #5 can deliver 1100 gallons per minute (1.584 MGD)

DID currently has 479 Customers, 366 of which are metered and 113 are flat rate, or unmetered. The estimated population served is 1,561. The District operates approximately 9.5 miles of pipelines.

The District *is classified as a Community Water System*, and therefore is required to utilize a State Certified Operator for the operation of the water system. The District Water System Operator engaged by the District is certified and monitors the delivery system functionality and water quality on a daily basis. The District Water System Operator performs all of the water quality sampling and compiles the data for required reporting to the State Water Resources Control Board. District water is treated with chlorine by injection at the wells prior to delivery.

The District remains focused on detecting and reporting lead levels as it works to complete an inventory of the potential for lead in user service lines. With the passage of Assembly Bill 746 the state of California has required that by July 2019, community water systems conduct lead sampling of drinking water in all public K-12 schools constructed before 2010. The community water systems are responsible for the costs associated with collecting drinking water samples, analyzing them, and reporting results through this new program. In August 2018, Durham Irrigation District provided services for sampling of drinking water at 10 locations throughout Durham Unified School District campuses. The laboratory returned test results with “non-detectable levels” from all ten sampling locations. In addition, the District completes mandated annual sampling for lead in random commercial and residential service locations located throughout the District.

DID’s facilities were last inspected by the State Water Resources Control Board, Drinking Water Field Operations Branch, on May 16, 2017, and no deficiencies were found. DID has not had any water quality violations since 2002, when methyl tert-butyl ether (MTBE) were detected (Violation No. 2003-221005). This violation appears to have been cleared by the State Water Resources Control Board in February 2018 (Enforcement Action No. 2018-9621011).

Cost of Service Analysis Methodology

The methodology of this Cost of Service Analysis (COSA) is consistent with industry standards established by the American Water works Association (AWWA) *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1*.

The COSA process begins with a revenue analysis by reviewing the current rate structure, reserve funds, and income trends and then comparing to forecasted operating and reserve costs to establish the adequacy of existing rates. Rates may need to be increased if a shortfall exists.

Typically, the next step in the process is to predict trends in water usage. Revenue and expenses are related to expected water usage. Actual water usage is influenced by changes to rates, regulatory impacts, weather, and other variables. The normal industry trend is for water usage to decline as rates increase and as regulatory conservation measures increase and/or are enforced. DID does not have any empirical data regarding the impacts to usage due these factors. For the purposes of this COSA it is assumed that water usage will decline 2%.

Rates are then designed to equitably recover costs from customers. Operational costs are typically divided into two categories, Fixed Expenses and Variable Expenses. Fixed Expenses are those that are related to the day-to-day operations of the District, irrespective of the amount of water volume actually delivered to customers. Fixed Expenses include office staffing, supplies, rent, taxes, etc. Variable Expenses are those that are directly attributable to physically supplying water to the customers on a daily basis. These include electricity for the well pumps, chlorine, repairs, etc. Typically, Fixed Expenses are recovered based on the size of the water meter serving the customer. The AWWA publishes industry standard water meter size “equivalency factors” used to equitably prorate the customers impact on the water system. The Fixed Expenses recovery comes from the Base Rate portion of the typical water bill. Variable Expenses are recovered based on the actual units of water sold. This is the water usage portion of the water bill.

It is important for the District to follow sound financial management practices. This includes maintaining a reasonable operating reserve, funding working capital, and maintaining a good credit rating. The District’s current approach with regard to these objectives is as follows:

- Meeting Annual Operating and Maintenance Costs: The District’s operating budget identifies the District’s expenditures for operating and maintaining the water utility. The adoption and update of this budget is approved each year by the Board. For this COSA revenue (approx. \$250k) is from FY 2018 and expenses (approx. \$420k) are from FY 2023.
- Maintaining a Reasonable Operating Reserve: The District targets a minimum operating reserve of twenty-five percent (25%) of the annual Operating and Maintenance expenditures, or about three months of operating expenses, to handle daily cash flow requirements and emergencies (approx. \$105k for FY 2023).
- Maintaining Adequate Debt Service Coverage Ratios: A “coverage ratio” is typically required as a part of the obligations incurred when a utility assumes debt. Generally, a District will fix, prescribe, and collect rates and charges to yield net revenues, after operating expenses, equal to one hundred twenty-five percent (125%) of debt service in any given fiscal year. *Currently, the District has no debt.*
- Annual depreciation is considered an operating expense and should be funded like any other operating expense. If funds are not collected for depreciation then this cost is being passed along to the next generation of users. Depreciation is an approximation calculated by dividing the historical cost of assets by the estimated useful lifespan (approx. \$25k).

