BUDGET

Fiscal Year 2021-2022

VALLECITOS WATER DISTRICT

Water and Wastewater Specialists since 1955

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Our Mission

Water and wastewater specialists providing exceptional and sustainable services.

This mission of exceptional and sustainable services is reflected in this budget and in the attitudes and commitment of the Vallecitos Water District staff and Board Members.





Clockwise: Jim Pennock, Mike Sannella (center), Tiffany Boyd-Hodgson, Craig Elitharp and James Hernandez

Board of Directors

Mike Sannella, President
Craig Elitharp, Vice President
Tiffany Boyd-Hodgson, Ph.D.
James Hernandez
Jim Pennock

Vallecitos Water District is a public agency organized in 1955, proudly serving the City of San Marcos, portions of Escondido, Carlsbad, Vista, and the surrounding unincorporated areas.

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VALLECITOS WATER DISTRICT
Water and Wastewater Specialists since 1955

201 Vallecitos de Oro · San Marcos, California · 92069-1453 · (760) 744-0460

Date: June 2, 2021

To: Honorable Board of Directors

Regarding: Fiscal Year 2021/22 Budget

Enclosed is the recommended **Budget** for Fiscal Year 2021/22 (FY 21/22). The FY 21/22 budget totals $93.5 million compared to $90.6 million in FY 20/21. The FY 21/22 Budget is comprised of $59.4 million of operational expenses (a 5.9% increase from the $56.0 million in 2020/21 operating budget), $26.1 million for capital items and projects ($25.2 million in 2020/21), debt service of $5.4 million ($5.4 million in 2020/21) and CalPERS Unfunded Accrued Liability (UAL) funding of $2.6 million ($4.0 in 2020/21). This budget includes a ten-year plan for capital items and projects of $134.4 million ($144.9 million in 2020/21). Inclusive of the ten-year capital plan the budget totals $202.4 million compared to $211.2 million in 2020/21.

The operational increase of $3.4 million primarily is attributable to a $2.7 million increase in water purchases as a result of budgeted impacts due to COVID being adjusted to actual results. The District estimated a 35% reduction in commercial demand as a result of businesses being closed offset by a 5% increase in residential demand due to COVID in FY 20/21. The actual commercial usage decrease was lower than anticipated and the residential increase was higher than anticipated. Budgeted water purchases for FY 21/22 reflect this higher demand. The remaining $0.7 million is mainly a result of budgeted increase in costs from the Encina Wastewater Authority (EWA), and operational projects budgeted by the District such as an energy management study and a proactive meter replacement program. In addition, $8.2 million from operations is being transferred to reserves for capital replacement.

The revenue estimates included in this budget reflect water and sewer rates for the average single family resident which are not expected to increase January 1, 2022. There may be changes to Water, Sewer and Ready-to-Serve rates which will be considered after completion of a cost of service study to be performed prior to consideration in December. Estimated rate increases included in this budget are between 3.5% and 4% over the five-year forecast. The rates are to recover the costs of service and meet strategic and financial objectives of the budget.

Long-range Financial Planning

As with recent budgets, this budget includes a ten-year projection of operating costs and capital needs in order to plan for a sound future in water supply and reliability. Fiscal sustainability is a necessary factor in the equation for future reliability and is a guiding influence in everything the District does.

All District employees are responsible to consider costs involved with activities and try to work as efficiently and effectively as possible. Consideration of controlling costs translates into the future financial viability of the District. Some of these considerations include: rate affordability; maintaining reserves, assessing adequacy to cover debt obligations now and in the future; funding CalPERS UAL; and a credit worthy cash position. We plan to meet our capital needs and maintain a strong financial position by issuing bonds in FY 21/22 which will settle in August 2021. These bonds will fund capital projects in the amount of $28 million and are estimated to have near historically low interest rates at 2.65% fixed for the 30-year term.

FINANCIAL HIGHLIGHTS

The following narratives are financial highlights and comparisons of this budget, FY 2021/22, and last budget, FY 2020/21.

Water Operations (pages 3-14)

Water purchases are projected to total 15,450 acre-feet with sales of 13,240 acre-feet for 2021/22. The water operating budget increased by $2.8 million from last year's budget, or 6.7%.

Wastewater Operations (pages 15-24)

Wastewater operating costs increased $0.5 million, or 3.5%, over last year's budget, mainly due to the District's portion of increasing costs from the Encina Wastewater Authority and an energy management study being undertaken by the District.

Personnel (pages 25-31)

Fiscal year 2021/22 includes no new positions. The Assistant General Manager position is budgeted as for 9 months of this year. Salaries and benefits for 2021/22 increased from the last budget year by $207 thousand or 1.3% mainly as a result of a budgeted Cost of Living Adjustment of $235 thousand and funding the Assistant General Manager position for 9 months at a cost of $208 thousand inclusive of salaries and benefits. Management will continue to scrutinize the need for all positions and only fill positions if absolutely necessary.

Capital Budget (pages 33-115)

Capital projects are summarized on the Comprehensive Project List found on page 34. Details of each project, including timing of phases and spending, are presented on pages 36 through 113, followed by requests for easements, vehicles and equipment of $662 thousand. Of the ten-year $134.4 million capital budget, $41.5 million are new requests and $40.4 million are for future projects included for planning purposes. The remainder is from projects carried over from the prior year resulting in a capital budget decrease of $10.5 million. The amount of capital funding for FY 2021/22 is $25.4 million.

Reserve Budget and Projection (pages 116-126)

The Reserve Budget includes revenues and transfers from various sources and summarizes appropriations and expected cash outflows for CalPERS UAL funding, debt service, and capital projects. Page 117 displays the 2021/22 reserve budget for consideration. Pages 118 through 124 display detailed reserve projections for four subsequent years and a summary projection for the five years thereafter followed by a graphical representation of reserve levels as they relate to policy limits.

As a final note, our projections are based on trends, anticipated large one-time expenditures, economic factors within our industry, and global factors influencing our operations. Obviously, a good amount of forethought and monitoring at both the Board and staff levels has been required to produce such a realistic and useable financial guide.

Respectfully submitted,

Glenn Pruim, General Manager

VALLECITOS WATER DISTRICT
Water and Wastewater Specialists since 1955

201 Vallecitos de Oro · San Marcos, California · 92069-1453 · (760) 744-0460

Date: June 2, 2021

To: Honorable Board of Directors

Regarding: CalPERS Unfunded Accrued Liability Funding Policy

It is Vallecitos Water District's commitment to excellence which drives staff to identify opportunities to remain efficient, fiscally responsible, and innovative. Managing the CalPERS pension liability is one of the District's most significant financial challenges and has been identified as one of the organization's key strategic initiatives to address. In Fiscal Year 2020 Vallecitos established a policy to pay down the pension liability over three years with half of the amount paid in Fiscal Year 2020 and with the final year to be reassessed by the board. In accordance with policy, the District paid $8.1 million of the CalPERS Unfunded Accrued Liability in Fiscal Year 2020 and another $4.0 million in Fiscal Year 2021. Based on the most recent actuarial valuation report, dated June 30, 2019, the District's pension liability was approximately $20.1 million. After the $8.1 million payment and the $4.0 million payment the revised June 30, 2021 Total Unfunded Liability per CalPERS was $7.7 million. Further, factoring in CalPERS realized and projected earnings to be reported in the June 30, 2020 and June 30, 2021 actuarial valuations respectively, the estimated June 30, 2021 Total Unfunded Liability is $3.5 million.

At the board meeting on May 19, 2021 staff obtained clear policy direction on how to manage the pension liability. Staff has been instructed to pay $2.6 million of the pension liability in Fiscal Year 2022 with the remaining amount to be paid in Fiscal Year 2023 at the discretion of the Board. Based on guidance and concerns received from the Board of Directors, Vallecitos intends to continue to address the pension liability by doing the following:

1) Pay the $3.5 million pension liability over the next two years at the discretion of the Board with $2.6 being paid in Fiscal Year 2022. For the five-year plan included in the Fiscal Year 2022 Recommended Budget it is assumed the $3.5 million won't materially change during that time frame and it assumes a constant 7.0% interest rate being charged.

2) Revise the policy brief annually with updated amounts when new actuarial reports are released and incorporate them into Budgets for future fiscal years.

3) Maintain flexibility and control with this funding strategy, not locking into any formal arrangements with CalPERS.

4) Avoid over-paying, or becoming super-funded, by reassessing the final year's payment as necessary.

5) Report back to the Finance Committee and Board of Directors on pension funding status on a regular basis.

Below approximates the fiscal impact of this funding policy in conjunction with the minimum required payments Vallecitos would have to make regardless of the funding policy. This has been incorporated into the Recommended Budget for Fiscal Year 2022.

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	Two Years to 100% Funded		
	FY 2022	FY 2023	Total
Funding Policy			
Additional Discrectionary Payment (ADP)	$ 2,595,000	$ 923,000	$ 3,518,000
Required Payment on UAL ***(1)***	743,696	1,135,000	1,878,696
Unfunded Accrued Liability Payment	$ 3,338,696	$ 2,058,000	$ 5,396,696
Approximate Interest Savings	**$ 2,731,845**		

(1) Required payments on the UAL will change when new actuarial reports are released and will be reduced as a result of additional discretionary payments

Respectfully submitted,

Glenn Pruim, General Manager

BUDGET FOR THE YEAR ENDING JUNE 30, 2022

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BUDGET FOR THE YEAR ENDING JUNE 30, 2022

BUDGETARY CONSIDERATIONS

Mission Statement

Water and wastewater specialists providing exceptional and sustainable services.

The budget reflects the mission statement

Budgetary Approach

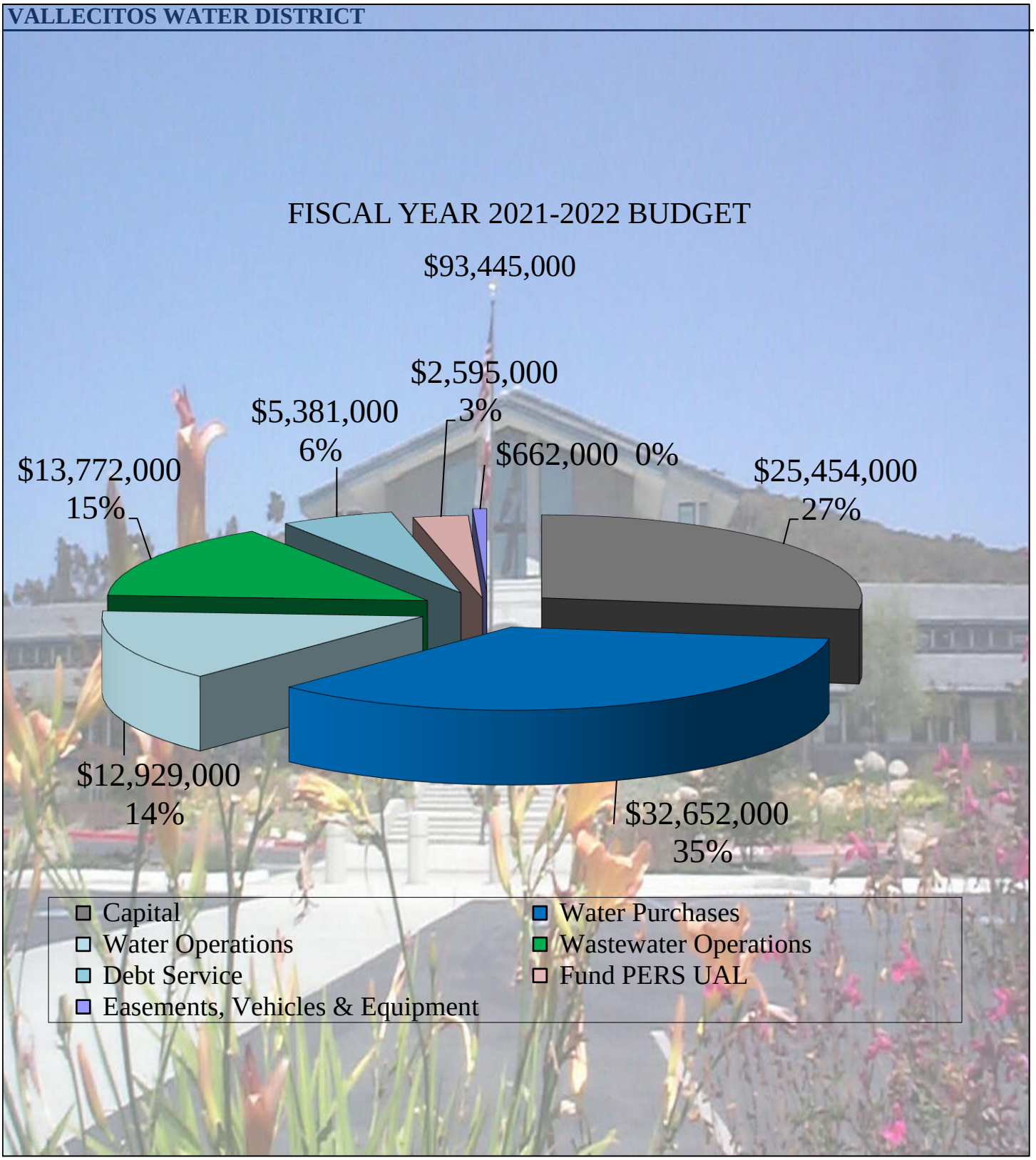
Governmental agencies, such as cities and counties, usually approach their budgets from the "revenue end." Since their revenues are somewhat predictable and restricted, their budgetary considerations are based on setting a level of service (expense total) that can be attained with those available funds.

A special district, however, must make a more thorough analysis. Normally, the expenses can be determined with a high degree of accuracy, and it's the revenues that must be set to cover those expenses. To complicate matters, factors such as weather variability and customer usage habits can have a profound effect on the overall revenue projection.

Operations vs. Capital Budget

The budget is designed to ensure various revenues and fees are used as intended. The Operations Budget, which covers the ongoing cost of running the District, is paid by the rate payers of the District through charges for water and sewer service. The Capital Facilities Budget is covered primarily by fees on new development and existing customers with increased demands.

Operating revenue in excess of operating expense is earmarked for transfer to the Replacement Reserve Fund for the future replacement of assets. This ensures the current users of our system are paying their fair share for the maintenance of existing facilities as they depreciate.

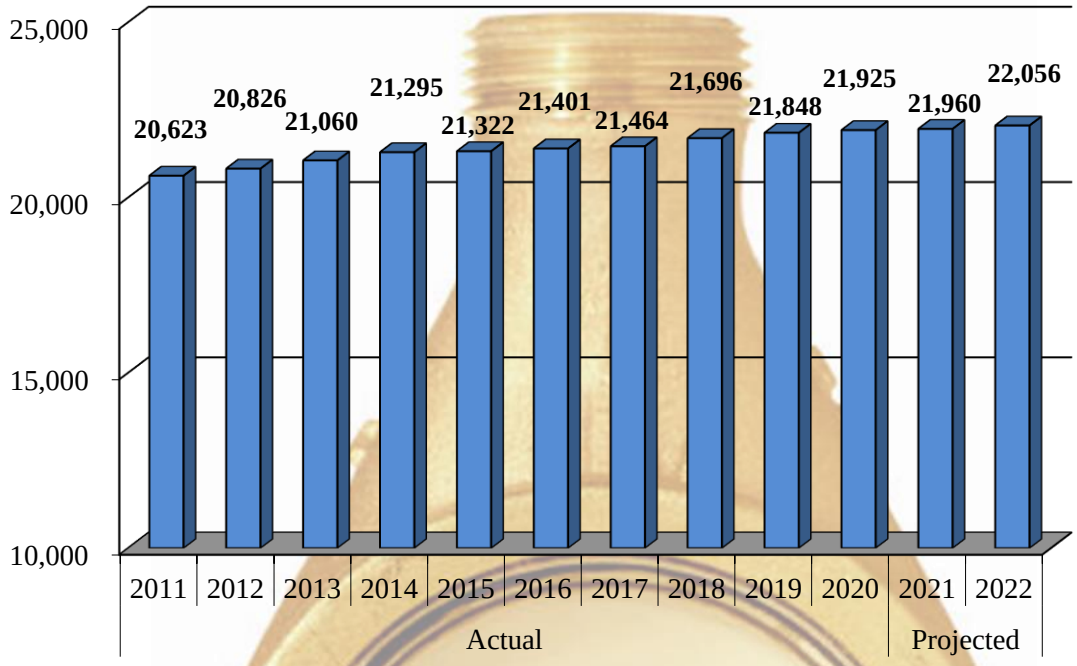

FISCAL YEAR 2021-2022 BUDGET
$93,445,000
$2,595,000
3%
$5,381,000
6%
$662,000 0%
$13,772,000
15%
$25,454,000
27%
$12,929,000
14%
$32,652,000
35%
Capital
Water Operations
Debt Service
Easements, Vehicles & Equipment
Water Purchases
Wastewater Operations
Fund PERS UAL

2021-22 OPERATING BUDGET

WATER

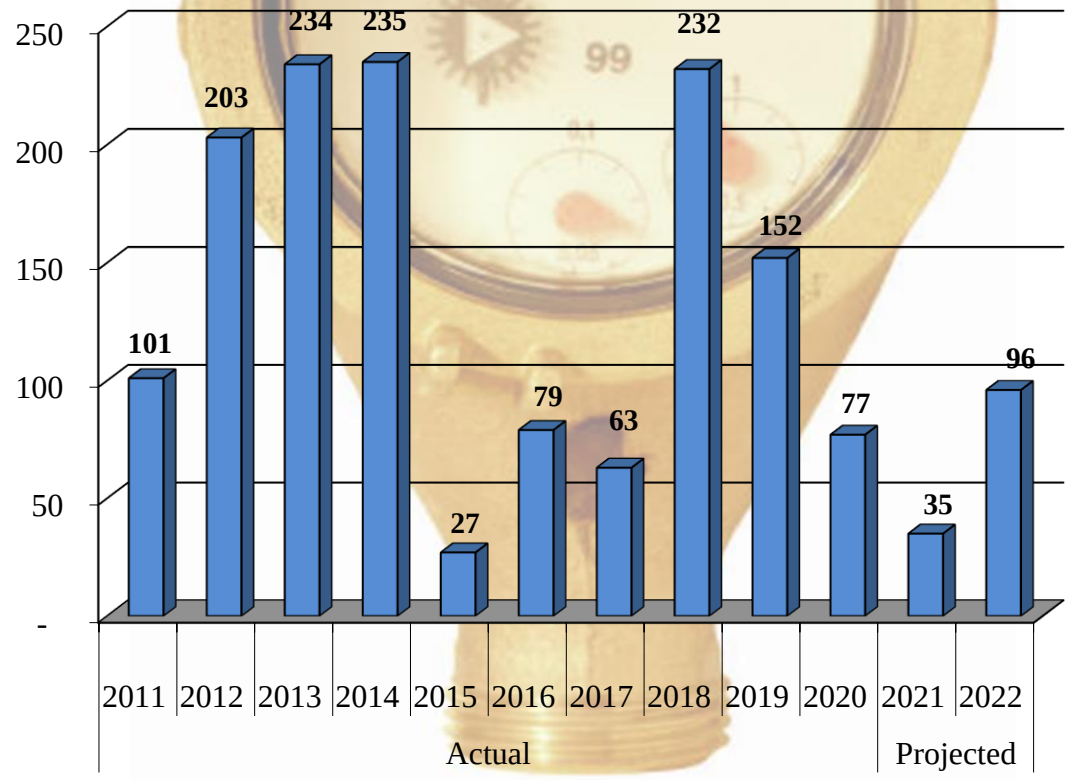
Double Peak Tank

METERS IN SERVICE

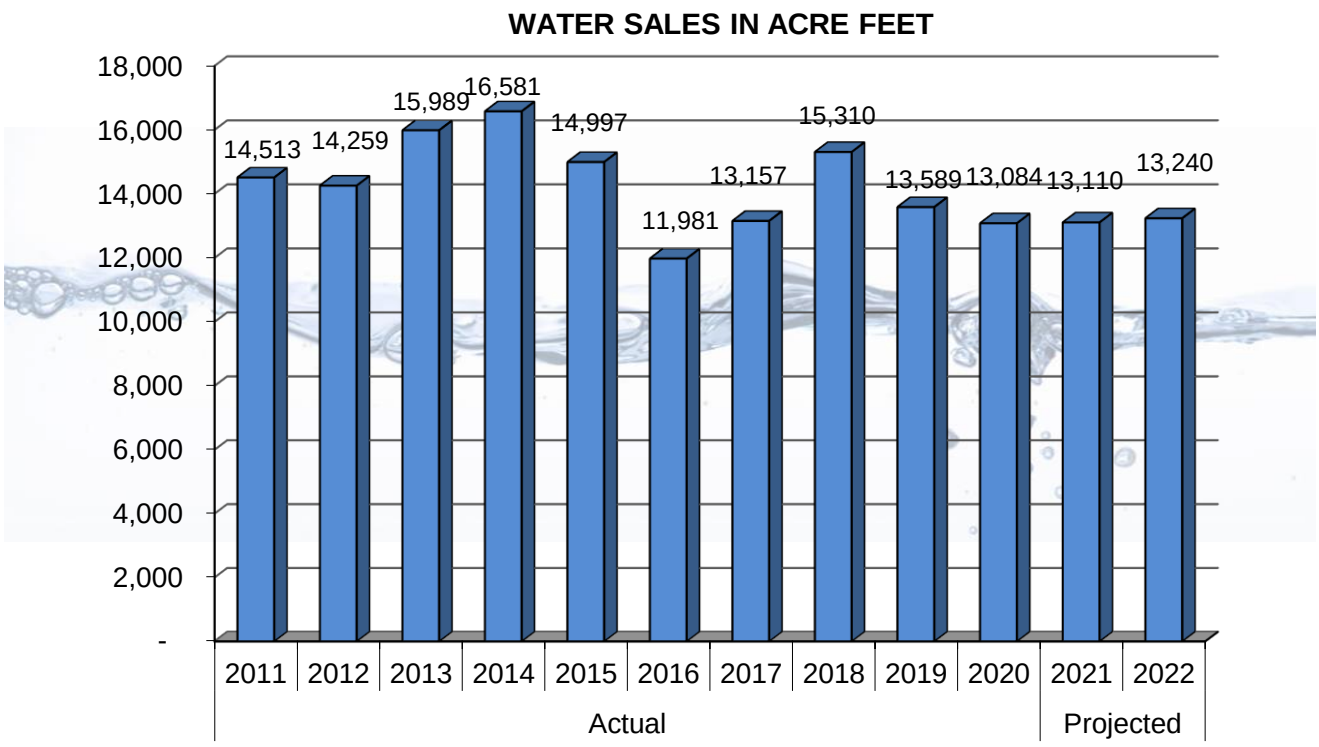


Fiscal Year End June 30

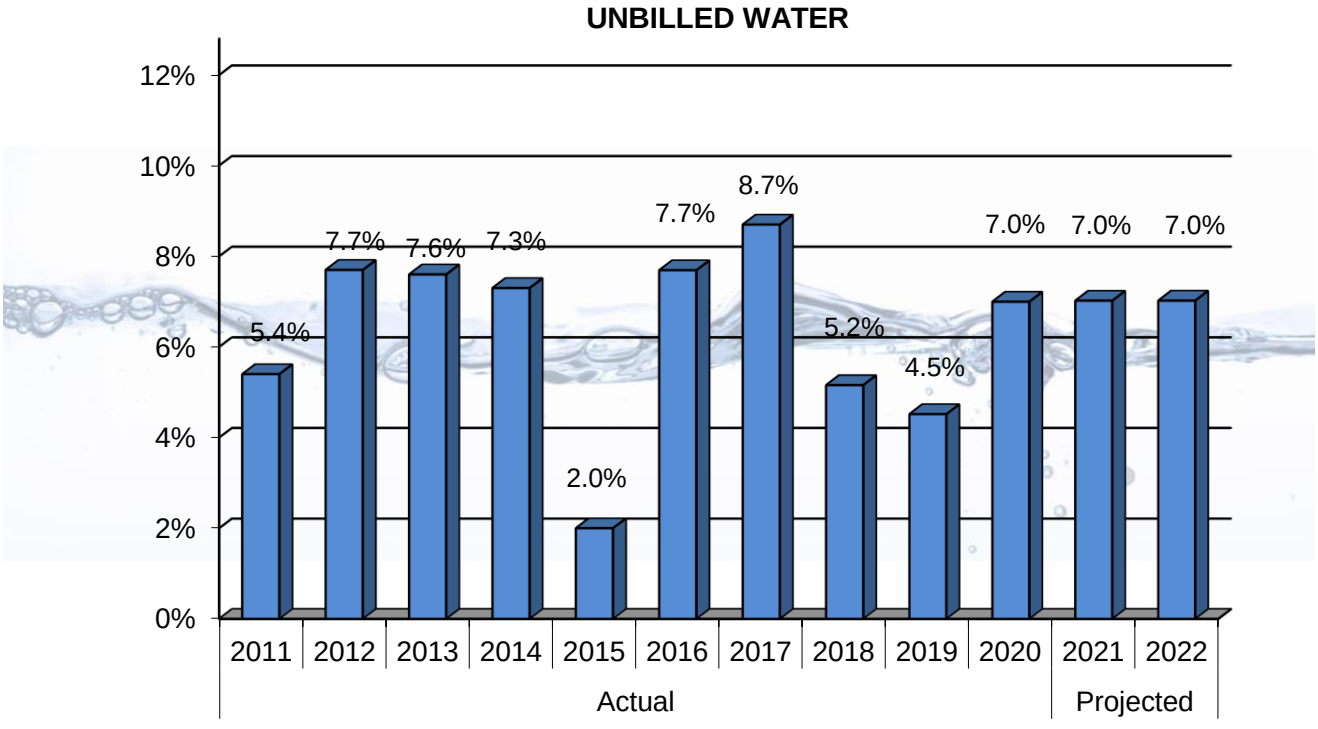
METER ADDITIONS



Fiscal Year End June 30



Year End June 30



Year End June 30

Unbilled Water includes one-day permit use, tie-ins, operational use, fire hydrant damage and use, meter malfunctions, leaks, and timing differences

BUDGET FOR THE YEAR ENDING JUNE 30, 2022

FUNCTION DEFINITIONS - WATER OPERATIONS

REVENUES

Water Sales: Monthly charges to cover the wholesale cost of water, with a minimal markup targeted to cover some operating costs and provide funds for capital improvements and replacement.

Ready To Serve: Monthly charge to cover fixed costs, regardless of water sales. Examples include maintenance of reservoirs and transmission lines, meter reading and administrative costs such as insurance.

Pumping Charges: Charges to customers at high elevations, to cover the power costs required to deliver water.

Interest and Other: Interest revenue, late charges, backflow fees, engineering fees and other miscellaneous revenues.

OPERATING EXPENSES

Water Purchases: Vallecitos purchases its water from two sources: The San Diego County Water Authority (SDCWA) and the Olivenhain Municipal Water District. Desalinated water is included in the water purchased from SDCWA.

Pumping: To move water to various elevations, and to provide adequate pressure and storage to higher service connections. Includes maintenance of ten pump stations, readings, and power costs.

Water Quality: To monitor incoming water in accordance with federal and state regulations. Includes collecting samples and reporting results, and maintenance of monitoring equipment.

Water Treatment: To treat water in tanks, handle chemicals, and use and maintain injection equipment for pipelines.

Tanks and Reservoirs: Maintenance of 17 steel tanks and 2 reservoirs. Includes corrosion control, security, and water level monitoring.

Transmission and Distribution: Maintenance of pipeline system within 45 square miles, consisting of 379 miles of pipes. Includes 26 pressure reducing stations, 3 (internal) flow control facilities, all air releases/blow-offs, fire hydrant laterals (not including the hydrant), cross-tie valves with other districts, and valve exercising.

Services: Maintenance of all service lines located from main lines to meters.

BUDGET FOR THE YEAR ENDING JUNE 30, 2022

FUNCTION DEFINITIONS - WATER OPERATIONS (Continued)

Meters: Reading approximately 22,000 meters monthly for billing purposes as well as maintenance of all customer meters.

Backflow Prevention: Ensures compliance with Title 17, requiring backflow devices for specific connections to protect quality of water in our system.

Customer Accounts: Costs related to opening and closing accounts, response to customer concerns, billing costs (statements, mailing), and uncollectible accounts.

Equipment and Vehicles: Maintenance of District equipment. Includes all construction equipment, water, sewer and administrative vehicles, plus miscellaneous tools and equipment.

Buildings and Grounds: Maintenance of administrative and operations buildings, warehouse, and shops. Also includes power costs, alarmed security system, landscape service, janitorial, and pest control.

Engineering: All costs of engineering, capital facilities and inspection services. Includes review and monitoring of development to ensure compliance with standard design practices, impact on existing system and environment, and orderly planning to provide adequate water and sewer service as demand dictates.

Safety and Regulatory Affairs: Program to control unnecessary risks, hazardous conditions, and unsafe practices, and minimize physical losses, personnel injuries, and District liability, and to provide for regulatory compliance in environmental, public health and other mandated areas.

Information Technology: Centralization of the District's technology to maintain hardware, software, servers, networks, and interfaces.

General and Administrative
Cost of Labor:

- *Salaries* include administrative and conservation personnel salaries and all vacation, sick leave, and holiday time for administrative and water personnel.

- *Group Insurance* is health, vision, and dental costs for all administrative and water personnel.

- *Workers' Compensation Insurance* costs for all administrative and water personnel.

- *Public Employees Retirement System* (PERS) participation costs for all administrative and water personnel.

- *Social Security* costs for all administrative and water personnel.

BUDGET FOR THE YEAR ENDING JUNE 30, 2022

FUNCTION DEFINITIONS - WATER OPERATIONS (Continued)

General and Administrative (continued)

- *Other Taxes/Benefits* includes unemployment and other miscellaneous employee taxes and benefits such as annual luncheon, and awards for all personnel.

District Insurance premium costs protect District assets, such as buildings and vehicles, and provide liability coverage for potential claims.

Outside Services are provided by consultants and temporary help.

Legal costs are incurred for general legal counsel (presence at board meetings, contracts, employment issues, etc.)

Auditing is conducted by a certified public accounting firm to provide an opinion on the annual financial report.

Banking Services are provided to maintain the District's general checking account plus trust and custody services.

Office Supplies are purchased for necessary administration of the District including office equipment costing less than the capitalization threshold.

Postage not related to public relations or customer billing includes notifications, such as shutdowns and public hearing notification mailings.

Office Equipment Repair covers maintenance contracts on computer system, billing equipment, copiers, telephone system, and other repairs as needed.

Telephone costs are for service at administration and water operations, long distance, data lines, and cellular phone service for field and key personnel.

Travel costs are for administrative and water personnel.

Meetings and Seminars for administrative and water personnel provide District representation and professional development.

Dues and Subscriptions are for memberships and periodicals to various organizations, such as American Water Works Association (AWWA).

Public Awareness/Conservation is the "image and information" arm of the District, utilizing publications, special events, the speakers' bureau, and the VWD School Program to present Vallecitos as the "Water and Wastewater Specialists" and promote effective water conservation programs.

BUDGET FOR THE YEAR ENDING JUNE 30, 2022

FUNCTION DEFINITIONS - WATER OPERATIONS (Continued)

General and Administrative (continued)

Regulatory Fees are incurred for renewal fees for personnel certifications such as water distribution and treatment, notary, and professional memberships, state regulatory agencies, and other compliance matters.

Election and Annexations facilitation costs are assessed by the County.

