

Fiscal Year  
2021 / 2022

# Operating & Capital Budget



Trabuco Canyon Water District

Operating & Capital Budget

Fiscal Year 2021 / 2022



DOVE TANK OVERLOOKING RECYCLED WATER RESERVOIR AT ROBINSON RANCH WASTEWATER TREATMENT PLANT

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## **Board of Directors 2021-2022**

Donald Chadd, President  
Stephen Dopudja, Vice-President  
Glenn Acosta, Director  
Edward Mandich, Director  
Michael Safranski, Director

## **District Management**

Fernando Paludi, General Manager  
Michael Perea, Assistant General Manager  
Cindy Byerrum, District Treasurer

*Trabuco Canyon Water District is a public agency serving portions of the cities of Rancho Santa Margarita, Mission Viejo, and Lake Forest, and unincorporated Orange County.*



## Mission Statement

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**The Trabuco Canyon Water District's purpose as a public service agency is to provide:**

- ❖ Service to our customers which instills trust regarding the quality and quantity of the water supply
- ❖ Reliable service for collection, treatment, and reuse of wastewater
- ❖ A work environment where safety and health of employees and customers is our paramount concern
- ❖ Information to our customers to foster and maintain a well-informed community
- ❖ Cost effective and efficient services in a courteous manner

**In addition, the District is committed to:**

- ❖ Ensure compliance with environmental, safety, and regulatory requirements
- ❖ Maintain or improve existing infrastructure



TRABUCO CREEK WELLS FACILITY

## GENERAL MANAGER'S MESSAGE

The Trabuco Canyon Water District (TCWD or District) is pleased to present its Fiscal Year 2021-22 Budget. The annual budget process is an opportunity for District staff to provide the Board and the agency's customers and stakeholders an overview of the District's financial condition. The budget process addresses both operational and capital expenditures and reflects the District's priorities and needs for the upcoming year.

Looking back over the challenges of the previous fiscal year, the District is fortunate to be emerging from the unprecedented conditions of a global pandemic in sound operational and financial condition. Throughout the pandemic stay-at-home orders, TCWD has maintained uninterrupted water and sewer essential services to our communities while also prioritizing public and employee health and safety. To help provide relief from pandemic-related fiscal impacts to our customers, the District's Board of Directors implemented a moratorium on delinquent account shut-offs and temporarily suspended late payment penalties. The District appreciates how a large percentage of District customers have diligently kept their accounts current during this challenging time.

The pandemic's effects will continue to impact the District's resources for the foreseeable future, however. The general scarcity of equipment and materials is severely lengthening procurement times and driving up the cost of construction projects. TCWD was successful this past year in securing nearly \$600,000 in grant awards from the state and federal governments that will help offset the funding needed for Capital Improvement Plan expenditures. Given increased public attention on the need for public works infrastructure spending, the District will continue to be aggressive in pursuing outside funding should it become available.

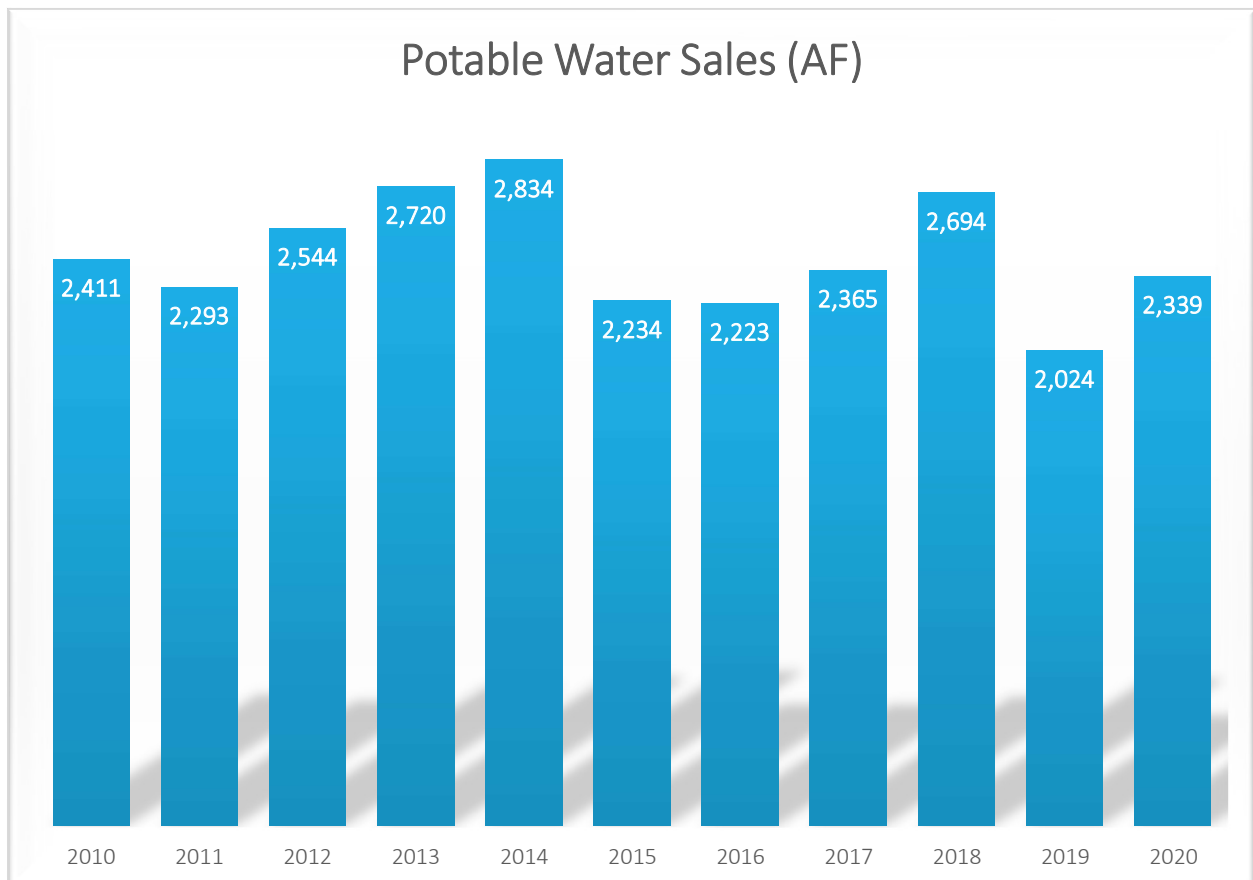
I would like to thank the Board of Directors for their leadership and continued interest in, and support of, prudent fiscal management of the District. I would also like to extend my appreciation to all employees for their support of the District's mission, and for their dedication to providing the highest level of professionalism, teamwork and customer service. Most importantly, on behalf of the Board and staff, thank you to our valued customers whom we are privileged to serve.



**Fernando Paludi**  
General Manager

## POTABLE WATER SALES HISTORY

TCWD's annual water-related revenues are predominantly variable and correlated to the volume of water sold to homes, business, and other users. Sales of potable or drinking water for indoor and outdoor use, including landscape irrigation, comprise nearly two-thirds of all revenue from customer charges. For 2021, customer demand for potable water is forecasted to increase 2% in comparison to 2020, which was relatively warmer and dryer than average. After reaching a ten-year low point in 2019, water demand rebounded significantly in 2020. Should concerns over an emerging drought continue in 2021, water demand could increase due to continued, below-average precipitation, before ultimately decreasing as public awareness and response to water shortage conditions takes hold.

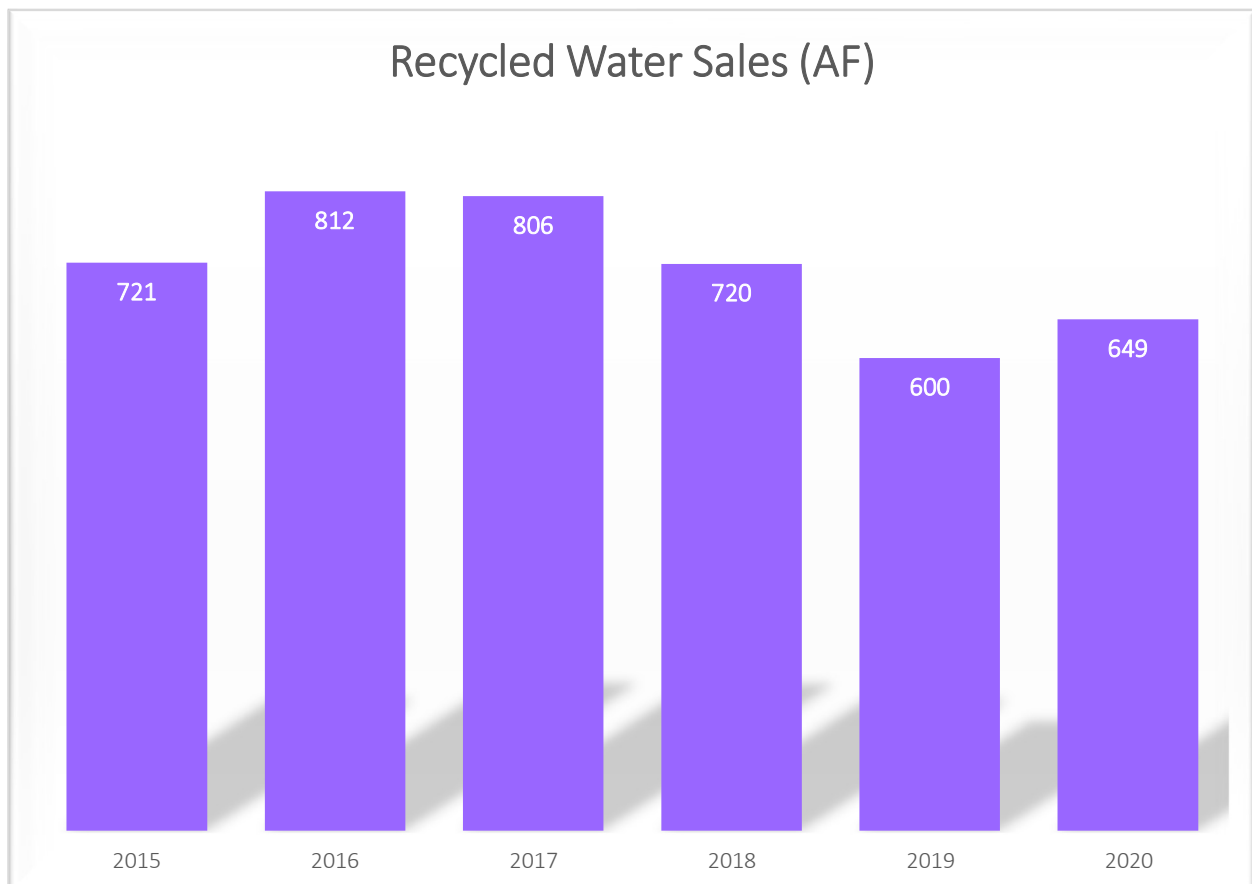


## RECYCLED WATER SALES HISTORY

TCWD beneficially reuses 100% of the sewage or wastewater collected within its service territory. This “recycled water” produced at the Robinson Ranch Wastewater Treatment Plant is augmented by natural urban runoff captured through a network of basins and Dove Canyon Lake and used for landscape irrigation by several Homeowners Associations (HOAs). Recycled water represents 100% conservation of potable or drinking water supplies, which would otherwise be used for irrigation purposes. Recycled water supplies are limited and carefully managed by District operations personnel to maximize its benefit. Similar to demand for potable water, demand for recycled water reached a low point in 2019 but increased in 2020.

