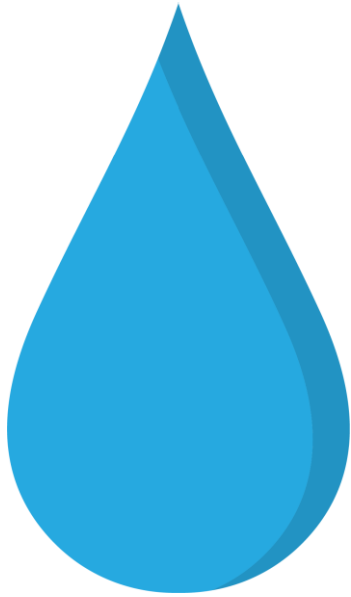


Fiscal Year
2020-2021

BUDGET



Vallecitos Water District
San Marcos, California

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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.



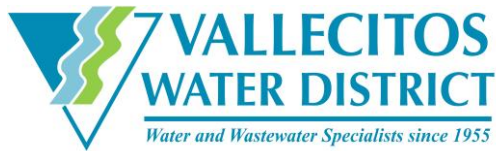
Clockwise: Hal Martin, Betty Evans (center), Craig Elitharp, Mike Sannella and James Hernandez

Board of Directors

Betty Evans, President
Mike Sannella, Vice President
Craig Elitharp
Hal Martin
James Hernandez

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

Date: June 3, 2020
To: Honorable Board of Directors
Regarding: Fiscal Year 2020/21 Budget

Enclosed is the recommended **Budget** for Fiscal Year 2020/21 (FY 20/21). The FY 20/21 budget totals \$90.6 million compared to \$98.1 million in FY 19/20. The FY 20/21 Budget is comprised of \$56.0 million of operational expenses (a 4.3% decrease from the \$58.6 million in 2019/20 operating budget), \$25.2 million for capital items and projects (\$26.1 million in 2019/20), debt service of \$5.4 million (\$5.4 million in 2019/20) and CalPERS Unfunded Accrued Liability (UAL) funding of \$4.0 million (\$8.1 in 2019/20). This budget includes a ten-year plan for capital items and projects of \$144.9 million (\$140.2 million in 2019/20). Inclusive of the ten-year capital plan the budget totals \$211.2 million compared to \$212.9 million in 2019/20.

The operational decrease of \$2.6 million primarily is attributable to a \$2.3 million decrease in water purchases due to decreased demand as a result of COVID impacts. The District estimates a 35% reduction in commercial demand as a result of businesses being closed offset by a 5% increase in residential demand due to customers being home and using more water in FY 20/21. The remaining \$0.3 million is mainly from decreased costs budgeted as a result of operational efficiencies at Meadowlark Plant, Meadowlark Lift Station, and Mahr Reservoir. In addition, \$6.3 million from operations is being transferred to reserves for capital replacement.

The revenue estimates included in this budget reflect rate increases for Water, Sewer and Ready-to-Serve 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, assess 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 without incurring any new debt in FY 2020/21.

FINANCIAL HIGHLIGHTS

The following narratives are financial highlights and comparisons of this budget, FY 2020/21, and last budget, FY 2019/20.

Board of Directors

June 3, 2020

Page Two

Water Operations (pages 3-14)

Water purchases are projected to total 13,445 acre-feet with sales of 12,400 acre-feet for 2020/21. The water operating budget decreased by \$1.6 million from last year's budget, or 3.6%.

Wastewater Operations (pages 15-24)

Wastewater operating costs decreased \$0.9 million, or 6.6%, over last year's budget, mainly due to operational efficiencies at the Meadowlark plant and the District's portion of Encina's pre-funding of their UAL being moved from operating expenses to being funded from reserves. Reclaimed water costs are recovered by contractual sales to the Carlsbad Municipal Water District and Olivenhain Municipal Water District.

Personnel (pages 25-31)

Fiscal year 2020/21 includes no new positions. The Assistant General Manager position is budgeted as vacant again this year. Salaries and benefits for 2020/21 decreased from the last budget year by \$321 thousand or 2.0% mainly as a result of a \$280 thousand decrease in the cost of Public Employment Retirement due to the District paying down the Unfunded Accrued Liability. Management will continue to scrutinize the need for all positions and only fill positions if absolutely necessary.

Capital Budget (pages 33-103)

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 101, followed by requests for easements, vehicles and equipment of \$881 thousand. Of the ten-year \$144.9 million capital budget, \$67.1 million are new requests and \$31.2 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 increase of \$4.8 million. The amount of capital funding for FY 2020/21 is \$24.3 million.

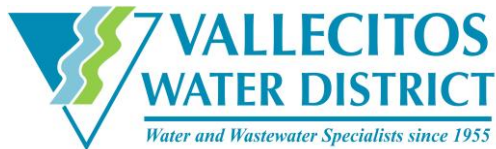
Reserve Budget and Projection (pages 104-111)

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 105 displays the 2020/21 reserve budget for consideration. Pages 106 through 110 display detailed reserve projections for four subsequent years followed by a summary projection for the five years thereafter.

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 Pruijm, General Manager



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

Date: June 3, 2020
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 a maximum of three years with half of the amount paid in Fiscal Year 2020. On November 20, 2019, in accordance with policy, the District paid \$8.1 million of the CalPERS Unfunded Accrued Liability. Based on the most recent actuarial valuation report, dated June 30, 2018, the District's pension liability was approximately \$19.8 million. After the \$8.1 million payment the revised June 30, 2020 Total Unfunded Liability per CalPERS was \$11.3 million.

At the board meeting on May 20, 2020 staff obtained clear policy direction on how to manage the pension liability over the next couple years. Staff has been instructed to pay \$4.0 million of the pension liability in Fiscal Year 2021 with the remaining amount to be paid in Fiscal Year 2022 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 \$11.3 million pension liability over the next two years at the discretion of the Board with \$4.0 being paid in Fiscal Year 2021. For the five-year plan included in the Fiscal Year 2021 Recommended Budget it is assumed the \$11.3 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 2021.

	Two Years to 100% Funded		
	FY 2021	FY 2022	Total
Funding Policy			
Additional Discretionary Payment (ADP)	\$ 4,027,000	\$ 7,273,000	\$ 11,300,000
Required Payment on UAL (1)	850,396	1,557,000	2,407,396
Unfunded Accrued Liability Payment	<u>\$ 4,877,396</u>	<u>\$ 8,830,000</u>	<u>\$ 13,707,396</u>
Approximate Interest Savings	\$ 9,829,000		
<i>(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</i>			

Respectfully submitted,

Glenn Pruum, General Manager

VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

TABLE OF CONTENTS

<u>Section</u>	<u>Page#</u>
Budgetary Considerations	1
Chart - Overall Budget	2
Operations	3
Water Statistics Graphs	4
Function Definitions - Water Operations	6
Graph - Water Operating Budget	10
Water Operations Budget	11
Water Operations Budget Expense Detail	12
Wastewater Statistics Graphs	15
Function Definitions - Wastewater Operations	18
Chart - Wastewater Operating Budget	20
Wastewater Operations Budget	21
Wastewater Operations Budget Expense Detail	22
Salary and Benefit Recap	25
Organization Chart	26
Personnel Budget	31
Public Awareness & Conservation Programs	32
Capital	33
Master Projects List	34
Capital Improvement Program Detail	36
Vehicles and Equipment Schedule	102
Debt Service	103
Long-Range Planning	104
Reserve Budget	105
Reserve Projections	106
Replacement Reserve Limits	111

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VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

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.

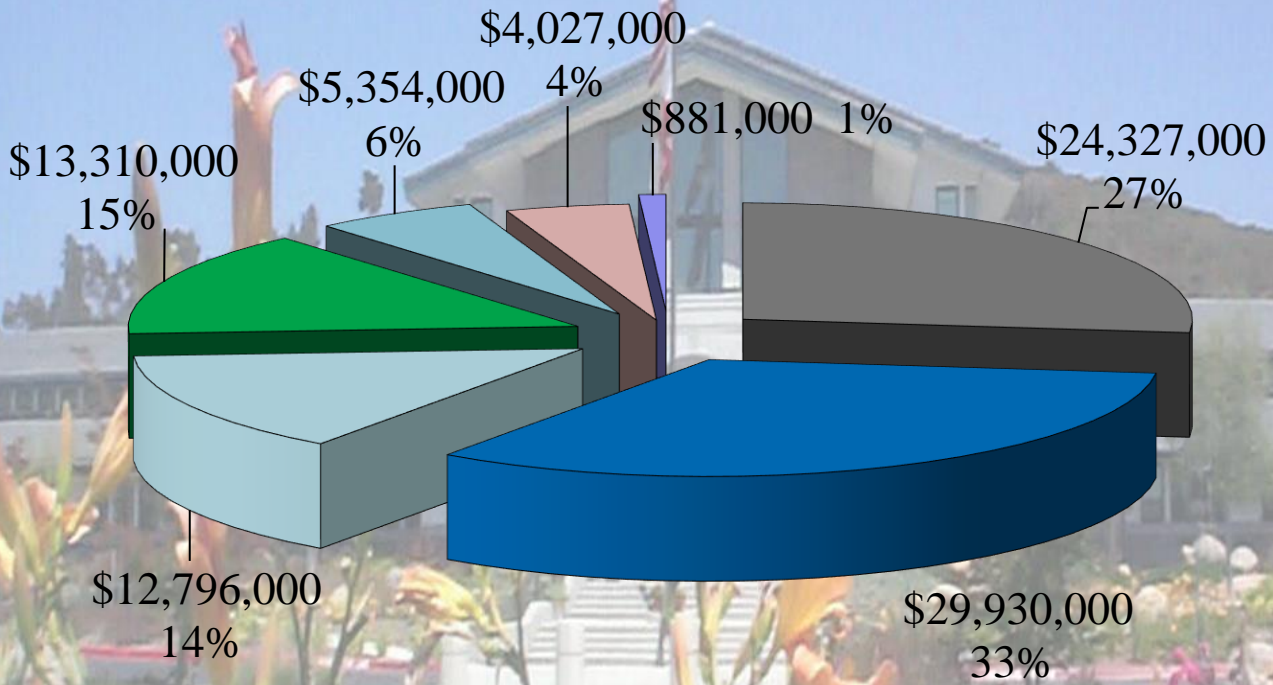
Operations vs. Capital Budget

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 2020-2021 BUDGET

\$90,625,000



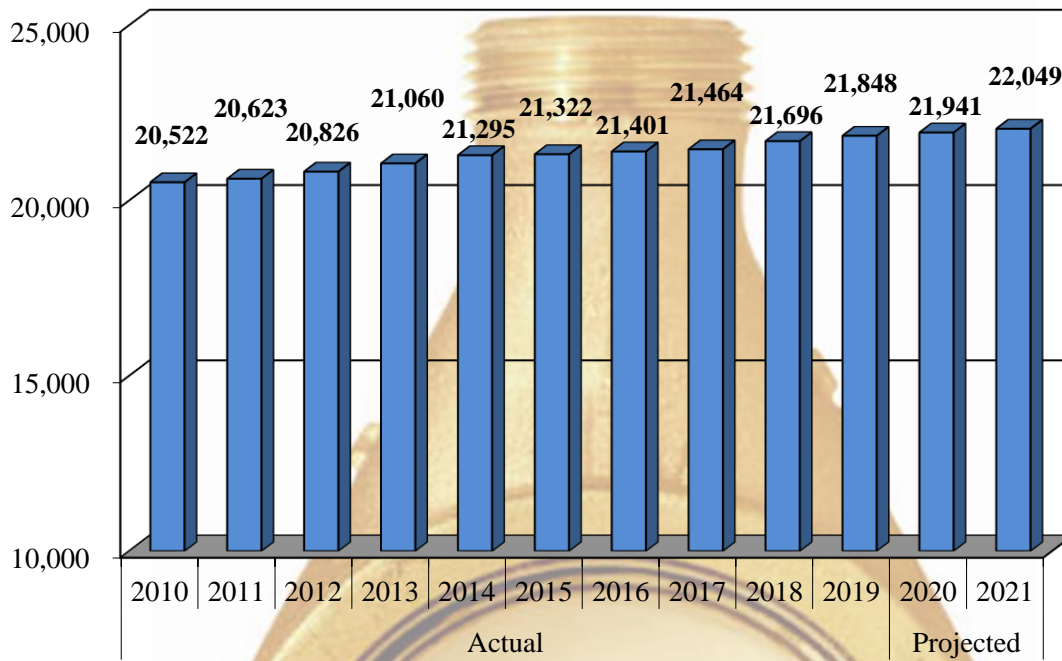
- | | |
|-----------------------------------|-------------------------|
| ■ Capital | ■ Water Purchases |
| ■ Water Operations | ■ Wastewater Operations |
| ■ Debt Service | ■ Fund PERS UAL |
| ■ Easements, Vehicles & Equipment | |