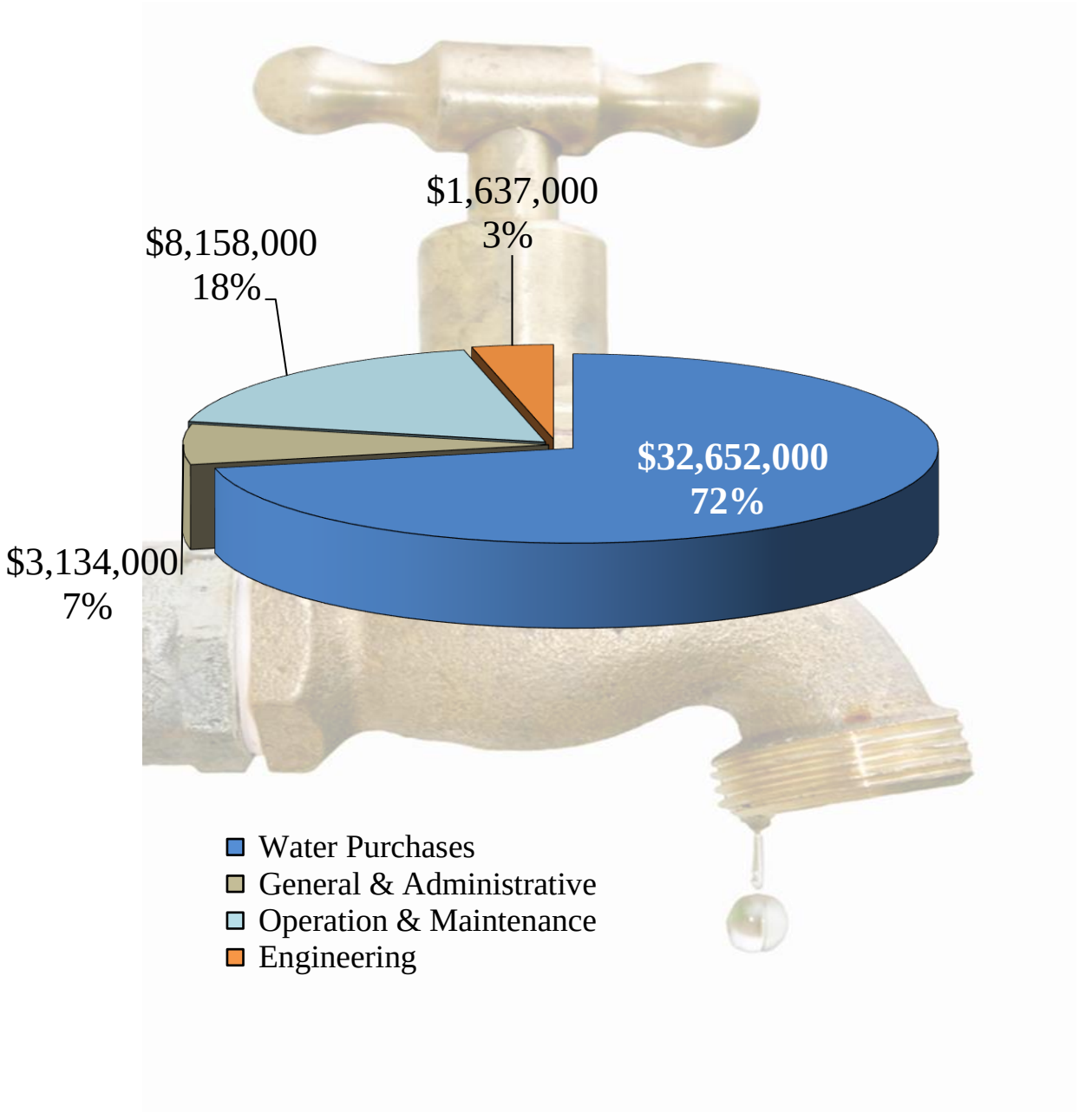
Director Fees are paid for attendance of board meetings, professional conferences, and other District-sanctioned organizations.

Director Expenses include all costs incurred by Directors, such as travel reimbursement and conference fees.

Other/Mandated Reimbursements include miscellaneous expenses that do not specifically apply to any of the above-referenced categories less mandated cost reimbursements due from the State.

Administrative Credit Transfer is a collection or recovery of overhead costs that are applied to all construction work orders.

2021-22 WATER OPERATING EXPENSE BUDGET
$45,581,000



VALLECITOS WATER DISTRICT

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
OPERATING REVENUES						
Water Sales	*4001*	$ 28,407,203	$ 26,810,000	$ 31,260,000	$ 31,180,000	$ 32,270,000
Ready to Serve	*4003*	14,275,830	14,450,000	14,350,000	14,310,000	14,730,000
Pumping Charges	*4002*	394,029	415,000	431,000	415,000	425,000
Interest	*4401*	1,848	5,000	5,000	5,000	5,000
Other	*Various*	709,854	436,000	517,000	596,000	794,000
Total Revenue		43,788,764	42,116,000	46,563,000	46,506,000	48,224,000
OPERATING EXPENSES						
Water Purchases	*1010*	28,874,401	29,930,000	31,000,000	32,652,000	34,040,000
Pumping	*2010*	797,345	1,039,000	812,000	923,000	954,000
Water Quality	*2020*	129,256	210,000	104,000	211,000	225,000
Water Treatment	*2030*	511,597	467,000	477,000	476,000	498,000
Tanks & Reservoirs	*2040*	339,469	456,000	368,000	380,000	393,000
Transmission & Dist.	*2050*	1,675,939	1,877,000	1,862,000	1,910,000	2,103,000
Services	*2060*	78,010	88,000	104,000	82,000	86,000
Meters	*2070*	726,233	733,000	918,000	966,000	918,000
Backflow Prevention	*2080*	93,398	65,000	68,000	74,000	77,000
Customer Accounts	*4010*	662,308	1,033,000	805,000	888,000	921,000
Equipment & Vehicles	*4210*	259,936	318,000	250,000	339,000	374,000
Buildings & Grounds	*4110*	370,924	423,000	387,000	494,000	496,000
Engineering	*5010*	1,705,060	1,627,000	1,667,000	1,637,000	1,771,000
Safety & Reg. Affairs	*5210*	243,514	292,000	271,000	285,000	299,000
Information Technology	*6230*	950,818	1,080,000	994,000	1,130,000	1,159,000
General & Admin.	*6xxx*	3,415,706	3,088,000	2,990,000	3,134,000	3,201,000
Total Expense		40,833,914	42,726,000	43,077,000	45,581,000	47,515,000
OPERATING INCOME		2,954,850	(610,000)	3,486,000	925,000	709,000
LESS TRANSFERS TO/(FROM) REPLACEMENT RESERVE		2,954,850	(610,000)	3,486,000	925,000	709,000
NET INCOME		$ -	$ -	$ -	$ -	$ -

VALLECITOS WATER DISTRICT

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
WATER PURCHASES	*5001*	$ 28,874,401	$ 29,930,000	$ 31,000,000	$ 32,652,000	$ 34,040,000
PUMPING						
Cost of Labor	*2010xxx.51xx*	73,670	107,000	87,000	116,000	125,000
Materials & Supplies	*" .53xx*	14,238	33,000	29,000	37,000	41,000
Outside Repair/Service	*" .54xx*	6,736	149,000	125,000	56,000	8,000
Power	*" .5306*	702,701	750,000	571,000	714,000	780,000
Total Pumping		797,345	1,039,000	812,000	923,000	954,000
WATER QUALITY						
Cost of Labor	*2020000.51xx*	61,207	55,000	41,000	55,000	57,000
Materials & Supplies	*" .53xx*	32,003	45,000	37,000	41,000	45,000
Outside Repair/Service	*" .54xx*	36,046	110,000	26,000	115,000	123,000
Total Water Quality		129,256	210,000	104,000	211,000	225,000
WATER TREATMENT						
Cost of Labor	*2030000.51xx*	425,064	385,000	410,000	394,000	406,000
Materials & Supplies	*" .53xx*	52,313	50,000	29,000	50,000	57,000
Outside Repair/Service	*" .54xx*	23,393	20,000	29,000	20,000	22,000
Power	*" .5306*	10,827	12,000	9,000	12,000	13,000
Total Water Treatment		511,597	467,000	477,000	476,000	498,000
TANKS & RESERVOIRS						
Cost of Labor	*2040xxx.51xx*	240,128	246,000	184,000	197,000	206,000
Materials & Supplies	*" .53xx*	14,990	39,000	32,000	24,000	21,000
Outside Repair/Service	*" .54xx*	78,654	164,000	147,000	152,000	158,000
Power	*" .5306*	5,697	7,000	5,000	7,000	8,000
Total Tanks & Reservoirs		339,469	456,000	368,000	380,000	393,000
TRANSMISSION & DISTRIBUTION						
Cost of Labor	*2050xxx.51xx*	1,277,581	1,234,000	1,209,000	1,164,000	1,209,000
Materials & Supplies	*" .53xx*	201,223	315,000	189,000	263,000	275,000
Outside Repair	*" .54xx*	185,294	315,000	455,000	470,000	604,000
Power	*" .5306*	11,841	13,000	9,000	13,000	15,000
Total Trans. & Dist.		1,675,939	1,877,000	1,862,000	1,910,000	2,103,000
SERVICES						
Cost of Labor	*2060xxx.51xx*	50,356	51,000	53,000	45,000	46,000
Materials & Supplies	*" .53xx*	12,693	12,000	11,000	12,000	12,000
Outside Repair	*" .54xx*	14,961	25,000	40,000	25,000	28,000
Total Services		78,010	88,000	104,000	82,000	86,000

VALLECITOS WATER DISTRICT

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
METERS						
Cost of Labor	*2070xxx.51xx*	$ 667,393	$ 656,000	$ 868,000	$ 792,000	$ 838,000
Materials & Supplies	*" .53xx*	54,631	69,000	46,000	137,000	72,000
Outside Service/Repair	*" .54xx*	4,209	8,000	4,000	37,000	8,000
Total Meters		726,233	733,000	918,000	966,000	918,000
BACKFLOW PREVENTION						
Cost of Labor	*2080000.51xx*	35,874	21,000	24,000	23,000	25,000
Materials & Supplies	*" .53xx*	2,744	1,000	1,000	1,000	2,000
Outside Service	*" .54xx*	54,780	43,000	43,000	50,000	50,000
Total Backflow		93,398	65,000	68,000	74,000	77,000
CUSTOMER ACCOUNTS						
Cost of Labor	*4010000.51xx*	505,627	539,000	514,000	561,000	584,000
Materials & Supplies	*" .53xx*	70,406	97,000	44,000	91,000	93,000
Outside Service/Repair	*" .54xx*	46,025	40,000	33,000	42,000	50,000
Uncollectible Accts.	*" .5703*	40,250	357,000	214,000	194,000	194,000
Total Cust. Accts.		662,308	1,033,000	805,000	888,000	921,000
EQUIPMENT & VEHICLES						
Cost of Labor	*4210000.51xx*	95,985	142,000	100,000	140,000	147,000
Materials & Supplies	*" .53xx*	46,786	61,000	44,000	59,000	61,000
Fuel	*" .5307*	101,715	75,000	94,000	100,000	140,000
Outside Repair	*" .54xx*	15,450	40,000	12,000	40,000	26,000
Total Equip. & Vehicles		259,936	318,000	250,000	339,000	374,000
BUILDINGS & GROUNDS						
Cost of Labor	*4110000.51xx*	188,892	150,000	201,000	209,000	204,000
Materials & Supplies	*" .53xx*	27,137	76,000	38,000	78,000	80,000
Outside Services	*" .54xx*	88,824	122,000	74,000	132,000	135,000
Power	*" .5306*	66,071	75,000	74,000	75,000	77,000
Total Bldg. & Grnd.		370,924	423,000	387,000	494,000	496,000
ENGINEERING						
Cost of Labor	*5010000.51xx*	1,613,718	1,469,000	1,589,000	1,446,000	1,573,000
Materials & Supplies	*" .53xx*	11,593	21,000	16,000	31,000	34,000
Outside Services	*" .54xx*	79,749	137,000	62,000	160,000	164,000
Total Engineering		1,705,060	1,627,000	1,667,000	1,637,000	1,771,000

VALLECITOS WATER DISTRICT

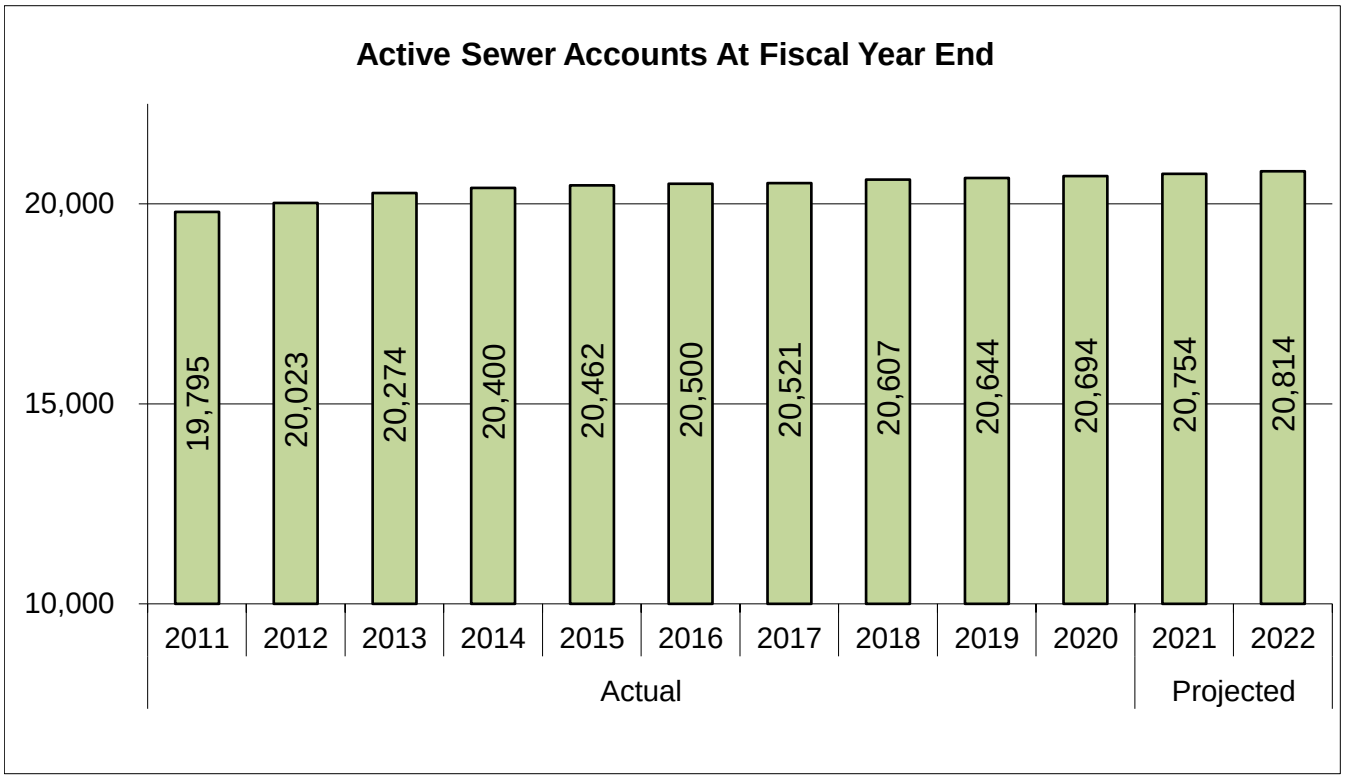
WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

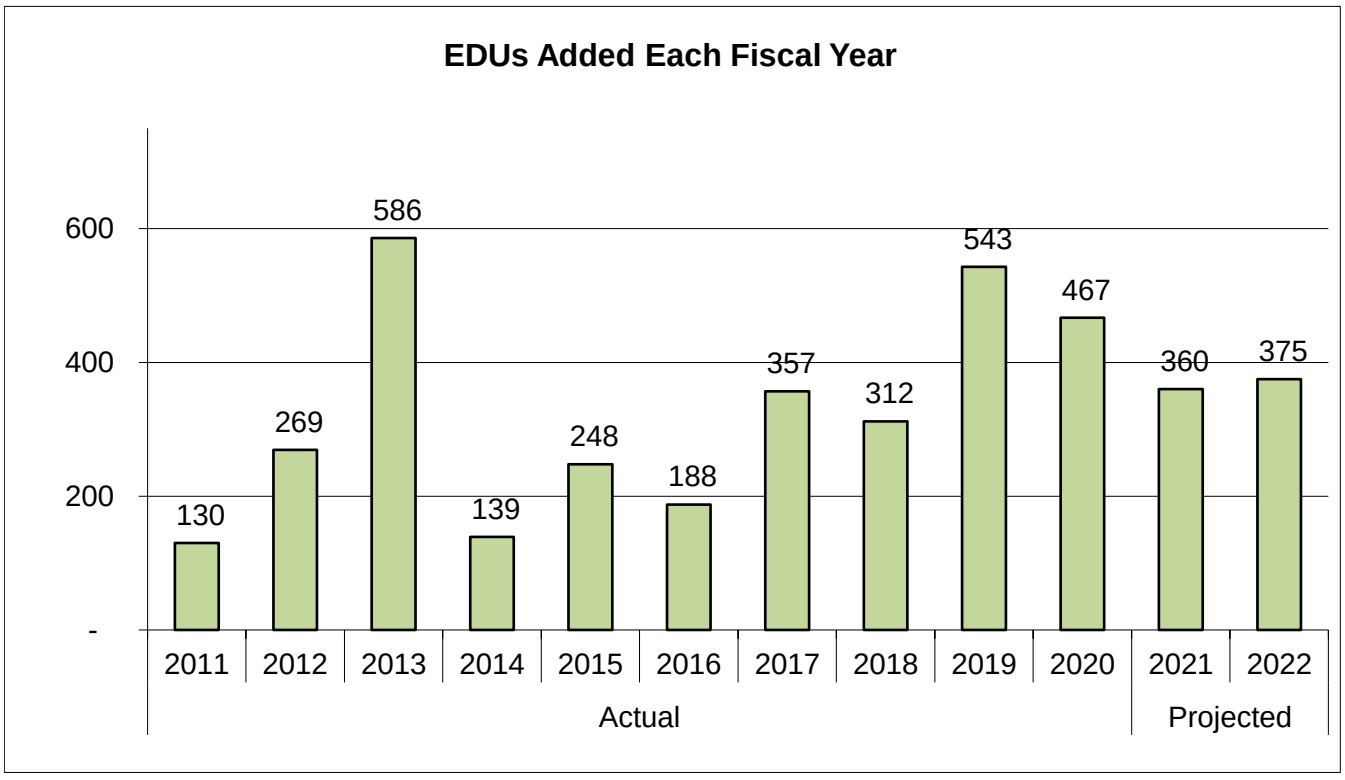
		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
SAFETY & REG. AFFAIRS						
Cost of Labor	*5210000.51xx*	$ 208,531	$ 234,000	$ 219,000	$ 237,000	$ 249,000
Materials & Supplies	*" .53xx*	18,445	28,000	24,000	18,000	19,000
Safety Support	*" .54xx*	16,538	30,000	28,000	30,000	31,000
Total Safety		243,514	292,000	271,000	285,000	299,000
INFORMATION TECHNOLOGY						
Cost of Labor	*6230000.51xx*	541,901	609,000	584,000	611,000	627,000
Materials & Supplies	*" .53xx*	95,427	65,000	71,000	84,000	86,000
Outside Services	*" .54xx*	313,490	406,000	339,000	435,000	446,000
Total Information Tech		950,818	1,080,000	994,000	1,130,000	1,159,000
GENERAL & ADMINISTRATION						
Cost of Labor	*6xxxxx.51xx*	3,406,123	3,051,000	3,026,000	3,024,000	3,207,000
Directors Fees	*" .5101*	41,129	75,000	76,000	75,000	77,000
District Insurance	*" .5201*	151,391	140,000	115,000	168,000	187,000
Travel	*" .5202*	8,923	6,000	-	6,000	14,000
Meetings & Seminars	*" .5203*	24,306	25,000	5,000	36,000	37,000
Dues & Subscriptions	*" .5204*	80,669	80,000	71,000	80,000	82,000
Directors Expenses	*" .5205*	34,476	50,000	7,000	50,000	51,000
Office Supplies	*" .5301*	18,921	41,000	17,000	41,000	42,000
Awareness/Conservation	*" .5303*	100,770	83,000	77,000	113,000	95,000
Postage	*" .5304*	1,389	3,000	2,000	3,000	3,000
Outside Services	*" .5401*	111,745	110,000	128,000	83,000	71,000
Legal	*" .5402*	130,871	138,000	207,000	180,000	164,000
Auditing	*" .5403*	11,837	13,000	13,000	13,000	15,000
Bank/Investment Svcs	*" .5501*	25,565	25,000	21,000	25,000	26,000
Regulatory Fees	*" .5502*	56,711	50,000	37,000	51,000	52,000
Election & Annexation	*" .5503*	-	2,000	2,000	2,000	2,000
Other/Reimbursements		65,584	10,000	4,000	10,000	10,000
Admin Credit Transfer.	*4702*	(854,704)	(814,000)	(818,000)	(826,000)	(934,000)
Total Gen. & Admin.		3,415,706	3,088,000	2,990,000	3,134,000	3,201,000
TOTAL EXPENSES		$ 40,833,914	$ 42,726,000	$ 43,077,000	$ 45,581,000	$ 47,515,000

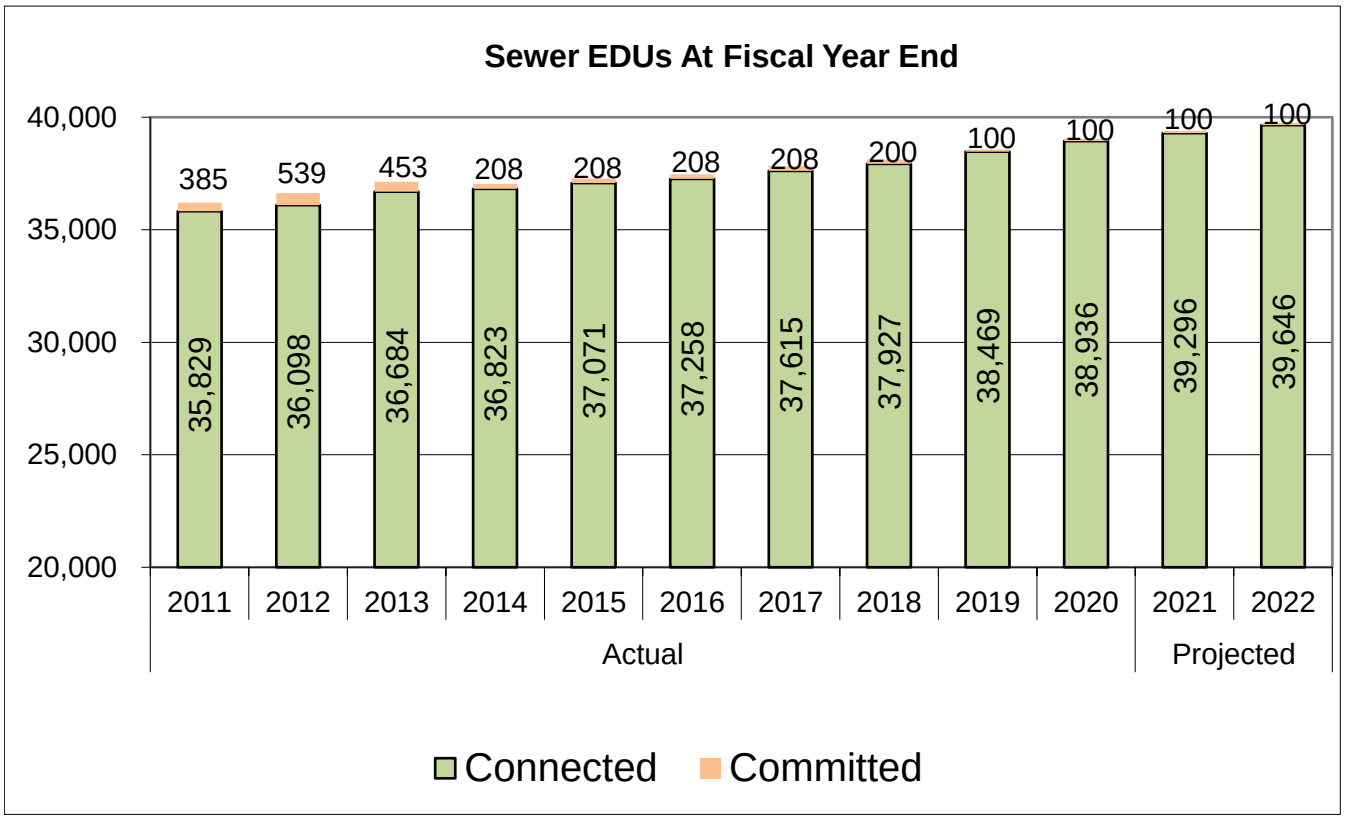
2021-22 OPERATING BUDGET

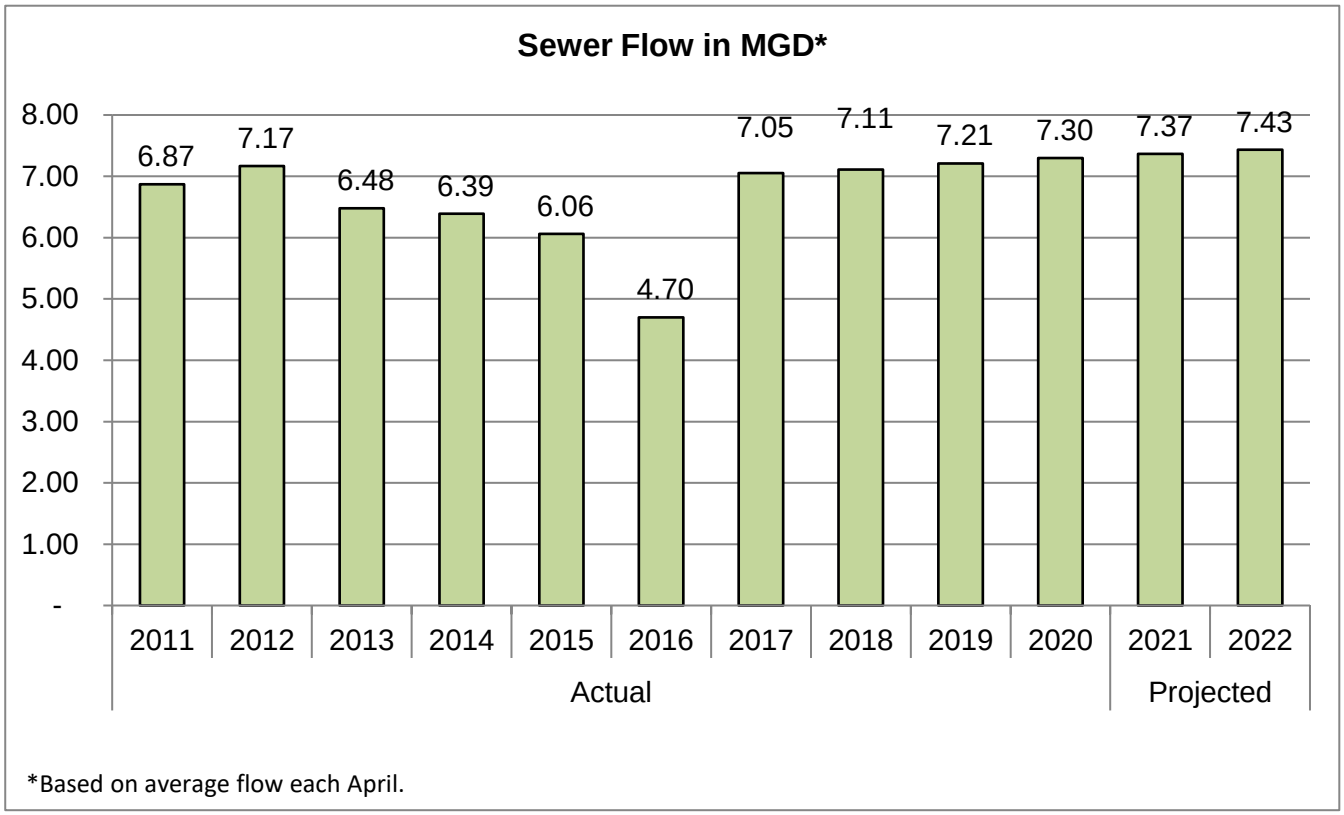
WASTEWATER

Chlorine Contact Tank at Meadowlark Wastewater Reclamation Facility


Active Sewer Accounts At Fiscal Year End
20,000
15,000
10,000
19,795
20,023
20,274
20,400
20,462
20,500
20,521
20,607
20,644
20,694
20,754
20,814
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Actual
Projected


EDUs Added Each Fiscal Year
600
400
200
-
130
269
586
139
248
188
357
312
543
467
360
375
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Actual
Projected


Sewer EDUs At Fiscal Year End
40,000
35,000
30,000
25,000
20,000
385
539
453
208
208
208
208
200
100
100
100
100
35,829
36,098
36,684
36,823
37,071
37,258
37,615
37,927
38,469
38,936
39,296
39,646
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Actual
Projected
Connected
Committed


Sewer Flow in MGD*
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
-
6.87
7.17
6.48
6.39
6.06
4.70
7.05
7.11
7.21
7.30
7.37
7.43
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Actual
Projected
*Based on average flow each April.

BUDGET FOR THE YEAR ENDING JUNE 30, 2022

FUNCTION DEFINITIONS - WASTEWATER OPERATIONS

REVENUES

Sewer Service: Monthly charges to cover the cost to collect, treat and dispose of wastewater plus maintain the various wastewater facilities.

Reclaimed Water Sales: Revenue generated from contractual sale of reclaimed water to the Carlsbad Municipal Water District and the Olivenhain Municipal Water District on a cost recovery basis.

Other: Interest revenue, late charges, engineering fees and other miscellaneous revenues.

OPERATING EXPENSES

Collection and Conveyance: Maintaining flow in 276 miles of District sewer lines. Includes blockage removal, television inspection, and maintenance of pipeline system and manholes.

Lift Stations: Cost of lifting sewage flows at the Montiel Lift Station, Lake San Marcos Lift Station and Questhaven Lift Station. Includes maintenance and power costs of the pumping systems.

Source Control: Costs to ensure compliance with federal, state, and local regulations as administered through the Encina Wastewater Authority.

Encina Disposal: Cost reimbursement to the Encina Wastewater Authority for processing wastewater and returning clean water to the environment.

Meadowlark Plant: All costs attributed to treating wastewater and for production and sale of reclaimed water to City of Carlsbad, and OMWD including operation and maintenance of the plant, No. 1 Lift Station, and Mahr Reservoir.

Customer Accounts: Responds to customers, associated billing costs, and uncollectible accounts.

Equipment and Vehicles: Maintenance of sewer vehicles and equipment and transfer of a portion of administrative and water operations vehicle costs attributable to sewer.

Buildings and Grounds: A transfer of costs attributable to sewer.

Engineering: All attributable sewer engineering, capital facilities and inspection costs.

BUDGET FOR THE YEAR ENDING JUNE 30, 2022

FUNCTION DEFINITIONS - WASTEWATER OPERATIONS (Continued)

Safety and Compliance: A transfer of safety and regulatory affairs costs attributable to sewer operations.

Information Technology: Centralization of the District's technology to maintain hardware, software, servers, networks, and interfaces.

General and Administrative
Cost of Labor:

- *Salaries* include all vacation, sick leave, and holiday time for sewer personnel.
- *Group Insurance* is health, vision, and dental costs for all sewer personnel.
- *Workers' Compensation Insurance* covers all sewer personnel.
- *Public Employees Retirement System* (PERS) participation costs for all sewer personnel.
- *Social Security* cost for all sewer personnel.
- *Other Taxes* include unemployment and other miscellaneous employee taxes for sewer personnel.

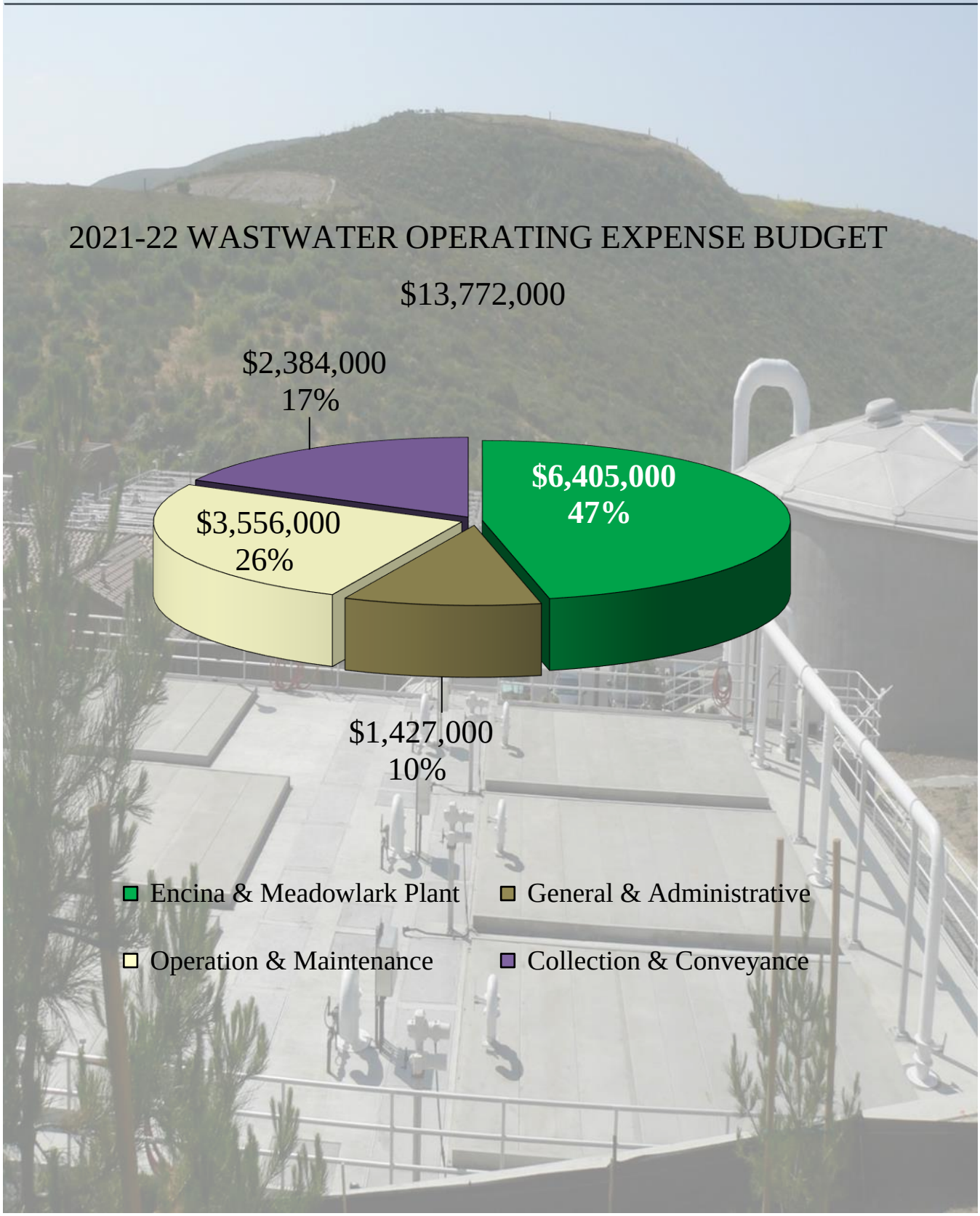
Travel costs for sewer personnel.