The final component of the Revenue Requirements is the Capital Improvement Program (CIP). The proper and adequate funding of capital improvement projects is a major issue within the utility industry in general. The District needs to adequately support and fund the renewal and replacement of existing infrastructure. Districts typically strive to maintain an appropriate balance between pay-as-you-go, or cash-funding, and funding of these projects through issuance of debt. This balance is determined with the overall intent of minimizing rate increases and maintaining the financial health of the utility. DID has completed a CIP Planning and Implementation Process, including public outreach through community workshops. *Currently, the District has no debt and no stated plans to incur debt related to the CIP.*

Rate Design Analysis

Typically, the **rate design analysis** is concerned with the equitable allocation of the total revenue requirements between the various customer classes (e.g., residential, non-residential, etc.). The

revenue analysis, discussed above, determines the utility's overall financial needs, while this rate analysis determines the fair and equitable manner to collect the revenue required.

DID is a very simple water supply and distribution system. All customers are supplied water from the three wells via a single Operational Zone. The District **does not have** special pressure zones or water supply zones that might have differing Variable Expenses.

Similarly, the cost to supply water to the various customer classes is not different. For example, there are no non-residential customers that require an enhanced water supply. In essence, the District has one Commodity Block. It should be noted that there are some customers that do require "enhanced" service from the District. The most notable examples are those customers with a required backflow prevention device or those customers with fire sprinkler systems. The cost for these instances is passed on to the individual customer, separate from rates, and is set to recover only "actual" costs incurred by the District.

Water rates must consider how fixed and variable rates are designed to collect the target level of revenues and achieve other District goals such as revenue stability and water conservation. Typical to most water utility's, DID's fee structure includes two components, a fixed Base Monthly Fee, and a variable Water Usage Fee. The Base Monthly Fee is set to recover Fixed Expenses incurred by the District while the Metered Rate Water Usage Fee is set to recover Variable Expenses. The Base Monthly Fee is directly related to the size of the water service meter or water supply pipeline serving the customer. This is an industry-standard approach, which relates to the hydraulic capacity of the meters and directly links the customer's base charge to the safe operating capacity of their water meter. Customers with larger meters pay for greater capacity in the system.

Note that all multi-family and non-residential (schools, agencies, churches, commercial, and industrial) customers all pay based on meter size. This is considered a nondiscriminatory method of classification.

Not all DID customers have metered water supply. The District still has 113 "Flat Rate" customers with no meter. It should be noted that State Law requires all customers to be metered by 2025.

Current Rate Structure

For the purposes of this Cost of Service Analysis the current water rate structure is the one that was in effect in 2017 and 2018, see below. ***This current rate structure was reinstated effective January 1, 2023.*** The current Water Rate structure is very simple and straight forward. All customers are billed on a monthly basis. A meter reader physically reads each water meter every month. If it is physically not possible for a meter to be read then the water usage is estimated for that location based on past usage history.

Customers still on a Flat Rate service fee are all located within the older neighborhoods within the DID Service Area boundary. Typically, these are smaller lots with smaller homes and less formal irrigated landscaping than is found in the newer areas of the community. Flat Rate customers pay a fixed monthly fee for each month of the year with no water usage fee attached. The monthly fee is based on water meter size and remains the same each month of the year. Flat Rate service fees are set to be approximately equal to a typical spring or fall bill for a metered water service (combined base rate fee and average water usage fee).

Metered customers pay a monthly Base Rate fee that is lower than the corresponding Flat Rate fee. Plus, the metered customer pays a usage fee for actual water used each month. This fee is based on the monthly meter reading. Summer landscape irrigation season usage is generally higher than winter usage so metered rate water bills can vary considerably throughout the year.