2020-21 OPERATING BUDGET
WATER



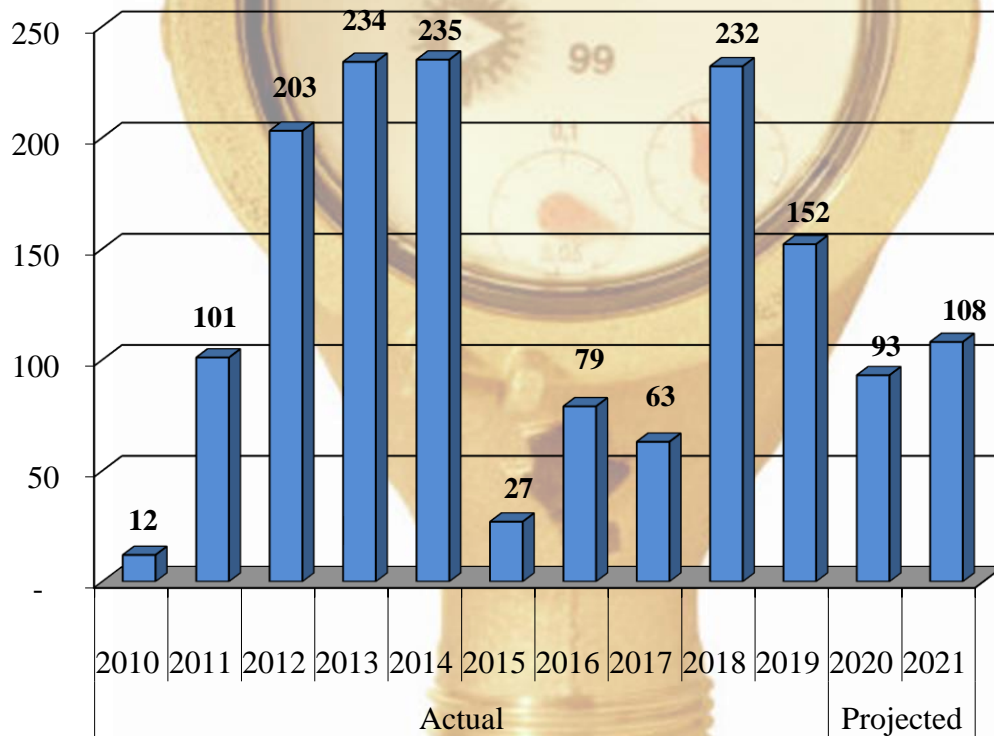
Double Peak Tank

METERS IN SERVICE



Fiscal Year End June 30

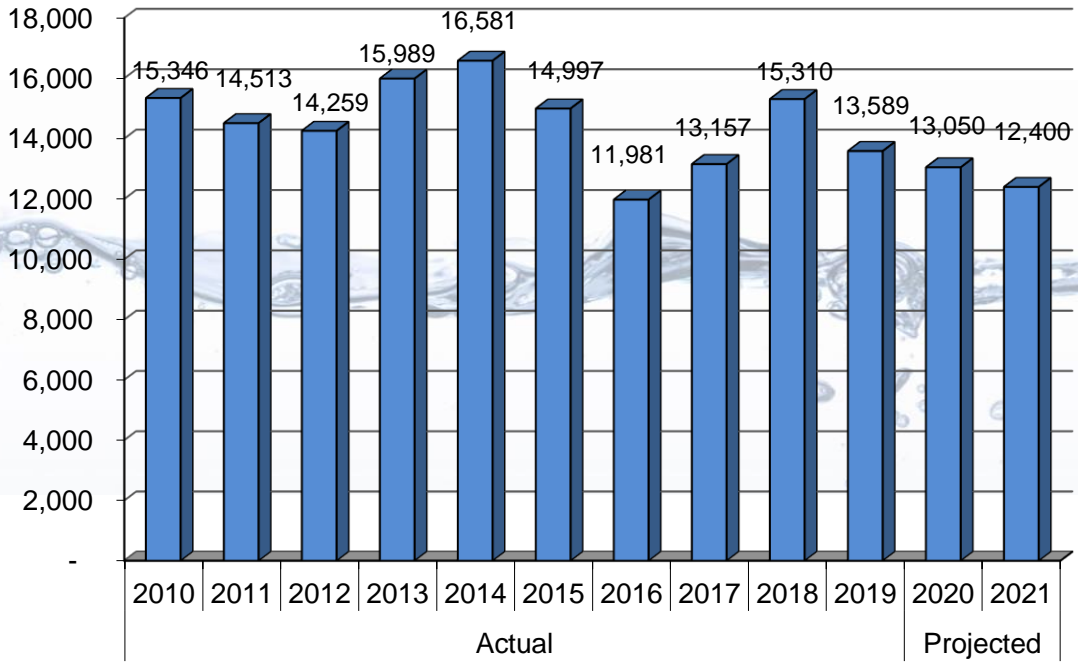
METER ADDITIONS



Fiscal Year End June 30

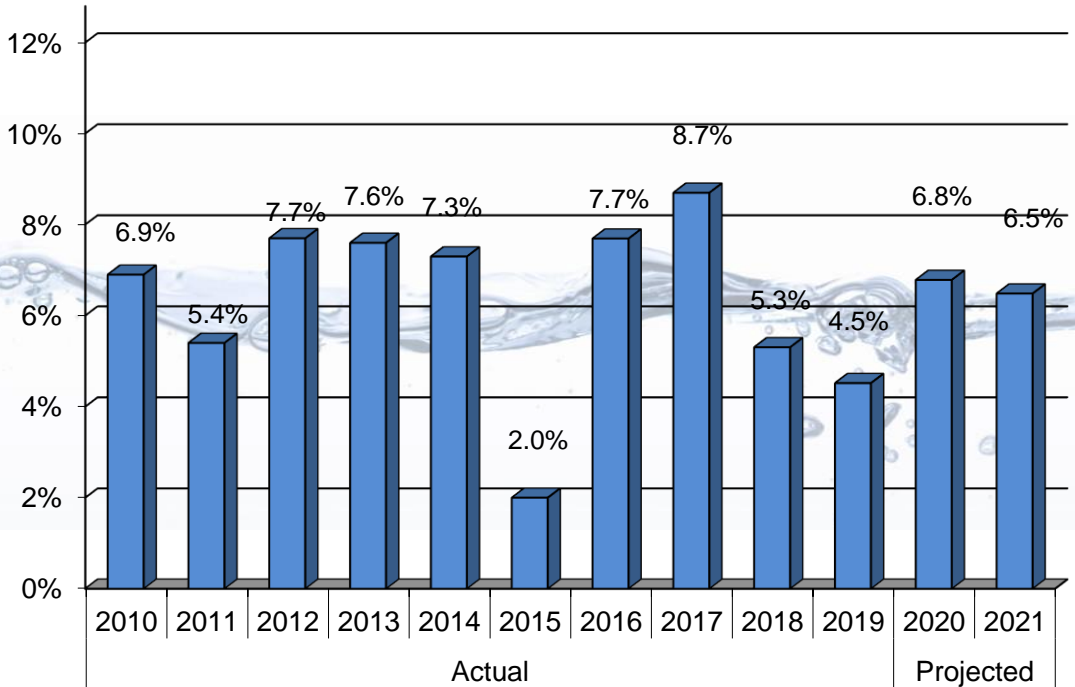
VALLECITOS WATER DISTRICT

WATER SALES IN ACRE FEET



Year End June 30

UNBILLED WATER



Year End June 30

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

VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

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 329 miles of pipes. Includes 26 pressure reducing stations, 3 (internal) flow control facilities, all air releases/blow-offs, fire hydrants (buried portion), cross-tie valves with other districts, and valve exercising.

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

VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

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.

VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

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.

VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

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.

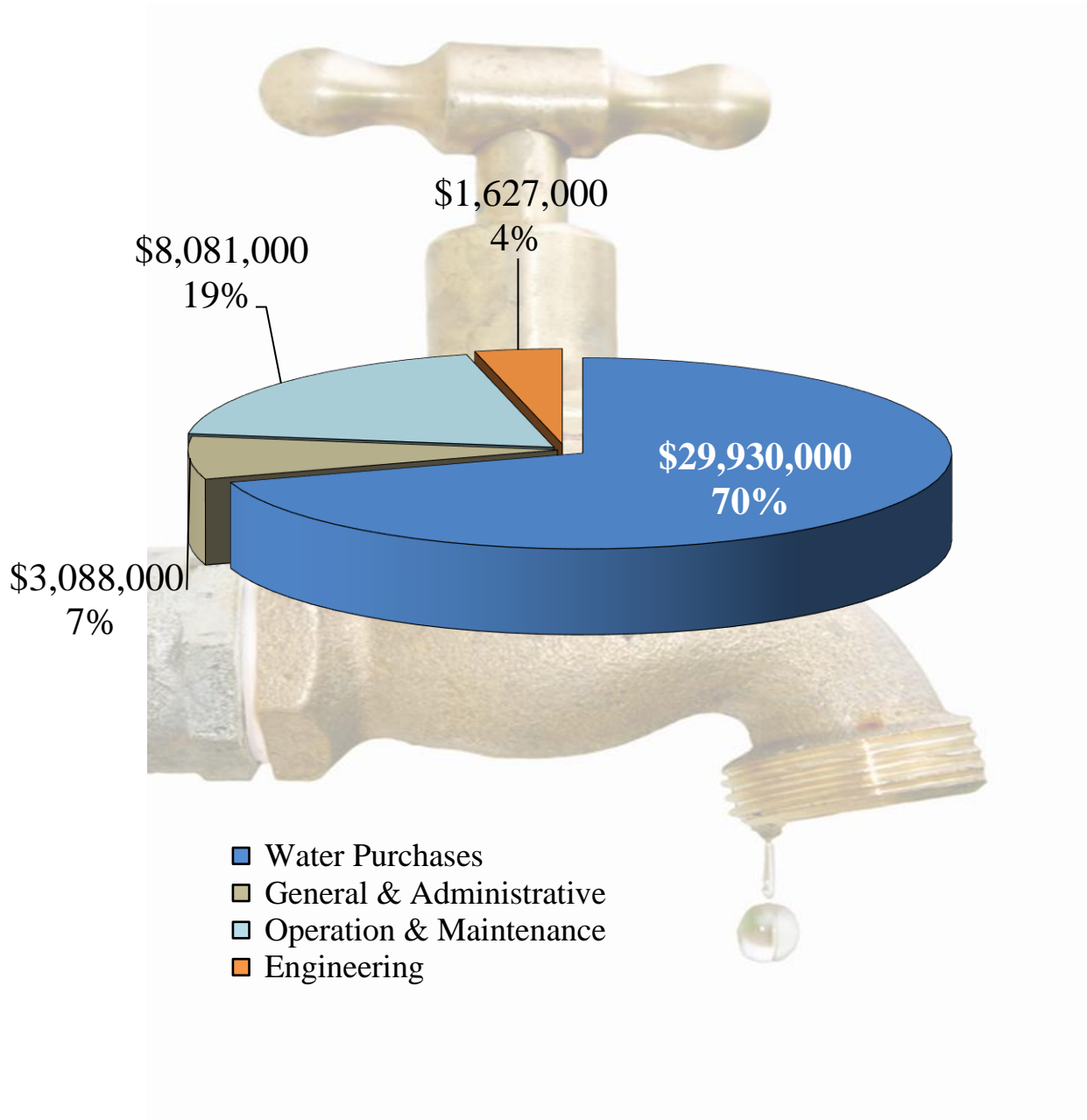
Director Expenses include all costs incurred by Directors, such as travel reimbursement and conference fees.

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.

2020-21 WATER OPERATING EXPENSE BUDGET

\$42,726,000



VALLECITOS WATER DISTRICT

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

		Actual FY 18-19	Budget FY 19-20	Projected FY 19-20	Budget FY 20-21	Estimated FY 21-22
OPERATING REVENUES						
Water Sales	4001	\$27,339,732	\$ 31,850,000	\$ 27,330,000	\$ 26,810,000	\$ 28,750,000
Ready to Serve	4003	13,931,114	13,800,000	14,200,000	14,450,000	15,010,000
Pumping Charges	4002	302,676	340,000	415,000	415,000	425,000
Interest	4401	1,234	5,000	3,840	5,000	5,000
Other	Various	964,118	695,000	710,000	436,000	787,000
Total Revenue		<u>42,538,874</u>	<u>46,690,000</u>	<u>42,658,840</u>	<u>42,116,000</u>	<u>44,977,000</u>
OPERATING EXPENSES						
Water Purchases	1010	28,535,460	32,200,000	28,000,000	29,930,000	31,565,000
Pumping	2010	866,870	911,000	910,000	1,039,000	1,047,000
Water Quality	2020	185,771	227,000	152,000	210,000	225,000
Water Treatment	2030	445,642	485,000	526,000	467,000	497,000
Tanks & Reservoirs	2040	400,702	465,000	429,000	456,000	472,000
Transmission & Dist.	2050	2,464,619	1,840,000	1,959,000	1,877,000	2,041,000
Services	2060	54,568	82,000	82,000	88,000	94,000
Meters	2070	664,215	766,000	756,000	733,000	723,000
Backflow Prevention	2080	62,246	65,000	84,000	65,000	66,000
Customer Accounts	4010	683,425	672,000	667,000	1,033,000	902,000
Equipment & Vehicles	4210	246,081	328,000	238,000	318,000	355,000
Buildings & Grounds	4110	380,147	392,000	383,000	423,000	417,000
Engineering	5010	1,906,787	1,614,000	1,784,000	1,627,000	1,759,000
Safety & Reg. Affairs	5210	272,918	246,000	217,000	292,000	306,000
Information Technology	6230	868,644	1,027,000	910,000	1,080,000	1,115,000
General & Admin.	6xxx	2,971,644	2,986,000	3,201,000	3,088,000	3,375,000
Total Expense		<u>41,009,739</u>	<u>44,306,000</u>	<u>40,298,000</u>	<u>42,726,000</u>	<u>44,959,000</u>
OPERATING INCOME		1,529,135	2,384,000	2,360,840	(610,000)	18,000
LESS TRANSFERS TO/(FROM)						
REPLACEMENT RESERVE		<u>1,529,135</u>	<u>2,384,000</u>	<u>2,360,840</u>	<u>(610,000)</u>	<u>18,000</u>
NET INCOME		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

VALLECITOS WATER DISTRICT

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

		<u>Actual</u>	<u>Budget</u>	<u>Projected</u>	<u>Budget</u>	<u>Estimated</u>
		<u>FY 18-19</u>	<u>FY 19-20</u>	<u>FY 19-20</u>	<u>FY 20-21</u>	<u>FY 21-22</u>
WATER PURCHASES	5001	\$28,535,460	\$ 32,200,000	\$ 32,200,000	\$ 29,930,000	\$ 31,565,000
PUMPING						
Cost of Labor	2010xxx.51xx	107,625	119,000	86,000	107,000	113,000
Materials & Supplies	" .53xx	54,258	29,000	25,000	33,000	36,000
Outside Repair/Service	" .54xx	29,523	75,000	70,000	149,000	78,000
Power	" .5306	675,463	688,000	729,000	750,000	820,000
Total Pumping		<u>866,870</u>	<u>911,000</u>	<u>910,000</u>	<u>1,039,000</u>	<u>1,047,000</u>
WATER QUALITY						
Cost of Labor	2020000.51xx	58,476	58,000	46,000	55,000	58,000
Materials & Supplies	" .53xx	76,862	49,000	41,000	45,000	50,000
Outside Repair/Service	" .54xx	50,433	120,000	65,000	110,000	117,000
Total Water Treatment		<u>185,771</u>	<u>227,000</u>	<u>152,000</u>	<u>210,000</u>	<u>225,000</u>
WATER TREATMENT						
Cost of Labor	2030000.51xx	382,642	411,000	438,000	385,000	405,000
Materials & Supplies	" .53xx	25,000	42,000	55,000	50,000	57,000
Outside Repair/Service	" .54xx	27,000	20,000	22,000	20,000	22,000
Power	" .5306	11,000	12,000	11,000	12,000	13,000
Total Water Treatment		<u>445,642</u>	<u>485,000</u>	<u>526,000</u>	<u>467,000</u>	<u>497,000</u>
TANKS & RESERVOIRS						
Cost of Labor	2040xxx.51xx	284,411	244,000	234,000	246,000	259,000
Materials & Supplies	" .53xx	36,248	26,000	19,000	39,000	35,000
Outside Repair/Service	" .54xx	74,880	189,000	170,000	164,000	170,000
Power	" .5306	5,163	6,000	6,000	7,000	8,000
Total Tanks & Reservoirs		<u>400,702</u>	<u>465,000</u>	<u>429,000</u>	<u>456,000</u>	<u>472,000</u>
TRANSMISSION & DISTRIBUTION						
Cost of Labor	2050xxx.51xx	1,255,499	1,185,000	1,331,000	1,234,000	1,291,000
Materials & Supplies	" .53xx	236,912	265,000	169,000	315,000	330,000
Outside Repair	" .54xx	959,849	377,000	446,000	315,000	405,000
Power	" .5306	12,360	13,000	13,000	13,000	15,000
Total Trans. & Dist.		<u>2,464,619</u>	<u>1,840,000</u>	<u>1,959,000</u>	<u>1,877,000</u>	<u>2,041,000</u>
SERVICES						
Cost of Labor	2060xxx.51xx	31,731	45,000	49,000	51,000	54,000
Materials & Supplies	" .53xx	21,907	12,000	12,000	12,000	12,000
Outside Repair	" .54xx	930	25,000	21,000	25,000	28,000
Total Services		<u>54,568</u>	<u>82,000</u>	<u>82,000</u>	<u>88,000</u>	<u>94,000</u>