Meetings and Seminars fees for sewer personnel are to provide District representation and professional development.

Dues and Subscriptions are periodical costs for sewer-related activities.

Other includes miscellaneous expenses that do not specifically apply to any of the above-referenced categories.

Administrative Credit Transfer is the collection or recovery of overhead costs that apply to all construction work orders.


2021-22 WASTWATER OPERATING EXPENSE BUDGET
$13,772,000
$2,384,000
17%
$6,405,000
47%
$3,556,000
26%
$1,427,000
10%
Encina & Meadowlark Plant
General & Administrative
Operation & Maintenance
Collection & Conveyance

VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
OPERATING REVENUES						
Sewer Service	*4101*	$ 18,012,258	$ 17,330,000	$ 17,695,000	$ 17,763,000	$ 18,210,000
Reclaimed Water Sales	*4102*	2,663,436	2,794,000	2,726,000	2,975,000	2,995,000
Other	*Various*	421,084	110,000	285,000	317,000	325,000
Total Revenue		21,096,778	20,234,000	20,706,000	21,055,000	21,530,000
OPERATING EXPENSES						
Collection & Conveyance	*3010000*	2,189,635	2,352,000	2,437,000	2,384,000	2,491,000
Lift Stations	*3020000*	283,593	293,000	281,000	236,000	246,000
Source Control	*3060000*	173,515	204,000	192,000	203,000	209,000
Encina Disposal	*3070000*	2,994,404	3,045,000	3,077,000	3,339,000	3,439,000
Meadowlark Plant	*3410000*	2,800,121	3,102,000	2,749,000	3,066,000	3,061,000
Customer Accounts	*4010000*	479,027	600,000	465,000	565,000	582,063
Equipment & Vehicles	*4210000*	207,627	227,000	230,000	262,000	267,000
Buildings & Grounds	*4110000*	199,958	303,000	251,000	329,000	346,000
Engineering	*5010000*	727,741	747,000	822,000	899,000	819,000
Safety & Compliance	*5210000*	144,621	197,000	165,000	189,000	198,000
Information Technology	*6230000*	743,855	828,000	788,000	873,000	895,000
General & Admin.	*6xxx000*	1,747,995	1,412,000	1,566,000	1,427,000	1,471,000
Total Expense		12,692,092	13,310,000	13,023,000	13,772,000	14,024,063
OPERATING INCOME		8,404,686	6,924,000	7,683,000	7,283,000	7,505,937
LESS: TRANSFERS TO REPLACEMENT RESERVE		8,404,686	6,924,000	7,683,000	7,283,000	7,505,937
NET INCOME		$ -	$ -	$ -	$ -	$ -

VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
COLLECTION/CONVEYANCE						
Cost of Labor	*3010xxx.51xx*	$ 1,722,551	$ 1,655,000	$ 1,744,000	$ 1,668,000	$ 1,757,000
Materials & Supplies	*" .53xx*	176,700	165,000	112,000	157,000	161,000
Chemicals	*" .5350*	276,860	350,000	345,000	315,000	323,000
Outside Services/Power	*" .5xxx*	13,524	182,000	236,000	244,000	250,000
Total Collection/Conveyance		2,189,635	2,352,000	2,437,000	2,384,000	2,491,000
LIFT STATIONS						
Cost of Labor	*3020xxx.51xx*	181,757	130,000	135,000	133,000	140,000
Materials & Supplies	*" .53xx*	34,307	55,000	65,000	35,000	36,000
Outside Services	*" .54xx*	15,799	58,000	38,000	20,000	21,000
Power	*" .5306*	51,730	50,000	43,000	48,000	49,000
Total Lift Stations		283,593	293,000	281,000	236,000	246,000
SOURCE CONTROL						
Cost of Labor	*3060000.51xx*	159,168	173,000	167,000	170,000	175,000
Materials & Supplies	*" .53xx*	14,347	24,000	21,000	25,000	26,000
Outside Services	*" .54xx*	-	7,000	4,000	8,000	8,000
Total Industrial Waste		173,515	204,000	192,000	203,000	209,000
ENCINA DISPOSAL	*3070000.551*	2,994,404	3,045,000	3,077,000	3,339,000	3,439,000
MEADOWLARK LIFT STATION						
Cost of Labor	*3710000.51xx*	72,233	87,000	63,000	72,000	76,000
Materials & Supplies	*" .53xx*	4,344	45,000	39,000	37,000	38,000
Chemicals	*" .5350*	71,421	140,000	118,000	125,000	128,000
Outside Services	*" .54xx*	28,091	77,000	44,000	40,000	41,000
Power	*" .5306*	79,573	100,000	82,000	90,000	93,000
Total Lift Sta.		255,662	449,000	346,000	364,000	376,000

VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
MEADOWLARK PLANT						
Cost of Labor	*3410000.51xx*	$ 1,091,793	$ 1,107,000	$ 1,081,000	$ 1,107,000	$ 1,152,000
Materials & Supplies	*" .53xx*	291,764	316,000	325,000	365,000	313,000
Chemicals	*" .5350*	159,534	250,000	176,000	205,000	210,000
Outside Services	*" .54xx*	431,062	291,000	304,000	335,000	302,000
Power	*" .5306*	364,684	415,000	305,000	400,000	412,000
Telephone	*" .5305*	167	2,000	1,000	1,000	1,000
Total Meadowlark		2,339,004	2,381,000	2,192,000	2,413,000	2,390,000
MAHR RESERVOIR						
Cost of Labor	*3810000.51xx*	72,978	97,000	86,000	100,000	103,000
Materials & Supplies	*" .53xx*	30,831	15,000	9,000	18,000	18,000
Chemicals	*" .5350*	20,887	35,000	35,000	40,000	39,000
Outside Services	*" .54xx*	26,388	65,000	41,000	76,000	78,000
Power	*" .5306*	54,371	60,000	40,000	55,000	57,000
Total Mahr Reservoir		205,455	272,000	211,000	289,000	295,000
CUSTOMER ACCOUNTS						
Cost of Labor	*4010000.51xx*	342,389	336,000	356,000	349,000	363,000
Materials & Supplies	*" .53xx*	64,073	93,000	27,000	87,000	89,000
Outside Services	*" .54xx*	42,502	32,000	31,000	35,000	36,000
Uncollectible Accts.	*" .5703*	30,063	139,000	51,000	94,000	94,063
Total Cust. Accts.		479,027	600,000	465,000	565,000	582,063
EQUIPMENT & VEHICLES						
Cost of Labor	*4210000.51xx*	111,566	123,000	129,000	151,000	158,000
Materials & Supplies	*" .53xx*	28,117	49,000	43,000	47,000	48,000
Fuel	*" .5307*	39,651	30,000	39,000	39,000	50,000
Outside Services	*" .54xx*	28,293	25,000	19,000	25,000	11,000
Total Equip. & Veh.		207,627	227,000	230,000	262,000	267,000
BUILDINGS & GROUNDS						
Cost of Labor	*4110000.51xx*	49,039	65,000	72,000	78,000	88,000
Materials & Supplies	*" .53xx*	12,925	69,000	27,000	68,000	70,000
Outside Services	*" .54xx*	75,817	104,000	82,000	111,000	114,000
Power	*" .5306*	62,177	65,000	70,000	72,000	74,000
Total Buildings & Grounds		199,958	303,000	251,000	329,000	346,000
ENGINEERING						
Cost of Labor	*5010000.51xx*	698,798	629,000	744,000	686,000	719,000
Materials & Supplies	*" .53xx*	1,615	21,000	3,000	22,000	23,000
Outside Services	*" .54xx*	27,328	97,000	75,000	191,000	77,000
Total Engineering		727,741	747,000	822,000	899,000	819,000

VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2022

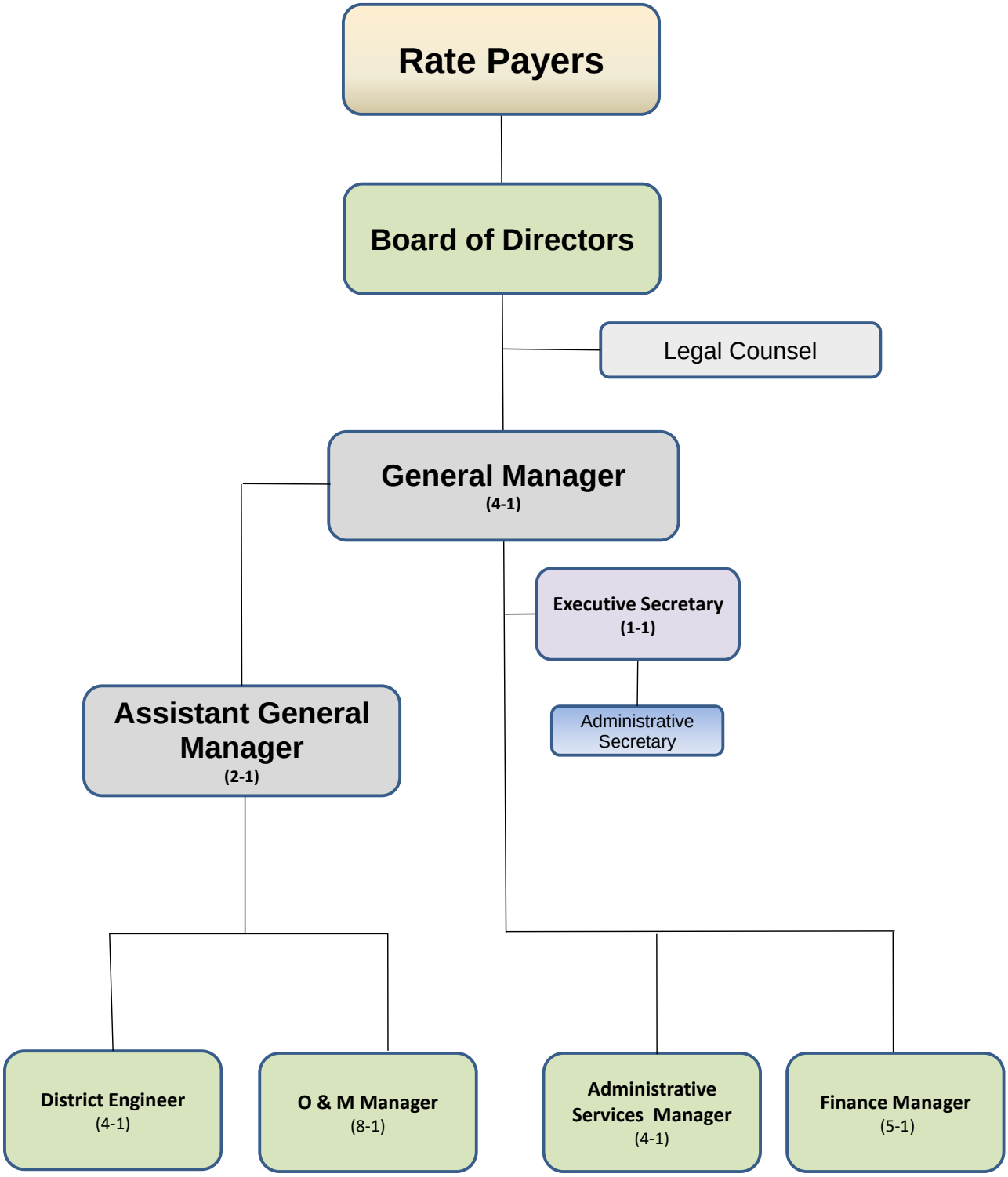
		Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
SAFETY & REGULATORY AFFAIRS						
Cost of Labor	*5210000.51xx*	$ 110,924	$ 139,000	$ 111,000	$ 141,000	$ 149,000
Materials & Supplies	*" .53xx*	17,817	29,000	28,000	18,000	18,000
Safety Support	*" .54xx*	15,880	29,000	26,000	30,000	31,000
Total Safety/Reg Affairs		144,621	197,000	165,000	189,000	198,000
INFORMATION TECH						
Cost of Labor	*6230000.51xx*	338,294	361,000	379,000	364,000	373,000
Materials & Supplies	*" .53xx*	91,591	58,000	85,000	77,000	79,000
Outside Services	*" .54xx*	313,970	409,000	324,000	432,000	443,000
Total Information Tech		743,855	828,000	788,000	873,000	895,000
GENERAL & ADMINISTRATION						
Cost of Labor	*6xxxxx.51xx*	1,611,282	1,430,000	1,508,000	1,430,000	1,510,000
Directors Fees	*" .5101*	30,133	58,000	54,000	58,000	59,000
District Insurance	*" .5201*	106,289	150,000	110,000	113,000	125,000
Travel	*" .5202*	-	4,000	-	4,000	4,000
Meetings & Seminars	*" .5203*	697	13,000	4,000	15,000	15,000
Dues & Subscriptions	*" .5204*	39,348	48,000	32,000	48,000	49,000
Office Supplies	*" .5301*	9,559	13,000	5,000	13,000	13,000
Postage	*" .5304*	1,335	6,000	2,000	4,000	4,000
Outside Services	*" .5401*	93,071	74,000	69,000	87,000	66,000
Legal	*" .5402*	123,946	132,000	199,000	184,000	163,000
Auditing	*" .5403*	11,373	13,000	13,000	13,000	15,000
Bank/Investment Svcs	*" .5501*	24,351	25,000	20,000	25,000	26,000
Regulatory Fees	*" .5502*	-	49,000	36,000	51,000	52,000
Other	*" .5702*	75,417	5,000	2,000	5,000	5,000
Admin Credit Trans	*4702*	(378,806)	(608,000)	(488,000)	(623,000)	(635,000)
Total Gen. & Admin.		1,747,995	1,412,000	1,566,000	1,427,000	1,471,000
TOTAL EXPENSES		$ 12,692,092	$ 13,310,000	$ 13,023,000	$ 13,772,000	$ 14,024,063

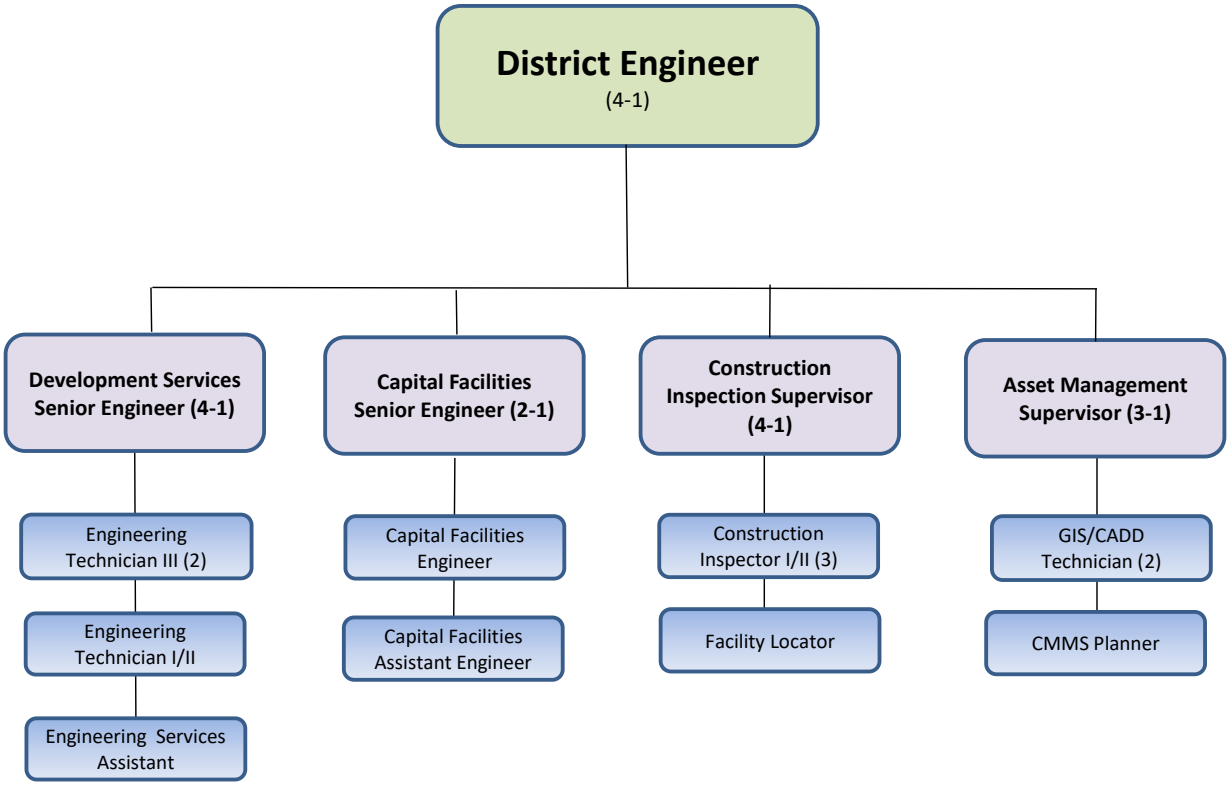
BUDGET FOR THE YEAR ENDING JUNE 30, 2022

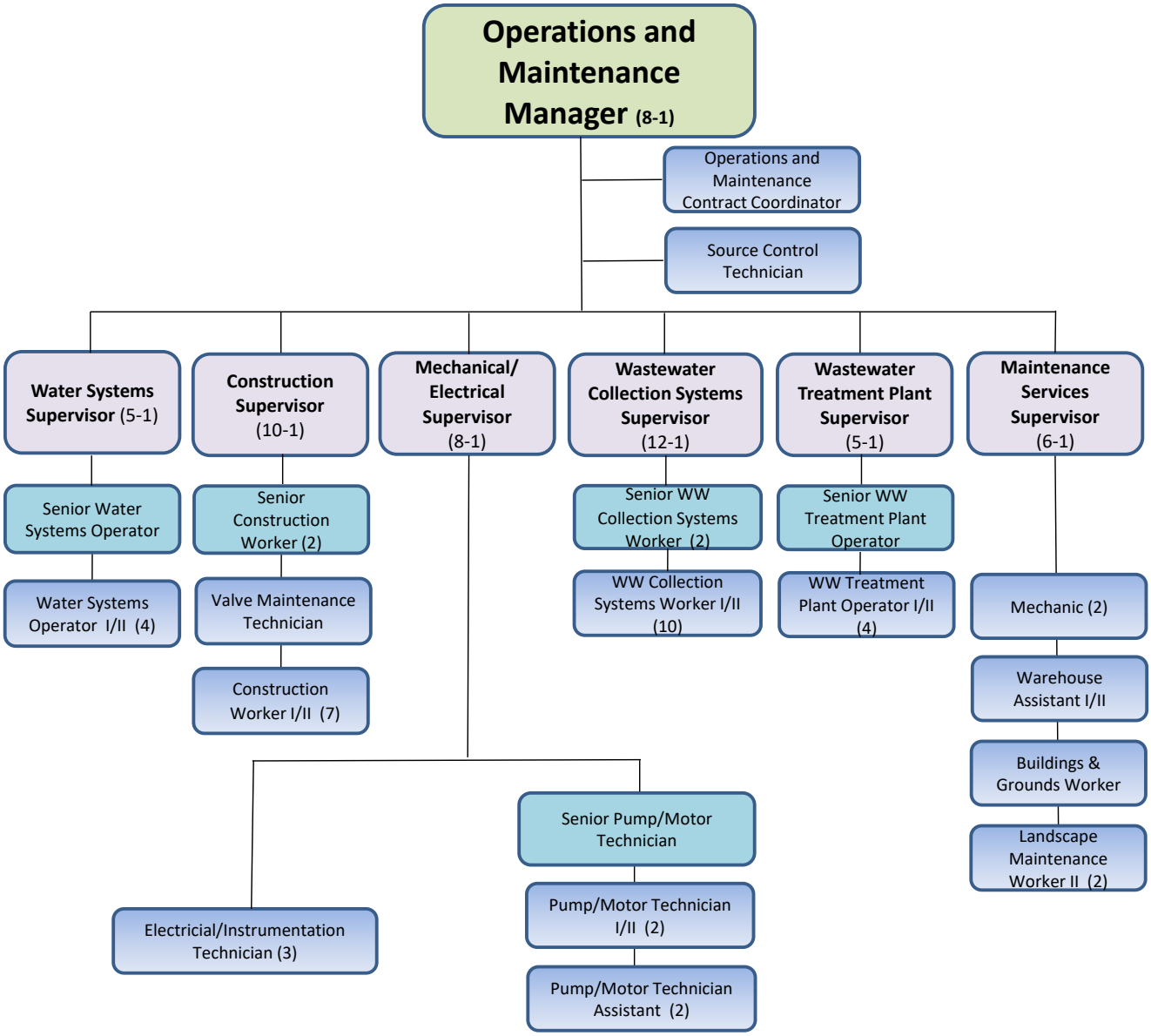
SALARY AND BENEFIT RECAP

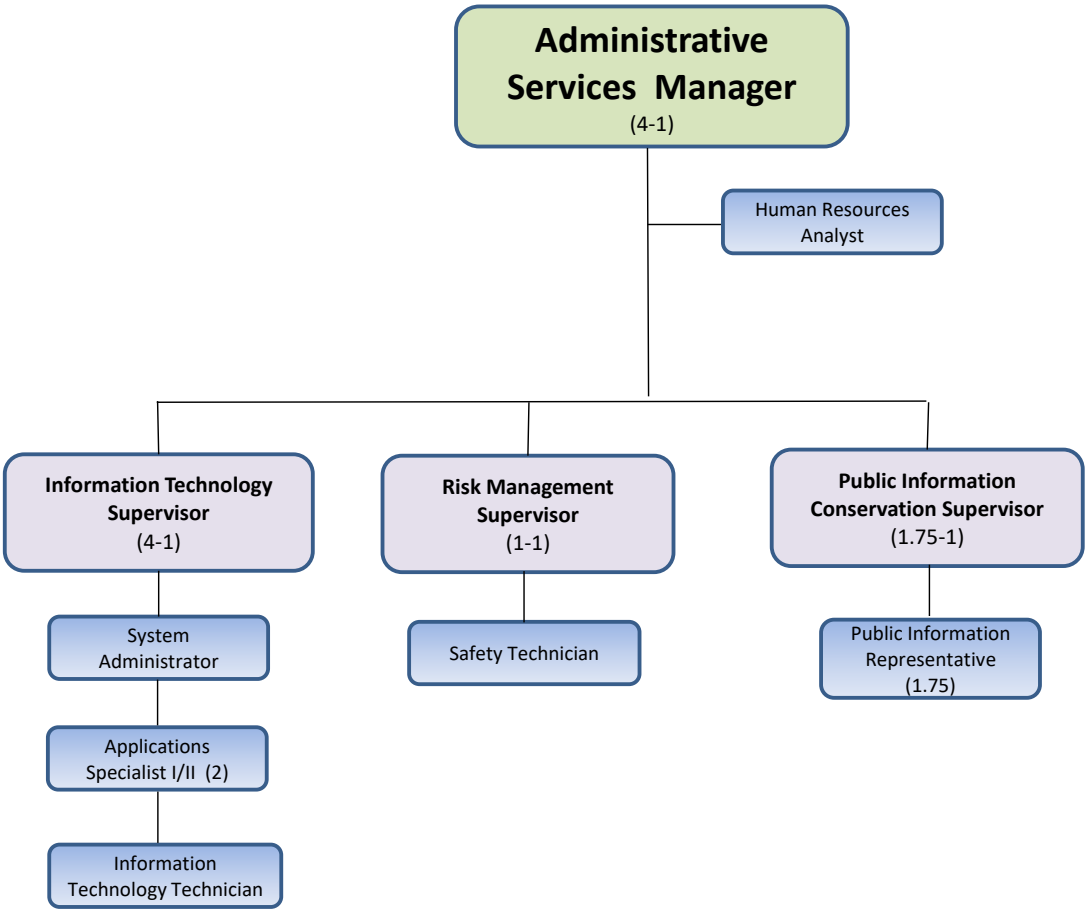
	Actual FY 19-20	Budget FY 20-21	Projected FY 20-21	Budget FY 21-22	Estimated FY 22-23
SALARIES					
Water Operations	$ 5,825,569	$ 5,583,000	$ 5,487,000	$ 5,606,000	$ 5,935,000
Wastewater Operations	3,969,024	3,951,000	3,903,000	4,010,000	4,224,000
Subtotal	9,794,593	9,534,000	9,390,000	9,616,000	10,159,000
Labor Posted to Work Orders*	597,760	657,000	701,000	682,000	712,000
TOTAL SALARIES	10,392,353	10,191,000	10,091,000	10,298,000	10,871,000
BENEFITS					
Public Employee Retirement	2,446,153	2,123,000	2,266,000	2,074,000	2,152,000
Group Insurance	2,614,148	2,377,000	2,489,000	2,540,000	2,658,000
Social Security	767,619	780,000	755,000	788,000	832,000
Workers' Comp Insurance	184,353	222,000	191,000	205,000	223,000
457 Contribution Match	234,374	218,000	186,000	218,000	218,000
Other Taxes and Benefits	17,448	27,000	18,000	22,000	24,000
TOTAL BENEFITS	6,264,095	5,747,000	5,905,000	5,847,000	6,107,000
TOTAL SALARIES & BENEFITS	$ 16,656,448	$ 15,938,000	$ 15,996,000	$ 16,145,000	$ 16,978,000
Benefits as a Percentage of Salaries	60.3%	56.4%	58.5%	56.8%	56.2%
Operations	52.00	54.00	54.00	55.00	55.00
Engineering	17.00	17.00	17.00	18.00	18.00
Finance	23.00	21.00	21.00	20.00	20.00
Administration	15.75	15.75	15.75	15.75	15.75
Total Funded FTEs	107.75	107.75	107.75	108.75	108.75

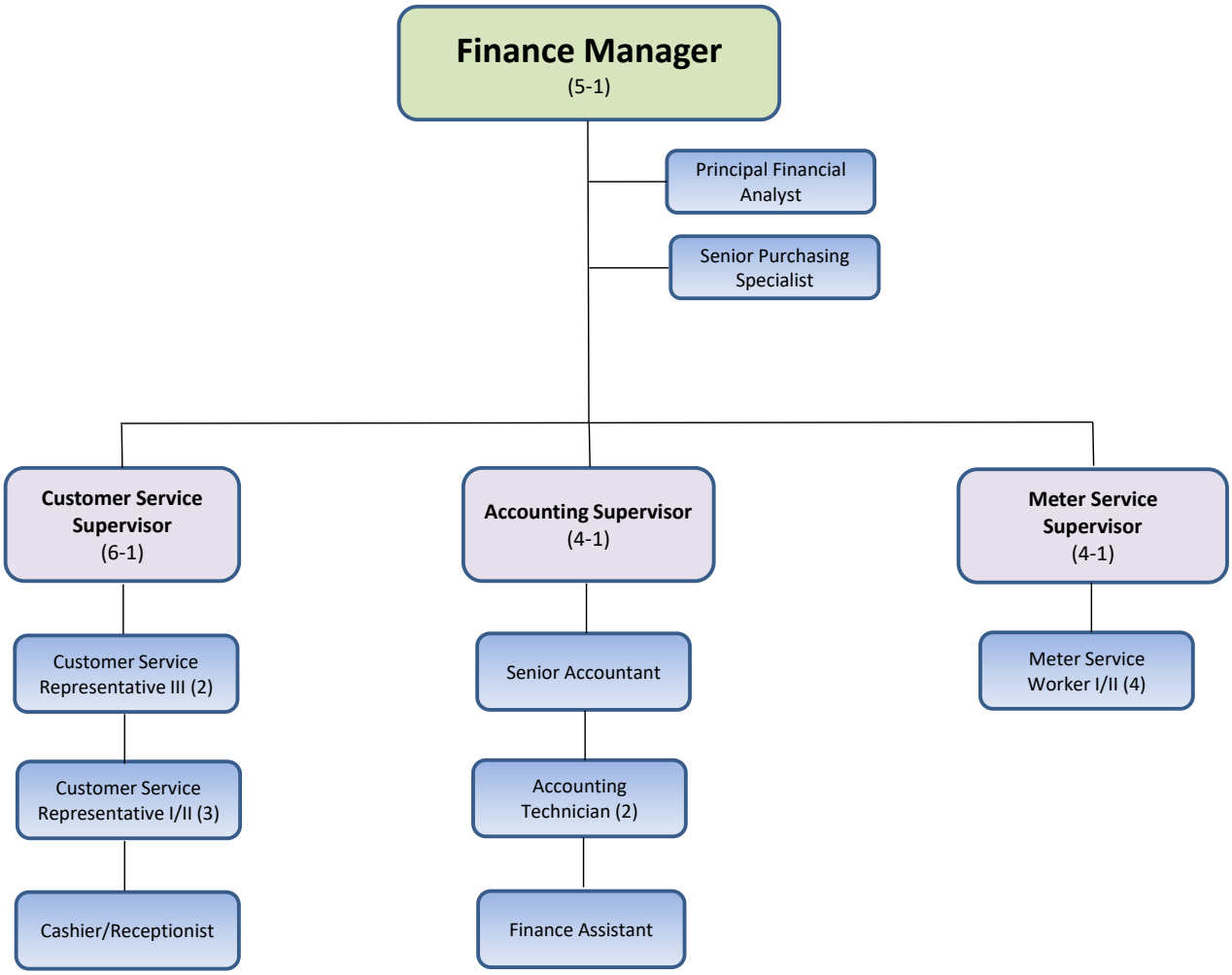
* There is also a labor overhead charge to work orders to cover benefit costs which are a part of the credit in the General and Administration sections of Water and Wastewater operations.


Rate Payers
Board of Directors
Legal Counsel
General Manager
(4-1)
Executive Secretary
(1-1)
Administrative Secretary
Assistant General Manager
(2-1)
District Engineer
(4-1)
O & M Manager
(8-1)
Administrative Services Manager
(4-1)
Finance Manager
(5-1)


District Engineer
(4-1)
Development Services Senior Engineer (4-1)
Engineering Technician III (2)
Engineering Technician I/II
Engineering Services Assistant
Capital Facilities Senior Engineer (2-1)
Capital Facilities Engineer
Capital Facilities Assistant Engineer
Construction Inspection Supervisor (4-1)
Construction Inspector I/II (3)
Facility Locator
Asset Management Supervisor (3-1)
GIS/CADD Technician (2)
CMMS Planner


Operations and Maintenance Manager (8-1)
Operations and Maintenance Contract Coordinator
Source Control Technician
Water Systems Supervisor (5-1)
Construction Supervisor (10-1)
Mechanical/ Electrical Supervisor (8-1)
Wastewater Collection Systems Supervisor (12-1)
Wastewater Treatment Plant Supervisor (5-1)
Maintenance Services Supervisor (6-1)
Senior Water Systems Operator
Water Systems Operator I/II (4)
Senior Construction Worker (2)
Valve Maintenance Technician
Construction Worker I/II (7)
Senior WW Collection Systems Worker (2)
WW Collection Systems Worker I/II (10)
Senior WW Treatment Plant Operator
WW Treatment Plant Operator I/II (4)
Mechanic (2)
Warehouse Assistant I/II
Buildings & Grounds Worker
Landscape Maintenance Worker II (2)
Electricial/Instrumentation Technician (3)
Senior Pump/Motor Technician
Pump/Motor Technician I/II (2)
Pump/Motor Technician Assistant (2)


Administrative Services Manager
(4-1)
Human Resources Analyst
Information Technology Supervisor
(4-1)
Risk Management Supervisor
(1-1)
Public Information Conservation Supervisor
(1.75-1)
System Administrator
Applications Specialist I/II (2)
Information Technology Technician
Safety Technician
Public Information Representative
(1.75)


Finance Manager
(5-1)
Principal Financial Analyst
Senior Purchasing Specialist
Customer Service Supervisor
(6-1)
Customer Service Representative III (2)
Customer Service Representative I/II (3)
Cashier/Receptionist
Accounting Supervisor
(4-1)
Senior Accountant
Accounting Technician (2)
Finance Assistant
Meter Service Supervisor
(4-1)
Meter Service Worker I/II (4)

2021-22 PERSONNEL BUDGET

POSITIONS/PERSONNEL:

Management will scrutinize the need for all positions and only fill positions if absolutely necessary. The fiscal year 2021-22 budget includes 9 months of funding for the Assistant General Manager position. There are no new positions, one reclassification, and one retitle as outlined below.