CURRENT WATER RATE STRUCTURE

SERVICE SIZE	CURRENT RATE (2017/2018)
FLAT RATE SERVICES	
3/4" Service	\$39.93
1" Service	\$49.91
1-1/2" Service	\$74.87
2" Service	\$99.83
Development	\$678.81
METERED RATE SERVICES - BASE FEE	
3/4" Service	\$21.96
1" Service	\$27.95
1-1/2" Service	\$33.94
2" Service	\$39.93
Misc. Service	\$415.27
METERED RATE SERVICES - QUANTITY USAGE FEE	
Per CCF (748 gallons)	\$0.50

Note, it is DID policy that new development of all types is required to fully fund any water system improvements necessary to for the project. The adopted District Water Service Policy includes this statement:

"All new pipelines and service facilities to supply water to new developments shall be installed at the full cost and expense of the owners of such developments and shall be installed in accordance with the District's Pipeline requirements."

Revenue Analysis

As stated above, the revenue analysis looks at the District's overall financial needs, basically, income versus expenses. Based on the current Water Rate structure, shown above, total income, or revenue, has typically been running just under \$250k per year. Total annual expenses have varied but are typically around \$275k. *Under the current 2017/2018 rate structure DID is operating at a loss and drawing upon reserve funds.*

HISTORICAL BUDGET SUMMARY

	FY 2016	FY 2017	FY 2018
	Actual	Actual	Budget
TOTAL REVENUE	\$243,233.00	\$245,723.00	\$250,000.00

EXPENSES:			
Administration			
Legal	\$35,982.00	\$35,331.00	\$35,000.00
Meter Reading	\$6,000.00	\$6,500.00	\$6,500.00
Insurance	\$3,010.00	\$4,418.00	\$4,500.00
Office Supplies	\$8,443.00	\$7,270.00	\$8,000.00
Salaries	\$7,155.00	\$11,666.00	\$12,000.00
Payroll Taxes	-\$283.00	\$66.00	\$200.00
Retirement Contribution	\$1,027.00	\$207.00	\$1,000.00
Administration	\$44,783.00	\$68,385.00	\$45,000.00
Rent	\$4,990.00	\$5,400.00	\$5,400.00
Depreciation	<u>\$25,134.00</u>	<u>\$25,000.00</u>	<u>\$25,000.00</u>
Total Administration	\$136,241.00	\$164,243.00	\$142,600.00
Distribution			
Repair & Maintenance	\$37,485.00	\$20,227.00	\$40,000.00
Power	\$50,045.00	\$53,853.00	\$55,000.00
Water Treatment	\$9,175.00	\$8,885.00	\$9,000.00
Transmission and Distribution	\$13,618.00	\$2,008.00	\$15,000.00
Wells Expense/Reserve	<u>\$68,702.00</u>	<u>\$25,289.00</u>	<u>\$10,000.00</u>
Total Distribution	\$179,025.00	\$110,262.00	\$129,000.00
TOTAL EXPENSES:	\$315,266.00	\$274,505.00	\$271,600.00
NET INCOME/LOSS	-\$72,033.00	-\$28,782.00	-\$21,600.00

Projected Financial Data

There are significant economic and regulatory trends impacting all water districts, including the DID budget moving forward. These factors include:

- Increasing electric power costs to pump water from the three wells.
- Increasing regulatory requirements and costs. These include:
 - o Lead and copper rules – testing, monitoring, and reporting annually.
 - o All unmetered service connections must have meters installed by 2025. There are currently 113 unmetered water services in the District that are billed at a Flat Rate.
 - o Water quality testing, monitoring, and reporting, monthly and annually.
 - o Compliance with State regulations for groundwater sustainability. DID draws water from the Tuscan aquifer which has been shown to have declining groundwater levels. The District will be required to pay additional fees of an unknown amount that will begin soon.
- Increasing operational and maintenance costs. On average, all cost of services are projected to increase with inflation. Average annual inflation has been estimated at 2%.