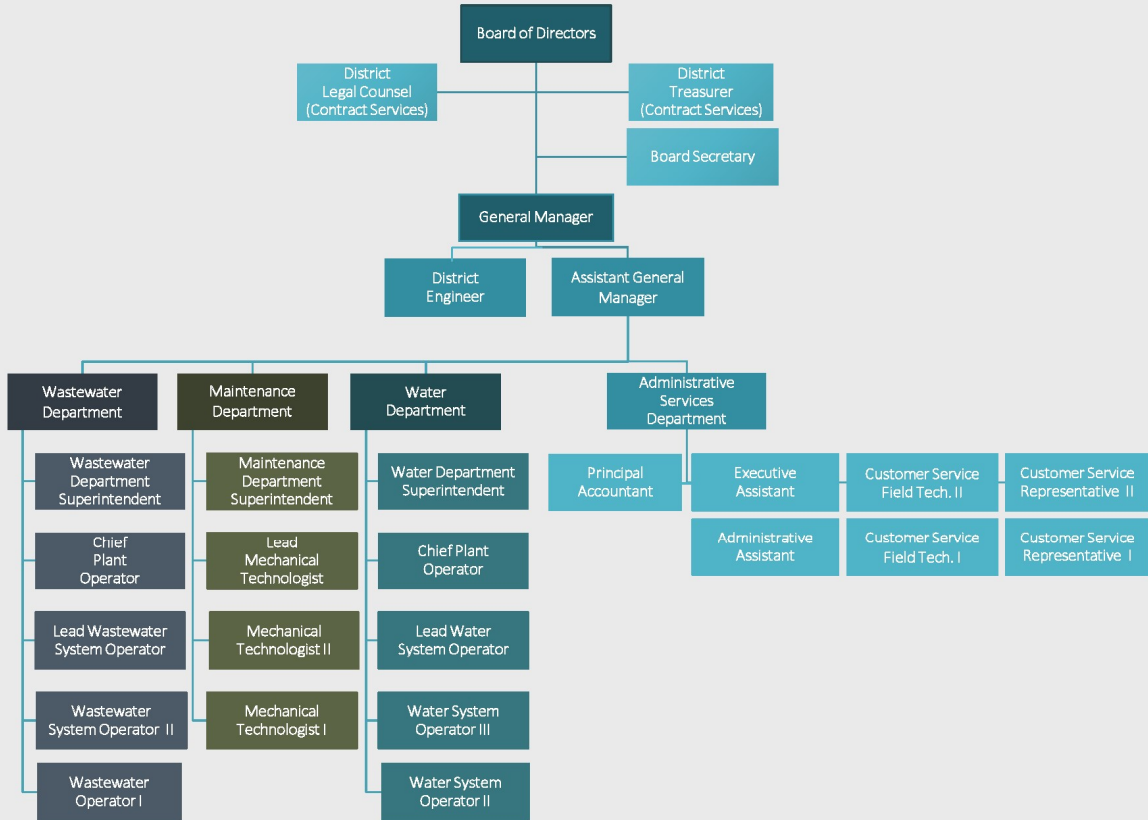
**\*Recycled water includes treated wastewater effluent and captured urban runoff**

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# ORGANIZATIONAL CHART

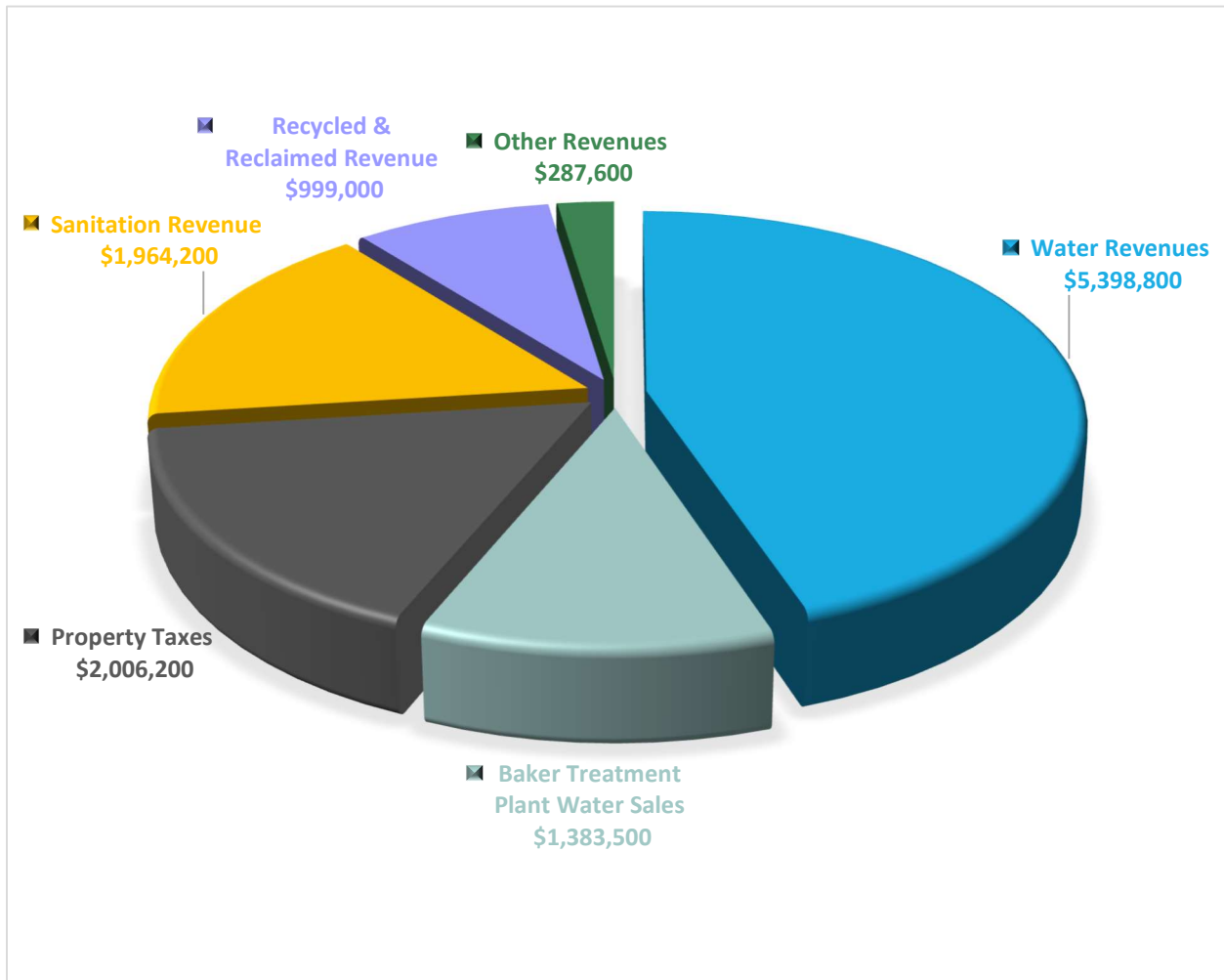
## TRABUCO CANYON WATER DISTRICT ORGANIZATIONAL CHART Effective July 1, 2021



# BUDGETED REVENUES

The FY 2022 Budget is supported by \$12 million in total District revenues, including operating and non-operating revenue. District revenues are derived predominantly from rates and charges to customers for water, sanitation, and recycled water services. Other sources of revenue include the sale of water from the District's capacity in the Baker Water Treatment Plant to another water purveyor; property taxes; and other miscellaneous income sources such as leases and interest income.