RECLASSIFICATIONS:

Control Systems Specialist to Electrical/Instrumentation Technician - Estimated Annual Savings: $16,000

The recently vacated Control Systems Specialist has resulted in reevaluating the ability to fill this specialized position while competing with private sector salaries. The District will continue to use consultants as-needed for this type of work with assistance from the IT Supervisor. The Mechanical/Electrical department has a need for the position to revert back to being an electrician. One CSS position will be reclassified to Electrical/Instrumentation Technician.

Mechanical Maintenance Worker I/II to Pump and Motor Technician Assistant – Estimated Annual Savings: $27,000

Mechanical Maintenance Worker (MMW) classifications have evolved over time to where the majority of the duties overlap with the Pump and Motor Technician (PMT) classifications. The Mechanical/Electrical department requests consolidating these series to ensure employees are appropriately classified, while also streamlining the recruitment and hiring process to allow for employees to upgrades within the job series when they have the required knowledge, skill and abilities. Two vacant MMW I/II positions will be retitled to PMT Assistant.

RETITLES:

Operations & Maintenance Assistant to Operations & Maintenance Contract Coordinator - Estimated Annual Cost: $0

This is a retitle only and will have no fiscal impact as there is no salary change.

OTHER:

Assistant General Manager - Estimated Additional Annual Cost: $277,000

The vacant Assistant General Manager (AGM) is a vacant authorized position/Full-Time Equivalent that will be funded in anticipation of filling the position. While the AGM position remained vacant, workload has increased requiring the need for additional Executive Management support. The AGM would fill in for the General Manager as needed, assist in responding to customer and Board requests, increase engagement on regional issues, develop strategic planning initiatives and regional partnerships, and resolve long-standing organizational issues. The AGM is a critical position for the District's Succession Plan. The position is budgeted for 9 months in Fiscal Year 21/22 at a cost of $208,000 followed by an annual cost of $277,000 including benefits.

VALLECITOS WATER DISTRICT

2021-22 PUBLIC AWARENESS AND CONSERVATION PROGRAM BUDGET

REBATE PROGRAMS * Prj 2022100047 W/O 117447

To encourage the purchase of qualified low flow devices, appliances, artificial turf or rebates to customers who remove their existing truf grass and install a low-water landscape (i.e., Cash for Grass program.) $ 1,000

OUTREACH & ADVERTISING Prj 2022100048 W/O 117448

For purchase of items and services used to assist customers in becoming better informed about water related issues. Includes but not limited to: purchase of videos, books, displays and promotional items; advertising; cost to participate in community events; employee education; and to provide tours of District facilities. Includes cost to produce and mail newsletters, consumer confidence report, brochures, bill inserts, special hearing notifications, and others as needed. 52,900

VIDEO PRODUCTION Prj 2022100049 W/O 123555

Cost to hire outside production company to produce videos highlighting the District or for internal staff to purchase supplies and services to create videos. Videos to be shown during tours of the District, speaking engagements, on the VWD website and/or on social media. 9,900

EDUCATION Prj 2022100050 W/O 117451

For continued development and purchase of materials designed to promote and implement K-12 education programs. This includes the Splash Science Mobile Lab visits to area elementary schools and payment for bus transportation to Jack's Pond Park and Heritage Park to listen to educational water history information by District staff. Also includes bus transportation for school tours of the District. Includes materials and costs to participate in annual Water Awareness Campaign (4th grade calendar/poster contest), such as the purchase of calendars, entry forms, prizes for entrants and poster contest winners. Also includes participation in Palomar College GEAR UP program. 35,500

COOPERATIVE PROGRAMS* Prj 2022100051 W/O 117452

For participation in cost-sharing programs such as residential surveys; large property audits, which are outsourced due to extensive staff time that would be required; customer service surveys; and supplies such as dye tablets, showerheads and moisture probes. 3,000

WATERWISE LANDSCAPE Prj 2022100052 W/O 117453

To promote low water use landscape and irrigation practices. Includes the cost for sponsoring, maintaining and upgrading water-wise demonstration gardens**, landscape irrigation/plant selection workshops, signage and promotion of demonstration gardens, waterwise plant promotions, and purchase of waterwise landscape brochures and publication reprints.

** Demonstration gardens include: Sustainable Demonstration Garden at VWD Administration building, Heritage Park native plant garden and Jack's Pond Park native plant garden. 7,300

MEMBERSHIPS & EQUIPMENT Prj 2022100053 W/O 117454

To maintain memberships in related organizations and committees and for the purchases of new or replacement equipment. 2,400

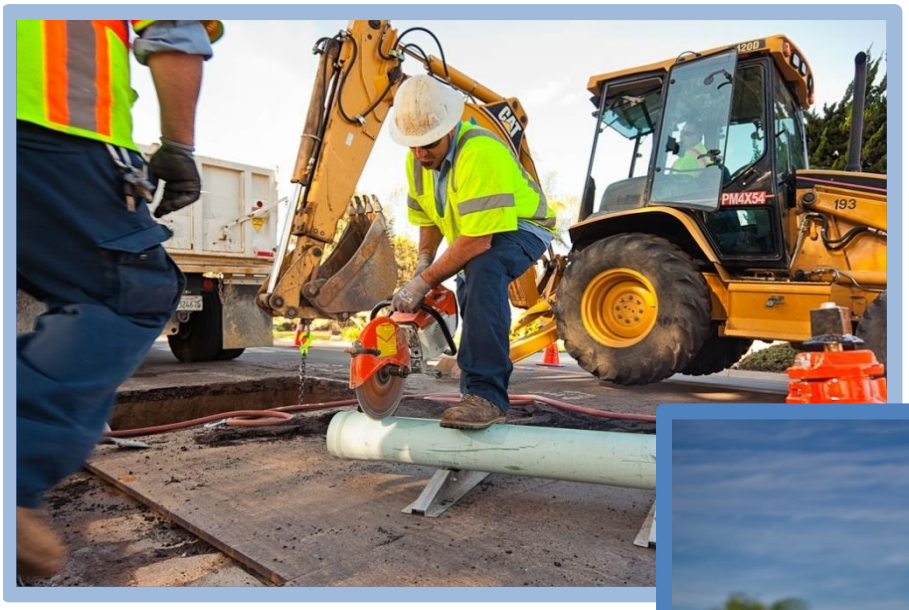
COMMERCIAL/INDUSTRIAL Prj 2022100054 W/O 117455

To assist large commercial and public agency customers by providing workshops, written materials, monetary incentives, and using outside consultants. 1,000

TOTAL PUBLIC AWARENESS/CONSERVATION PROGRAM BUDGET **$ 113,000**

* Uncertainty in the funding from the Metropolitan Water District may adversely impact the availablity of programs.

2021-22 CAPITAL BUDGET



VALLECITOS WATER DISTRICT

Comprehensive Project List

Page Number	Project Number	Project Title	Funding Source	Previous Budget & Amendments	Estimated Amt Expended @ 6/30/21	Fiscal Year 2021-22 Carryforward	Fiscal Year 2021-22 New Request
Carryover Projects							
36	2021100002	Land Outfall Parallel Sewer Section A Phase 1	210 & 220	$ 11,320,000	$ 120,000	$ 11,200,000	$ -
37	71004	San Marcos Interceptor Phase 2	210 & 220	8,500,000	8,595,000	(95,000)	250,000
38	90001	Land Outfall Gravity Sewer Sec D Phs 1	210 & 220	8,630,000	255,000	8,375,000	70,000
39	2020100002	Montiel Lift Station and Forcemain Replacement	210 & 220	5,580,000	775,000	4,805,000	-
40	2016100002	Chlorine Contact Tank Expansion	250	4,719,000	67,000	4,652,000	-
41	2021100001	Encina Wastewater Authority FY 20/21	210	4,087,000	2,712,000	1,375,000	-
42	2017100224	City of San Marcos Creek District Phase 1	110 & 210	3,740,000	90,000	3,650,000	(162,000)
43	2021100003	16-Inch Emergency Bypass Pipeline Rehabilitation	210	2,010,000	210,000	1,800,000	1,200,000
44	2020100003	Tres-Amigos Water Line Replacement Phase 1	110	3,035,000	175,000	2,860,000	-
45	2020100005	Meadowlark Failsafe Rehabilitation (Buena Reach)	210	1,160,000	125,000	1,035,000	1,825,000
46	2017100002	MRF: Conversion to Sodium Hypochlorite	250	1,795,000	25,000	1,770,000	50,000
47	2019100002	MRF - Biological Selector Improvements	250	1,700,000	575,000	1,125,000	(125,000)
48	2012100002	Richland Invert Replacement	210	1,535,000	15,000	1,520,000	5,000
49	2020100010	Ductile Iron Pipe Condition Assessment	110	605,000	100,000	505,000	695,000
50	2020100004	District-wide SCADA Upgrade Project	110 & 210	1,250,000	700,000	550,000	-
51	2020100006	Sage Canyon Tank Refurbishment	110	1,028,000	30,000	998,000	127,000
52	2020100007	Steel Pipeline Condition Assessment	110	855,000	-	855,000	-
53	2018100011	MRF - Tertiary Structural Rehab and Repairs	250	663,000	95,000	568,000	52,000
54	2014100004	Asset Management Replacement Schedule	110 & 210	704,000	190,000	514,000	-
55	2021100006	MRF Direct Potable Reuse	210	400,000	10,000	390,000	250,000
56	2020100009	Land Outfall West Condition Assessment	210	609,000	175,000	434,000	-
57	2020100011	Palos Vista Pump Station - Motor Starters Upgrade	110	408,000	5,000	403,000	109,000
58	2018100004	Las Posas Water Line Replacement	110	307,000	17,000	290,000	196,000
59	2021100004	MRF Headworks - Upgrade/Replace Equipment	210	440,000	455,000	(15,000)	35,000
60	2021100005	Coronado Hills Tank Exterior Refurbishment	110	420,000	-	420,000	40,000
61	2021100006	Richland I Tank Exterior Refurbishment	110	385,000	-	385,000	20,000
62	2020100023	Technology Infrastructure Upgrades	110 & 210	220,000	220,000	-	130,000
63	2020100022	Redundancy for Admin. Wireless Radio Network	110 & 210	347,000	45,000	302,000	-
64	2021100008	Coggan Pump Station - Generator	110	285,000	-	285,000	40,000
65	2021100007	Rancheros Drive Sewer Replacement	210	300,000	2,000	298,000	-
66	2016100007	Rock Springs Valve Replacement	110	300,000	7,000	293,000	-
67	2017100005	Fire Services - Backflow Preventer Upgrades	110	250,000	175,000	75,000	-
68	2016100014	Via Vera Cruz Tank Hill Stabilization	110	250,000	35,000	215,000	-
69	2021100009	MRF - Odor Scrubber #1 Replacement	210	250,000	225,000	25,000	-
70	2020100012	DHS- Upgrades for Critical Infrastructure Hardware	110 & 210	239,000	11,000	228,000	-
71	2020100014	District Wide Solar	110 & 210	105,000	165,000	(60,000)	65,000
72	2020100016	Door Access Control System Expansion -MRF & Mahr	110 & 210	101,000	101,000	-	49,000
73	2020100026	Upgrades to Surveillance Video Management System	110 & 210	150,000	-	150,000	-
74	2020100015	HVAC Communication Upgrade	110 & 210	143,000	-	143,000	-
75	2020100021	Update Restrooms to ADA Compliance	110 & 210	107,000	-	107,000	28,000
76	2021100013	City of San Marcos Joint Projects Relocate/Adjust	110 & 210	70,000	-	70,000	11,000
				$ 69,002,000	***$ 16,502,000***	***$ 52,500,000***	***$ 4,960,000***
New Projects							
77	2022100001	Encina Wastewater Authority Five Year Plan	210	-	-	-	31,847,000
78	2022100002	Camino de Amigos Sewer Replacement	210 & 220	-	-	-	1,380,000
79	2022100003	Sewer Lining and Rehab 2022	210	-	-	-	870,000
80	2022100004	Maximo Mobility	110 & 210	-	-	-	270,000
81	2022100005	Lake San Marcos Lift Station - Generator	210	-	-	-	235,000
82	2022100006	Energy Management Study	110 & 210	-	-	-	230,000
83	2022100007	Reclaimed Pumps - Evaluation and Design	250	-	-	-	190,000
84	2022100008	Meadowlark - Landscaping Improvements	210	-	-	-	180,000
85	2022100009	Maintenance Services Department - Offices	110 & 210	-	-	-	150,000
86	2022100010	Wulff Pressure Reducing Station	110	-	-	-	140,000
87	2022100011	Maximo - GIS interface	110 & 210	-	-	-	120,000
88	2022100012	District-wide Valve Replacement Program	110	-	-	-	100,000
89	2022100013	Fleet Maintenance - Hydraulic Lift Replacement	110 & 210	-	-	-	80,000
90	2022100014	Safety Nets and Climbing System for Twin Oaks	110	-	-	-	70,000
91	2022100015	E Building - Minor Repairs and Painting	110 & 210	-	-	-	60,000
92	2022100016	Administration Building - Concrete Repairs	110 & 210	-	-	-	55,000
93	2022100017	Meadowlark - Concrete and Asphalt Improvements	210	-	-	-	50,000
94	2022100018	Painting of Car Wash Building	110 & 210	-	-	-	50,000
95	2022100019	Meadowlark Headworks - Sluice Gate Actuators	210	-	-	-	42,000
96	2022100020	Craven Pressure Station - Interior Refurbishment	110	-	-	-	40,000
97	2022100021	Trussell FCF - Water Quality Analyzer	110	-	-	-	35,000
98	2022100022	San Elijo Pump Station - Water Quality Analyzer	110	-	-	-	35,000
99	2022100023	Administration Building - Roof Repairs	110 & 210	-	-	-	34,000
100	2022100024	Palomar Tank: Asphalt Repair & Sealcoat	110	-	-	-	33,000
101	2022100025	Maximo 7.6.1.2 Upgrade	110 & 210	-	-	-	30,000
102	2022100026	GEMS AB Suite 6.1 Upgrade	110 & 210	-	-	-	30,000
103	2022100027	Meadowlark - BOD Monitor	210	-	-	-	28,000
104	2022100028	Sodium Bisulfite Secondary Containment	250	-	-	-	25,000
105	2022100029	Mountain Belle Tank: Asphalt Repair & Sealcoat	110	-	-	-	21,000
106	2022100030	NeoGOV Applicant Tracking Software	110 & 210	-	-		21,000
107	2022100031	OpenGOV Digital Transparency and Reporting	110 & 210	-	-	-	20,000
108	2022100032	District Headquarters - HVAC Repairs	110 & 210	-	-	-	20,000
109	2022100033	Schoolhouse Pump Station - Roof Replacement	110	-	-	-	20,000
110	2022100034	Mahr Reservoir - Algae Monitoring	250	-	-	-	18,000
111	2022100035	Website Redesign - VWD.ORG	110 & 210	-	-	-	15,000
112	2022100036	N Twin Oaks #2 Tank: Asphalt Repair & Sealcoat	110	-	-	-	12,000
113	TBA	Future Projects		-	-	-	40,435,000
				$ -	***$ -***	***$ -***	***$ 76,991,000***
				$ 69,002,000	***$ 16,502,000***	***$ 52,500,000***	***$ 81,951,000***
						$134,451,000	

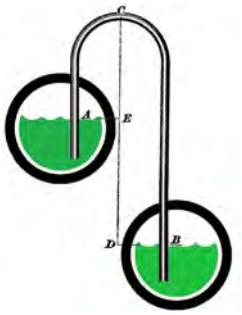
VALLECITOS WATER DISTRICT

Comprehensive Project List

Project Total	Spending by Fiscal Year 2021-22	2022-23	2023-24	2024-25	2025-26	2026 to 2031	Page Number
$ 11,320,000	$ 400,000	$ 600,000	$ 4,200,000	$ 6,000,000	$ -	$ -	36
8,750,000	155,000	-	-	-	-	-	37
8,700,000	5,000	15,000	435,000	5,000,000	2,990,000	-	38
5,580,000	1,260,000	3,545,000	-	-	-	-	39
4,719,000	292,000	4,360,000	-	-	-	-	40
4,087,000	1,375,000	-	-	-	-	-	41
3,578,000	1,014,000	2,474,000	-	-	-	-	42
3,210,000	3,000,000	-	-	-	-	-	43
3,035,000	1,405,000	1,455,000	-	-	-	-	44
2,985,000	2,860,000	-	-	-	-	-	45
1,845,000	270,000	1,550,000	-	-	-	-	46
1,575,000	1,000,000	-	-	-	-	-	47
1,540,000	65,000	850,000	610,000	-	-	-	48
1,300,000	300,000	300,000	300,000	300,000	-	-	49
1,250,000	550,000	-	-	-	-	-	50
1,155,000	1,125,000	-	-	-	-	-	51
855,000	250,000	250,000	355,000	-	-	-	52
715,000	620,000	-	-	-	-	-	53
704,000	320,000	194,000	-	-	-	-	54
650,000	340,000	300,000	-	-	-	-	55
609,000	60,000	374,000	-	-	-	-	56
517,000	512,000	-	-	-	-	-	57
503,000	486,000	-	-	-	-	-	58
475,000	20,000	-	-	-	-	-	59
460,000	5,000	455,000	-	-	-	-	60
405,000	45,000	360,000	-	-	-	-	61
350,000	130,000	-	-	-	-	-	62
347,000	302,000	-	-	-	-	-	63
325,000	325,000	-	-	-	-	-	64
300,000	28,000	270,000	-	-	-	-	65
300,000	20,000	273,000	-	-	-	-	66
250,000	75,000	-	-	-	-	-	67
250,000	-	-	20,000	195,000	-	-	68
250,000	25,000	-	-	-	-	-	69
239,000	228,000	-	-	-	-	-	70
170,000	5,000	-	-	-	-	-	71
150,000	49,000	-	-	-	-	-	72
150,000	150,000	-	-	-	-	-	73
143,000	143,000	-	-	-	-	-	74
135,000	135,000	-	-	-	-	-	75
81,000	-	81,000	-	-	-	-	76
$ 73,962,000	***$ 19,349,000***	***$ 17,706,000***	***$ 5,920,000***	***$ 11,495,000***	***$ 2,990,000***	***$ -***	
31,847,000	4,156,000	6,607,000	6,412,000	7,492,000	7,180,000	-	77
1,380,000	40,000	390,000	950,000	-	-	-	78
870,000	45,000	825,000	-	-	-	-	79
270,000	20,000	250,000	-	-	-	-	80
235,000	235,000	-	-	-	-	-	81
230,000	230,000	-	-	-	-	-	82
190,000	40,000	150,000	-	-	-	-	83
180,000	30,000	150,000	-	-	-	-	84
150,000	150,000	-	-	-	-	-	85
140,000	140,000	-	-	-	-	-	86
120,000	75,000	45,000	-	-	-	-	87
100,000	100,000	-	-	-	-	-	88
80,000	80,000	-	-	-	-	-	89
70,000	70,000	-	-	-	-	-	90
60,000	60,000	-	-	-	-	-	91
55,000	55,000	-	-	-	-	-	92
50,000	50,000	-	-	-	-	-	93
50,000	50,000	-	-	-	-	-	94
42,000	42,000	-	-	-	-	-	95
40,000	40,000	-	-	-	-	-	96
35,000	35,000	-	-	-	-	-	97
35,000	35,000	-	-	-	-	-	98
34,000	34,000	-	-	-	-	-	99
33,000	33,000	-	-	-	-	-	100
30,000	30,000	-	-	-	-	-	101
30,000	30,000	-	-	-	-	-	102
28,000	28,000	-	-	-	-	-	103
25,000	25,000	-	-	-	-	-	104
21,000	21,000	-	-	-	-	-	105
21,000	21,000	-	-	-	-	-	106
20,000	20,000	-	-	-	-	-	107
20,000	20,000	-	-	-	-	-	108
20,000	20,000	-	-	-	-	-	109
18,000	18,000	-	-	-	-	-	110
15,000	15,000	-	-	-	-	-	111
12,000	12,000	-	-	-	-	-	112
40,435,000	-	30,000	875,000	8,850,000	15,825,000	14,855,000	113
$ 76,991,000	***$ 6,105,000***	***$ 8,447,000***	***$ 8,237,000***	***$ 16,342,000***	***$ 23,005,000***	***$ 14,855,000***	
$ 150,953,000	***$ 25,454,000***	***$ 26,153,000***	***$ 14,157,000***	***$ 27,837,000***	***$ 25,995,000***	***$ 14,855,000***	

Capital Improvement Program
Land Outfall Parallel Sewer Section A Phase 1

Description: The existing 20 to 24-inch Siphon Section A, and 30-inch Gravity Section A of the Land Outfall are under capacity and will require a parallel 30-inch pipeline and a new 42-inch pipe to be installed.



Project Manager: Ryan Morgan **Department:** Engineering

Project: 2021100002 **Funding Source:** 76% Fund 220 – Sewer Capacity
24% Fund 210 – Sewer Replacement

Comments: The Land Outfall comprises approximately 34,000 feet of sewer pipe (total) installed in 1985, connecting Lift Station No. 1 to the Encina Water pollution Control Facility. The Siphon Section A comprises approximately 12,000-feet of 20 to 24-inch ductile iron pipe (DIP) and operates as a pressurized inverted siphon. The Siphon Section A corridor begins just west of Acacia Drive and ends just east of El Camino Real. Currently Siphon Section A is overcapacity during peak wet weather flow conditions. A 30-inch siphon pipeline, parallel to Siphon Section A, needs to be installed to provide additional capacity and to accommodate ultimate build out demands.
Approximately 1,500 feet of existing 30-inch vitrified clay pipe (VCP), referred to a Gravity Section A, was installed in 1985 as part of the 34,000 foot Land Outfall project, which connects Lift Station No. 1 to the Encina Water pollution Control Facility. Gravity Section A is currently under capacity for build out demands and will need to be replaced with new 42-inch PVC.

Operations Impact: Reduce the risk of sewer spills. Increase capacity. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$120,000	$200,000					$320,000
Design		$200,000	$600,000	$200,000			$1,000,000
Construction				$4,000,000	$6,000,000		$10,000,000
Total	$120,000	$400,000	$600,000	$4,200,000	$6,000,000	$0	**$11,320,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021	Jul 2021	Jun 2022	Apr 2022	Jun 2023	Jul 2023	Jun 2025	Jun 2025

Capital Improvement Program
San Marcos Interceptor Phase 2

Description: The project consists of constructing approximately 3400 feet of 42-inch sewer interceptor replacing an existing 21-inch sewer line. The existing line is prone to groundwater inflow and infiltration (I&I) and at risk for failure and sanitary sewer overflow. The sewer interceptor runs along San Marcos Creek from north of the State Route 78 past McMahr Road. The project includes open cut and a tunnel section.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 71004 **Funding Source:** 29% Fund 210 – Sewer Replacement
71% Fund 220 – Sewer Capacity

Comments: This project is the last phase of a project identified in the 2002 Master Plan. The reduction of inflow and infiltration (I&I) will help extend the life of the sewer system downstream of the San Marcos interceptor and reduce unnecessary treatment of groundwater at the Encina Water Pollution Control Facility and VWD's Meadowlark Water Reclamation Facility. The new line will also reduce the likelihood of sanitary sewer overflows into the San Marcos Creek. Previous phases have already been completed. Design began FY 13/14 for the last phase, Phase 2, between Via Vera Cruz and Pacific Street in order to be consistent with the future improvements within the Creek District. The City of San Marcos will reimburse VWD for approximately $70,000 in design costs for Phase 2. The construction cost reimbursement will be finalized after actual bid prices are received for the project. This project is identified in the 2018 Master Plan as Project SP-11.

Operations Impact: The sewer capacity replacement project will serve to prevent future sanitary sewer overflows (SSOs).

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$370,000						$370,000
Design	$825,000						$825,000
Construction	$7,400,000	$155,000					$7,555,000
Total	$8,595,000	$155,000	$0	$0	$0	$0	**$8,750,000**

FY 2021/22 Budget Request - $250,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 1996	Jul 1996	Jun 2007	Dec 2013	May 2020	Jun 2020	Jun 2021	Jul 2021

Capital Improvement Program
Land Outfall Gravity Sewer Sec D Phs 1

Description: Approximately 7,900 feet of existing 30 to 39-inch sewer pipe within Gravity Section D of the Land Outfall is currently under capacity and will need to be upsized to new 36-inch to 48-inch PVC pipes.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 90001 **Funding Source:** 20% Fund 220 - Sewer Capacity
80% Fund 210 - Sewer Replacement

Comments: The Land Outfall comprises approximately 34,000 feet of sewer pipe (total) installed in 1985, connecting Lift Station No. 1 to the Encina Water pollution Control Facility. A portion of the Land Outfall, referred to as Gravity Section D, is made up of approximately 15,000 feet of sewer pipe ranging in size from 30 to 39-inch from east of Interstate 5 to the end of Siphon C, located near Palomar Oaks Way and Camino Vida Roble. Approximately 7,900 feet of Gravity Section D is currently over capacity and needs to be upsized to new 36-inch to 48-inch PVC pipelines. The District will work with other interested agencies (City of Carlsbad, Buena Sanitation District & City of Vista) when possible in pursuit of cost-sharing alternatives. After project completion, the District estimates $3,515,000 will be received in reimbursements.

The existing Land Outfall capacity ownership percentages for the three agencies are:
Carlsbad 23.98%
Vista 17.99%
VWD 58.03%

Operations Impact: Reduce the risk of sewer spills. Increase capacity. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$255,000	$5,000					$260,000
Design			$15,000				$15,000
Construction				$435,000	$5,000,000	$2,990,000	$8,425,000
Total	$255,000	$5,000	$15,000	$435,000	$5,000,000	$2,990,000	**$8,700,000**

FY 2021/22 Budget Request - $70,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2008	Jan 2009	Jun 2023	Jul 2023	Sep 2024	Oct 2024	Sep 2025	Oct 2025

Capital Improvement Program
Montiel Lift Station and Forcemain Replacement

Description: The Montiel Lift Station and the discharge forcemain have surpassed the end of their design life and require replacement. In addition, the lift station is undersized to handle peak wet weather build out flows for the area.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2020100002 **Funding Source:** 51% Fund 210 – Sewer Replacement
49% Fund 220 – Sewer Capacity

Comments: The Montiel Lift Station is a small facility just north of State Route-78 and east of Nordahl Road. This lift station was constructed in 1985 and was originally designed to serve as a temporary purpose. The lift station collects and conveys wastewater flows from a 200-acre area east of Nordahl Road near the District's eastern service area boundary. The lift station's discharge consists of 1,830-feet of 6-inch diameter ductile iron pipe (DIP) forcemain which has surpassed the end of its design life.The District has prepared a planning document and determined that a gravity outfall solution, in partnership with the City of Escondido will not be realized. This project is identified in the 2018 Master Plan as Project LS-1.

The existing forcemain discharge connection to the gravity manhole in Nordahl Road will be replaced as part of this project. An additional 2,350 feet of forcemain piping may be included downstream of this location to reduce the quantity/cost of future CIP replacements of the existing gravity sewer in the Nordahl Shopping Center. Additional replacements of existing 10" diameter DIP influent gravity sewer segments upstream of the lift station may be replaced. Applying these project components under one scope of work presents an estimated savings of over $1,000,000 compared to executing individually as separate capital improvement projects.

Operations Impact: Routine monitoring and maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$375,000						$375,000
Design	$400,000	$260,000					$660,000
Construction		$1,000,000	$3,545,000				$4,545,000
Total	$775,000	$1,260,000	$3,545,000	$0	$0	$0	**$5,580,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Feb 2016	Jul 2021	Jan 2020	Apr 2022	May 2022	Mar 2023	Apr 2023

Capital Improvement Program
Chlorine Contact Tank Expansion

Description: Expand the existing Chlorine Contact Tank (CCT) at the Meadowlark Water Reclamation Facility (MRF) from 5 million gallons a day (MGD) to 6.5 MGD. Evaluate updating CCT process to utilize Ultraviolet Sterilization.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2016100002 **Funding Source:** 100% Fund 250 - Reclaimed

Work Order: 167177

Comments: The existing CCT were part of the original expansion of MRF in the 1980's. During the latest expansion of MRF which started in 2005, the CCTs were re-rated to handle the expanded flow but were not updated. Currently the CCTs remain one of the bottlenecks in the process at MRF.

Chlorine contact tanks (CCTs) at Meadowlark Water Reclamation Facility (MRF) can process up to 5 million gallons per day (MGD) of reclaimed water; all of the other treatment components at MRF has the ability to process up to 6.5 MGD. This was identified in the draft Nutrient Removal Study, which indicated that MRF has the ability to increase the daily treatment capacity to 6.5 MGD. The District as a member of the North San Diego County Water Reuse Coalition secured a grant of $90,000 under Prop 84, awarded by the State Water Resources Control Board (SWRCB). The District is seeking 25% Grant funding for the project budget total. Reimbursement for project costs will also be acquired from current recycled water customers (City of Carlsbad and Olivenhain Municipal Water District) through the Recycled Water Rates. Construction of the CCT expansion will be contingent on acquiring these grant funds and reimbursement agreements. The net result will be 'no cost' to the District.

Operations Impact: Normal maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$67,000	$5,000					$72,000
Design		$287,000	$60,000				$347,000
Construction			$4,300,000				$4,300,000
Total	$67,000	$292,000	$4,360,000	$0	$0	$0	**$4,719,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Apr 2016	Jul 2021	Jul 2021	Aug 2022	Sep 2022	Jun 2023	Jul 2023

Capital Improvement Program
Encina Wastewater Authority FY 20/21

Description: The District is a member agency of the Encina Wastewater Authority (EWA). The District shares in the cost of planned asset replacements and capital acquisitions.

Project Manager: Wes Owen **Department:** General Manager

Project: 2021100001 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: These miscellaneous Encina Wastewater Authority capital projects are budgeted each year based on the District's 22.4% ownership share.

Operations Impact: No significant increase in costs or changes in efficiencies are anticipated from this project

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction	$2,712,000	$1,375,000					$4,087,000
Total	$2,712,000	$1,375,000	$0	$0	$0	$0	**$4,087,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2009							Aug 2021

Capital Improvement Program
City of San Marcos Creek District Phase 1

Description: This amount is set-aside to cover services rendered in conjunction with various City of San Marcos projects involving District infrastructure per the District/City of San Marcos Cost Sharing Agreement dated March 31, 2009. This includes District staff time involved in inspection and project management, as well as reimbursements to the City for District infrastructure relocations and adjustments.

Project Manager: James Gumpel **Department:** Engineering

Project: 2017100224 **Funding Source:** See Below

Comments:

Project:	Amount:	Source:
Discovery St Widening*	$764,000	Water/Sewer 85% / 15%
Bent Ave Bridge*	$1,014,000	Water/Sewer 25% / 75%
Via Vera Cruz Bridge*	$1,800,000	Water/Sewer 70% / 30%
Total	$3,578,000	

These projects are in conjunction with the City's Capital Improvement Plan. Totals do not include potential construction change orders.

Operations Impact: Normal maintenance for infrastructure.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$90,000						$90,000
Design							
Construction		$1,014,000	$2,474,000				$3,488,000
Total	$90,000	$1,014,000	$2,474,000	$0	$0	$0	**$3,578,000**

FY 2021/22 Budget Request - ($162,000)

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016						Apr 2023	May 2023

Capital Improvement Program
16-Inch Emergency Bypass Pipeline Rehabilitation

Description: Rehabilitate approximately 4550 feet of existing 16-inch reinforced plastic mortar sewer pipeline and 3500 feet of existing 12-inch ductile iron pipeline with a cured-in-place-pipe (CIPP) liner and replace necessary isolation valves and appurtenances. Provide new permanent access locations at incremental lengths along both alignments.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2021100003 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The 16-inch Emergency Bypass pipeline was installed in 1969 and connects to the District's 24-inch Land Outfall pipeline in the City of Carlsbad. The pipeline extends from Melrose Drive near Poinsettia Lane and follows a natural canyon easterly to Rancho Santa Fe Road near Via Cancion. The pipeline is primarily composed of reinforced plastic mortar (RPM) pipe, commonly referred to as "Techite", with some section of ductile iron pipe (DIP). The pipeline, controlled by a series of valves, serves as an emergency bypass of sewer flows to and from the Meadowlark Water Reclamation Facility (MRF) and the Land Outfall pipeline to the Encina Water Pollution Control Facility (EWPCF) in Carlsbad. Due to age, material, and corrosive environment, the pipeline has suffered breaks in recent years and several of the control valves no longer function.