The District’s water distribution system includes approximately 9.5 miles of pipeline. This pipeline network has significant deficiencies that negatively impact daily operations and delivery of water

to customers. The most notable impact to customers is when portions of the system must be shut down, something that occurs pretty much monthly. Reasons include:

- Lack of isolation valves – The older portions of the District’s distribution system lack shutoff valves that allow small discrete sections (typically one block or smaller) of pipeline to be shut off to repair leaks or perform maintenance. Cost of valve installation is included as a line item in the Capital Improvement Program. The normal annual operational budget also includes funds for replacing individual valves when opportunity arises.
- Lack of pipeline redundancy – Water delivery systems must be designed to modern industry standards with a redundant pipe network. This allows water delivery to continue to most customers during pipeline shutdown.
- Substandard pipeline size – Many of the existing pipelines found within the older areas of the District are 4” in diameter or smaller. Current commonly accepted industry standard is for 6” minimum pipe size with 8” more typical.
- Substandard fire hydrants – The District owns the fire hydrants. Some older hydrants found within the District are the “wharf” style, no longer allowed by fire departments.
- Substandard fire flow – The District is unable to provide minimum code required fire flows to some commercial and industrial customers. Typically, this results in higher fire insurance premiums for those customers.
- Aging infrastructure – Many pipelines found within the District are 70 years old or more. Many of these pipelines are steel and beginning to leak. Leaking water is an unrecovered cost to the District. Repairs to leaking pipelines is a significant cost to the District as well as a source of pipeline shutdown and service interruption.

DID has a Capital Improvement Program (CIP) that includes a wide range of infrastructure improvement projects. Basic goals of the CIP include:

- Increase system reliability and minimize shutdowns.
- Improve operational efficiencies.
- Increase water supply reliability and consistency.
- Pipeline gap closures to improve system redundancy.

Infrastructure projects in the Capital Improvement Program include:

- Lead Service Pipe Study (Regulatory Compliance)
- Wharf Hydrant Replacement
- Valve Installation and Replacement
- Meters (Regulatory Compliance)
- SCADA System
- Pipeline Replacement
- Well Improvements

The Projected Budget for 2023 is shown below. This budget includes accurate projections for Administration and Distribution line item costs. Management is projected at \$50,000 per year, however the District does not currently have a Manager. Management tasks are currently being assumed by the Board which is not sustainable.

Some revenue is currently allocated for Capital Improvement Projects and is included within the Repair and Maintenance line item amount of \$50,000. Valve replacement is an example of project

work that has been completed using these funds in past years. Another example is the installation of pressure tanks at each well site and the abandonment of the old leaking steel pressure tank at the alley well. This level of CIP funding is nominal at best and is not sufficient to fund the adopted Capital Improvement Program.

The three wells owned and operated by the District are the sole source of water. It is essential that these wells be operational at all times. All three wells are needed to serve the water demands during the summer months as well as during extreme fire emergencies. Therefore, \$20,000 is budgeted under Wells Expense/Reserve to provide funds for unexpected well costs.

PROJECTED BUDGET EXPENSE SUMMARY FOR 2023

	BUDGET
EXPENSES:	
Administration	
Legal	\$35,000.00
Meter Reading	\$6,500.00
Insurance	\$6,800.00
Office Expenses	\$6,500.00
Administration	\$38,000.00
Payroll Taxes	\$2,000.00
Water Operations	\$42,000.00
Management	\$50,000.00
Operations	\$38,500.00
Rent	\$6,000.00
Depreciation	<u>\$26,500.00</u>
Total Administration	\$257,800.00
Distribution	
Repair & Maintenance	\$50,000.00
Power	\$65,000.00
Water Treatment	\$9,500.00
Transmission and Distribution	\$20,000.00
Wells Expense/Reserve	<u>\$20,000.00</u>
Total Distribution	\$164,500.00
TOTAL EXPENSES:	\$422,300.00

As noted above, current 2017/2018 rates, and as reset in January 2022 to those in effect in 2017/2018, were not meeting actual funding needs for basic operational costs in 2018. The District was operating at a loss at the time of the last rate increase. Over the past five years total budgeted expenses for the District have risen approximately 54%. Based on this Revenue Analysis and Projected Financial Data, a rate increase is necessary.