**\*Total Budgeted Revenues of \$12,039,300**

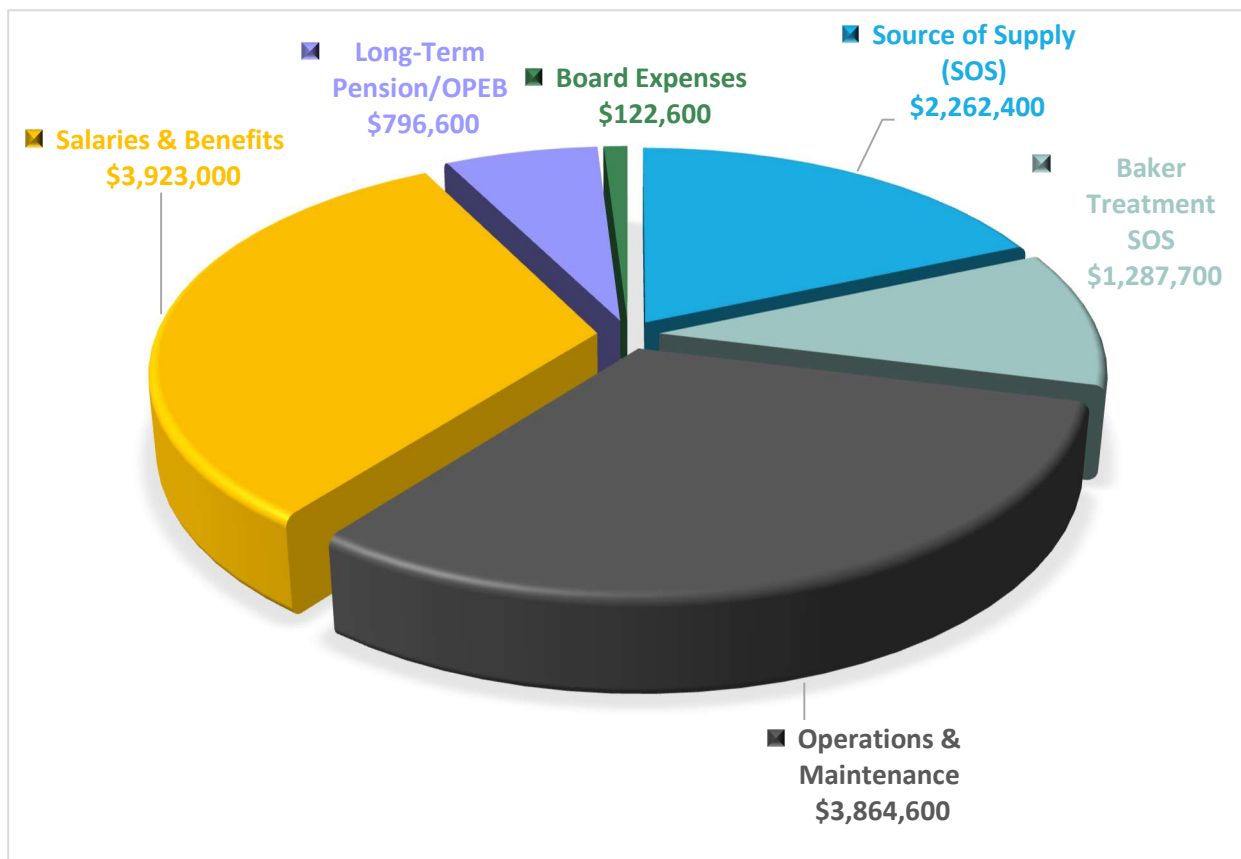


# BUDGETED EXPENSES

Expenditures are first driven by supply cost of water. Water supply costs are managed by purchasing less expensive raw Colorado River water from the Metropolitan Water District, then treating it to drinking or potable water standards at the District filtration plant. As necessary the District can purchase treated water directly from neighboring agency interconnections. The District also invests in long-term water security by purchasing capacity in the regional Baker Water Treatment Plant and selling Baker supply to another Orange County water agency when available.

Expenditures are also largely driven by labor and operations and maintenance. Labor includes employee salaries, benefits and long-term obligations including pensions and Other Post-Employment Benefits (OPEB), or retiree health benefits. The District maintains a cost-effective staffing model and contracts externally for specialized services to keep full-time internal positions to a minimum. Operations and maintenance expenses include the cost of system repairs and maintenance to deliver water and sanitation services to customers, pumping costs, general and administrative costs and other miscellaneous expenses.

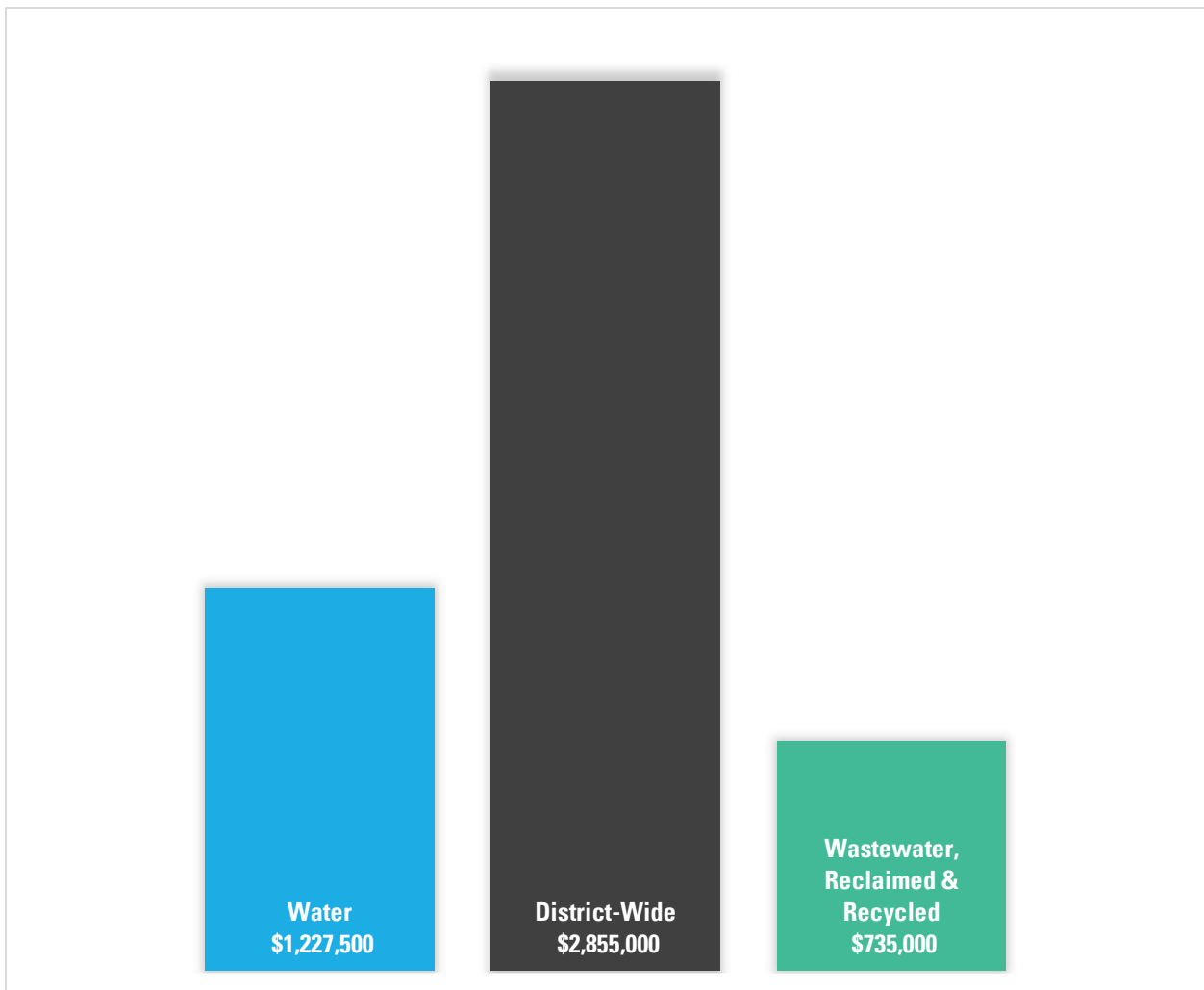
**\*Total Budgeted Expenses of \$12,256,900**



## CAPITAL PROGRAM SPENDING

TCWD's Capital Improvement Program (CIP) spending plan consists of new infrastructure, asset restoration and equipment purchase and maintenance including vehicles, pumps, meters and valves. Capital spending is essential for the District not only to reinvest in its infrastructure to maintain its high level of service to its customers, but also to meet changing regulatory compliance and safety standards. For FY 2021, the District is projected to complete 22 major projects and programs within the CIP, totaling approximately \$4.8 million, a 37% increase over the \$3.5 million budgeted the FY 2020 CIP.

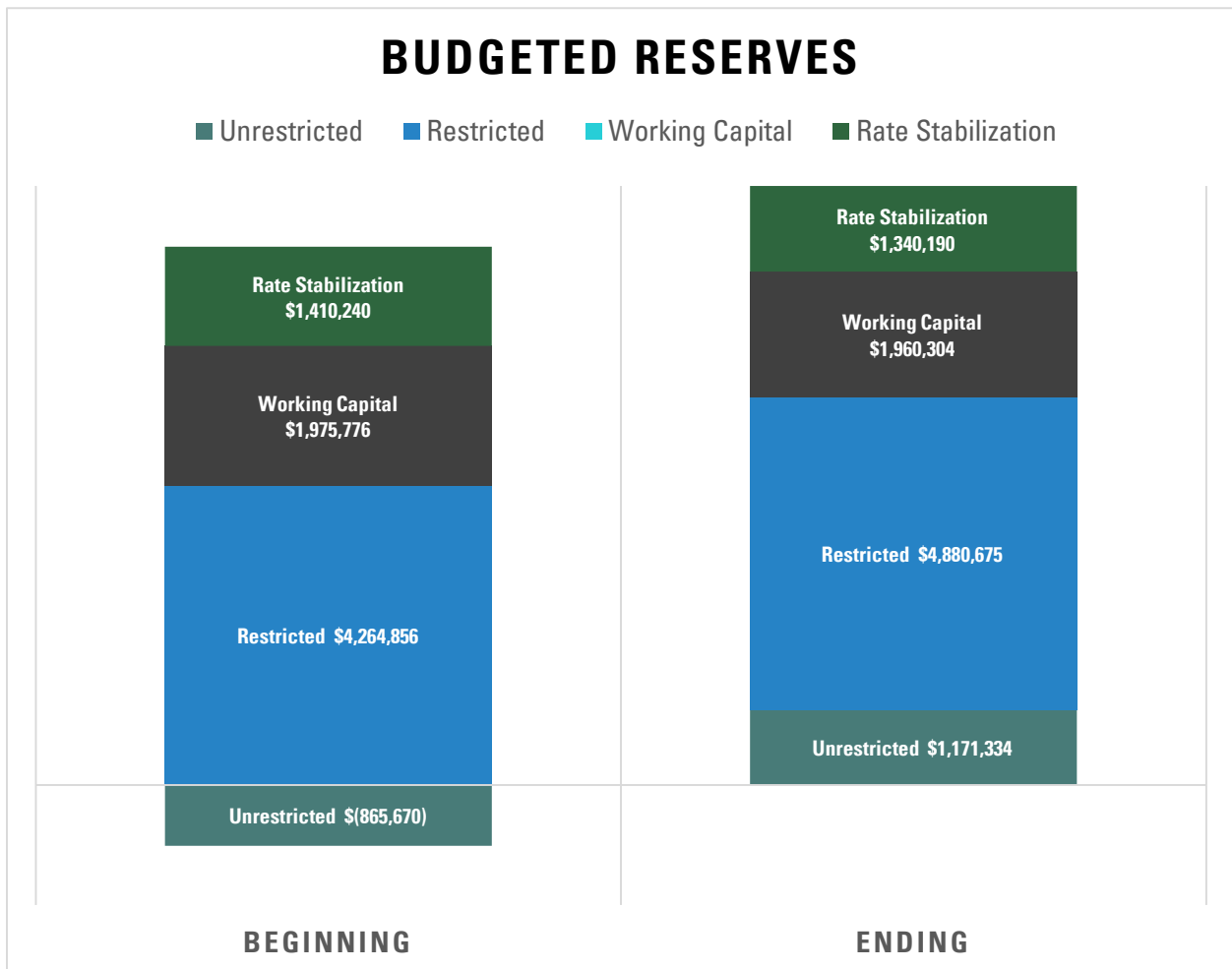
**\*Total CIP of \$4,817,500**



# RESERVES SUMMARY

TCWD maintains four groups of cash reserves in accordance with District reserve policy. The Working Capital Reserve delegates contingency funds to continue day to day operations in the event of short-term cash shortfalls. Rate Stabilization Reserves allow the smoothing of rates and provide rate stability in periods of fluctuating system demands or revenue loss. Restricted Reserves are designated for specific purposes such as funding infrastructure, debt payments, legislative obligations, and board committed spending. Unrestricted Reserves include all reserves not in one of the three other categories. The District plans to issue an estimated \$6.4 Million in debt during FY 2021/2022 to maintain adequate reserves while funding \$4.8 Million in Capital spending.