This project will incorporate necessary rehabilitation to the District's Failsafe 12-inch DIP Outfall located approximately 5-ft offset of the Bypass Pipeline. Both utilities are considered at-risk critical infrastructure assets to the District. This project will result in an overall savings in excess of $500,000 when compared to executing the two pipeline rehab projects under individual capital improvement projects.

Operations Impact: Restore operation to broken valves and increase life of the Emergency Bypass Sewer and the Failsafe Outfall.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$90,000						$90,000
Design	$120,000	$120,000					$240,000
Construction		$2,880,000					$2,880,000
Total	$210,000	$3,000,000	$0	$0	$0	$0	**$3,210,000**

FY 2021/22 Budget Request - $1,200,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020	Jul 2020	Jan 2021	Feb 2021	Sep 2021	Oct 2021	Feb 2022	Mar 2022

Capital Improvement Program
Tres-Amigos Water Line Replacement Phase 1

Description: Replace approximately 7,800 feet of the Tres-Amigos thin-wall steel water line. The aging 6-inch to 8-inch steel pipe will be replaced with new PVC pipe.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2020100003 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The Tres-Amigos water line consists of of approximately 19,000 feet of pipelines ranging from 6-inch to 12-inch diameter. The water pipelines located in the northern limits of VWD boundary were installed in the 1950s and 1960s, extending from the North Twin Oaks Tank No. 2 in Pleasant Heights Drive to north of Carrio Drive. The original Tres Amigos Line Extension Project occurred in 1958 which installed 6-inch and 8-inch diameter tar wrapped 12-14-gauge steel pipelines. This material is considered steam pipeline and is not adequate for use in pressurized water distribution systems. The Project will design the replacement of existing 6-inch and 8-inch diameter steel water mains with 8-inch (minimum) diameter C-900 PVC water pipeline.

Due to the frequency of pipeline ruptures, this project will replace approximately 7,800-feet of the Tres Amigos water pipelines beginning at the tee junction in Green Hills Way, traveling northbound in VWD easements and in Ormsby Way. The pipeline corridor veers east in an existing VWD easement from Ormsby Way and travels northbound in alignment with Fairview Drive and crosses Gopher Canyon Road, continuing northbound in Fairview Drive. North of the Carrio Drive/ Fairview Drive intersection, the pipeline travels northeast in VWD easements through private properties to a dead-end at VWD's northern boundary (end of Project). A key Project objective includes the relocation of the existing pipelines out of private backyards and into more accessible areas.

Operations Impact: Reduced risk of water line breakage. Annual and routine pipeline maintenance is expected with the completion of this project.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$50,000						$50,000
Design	$125,000	$405,000					$530,000
Construction		$1,000,000	$1,455,000				$2,455,000
Total	$175,000	$1,405,000	$1,455,000	$0	$0	$0	**$3,035,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Jul 2019	Jun 2020	Jul 2020	Mar 2022	May 2022	Feb 2023	Mar 2023

Capital Improvement Program
Meadowlark Failsafe Rehabilitation (Buena Reach)

Description: This project will install manholes to provide access to the pressured system for cured in place pipeline rehabilitation, repair, and/or replacement alternatives.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2020100005 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The Meadowlark Failsafe Sewer Outfall is composed of approximately 9900 feet of 16-inch ductile iron pipe (DIP) installed in 1980 from Aviara Parkway and Palomar Airport Road to Yarrow Road and Camino Vida Roble in Carlsbad. Recent repairs in the Buena Reach have determined that there is a significant need to improve the condition of this pipeline. This project will install manholes to provide access to the pressured system for cured in place pipeline rehabilitation, repair, and/or replacement alternatives.

Buena Sanitation District is responsible for 50% of any repairs or improvements in the Buena Reach and a letter agreement as a rider to the 1980 agreement will be required. After project completion, VWD expects to receive approximately $1,450,000 in project design and construction reimbursements.

Operations Impact: Improve maintenance access. Identify structural, flow capacity deficiencies, and potential repairs. Reduce risk of sewer spills. Annual and routine pipeline maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$25,000						$25,000
Design	$100,000	$80,000					$180,000
Construction		$2,780,000					$2,780,000
Total	$125,000	$2,860,000	$0	$0	$0	$0	**$2,985,000**

FY 2021/22 Budget Request - $1,825,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Jan 2020	Nov 2020	Nov 2020	Sep 2021	Oct 2021	Feb 2022	Mar 2022

Capital Improvement Program
MRF: Conversion to Sodium Hypochlorite

Description: Replace the use of chlorine gas at the Meadowlark Water Reclamation Facility with bulk storage of sodium hypochlorite (bleach)and peform a structural retrofit to meet the current State seismic standards for buildings.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2017100002 **Funding Source:** 100% Fund 250 - Reclaimed

Comments: The Meadowlark Water Reclamation Facility (MRF) currently uses 100% chlorine gas as a disinfectant in order to meet State regulations for reclaimed water. Chlorine gas is an acute hazard that presents a danger to District staff and the increasing number of residents in the immediate area. Use of this gas requires the District to maintain several expensive State and Federal safety programs, equipment, and a Hazardous Materials response team; requiring a considerable amount of staff time. The conversion to bulk storage of sodium hypochlorite removes the acute hazard of chlorine gas and replaces it with a bleach solution (12.5%) that removes the District's requirement to maintain several of the extensive safety programs for that site. Use of the bleach will not create an acute hazard in the event of a leak. The project will proceed with an agreement from the Recycled Water customers (City of Carlsbad and OMWD) to reimburse the District through Recycled Water rates.

During the Process Hazard Analysis of 2019, ventilation openings in the Chlorine Building were identified as having seismic deficiencies. These deficiencies need to be seismically retrofitted to the current building code.

Operations Impact: Removal of an acute hazard. Reduction in regulatory requirements and staff time at the Meadowlark Reclamation Facility. Economic benefit of no longer needing to import chlorine gas or maintain a HazMat team. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$25,000	$10,000					$35,000
Design		$260,000	$70,000				$330,000
Construction			$1,480,000				$1,480,000
Total	$25,000	$270,000	$1,550,000	$0	$0	$0	**$1,845,000**

FY 2021/22 Budget Request - $50,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2018	Jun 2021	Jul 2021	Aug 2022	Oct 2022	Jun 2023	Jun 2023

Capital Improvement Program
MRF - Biological Selector Improvements

Description: Construct modifications to the existing aeration basins to reduce sludge bulking, improve treatment, and reduce operation and maintenance costs at the Meadowlark Water Reclamation Facility (MRF).

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2019100002 **Funding Source:** 100% Fund 250 - Reclaimed

Comments: Using biological modeling, this project will make improvements to the aeration basin operation and capacity. With the addition of a anaerobic selector to the existing aeration basin, overall treatment will improve, lowering operational costs. In addition flexibility will be added to the process by allowing treatment to occur without running the roughing filters. Infrastructure modifications will be made to the aeration basin including changing to ceramic disc diffusers and adding geo-membrane baffling, a new compressed air mixing system, and process control probes.

The construction of the biological selector will only proceed with an agreement from the current recycled water customers (City of Carlsbad and Olivenhain Municipal Water District) to reimburse the District through the Recycled Water Rates.

Operations Impact: Reduce operation and maintenance costs.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$50,000						$50,000
Design	$210,000						$225,000
Construction	$315,000	$1,000,000					$1,300,000
Total	$575,000	$1,000,000	$0	$0	$0	$0	**$1,575,000**

FY 2021/22 Budget Request - ($125,000)

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2018	Jul 2018	Feb 2019	Mar 2019	Feb 2021	Mar 2021	Oct 2021	Nov 2021

Capital Improvement Program
Richland Invert Replacement

Description: This project calls for the replacement of the existing 100-foot wastewater siphon pipeline that travels under San Marcos Creek from the Diamond Environmental Services parking lot south of Mission Road to the 18-inch Richland Interceptor. The existing 8-inch and 10-inch pipelines will be replaced with either a new 15-inch siphon to be located at the existing pipelines' location.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2012100002 **Funding Source:** 100% Fund 210 – Sewer Replacement

Work Order: 123749

Comments: The existing 8-inch and 10-inch invert pipelines were installed over 27 years ago and were originally designed to be temporary. Because of their size restrictions, surcharging occurs in the upstream gravity pipelines during peak flows. In addition, recent inspections by the District's Collections crew have revealed damage to the existing pipe. This project will evaluate whether a new, larger capacity siphon underneath the San Marcos Creek or a gravity line in the City right-of-way is the most cost effective option. If the creek crossing is selected, staff anticipates environmental wetland permitting will be required. The 2018 Master Plan has identified this replacement as project SP-10.

Operations Impact: The project increases sewage handling capacity in the collections system and solves an existing sewer surcharge issue during daily peak and wet weather events. Annual, routine sewer pipeline maintenance is expected with the completion of this project.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$15,000	$35,000					$50,000
Design		$30,000	$150,000				$180,000
Construction			$700,000	$610,000			$1,310,000
Total	$15,000	$65,000	$850,000	$610,000	$0	$0	**$1,540,000**

FY 2021/22 Budget Request - $5,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2011	Apr 2012	Mar 2022	Apr 2022	Feb 2023	Mar 2023	Sep 2023	Oct 2023

Capital Improvement Program
Ductile Iron Pipe Condition Assessment

Description: Leverage the District's Asset Management Program to perform condition assessment on targeted areas of the ductile iron pipe system that have been experiencing breaks in recent years. Results will be evaluated to minimize future replacement projects and reduce chances of emergency repairs.

Project Manager: Susan Bowman **Department:** Engineering

Project: 2020100010 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The District will plan and implement a phased, multi-year condition assessment program. This program will use pipeline condition assessment technology in conjunction with the District's Asset Management Program, to target specific areas in the ductile iron pipe (DIP) water line system for evaluation. The program will determine whether pipelines are in need of repair, rehabilitation, or full replacement. Coordination with Operations staff will minimize disruption to customers and provide invaluable insight to developing implementation plans. Implementation plans will establish where pipe tools will be inserted into the water line to measure pipeline wall thickness. Results will be evaluated to maximize the beneficial use of the District's existing infrastructure.

Operations Impact: Reduce risk of water line breakage by identifying potential repairs. Extend the useful life of the existing water lines, reduce operational costs of annual and routine pipeline maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$20,000	$20,000	$20,000	$20,000		$80,000
Design	$29,000	$20,000	$20,000	$20,000	$20,000		$109,000
Construction	$71,000	$260,000	$260,000	$260,000	$260,000		$1,111,000
Total	$100,000	$300,000	$300,000	$300,000	$300,000	$0	**$1,300,000**

FY 2021/22 Budget Request - $695,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019			Jul 2019	Dec 2022	Jan 2020	Jun 2023	Jun 2023

Capital Improvement Program
District-wide SCADA Upgrade Project

Description: Upgrade SCADA Network, Software and Hardware Components.

Project Manager: Matias Labarrere **Department:** Operations and Maintenance

Project: 2020100004 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments:

The District's existing Supervisory Control and Data Acquisition (SCADA) system is outdated and obsolete. Replacement parts are difficult to obtain, extremely expensive and technical support is no longer available. The existing hardware is 1970's technology and no longer compatible with current software operating systems. The new hardware will include SCADA radios and PLC's (Programmable Logic Controllers) that are Ethernet capable, allowing for faster data transfer rates. This new hardware and software will also allow remote access, which allows staff to program and troubleshoot the SCADA network from one central location. This will decrease the downtime of the network and reduce travel time to remote sites, saving staff time and improving efficiency. Security of the SCADA network will be much improved with this upgrade and Operations will be working with IT staff to ensure the District's cyber-security needs are met.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction	$700,000	$550,000					$1,250,000
Total	$700,000	$550,000	$0	$0	$0	$0	**$1,250,000**

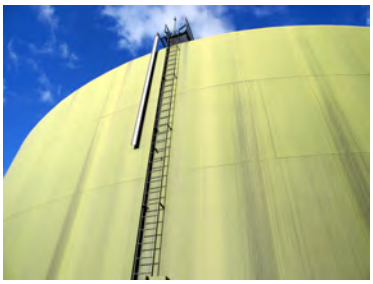
FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
Sage Canyon Tank Refurbishment

Description: Sage Canyon Tank requires interior refurbishment.



Project Manager: Ryan Morgan **Department:** Engineering

Project: 2020100006 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The existing interior lining of the 3.7 million gallon (MG) tank has deteriorated and requires full refurbishment. This project will remove the existing lining and coating and install a new lining and coating. Structural repairs to the ceiling rafters and equipment upgrades may also be necessary.

Operations Impact: Prevent further delamination of the existing lining. Routine maintenance

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$5,000						$5,000
Design	$25,000	$15,000					$40,000
Construction		$1,110,000					$1,110,000
Total	$30,000	$1,125,000	$0	$0	$0	$0	**$1,155,000**

FY 2021/22 Budget Request - $127,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Nov 2019	Dec 2020	Jan 2021	Oct 2021	Nov 2021	Mar 2022	Apr 2022

Capital Improvement Program
Steel Pipeline Condition Assessment

Description: Leverage the District's Asset Management Program to perform condition assessment on targeted areas of the District's highest priority steel water line. Results will be evaluated to minimize future replacement projects and reduce chances of emergency repairs.

Project Manager: Susan Bowman **Department:** Engineering

Project: 2020100007 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The District will plan and implement a phased, multi-year condition assessment program. This program will use pipeline condition assessment technology in conjunction with the District's Asset Management Program, to target specific areas in the District's steel (CML&C) water line system for evaluation. The program will determine whether pipelines are in need of repair, rehabilitation, or full replacement. Coordination with Operations staff will minimize disruption to customers and provide invaluable insight to developing work plans. Work plans will establish where pipe tools will be inserted into the water line to measure pipeline wall thickness. Results will be evaluated to maximize the beneficial use of the District's existing infrastructure.

Operations Impact: Reduce risk of water line breakage by identifying potential repairs. Extend the useful life of the existing water lines. Annual and routine pipeline maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design		$75,000	$75,000	$75,000			$225,000
Construction		$175,000	$175,000	$280,000			$630,000
Total	$0	$250,000	$250,000	$355,000	$0	$0	**$855,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Jul 2019	Dec 2023	Jan 2020	Jun 2024			Jun 2024

Capital Improvement Program
MRF - Tertiary Structural Rehab and Repairs

Description: The Tertiary Treatment Area at the Meadowlark Water Reclamation Facility (MRF) requires rehabilitation and repairs to the influent chamber, an associated air line, a joint seal and pipe opening to Filter Basin No. 3, the existing sluice gate located in the Chlorine Contact Tank - Effluent and Backwash Pump Station, and various related areas.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2018100011 **Funding Source:** 100% Fund 250 - Reclaimed

Comments: The Meadowlark Water Reclamation Facility's (MRF) Tertiary Treatment Area needs various repairs due to the corrosive nature of the treatment process. The existing high solids epoxy coating the tertiary influent chamber is failing. A stainless steel mixing air line inside the chamber has also developed leaks. Using bypass methods, the chamber's protective lining will need to be repaired and the airline replaced. Associated with the tertiary influent chamber is a concrete mixer platform that has deteriorated and will need to be replaced with new steel beams and platform.

Downstream from the influent chamber are six tertiary filter basins. The joint seal in Filter Basin No. 3 is failing, resulting in corrosion to a pipe opening at the bottom of the filter and corrosion to the associated pipe located outside of the basin in the Filter Pipe Gallery. This isolated area will need to be repaired and recoated. All work will need to be scheduled during low production of recycled water.

The existing sluice gate in the Effluent and Backwash Pump Station, which is used to isolate tertiary flows in the Chlorine Contact Tank, is non-functional. The sluice gate needs to be replaced to restore operational use of this equipment.

To get more competitive pricing, and due to the coordinated scheduling of the related work, these individual repairs will be grouped together under one construction contract.

Operations Impact: Restore operational functionality. Maintains the integrity of tertiary treatment area and operational processes. Normal maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$5,000						$5,000
Design	$50,000	$10,000					$60,000
Construction	$40,000	$610,000					$650,000
Total	$95,000	$620,000	$0	$0	$0	$0	**$715,000**

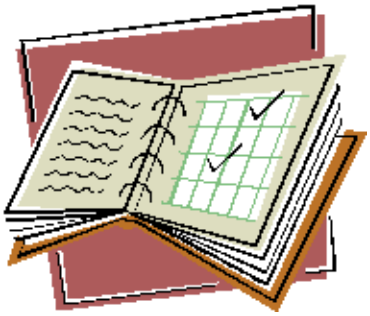
FY 2021/22 Budget Request - $52,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2017	Apr 2018	Jun 2019	Jul 2019	Jul 2021	Nov 2021	Feb 2022	Mar 2022

Capital Improvement Program
Asset Management Replacement Schedule

Description: Create a comprehensive Asset Management Plan integrating the District's own computerized maintenance management system (CMMS), prioritized Asset/Infrastructure replacement schedule, including condition assessment, for the District Facilities. This item is part of the VWD Strategic Plan – Strategic Focus Area 1.2.



Project Manager: Susan Bowman

Department: Engineering

Project: 2014100004

Funding Source: 50% Fund 110 – Water Replacement
50% Fund 210 – Sewer Replacement

Comments: The District's infrastructure is aging and proper planning requires an understanding of when, where, and how much replacing that infrastructure will cost. Proper preventative maintenance helps ensure the District obtains the maximum beneficial life out of its infrastructure. The District has already taken steps towards this by implementing a computerized maintenance management system (CMMS) known as Maximo to implement and track preventative, corrective, and emergency maintenance/repairs on all assets/ infrastructure. This project will take the CMMS, Geographical Information System (GIS) and condition information to develop an Asset Management Plan that will provide a prioritized, risk-based replacement schedule with cost estimates over the expected life of all assets/infrastructure. This, plus a Business Risk Exposure analysis and performance of condition assessments on infrastructure, will help the the Asset Management Plan identify future renewal and replacement projects.

Operations Impact: An Asset Management Plan with schedule will help to prevent costly line breaks, prioritize resource allocation, improve efficiency and reduce overall asset lifecycle costs.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$20,000	$50,000				$70,000
Design	$190,000	$100,000	$50,000				$340,000
Construction		$200,000	$94,000				$294,000
Total	$190,000	$320,000	$194,000	$0	$0	$0	**$704,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2013	Jul 2017	Jun 2023	Jan 2019	Jun 2023			Jun 2023

Capital Improvement Program
MRF Direct Potable Reuse

Description: VWD would like to explore the feasibility of repurposing or expanding MRF Plant Capacity and providing potable reuse

Project Manager: James Gumpel **Department:** Engineering

Project: 2021100006 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The Meadowlark Water Reclamation Facility (MRF) currently provides approximately 4 MGD of recycled water to the Olivenhain Municipal Water District and the City of Carlsbad. VWD would like to explore the feasibility of repurposing some of this capacity, or expanding MRF, to create potable water for distribution to VWD's water customers. The evaluation is the first step in determining if this concept is technically and financially feasible.

Operations Impact: Potential to provide alternative water supply source

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$10,000	$340,000	$300,000				$650,000
Design							
Construction							
Total	$10,000	$340,000	$300,000	$0	$0	$0	**$650,000**

FY 2021/22 Budget Request - $250,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020	Apr 2021	Jun 2023					Jun 2035

Capital Improvement Program
Land Outfall West Condition Assessment

Description: The western segment of the sewer Land Outfall is in need of a condition assessment to evaluate for future cleaning, rehabilitation, and/or repair projects

Project Manager: Susan Bowman **Department:** Engineering

Project: 2020100009 **Funding Source:** 100% Fund 210 – Sewer Replacement

Work Order: 212368

Comments: The existing sewer Land Outfall pipeline was installed in 1986 and connects the District's Lift Station No.1 to the Encina Water Pollution Control Facility (EWPCF).The 34,000 foot long pipeline has both gravity and pressurized segments. While some eastern segments, between Melrose Drive and Acacia Drive were replaced in 2006, there has been no evaluation of the western portion of the Land Outfall from El Camino Real to the EWPCF. This project will evaluate through closed-circuit television (CCTV) inspection the condition of approximately 16,700 feet of sewer pipeline ranging in size from 30-inch to 54-inch.

As joint partners in the Land Outfall, this project will require coordination with the City of Carlsbad and the Buena Sanitation District (Vista). After project completion, we expect to receive $256,000 in reimbursements.

Operations Impact: Reduce the risk of sewer spills. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$10,000	$20,000	$50,000				$80,000
Design	$65,000	$20,000	$50,000				$135,000
Construction	$100,000	$20,000	$274,000				$394,000
Total	$175,000	$60,000	$374,000	$0	$0	$0	**$609,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Jul 2019	Jun 2023	Aug 2019	Oct 2022	Oct 2020	Jun 2023	Jun 2023

Capital Improvement Program
Palos Vista Pump Station - Motor Starters Upgrade

Description: Upgrade four auto-transformer motor starters to solid state soft starters.

Project Manager: Dean Toth **Department:** Mechanical/Electrical

Project: 2020100011 **Funding Source:** 100% Fund 110 – Water Replacement

Comments:

Replace four auto-transformer motor starters. Replacement is required due to wear from a long service life of over 25 years and a lack of support for replacement parts. New solid state soft starters will improve reliability and operating efficiency of electric motors.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$5,000						$5,000
Design		$30,000					$30,000
Construction		$482,000					$482,000
Total	$5,000	$512,000	$0	$0	$0	$0	**$517,000**

FY 2021/22 Budget Request - $109,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
Las Posas Water Line Replacement

Description: Replace an existing 10-inch water line crossing underneath an existing double reinforced box culvert on Las Posas Road.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2018100004 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: A 10-inch ductile iron (DIP) water main underneath a double reinforced box culvert (RBC) on Las Posas Road, between Linda Vista Drive and Stone Drive is aging and in need of replacement. It has experienced a break in recent years and control valves associated with this water main are non-operational. The replacement will involve installing a new parallel PVC water main in a steel casing and reconnecting to the existing asbestos-cement pipe (ACP) located on either side of the double RBC.

Operations Impact: Prevent future breaks. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$7,000						$7,000
Design	$10,000	$78,000					$88,000
Construction		$408,000					$408,000
Total	$17,000	$486,000	$0	$0	$0	$0	**$503,000**

FY 2021/22 Budget Request - $196,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2017	Jun 2018	Apr 2021	May 2021	Nov 2021	Jan 2022	May 2022	Jun 2022

Capital Improvement Program
MRF Headworks - Upgrade/Replace Equipment

Description: Replace existing channel grinders, frames, augers and control panels.

Project Manager: Ryan Morgan **Department:** Mechanical/Electrical

Project: 2021100004 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: Vallecitos staff evaluated the existing augers, grinders and flow conditions at the Meadowlark Reclamation Facility (MRF) Headworks and determined an update/upgrade to the existing equipment is necessary to satisfy current and future wastewater flow conditions at MRF. This project will replace the existing equipment to provide increased efficiency and reliability at the MRF Headworks.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$20,000						$20,000
Design	$10,000						$10,000
Construction	$425,000	$20,000					$445,000
Total	$455,000	$20,000	$0	$0	$0	$0	**$475,000**

FY 2021/22 Budget Request - $35,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020	Jul 2020	Sep 2020	Oct 2020	Jan 2021	Feb 2021	Aug 2021	Sep 2021

Capital Improvement Program
Coronado Hills Tank Exterior Refurbishment

Description: Coronado Hills Tank requires exterior refurbishment.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2021100005 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The existing exterior coating of the 2.6 million gallon (MG) tank has deteriorated and requires full refurbishment. As part of the refurbishment, some equipment upgrades may be necessary.

Operations Impact: Prevent further deterioration of the exterior coating and corrosion of the metal tank shell. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$5,000					$5,000
Design							
Construction			$455,000				$455,000
Total	$0	$5,000	$455,000	$0	$0	$0	**$460,000**

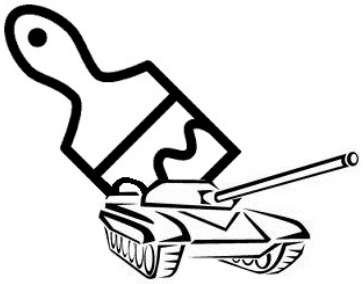
FY 2021/22 Budget Request - $40,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020	Jan 2022	Jun 2022	Jul 2022	Dec 2022	Jan 2023	Jun 2023	Jul 2023

Capital Improvement Program
Richland I Tank Exterior Refurbishment

Description: Richland I Tank requires exterior refurbishment.



Project Manager: Ryan Morgan **Department:** Engineering

Project: 2021100006 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The existing exterior coating of the 1.3 million gallon (MG) tank has deteriorated and requires full refurbishment. As part of the refurbishment, some equipment upgrades may be necessary.

Operations Impact: Prevent further deterioration of the exterior coating and corrosion of the metal tank shell. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$5,000					$5,000
Design		$40,000					$40,000
Construction			$360,000				$360,000
Total	$0	$45,000	$360,000	$0	$0	$0	**$405,000**

FY 2021/22 Budget Request - $20,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021	Jul 2021	Dec 2021	Jan 2022	Jun 2022	Jul 2022	Jan 2023	Feb 2023

Capital Improvement Program
Technology Infrastructure Upgrades

Description: Replacement or upgrades of District technology infrastructure. Includes servers, networking equipment (wired/wireless), security appliances, and supporting infrastructure management solutions.

Project Manager: Matias Labarrere **Department:** Information Technology

Project: 2020100023 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: Secure and reliable technical infrastructure is mission critical to District operations and service to the public. Serious disruptions or costly unplanned emergency repairs can occur if end-of-life/end-of-support systems are not upgraded or replaced in a timely manner, resulting in reduced productivity and service levels.

Operations Impact: Replacement of end-of-life equipment is necessary to ensure continuity of business operations.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction	$220,000	$130,000					$350,000
Total	$220,000	$130,000	$0	$0	$0	$0	**$350,000**

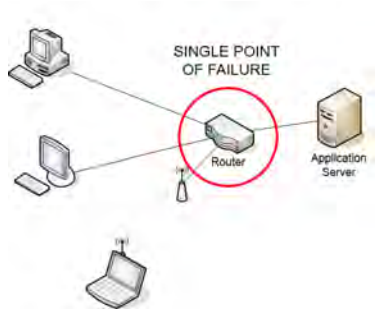
FY 2021/22 Budget Request - $130,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
Redundancy for Admin. Wireless Radio Network

Description: The District provides network connectivity between facilities via wireless radio infrastructure. Additional redundancy of radio network is necessary in order to provide continuity of data communications between sites in the event of a radio failure.



Project Manager: Matias Labarrere **Department:** Information Technology

Project: 2020100022 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: Upgrades to District Wireless Radio network. Additional radio stations are needed to support redundancy of data communications between the following district locations: Admin/Operations Buildings, Meadowlark Reclamation Facility, Twin Oaks Reservoir. Current Administrative Wireless radio architecture has a single point of failure - one fault or malfunction will cause the entire communications system to stop operating in the event of a single radio outage.

Operations Impact: Additional redundancy must be added to the Administrative radio network in order to provide continuity of data communications in the event of radio failures.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$45,000	$19,000					$64,000
Design		$58,000					$58,000
Construction		$225,000					$225,000
Total	$45,000	$302,000	$0	$0	$0	$0	**$347,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
Coggan Pump Station - Generator

Description: Install new permanent generator with automatic transfer switch.

Project Manager: Dean Toth **Department:** Mechanical/Electrical

Project: 2021100008 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Coggan Pump Station has no permanent generator for emergency power. To insure reliability to this facility, an Air Pollution Control District (APCD) / California Air Resources Board (CARB) compliant generator will need to be installed at the station. Improvements will also include an automatic transfer switch, enclosure, concrete pad, and conduit.

Operations Impact: Provide reliability to the pump station in the event of a power failure. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design		$35,000					$35,000
Construction		$290,000					$290,000
Total	$0	$325,000	$0	$0	$0	$0	**$325,000**

FY 2021/22 Budget Request - $40,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020	Jul 2020	Jun 2021	Jul 2021	Jan 2022	Mar 2022	Jun 2022	Jun 2022

Capital Improvement Program
Rancheros Drive Sewer Replacement

Description: The project will include identifying alternative alignments, bypass pumping, and sewer replacement with District approved materials.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2021100007 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The Rancheros Drive sewer includes approximately 700-feet of corroded ductile iron pipe originally installed in 1972. Severe corrosion has compromised the structural integrity of the pipe wall and collections is no longer able to safely clean and maintain the sewer.

Operations Impact: Collections will have the ability to clean and maintain the Rancheros Drive Sewer upon completion of the project.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$2,000	$5,000					$7,000
Design		$23,000					$23,000
Construction			$270,000				$270,000
Total	$2,000	$28,000	$270,000	$0	$0	$0	**$300,000**

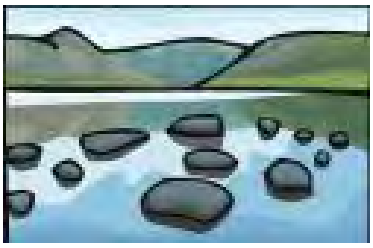
FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Mar 2020	Jun 2021	Dec 2021	Jan 2022	Jun 2022	Jul 2022	Dec 2022	Jan 2023

Capital Improvement Program
Rock Springs Valve Replacement

Description: Replace the existing 12-inch and 14-inch valve cluster at Rock Springs Road and Bennet Avenue and associated piping. The valves are non-operational and the nearby pipeline has failed in recent years



Project Manager: Ryan Morgan **Department:** Engineering

Project: 2016100007 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: This project will allow proper control of the water system and reduce the number of customers affected during a pipeline failure.

Operations Impact: The valves are non-operational. Operations and maintenance repair costs will be minimized at this location.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$7,000						$7,000
Design		$20,000					$20,000
Construction			$273,000				$273,000
Total	$7,000	$20,000	$273,000	$0	$0	$0	**$300,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jun 2018	Dec 2021	Jan 2022	Jun 2022	Jul 2022	Dec 2022	Jan 2023

Capital Improvement Program
Fire Services - Backflow Preventer Upgrades

Description: Replace single-check backflow prevention systems with double-check systems on fire services.

Project Manager: Kevin Anctil **Department:** Construction

Project: 2017100005 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The District is responsible for several fire service backflow preventers in the distribution system that were installed prior to new District standards being adopted. The single-check backflow preventers that were installed are no longer an acceptable device and some have failed due to corrosion from being installed in an underground vault. The Construction department will replace 5 systems each year with an approved double-check backflow prevention system and bring the services above ground.

Operations Impact: Enhanced backflow prevention. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction	$175,000	$75,000					$250,000
Total	$175,000	$75,000	$0	$0	$0	$0	**$250,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2017							Jun 2022

Capital Improvement Program
Via Vera Cruz Tank Hill Stabilization

Description: A side slope adjacent to the Via Vera Cruz Tank requires slope stabilization treatment.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2016100014 **Funding Source:** 100% Fund 110 – Water Replacement

Work Order: 162901

Comments: A portion of the existing slope adjacent to the Via Vera Cruz Tank on District property is failing due to steep terrain and material composition. The foundation of a property line fence is being eroded and exposed and material washes down to the tank elevation. Routine clean-up of the area is done and falling rocks threaten to damage the tank. Phase 1 of the project installed a rigid barrier at the toe of slope along a portion of the perimeter to catch failing rocks. Phase 2 will apply a mesh or tensioned slope stabilization system to approximately 2200 square feet (SF) of steep slope to prevent further failures. Repairs to the property line fence will also be performed and landscaping repairs may be necessary.

Operations Impact: Reduced risk of damage to the tank from falling rocks. Eliminate clean-up of the area from debris. Maintain security of property with intact fence. Annual and routine monitoring of the slope.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design	$7,000			$20,000			$27,000
Construction	$28,000				$195,000		$223,000
Total	$35,000	$0	$0	$20,000	$195,000	$0	**$250,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jan 2016	Mar 2016	Jul 2023	Jun 2024	Jul 2024	Dec 2024	Dec 2024

Capital Improvement Program
MRF - Odor Scrubber #1 Replacement

Description: Replace existing Odor Scrubber #1.

Project Manager: Dawn McDougle **Department:** Meadowlark Reclamation Facility

Project: 2021100009 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: Odor Scrubber #1 is over 10 years old and is showing signs of degradation. The components required to maintain reliable operation are in need of constant repair and maintenance. The odor scrubber is required to be in operation 24/7 in order to comply with the Air Pollution Control District's (APCD) permit. As the odor scrubber continues to age and degrade, compliance with the APCD regulations will be increasingly difficult to achieve. The odor scrubber reduces and/or eliminates odors from various plant processes that would otherwise be released to the atmosphere. The odor scrubber also reduces the corrosion effects of hydrogen sulfide gas and is a part of the District's efforts in maintaining good neighbor relations by abating offensive odors.