VALLECITOS WATER DISTRICT

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

		<u>Actual</u>	<u>Budget</u>	<u>Projected</u>	<u>Budget</u>	<u>Estimated</u>
		<u>FY 18-19</u>	<u>FY 19-20</u>	<u>FY 19-20</u>	<u>FY 20-21</u>	<u>FY 21-22</u>
METERS						
Cost of Labor	2070xxx.51xx	\$ 642,663	\$ 663,000	\$ 682,000	\$ 656,000	\$ 688,000
Materials & Supplies	" .53xx	18,172	95,000	71,000	69,000	29,000
Outside Service/Repair	" .54xx	3,380	8,000	3,000	8,000	6,000
Total Meters		<u>664,215</u>	<u>766,000</u>	<u>756,000</u>	<u>733,000</u>	<u>723,000</u>
BACKFLOW PREVENTION						
Cost of Labor	2080000.51xx	14,277	21,000	35,000	21,000	21,000
Materials & Supplies	" .53xx	1,000	1,000	1,000	1,000	2,000
Outside Service	" .54xx	46,969	43,000	48,000	43,000	43,000
Total Backflow		<u>62,246</u>	<u>65,000</u>	<u>84,000</u>	<u>65,000</u>	<u>66,000</u>
CUSTOMER ACCOUNTS						
Cost of Labor	4010000.51xx	484,655	496,000	520,000	539,000	576,000
Materials & Supplies	" .53xx	100,415	113,000	78,000	97,000	99,000
Outside Service/Repair	" .54xx	76,546	23,000	46,000	40,000	47,000
Uncollectible Accts.	" .5703	21,809	40,000	23,000	357,000	180,000
Total Cust. Accts.		<u>683,425</u>	<u>672,000</u>	<u>667,000</u>	<u>1,033,000</u>	<u>902,000</u>
EQUIPMENT & VEHICLES						
Cost of Labor	4210000.51xx	80,147	129,000	83,000	142,000	153,000
Materials & Supplies	" .53xx	46,426	65,000	37,000	61,000	63,000
Fuel	" .5307	111,374	94,000	104,000	75,000	113,000
Outside Repair	" .54xx	8,134	40,000	14,000	40,000	26,000
Total Equip. & Vehicles		<u>246,081</u>	<u>328,000</u>	<u>238,000</u>	<u>318,000</u>	<u>355,000</u>
BUILDINGS & GROUNDS						
Cost of Labor	4110000.51xx	161,565	163,000	182,000	150,000	137,000
Materials & Supplies	" .53xx	26,755	66,000	48,000	76,000	78,000
Outside Services	" .54xx	87,137	112,000	81,000	122,000	125,000
Power	" .5306	104,689	51,000	72,000	75,000	77,000
Total Bldg. & Grnd.		<u>380,147</u>	<u>392,000</u>	<u>383,000</u>	<u>423,000</u>	<u>417,000</u>
ENGINEERING						
Cost of Labor	5010000.51xx	1,710,962	1,518,000	1,648,000	1,469,000	1,596,000
Materials & Supplies	" .53xx	5,024	12,000	5,000	21,000	23,000
Outside Services	" .54xx	190,801	84,000	131,000	137,000	140,000
Total Engineering		<u>1,906,787</u>	<u>1,614,000</u>	<u>1,784,000</u>	<u>1,627,000</u>	<u>1,759,000</u>

VALLECITOS WATER DISTRICT

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

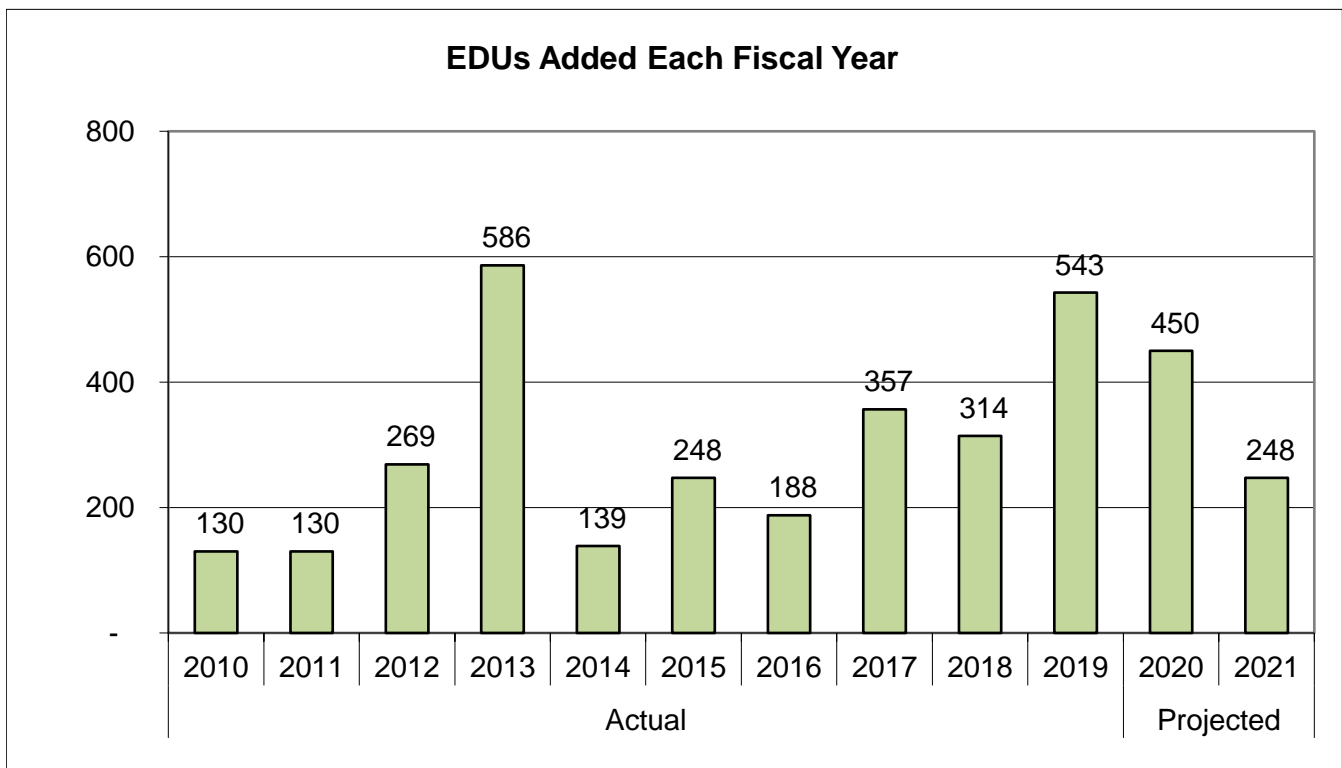
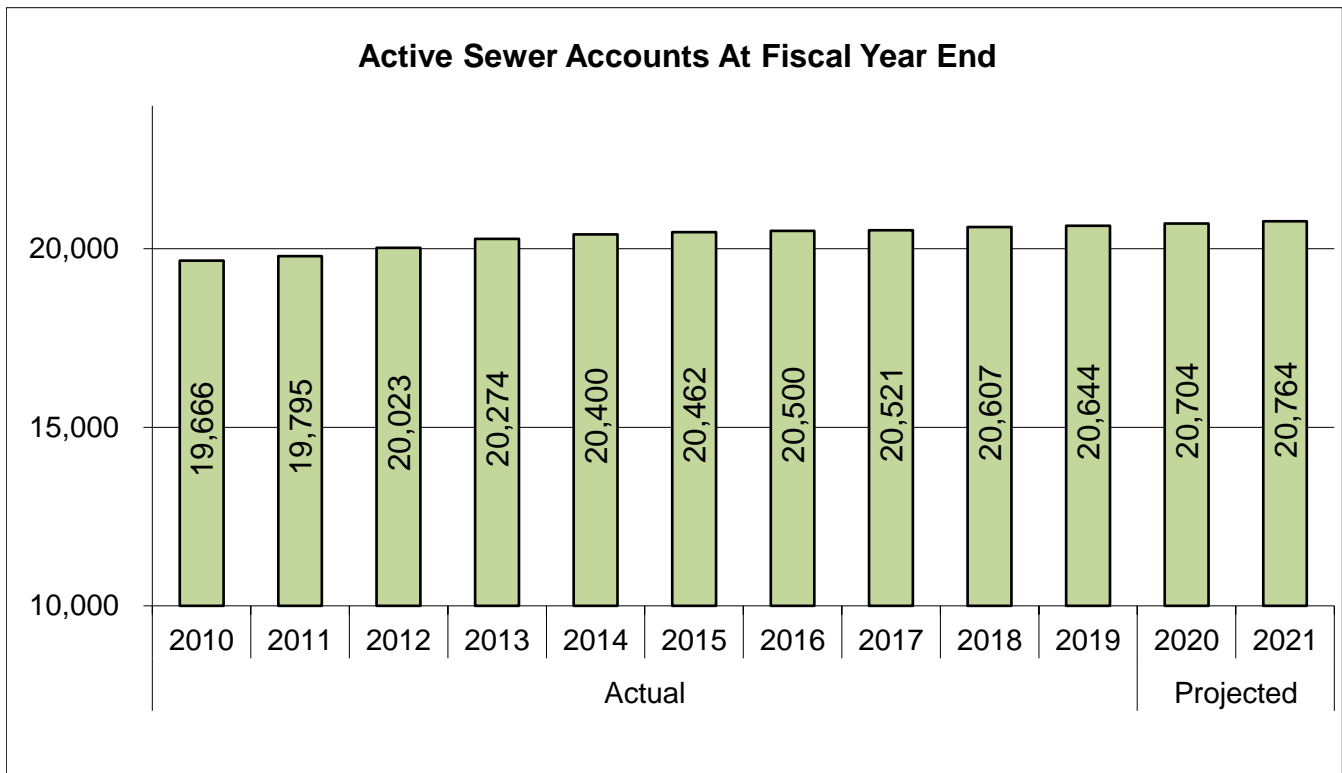
		<u>Actual</u>	<u>Budget</u>	<u>Projected</u>	<u>Budget</u>	<u>Estimated</u>
		<u>FY 18-19</u>	<u>FY 19-20</u>	<u>FY 19-20</u>	<u>FY 20-21</u>	<u>FY 21-22</u>
SAFETY & REG. AFFAIRS						
Cost of Labor	5210000.51xx	\$ 247,854	\$ 214,000	\$ 188,000	\$ 234,000	\$ 246,000
Materials & Supplies	" .53xx	8,013	12,000	16,000	28,000	29,000
Safety Support	" .54xx	17,051	20,000	13,000	30,000	31,000
Total Safety		<u>272,918</u>	<u>246,000</u>	<u>217,000</u>	<u>292,000</u>	<u>306,000</u>
INFORMATION TECHNOLOGY						
Cost of Labor	6230000.51xx	494,159	568,000	529,000	609,000	632,000
Materials & Supplies	" .53xx	102,167	70,000	93,000	65,000	67,000
Outside Services	" .54xx	<u>272,318</u>	<u>389,000</u>	<u>288,000</u>	<u>406,000</u>	<u>416,000</u>
Total Information Tech		<u>868,644</u>	<u>1,027,000</u>	<u>910,000</u>	<u>1,080,000</u>	<u>1,115,000</u>
GENERAL & ADMINISTRATION						
Cost of Labor	6xxxxxx.51xx	3,130,839	3,141,000	3,143,000	3,051,000	3,351,000
Directors Fees	" .5101	44,495	62,000	77,000	75,000	77,000
District Insurance	" .5201	109,847	163,000	121,000	140,000	158,000
Travel	" .5202	11,353	11,000	13,000	6,000	14,000
Meetings & Seminars	" .5203	20,142	30,000	29,000	25,000	26,000
Dues & Subscriptions	" .5204	79,155	71,000	116,000	80,000	82,000
Directors Expenses	" .5205	37,768	50,000	43,000	50,000	51,000
Office Supplies	" .5301	30,313	43,000	22,000	41,000	42,000
Awareness/Conservation	" .5303	72,630	79,000	105,000	83,000	85,000
Postage	" .5304	2,573	3,000	1,000	3,000	3,000
Outside Services	" .5401	81,616	81,000	125,000	110,000	90,000
Legal	" .5402	104,567	95,000	133,000	138,000	149,000
Auditing	" .5403	12,087	13,000	14,000	13,000	15,000
Bank/Investment Svcs	" .5501	25,648	25,000	22,000	25,000	26,000
Regulatory Fees	" .5502	51,964	68,000	85,000	50,000	51,000
Election & Annexation	" .5503	-	2,000	-	2,000	2,000
Other/Reimbursements		17,483	10,000	6,000	10,000	10,000
Admin Credit Transfer.	4702	<u>(860,836)</u>	<u>(961,000)</u>	<u>(854,000)</u>	<u>(814,000)</u>	<u>(857,000)</u>
Total Gen. & Admin.		<u>2,971,644</u>	<u>2,986,000</u>	<u>3,201,000</u>	<u>3,088,000</u>	<u>3,375,000</u>
TOTAL EXPENSES		<u>\$41,009,739</u>	<u>\$ 44,306,000</u>	<u>\$ 44,498,000</u>	<u>\$ 42,726,000</u>	<u>\$ 44,959,000</u>