Proposed Water Rate Structure

To meet the minimum financial needs of the District based on projected budget expenses for 2023, the following rates for water service are proposed:

PROPOSED 2023 WATER RATE STRUCTURE

SERVICE SIZE	PROPOSED RATE
FLAT RATE SERVICES	
3/4" Service	\$63.78
1" Service	\$84.16
1-1/2" Service	\$134.74
2" Service	\$194.21
Development	\$1,084.20
METERED RATE SERVICES - BASE FEE	
3/4" Service	\$35.07
1" Service	\$46.43
1-1/2" Service	\$72.02
2" Service	\$102.50
3" Service	\$192.91
4" Service	\$309.88
6" Service	\$602.05
Misc. Service	\$701.49
METERED RATE SERVICES - QUANTITY USAGE FEE	
Per CCF (748 gallons)	\$1.00

Projected Financial Data

Based on past water consumption history and using the proposed water rate structure, the total annual revenue for 2023 is projected at \$430,000. The 2023 Projected Budget Summary is as follows:

2023 PROJECTED BUDGET SUMMARY

	BUDGET
TOTAL PROJECTED REVENUE	\$430,000.00
EXPENSES:	
Administration	
Legal	\$35,000.00
Meter Reading	\$6,500.00
Insurance	\$6,800.00

Office Expenses	\$6,500.00
Administration	\$38,000.00
Payroll Taxes	\$2,000.00
Water Operations	\$42,000.00
Management	\$50,000.00
Operations	\$38,500.00
Rent	\$6,000.00
Depreciation	<u>\$26,500.00</u>
Total Administration	\$257,800.00
Distribution	
Repair & Maintenance	\$50,000.00
Power	\$65,000.00
Water Treatment	\$9,500.00
Transmission and Distribution	\$20,000.00
Wells Expense/Reserve	<u>\$20,000.00</u>
Total Distribution	\$164,500.00
TOTAL EXPENSES:	\$422,300.00
NET INCOME/LOSS	\$7,700.00

Policy Decisions

The District also proposes re-instituting a number of water rate policies in effect as recently as December 2022 and repealed due to the voter referendum as of January 1, 2023. These policies may impact the rates paid by District’s customers. These policies align water rates with District’s actual cost of service and have minimal impact on the projected budget. They are described as follows:

- Eliminate discounted services – There are a few charitable or public service facilities that have historically received water at a discounted rate or at no charge. They will now be charged at the minimum monthly flat ¾” service rate, currently \$39.93.
- Fire sprinkler services – The District will implement a monthly service charge equal to a metered ¾” service rate, currently \$21.96.
- Standardize the Schedule of Services and Rates – The District will eliminate reference to “commercial”, “single-family”, “duplex”, “triplex”, etc., and assess all connections based solely on equivalent meter size. For example, a current “commercial” service will be identified as a ¾” service and the monthly flat rate will increase from \$23.96 to \$39.93.

Connection Fees

New customers to the District are required to pay a Connection Fee. The Connection Fee consists of three components, Cost of System Assets Buy-in, Cost of System Capacity Buy-in, and Cost of Actual Reimbursable Expenses. The Cost of System Assets Buy-in, Cost of System Capacity Buy-in are both directly proportional to the impact on the water system as related to water demand potential.

In 2011 the DID Board adopted Connection Fees based on the 2009 value of system assets and

using the following set of Equivalency Factors, similar to those used by other districts:

<u>Service Size</u>	<u>Equivalency Factor</u>
¾"	1.0
1"	1.3
1-½"	1.6
2"	2.6

The current 2017/2018 Connection Fee Schedule and as reset in January 2022 to those in effect in 2017/2018, is as follows:

CURRENT CONNECTION FEE SCHEDULE

Meter Size	DID CURRENT
¾"	\$6,723
1"	\$8,840
1-1/2"	\$13,857
2"	\$32,720
3"	---
4"	---
6"	---

Moving forward, the Connection Fee Cost of System Assets Buy-in will be set based on the 2016 value of system assets found within the 2016 District Audit *Statement of Net Assets*. The Cost of System Capacity Buy-in will be set at \$4,000.00 for a ¾" service size. The Equivalency Factors are updated and expanded to those as published by the American Water Works Association, the industry standard, as follows:

<u>Service Size</u>	<u>Equivalency Factor</u>
¾"	1.00
1"	1.67
1-½"	3.33
2"	5.33
3"	10.00
4"	16.67
6"	33.33

Using these Equivalency Factor values, the Proposed 2023 Connection Fee Schedule is expanded and set as follows:

PROPOSED 2023 CONNECTION FEE SCHEDULE

DURHAM IRRIGATION DISTRICT				
Meter Size	Reimbursable Costs	Cost of System Assets Buy-in	Cost of System Capacity Buy-in	Total Connection Fee
¾"	\$500	\$1,310	\$4,000	\$5,810

1"	\$750	\$2,187	\$6,680	\$9,617
1-1/2"	\$1,500	\$4,361	\$13,320	\$19,181
2"	\$2,500	\$6,980	\$21,320	\$30,800
3"	\$2,500	\$13,096	\$40,000	\$53,846
4"	\$2,500	\$21,831	\$66,680	\$90,011
6"	\$2,500	\$43,649	\$133,320	\$179,469

\$863,032 = Total Assets from the 2016 Statement of Net Assets

659 = Current Equivalent Customers

\$1,310 = Average Net Equity to Determine Cost of System Buy-in

Rate Comparison

Proposed 2023 water service rates for a typical 3/4" metered service, the most common found within the District, are compared to other water providers in the region:

RATE COMPARISON - 3/4" METERED WATER SERVICE

Usage Volume	0 CF	400 CF	800 CF	1300 CF	2100 CF	4100 CF	Effective Date
Utility	= 0 gal	=2992 gal	=5984 gal	=9724 gal	=15708 gal	=30668 gal	
California Water Services - Chico	\$ 23.63	\$ 29.74	\$ 35.86	\$ 48.46	\$ 63.74	\$ 141.11	6/1/2022
California Water Services - Oroville	\$ 42.74	\$ 48.85	\$ 58.02	\$ 67.57	\$ 102.91	\$ 160.22	6/1/2022
Del Oro Water Company - Lime Saddle	\$ 37.95	\$ 47.23	\$ 56.50	\$ 68.10	\$ 86.65	\$ 133.03	8/6/2020
Del Oro Water Company - Magalia	\$ 49.67	\$ 65.39	\$ 81.11	\$ 100.77	\$ 132.21	\$ 210.82	8/6/2020
Del Oro Water Company - Paradise Pines	\$ 42.08	\$ 56.29	\$ 70.50	\$ 88.27	\$ 116.69	\$ 187.75	8/6/2020
Del Oro Water Company - Stirling Bluffs	\$ 33.51	\$ 45.47	\$ 57.44	\$ 72.39	\$ 96.32	\$ 156.14	8/6/2020
Durham Irrigation District - CURRENT	\$ 21.96	\$ 23.96	\$ 25.96	\$ 28.46	\$ 32.46	\$ 42.46	2017
Durham Irrigation District - PROPOSED	\$ 35.07	\$ 39.07	\$ 43.07	\$ 48.07	\$ 56.07	\$ 76.07	PROPOSED
Paradise Irrigation District	\$ 42.97	\$ 49.41	\$ 55.85	\$ 63.90	\$ 76.78	\$ 108.98	1/1/2019
Thermalito Water and Sewer District	\$ 28.84	\$ 31.80	\$ 34.76	\$ 38.46	\$ 44.38	\$ 59.18	2022-2023
City of Redding	\$ 24.92	\$ 31.28	\$ 37.64	\$ 45.59	\$ 58.31	\$ 90.11	1/1/2023
City of Sacramento	\$ 35.72	\$ 41.55	\$ 47.39	\$ 54.68	\$ 66.35	\$ 95.53	7/1/2021

Summary

Proposition 218 is a constitutional initiative, approved by California voters in November 1996, that significantly restricts local governments' ability to raise revenue. It applies to nearly 7,000 cities, counties, school districts, special districts, including water districts, and other agencies. In essence, Proposition 218 requires that water districts set water rates on a cost-of-service basis, provide written notice of proposed changes, and hold at least one public hearing. To ensure compliance with Proposition 218, water districts seeking to update water rates often engage consulting firms to perform a Cost of Service Analysis.

Consistent with the cost-of-service principle, a typical Cost of Service Analysis calculates the amount of revenue the water district needs to collect through charges to its customers to cover

its anticipated costs including operating costs, capital improvement costs, and debt servicing costs. A water rate structure is then designed to ensure that all costs are recovered fairly and equitably and that the rates will provide fiscal stability to the water district.