Operations Impact: A new odor scrubber will provide greater reliability for odor control and meet APCD permit requirements.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction	$225,000	$25,000					$250,000
Total	$225,000	$25,000	$0	$0	$0	$0	**$250,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020							Jun 2021

Capital Improvement Program
DHS- Upgrades for Critical Infrastructure Hardware

Description: The Department of Homeland Security (DHS) performed an audit of the District Industrial Control System (ICS) Information Technology Network on 11/27-28/2018. Audit As a result of the audit, several recommendations were provided to enhance system architecture on the Supervisory Control and Data Acquisition (SCADA) network. Initiatives contained within this CIP aim to strengthen the cybersecurity posture of the District's industrial control systems (ICS).

Project Manager: Matias Labarrere **Department:** Information Technology

Project: 2020100012 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: As a core part of its mission to reduce risk to the Nation's critical infrastructure (CI), Department of Homeland Security (DHS) National Cyber Assessments and Technical Services (NCATS) subject matter experts provide cybersecurity assessments to CI asset owners and operators to strengthen the cybersecurity posture of their industrial control systems (ICS). NCATS on behalf of the National Cybersecurity and Communications Integration Center (NCCIC) provides voluntary assessments based on standards, guidelines, and best practices. The assessment methodology provides a structured framework that asset owners and operators can leverage to evaluate and validate the cybersecurity of their ICS networks. The information gained from these reviews provided the District with additional understanding and context necessary to build effective defense-in-depth processes for enhancing our cybersecurity posture. The DHS team worked directly with the information technology (IT), operations technology (OT), and management staff at the VWD facilities to determine the overall cybersecurity posture of its ICS. DHS recommends physical isolation of the control systems network from the business network.

Hardware upgrades contained within this CIP are broken down in the following manner:

Creation of an isolated system for SCADA/ICS - $151,440
Backup/Disaster Recovery of isolated SCADA/ICS system - $80,260
Remote Monitoring/Support - $7,500

Operations Impact: Hardware upgrades contained within this CIP aim to strengthen the cybersecurity posture of the District's industrial control systems (ICS) per DHS recommendations.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$11,000	$33,000					$44,000
Design		$44,000					$44,000
Construction		$151,000					$151,000
Total	$11,000	$228,000	$0	$0	$0	$0	**$239,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2021

Capital Improvement Program
District Wide Solar

Description: The District entered into a power purchase agreement in November, 2019 to develop new solar sites which will ultimately reduce future energy costs. An independent third party will build, maintain, and operate the solar installations at no cost to the District. The PPA generates a reduced electric rate for 25 years resulting in net savings to the District with no capital contributions.

Project Manager: Ryan Morgan

Department: Engineering

Project: 2020100014

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The District entered into a power purchase agreement in November, 2019 to develop new solar sites which will ultimately reduce future energy costs at the following two locations:
1. Net Energy Metering at Lift Station No. 1
2. RES-BCT Project at Twin Oaks Reservoirs 1 & 2 Site

A Power Purchase Agreement (PPA) was established between an independent third party that will build, maintain and operate the solar installations at both sites over a period of 25 years. The PPA will provide a significantly reduced electric rate to select District meters over this term, resulting in a net savings to the District at no capital investment. The project is moving into construction, with both projects anticipated for completion in the winter of 2020.

Operations Impact: Savings in District's monthly payments to electrical utility over the lifetime of the PPA.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning	$40,000						$40,000
Design	$25,000						$25,000
Construction	$100,000	$5,000					$105,000
Total	$165,000	$5,000	$0	$0	$0	$0	**$170,000**

FY 2021/22 Budget Request - $65,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Aug 2017	Nov 2019	Dec 2019	Jun 2020	Jul 2020	Jul 2021	Aug 2021

Capital Improvement Program

Door Access Control System Expansion -MRF & Mahr

Description: Access control for a total of thirty-nine (39) doors between Meadowlark Reclamation, Mahr, and Administrative facilities.

Project Manager: Matias Labarrere

Department: Information Technology

Project: 2020100016

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: There is a need to convert keyed locks at Meadowlark Reclamation, Mahr, and Administrative buildings to keyless entry and add them to our existing BlueWave access control system. This upgrade will allow dual access to doors through the use of a fob or a security code and will eliminate the need for keys at Meadowlark, Mahr, and Administrative buildings. This initiative will allow for improved control over access to VWD facilities while minimizing reliance on the management of physical keys.

Upgrades contained within this CIP are broken down in the following manner:

Access Control upgrades for Administrative Building - $30,000
Access Control upgrades for Meadowlark and Mahr Facilities - $110,000
Re-Key of existing locks for Administrative Building - $5,000
Re-Key of existing locks for Meadowlark and Mahr Facilities- $5,000

Operations Impact: Increased security, time savings, and eliminate the cost of replacing keys

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction	$101,000	$49,000					$150,000
Total	$101,000	$49,000	$0	$0	$0	$0	**$150,000**

FY 2021/22 Budget Request - $49,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
Upgrades to Surveillance Video Management System

Description: Upgrades to existing Video Recording systems are required to obtain additional coverage, fidelity, and performance of the District's centralized recording system.

Project Manager: Matias Labarrere

Department: Information Technology

Project: 2020100026

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: Upgrades to the District's video recording systems have been recommended by the Department of Homeland Security (DHS). Long-range IR illuminators and additional cameras are recommended to provide additional coverage for dimly lit facilities. Current limitations of installed hardware adversely affect the quality of video recording during the night.

Operations Impact: Increased security, resiliency, and performance of existing video recording system.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$50,000					$50,000
Design		$50,000					$50,000
Construction		$50,000					$50,000
Total	$0	$150,000	$0	$0	$0	$0	**$150,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
HVAC Communication Upgrade

Description: Upgrade the District's HVAC control communication to an updated and user-friendly system. This will enable the District to control the HVAC system remotely, with non-proprietary restraints.

Project Manager: Steve Klein **Department:** Maintenance Services

Project: 2020100015 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The current HVAC system is 24 years old. The system routinely fails and finding technicians trained to work on the outdated systems is expensive and cumbersome. We are currently unable to remotely log in and troubleshoot any issues. This prevents staff from making any modifications to the system. Updating the communication system will allow staff better control and improve overall efficiency.

Operations Impact: Occasional HVAC service disruptions while the system is being upgraded.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$3,000					$3,000
Design		$5,000					$5,000
Construction		$135,000					$135,000
Total	$0	$143,000	$0	$0	$0	$0	**$143,000**

FY 2021/22 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
Update Restrooms to ADA Compliance

Description: Remove and replace the existing counters, sinks, mirrors, and paint. Fire system lights will need to be installed in the restrooms for compliance.

Project Manager: Steve Klein

Department: Maintenance Services

Project: 2020100021

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: Several restrooms in the Administration building need new counters, sinks, mirrors, and paint. When quotes were solicited for these updates, we were informed certain locations were not ADA compliant. Two areas of concern are the Lobby and Engineering restrooms.

Operations Impact: Some restrooms will be unavailable while under construction.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$2,000					$2,000
Design		$10,000					$10,000
Construction		$123,000					$123,000
Total	$0	$135,000	$0	$0	$0	$0	**$135,000**

FY 2021/22 Budget Request - $28,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019							Jun 2022

Capital Improvement Program
City of San Marcos Joint Projects Relocate/Adjust

Description: This amount is set-aside to cover services rendered in conjunction with various City of San Marcos projects involving District infrastructure per the District/City of San Marcos Cost Sharing Agreement dated March 31, 2009. This includes District staff time involved in inspection and project management, as well as reimbursements to the City for District infrastructure relocations and adjustments.

Project Manager: James Gumpel **Department:** Engineering

Project: 2021100013 **Funding Source:** See Below

Comments:

Miscellaneous relocations/adjustments resulting from City of San Marcos joint projects.

These projects are in conjunction with the City's Capital Improvement Plan. Currently one project is proposed:

San Marcos Boulevard and Discovery Street

Operations Impact: Normal maintenance for infrastructure.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction			$81,000				$81,000
Total	$0	$0	$81,000	$0	$0	$0	**$81,000**

FY 2021/22 Budget Request - $11,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020						Jun 2022	Jul 2022

Capital Improvement Program
Encina Wastewater Authority Five Year Plan

Description: The District is a member agency of the Encina Wastewater Authority (EWA). The District shares in the cost of planned asset replacements and capital acquisitions.

Project Manager: Wes Owen **Department:** Finance

Project: 2022100001 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: These miscellaneous capital projects are budgeted each year

Operations Impact: No significant increase in costs or changes in efficiencies are anticipated from this project..

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$4,156,000	$6,607,000	$6,412,000	$7,492,000	$7,180,000	$31,847,000
Total	$0	$4,156,000	$6,607,000	$6,412,000	$7,492,000	$7,180,000	**$31,847,000**

FY 2021/22 Budget Request - $31,847,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2009						Jun 2026	Jun 2026

Capital Improvement Program
Camino de Amigos Sewer Replacement

Description: Replace approximately 3,200 feet of existing 8-inch gravity main in Camino de Amigos from Alga Road south to La Costa Meadows Drive with 12-inch diameter.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2022100002 **Funding Source:** 45% Fund 210 – Sewer Replacement
55% Fund 220 – Sewer Capacity

Comments: Based on the 2018 Master Plan for Phase 3, the 8-inch gravity main along Camino de Amigos from Alga Road south to La Costa Meadows Drive will need to be upsized from 8-inch vitrified clay pipe (VCP) to 12-inch PVC pipeline. The 2018 Master Plan has identified this replacement project as SP-13.

Operations Impact: Annual and routine sewer pipline maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$40,000					$40,000
Design			$190,000				$190,000
Construction			$200,000	$950,000			$1,150,000
Total	$0	$40,000	$390,000	$950,000	$0	$0	**$1,380,000**

FY 2021/22 Budget Request - $1,380,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021	Jul 2021	Jun 2022	Jul 2022	Apr 2023	May 2023	Nov 2023	Dec 2023

Capital Improvement Program
Sewer Lining and Rehab 2022

Description: The project consists of constructing approximately 9,900 feet of gravity sewer trenchless rehabilitation at locations throughout the District.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2022100003 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: Gravity sewer line segments throughout the District totaling approximately 9,900 feet are in need of rehabilitation to restore structural integrity and flow capacity. These pipe sections have become compromised due to a combination of O&M deficiencies (age, pipe material type, ground settlement, grease deposits, root intrusion) and Structural Defects (cracks, voids, collapse). Significant costs will be accrued upon line failures if the sections of sewer pipeline are not rehabilitated. The project will utilize trenchless cured-in-place pipe (CIPP) liners, to rehabilitate the existing pipelines. To take advantage of volume pricing discounts and to solicit more competitive bids, multiple sewer pipe segments are grouped together in one bid package, rather than broken into smaller projects.

Operations Impact: Restored structural integrity and flow capacity and increased service life of sewer line sections.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$5,000					$5,000
Design		$40,000					$40,000
Construction			$825,000				$825,000
Total	$0	$45,000	$825,000	$0	$0	$0	**$870,000**

FY 2021/22 Budget Request - $870,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021	Jul 2021	Dec 2021	Jan 2022	Jun 2022	Jul 2022	Dec 2022	Dec 2022

Capital Improvement Program
Maximo Mobility

Description: Develop a mobile enhancement to the CMMS Maximo Asset Management system.

Project Manager: Matias Labarrere

Department: Information Technology

Project: 2022100004

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The District has implemented a computerized maintenance management system (CMMS) in IBM Maximo to track asset specifications, installation information, purchasing details and the work performed to maintain those assets. The standard Maximo system is designed to be used on a desktop computer in the office. The District desires to use the Maximo system in the field by staff to record maintenance activities as it occurs. An enhancement to the Maximo software will create a user interface suitable for use by field staff using tablet computers or smart phones. Many solutions exist to mobilize the Maximo system, building on top of the core system, which provide for simple-to-use data entry forms, allow for non-connected field use and also present the assets and work orders on a map, facilitating location identification for field use. This enhancement will bring about labor time savings, more accurate and timely data capture, and improve information access for staff as they are working in the field. This project will develop the requirements, business processes, key performance metrics, system design, implementation and user training.

Operations Impact: Enhance the usage of the CMMS by field crews, optimizing labor time, improving data capture, and providing information to field crews.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$20,000	$50,000				$70,000
Design			$100,000				$100,000
Construction			$100,000				$100,000
Total	$0	$20,000	$250,000	$0	$0	$0	**$270,000**

FY 2021/22 Budget Request - $270,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2023

Capital Improvement Program
Lake San Marcos Lift Station - Generator

Description: Replace existing generator with one sized appropriately for the station.

Project Manager: Dean Toth **Department:** Mechanical/Electrical

Project: 2022100005 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The existing generator is not large enough to power the entire facility with three pumps running. We require all three pumps to run during heavy rain events in order to keep up with flow into the station. Having available backup power during a storm event is critical as this is usually when SDG&E power is unstable or becomes unavailable.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design		$10,000					$10,000
Construction		$225,000					$225,000
Total	$0	$235,000	$0	$0	$0	$0	**$235,000**

FY 2021/22 Budget Request - $235,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021					Jul 2021	Jun 2022	Jun 2022

Capital Improvement Program
Energy Management Study

Description: The Energy Management Study is a wholistic approach to energy management for the District. Looking at how the District manages/operates (energy) at various sites and what can be done to reduce power consumption.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2022100006 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The District entered into a power purchase agreement in November, 2019 to develop new solar sites which will ultimately reduce future energy costs at the following two locations:
1. Net Energy Metering at Lift Station No. 1
2. RES-BCT Project at Twin Oaks Reservoirs 1 & 2 Site

Additional SGIP grant funding opportunities through Tesla for multiple battery sites throughout the District are in design. The combination of District Wide Solar Power Purchase Agreement with the future energy storage capacity bandwidth at the District requires a comprehensive Energy Management Study. The Energy Management Study is a wholistic approach to energy management for the District. The study will investigate how the District manages/operates (energy) at various sites and what opportunities are available to reduce peak-use power consumption. Recommendations and usage thresholds will be provided to change/optimize electricity rates to save money while integrating a greater plan on how the District incorporates their various renewable resource assets.

Operations Impact: Determining optimal usage of District renewable energy assets to achieve long-term savings in District's monthly payments to electrical utility.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$10,000					$10,000
Design		$220,000					$220,000
Construction							
Total	$0	$230,000	$0	$0	$0	$0	**$230,000**

FY 2021/22 Budget Request - $230,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021	Jul 2021	Oct 2021	Nov 2021	Mar 2022			Apr 2022

Capital Improvement Program
Reclaimed Pumps - Evaluation and Design

Description: Evaluate and construct piping for the backwash pumps to operate during low reclaimed flow periods.

Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2022100007

Funding Source: 100% Fund 250 - Reclaimed

Comments: The large reclaimed pumps are used to pump tertiary treated water into the distribution system and Mahr Reservoir. During low demand periods, the reclaimed pumps cycle on and off throughout the day. This requires significant electrical power as well as adding wear to the pumping system. Next to the reclaimed pumps are two smaller backwash pumps that are used to pump reclaimed water for backwashing of the tertiary filters. If the pump curves of these two smaller pumps indicate they can be used to pump during low flow periods, then they could be tied into the header piping of the larger reclaimed pumps and be programmed to operate during low flow periods. This would reduce power consumption and maintenance costs.

Operations Impact: There will be some interruption to reclaimed effluent pumping during construction.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design		$40,000					$40,000
Construction			$150,000				$150,000
Total	$0	$40,000	$150,000	$0	$0	$0	**$190,000**

FY 2021/22 Budget Request - $190,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2023

Capital Improvement Program
Meadowlark - Landscaping Improvements

Description: Design and installation of new landscaping at the Meadowlark Reclamation Facility.

Project Manager: Dawn McDougle **Department:** Meadowlark Reclamation Facility

Project: 2022100008 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The landscaping at the Meadowlark Reclamation Facility needs to be improved using more drought tolerant plants. The existing landscaping at Meadowlark requires significant maintenance and in some areas the plants have not responded well to reclaimed water. The landscaping should focus on drought tolerant plants as well as the use of reclaimed water for irrigation. Meadowlark has several public tours each year. The landscaping should reflect the District's message to the public of the importance of low water usage landscaping.

Operations Impact: Reduced maintenance and water usage.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design		$30,000					$30,000
Construction			$150,000				$150,000
Total	$0	$30,000	$150,000	$0	$0	$0	**$180,000**

FY 2021/22 Budget Request - $180,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2023

Capital Improvement Program
Maintenance Services Department - Offices

Description: Create new supervisor and crew offices in the C Building.

Project Manager: Steve Klein **Department:** Maintenance Services

Project: 2022100009 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The recently created Maintenance Services department in the Operations & Maintenance division does not have an office space. This project will be to create office space for the supervisor and department staff in the C Building using an underutilized shop area.

Operations Impact: Improved work environment for the Maintenance Services department.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$10,000					$10,000
Design							
Construction		$140,000					$140,000
Total	$0	$150,000	$0	$0	$0	$0	**$150,000**

FY 2021/22 Budget Request - $150,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Wulff Pressure Reducing Station

Description: This project will install a new pressure reducing station to allow water to be pumped from the High Point hydro-pneumatic pump station to the Wulff pressure zone.

Project Manager: Ryan Morgan **Department:** Engineering

Project: 2022100010 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: After the High Point residential development is completed to the south, an offsite waterline and pressure reducing station will be built to provide an additional source of water from the High Point/Palos Vista area. This provides additional redundancy to the VWD water system in this area. The offsite waterline construction is the developer's responsibility. VWD will reimburse the developer for the construction of the PRS.

Operations Impact: The operation of Wulff Pump Station will be reduced after the installation of the proposed pressure reducing station. The new pressure reducing station will allow for a redundant water supply to the Wulff pressure zone.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design		$15,000					$15,000
Construction		$125,000					$125,000
Total	$0	$140,000	$0	$0	$0	$0	**$140,000**

FY 2021/22 Budget Request - $140,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021	Aug 2021	Jun 2012	Jul 2021	Aug 2021	Sep 2021	Jun 2022	Jul 2022

Capital Improvement Program
Maximo - GIS interface

Description: Develop an interface to replicate data between the CMMS and GIS to ensure accurate and consistent asset information.

Project Manager: Matias Labarrere

Department: Information Technology

Project: 2022100011

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The District has implemented a computerized maintenance management system (CMMS) in IBM Maximo to track asset specifications, installation information, purchasing details and the work performed to maintain those assets. The District also maintains asset information in the geographic information system (GIS) which primarily documents asset location and connectivity in the water and sewer systems with cartography and maps, using the ESRI GIS software. It also tracks asset specifications, maintenance information and installation dates. These two systems have unique, non-redundant purposes but share asset information and work together to form a complete, complementary Asset Management system. Currently, the common information is not synchronized so updates to one system do not occur in the other. Staff strive to maintain the information manually but this is not efficient. To keep the information on our assets accurate and consistent, these two systems must be interfaced so that replication of data is occurring. This project will develop the data rules, interface design and technology to interface these two asset systems.

Operations Impact: Integration between these two systems will improve asset tracking and reduce inaccurate data.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$20,000	$15,000				$35,000
Design		$20,000	$15,000				$35,000
Construction		$35,000	$15,000				$50,000
Total	$0	$75,000	$45,000	$0	$0	$0	**$120,000**

FY 2021/22 Budget Request - $120,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2023

Capital Improvement Program
District-wide Valve Replacement Program

Description: Replace broken or leaking valves throughout the District.

Project Manager: Kevin Anctil **Department:** Construction

Project: 2022100012 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The valve crew has discovered many broken valves requiring replacement. This project is to replace 25 to 30 valves in the next fiscal year.

Operations Impact: Improved ability to isolate water mains with less impact to customers. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$100,000					$100,000
Total	$0	$100,000	$0	$0	$0	$0	**$100,000**

FY 2021/22 Budget Request - $100,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Fleet Maintenance - Hydraulic Lift Replacement

Description: Remove XL in-ground hydraulic lift and replace with a new one. Upgrade hydraulic hoses to correct size and rating.

Project Manager: Steve Klein

Department: Maintenance Services

Project: 2022100013

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The District mechanics use a large hydraulic lift to raise our large and extra large equipment to perform maintenance and repairs. The existing lift has exceeded its useful life and is obsolete. Repair parts for this lift are no longer available and it needs to be replaced.

Operations Impact: The XL lift will be out of service during the replacement project. Some maintenance on large equipment may be delayed until the project is completed.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$80,000					$80,000
Total	$0	$80,000	$0	$0	$0	$0	**$80,000**

FY 2021/22 Budget Request - $80,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Safety Nets and Climbing System for Twin Oaks

Description: Installation of safety nets and updated climbing system at the Twin Oaks Reservoir #1.

Project Manager: Shawn Askine **Department:** Water Operations

Project: 2022100014 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The Twin Oaks Reservoir hatches and climbing systems need to be upgraded to improve staff safety while performing maintenance and comply with OSHA regulations. Twin Oaks Reservoir #1 is scheduled for cleaning next fiscal year. Safety nets will be installed on all hatches and the underground vaults within the facility while the reservoir is offline for maintenance. The climbing system currently inside the reservoir will be replaced with the District's standard of the Self Retrieving Lifelines (SRLs) that have been installed at all steel tanks. This will allow staff to safely access the inside of the reservoir during cleaning operations.

Operations Impact: Improved safety during inspections and when entering the reservoir during cleaning operations.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$70,000					$70,000
Total	$0	$70,000	$0	$0	$0	$0	**$70,000**

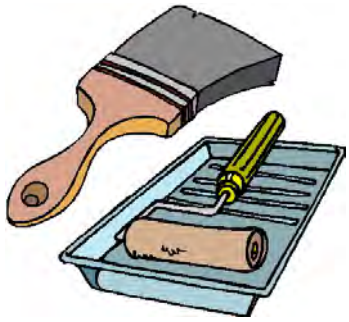
FY 2021/22 Budget Request - $70,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
E Building - Minor Repairs and Painting

Description: Repair concrete and vents. Paint interior and exterior of the building and the emergency generator.



Project Manager: Steve Klein

Department: Maintenance Services

Project: 2022100015

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The E Building houses the District's HVAC system for the Administration and O&M buildings. The concrete under the building vents is starting to crack and expose rebar. This can cause extensive damage to the walls if not repaired soon. The exterior metal surfaces of the building are showing signs of corrosion and need to be painted. The emergency generator for the headquarters facility is located next to the building and requires painting as well.

Operations Impact: The HVAC system may need to be shut down during some of the repairs.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$60,000					$60,000
Total	$0	$60,000	$0	$0	$0	$0	**$60,000**

FY 2021/22 Budget Request - $60,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Administration Building - Concrete Repairs

Description: Repair and replace damaged concrete and handrails at the front entrance to the Administration building.

Project Manager: Steve Klein

Department: Maintenance Services

Project: 2022100016

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The stem walls on the front entrance of the Administration building are cracking and pieces are falling off. We need to remove the entire stem wall on each side of the walkway to make repairs. We also need to repair cracked concrete panels where the handrails are mounted. The handrails have corroded in a few places and will need to be replaced or repaired.

Operations Impact: Customer foot traffic will need to be diverted around the construction area. Construction noise may impact some employees.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design		$5,000					$5,000
Construction		$50,000					$50,000
Total	$0	$55,000	$0	$0	$0	$0	**$55,000**

FY 2021/22 Budget Request - $55,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Meadowlark - Concrete and Asphalt Improvements

Description: Concrete and asphalt improvements needed at the Meadowlark Water Reclamation Facility.

Project Manager: Dawn McDougle **Department:** Meadowlark Reclamation Facility

Project: 2022100017 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: There are various concrete and asphalt modifications and repairs that need to be made at the Meadowlark Water Reclamation Facility. Some of the modifications needed are: 1) The front entrance to the Meadowlark Control Building is not ADA compliant. The wheelchair accessible ramp does not have wheelchair access leading up to the ramp and there is not enough space for a wheelchair to turn around. 2) A berm is needed at the top of the plant to keep rainwater from outside the District property from entering the plant storm water sampling location. Storm water currently enters the plant from the surrounding community, carrying debris that has a direct impact on the plant's storm water sampling analysis. 3) A ramp is needed to allow access for the forklift to reach the secondary deck. The forklift access will allow Meadowlark staff to lift equipment and supplies to the secondary deck, reducing the potential for injury. 4) Various points around the plant need general concrete repair. 5) The rock area that used to be the site of the rotating biological contactors needs to be paved. This will allow maintenance vehicles to access the aeration deck, secondary deck and odor scrubber. It will also increase the staging area for future projects.

Operations Impact: Minimal impact to plant operations during construction.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$50,000					$50,000
Total	$0	$50,000	$0	$0	$0	$0	**$50,000**

FY 2021/22 Budget Request - $50,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Painting of Car Wash Building

Description: Painting and epoxy coating of the car wash building.

Project Manager: Steve Klein

Department: Maintenance Services

Project: 2022100018

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The District's car wash needs to be coated with an epoxy paint to keep dirt and grease from sticking to the interior block wall. The metal structure is starting to show signs of corrosion and the exterior walls are peeling requiring minor repairs and painting.

Operations Impact: The car wash will be unavailable during this project.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$50,000					$50,000
Total	$0	$50,000	$0	$0	$0	$0	**$50,000**

FY 2021/22 Budget Request - $50,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Meadowlark Headworks - Sluice Gate Actuators

Description: Installation of electric actuators on the channel sluice gates.

Project Manager: Dawn McDougle **Department:** Meadowlark Reclamation Facility

Project: 2022100019 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The two channels in the Meadowlark Reclamation Facility's Headworks Building have individual sluice gates to isolate each channel. The manual operation of the sluice gates is difficult and time consuming due to the long stem travel of the valves and the force of the influent flow against the gate. District maintenance staff recommends the implementation of a preventative maintenance program requiring rotation of the channels on a monthly basis. This maintenance program will allow equal run times for the grinders and augers in each channel, extending the life of the equipment. It typically takes two operators to rotate channels. Installing electric actuators on the sluice gates will reduce the hazards associated with operating the valves manually and require less staff time to rotate between channels.

Operations Impact: Improved procedures and safety.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$42,000					$42,000
Total	$0	$42,000	$0	$0	$0	$0	**$42,000**

FY 2021/22 Budget Request - $42,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Craven Pressure Station - Interior Refurbishment

Description: Coat the interior surfaces with Zebron's product and replace damaged electrical equipment.

Project Manager: Shawn Askine **Department:** Water Operations

Project: 2022100020 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Craven Pressure Station needs to be refurbished on the interior of the vault. Water intrusion from the surrounding area has caused corrosion throughout the station. Coating the interior of the station will seal the walls and prevent further water damage. The electrical conduit, light fixtures and other electrical components will need to be removed prior to the coating application. The interior of the vault will be coated with a proprietary product made by Zebron. This product has been used successfully in other District vaults and sewer manholes. New electrical equipment and conduits will be installed after the coating has cured.

Operations Impact: Prevent water from entering the vault and causing damage.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$40,000					$40,000
Total	$0	$40,000	$0	$0	$0	$0	**$40,000**

FY 2021/22 Budget Request - $40,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Trussell FCF - Water Quality Analyzer

Description: Installation of an analyzer that will provide real-time water quality data via the District's SCADA system.

Project Manager: Shawn Askine **Department:** Water Operations

Project: 2022100021 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Installation of a water quality analyzer at the Trussell Flow Control Facility (FCF) will give the Water Systems Operators the ability to monitor water quality continuously and provide real-time information concerning the water distribution system. Staff has been working with a vendor to develop a system for Vallecitos that measures chlorine residual and pH. The package includes a sample return pump. The analyzer does not use chemical reagents which allows the water to be returned to the distribution system. State regulations prohibit chlorinated water to be released to the storm drain. Returning the sample water to the distribution system keeps the District in compliance with discharge requirements and the recently enacted water conservation regulations.

Operations Impact: Continuous monitoring of water quality in the distribution system.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$35,000					$35,000
Total	$0	$35,000	$0	$0	$0	$0	**$35,000**

FY 2021/22 Budget Request - $35,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
San Elijo Pump Station - Water Quality Analyzer

Description: Installation of an analyzer that will provide real-time water quality data via the District's SCADA system.

Project Manager: Shawn Askine **Department:** Water Operations

Project: 2022100022 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Installation of a water quality analyzer at the San Elijo Pump Station will give the Water Systems Operators the ability to monitor water quality continuously and provide real-time information concerning the water distribution system. Staff has been working with a vendor to develop a system for Vallecitos that measures chlorine residual and pH. The package includes a sample return pump. The analyzer does not use chemical reagents which allows the water to be returned to the distribution system. State regulations prohibit chlorinated water to be released to the storm drain. Returning the sample water to the distribution system keeps the District in compliance with discharge requirements and the recently enacted water conservation regulations.

Operations Impact: Continuous monitoring of water quality in the distribution system.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$35,000					$35,000
Total	$0	$35,000	$0	$0	$0	$0	**$35,000**

FY 2021/22 Budget Request - $35,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Administration Building - Roof Repairs

Description: Repair leaks on the Administration building roof. Replace and paint damaged fascia boards.

Project Manager: Steve Klein

Department: Maintenance Services

Project: 2022100023

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The roof has had multiple leaks in the past few years. There are additional leaks that need to be repaired. The roof also has some damaged fascia board that needs to be replaced. The damaged board will let water between it and the rafter tails which will also become damaged. These boards need to be replaced and painted to prevent further damage.

Operations Impact: Construction noise may impact some employees.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$34,000					$34,000
Total	$0	$34,000	$0	$0	$0	$0	**$34,000**

FY 2021/22 Budget Request - $34,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Palomar Tank: Asphalt Repair & Sealcoat

Description: Repair damaged areas and seal coat the asphalt at the Palomar Tank site. The asphalt has cracks, root damage and potholes. The asphalt patches will be completed and then the area will be seal coated to extend the life of the asphalt.

Project Manager: Kevin Anctil **Department:** Construction

Project: 2022100024 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Repair asphalt and seal coat at Palomar Tank site.

Operations Impact: None

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$33,000					$33,000
Total	$0	$33,000	$0	$0	$0	$0	**$33,000**

FY 2021/22 Budget Request - $33,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Maximo 7.6.1.2 Upgrade

Description: Required Software upgrade for the District's computerized maintenance management system (CMMS) is required to ensure continued vendor support for District maintenance systems.

Project Manager: Matias Labarrere **Department:** Information Technology

Project: 2022100025 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The end of support and service for Maximo 7.6.0.x is September 2021. VWD must upgrade to 7.6.1.2 to stay in compliance and run a supported version of Maximo. TRM will upgrade Maximo from 7.6.0.9 to 7.6.1.2 in the Test and Production environments. The upgrade includes Maximo, BIRT (Business Intelligence and Reporting Tools) and TRM Rules Manager. In addition to performing the upgrade, TRM will help resolve issues found by VWD testing. It is the responsibility of VWD to perform application, workflow, RulesManager and interface testing.

Operations Impact: Replacement of end-of-life software is necessary to ensure continuity of business operations.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$10,000					$10,000
Design		$10,000					$10,000
Construction		$10,000					$10,000
Total	$0	$30,000	$0	$0	$0	$0	**$30,000**

FY 2021/22 Budget Request - $30,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
GEMS AB Suite 6.1 Upgrade

Description: A required Software upgrade to the District's Financial Information System (GEMS) is necessary to ensure continued vendor support for District Financial systems.

Project Manager: Matias Labarrere **Department:** Information Technology

Project: 2022100026 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The GEMS application runs on the AB Suite 5.0 Unisys platform. This platform reached end-of-life on December 31 2020. Harris ERP will continue to provide support for the GEMS application until VWD upgrades to AB Suite 6.1 in the first quarter of FY 21/22. There will be no additional Service Packs for AB Suite 5.0.

Operations Impact: Replacement of end-of-life software is necessary to ensure continuity of business operations.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning		$10,000					$10,000
Design		$10,000					$10,000
Construction		$10,000					$10,000
Total	$0	$30,000	$0	$0	$0	$0	**$30,000**

FY 2021/22 Budget Request - $30,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Meadowlark - BOD Monitor

Description: Install BOD monitor to measure plant influent BOD to improve process control.

Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2022100027

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: The Meadowlark Water Reclamation Facility is in need of a BOD (Biochemical Oxygen Demand) monitor. Meadowlark will experience influent wastewater flows that have a high BOD concentration. District staff are often unable to react through plant adjustments until the BOD loading has made its way through the plant. With a BOD monitor located near the start of the reclamation process, any shifts in the incoming BOD can be monitored and processes proactively adjusted in real time.

Operations Impact: Improved plant operations.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$28,000					$28,000
Total	$0	$28,000	$0	$0	$0	$0	**$28,000**

FY 2021/22 Budget Request - $28,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jul 2022

Capital Improvement Program
Sodium Bisulfite Secondary Containment

Description: Install a secondary containment system for the sodium bisulfite chemical tank, pumps and piping system.