2020-21 OPERATING BUDGET
WASTEWATER

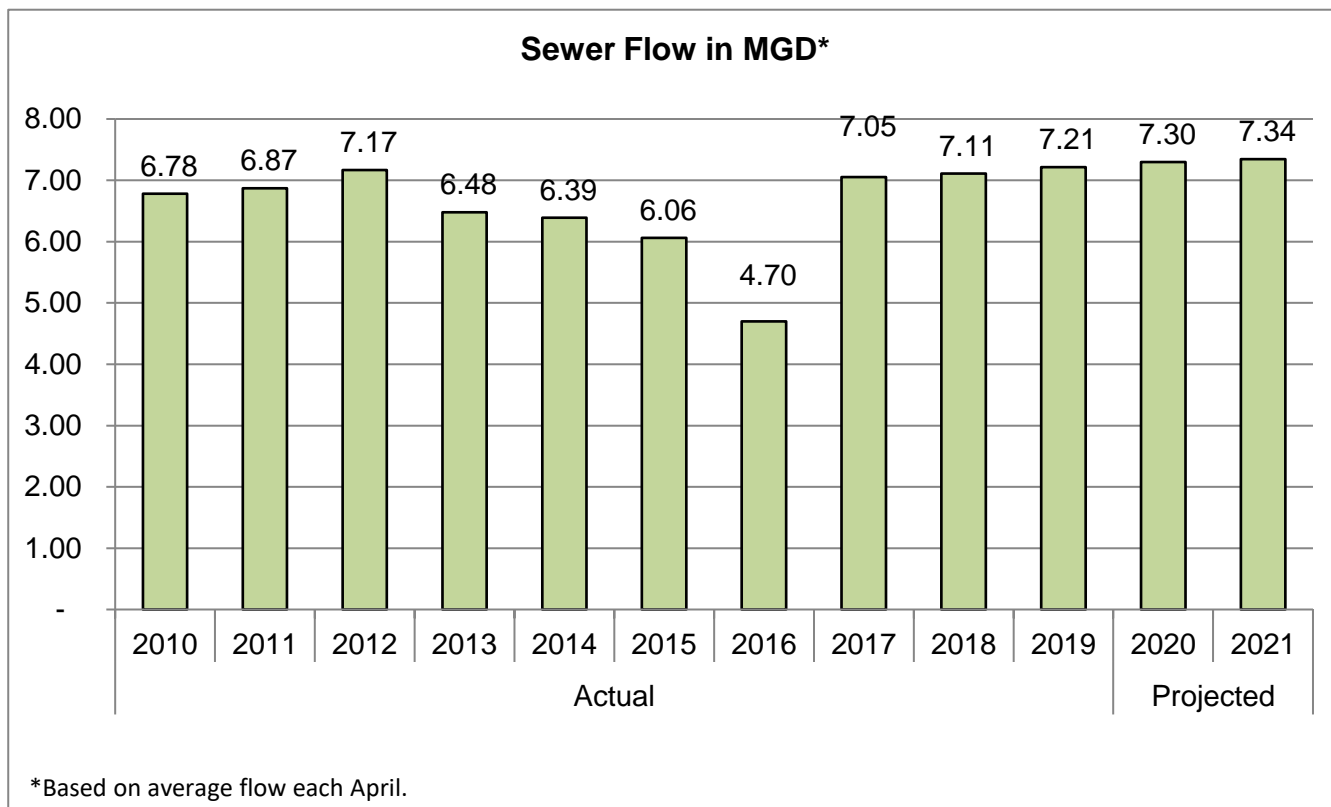
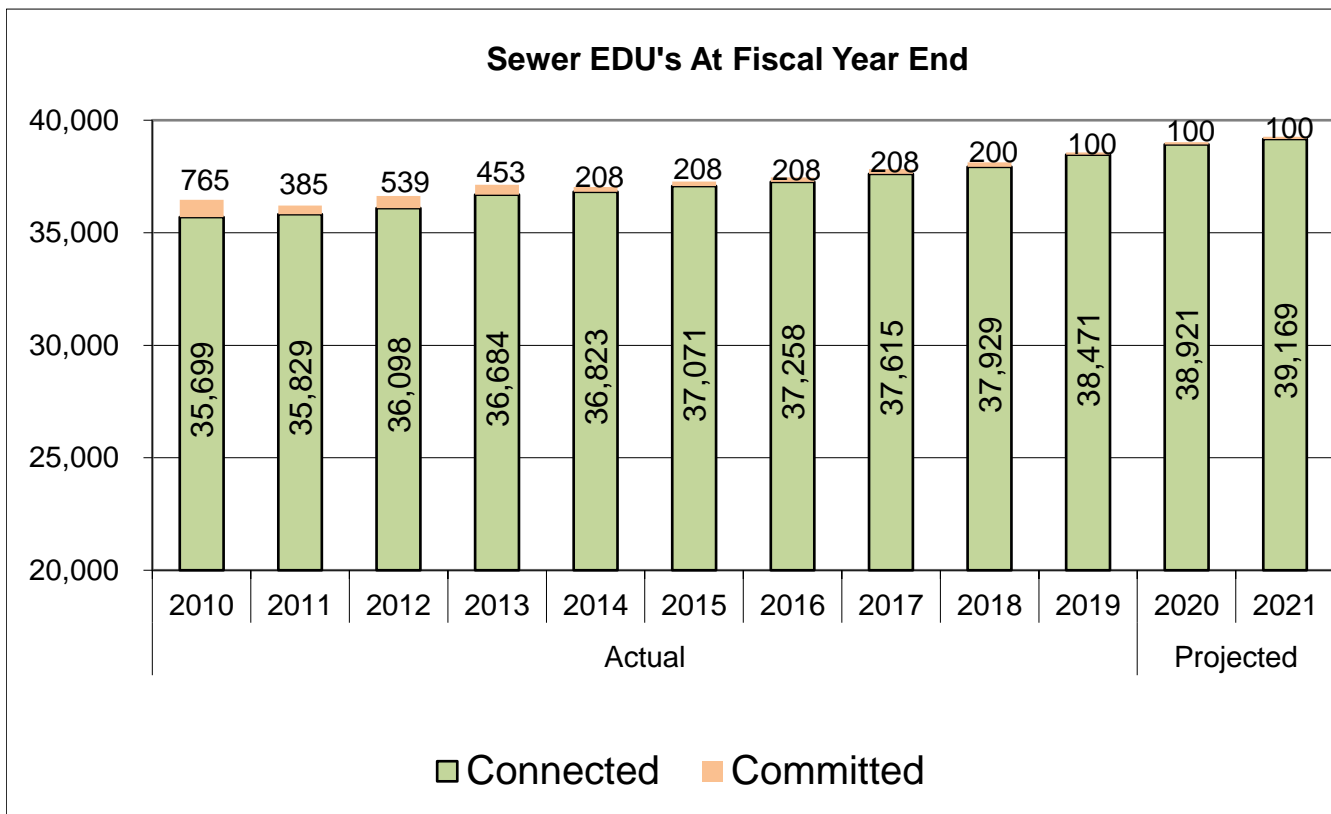


Chlorine Contact Tank at Meadowlark Wastewater Reclamation Facility

VALLECITOS WATER DISTRICT



VALLECITOS WATER DISTRICT



VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

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 249 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.

VALLECITOS WATER DISTRICT

BUDGET FOR THE YEAR ENDING JUNE 30, 2021

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.

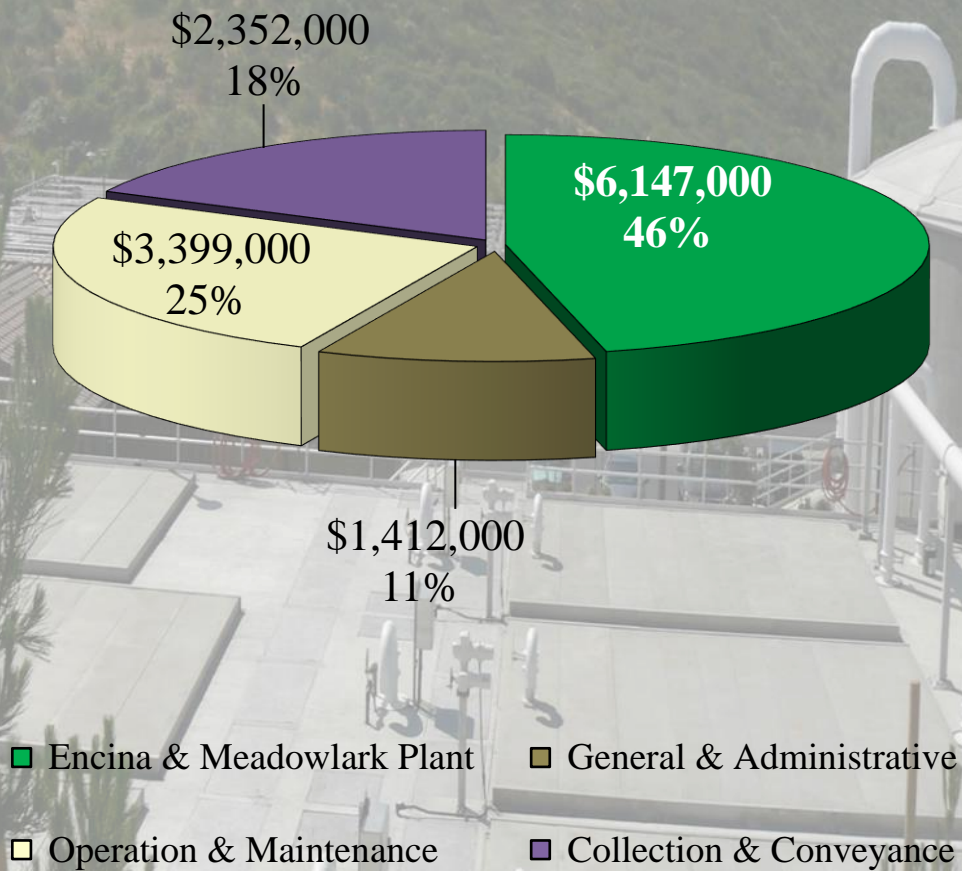
Dues and Subscriptions are periodical costs for sewer-related activities.

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.

2020-21 WASTEWATER OPERATING EXPENSE BUDGET

\$13,310,000



VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

		<u>Actual</u> <u>FY 18-19</u>	<u>Budget</u> <u>FY 19-20</u>	<u>Projected</u> <u>FY 19-20</u>	<u>Budget</u> <u>FY 20-21</u>	<u>Estimated</u> <u>FY 21-22</u>
OPERATING REVENUES						
Sewer Service	4101	\$ 18,077,717	\$ 18,180,000	\$ 18,130,000	\$ 17,330,000	\$ 17,930,000
Reclaimed Water Sales	4102	2,569,424	2,466,000	2,789,000	2,794,000	2,815,000
Other	Various	838,460	80,000	320,000	110,000	196,000
Total Revenue		<u>21,485,601</u>	<u>20,726,000</u>	<u>21,239,000</u>	<u>20,234,000</u>	<u>20,941,000</u>
OPERATING EXPENSES						
Collection & Conveyance	3010000	2,236,716	2,414,000	2,466,000	2,352,000	2,449,000
Lift Stations	3020000	188,485	338,000	233,000	293,000	282,000
Source Control	3060000	180,524	201,000	197,000	204,000	210,000
Encina Disposal	3070000	2,512,824	3,515,000	2,835,000	3,045,000	3,136,000
Meadowlark Plant	3410000	3,091,650	3,558,000	3,063,000	3,102,000	3,122,000
Customer Accounts	4010000	478,269	503,000	464,000	600,000	561,000
Equipment & Vehicles	4210000	180,369	256,000	207,000	227,000	235,000
Buildings & Grounds	4110000	249,510	272,000	231,000	303,000	313,000
Engineering	5010000	742,035	721,000	704,000	747,000	747,000
Safety & Compliance	5210000	179,485	190,000	151,000	197,000	206,000
Information Technology	6230000	719,058	833,000	726,000	828,000	854,000
General & Admin.	6xxx000	1,100,949	1,444,000	1,534,000	1,412,000	1,619,000
Total Expense		<u>11,859,874</u>	<u>14,245,000</u>	<u>12,811,000</u>	<u>13,310,000</u>	<u>13,734,000</u>
OPERATING INCOME		<u>9,625,727</u>	<u>6,481,000</u>	<u>8,428,000</u>	<u>6,924,000</u>	<u>7,207,000</u>
LESS: TRANSFERS TO REPLACEMENT RESERVE		<u>9,625,727</u>	<u>6,481,000</u>	<u>8,428,000</u>	<u>6,924,000</u>	<u>7,207,000</u>
NET INCOME		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

		<u>Actual</u> <u>FY 18-19</u>	<u>Budget</u> <u>FY 19-20</u>	<u>Projected</u> <u>FY 19-20</u>	<u>Budget</u> <u>FY 20-21</u>	<u>Estimated</u> <u>FY 21-22</u>
COLLECTION/CONVEYANCE						
Cost of Labor	3010xxx.51xx	\$ 1,545,645	\$ 1,642,000	\$ 1,752,000	\$ 1,655,000	\$ 1,734,000
Materials & Supplies	" .53xx	118,969	201,000	229,000	165,000	169,000
Chemicals	" .5350	361,529	350,000	314,000	350,000	359,000
Outside Services/Power	" .5xxx	210,573	221,000	171,000	182,000	187,000
Total Collection/Conveyance		<u>2,236,716</u>	<u>2,414,000</u>	<u>2,466,000</u>	<u>2,352,000</u>	<u>2,449,000</u>
LIFT STATIONS						
Cost of Labor	3020xxx.51xx	118,232	183,000	127,000	130,000	137,000
Materials & Supplies	" .53xx	13,781	69,000	34,000	55,000	56,000
Outside Services	" .54xx	10,043	34,000	20,000	58,000	38,000
Power	" .5306	46,429	52,000	52,000	50,000	51,000
Total Lift Stations		<u>188,485</u>	<u>338,000</u>	<u>233,000</u>	<u>293,000</u>	<u>282,000</u>
SOURCE CONTROL						
Cost of Labor	3060000.51xx	166,004	176,000	172,000	173,000	178,000
Materials & Supplies	" .53xx	14,520	21,000	22,000	24,000	25,000
Outside Services	" .54xx	-	4,000	3,000	7,000	7,000
Total Industrial Waste		<u>180,524</u>	<u>201,000</u>	<u>197,000</u>	<u>204,000</u>	<u>210,000</u>
ENCINA DISPOSAL	3070000.551	<u>2,512,824</u>	<u>3,515,000</u>	<u>2,835,000</u>	<u>3,045,000</u>	<u>3,136,000</u>
MEADOWLARK LIFT STATION						
Cost of Labor	3710000.51xx	81,498	107,000	74,000	87,000	91,000
Materials & Supplies	" .53xx	2,916	55,000	4,000	45,000	46,000
Chemicals	" .5350	70,964	150,000	86,000	140,000	144,000
Outside Services	" .54xx	33,403	52,000	52,000	77,000	79,000
Power	" .5306	87,871	110,000	98,000	100,000	103,000
Total Lift Sta.		<u>276,652</u>	<u>474,000</u>	<u>314,000</u>	<u>449,000</u>	<u>463,000</u>

VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

		Actual FY 18-19	Budget FY 19-20	Projected FY 19-20	Budget FY 20-21	Estimated FY 21-22
MEADOWLARK PLANT						
Cost of Labor	3410000.51xx	\$ 1,156,758	\$ 1,124,000	\$ 1,105,000	\$ 1,107,000	\$ 1,162,000
Materials & Supplies	" .53xx	409,793	383,000	380,000	316,000	271,000
Chemicals	" .5350	242,231	340,000	263,000	250,000	256,000
Outside Services	" .54xx	426,538	499,000	369,000	291,000	262,000
Power	" .5306	382,373	435,000	381,000	415,000	427,000
Telephone	" .5305	-	2,000	2,000	2,000	2,000
Total Meadowlark		<u>2,617,694</u>	<u>2,783,000</u>	<u>2,500,000</u>	<u>2,381,000</u>	<u>2,380,000</u>
MAHR RESERVOIR						
Cost of Labor	3810000.51xx	90,124	95,000	79,000	97,000	101,000
Materials & Supplies	" .53xx	10,652	19,000	18,000	15,000	15,000
Chemicals	" .5350	15,906	30,000	31,000	35,000	34,000
Outside Services	" .54xx	24,199	92,000	66,000	65,000	67,000
Power	" .5306	56,423	65,000	55,000	60,000	62,000
Total Mahr Reservoir		<u>197,304</u>	<u>301,000</u>	<u>249,000</u>	<u>272,000</u>	<u>279,000</u>
CUSTOMER ACCOUNTS						
Cost of Labor	4010000.51xx	307,432	358,000	334,000	336,000	358,000
Materials & Supplies	" .53xx	93,389	108,000	75,000	93,000	95,000
Outside Services	" .54xx	69,199	22,000	44,000	32,000	33,000
Uncollectible Accts.	" .5703	8,249	15,000	11,000	139,000	75,000
Total Cust. Accts.		<u>478,269</u>	<u>503,000</u>	<u>464,000</u>	<u>600,000</u>	<u>561,000</u>
EQUIPMENT & VEHICLES						
Cost of Labor	4210000.51xx	97,179	137,000	112,000	123,000	133,000
Materials & Supplies	" .53xx	21,858	50,000	23,000	49,000	50,000
Fuel	" .5307	39,678	41,000	41,000	30,000	41,000
Outside Services	" .54xx	21,654	28,000	31,000	25,000	11,000
Total Equip. & Veh.		<u>180,369</u>	<u>256,000</u>	<u>207,000</u>	<u>227,000</u>	<u>235,000</u>
BUILDINGS & GROUNDS						
Cost of Labor	4110000.51xx	52,057	75,000	54,000	65,000	68,000
Materials & Supplies	" .53xx	18,119	51,000	33,000	69,000	71,000
Outside Services	" .54xx	79,003	97,000	76,000	104,000	107,000
Power	" .5306	100,331	49,000	68,000	65,000	67,000
Total Buildings & Grounds		<u>249,510</u>	<u>272,000</u>	<u>231,000</u>	<u>303,000</u>	<u>313,000</u>
ENGINEERING						
Cost of Labor	5010000.51xx	630,854	671,000	650,000	629,000	712,000
Materials & Supplies	" .53xx	1,284	23,000	22,000	21,000	22,000
Outside Services	" .54xx	109,898	27,000	32,000	97,000	13,000
Total Engineering		<u>742,035</u>	<u>721,000</u>	<u>704,000</u>	<u>747,000</u>	<u>747,000</u>

VALLECITOS WATER DISTRICT

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2021

		Actual FY 18-19	Budget FY 19-20	Projected FY 19-20	Budget FY 20-21	Estimated FY 21-22
SAFETY & REGULATORY AFFAIRS						
Cost of Labor	5210000.51xx	\$ 166,063	\$ 158,000	\$ 126,000	\$ 139,000	\$ 146,000
Materials & Supplies	" .53xx	1,504	12,000	10,000	29,000	30,000
Safety Support	" .54xx	11,918	20,000	15,000	29,000	30,000
Total Safety/Reg Affairs		<u>179,485</u>	<u>190,000</u>	<u>151,000</u>	<u>197,000</u>	<u>206,000</u>
INFORMATION TECH						
Cost of Labor	6230000.51xx	326,700	399,000	354,000	361,000	376,000
Materials & Supplies	" .53xx	91,277	65,000	89,000	58,000	59,000
Outside Services	" .54xx	301,081	369,000	283,000	409,000	419,000
Total Information Tech		<u>719,058</u>	<u>833,000</u>	<u>726,000</u>	<u>828,000</u>	<u>854,000</u>
GENERAL & ADMINISTRATION						
Cost of Labor	6xxxxxx.51xx	1,196,042	1,462,000	1,496,000	1,430,000	1,595,000
Directors Fees	" .5101	31,756	58,000	55,000	58,000	59,000
District Insurance	" .5201	105,540	154,000	136,000	150,000	169,000
Travel	" .5202	-	1,000	1,000	4,000	4,000
Meetings & Seminars	" .5203	756	16,000	11,000	13,000	13,000
Dues & Subscriptions	" .5204	1,896	41,000	41,000	48,000	49,000
Office Supplies	" .5301	10,916	13,000	5,000	13,000	13,000
Postage	" .5304	2,472	6,000	4,000	6,000	6,000
Outside Services	" .5401	62,736	98,000	105,000	74,000	53,000
Legal	" .5402	100,466	90,000	127,000	132,000	142,000
Auditing	" .5403	11,613	12,000	13,000	13,000	15,000
Bank/Investment Svcs	" .5501	24,643	24,000	21,000	25,000	26,000
Regulatory Fees	" .5502	726	12,000	2,000	49,000	50,000
Other	" .5702	187	5,000	5,000	5,000	5,000
Admin Credit Trans	4702	(448,800)	(548,000)	(488,000)	(608,000)	(580,000)
Total Gen. & Admin.		<u>1,100,949</u>	<u>1,444,000</u>	<u>1,534,000</u>	<u>1,412,000</u>	<u>1,619,000</u>
TOTAL EXPENSES		<u><u>\$ 11,859,874</u></u>	<u><u>\$ 14,245,000</u></u>	<u><u>\$ 12,811,000</u></u>	<u><u>\$ 13,310,000</u></u>	<u><u>\$ 13,734,000</u></u>

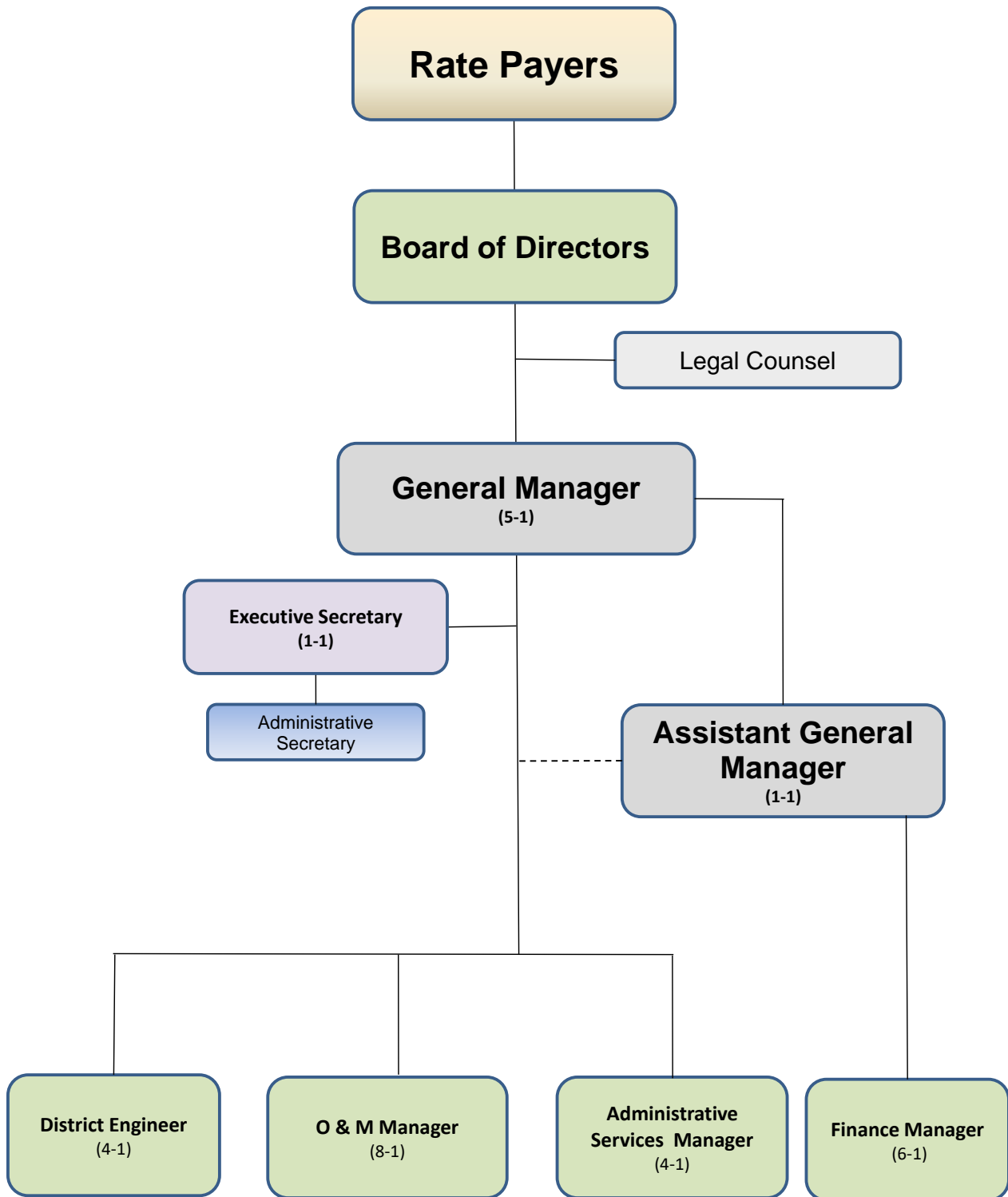
VALLECITOS WATER DISTRICT

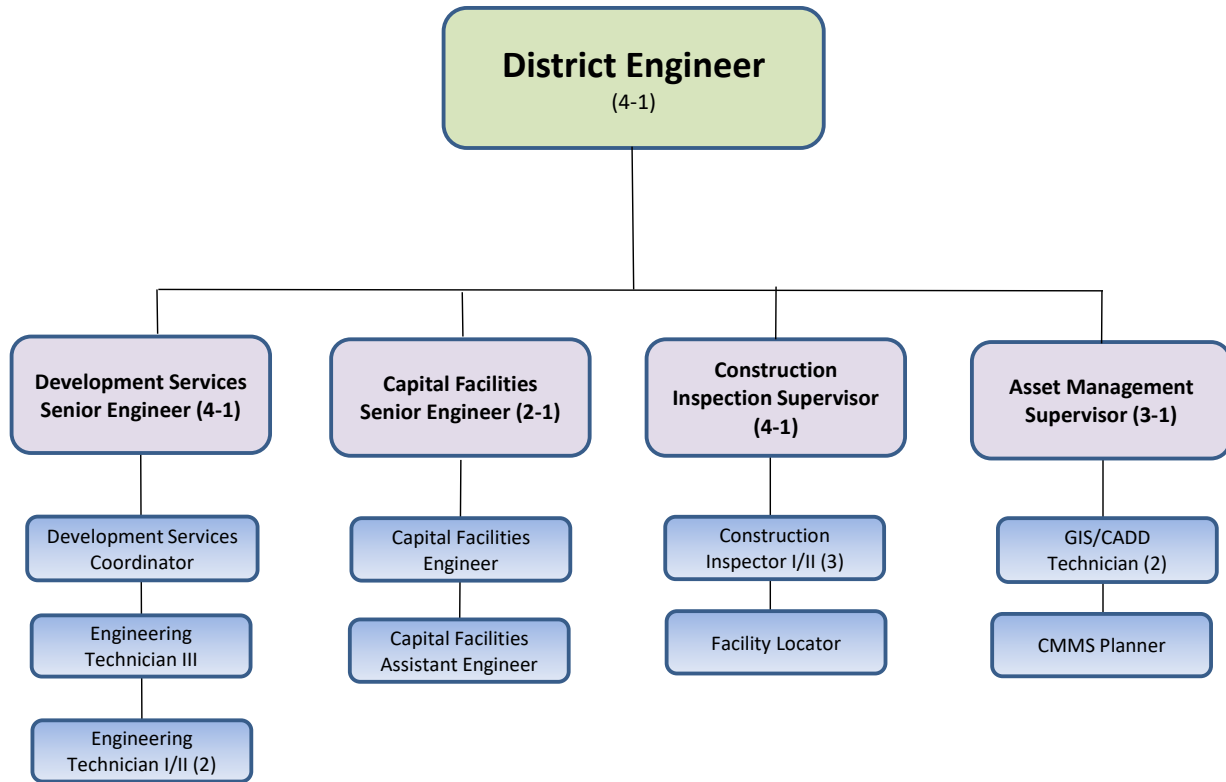
BUDGET FOR THE YEAR ENDING JUNE 30, 2021