**\*Projected Ending Reserves Total \$9,352,500**





DOVE LAKE STORAGE FACILITY IN THE DOVE CANYON COMMUNITY

# BUDGET SUMMARY

Schedule C (displayed on page 14) summarizes the District budget by various Funding Sources as follows:

**Line 1: General Fund:** The General Fund Summary includes the sources and uses of funds to operate the District's Water, Wastewater, Recycled, and Reclaimed systems. The General Fund Summary does not include non-cash expenses (depreciation and amortization), capital restricted revenues or capital expenses, all of which are not available to fund general operations.

**Columns A & B:** Fiscal Year (FY) 20/21 Projected Results compared to FY 20/21 Adopted Budget

- Revenues are projected to end higher than budgeted primarily due to higher than expected residential and irrigation water revenues and property taxes.
- Expenses are projected to end higher than budgeted primarily due to increased source of supply costs, electrical repairs, and increased salaries and benefits from salary survey findings implemented as of January 2021.

**Columns B & C:** FY 20/21 Projected Results compared to FY 21/22 Proposed Budget

- FY 21/22 revenues are budgeted to increase from FY 20/21 projected results based on the next rate increase (scheduled for January 1, 2022) combined with expectations for increased consumption and resuming District charges for penalty fees.
- FY 21/22 expenses are budgeted to increase from FY 20/21 projected results based on higher Baker Treatment Plant costs and increased salary and benefits costs. The FY 21/22 Budget considers full staffing with a 3.6% COLA. It also considers \$238K in Additional Discretionary Payments (ADPs) towards unfunded pension liabilities and the potential for a \$100K contribution to a newly established Pension Trust.

**Line 5: Restricted Capital Construction Revenues:** These revenues are restricted to fund capital improvements.

**Line 6-9: WRES:** shows Water Reliability and Emergency Storage Fees collected that are restricted to fund the Baker Treatment Plant, Reservoir & Distribution Improvements, and the Trabuco Creek Wells Facility.



# TCWD Budget Summary FY 2021/22

*Schedule A*

	<b>A</b>	<b>B</b>	<b>C</b>
	<b>FY 20/21 Adopted Budget</b>	<b>FY 20/21 Projected Results</b>	<b>FY 21/22 Adopted Budget</b>
<b>1 GENERAL FUND</b>			
2 Sources of Funds from Operating Budget (Revenues)	\$ 10,658,800	\$ 11,014,300	\$ 12,039,300
3 Uses of Funds from Budget* (Expenses)	(11,027,200)	(11,374,200)	(12,256,900)
<b>4 Surplus / (Deficit) Available to Fund CIP &amp; Debt Service</b>	<b>(368,400)</b>	<b>(359,900)</b>	<b>(217,600)</b>

*General Fund Cash Flow includes sources and uses of funds to operate the District's water, wastewater, recycled and reclaimed systems. General Fund Cash Flow does not include non-cash expenses such as depreciation, amortization, capital restricted revenues/expenses, or WRES (SRF) assessment revenues/expenses, all of which are not available to fund general operations. It does include Series C debt service, paid by General Fund.*

*\*Includes Series C principal payments, and major repairs in the CIP budget.*

	<b>A</b>	<b>B</b>	<b>C</b>
<b>5 RESTRICTED CAPITAL CONSTRUCTION REVENUES - EXCLUDES DEVELOPER FEES &amp; GRANT REIMBURSEMENTS</b>			
<b>6 Water Reliability and Emergency Storage Fees (WRES)</b>			
7 WRES - Baker Treatment Plant	<i>a.</i> \$ 373,400	\$ 377,900	\$ 377,900
8 WRES - Reservoir/Distribution Funding	<i>b.</i> \$ 54,100	\$ 30,700	\$ 30,700
9 WRES - Wells Facilities	<i>c.</i> \$ 406,800	\$ 413,600	\$ 413,600

*a. Dedicated for the District's share of costs for the construction of the Baker Treatment Plant.*

*b. Dedicated for constructing a new reservoir and/or distribution improvements.*

*c. Dedicated for repayment of the State Revolving Fund (SRF) loan, which funded the construction of the Trabuco Creek Wells Facility.*

# BUDGET DETAIL: REVENUES AND EXPENSES

Schedule B (displayed on page 19) shows the detailed budget for the District and will be used in FY 2021/22 to report monthly operating results to the Board.

## REVENUES

### *Total Operating Revenues*

- Line 2: Residential Water Revenues includes monthly fixed (flat) charges and commodity use water charges to residences and apartments; budgeted for a 9.5% rate increase effective January 1, 2022 and a 2% increase in water consumption. These increases are based on the 2020 Rate Study adopted and implemented on January 1, 2021.
- Line 3: Business & Industrial Water Revenues include monthly fixed charges and commodity water sales to businesses, industrial manufacturers, construction meters, and backflow and fire flow tests; budgeted for a 9.5% rate increase effective January 1, 2022 and a 2% water consumption increase. These increases are based on the 2020 Rate Study adopted and implemented on January 1, 2021.
- Line 4: Irrigation Water Revenues is water used primarily by the nurseries and HOA's for irrigation; budgeted for a 9.5% rate increase effective January 1, 2022 and a 2% water consumption increase. These increases are based on the 2020 Rate Study adopted and implemented on January 1, 2021.
- Line 5: Standby Revenues is the flat charge assessed per parcel to ensure water is made available to each property. Budgeted with a 2% increase to projected results.
- Line 6: Sanitation Revenue includes residential and commercial charges for sanitation services, costs for sewer collection and treatment for County of Orange and OCFA facilities, and for the IRWD and SMWD share of El Toro Road Sewer Lift Station expenses. Budgeted for an 8% rate increase effective January 1, 2022. These increases are based on the 2020 Rate Study adopted and implemented on January 1, 2021.
- Line 8: Baker Treatment Plant Water Sales is the projected sales of the excess water production from the Baker Water Treatment Plant. Per the agreement effective January 1, 2018, revenues come from the sale of this water to another agency. Revenues include MWDOC charges for water per AF, quarterly O&M reimbursements, and a Capital Recovery Fee per AF. Budgeted for a 3% rate increase and no change in consumption.

- Line 9: Other Operating Revenue includes revenues from repair work, late charges, new account fees, reconnection fees, and returned check fees. The District suspended all late charges in FY 20/21 due to the COVID-19 pandemic. The District will resume applying late charges during FY 21/22.

*Total Non-Operating Revenues*

- Line 12: Property Tax Unrestricted is the ad valorem property tax on each parcel in the District's service area; budgeted to increase based on FY 20/21 collections and increased property values.
- Line 13: Interest Revenue is budgeted to decrease based on 20/21 performance and currently decreasing trends.
- Line 14: Development Services are fees for plan checks. Development revenue is typically not budgeted for since it is unknown and cannot be estimated accurately each fiscal year.
- Line 15: Sale of Fixed Assets is gross proceeds from the sale of capital assets. The District has no plans to dispose of any assets in FY 21/22.
- Line 16: Other Non-Operating Revenue includes cell tower site fees, various refunds and reimbursements, and public meeting space revenues. This category is budgeted conservatively since refunds and reimbursements are unpredictable and difficult to estimate. FY 21/22 is budgeted lower due to a one-time reimbursement from SMWD (\$10K) for repairs on the DSWR system during FY 20/21.

**EXPENSES**

*Total Operating Expenses*

- Line 20: Source of Supply includes costs associated with the purchase, conveyance, and administration of untreated water from Santiago Aqueduct Commission (SAC line); treated water purchases and conveyance through the AMP and South County System (operated by SMWD); and imported water purchases from IRWD for Portola Hills customers. The District has budgeted for a 3% increase in the rate charged for water and a 5% increase in demand. This increase is offset by a \$150K Ridgeline expense that will not continue into FY 21/22.
- Line 21: Baker Treatment SOS Costs are the projected fixed and variable costs from the Baker Treatment Plant. The contracted agency will be billed from the pass-through O&M expenses in the same month we receive the bill from IRWD. The commodity purchase costs are budgeted based on projected FY 20/21 results; however, agency customer demand will determine how the costs in this category are realized.

- Line 22: Water Related Direct Expenses are the other costs associated with producing and delivering water including electricity, repairs and maintenance, lab testing, equipment, dues and memberships, engineering, various consulting services and water conservation expense. Budgeted expenses are projected to increase due to inflation and the rising cost of electricity, chemicals and fuel.
- Line 23: Sanitation Direct Expenses are costs associated with sanitation treatment and disposal. These costs include electricity, repairs and maintenance, and SMWD fees for the Chiquita Wastewater System. Budgeted expenses are projected to increase due to inflationary assumptions offset by a decrease in professional services due to Rate Study and Feasibility Study costs experienced during FY 20/21.
- Line 24: Reclaimed & Recycled Expenses are costs associated with recycled and reclaimed water transmission and distribution at Dove Lake and Shadow Rock Detention Basin. These expenses include electricity, repairs and maintenance, lab testing, dues and memberships, and other various professional and consulting services. Budgeted FY 21/22 expenses are projected to have an overall increase in most categories.

Line 25: Salaries & Benefits are costs of salaries and benefits for all employees in the District. FY 21/22 expenses are anticipated to increase due to the completed salary survey that moved employee salary ranges effective January 2021. The District is also planning on filling a position that was vacant last FY.