Project Manager: Dawn McDougle **Department:** Meadowlark Reclamation Facility

Project: 2022100028 **Funding Source:** 100% Fund 250 - Reclaimed

Comments: The sodium bisulfite chemical tank, pumps and piping system require a secondary containment system. Sodium bisulfite is used for reclaimed water dechlorination after it has gone through the disinfection process. Without the secondary containment, a release of the chemical would flow along the curb and into the storm water wet well. The chemical would then be pumped into the waste backwash tank and recirculated through the plant process. A dedicated chemical containment system will capture any release before it could reach the road or storm water wet well. The system will allow for sensors to be placed inside the chemical containment barrier that will alert operators to a release.

Operations Impact: The sodium bisulfite secondary containment system will reduce safety hazards and contamination concerns associated with a potential release.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$25,000					$25,000
Total	$0	$25,000	$0	$0	$0	$0	**$25,000**

FY 2021/22 Budget Request - $25,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Mountain Belle Tank: Asphalt Repair & Sealcoat

Description: Repair damaged areas and seal coat the asphalt at the Mountain Belle Tank site. The asphalt has cracks, root damage, and potholes. The asphalt patches will be completed and then the area will be seal coated to extend the life of the asphalt.

Project Manager: Kevin Anctil **Department:** Construction

Project: 2022100029 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Repair asphalt and seal coat Mountain Belle Tank site.

Operations Impact: None

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$21,000					$21,000
Total	$0	$21,000	$0	$0	$0	$0	**$21,000**

FY 2021/22 Budget Request - $21,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
NeoGOV Applicant Tracking Software

Description: Implementation of NeoGOV HR software will assist with automating the hiring, onboarding, and performance evaluation process for employees.

Project Manager: Matias Labarrere **Department:** Information Technology

Project: 2022100030 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The Administrative Services Department has expressed an interest in digitizing the applicant tracking process. Currently, paper forms are used to track new hires throughout the onboarding process. Implementation of NEOGOV will allow the District to go paperless from initial job posting to end of the formal employee onboarding process.

Applicant Tracking Features:
• Email and hardcopy notifications
• EEO Data collection and reports
• Track applicants by step/hurdle
• Schedule written, oral, and other exams
• Candidate self-service portal for scheduling and application status

Operations Impact: Increased efficiency as a result of digitization of the applicant tracking process.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$21,000					$21,000
Total	$0	$21,000	$0	$0	$0	$0	**$21,000**

FY 2021/22 Budget Request - $21,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
OpenGOV Digital Transparency and Reporting

Description: Implementation of an open data and financial transparency solution will provide the public with access to District financial data via an online portal.

Project Manager: Matias Labarrere **Department:** Information Technology

Project: 2022100032 **Funding Source:** 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: In an effort to provide additional transparency, the Finance Department would like to make Financial data sets available for public review/consumption. The OpenGOV platform will allow the District to publish financial data via online dashboards which can be shared with the public.

Operations Impact: Provision of financial data sets for public consumption will provide additional transparency of District Financial data.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$20,000					$20,000
Total	$0	$20,000	$0	$0	$0	$0	**$20,000**

FY 2021/22 Budget Request - $20,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
District Headquarters - HVAC Repairs

Description: HVAC repairs and recirculating piping installation.

Project Manager: Steve Klein

Department: Maintenance Services

Project: 2022100031

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: The current HVAC system has been failing during cooler weather. A recirculation system needs to be installed to prevent this from occurring. There are other minor repairs that will be made to the system while it is offline.

Operations Impact: The HVAC system will be offline during this project.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$20,000					$20,000
Total	$0	$20,000	$0	$0	$0	$0	**$20,000**

FY 2021/22 Budget Request - $20,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Schoolhouse Pump Station - Roof Replacement

Description: Replacement of tile roofing materials with composite shingles.

Project Manager: Shawn Askine **Department:** Water Operations

Project: 2022100033 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Schoolhouse Pump Station is in need of a full roof replacement. Several tiles on the roof are broken, resulting in significant leaks during rainy weather. The existing roofing material needs to be replaced with composite shingles to prevent damage during maintenance activities that require staff to walk on the roof.

Operations Impact: New roofing material will prevent leaks and require less maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$20,000					$20,000
Total	$0	$20,000	$0	$0	$0	$0	**$20,000**

FY 2021/22 Budget Request - $20,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Mahr Reservoir - Algae Monitoring

Description: Install and program algae probe on Mahr Reservoir's dock.

Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2022100034

Funding Source: 100% Fund 250 - Reclaimed

Comments: The algae meter at Mahr Reservoir is obsolete and needs to be replaced with modern probe technology. The probe will be installed on Mahr's floating dock, eliminating the need for pumps that currently provide sample water to the existing algae meter located in the control building. Moving the meter to the dock will save electrical and maintenance costs.

Operations Impact: Reduced power and maintenance costs.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$18,000					$18,000
Total	$0	$18,000	$0	$0	$0	$0	**$18,000**

FY 2021/22 Budget Request - $18,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Website Redesign - VWD.ORG

Description: Website Redesign: ADA Enhancements for District Website

Project Manager: Matias Labarrere

Department: Information Technology

Project: 2022100035

Funding Source: 51% Fund 110 – Water Replacement
49% Fund 210 - Sewer Replacement

Comments: A website redesign is recommended to ensure continued compliance with Americans with Disabilities Act (ADA) regulations. The District website will be converted to a 'mobile friendly' programming language which will provide a superior overall user experience for users visiting the website. All updates will be made in accordance with ADA Standards for Accessible Design.

Operations Impact: Updates will provide a superior user experience in addition to ensuring continued compliance with ADA regulations.

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$15,000					$15,000
Total	$0	$15,000	$0	$0	$0	$0	**$15,000**

FY 2021/22 Budget Request - $15,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
N Twin Oaks #2 Tank: Asphalt Repair & Sealcoat

Description: Repair damaged areas and seal coat the asphalt at the North Twin Oaks #2 Tank site. The asphalt has cracks, root damage, and potholes. The asphalt patches will be completed and then the area will be seal coated to extend the life of the asphalt.

Project Manager: Kevin Anctil **Department:** Construction

Project: 2022100036 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Repair asphalt and seal coat at North Twin Oaks #2 Tank site.

Operations Impact: None

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning							
Design							
Construction		$12,000					$12,000
Total	$0	$12,000	$0	$0	$0	$0	**$12,000**

FY 2021/22 Budget Request - $12,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2021							Jun 2022

Capital Improvement Program
Future Projects

Description: This amount is set-aside to cover projects planned within the next five years with a start date later than the current fiscal year..

Project Manager: Ryan Morgan **Department:** Engineering

Project: TBA **Funding Source:** See Below

Project:	Amount:	Source:
Land Outfall Parallel Sewer Section A Phase 2	14,200,000	76% Fund 220 – Sewer Capacity, 24% Fund 210 – Sewer Replacement
El Norte Parkway Water Line Extension	4,100,000	100% Fund 110 – Water Replacement
San Marcos Boulevard West Sewer Replacement	4,100,000	55% Fund 220 – Sewer Capacity, 45% Fund 210 – Sewer Replacement
Tres-Amigos Water Line Replacement Phase II	3,850,000	100% Fund 110 – Water Replacement
Mountain Belle Pump Station	3,810,000	100% Fund 120 – Water Capacity
Coronado Hills Tank #2	3,600,000	100% Fund 120 – Water Capacity
Rees Road Water Line Relocation	2,300,000	100% Fund 110 – Water Replacement
Land Outfall Gravity Sewer Section B Replacement	1,820,000	20% Fund 220 - Sewer Capacity, 80% Fund 210 - Sewer Replacement
Deer Springs Tank No.2	1,400,000	43% Fund 120 – Water Capacity, 57% Fund 110 – Water Replacement
Schoolhouse Pump Station Expansion	500,000	32% Fund 120 – Water Capacity, 68% Fund 110 – Water Replacement
Mountain Belle Tank Exterior Refurbishment	455,000	100% Fund 110 – Water Replacement
Schoolhouse Water Line Improvements	300,000	36% Fund 120 – Water Capacity, 64% Fund 110 – Water Replacement
Total	$40,435,000	

Comments: These projects are part of the District's capital budget beginning after fiscal year 2021-22.

Operations Impact: Normal Maintenance for infrastructure

Project Spending Plan

Project Phase	Previous Spending	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26 & Thereafter	Total
Planning			$5,000	$350,000	$200,000	$250,000	$805,000
Design			$25,000	$100,000	$550,000	$1,700,000	$2,375,000
Construction				$425,000	$8,100,000	$28,730,000	$37,255,000
Total	$0	$0	$30,000	$875,000	$8,850,000	$30,680,000	**$40,435,000**

FY 2021/22 Budget Request - $40,435,000.00

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
	Aug 2006	Jun 2026	Feb 2007	Jun 2027	Jul 2023	Jun 2028	Jun 2028

VALLECITOS WATER DISTRICT

2021-22 CAPITAL BUDGET - EASEMENTS, VEHICLES & EQUIPMENT SCHEDULE

VEHICLES/MOBILE EQUIPMENT

Existing Vehicle #	Description	Project #	New or Replacement	*Funding Source:* Water	Sewer	Total Cost
Water Operations:						
233	F-150 XL 2WD SuperCab	2022100037	Replacement	43,000		43,000
Engineering Inspection:						
209	2020 Ford F-150 4x4 SuperCab	2022100038	Replacement	23,000	22,000	45,000
Construction:						
225	Kenworth T370 Truck with Service Body	2022100039	Replacement	117,400	112,600	230,000
249	F-250 XL 4WD SuperCab	2022100040	Replacement	25,500	24,500	50,000
245	Vacuum Excavator	2022100041	Replacement	84,200	80,800	165,000
Mechanical/Electrical:						
	Fuel Transport Trailer for Generators	2022100042	New	11,700	11,300	23,000
228	F-550 XL 2WD	2022100043	Replacement	33,200	31,800	$ 65,000
TOTAL VEHICLES						*$ 621,000*

FACILITIES AND EQUIPMENT

Requesting Dept.	Description	Project #	New or Replacement	*Funding Source:* Water	Sewer	Total Cost
Mechanical/Electrical:						
	Main Breaker for Palos Vista Pump Station	2022100044	Replacement	15,000		15,000
Collections:						
	Sewer Flow Meter	2022100045	Replacement		14,000	14,000
Meadowlark Facility:						
	Caustic Storage Tank with Restraints & Fittings	2022100046	New		12,000	$ 12,000
TOTAL FACILITIES AND EQUIPMENT						*$ 41,000*

VEHICLES & EQUIPMENT TOTAL **$ 662,000**

DEBT SERVICE BUDGET FOR THE YEAR ENDING JUNE 30, 2022

	Water		Wastewater		
	Replacement	Capacity	Replacement	Capacity	Total
2015 Refunding [1]					
Outstanding principal as of July 1, 2021[2]	$ -	$ 20,005,500	$ -	$ 19,259,500	$ 39,265,000
2021/22 Principal Payments	-	(1,194,780)	-	(1,150,220)	(2,345,000)
Outstanding principal as of July 1, 2022	$ -	$ 18,810,720	$ -	$ 18,109,280	$ 36,920,000
2008 Private Placement [3]					
Outstanding principal as of July 1, 2021	$ -	$ -	$ -	$ 3,000,000	$ 3,000,000
2021/22 Principal Payments	-	-	-	(400,000)	(400,000)
Outstanding principal as of June 30, 2022	$ -	$ -	$ -	$ 2,600,000	$ 2,600,000
2012 Debt [4]					
Outstanding principal as of July 1, 2021	$ -	$ -	$ -	$ 1,527,000	$ 1,527,000
2021/22 Principal Payments	-	-	-	(755,000)	(755,000)
Outstanding principal as of June 30, 2022	$ -	$ -	$ -	$ 772,000	$ 772,000
2021 Bonds [5]					
Proceeds used to fund previously unreimbursed costs	$ -	$ 8,419,000	$ -	$ 7,786,000	$ 16,205,000
Proceeds used to fund projected spending	$ -	$ 2,913,000	$ -	$ 8,882,000	$ 11,795,000
Cost of issuance (estimated)	$ -	$ 91,000	$ -	$ 134,000	$ 225,000
Outstanding proceeds as of June 30, 2022	$ -	$ 11,423,000	$ -	$ 16,802,000	$ 28,225,000
2021/22 Debt Service Budget					
2015 Revenue Refunding principal	$ -	$ 1,194,780	$ -	$ 1,150,220	$ 2,345,000
2015 Revenue Refunding interest	-	943,590	-	908,410	1,852,000
2008 Private Placement - principal	-	-	-	400,000	400,000
2008 Private Placement - interest	-	-	-	6,000	6,000
2012 Debt - principal	-	-	-	755,000	755,000
2012 Debt - interest	-	-	-	23,000	23,000
Total 2021/22 Debt Service Budget	$ -	$ 2,138,370	$ -	$ 3,242,630	$ 5,381,000

Projected Debt Service Coverage Ratio [6]	395%
Excluding Capital Facility Fees	259%
Excluding Capital Facility Fees and Property Tax	172%
Days of Operating Expenses in Unrestricted Cash and Investments	578

[1] The District issued Refunding Revenue Bonds on July 1, 2015, to prepay a portion of the previously outstanding COPS Series 2005A. The bonds have a 5% interest rate over the 20-year term.

[2] The 21/22 principal payment on the refunding bonds is due to bondholders on July 1, 2021. The District is obligated to transfer the payment before June 30, 2021, to a restricted account maintained by the Trustee, and, therefore, was deducted from the projected July 1, 2021 balance presented in the Reserve Budget.

[3] The District and Union Bank of California executed an $8 million 20-Year tax-exempt private placement with variable rate interest tied to the LIBOR. The District has the option of changing the LIBOR term. The current term is six months. The current rate is 0.2028%. The proceeds partially restored a deficit balance in the restricted wastewater capacity fund from cash funding construction of the Encina Wastewater Authority Phase V expansion.

[4] The District issued bonds on December 21, 2012, to fund the increased capacity portions of San Marcos Interceptor and Linda Vista Sewer projects. The bonds have a 1.98% interest rate over the 10-year term.

[5] The District anticipates issuing bonds which will settle in August 2021 to fund capital projects in the amount of $28 million. A portion of the proceeds will be used to fund replacement projects and will subsequently be transferred to the capacity fund along with the responsiblity for the debt service. Terms are currently being negotiated and are estimated to be a fixed 2.65% interest rate over a 30-year term.

[6] Per the 2015 Refunding Revenue Bonds official statement, the District is required to maintain a debt service coverage ratio of 1.15. Debt service coverage ratios are presented above inclusive and exclusive of capital facilities fees to demonstrate the District's ability to cover debt service above the required minimum. Capital facility fees are included in the official statement's definition of "Net Revenues".

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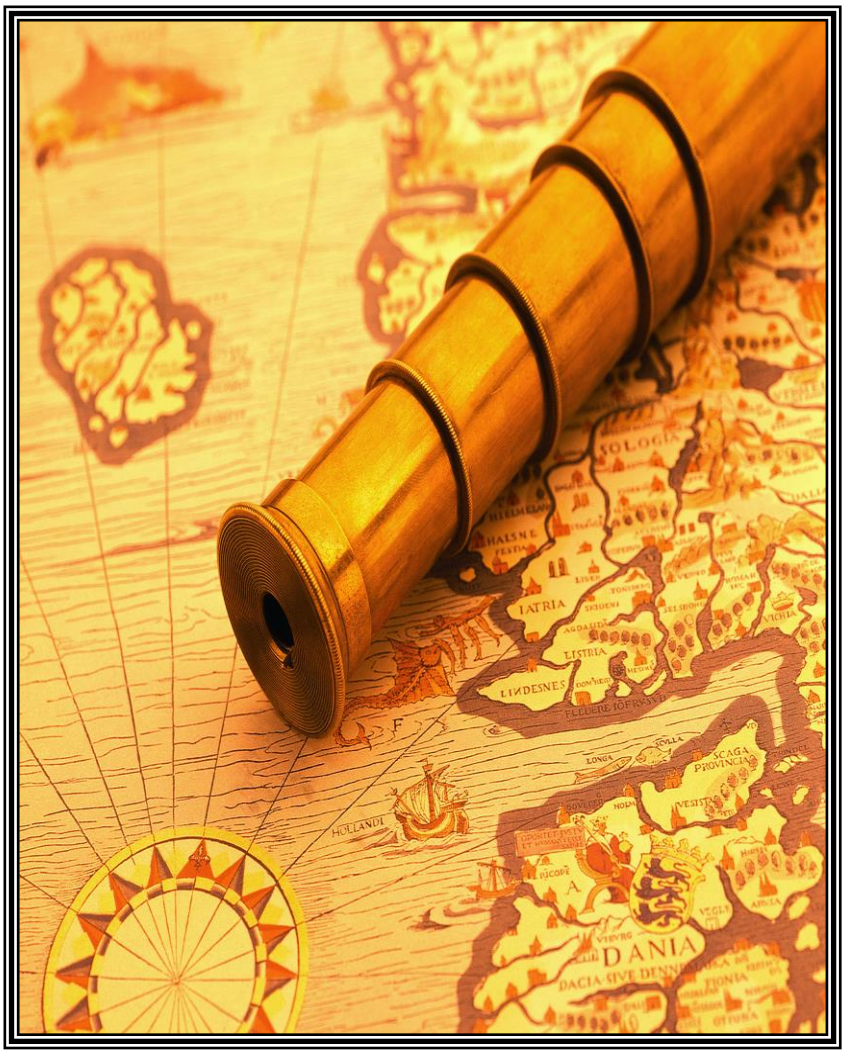
2021-22 LONG-RANGE PLANNING



RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2022

	110 Water	120	210 Wastewater	220	
	Replacement	Capacity	Replacement	Capacity	Total
Projected July 1, 2021 Balance	$ 41,507,000	$ (8,419,000)	$ 59,382,000	$ (11,411,000)	$ 81,059,000
Revenues					
Operating Transfers	925,000	-	7,283,000	-	8,208,000
Capital Facility Fees	-	2,320,000	-	5,000,000	7,320,000
Debt Proceeds	2,913,000	-	18,874,000	6,213,000	28,000,000
Interfund Transfer	-	11,332,000	-	10,455,000	21,787,000
Property Tax	1,254,000	-	1,002,000	-	2,256,000
RDA pass-through	1,200,000	-	1,200,000	-	2,400,000
Project Reimbursements	-	-	86,000	26,000	112,000
Investment Earnings	466,000	(32,000)	663,000	(33,000)	1,064,000
Available Balance	48,265,000	5,201,000	88,490,000	10,250,000	152,206,000
Less 21/22 Expenditures					
Encina Wastewater Authority Five Year Plan	-	-	4,156,000	-	4,156,000
16-Inch Emergency Bypass Pipeline Rehabilitation	-	-	3,000,000	-	3,000,000
Meadowlark Failsafe Rehabilitation (Buena Reach)	-	-	2,860,000	-	2,860,000
Tres-Amigos Water Line Replacement Phase 1	1,405,000	-	-	-	1,405,000
Encina Wastewater Authority FY 20/21	-	-	1,375,000	-	1,375,000
Montiel Lift Station and Forcemain Replacement	-	-	642,600	617,400	1,260,000
Sage Canyon Tank Refurbishment	1,125,000	-	-	-	1,125,000
City of San Marcos Creek District Phase 1	760,500	-	253,500	-	1,014,000
MRF - Biological Selector Improvements	-	-	1,000,000	-	1,000,000
Vehicles	338,000	-	283,000	-	621,000
MRF - Tertiary Structural Rehab and Repairs	-	-	620,000	-	620,000
District-wide SCADA Upgrade Project	280,500	-	269,500	-	550,000
Palos Vista Pump Station - Motor Starters Upgrade	512,000	-	-	-	512,000
Las Posas Water Line Replacement	486,000	-	-	-	486,000
Land Outfall Parallel Sewer Section A Phase 1	-	-	96,000	304,000	400,000
MRF Direct Potable Reuse	-	-	340,000	-	340,000
Coggan Pump Station - Generator	325,000	-	-	-	325,000
Asset Management Replacement Schedule	160,000	-	160,000	-	320,000
Redundancy for Admin. Wireless Radio Network	154,020	-	147,980	-	302,000
Ductile Iron Pipe Condition Assessment	300,000	-	-	-	300,000
Chlorine Contact Tank Expansion	-	-	292,000	-	292,000
MRF: Conversion to Sodium Hypochlorite	-	-	270,000	-	270,000
Steel Pipeline Condition Assessment	250,000	-	-	-	250,000
Lake San Marcos Lift Station - Generator	-	-	235,000	-	235,000
Energy Management Study	117,300	-	112,700	-	230,000
DHS- Upgrades for Critical Infrastructure Hardware	116,280	-	111,720	-	228,000
San Marcos Interceptor Phase 2	-	-	44,950	110,050	155,000
Maintenance Services Department - Offices	76,500	-	73,500	-	150,000
Upgrades to Surveillance Video Management System	76,500	-	73,500	-	150,000
HVAC Communication Upgrade	72,930	-	70,070	-	143,000
Wulff Pressure Reducing Station	140,000	-	-	-	140,000
Update Restrooms to ADA Compliance	68,850	-	66,150	-	135,000
Technology Infrastructure Upgrades	66,300	-	63,700	-	130,000
District-wide Valve Replacement Program	100,000	-	-	-	100,000
Fleet Maintenance - Hydraulic Lift Replacement	40,800	-	39,200	-	80,000
Maximo - GIS interface	38,250	-	36,750	-	75,000
Fire Services - Backflow Preventer Upgrades	75,000	-	-	-	75,000
Miscellaneous Projects	559,590	-	724,410	23,000	1,307,000
Interfund Transfer	2,913,000	-	18,874,000	-	21,787,000
Fund PERS UAL	1,557,000	-	1,038,000	-	2,595,000
Debt Service - 2012 Debt	-	-	-	778,000	778,000
Debt Service - 2008 Loan	-	-	-	406,000	406,000
Debt Service - 2015 Refunding	-	2,138,000	-	2,059,000	4,197,000
Less Total Expenditures	12,114,310	2,138,000	37,329,240	4,297,450	55,879,000
Projected June 30, 2022 Balance	36,150,690	3,063,000	51,160,760	5,952,550	***$ 96,327,000***
Less Operating Reserves	6,375,900	-	6,791,700	-	13,167,600
Projected replacement reserve/restricted funds	$ 29,774,790	$ 3,063,000	$ 44,369,060	$ 5,952,550	$ 83,159,400
Adopted replacement reserve floor	$ 10,394,000		$ 20,006,200		
Adopted replacement reserve ceiling	$ 40,281,800		$ 63,574,100		

See significant assumptions on page 122

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2023

	110 Water Replacement	120 Capacity	210 Wastewater Replacement	220 Capacity	Total
Projected July 1, 2022 Balance	$ 36,150,690	$ 3,063,000	$ 51,160,760	$ 5,952,550	$ 96,327,000
Revenues					
Operating Transfers	709,000	-	7,506,000	-	8,215,000
Capital Facility Fees	-	2,523,000	-	4,880,000	7,403,000
Project Reimbursements			1,656,000		1,656,000
Property Tax	1,281,000	-	1,024,000	-	2,305,000
RDA pass-through	1,261,000		1,211,000	-	2,472,000
Investment Earnings	419,000	36,000	571,000	62,000	1,088,000
Available Balance	39,820,690	5,622,000	63,128,760	10,894,550	119,466,000
Less 22/23 Expenditures					
Encina Wastewater Authority Five Year Plan	-	-	6,607,000	-	6,607,000
Chlorine Contact Tank Expansion	-	-	4,360,000	-	4,360,000
Montiel Lift Station and Forcemain Replacement	-	-	1,807,950	1,737,050	3,545,000
City of San Marcos Creek District Phase 1	1,855,500	-	618,500	-	2,474,000
MRF: Conversion to Sodium Hypochlorite	-	-	1,550,000	-	1,550,000
Tres-Amigos Water Line Replacement Phase 1	1,455,000	-	-	-	1,455,000
Richland Invert Replacement	-	-	850,000	-	850,000
Sewer Lining and Rehab 2022	-	-	825,000	-	825,000
Land Outfall Parallel Sewer Section A Phase 1	-	-	144,000	456,000	600,000
Coronado Hills Tank Exterior Refurbishment	455,000	-	-	-	455,000
Camino de Amigos Sewer Replacement	-	-	175,500	214,500	390,000
Land Outfall West Condition Assessment	-	-	374,000	-	374,000
Richland I Tank Exterior Refurbishment	360,000	-	-	-	360,000
Ductile Iron Pipe Condition Assessment	300,000	-	-	-	300,000
MRF Direct Potable Reuse	-	-	300,000	-	300,000
Rock Springs Valve Replacement	273,000	-	-	-	273,000
Rancheros Drive Sewer Replacement	-	-	270,000	-	270,000
Steel Pipeline Condition Assessment	250,000	-	-	-	250,000
Maximo Mobility	127,500	-	122,500	-	250,000
Asset Management Replacement Schedule	97,000	-	97,000	-	194,000
Meadowlark - Landscaping Improvements	-	-	150,000	-	150,000
Reclaimed Pumps - Evaluation and Design	-	-	150,000	-	150,000
Miscellaneous Projects	113,700	-	54,300	3,000	171,000
Vehicles and Equipment	332,000	-	318,000	-	650,000
Fund PERS UAL	554,000	-	369,000	-	923,000
Debt Service - 2012 Debt	-	-	-	780,000	780,000
Debt Service - 2008 Loan	-	-	-	406,000	406,000
Debt Service - 2021 Bonds	-	574,000	-	845,000	1,419,000
Debt Service - 2015 Refunding	-	2,139,400	-	2,059,600	4,199,000
Less Total Expenditures	6,172,700	2,713,400	19,142,750	6,501,150	34,530,000
Projected June 30, 2023 Balance	33,647,990	2,908,600	43,986,010	4,393,400	***$ 84,936,000***
Less Operating Reserves	6,645,200	-	6,916,000	-	13,561,200
Projected replacement reserve/restricted funds	$ 27,002,790	$ 2,908,600	$ 37,070,010	$ 4,393,400	$ 71,374,800
Adopted replacement reserve floor	$ 11,005,900		$ 20,838,600		
Adopted replacement reserve ceiling	$ 42,470,400		$ 67,012,900		

Debt service coverage	*316%*
Debt service coverage without cap fees	*207%*
Debt service coverage without cap fees or property tax & RDA	*137%*
Days of Operating Expenses in Unrestricted Cash and Investments	*489*

See significant assumptions on page 122

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2024

	110 Water	120	210 Wastewater	220	
	Replacement	Capacity	Replacement	Capacity	Total
Projected July 1, 2023 Balance	$ 33,647,990	$ 2,908,600	$ 43,986,010	$ 4,393,400	$ 84,936,000
Revenues					
Operating Transfers	539,000	-	7,722,000	-	8,261,000
Capital Facility Fees	-	2,365,000	-	4,231,000	6,596,000
Property Tax	1,309,000	-	1,046,000	-	2,355,000
RDA pass-through	1,298,000		1,248,000	-	2,546,000
Investment Earnings	416,000	33,000	536,000	35,000	1,020,000
Available Balance	37,209,990	5,306,600	54,538,010	8,659,400	105,714,000
Less 23/24 Expenditures					
Encina Wastewater Authority Five Year Plan	-	-	6,412,000	-	6,412,000
Land Outfall Parallel Sewer Section A Phase 1	-	-	1,008,000	3,192,000	4,200,000
Camino de Amigos Sewer Replacement	-	-	427,500	522,500	950,000
Future Projects	575,000	-	114,000	186,000	875,000
Richland Invert Replacement	-	-	610,000	-	610,000
Land Outfall Gravity Sewer Sec D Phs 1	-	-	348,000	87,000	435,000
Steel Pipeline Condition Assessment	355,000	-	-	-	355,000
Ductile Iron Pipe Condition Assessment	300,000	-	-	-	300,000
Via Vera Cruz Tank Hill Stabilization	20,000	-	-	-	20,000
Vehicles and Equipment	332,000	-	318,000	-	650,000
Debt Service - 2008 Loan	-	-	-	405,000	405,000
Debt Service - 2021 Bonds	-	574,000	-	845,000	1,419,000
Debt Service - 2015 Refunding	-	2,140,000	-	2,061,000	4,201,000
Less Total Expenditures	1,582,000	2,714,000	9,237,500	7,298,500	20,832,000
Projected June 30, 2024 Balance	35,627,990	2,592,600	45,300,510	1,360,900	***$ 84,882,000***
Less Operating Reserves	6,921,400	-	7,030,400	-	13,951,800
Projected replacement reserve/restricted funds	$ 28,706,590	$ 2,592,600	$ 38,270,110	$ 1,360,900	$ 70,930,200
Adopted replacement reserve floor	$ 11,189,700		$ 21,788,500		
Adopted replacement reserve ceiling	$ 43,446,400		$ 70,259,200		

Debt service coverage	*345%*
Debt service coverage without cap fees	*235%*
Debt service coverage without cap fees or property tax & RDA	*154%*
Days of Operating Expenses in Unrestricted Cash and Investments	*472*

See significant assumptions on page 122

RESERVE PROJECTION FOR THE YEARS ENDING JUNE 30, 2025

	110 Water 120		210 Wastewater 220		
	Replacement	Capacity	Replacement	Capacity	Total
Projected July 1, 2024 Balance	$ 35,627,990	$ 2,592,600	$ 45,300,510	$ 1,360,900	$ 84,882,000
Revenues					
Operating Transfers	296,000	-	7,788,000	-	8,084,000
Capital Facility Fees	-	2,366,000	-	4,234,000	6,600,000
Property Tax	1,337,000	-	1,068,000	-	2,405,000
RDA pass-through	1,337,000	-	1,285,000	-	2,622,000
Debt Proceeds	-	-	-	11,967,500	11,967,500
Project Reimbursements	-	-	226,000	57,000	283,000
Investment Earnings	429,000	29,000	520,000	32,000	1,010,000
Available Balance	39,026,990	4,987,600	56,187,510	17,651,400	117,853,500
Less 24/25 Expenditures					
Future Projects	2,400,000	-	1,621,500	4,828,500	8,850,000
Encina Wastewater Authority Five Year Plan	-	-	7,492,000	-	7,492,000
Land Outfall Parallel Sewer Section A Phase 1	-	-	1,440,000	4,560,000	6,000,000
Land Outfall Gravity Sewer Sec D Phs 1	-	-	4,000,000	1,000,000	5,000,000
Ductile Iron Pipe Condition Assessment	300,000	-	-	-	300,000
Via Vera Cruz Tank Hill Stabilization	195,000	-	-	-	195,000
Vehicles and Equipment	332,000	-	318,000	-	650,000
Debt Service - 2008 Loan	-	-	-	404,000	404,000
Debt Service - 2021 Bonds	-	574,000	-	845,000	1,419,000
Debt Service - 2015 Refunding	-	2,141,000	-	2,061,000	4,202,000
Less Total Expenditures	3,227,000	2,715,000	14,871,500	13,698,500	34,512,000
Projected June 30, 2025 Balance	35,799,990	2,272,600	41,316,010	3,952,900	***$ 83,341,500***
Less Operating Reserves	7,307,500	-	7,252,800	-	14,560,300
Projected replacement reserve/restricted funds	$ 28,492,490	$ 2,272,600	$ 34,063,210	$ 3,952,900	$ 68,781,200
Adopted replacement reserve floor	$ 12,032,500		$ 24,174,900		
Adopted replacement reserve ceiling	$ 44,595,300		$ 73,632,300		

Debt service coverage	*344%*
Debt service coverage without cap fees	*234%*
Debt service coverage without cap fees or property tax & RDA	*151%*
Days of Operating Expenses in Unrestricted Cash and Investments	*445*

See significant assumptions on page 122

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2026

	110 Water 120		210 Wastewater 220		
	Replacement	Capacity	Replacement	Capacity	Total
Projected July 1, 2025 Balance	$ 35,799,990	$ 2,272,600	$ 41,316,010	$ 3,952,900	$ 83,341,500
Revenues					
Operating Transfers	159,000	-	8,068,000	-	8,227,000
Capital Facility Fees	-	2,367,000	-	4,237,000	6,604,000
Property Tax	1,366,000	-	1,091,000	-	2,457,000
RDA pass-through	1,378,000	-	1,323,000	-	2,701,000
Debt Proceeds	-	-	-	8,032,500	8,032,500
Project Reimbursements	-	-	2,586,000	646,000	3,232,000
Investment Earnings	620,000	34,000	726,000	74,000	1,454,000
Available Balance	39,322,990	4,673,600	55,110,010	16,942,400	116,049,000
Less 25/26 Expenditures					
Future Projects	3,965,000	310,000	3,517,500	8,032,500	15,825,000
Encina Wastewater Authority Five Year Plan	-	-	7,180,000	-	7,180,000
Land Outfall Gravity Sewer Sec D Phs 1	-	-	2,392,000	598,000	2,990,000
Vehicles and Equipment	332,000	-	318,000	-	650,000
Debt Service - 2008 Loan	-	-	-	403,000	403,000
Debt Service - 2021 Bonds	-	574,000	-	845,000	1,419,000
Debt Service - 2025	-	-	-	450,000	450,000
Debt Service - 2015 Refunding	-	2,146,000	-	2,065,000	4,211,000
Less Total Expenditures	4,297,000	3,030,000	13,407,500	12,393,500	33,128,000
Projected June 30, 2026 Balance	35,025,990	1,643,600	41,702,510	4,548,900	***$ 82,921,000***
Less Operating Reserves	7,651,200	-	7,415,000	-	15,066,200
Projected replacement reserve/restricted funds	$ 27,374,790	$ 1,643,600	$ 34,287,510	$ 4,548,900	$ 67,854,800
Adopted replacement reserve floor	$ 12,467,200		$ 26,601,300		
Adopted replacement reserve ceiling	$ 45,716,400		$ 76,081,700		

Debt service coverage	*331%*
Debt service coverage without cap fees	*229%*
Debt service coverage without cap fees or property tax & RDA	*149%*
Days of Operating Expenses in Unrestricted Cash and Investments	*427*

See significant assumptions on page 122

LONG RANGE RESERVE PROJECTION

	2026/27	2027/28	2028/29	2029/30	2030/31
Projected Beginning Balance	$ 82,921,000	$ 90,952,000	$ 99,328,000	$ 108,451,000	$ 116,277,000
Revenues					
Operating transfers	8,392,000	8,560,000	8,731,000	8,906,000	9,084,000
Capital facility fees	6,604,000	6,604,000	6,604,000	4,953,000	4,953,000
Property tax	2,510,000	2,564,000	2,619,000	2,675,000	2,733,000
Investment earnings	1,043,000	1,142,000	1,247,000	1,348,000	1,454,000
Capital outlay	(2,480,000)	(2,530,000)	(2,581,000)	(2,633,000)	(2,686,000)
Debt service	(8,038,000)	(7,964,000)	(7,497,000)	(7,423,000)	(5,681,000)
Projected Ending Balance	$ 90,952,000	$ 99,328,000	$ 108,451,000	$ 116,277,000	$ 126,134,000
Operating reserves	15,443,000	15,829,000	16,225,000	16,631,000	17,047,000
Projected replacement reserve/restricted funds	$ 75,509,000	$ 83,499,000	$ 92,226,000	$ 99,646,000	$ 109,087,000
Adopted replacement reserve floor	$ 39,069,000	$ 41,755,000	$ 41,997,000	$ 43,141,000	$ 44,799,000
Adopted replacement reserve ceiling	$ 121,798,000	$ 124,622,000	$ 121,838,000	$ 119,170,000	$ 117,009,000

Significant Assumptions

Operating Transfers - the result of operating activity transferred from the disbursements fund during the year. Operating transfers from FY 2026 through 2031 will increase by 2%.