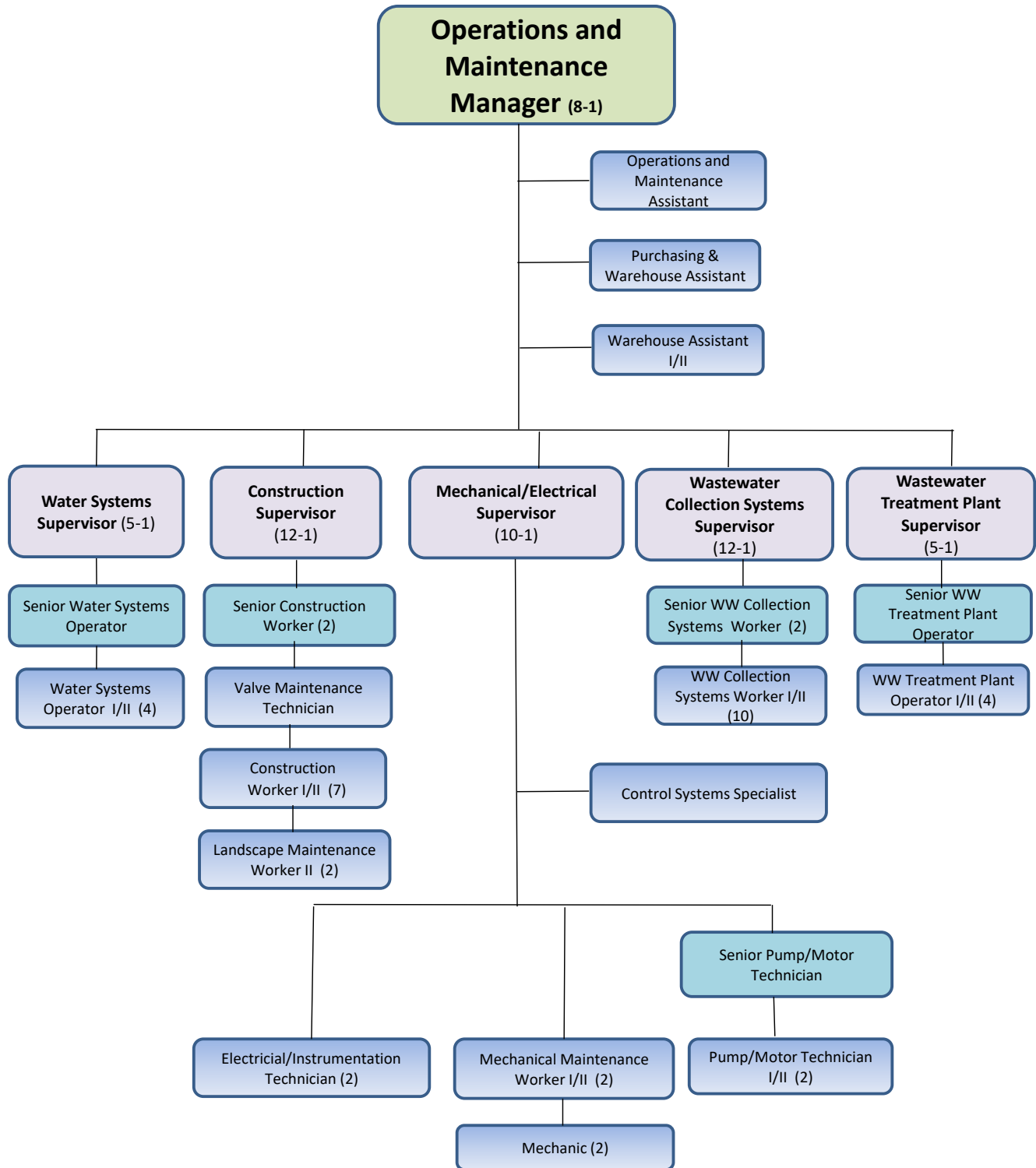
SALARY AND BENEFIT RECAP

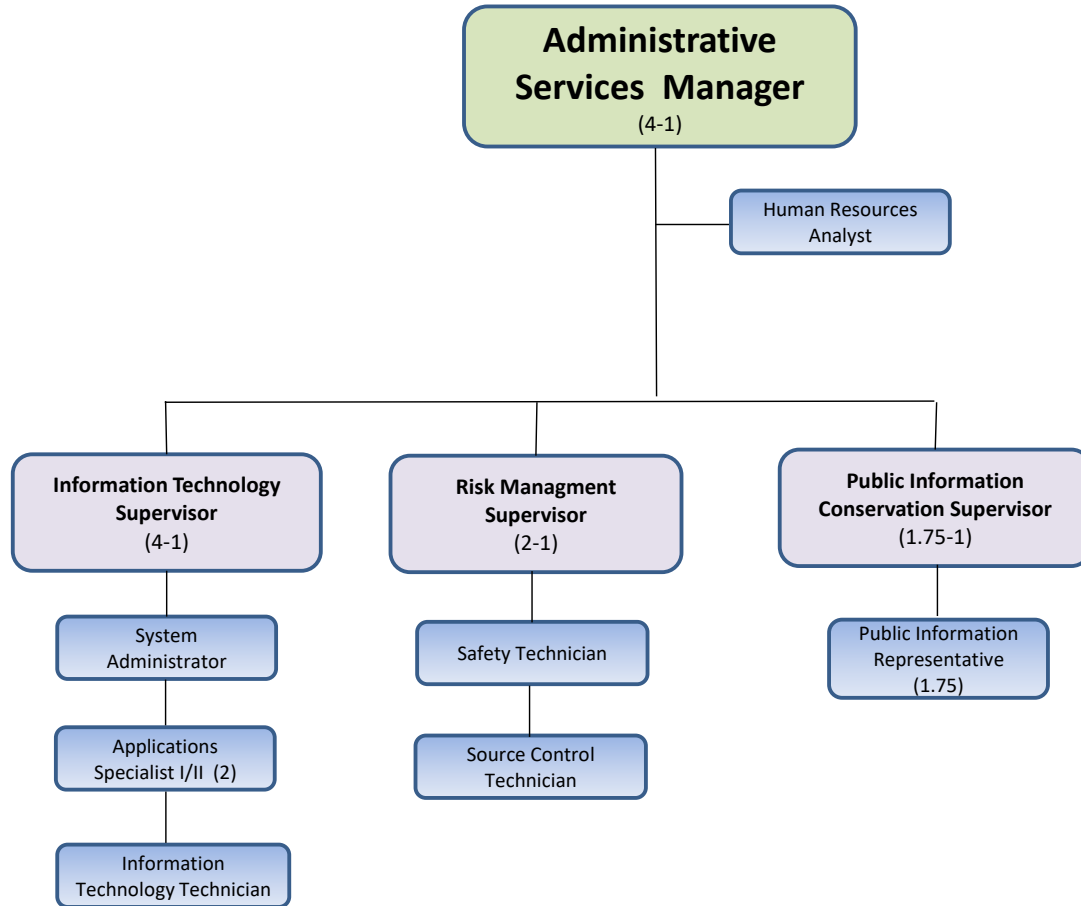
	Actual FY 18-19	Budget FY 19-20	Projected FY 19-20	Budget FY 20-21	Estimated FY 21-22
SALARIES					
Water Operations	\$ 5,620,843	\$ 5,353,000	\$ 5,722,000	\$ 5,583,000	\$ 5,988,000
Wastewater Operations	3,609,310	3,929,000	3,762,000	3,951,000	4,245,000
Subtotal	9,230,153	9,282,000	9,484,000	9,534,000	10,233,000
Labor Posted to Work Orders*	611,922	697,000	627,000	657,000	653,000
TOTAL SALARIES	9,842,075	9,979,000	10,111,000	10,191,000	10,886,000
BENEFITS					
Public Employee Retirement	2,142,631	2,399,000	2,424,000	2,123,000	2,333,000
Group Insurance	2,543,491	2,648,000	2,264,000	2,377,000	2,473,000
Social Security	731,835	763,000	757,000	780,000	833,000
Workers' Comp Insurance	180,773	218,000	205,000	222,000	244,000
457 Contribution Match	91,540	218,000	253,000	218,000	218,000
Other Taxes and Benefits	17,280	34,000	20,000	27,000	29,000
TOTAL BENEFITS	5,707,550	6,280,000	5,923,000	5,747,000	6,130,000
TOTAL SALARIES & BENEFITS	\$ 15,549,625	\$ 16,259,000	\$ 16,034,000	\$ 15,938,000	\$ 17,016,000
 Benefits as a Percentage of Salaries	 <u>58.0%</u>	 <u>62.9%</u>	 <u>58.6%</u>	 <u>56.4%</u>	 <u>56.3%</u>
 Operations	 52.00	 52.00	 52.00	 54.00	 54.00
Engineering	16.00	17.00	17.00	17.00	17.00
Finance	23.00	23.00	23.00	21.00	21.00
Administration	16.75	16.75	16.75	16.75	16.75
Total Funded FTEs	<u>107.75</u>	<u>108.75</u>	<u>108.75</u>	<u>108.75</u>	<u>108.75</u>

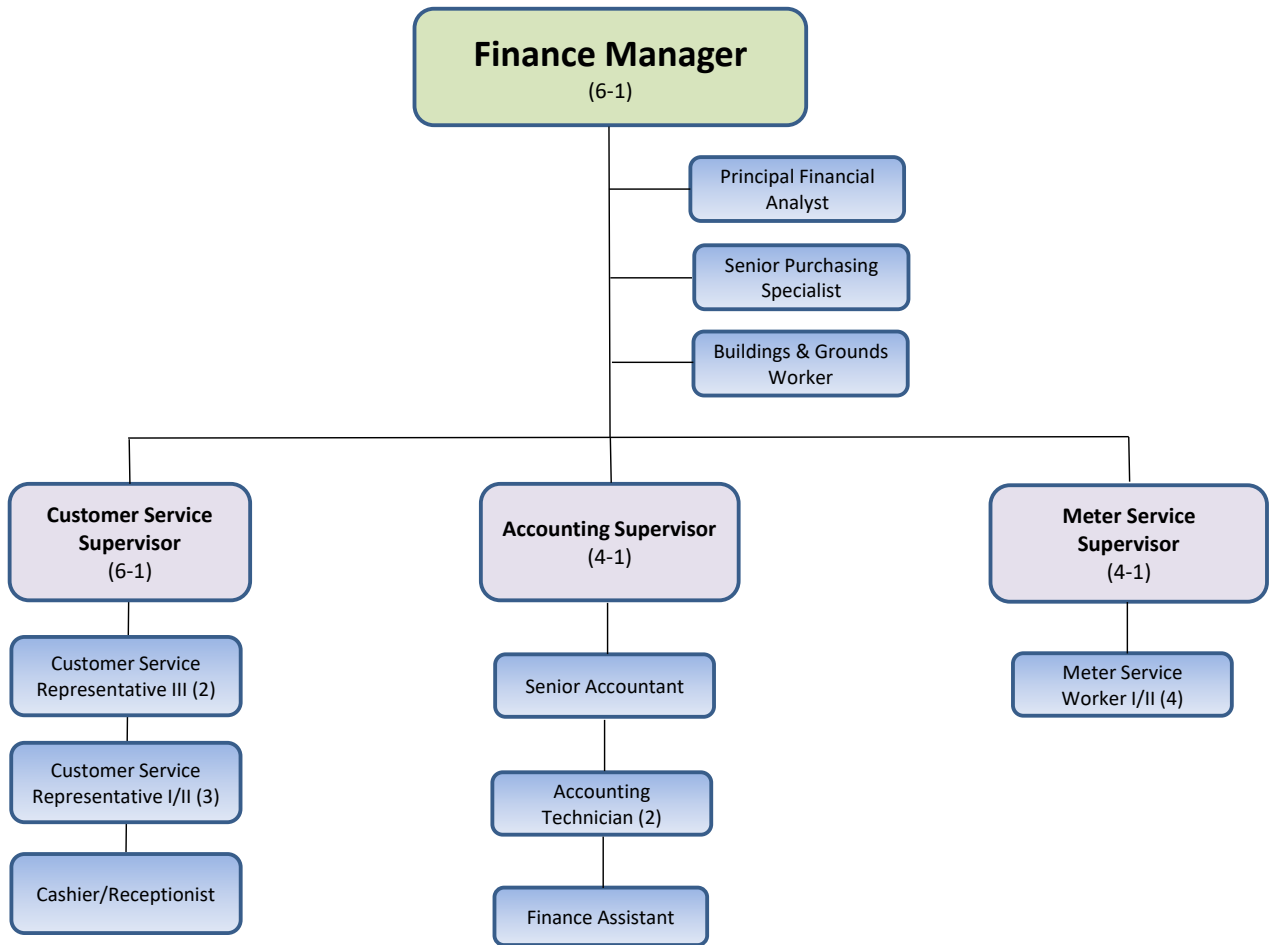
* There is also a labor overhead charge to work orders to cover benefit costs which are a part the credit in the General and Administration sections of Water and Wastewater operations.











2020-21 PERSONNEL BUDGET

POSITIONS/PERSONNEL:

Management will scrutinize the need for all positions and only fill positions if absolutely necessary. The Assistant General Manager position is budgeted as vacant again this year. The fiscal year 2020-21 budget includes no new positions.

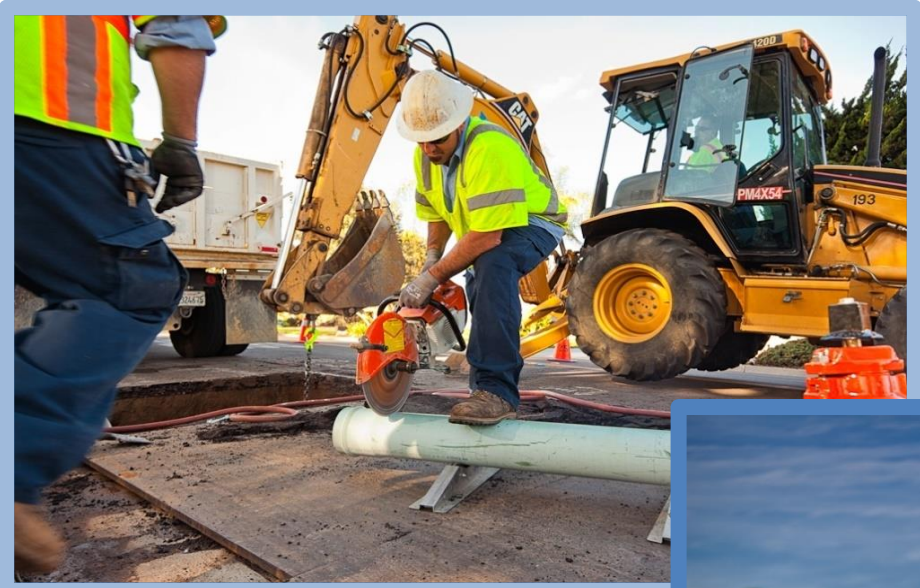
VALLECITOS WATER DISTRICT

2020-21 PUBLIC AWARENESS AND CONSERVATION PROGRAM BUDGET

<u>REBATE PROGRAMS *</u>	Prj 2021100038	W/O 117447	
To encourage the purchase of qualified low flow devices, appliances, artificial turf or rebates to customers who remove their existing turf grass and install a low-water landscape (i.e., Cash for Grass program.)			\$ 1,000
<u>OUTREACH & ADVERTISING</u>	Prj 2021100039	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
<u>VIDEO PRODUCTION</u>	Prj 2021100040	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.			8,500
<u>EDUCATION</u>	Prj 2021100041	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.			6,800
<u>COOPERATIVE PROGRAMS*</u>	Prj 2021100042	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.			4,000
<u>WATERWISE LANDSCAPE</u>	Prj 2021100043	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.			6,000
<u>MEMBERSHIPS & EQUIPMENT</u>	Prj 2021100044	W/O 117454	
To maintain memberships in related organizations and committees and for the purchases of new or replacement equipment.			2,600
<u>COMMERCIAL/INDUSTRIAL</u>	Prj 2021100045	W/O 117455	
To assist large commercial and public agency customers by providing workshops, written materials, monetary incentives, and using outside consultants.			<u>1,200</u>
TOTAL PUBLIC AWARENESS/CONSERVATION PROGRAM BUDGET			<u>\$ 83,000</u>