- Line 26: CalPERS UAL & Pension Trust Contributions accounts for Pension Trust contributions and contributions to CalPERS to pay down the Unfunded Accrued Liability (UAL). During FY 21/22 the District is required at a minimum to contribute \$252.6K to CalPERS to fund the Classic plan UAL. The budget also considers sending Additional Discretionary Payments (ADPs) to CalPERS for the Classic plan UAL of \$226.6K, a complete payoff of the PEPRA UAL of \$12K, and a contribution to the newly established CalPERS Pension Trust fund of \$100K.
- Line 27: OPEB Trust Contributions & Paygo OPEB accounts for District contributions to the CalPERS OPEB trust and direct payments (PAYGO) for existing retiree health costs. The District plans to contribute \$108K to the OPEB Trust in line with Actuary recommendations for FY 21/22.
- Line 28: Board Expenses: are the costs associated with the Board of Directors which includes salaries, benefits, and other expenses of the Board.

#### Total Non-Operating Expenses

- Line 31: Other Non-Operating Expenses are costs that include administrative expenses for the collection of the ad valorem property taxes.

- Line 34: Net Income/(Loss) Before Capital Contributions & Debt Service is the amount of Net Income/(Loss) from general operations. The FY 21/22 budget anticipates a deficit of \$245,200 mainly due to pension pre-funding and Additional Discretionary Payments (ADPs) discussed in line 26.
- Line 36: WRES (Water Reliability and Emergency Storage) are the monthly fees collected from ratepayers that are dedicated to certain capital projects pursuant the WRES fees adopted by the District.
- Line 37: Development Impact Fees are fees collected from new development. These fees are not budgeted due to the uncertainty of development.
- Line 38: Capital Contributions & Grant Proceeds includes capital contributions from outside sources such as development, FEMA reimbursements and various types of grant funding the District may be eligible for. The District has been approved for a \$500K grant towards the AMR/AMI meter project.
- Line 39: Debt Principal, Interest & Issuance Costs includes principal and interest payments on outstanding debt as well as issuance costs for new debt issuances. The District State Revolving Fund loan incurred for the construction of the Trabuco Creek Wells Facility is expected to be paid off in 2032 from the proceeds of the WRES charges collected monthly. The District plans on issuing \$6.4 million in debt during FY 21/22 to fund District CIP.
- Line 40: Net Income/(Loss) is the amount available to fund the District's Capital Improvement Plan.



**TCWD**  
**Budget Detail**  
**FY 2021/22**

*Schedule B*

	FY 2019/20 Actual Results	FY 2020/21 Adopted Budget	FY 2020/21 Projected Results	FY 2021/22 Adopted Budget	\$ Change	% Change
<b>1 Operating Revenue</b>						
2 Residential Water Revenues	\$ 3,244,641	\$ 3,497,400	\$ 3,710,000	\$ 4,116,200	\$ 406,200	10.9%
3 Business & Industrial Water Revenues	123,985	150,300	150,100	165,600	15,500	10.3%
4 Irrigation Water Revenues	763,726	823,400	964,300	1,075,200	110,900	11.5%
5 Stand-By Revenue	65,930	41,000	41,000	41,800	800	2.0%
6 Sanitation Revenue	1,918,114	1,859,400	1,830,900	1,964,200	133,300	7.3%
7 Recycled & Reclaimed Revenue	723,088	725,000	827,300	999,000	171,700	20.8%
8 Baker Treatment Plant Water Sales	1,210,433	1,469,100	1,344,100	1,383,500	39,400	2.9%
9 Other Operating Revenue	151,158	164,600	5,100	179,600	174,500	3421.6%
<b>10 Total Operating Revenue</b>	<b>8,201,075</b>	<b>8,730,200</b>	<b>8,872,800</b>	<b>9,925,100</b>	<b>1,052,300</b>	<b>11.9%</b>
<b>11 Non-Operating Revenue</b>						
12 Property Tax Unrestricted	1,936,412	1,707,400	1,966,200	2,006,200	40,000	2.0%
13 Interest Revenue	109,736	100,600	47,400	35,600	(11,800)	-24.9%
14 Development Services	-	-	-	-	-	-
15 Sale of Fixed Assets	9,584	50,000	46,100	-	(46,100)	-100.0%
16 Other Non-Operating Revenue	67,227	70,600	81,800	72,400	(9,400)	-11.5%
<b>17 Total Non-Operating Revenue</b>	<b>2,122,959</b>	<b>1,928,600</b>	<b>2,141,500</b>	<b>2,114,200</b>	<b>(27,300)</b>	<b>-1.3%</b>
<b>18 Total Revenues</b>	<b>10,324,034</b>	<b>10,658,800</b>	<b>11,014,300</b>	<b>12,039,300</b>	<b>1,025,000</b>	<b>9.3%</b>
<b>19 Operating Expenses</b>						
20 Source of Supply	2,103,788	2,198,100	2,271,800	2,262,400	(9,400)	-0.4%
21 Baker Treatment SOS Costs	1,046,475	1,155,300	1,201,700	1,287,700	86,000	7.2%
22 Water Related Direct Expenses	1,808,832	1,946,900	1,963,400	2,032,100	68,700	3.5%
23 Sanitation Direct Expenses	1,364,825	1,168,400	1,355,100	1,359,200	4,100	0.3%
24 Reclaimed & Recycled Expenses	454,442	446,700	458,800	468,300	9,500	2.1%
25 Salaries & Benefits	3,320,139	3,462,600	3,483,700	3,923,000	439,300	12.6%
26 CalPERS UAL & Pension Trust Contributions	452,254	222,100	216,200	590,500	374,300	173.1%
27 OPEB Trust Contributions & Paygo OPEB	112,319	309,100	309,300	206,100	(103,200)	-33.4%
28 Board Expenses	108,957	114,400	109,200	122,600	13,400	12.3%
<b>29 Total Operating Expenses</b>	<b>10,772,032</b>	<b>11,023,600</b>	<b>11,369,200</b>	<b>12,251,900</b>	<b>882,700</b>	<b>7.8%</b>
<b>30 Non-Operating Expenses</b>						
31 Other Non-Operating Expense	12,696	3,600	5,000	5,000	-	0.0%
<b>32 Total Non-Operating Expenses</b>	<b>12,696</b>	<b>3,600</b>	<b>5,000</b>	<b>5,000</b>	<b>-</b>	<b>0.0%</b>
<b>33 Total Expenses</b>	<b>10,784,728</b>	<b>11,027,200</b>	<b>11,374,200</b>	<b>12,256,900</b>	<b>882,700</b>	<b>7.8%</b>
<b>Net Income/(Loss) Before Capital</b>						
<b>34 Contributions &amp; Debt Service</b>	<b>(460,694)</b>	<b>(368,400)</b>	<b>(359,900)</b>	<b>(217,600)</b>	<b>142,300</b>	
<b>35 Capital Contributions &amp; Debt Service</b>						
36 WRES	833,511	834,300	822,200	822,200	-	
37 Developer Impact Fees	-	-	19,900	-	(19,900)	
38 Capital Contributions & Grants Proceeds	5,926,052	-	99,700	344,000	244,300	
39 Debt Principal, Interest & Issuance Costs	(230,381)	(230,300)	(230,300)	(445,300)	(215,000)	
<b>40 Total Capital Contributions &amp; Debt Service</b>	<b>6,529,182</b>	<b>604,000</b>	<b>711,500</b>	<b>720,900</b>	<b>9,400</b>	
<b>41 Net Income</b>	<b>\$ 6,068,488</b>	<b>\$ 235,600</b>	<b>\$ 351,600</b>	<b>\$ 503,300</b>	<b>\$ 151,700</b>	

## FY 2021/22 CAPITAL IMPROVEMENT PROGRAM (CIP)

Schedule C (displayed on page 21) shows the detailed TCWD budget for the District Capital Improvement Program. The FY 2021/22 CIP budget totals \$4,817,500 and is made up of 22 projects discussed in depth beginning on page 22.





**TCWD**  
**Capital Improvement Plan**  
**FY 2021/2022**

*Schedule C*

Item #	Project	Project Basis	Adopted
<b>WATER</b>			
1	PRV Improvements	Reliability	\$ 55,000
2	Valve Replacement Program	End of Service Life	37,500
3	DWTP Chlorine Building Improvement - Doors & Roof	Safety; End of Service Life	35,000
4	DWTP Office & Storage	Safety; End of Service Life	200,000
5	Live Oak Transmission Main Upgrade	Reliability	900,000
<b>WATER SUBTOTAL</b>			<b>1,227,500</b>
<b>DISTRICT-WIDE</b>			
6	SCADA System Upgrades	Reliability; End of Service Life	1,000,000
7	Meter Replacement Program	Water Use Efficiency	35,000
8	AMI/AMR System Implementation - USBR Grant Funded	Water Use Efficiency	600,000
9	District Facility Security Improvements	Security	100,000
10	Skiploader - AQMD Tier 1 Compliant	End of Life	100,000
11	Pump Replacement Program	End of Life	100,000
12	Generators (Grant - spend by Nov21)	Reliability	300,000
13	Master Plan and Condition Assessment Study	Reliability; Safety	600,000
14	Field Office Remediation (Excavation, French Drain, Retaining Wall)	Safety	20,000
<b>DISTRICT-WIDE SUBTOTAL</b>			<b>2,855,000</b>
<b>WASTEWATER / RECLAIMED / RECYCLED</b>			
15	Wet Well Recoating Program - Via Allegre, Barneburg, Bell Canyon - Sewer	General Maintenance	25,000
16	Manhole Recoating Program - Sewer	General Maintenance	20,000
17	PRV Vault Improvements Program - Reclaimed	General Maintenance	45,000
18	SLS Surge Tank Improvements/Rehabilitation Program (Barneburg & Bell Canyon) - Sewer	General Maintenance	25,000
19	Heritage SLS Improvements - Security, Asphalt, Piping, Bypass, Electrical	End of Service Life	240,000
20	Golf Club SLS Bypass Construction - Sewer ByPass, MCC, Wet Well Rehab	End of Service Life	150,000
21	WWTP Headworks Climber Screen - Sewer	End of Service Life	110,000
22	RW PS Header, Filters, Pump	End of Service Life	120,000
<b>WASTEWATER / RECLAIMED / RECYCLED SUBTOTAL</b>			<b>735,000</b>
<b>TOTAL PROPOSED CIP</b>			<b>\$ 4,817,500</b>

*\*The District is projected to issue \$6.4M in debt per the most recent Rate Study to fund current and future capital projects.*

**PROJECT TITLE: PRESSURE REGULATING VALVE (PRV) IMPROVEMENTS**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #1

**PROJECT LOCATION:** District-wide

**PROJECT BASIS:** Reliability

**TOTAL PROJECT COST:** \$55,000

**DESCRIPTION:** Pressure-regulating valves or pressure regulators are used to lower the water supply pressure in the District's main water lines to a specific, consistent pressure. This annual program includes general maintenance on all PRVs and Cla Vals district-wide, including changing out diaphragms, CRDs/CRLs, stainless steel tubing, and calibration. This budget is an annual programmatic budget.