Rates - For budget purposes combined water and sewer rates for the average single family resident are not expected to increase January 1, 2022 pending results from the San Diego County Water Authority rate increases and are estimated to increase by approximately 3.5% to 4.0% January 1, 2023 and beyond.

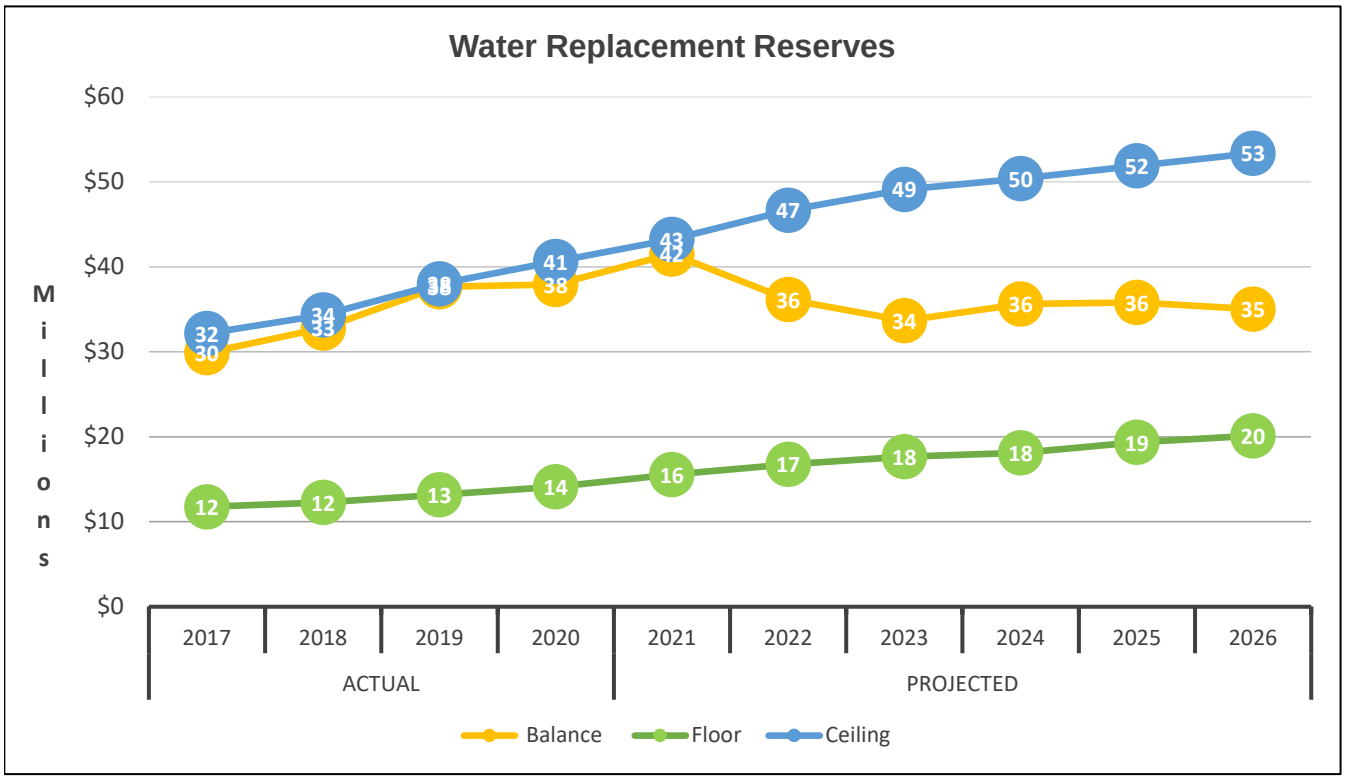
Operating Expense Assumptions - Over the next five years, cost of wholesale water commodity will increase by approximately 25% and wholesale fixed charges will increase by approximately 24%. Power, fuel, and chemical costs will increase by 4.5% per year, while most other operating costs will increase by 2% from year-to-year on average. The District will add 100 to 120 water accounts in 2021/22, and 100 to 120 in 2022/23 and every year thereafter. The District will add 100 to 120 sewer accounts in 2021/22 and approximately 100 to 120 in 2022/23 and each year thereafter.

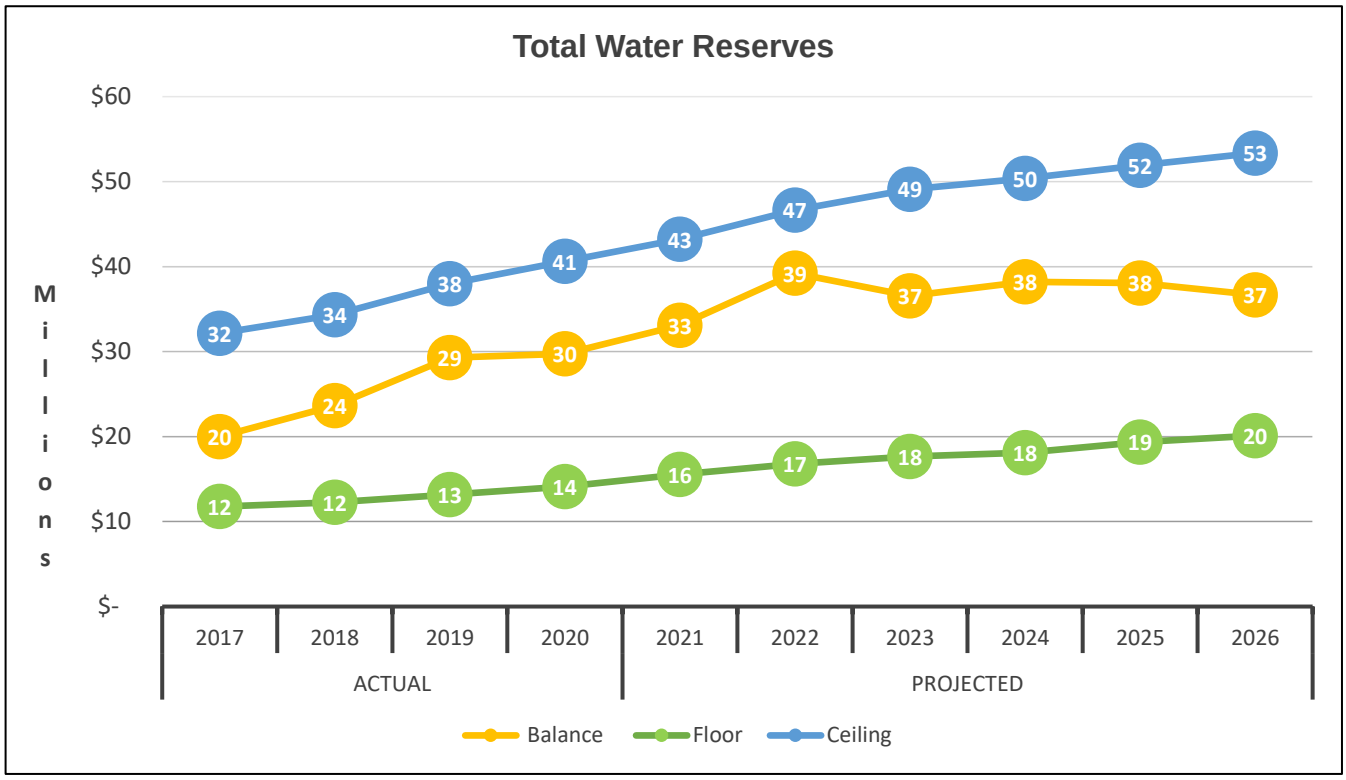
Capital Facility Fees – The District will collect capacity charges for 260 water EDUs in fiscal year 2021/22 and between 225 and 300 EDUs in each fiscal year, 2022/23 through 2025/26. The District will collect capacity charges for 360 sewer EDUs in 2021/22 and between 300 and 375 sewer EDUs from 2022/23 through 2025/26. The rate per EDU will increase by the ENR each year.

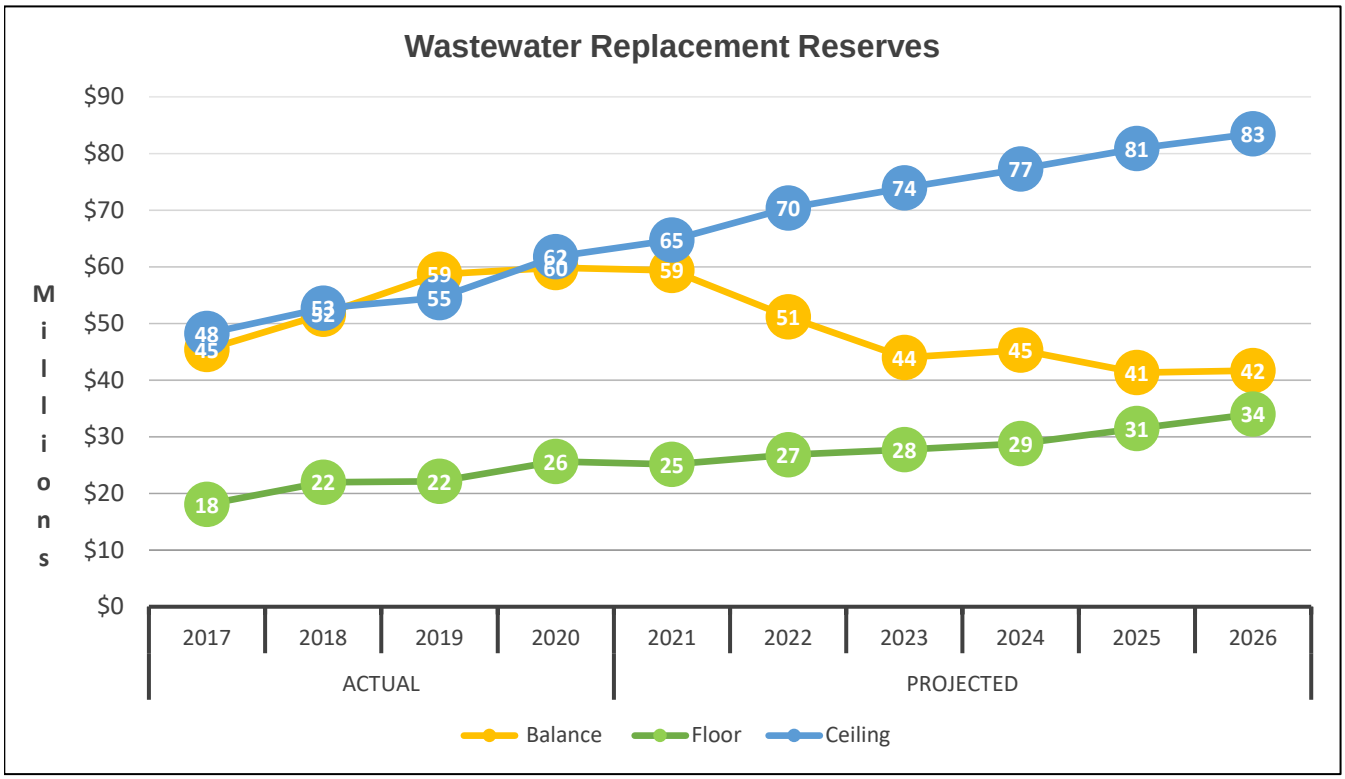
Property Tax - revenue from the 1% allocation will increase by 2.15% each year.

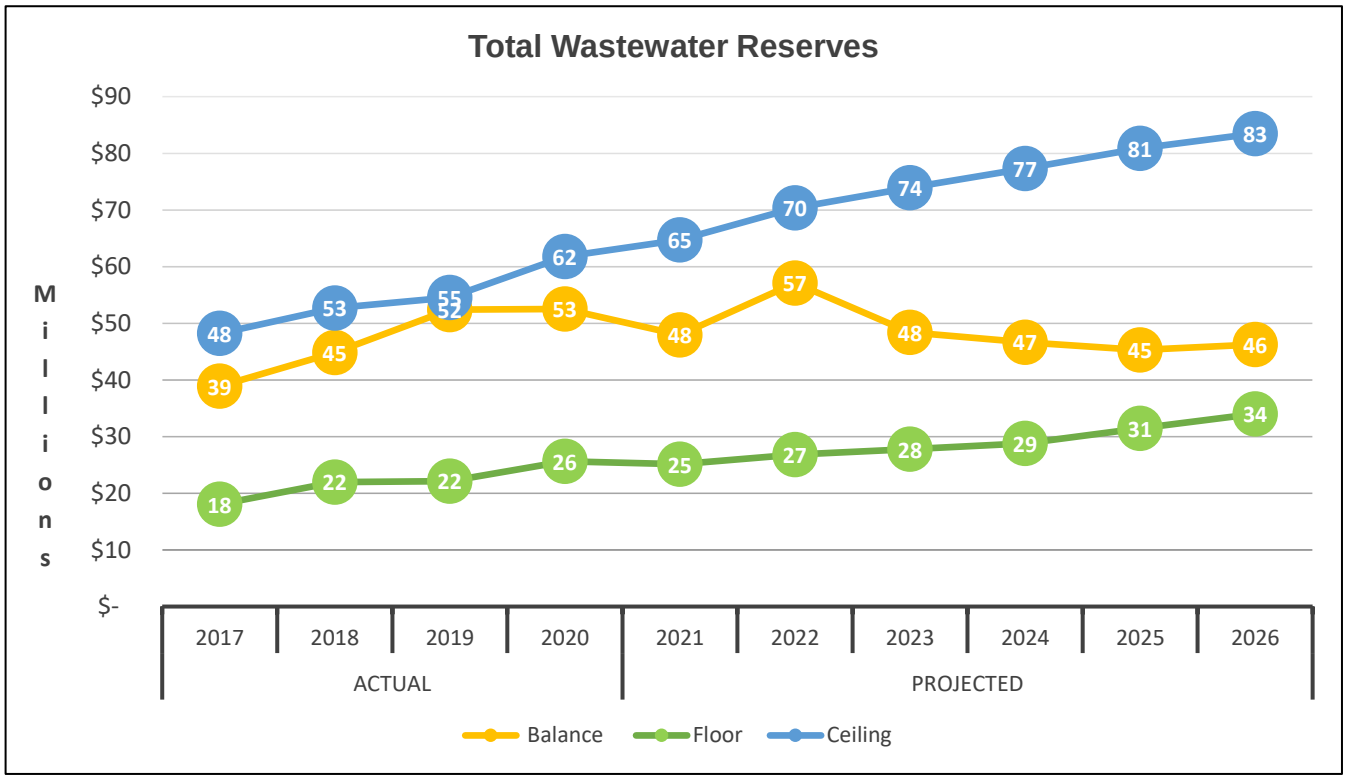
Investment Earnings - assumed at 1.2%.

Capital Outlay scheduled after Fiscal Year 2026 will be expended evenly over six years.


Water Replacement Reserves
Millions
$60
$50
$40
$30
$20
$10
$0
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
ACTUAL
PROJECTED
Balance
Floor
Ceiling


Total Water Reserves
Millions
$60
$50
$40
$30
$20
$10
$-
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
ACTUAL
PROJECTED
Balance
Floor
Ceiling

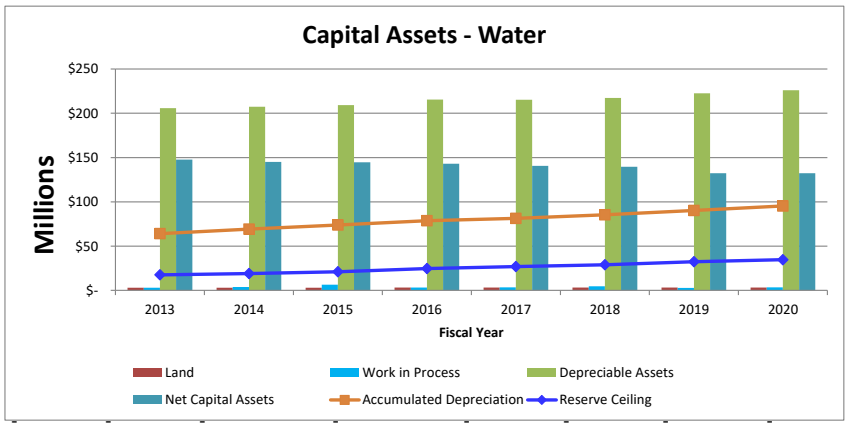

Wastewater Replacement Reserves
Millions
$90
$80
$70
$60
$50
$40
$30
$20
$10
$0
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
ACTUAL
PROJECTED
Balance
Floor
Ceiling


Total Wastewater Reserves
Millions
$90
$80
$70
$60
$50
$40
$30
$20
$10
$-
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
ACTUAL
PROJECTED
Balance
Floor
Ceiling

Vallecitos Water District
Replacement Reserve Limits - Water System
For the 2021-22 Budget year

ENR Index (as of March 2021)	11750

Year Added	Original Cost	ENR Factor	2021 Costs	Year of Replacement 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1957	$ 923,038	16.23	$ 14,980,244	483,234	483,234	483,234	483,234	483,234	483,234	-	-	-	-
1958	134,201	15.48	2,077,552	67,018	67,018	67,018	67,018	67,018	67,018	67,018	-	-	-
1963	2,067,687	13.04	26,964,842	869,834	869,834	869,834	869,834	869,834	869,834	869,834	869,834	869,834	869,834
1964	181,560	12.55	2,279,199	73,523	73,523	73,523	73,523	73,523	73,523	73,523	73,523	73,523	73,523
1965	256,377	12.10	3,102,399	100,077	100,077	100,077	100,077	100,077	100,077	100,077	100,077	100,077	100,077
1966	107,429	11.53	1,238,754	39,960	39,960	39,960	39,960	39,960	39,960	39,960	39,960	39,960	39,960
1967	122,039	10.94	1,335,157	43,070	43,070	43,070	43,070	43,070	43,070	43,070	43,070	43,070	43,070
1968	37,421	10.17	380,690	12,280	12,280	12,280	12,280	12,280	12,280	12,280	12,280	12,280	12,280
1969	39,742	9.26	367,981	11,870	11,870	11,870	11,870	11,870	11,870	11,870	11,870	11,870	11,870
1970	37,955	8.51	322,934	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417
1971	90,080	7.43	669,475	21,596	21,596	21,596	21,596	21,596	21,596	21,596	21,596	21,596	21,596
1972	77,091	6.70	516,725	16,669	16,669	16,669	16,669	16,669	16,669	16,669	16,669	16,669	16,669
1973	169,427	6.20	1,050,537	33,888	33,888	33,888	33,888	33,888	33,888	33,888	33,888	33,888	33,888
1974	141,987	5.82	825,914	26,642	26,642	26,642	26,642	26,642	26,642	26,642	26,642	26,642	26,642
1975	230,530	5.31	1,224,560	39,502	39,502	39,502	39,502	39,502	39,502	39,502	39,502	39,502	39,502
1976	296,066	4.89	1,448,886	46,738	46,738	46,738	46,738	46,738	46,738	46,738	46,738	46,738	46,738
1977	303,133	4.56	1,382,691	44,603	44,603	44,603	44,603	44,603	44,603	44,603	44,603	44,603	44,603
1978	3,353,752	4.23	14,195,456	457,918	457,918	457,918	457,918	457,918	457,918	457,918	457,918	457,918	457,918
1979	933,794	3.91	3,653,706	117,861	117,861	117,861	117,861	117,861	117,861	117,861	117,861	117,861	117,861
1980	390,894	3.63	1,418,908	45,771	45,771	45,771	45,771	45,771	45,771	45,771	45,771	45,771	45,771
1981	397,944	3.32	1,322,728	42,669	42,669	42,669	42,669	42,669	42,669	42,669	42,669	42,669	42,669
1982	1,933,811	3.07	5,940,465	191,628	191,628	191,628	191,628	191,628	191,628	191,628	191,628	191,628	191,628
1983	3,393,243	2.89	9,805,855	316,318	316,318	316,318	316,318	316,318	316,318	316,318	316,318	316,318	316,318
1984	5,435,002	2.83	15,403,105	-	496,874	496,874	496,874	496,874	496,874	496,874	496,874	496,874	496,874
1985	675,452	2.80	1,891,910	-	-	61,029	61,029	61,029	61,029	61,029	61,029	61,029	61,029
1986	611,788	2.74	1,673,692	-	-	-	53,990	53,990	53,990	53,990	53,990	53,990	53,990
1987	799,052	2.67	2,130,926	-	-	-	-	68,740	68,740	68,740	68,740	68,740	68,740
1988	8,585,267	2.60	22,322,834	-	-	-	-	-	720,091	720,091	720,091	720,091	720,091
1989	1,572,104	2.55	4,002,648	-	-	-	-	-	-	129,118	129,118	129,118	129,118
1990	2,124,484	2.48	5,275,293	-	-	-	-	-	-	-	170,171	170,171	170,171
1991	1,777,396	2.43	4,319,422	-	-	-	-	-	-	-	-	139,336	139,336
1992	8,263,508	2.36	19,477,677	-	-	-	-	-	-	-	-	-	628,312
1993	3,727,844	2.26	8,407,326	-	-	-	-	-	-	-	-	-	-
1994	2,198,280	2.17	4,776,219	-	-	-	-	-	-	-	-	-	-
1995	4,438,365	2.15	9,532,222	-	-	-	-	-	-	-	-	-	-
1996	1,872,216	2.09	3,914,331	-	-	-	-	-	-	-	-	-	-
1997	3,075,659	2.02	6,203,054	-	-	-	-	-	-	-	-	-	-
1998	4,236,142	1.98	8,407,883	-	-	-	-	-	-	-	-	-	-
1999	1,216,379	1.94	2,358,880	-	-	-	-	-	-	-	-	-	-
2000	33,016,987	1.89	62,361,292									-	-
2001	1,599,452	1.85	2,962,882									-	-
2002	2,243,174	1.80	4,031,400									-	-
2003	8,148,602	1.76	14,301,900									-	-
2004	4,803,706	1.65	7,933,158									-	-
2005	4,945,039	1.58	7,803,433									-	-
2006	6,296,020	1.52	9,544,347									-	-
2007	9,123,102	1.48	13,456,747									-	-
2008	7,200,501	1.41	10,181,214									-	-
2009	32,403,360	1.37	44,427,011									-	-
2010	4,510,327	1.33	6,020,943									-	-
2011	2,053,547	1.30	2,660,328									-	-
2012	1,249,525	1.26	1,577,344									-	-
2013	3,574,225	1.24	4,440,853									-	-
2014	1,464,242	1.20	1,754,522									-	-
2015	1,950,156	1.17	2,285,719									-	-
2016	6,131,372	1.17	7,186,396									-	-
2017	-	1.14	-	-	-	-	-	-	-	-	-	-	-
2018	3,142,674	1.05	3,315,057	-	-	-	-	-	-	-	-	-	-
2019	4,082,656	1.05	4,272,462	-	-	-	-	-	-	-	-	-	-
2020	3,806,843	1.03	3,924,753	-	-	-	-	-	-	-	-	-	-
	$ 207,973,649		$ 431,044,841	3,113,086	3,609,960	3,670,989	3,724,980	3,793,719	4,513,810	4,159,695	4,262,847	4,402,184	5,030,496



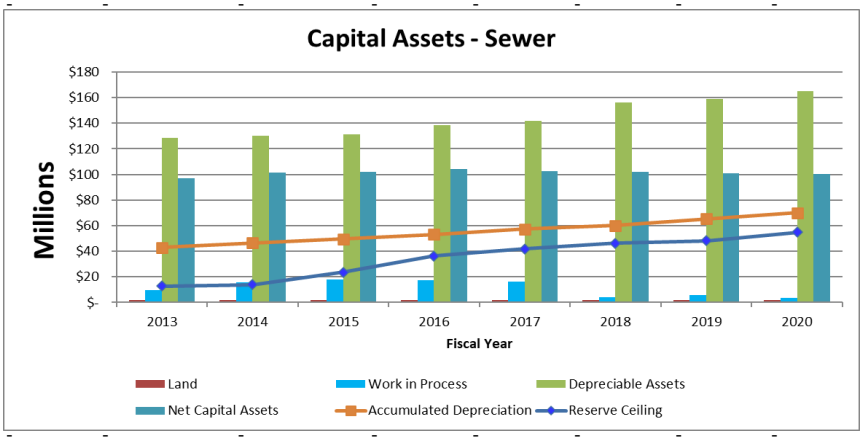
Three-Year Minimum Reserve Balance <-------$10,394,035------->

Ten-Year Maximum Reserve Balance <---------- $40,281,766 ---------->

Vallecitos Water District
Replacement Reserve Limits - Wastewater System
For the 2021-22 Budget year

ENR Index (as of March 2021)	11750

Year Added	Original Cost	ENR Factor	2021 Costs	Year of Replacement 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1964	$ 1,421,340	12.55	$ 17,842,676	-	-	-	-	-	-	-	-	-	-
1965	394,116	12.10	4,769,169	-	-	-	-	-	-	-	-	-	-
1966	110,183	11.53	1,270,511	-	-	-	-	-	-	-	-	-	-
1967	41,816	10.94	457,484	-	-	-	-	-	-	-	-	-	-
1968	24,352	10.17	247,737	-	-	-	-	-	-	-	-	-	-
1969	28,784	9.26	266,519	-	-	-	-	-	-	-	-	-	-
1970	1,617,466	8.51	13,761,930	-	-	-	-	-	-	-	-	-	-
1971	53,601	7.43	398,363	-	-	-	-	-	-	-	-	-	-
1972	78,755	6.70	527,879	32,992	-	-	-	-	-	-	-	-	-
1973	149,279	6.20	925,609	57,851	57,851	-	-	-	-	-	-	-	-
1974	409,501	5.82	2,381,998	148,875	148,875	148,875	-	-	-	-	-	-	-
1975	189,378	5.31	1,005,964	62,873	62,873	62,873	62,873	-	-	-	-	-	-
1976	151,559	4.89	741,699	46,356	46,356	46,356	46,356	46,356	-	-	-	-	-
1977	394,775	4.56	1,800,701	112,544	112,544	112,544	112,544	112,544	112,544	-	-	-	-
1978	930,683	4.23	3,939,310	246,207	246,207	246,207	246,207	246,207	246,207	246,207	-	-	-
1979	697,184	3.91	2,727,909	170,494	170,494	170,494	170,494	170,494	170,494	170,494	170,494	-	-
1980	139,384	3.63	505,951	31,622	31,622	31,622	31,622	31,622	31,622	31,622	31,622	31,622	-
1981	192,586	3.32	640,137	40,009	40,009	40,009	40,009	40,009	40,009	40,009	40,009	40,009	40,009
1982	4,772,279	3.07	14,659,942	916,246	916,246	916,246	916,246	916,246	916,246	916,246	916,246	916,246	916,246
1985	5,149,309	2.80	14,422,975	901,436	901,436	901,436	901,436	901,436	901,436	901,436	901,436	901,436	901,436
1986	19,355,791	2.74	52,952,397	3,309,525	3,309,525	3,309,525	3,309,525	3,309,525	3,309,525	3,309,525	3,309,525	3,309,525	########
1987	381,136	2.67	1,016,420	63,526	63,526	63,526	63,526	63,526	63,526	63,526	63,526	63,526	63,526
1988	1,232,431	2.60	3,204,484	200,280	200,280	200,280	200,280	200,280	200,280	200,280	200,280	200,280	200,280
1989	2,001,761	2.55	5,096,575	-	318,536	318,536	318,536	318,536	318,536	318,536	318,536	318,536	318,536
1990	3,031,169	2.48	7,526,677	-	-	470,417	470,417	470,417	470,417	470,417	470,417	470,417	470,417
1991	1,864,618	2.43	4,531,388	-	-	-	283,212	283,212	283,212	283,212	283,212	283,212	283,212
1992	3,162,421	2.36	7,454,052	-	-	-	-	465,878	465,878	465,878	465,878	465,878	465,878
1993	13,446,724	2.26	30,326,105	-	-	-	-	-	1,895,382	1,895,382	1,895,382	1,895,382	########
1994	2,113,222	2.17	4,591,412	-	-	-	-	-	-	286,963	286,963	286,963	286,963
1995	3,276,618	2.15	7,037,153	-	-	-	-	-	-	-	439,822	439,822	439,822
1996	1,199,768	2.09	2,508,412	-	-	-	-	-	-	-	-	156,776	156,776
1997	988,964	2.02	1,994,564	-	-	-	-	-	-	-	-	-	124,660
1998	4,670,391	1.98	9,269,779	-	-	-	-	-	-	-	-	-	-
1999	1,047,495	1.94	2,031,369									-	-
2000	3,954,391	1.89	7,468,911									-	-
2001	2,705,995	1.85	5,012,682									-	-
2002	109,018	1.80	195,926									-	-
2003	9,260,829	1.76	16,254,009									-	-
2004	3,031,642	1.65	5,006,654									-	-
2005	2,984,298	1.58	4,709,320									-	-
2006	7,245,244	1.52	10,983,308									-	-
2007	(10,129,834)	1.48	(14,941,696)									-	-
2008	9,022,922	1.41	12,758,043									-	-
2009	37,476,922	1.37	51,383,178									-	-
2010	3,860,825	1.33	5,153,907									-	-
2011	1,487,477	1.30	1,926,996									-	-
2012	3,612,924	1.26	4,560,793									-	-
2013	(1,398,127)	1.23	(1,720,749)									-	-
2014	2,007,273	1.20	2,405,207									-	-
2015	(1,576,814)	1.17	(1,848,136)									-	-
2016	792,086	1.17	928,380	-	-	-	-	-	-	-	-	-	-
2017	1,984,324	1.14	2,268,516	-	-	-	-	-	-	-	-	-	-
2018	1,984,324	1.05	2,093,169	-	-	-	-	-	-	-	-	-	-
2019	1,422,607	1.05	1,488,745	-	-	-	-	-	-	-	-	-	-
2020	6,155,403	1.03	6,346,055	-	-	-	-	-	-	-	-	-	-
	$ 160,712,568		$345,268,465	6,340,836	6,626,379	7,038,946	7,173,283	7,576,289	9,425,314	9,599,733	9,793,349	9,779,630	9,872,668



Three-Year Minimum Reserve Balance <------$20,006,162------->

Eight-Year Maximum Reserve Balance <---------- $63,574,129 ---------->