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

2020-21 CAPITAL BUDGET



VALLECITOS WATER DISTRICT

Comprehensive Project List

Page Number	Project Number	Project Title	Funding Source	Previous Budget & Amendments	Estimated Amt Expended @ 6/30/20	Fiscal Year 2020-21	
						Carryforward	New Request
Carryover Projects							
36	90001	Land Outfall Gravity Sewer Sec D Phs 1	210 & 220	\$ 8,550,000	\$ 190,000	\$ 8,360,000	\$ 80,000
37	71004	San Marcos Interceptor Phase 2	210 & 220	7,540,000	1,750,000	5,790,000	960,000
38	2020100002	Montiel Lift Station and Forcemain Replacement	210 & 220	2,815,000	590,000	2,225,000	2,765,000
39	2020100001	Encina Wastewater Authority FY 19/20	210	4,848,000	3,458,000	1,390,000	-
40	2016100002	Chlorine Contact Tank Expansion	250	4,719,000	66,000	4,653,000	-
41	71084	Meadowlark Tank No. 3	120	4,552,000	490,000	4,062,000	-
42	2017100224	City of San Marcos Creek District Phase 1	110 & 210	3,080,000	90,000	2,990,000	660,000
43	2020100003	Tres-Amigos Water Line Replacement Phase 1	110	2,060,000	20,000	2,040,000	975,000
44	2018100002	Elser Lane Water Line Improvements	110	1,812,000	15,000	1,797,000	58,000
45	2017100002	MRF: Conversion to Sodium Hypochlorite	250	2,000,000	5,000	1,995,000	(205,000)
46	2019100002	MRF - Biological Selector Improvements	250	1,878,000	200,000	1,678,000	(178,000)
47	2012100002	Richland Invert Replacement	210	1,485,000	25,000	1,460,000	50,000
48	2020100004	District-wide SCADA Upgrade Project	110 & 210	1,250,000	425,000	825,000	-
49	2020100005	Meadowlark Fallsafe Rehabilitation	210	1,160,000	110,000	1,050,000	-
50	2020100006	Sage Canyon Tank Refurbishment	110	1,025,000	3,000	1,022,000	3,000
51	2020100007	Steel Pipeline Condition Assessment	110	855,000	-	855,000	-
52	2014100004	Asset Management Replacement Schedule	110 & 210	704,000	154,000	550,000	-
53	2018100011	MRF - Tertiary Structural Rehab and Repairs	250	573,000	263,000	310,000	90,000
54	2019100003	North Twin Oaks Tank No. 1 Refurbishment	110	627,000	190,000	437,000	30,000
55	2020100009	Land Outfall West Condition Assessment	210	609,000	-	609,000	-
56	2020100010	Ductile Iron Pipe Condition Assessment	110	605,000	-	605,000	-
57	2020100011	Palos Vista Pump Station - Motor Starters Upgrade	110	375,000	375,000	-	33,000
58	2020100022	Redundancy for Admin. Wireless Radio Network	110 & 210	67,000	67,000	-	280,000
59	2018100004	Las Posas Water Line Replacement	110	474,000	5,000	469,000	(167,000)
60	2016100007	Rock Springs Valve Replacement	110	300,000	5,000	295,000	-
61	2016100014	Via Vera Cruz Tank Hill Stabilization	110	250,000	35,000	215,000	-
62	2017100005	Fire Services - Backflow Preventer Upgrades	110	250,000	100,000	150,000	-
63	2020100012	DHS- Upgrades for Critical Infrastructure Hardware	110 & 210	239,000	-	239,000	-
64	2020100023	Technology Infrastructure Upgrades	110 & 210	65,000	65,000	-	155,000
65	2020100016	Door Access Control System Expansion -MRF & Mahr	110 & 210	101,000	101,000	-	49,000
66	2020100026	Upgrades to Surveillance Video Management System	110 & 210	25,000	-	25,000	125,000
67	2020100024	MRF - Site Lighting Upgrade and Repairs	250	60,000	60,000	-	90,000
68	2020100015	HVAC Communication Upgrade	110 & 210	143,000	-	143,000	-
69	2017100009	Building B Laminate Floor Replacement	110 & 210	110,000	-	110,000	-
70	2020100021	Update Restrooms to ADA Compliance	110 & 210	107,000	-	107,000	-
71	2020100014	District Wide Solar	110 & 210	130,000	65,000	65,000	(25,000)
72	2020100019	Water Operations Control Room Upgrades	110	78,000	14,000	64,000	10,000
				\$ 55,521,000	\$ 8,936,000	\$ 46,585,000	\$ 5,838,000
New Projects							
73	2021100001	Encina Wastewater Authority Five Year Plan	210	-	-	-	29,077,000
74	2021100002	Land Outfall Parallel Siphon Sewer Section A	220	-	-	-	27,275,000
75	2021100003	16-Inch Emergency Bypass Pipeline Rehabilitation	210	-	-	-	2,010,000
76	2021100004	MRF Headworks - Upgrade/Replace Equipment	210	-	-	-	440,000
77	2021100005	Coronado Hills Tank Exterior Refurbishment	110	-	-	-	420,000
78	2021100006	MRF Direct Potable Reuse	210	-	-	-	400,000
79	2021100007	Rancheros Drive Sewer Replacement	210	-	-	-	300,000
80	2021100008	Coggan Pump Station - Generator	110	-	-	-	285,000
81	2021100009	MRF - Odor Scrubber #1 Replacement	210	-	-	-	250,000
82	2021100010	Building A Roof Replacement	110 & 210	-	-	-	140,000
83	2021100011	District-wide Valve Replacement Program	110	-	-	-	100,000
84	2021100012	MRF - Uninterruptible Power Supply Installation	210	-	-	-	70,000
85	2021100013	City of San Marcos Joint Projects Relocate/Adjust	110 & 210	-	-	-	70,000
86	2021100014	South Lake - Ultrasonic Algae Control System	110	-	-	-	65,000
87	2021100015	MRF - Replacement of Valve Actuators	250	-	-	-	65,000
88	2021100016	MRF - Flow Control Valve and Actuator	210	-	-	-	54,000
89	2021100017	VWD Headquarters: Asphalt Repair & Sealcoat	110 & 210	-	-	-	51,000
90	2021100018	SSO Training Facility	210	-	-	-	40,000
91	2021100019	MRF - Fall Protection Grating Installation	210	-	-	-	37,000
92	2021100020	Meadowlark FCF - Water Quality Analyzer	110	-	-	-	30,000
93	2021100021	Richland Tank II: Asphalt Repair and Sealcoat	110	-	-	-	22,000
94	2021100022	Twin Oaks Reservoir - Safety Climb System	110	-	-	-	18,000
95	2021100023	MRF - Aeration Influent Channel Mixing	210	-	-	-	17,000
96	2021100024	MRF - AT&T Phone Line Relocation	210	-	-	-	16,000
97	2021100025	Mahr - Salt Tank Ladder Climbing System	250	-	-	-	15,000
98	2021100026	Richland Tank I: Asphalt Repair and Sealcoat	110	-	-	-	15,000
99	2021100027	Palos Vista Tank: Asphalt Repair and Sealcoat	110	-	-	-	15,000
100	2021100028	Via Vera Cruz Tank: Asphalt Repair and Sealcoat	110	-	-	-	14,000
101	TBA	Future Projects					31,179,000
				\$ -	\$ -	\$ -	\$ 92,490,000
				\$ 55,521,000	\$ 8,936,000	\$ 46,585,000	\$ 98,328,000
\$144,913,000							

VALLECITOS WATER DISTRICT

Comprehensive Project List

Project Total	Spending by Fiscal Year						Page Number
	2020-21	2021-22	2022-23	2023-24	2024-25	2025 to 2030	
\$ 8,630,000	\$ 50,000	\$ 400,000	\$ 5,000,000	\$ 2,990,000	\$ -	\$ -	36
8,500,000	6,750,000	-	-	-	-	-	37
5,580,000	1,525,000	3,465,000	-	-	-	-	38
4,848,000	1,390,000	-	-	-	-	-	39
4,719,000	1,000	1,000	264,000	3,212,000	1,175,000	-	40
4,552,000	-	-	-	4,062,000	-	-	41
3,740,000	-	3,650,000	-	-	-	-	42
3,035,000	400,000	2,000,000	615,000	-	-	-	43
1,870,000	-	-	-	-	20,000	1,835,000	44
1,795,000	30,000	235,000	1,525,000	-	-	-	45
1,700,000	1,500,000	-	-	-	-	-	46
1,535,000	10,000	175,000	1,325,000	-	-	-	47
1,250,000	825,000	-	-	-	-	-	48
1,160,000	750,000	300,000	-	-	-	-	49
1,028,000	165,000	860,000	-	-	-	-	50
855,000	355,000	250,000	250,000	-	-	-	51
704,000	300,000	150,000	100,000	-	-	-	52
663,000	400,000	-	-	-	-	-	53
657,000	467,000	-	-	-	-	-	54
609,000	609,000	-	-	-	-	-	55
605,000	205,000	200,000	200,000	-	-	-	56
408,000	33,000	-	-	-	-	-	57
347,000	280,000	-	-	-	-	-	58
307,000	2,000	300,000	-	-	-	-	59
300,000	2,000	93,000	200,000	-	-	-	60
250,000	-	-	20,000	195,000	-	-	61
250,000	75,000	75,000	-	-	-	-	62
239,000	239,000	-	-	-	-	-	63
220,000	155,000	-	-	-	-	-	64
150,000	-	49,000	-	-	-	-	65
150,000	-	150,000	-	-	-	-	66
150,000	90,000	-	-	-	-	-	67
143,000	128,000	15,000	-	-	-	-	68
110,000	-	110,000	-	-	-	-	69
107,000	67,000	40,000	-	-	-	-	70
105,000	40,000	-	-	-	-	-	71
88,000	74,000	-	-	-	-	-	72
\$ 61,359,000	\$ 16,917,000	\$ 12,518,000	\$ 9,499,000	\$ 10,459,000	\$ 1,195,000	\$ 1,835,000	
29,077,000	4,087,000	6,076,000	5,938,000	6,122,000	6,854,000	-	73
27,275,000	120,000	200,000	1,000,000	18,025,000	7,930,000	-	74
2,010,000	1,510,000	500,000	-	-	-	-	75
440,000	440,000	-	-	-	-	-	76
420,000	25,000	95,000	300,000	-	-	-	77
400,000	250,000	150,000	-	-	-	-	78
300,000	2,000	28,000	270,000	-	-	-	79
285,000	10,000	275,000	-	-	-	-	80
250,000	250,000	-	-	-	-	-	81
140,000	2,000	138,000	-	-	-	-	82
100,000	100,000	-	-	-	-	-	83
70,000	70,000	-	-	-	-	-	84
70,000	70,000	-	-	-	-	-	85
65,000	65,000	-	-	-	-	-	86
65,000	65,000	-	-	-	-	-	87
54,000	54,000	-	-	-	-	-	88
51,000	51,000	-	-	-	-	-	89
40,000	40,000	-	-	-	-	-	90
37,000	37,000	-	-	-	-	-	91
30,000	30,000	-	-	-	-	-	92
22,000	22,000	-	-	-	-	-	93
18,000	18,000	-	-	-	-	-	94
17,000	17,000	-	-	-	-	-	95
16,000	16,000	-	-	-	-	-	96
15,000	15,000	-	-	-	-	-	97
15,000	15,000	-	-	-	-	-	98
15,000	15,000	-	-	-	-	-	99
14,000	14,000	-	-	-	-	-	100
31,179,000	-	740,000	1,725,000	834,000	11,645,000	16,235,000	101
\$ 92,490,000	\$ 7,410,000	\$ 8,202,000	\$ 9,233,000	\$ 24,981,000	\$ 26,429,000	\$ 16,235,000	
\$ 153,849,000	\$ 24,327,000	\$ 20,720,000	\$ 18,732,000	\$ 35,440,000	\$ 27,624,000	\$ 18,070,000	

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$190,000	\$50,000	\$40,000				\$280,000
Design			\$360,000				\$360,000
Construction				\$5,000,000	\$2,990,000		\$7,990,000
Total	\$190,000	\$50,000	\$400,000	\$5,000,000	\$2,990,000	\$0	\$8,630,000

FY 2020/21 Budget Request - \$80,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2008	Jan 2009	Dec 2021	Jul 2021	Dec 2022	Jan 2023	Jan 2024	Feb 2024

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$370,000						\$370,000
Design	\$825,000						\$825,000
Construction	\$555,000	\$6,750,000					\$7,305,000
Total	\$1,750,000	\$6,750,000	\$0	\$0	\$0	\$0	\$8,500,000

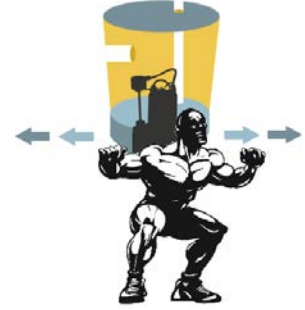
FY 2020/21 Budget Request - \$960,000

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	Apr 2021	May 2021

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 pumps in the lift station are not adequately sized to convey ultimate peak wet weather flows and will be replaced with 300-gpm pumps (approx). Access to the lift station will be improved and located above ground with dry pit centrifugal pumps to reduce occurrences of confined space entry by staff. The existing forcemain discharge connection to the gravity manhole in Nordahl Road will be replaced. 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.

Operations Impact: Routine monitoring and maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$315,000	\$35,000					\$350,000
Design	\$275,000	\$240,000					\$515,000
Construction		\$1,250,000	\$3,465,000				\$4,715,000
Total	\$590,000	\$1,525,000	\$3,465,000	\$0	\$0	\$0	\$5,580,000

FY 2020/21 Budget Request - \$2,765,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Feb 2016	Oct 2020	Jan 2020	Dec 2020	Feb 2021	Nov 2021	Dec 2021

Capital Improvement Program Encina Wastewater Authority FY 19/20

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: 2020100001

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction	\$3,458,000	\$1,390,000					\$4,848,000
Total	\$3,458,000	\$1,390,000	\$0	\$0	\$0	\$0	\$4,848,000

FY 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2009							Aug 2020

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$66,000	\$1,000	\$1,000	\$1,000			\$69,000
Design				\$263,000	\$87,000		\$350,000
Construction					\$3,125,000	\$1,175,000	\$4,300,000
Total	\$66,000	\$1,000	\$1,000	\$264,000	\$3,212,000	\$1,175,000	\$4,719,000

FY 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Apr 2016	Jun 2022	Jul 2022	Oct 2023	Nov 2023	Sep 2024	Sep 2024

Capital Improvement Program Meadowlark Tank No. 3

Description: This existing Meadowlark Tank site is comprised of one 1.25 million gallon (MG) tank and a second 2.75 MG tank. As part of this project, a new 2.5 MG Meadowlark Tank No. 3 will be built.



Project Manager: Ryan Morgan

Department: Engineering

Project: 71084

Funding Source: 100% Fund 120 – Water Capacity

Work Order: 71084

Comments: The site was master planned during the 76-1 Assessment District to accommodate three tanks total. A final 3.5 million gallon (MG) tank is not expected to be needed until 2036, when it will replace the 1.25 MG Tank No. 1. At build-out, the Meadowlark Tanks will provide a total storage capacity of 8.75 MG. This project is identified in the 2018 Master Plan as Project R-1.