**PROJECT TITLE: VALVE REPLACEMENT PROGRAM**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #2

**PROJECT LOCATION:** District-wide

**PROJECT BASIS:** End of Service Life

**TOTAL PROJECT COST:** \$37,500

**DESCRIPTION:** Valves throughout the District are generally between 30-50 years old. Funding is needed to repair or replace any valves that leak or break while being exercised during the Valve Maintenance Program. This budget is an annual programmatic budget.

**PROJECT TITLE: DIMENSION WATER TREATMENT PLANT (DWTP) CHLORINE BUILDING IMPROVEMENTS – DOORS & ROOF**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #3

**PROJECT LOCATION:** Dimension Water Treatment Plant

**PROJECT BASIS:** Safety; End of Service Life

**TOTAL PROJECT COST:** \$35,000

**DESCRIPTION:** The Chlorine Room houses the treatment plant's supply of chlorine, which is essential to the distribution of safe drinking water throughout the District's water mains. This project will replace the building's roof and doors, which are weathered and heavily damaged beyond repair.

**PROJECT TITLE: DIMENSION WATER TREATMENT PLANT (DWTP) OFFICE & STORAGE IMPROVEMENTS**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #4

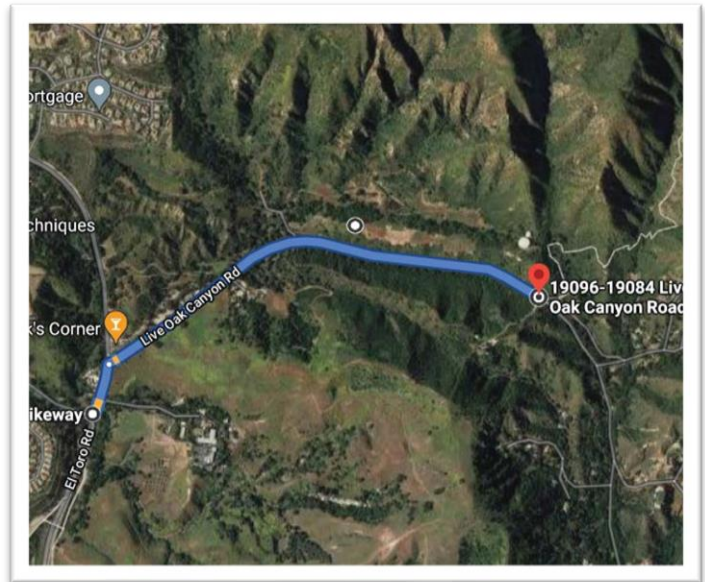
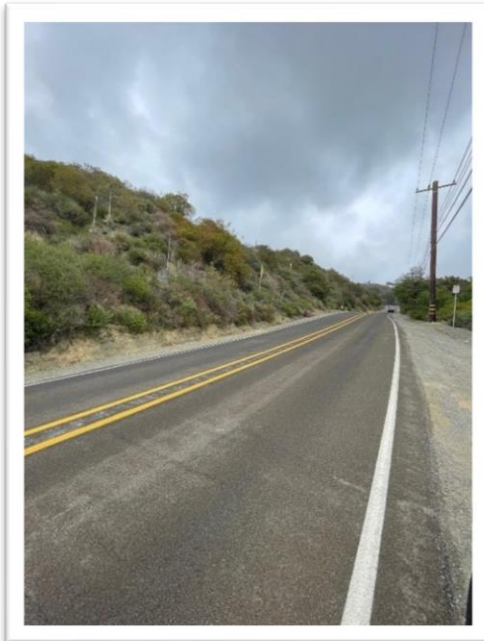
**PROJECT LOCATION:** Dimension Water Treatment Plant

**PROJECT BASIS:** Safety; End of Service Life

**TOTAL PROJECT COST:** \$200,000

**DESCRIPTION:** DWTP is home to the District’s Water Operations Department. The office trailer has been in continuous operation since 19—and is showing significant structural deterioration, including the floor which is fracturing and uneven. The new office space will need to sized adequately for the department’s full time staff of five (5) operators and be compliant with Covid-19 guidelines.

**PROJECT TITLE: LIVE OAK TRANSMISSION MAIN UPGRADE**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #5

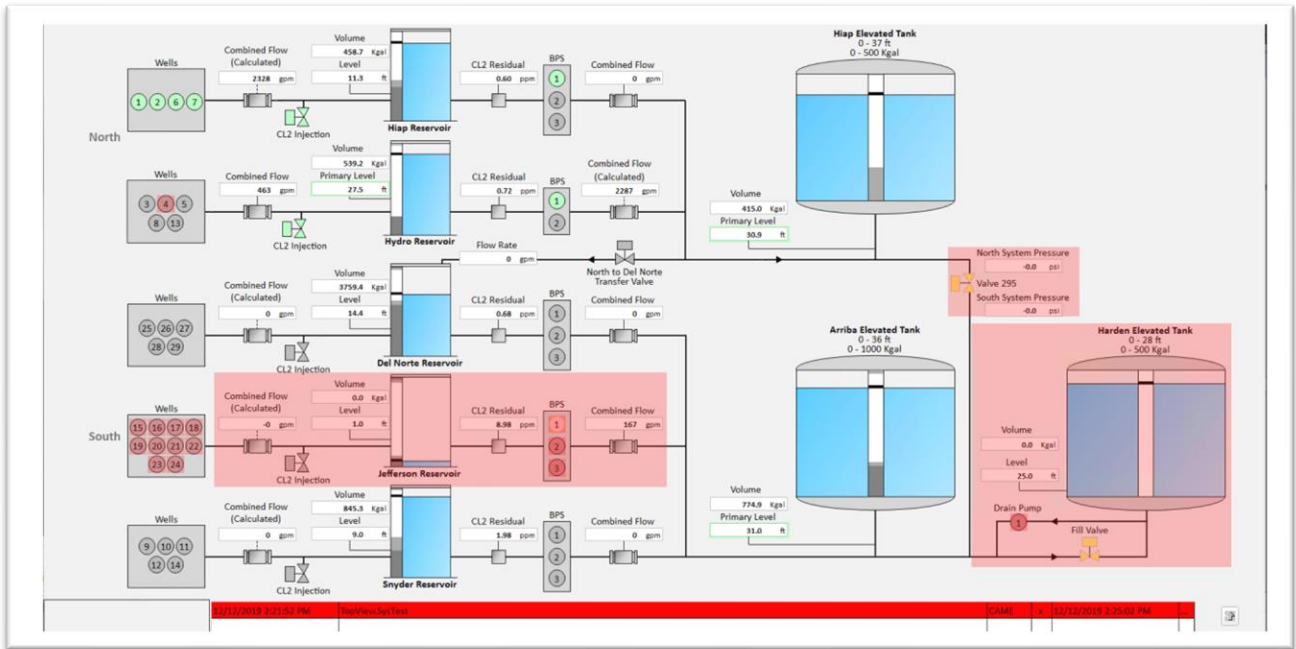
**PROJECT LOCATION:** Live Oak Canyon Road from Ridgeline Booster Pump Station to Harris Grade Tanks

**PROJECT BASIS:** Reliability

**TOTAL PROJECT COST:** \$830,000 in FY 2021-22 (\$1,600,000 Total)

**DESCRIPTION:** The existing 10" welded steel pipeline was installed in 1964 and is nearing the end of its service life. In addition, hydraulic analysis shows that the pipe is undersized and does not allow water to move as efficiently between Ridgeline BPS, Saddle Crest development, and Harris Grade tanks. The approximate length of the pipeline is 5400 lineal feet (LF).

**PROJECT TITLE: SCADA SYSTEM UPGRADE**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #6

**PROJECT LOCATION:** District-wide Drinking Water, Recycled Water, and Sewer Facilities

**PROJECT BASIS:** Reliability; End of Service Life

**TOTAL PROJECT COST:** \$1,000,000 in FY 2021-22 (\$2,500,000 Total)

**DESCRIPTION:** The District’s Supervisory Control and Data Acquisition (SCADA) System is a critical system used for the daily operation and monitoring of facilities in the water, recycled water, and sewer systems. The District is in the process of a multi-year phased approach to upgrade the system to improve communication, update security and replace equipment that has reached the end of its service life.

**PROJECT TITLE: METER REPLACEMENT PROGRAM**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #7

**PROJECT LOCATION:** District-wide

**PROJECT BASIS:** Water Use Efficiency

**TOTAL PROJECT COST:** \$35,000

**DESCRIPTION:** The District serves potable water to approximately 4,200 residential and commercial customers systemwide via water meters for monitoring and billing purposes. Each year, a budget is approved for the replacement of faulty or broken meters and is adjusted annually based on inventory and system age. This budget is an annual programmatic budget.

**PROJECT TITLE: AUTOMATED METER READING (AMR)/AUTOMATIC METERING INFRASTRUCTURE (AMI) SYSTEM IMPLEMENTATION**



**CAPITAL PLAN**

**CLASSIFICATION:**

PROJECT #8

**PROJECT LOCATION:**

District-wide

**PROJECT BASIS:**

Water Use Efficiency

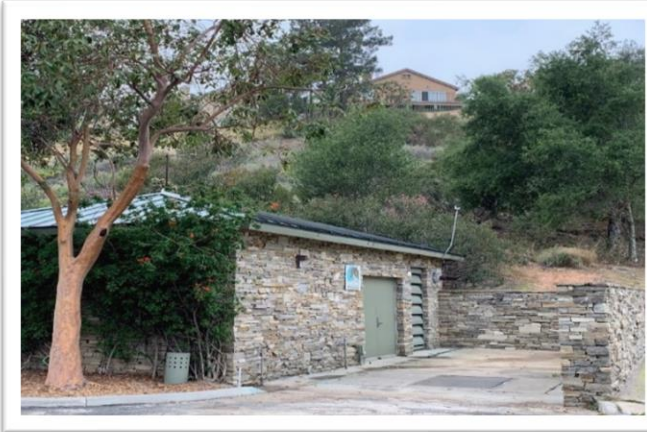
**TOTAL PROJECT COST:**

\$600,000 in FY 2021-22 (\$1,700,000 Total, Including \$500,000 in grant funds)

**DESCRIPTION:**

In March 2021, the District was awarded a U.S. Bureau of Reclamation WaterSmart Grant Program for an Automatic Meter Reading/Automatic Metering Infrastructure (AMR/AMI) Implementation Project. Grant funds will cover approximately 30% of the total project cost. The project includes the upgrade of approximately 3,420 existing touch meters (currently read via walking) with an AMI network system that will automatically collect and store hourly consumption data, aiding in water conservation, improved water management, and energy savings. The new system can provide hourly water usage information, enabling customers to know their consumption in near real-time on their computer or mobile devices to receive high-usage and leak alerts. In addition to enhancing water use efficiency District-wide, this system allows for improved customer service and an enhanced customer experience with the District.

**PROJECT TITLE: DISTRICT FACILITY SECURITY IMPROVEMENTS**



**CAPITAL PLAN  
CLASSIFICATION:**

PROJECT #9

**PROJECT LOCATION:**

District-wide

**PROJECT BASIS:**

Security

**TOTAL PROJECT COST:**

\$100,000

**DESCRIPTION:**

The District owns and operates numerous drinking water, recycled water, sewer, and administrative facilities throughout its service area. The protection of these facilities and services, and the safety of residents are paramount concerns for the District, and periodically, certain improvements are necessary. In addition, the District will often ensure that security features such as walls and gates are architecturally consistent with surrounding communities. This budget is an annual programmatic budget.

**PROJECT TITLE: SKIP LOAD TRACTOR**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #10

**PROJECT LOCATION:** Robinson Ranch Wastewater Treatment Plant Materials Yard

**PROJECT BASIS:** End of Service Life

**TOTAL PROJECT COST:** \$100,000

**DESCRIPTION:** The District owns and operates heavy-duty equipment to complete certain tasks and projects cost-effectively. John Deere 210LE Skip Loader has reached the end of its useful life and is not Air Quality Management District (AQMD/California Air Resources Board (CARB) Tier IV compliant. The skip loader is used primarily to grade dirt access roads and load materials when the CAT backhoe is unavailable.

**PROJECT TITLE: PUMP REPLACEMENT PROGRAM**



**CAPITAL PLAN  
CLASSIFICATION:**

PROJECT #11

**PROJECT LOCATION:**

District-wide

**PROJECT BASIS:**

End of Service Life; Reliability

**TOTAL PROJECT COST:**

\$100,000

**DESCRIPTION:**

The District operates its drinking water, recycled water, and sewer pumping plants at some of the highest elevations in Orange County. The preventative maintenance of the pumps and related facilities is of paramount concern for the District. This budget is an annual programmatic budget.

**PROJECT TITLE: PORTABLE GENERATOR – GRANT FUNDING**



**CAPITAL PLAN  
CLASSIFICATION:**

PROJECT #12

**PROJECT LOCATION:**

District Wide

**PROJECT BASIS:**

Reliability

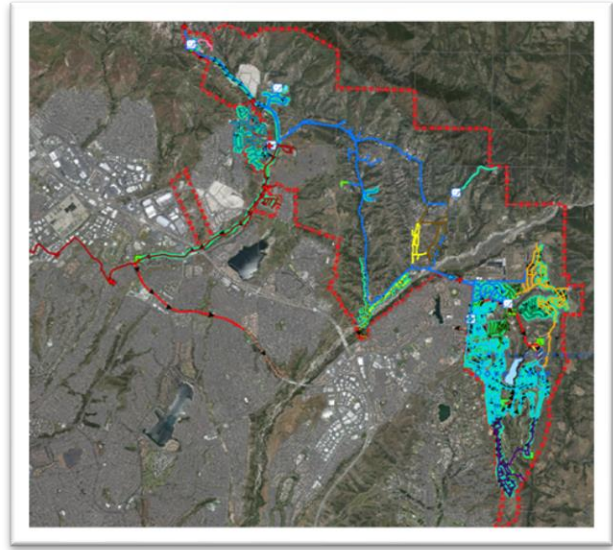
**TOTAL PROJECT COST:**

\$200,000 (Including \$99,750 in grand funds)

**DESCRIPTION:**

In March 2021, the District was notified of the award of the CalOES Community Power Resiliency Allocation Program grant in the amount of \$99,750. This award will be utilized towards the purchase of a portable trailer mounted diesel generator. This generator can be used to provide temporary power to District's facilities during an emergency outage.

**PROJECT TITLE: MASTER PLAN AND CONDITION ASSESSMENT**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #13

**PROJECT LOCATION:** Distric Wide

**PROJECT BASIS:** Reliability; Safety

**TOTAL PROJECT COST:** \$600,000

**DESCRIPTION:** The District owns and operates eight (8) domestic water pump stations, eight (8) sewer lift stations, seven (7) domestic reservoirs, two (2) non-domestic water pump stations, one non-domestic reservoir, Dove Lake, Dimension Water Treatment Plant, Robinson Ranch Wastewater Treatment Plant, three (3) dry-weather runoff recovery pump stations, and two (2) wells with a treatment facility. The Districts' most recent Master Plan was completed in 1999. Since that time, there have been a number of new facilities and developments come on-line, and a number of facility upgrades. This project will update the current hydraulic models, develop a sewer model, update the GIS database, recommend future CIP and provide condition assessments at District facilities.

**PROJECT TITLE: FIELD OFFICE REMEDIATION**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #14

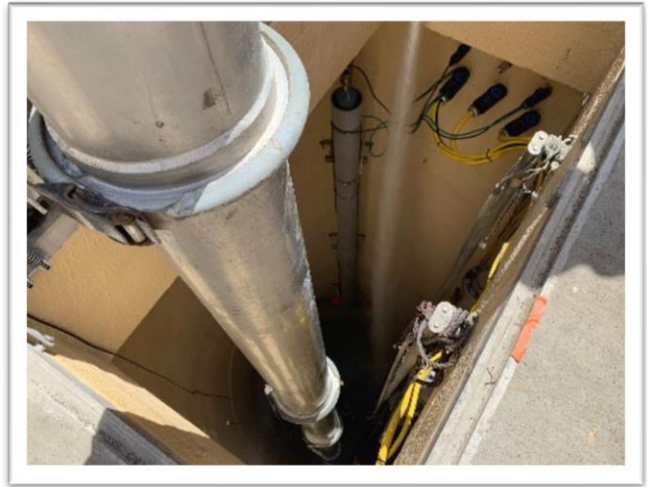
**PROJECT LOCATION:** Santiago Canyon Road, North of Ridgeline Dr.

**PROJECT BASIS:** Safety

**TOTAL PROJECT COST:** \$20,000

**DESCRIPTION:** The “Field Office” pump house was built in 1979. The pump house needs drainage repairs including excavation, french drain installation and a retaining wall to prevent water from entering the building.

**PROJECT TITLE: WET WELL RECOATING PROGRAM**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #15

**PROJECT LOCATION:** District-wide

**PROJECT BASIS:** General Maintenance

**TOTAL PROJECT COST:** \$25,000

**DESCRIPTION:** The District owns and operates seven (7) sewer lift stations and the Robinson Ranch Wastewater Treatment Plant (WWTP) in its service area. Wet wells are the part of the sewer lift station serve to receive and temporarily hold raw sewage for the purpose of pumping to another location. Periodically, the wet wells at these facilities require recoating to protect the concrete structures from degradation due the effects of naturally occurring hydrogen sulfide gases. The recoating is scheduled by Operations and Maintenance staff based on manufacturing recommendations. This budget is an annual programmatic budget.

**PROJECT TITLE: MANHOLE RECOATING PROGRAM**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #16

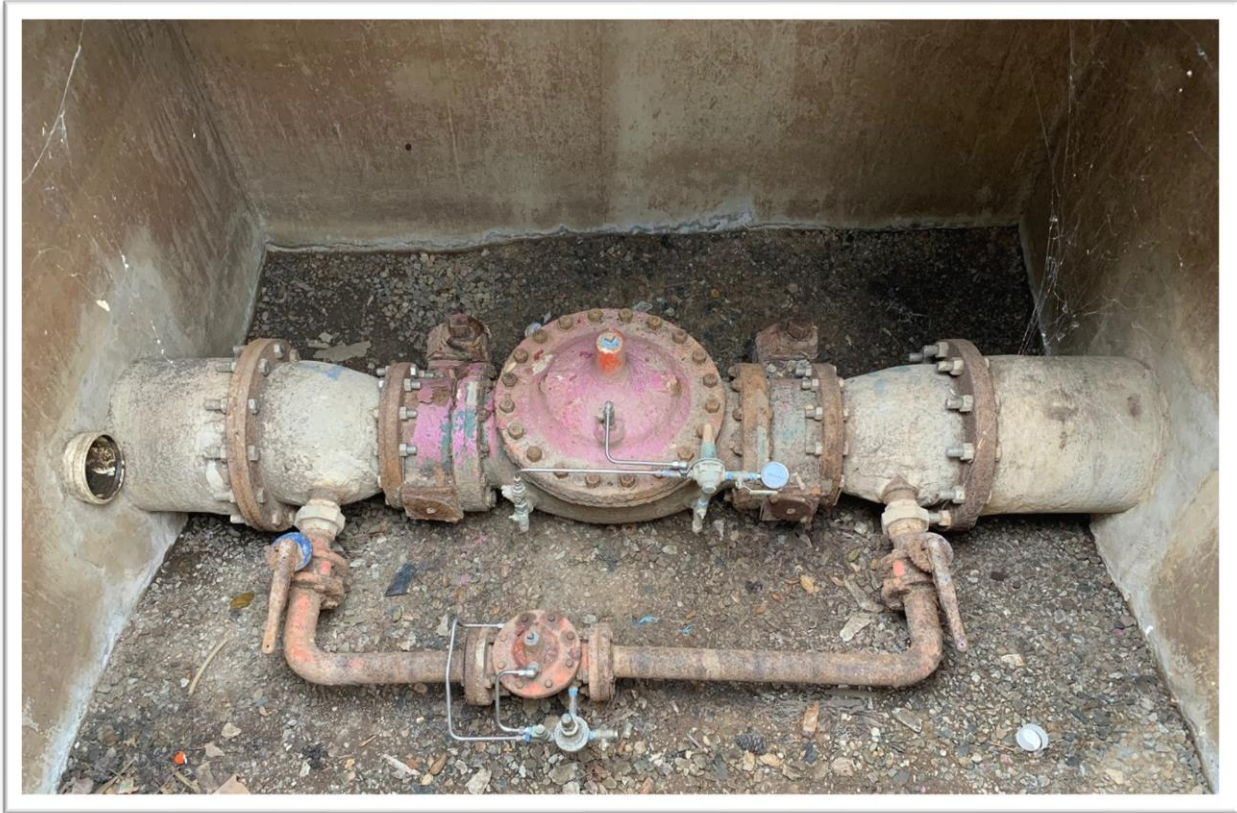
**PROJECT LOCATION:** District-wide

**PROJECT BASIS:** General Maintenance

**TOTAL PROJECT COST:** \$20,000

**DESCRIPTION:** The District owns and operates a sanitary sewer system that includes approximately forty-seven (47) miles of force mains and gravity sewer pipelines in its service area. The sanitary sewer system also includes eight hundred (800) sewer manholes that require periodic recoating improvements. This budget is an annual programmatic budget.

**PROJECT TITLE: PRESSURE REGULATING VALVE (prv) VAULT IMPROVEMENTS PROGRAM**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #17

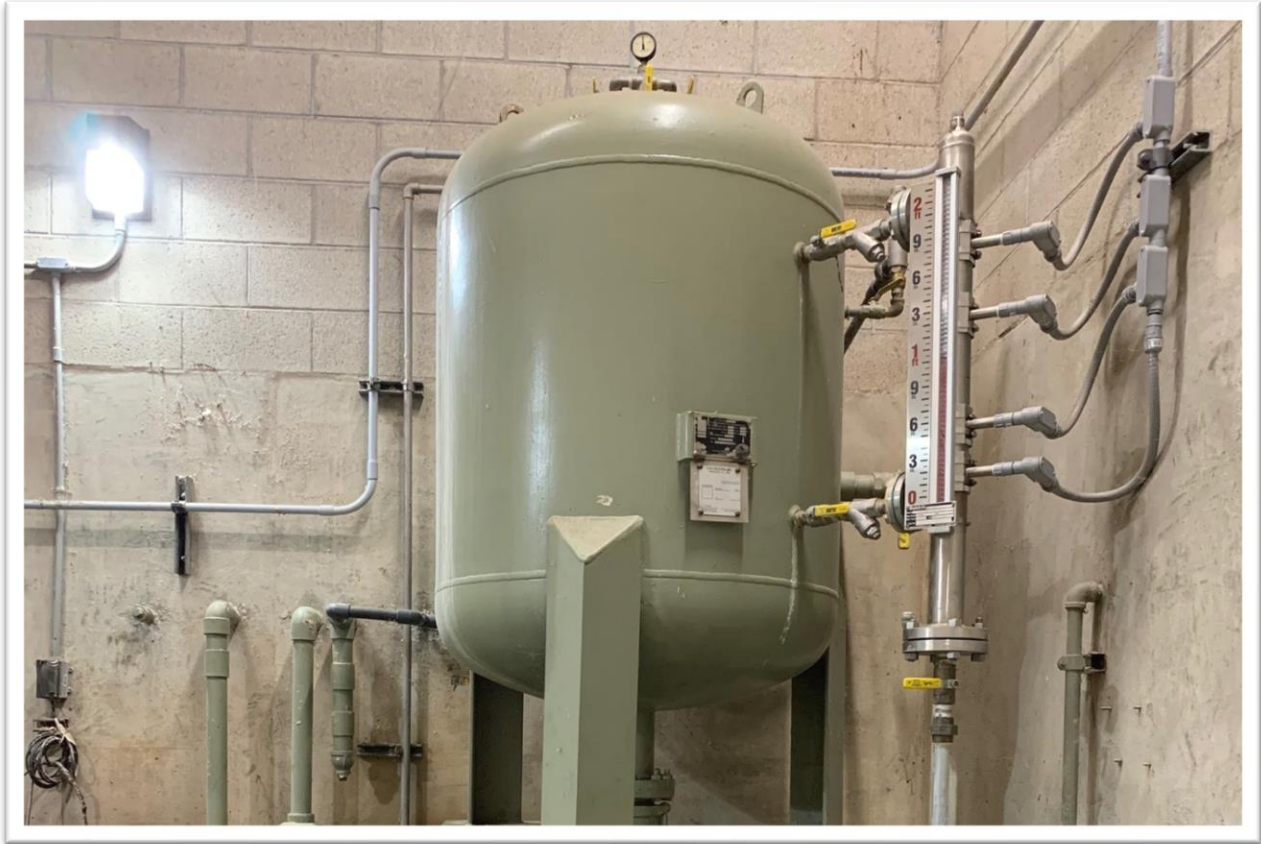
**PROJECT LOCATION:** District-wide

**PROJECT BASIS:** Reliability

**TOTAL PROJECT COST:** \$45,000

**DESCRIPTION:** The District owns and operates a recycled water (reclaimed water and stormwater) system that includes four (4) pressure regulating valves and vaults in its service area. These PRVs serve to reduce and regulate high system pressures to prevent damage to downstream systems. This budget is an annual programmatic budget.

**PROJECT TITLE: SEWER LIFT STATION SURGE TANK IMPROVEMENTS/  
REHABILITATION PROGRAM**



**CAPITAL PLAN  
CLASSIFICATION:**

PROJECT #18

**PROJECT LOCATION:**

District-wide

**PROJECT BASIS:**

General Maintenance

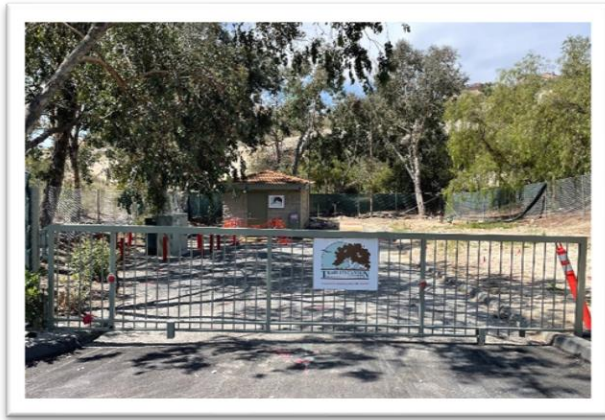
**TOTAL PROJECT COST:**

\$25,000

**DESCRIPTION:**

The District owns and operates seven (7) sewer lift stations in its service area which use surge tanks to control downstream system pressure fluctuations and mitigate potential line breaks. This budget is an annual programmatic budget.

**PROJECT TITLE: HERITAGE SEWER LIFT STATION (SLS) IMPROVEMENTS**



**CAPITAL PLAN**

**CLASSIFICATION:** PROJECT #19

**PROJECT LOCATION:** Heritage Dr. and Robinson Ranch Rd.

**PROJECT BASIS:** Security; End of Service Life

**TOTAL PROJECT COST:** \$240,000 in FY 2021-22 (\$340,000 Total)

**DESCRIPTION:** Heritage SLS is exhibiting land subsidence in a section of the facility. This project includes replacement of the bypass manhole, bypass intertie, a section of sewer pipeline to the street, and paving upgrades. The project also includes security upgrades including a new block wall and entrance gate.

**PROJECT TITLE: GOLF CLUB SEWER LIFT STATION (SLS) UPGRADES**



**CAPITAL PLAN**

**CLASSIFICATION:**

PROJECT #20

**PROJECT LOCATION:**

Dove Canyon HOA Community

**PROJECT BASIS:**

End of Service Life

**TOTAL PROJECT COST:**

\$320,000

**DESCRIPTION:**

Built in 1989, Golf Club SLS receives sewage from both Bell Canyon SLS and Barneburg SLS and in turn pumps by force main to the District's Robinson Ranch Wastewater Treatment Plant. The lift station requires wet well repairs such as coatings, guide rails, dry pit piping repairs, surge tank replacement, and Motor Control Center (MCC) upgrades.

**PROJECT TITLE: ROBINSON RANCH WASTEWATER TREATMENT PLANT (WWTP)  
HEADWORKS CLIMBER SCREEN**



**CAPITAL PLAN**

**CLASSIFICATION:**

PROJECT #21

**PROJECT LOCATION:**

Robinson Ranch Wastewater Treatment Plant

**PROJECT BASIS:**

End of Service Life

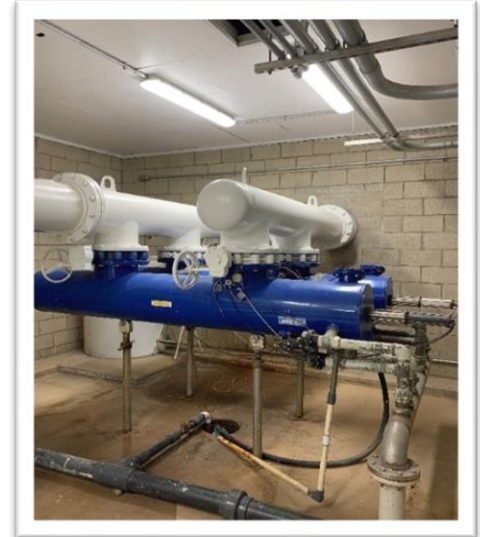
**TOTAL PROJECT COST:**

\$110,000

**DESCRIPTION:**

The District owns and operates the Robinson Ranch Wastewater Treatment Plant (WWTP), a Title 22 Tertiary treatment level facility rated to treat 0.85 million gallons per day (MGD). 100% of the product water from the WWTP is reused within the District as irrigation supply for some HOA common landscape areas. The WWTP headworks is designed to receive all raw wastewater collected in the District's sanitary sewer system, both liquid and solids. District staff propose rehabilitating the headworks climber screen to better remove solids from the raw influent wastewater prior to treatment.

**PROJECT TITLE: DOVE RECYCLED WATER PUMP STATION PIPELINE HEADER & FILTERS REHABILITATION**



**CAPITAL PLAN**

**CLASSIFICATION:**

PROJECT #22

**PROJECT LOCATION:**

Dove Recycled Water Pump Station

**PROJECT BASIS:**

End of Service Life

**TOTAL PROJECT COST:**

\$120,000 in FY 2021-22 (\$725,000 Total)

**DESCRIPTION:**

The District owns and operates the Dove Recycled Water Pump Station which is designed to boost the pressure of recycled water supply to irrigation water customers in its service area. Most of the critical portions of this facility were improved in Fiscal Years 2019-20 & 2020-21. The next phase of this facility rehabilitation includes the filter system and pipeline header.



ADMINISTRATIVE FACILITY