Operations Impact: The project will increase capacity at the site by 2.5 million gallons with the construction of the new tank. Daily monitoring of water levels and conditions at the tank site is expected.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$123,000						\$123,000
Design	\$367,000				\$51,000		\$418,000
Construction					\$4,011,000		\$4,011,000
Total	\$490,000	\$0	\$0	\$0	\$4,062,000	\$0	\$4,552,000

FY 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2003	Aug 2003	Mar 2004	Apr 2004	Oct 2023	Jan 2024	Jun 2024	Jun 2024

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: Rob Scholl

Department: Engineering

Project: 2017100224

Funding Source: See Below

Comments:

Project:	Amount:	Source:
Discovery St Widening*	\$800,000	Water/Sewer 85% / 15%
Bent Ave Bridge*	\$1,050,000	Water/Sewer 25% / 75%
Via Vera Cruz Bridge*	\$1,800,000	Water/Sewer 70% / 30%
Total	\$3,650,000	

These projects are in conjunction with the City's Capital Improvement Plan.

Operations Impact: Normal maintenance for infrastructure.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$90,000						\$90,000
Design							
Construction			\$3,650,000				\$3,650,000
Total	\$90,000	\$0	\$3,650,000	\$0	\$0	\$0	\$3,740,000

FY 2020/21 Budget Request - \$660,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016						Jun 2022	Jun 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 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$20,000	\$65,000					\$85,000
Design		\$335,000	\$115,000				\$450,000
Construction			\$1,885,000	\$615,000			\$2,500,000
Total	\$20,000	\$400,000	\$2,000,000	\$615,000	\$0	\$0	\$3,035,000

FY 2020/21 Budget Request - \$975,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Jul 2019	Jun 2020	Jul 2020	Aug 2021	Nov 2021	Aug 2022	Aug 2022

Capital Improvement Program Elser Lane Water Line Improvements

Description: Project will ensure reliability and improve water quality for residents along Elser Lane by transferring water services to a new 8-inch distribution main instead of the existing 18-inch transmission main.



Project Manager: Ryan Morgan

Department: Engineering

Project: 2018100002

Funding Source: 100% Fund 110 – Water Replacement

Comments: An existing 18-inch diameter cement mortar lined and coated steel transmission main between Rees Road and Rock Springs Road was installed in 1956. The pipeline corridor travels between homes, underneath structures, and in private backyards where access is significantly limited. Should a pipeline rupture occur or if the pipeline requires repair, there is a greater chance of damage to property owners. This line serves approximately 21 residential meters. This project will bring this area into District standards by extending new 8-inch distribution water lines on Elser Lane to service residents with new water meters. New connections to existing water lines in McLees Court will create a loop in the water supply system, ensuring reliability of service and improving water quality. This project also offsets future costs to relocate the water main under the Rees Road Water Line Project.

Operations Impact: Improve reliability and water quality. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$15,000					\$20,000	\$35,000
Design						\$200,000	\$200,000
Construction						\$1,635,000	\$1,635,000
Total	\$15,000	\$0	\$0	\$0	\$0	\$1,855,000	\$1,870,000

FY 2020/21 Budget Request - \$58,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2017	Jul 2024	Jun 2026	Dec 2025	Dec 2026	Mar 2027	Nov 2027	Dec 2027

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 perform 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$5,000	\$30,000	\$10,000				\$45,000
Design			\$225,000	\$75,000			\$300,000
Construction				\$1,450,000			\$1,450,000
Total	\$5,000	\$30,000	\$235,000	\$1,525,000	\$0	\$0	\$1,795,000

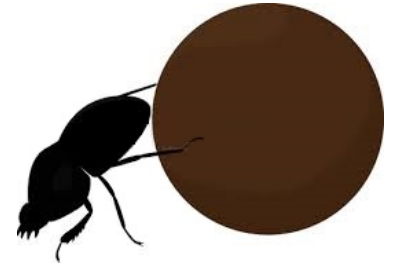
FY 2020/21 Budget Request - (\$205,000)

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2018	Sep 2021	Oct 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$50,000						\$50,000
Design	\$150,000						\$150,000
Construction		\$1,500,000					\$1,500,000
Total	\$200,000	\$1,500,000	\$0	\$0	\$0	\$0	\$1,700,000

FY 2020/21 Budget Request - (\$178,000)

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2018	Jul 2018	Feb 2019	Mar 2019	Jul 2020	Aug 2020	Nov 2020	Dec 2020

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$25,000	\$10,000	\$40,000				\$75,000
Design			\$135,000	\$15,000			\$150,000
Construction				\$1,310,000			\$1,310,000
Total	\$25,000	\$10,000	\$175,000	\$1,325,000	\$0	\$0	\$1,535,000

FY 2020/21 Budget Request - \$50,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2011	Apr 2012	Jun 2021	Jul 2021	Jun 2022	Sep 2022	Feb 2023	Mar 2023

Capital Improvement Program Meadowlark Failsafe Rehabilitation

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, we expect to receive \$580,000 in 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$40,000	\$30,000					\$70,000
Design	\$70,000	\$50,000					\$120,000
Construction		\$670,000	\$300,000				\$970,000
Total	\$110,000	\$750,000	\$300,000	\$0	\$0	\$0	\$1,160,000

FY 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Jan 2020	Aug 2020	Jul 2020	Oct 2020	Feb 2021	Aug 2021	Aug 2021

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$3,000						\$3,000
Design		\$65,000					\$65,000
Construction		\$100,000	\$860,000				\$960,000
Total	\$3,000	\$165,000	\$860,000	\$0	\$0	\$0	\$1,028,000

FY 2020/21 Budget Request - \$3,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Nov 2019	Jun 2020	Jul 2020	Mar 2021	Jun 2021	Dec 2021	Jan 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design		\$92,000	\$75,000	\$75,000			\$242,000
Construction		\$263,000	\$175,000	\$175,000			\$613,000
Total	\$0	\$355,000	\$250,000	\$250,000	\$0	\$0	\$855,000

FY 2020/21 Budget Request - \$0

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 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$154,000	\$100,000	\$50,000	\$50,000			\$354,000
Design		\$200,000	\$100,000	\$50,000			\$350,000
Construction							
Total	\$154,000	\$300,000	\$150,000	\$100,000	\$0	\$0	\$704,000

FY 2020/21 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 - 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$3,000						\$3,000
Design	\$50,000						\$50,000
Construction	\$210,000	\$400,000					\$610,000
Total	\$263,000	\$400,000	\$0	\$0	\$0	\$0	\$663,000

FY 2020/21 Budget Request - \$90,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2017	Apr 2018	Jun 2019	Jul 2019	Jun 2020	Jul 2020	Oct 2020	Nov 2020

Capital Improvement Program North Twin Oaks Tank No. 1 Refurbishment

Description: North Twin Oaks Tank No. 1 requires interior and exterior refurbishment.



Project Manager: Ryan Morgan

Department: Engineering

Project: 2019100003

Funding Source: 100% Fund 110 – Water Replacement

Comments: North Twin Oaks Tank No. 1 was built in 1961 off El Paso Alto and was last inspected in 2010 and 2015. The existing interior lining and exterior coating of this 0.6 million gallon (MG) tank has deteriorated and requires full refurbishment. This project will remove the existing interior lining and exterior coating and install new linings and coatings. Due to the age of the tank and level of deterioration, repairs to the ceiling rafters or replacement may be necessary as well as upgrades to the safety and cathodic protection equipment. The existing antenna will also be relocated off the tank and remote communication equipment upgraded.

Operations Impact: Prevent further deterioration of the existing linings and coatings. Improved safety. Routine Maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design	\$65,000						\$65,000
Construction	\$125,000	\$467,000					\$592,000
Total	\$190,000	\$467,000	\$0	\$0	\$0	\$0	\$657,000

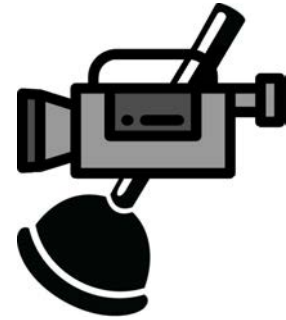
FY 2020/21 Budget Request - \$30,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2018	Jul 2018	Nov 2018	Dec 2018	Oct 2019	May 2020	Nov 2020	Dec 2020

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$17,000					\$17,000
Design		\$12,000					\$12,000
Construction		\$580,000					\$580,000
Total	\$0	\$609,000	\$0	\$0	\$0	\$0	\$609,000

FY 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Jul 2019	Jun 2021	Aug 2019	Oct 2020	Oct 2020	Jun 2021	Jun 2021

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design		\$71,000	\$75,000	\$75,000			\$221,000
Construction		\$134,000	\$125,000	\$125,000			\$384,000
Total	\$0	\$205,000	\$200,000	\$200,000	\$0	\$0	\$605,000

FY 2020/21 Budget Request - \$0

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 Palos Vista Pump Station - Motor Starters Upgrade

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



Project Manager: Robert Salazar

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$5,000						\$5,000
Design		\$33,000					\$33,000
Construction	\$370,000						\$370,000
Total	\$375,000	\$33,000	\$0	\$0	\$0	\$0	\$408,000

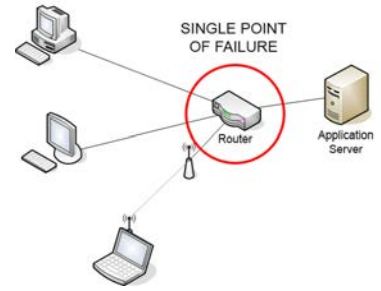
FY 2020/21 Budget Request - \$33,000

Estimated Project Timeline

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

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$14,000	\$50,000					\$64,000
Design	\$8,000	\$50,000					\$58,000
Construction	\$45,000	\$180,000					\$225,000
Total	\$67,000	\$280,000	\$0	\$0	\$0	\$0	\$347,000

FY 2020/21 Budget Request - \$280,000

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$5,000	\$2,000					\$7,000
Design			\$30,000				\$30,000
Construction			\$270,000				\$270,000
Total	\$5,000	\$2,000	\$300,000	\$0	\$0	\$0	\$307,000

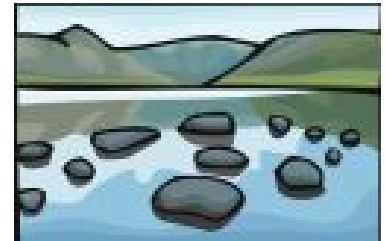
FY 2020/21 Budget Request - (\$167,000)

Estimated Project Timeline

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

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$5,000	\$2,000					\$7,000
Design			\$20,000				\$20,000
Construction			\$73,000	\$200,000			\$273,000
Total	\$5,000	\$2,000	\$93,000	\$200,000	\$0	\$0	\$300,000

FY 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jun 2018	Dec 2020	Jul 2021	Dec 2021	Mar 2022	Aug 2022	Mar 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & 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 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jan 2016	Mar 2016	Apr 2016	Jun 2023	Jul 2023	Dec 2023	Dec 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction	\$100,000	\$75,000	\$75,000				\$250,000
Total	\$100,000	\$75,000	\$75,000	\$0	\$0	\$0	\$250,000

FY 2020/21 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 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. 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$44,000					\$44,000
Design		\$44,000					\$44,000
Construction		\$151,000					\$151,000
Total	\$0	\$239,000	\$0	\$0	\$0	\$0	\$239,000

FY 2020/21 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 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction	\$65,000	\$155,000					\$220,000
Total	\$65,000	\$155,000	\$0	\$0	\$0	\$0	\$220,000

FY 2020/21 Budget Request - \$155,000

Estimated Project Timeline

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

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction	\$101,000		\$49,000				\$150,000
Total	\$101,000	\$0	\$49,000	\$0	\$0	\$0	\$150,000

FY 2020/21 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 manufacturer. 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning			\$25,000				\$25,000
Design			\$25,000				\$25,000
Construction			\$100,000				\$100,000
Total	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000

FY 2020/21 Budget Request - \$125,000

Estimated Project Timeline

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

Capital Improvement Program MRF - Site Lighting Upgrade and Repairs

Description: Replace three light poles and existing outdoor High Pressure Sodium (HPS), Low Pressure Sodium (LPS) and Metal Halide lighting fixtures with LED fixtures.



Project Manager: Robert Salazar

Department: Mechanical/Electrical

Project: 2020100024

Funding Source: 100% Fund 250 - Reclaimed

Comments:

Replacing existing outdoor lighting fixtures with LED fixtures will provide improved security and safety lighting at night for District staff.

LED fixtures will be more energy efficient and reduce operating and maintenance costs. There are currently three lighting poles that require replacement due to corrosion and deterioration at the bases.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$10,000					\$10,000
Design							
Construction	\$60,000	\$80,000					\$140,000
Total	\$60,000	\$90,000	\$0	\$0	\$0	\$0	\$150,000

FY 2020/21 Budget Request - \$90,000

Estimated Project Timeline

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

Capital Improvement Program Building B Laminate Floor Replacement

Description: The flooring in B building is peeling up. To prevent trip hazards this project will thoroughly seal the concrete below and lay the new laminate.



Project Manager: Dennis Bowman

Department: Warehouse/Purchasing

Project: 2017100009

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

Comments: Remove old flooring, seal concrete, and install new flooring.

Operations Impact: None

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction			\$110,000				\$110,000
Total	\$0	\$0	\$110,000	\$0	\$0	\$0	\$110,000

FY 2020/21 Budget Request - \$0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016							Jun 2022

Capital Improvement Program Update Restrooms to ADA Compliance

Description: Remove and replace the current counters, sinks, mirrors, and paint. Fire system lights are a requirement to install in the restroom for compliance.



Project Manager: Dennis Bowman

Department: Warehouse/Purchasing

Project: 2020100021

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

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

Operations Impact: Certain restrooms will be down while under construction.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$2,000					\$2,000
Design							
Construction		\$65,000	\$40,000				\$105,000
Total	\$0	\$67,000	\$40,000	\$0	\$0	\$0	\$107,000

FY 2020/21 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 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning	\$40,000						\$40,000
Design	\$15,000	\$10,000					\$25,000
Construction	\$10,000	\$30,000					\$40,000
Total	\$65,000	\$40,000	\$0	\$0	\$0	\$0	\$105,000

FY 2020/21 Budget Request - (\$25,000)

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2019	Aug 2017	Nov 2019	Dec 2019	Apr 2020	May 2020	Nov 2020	Dec 2020

Capital Improvement Program Water Operations Control Room Upgrades

Description: Replacement of the Water Operations SCADA console, floors and paint. New SCADA software and display screens will be used for enhanced distribution system control and security camera monitoring operations. This will comply with DHS recommendations and the District's VA.



Project Manager: Shawn Askine

Department: Water Operations

Project: 2020100019

Funding Source: 100% Fund 110 – Water Replacement

Comments: VWD staff is working on a District-wide Supervisory Control and Data Acquisition (SCADA) upgrade that is compliant with the Department of Homeland Security (DHS) recommendations. The Water Operations control room console was constructed in 1997. This console was designed to hold the old style, square monitors and does not allow the use of the current wide screen technology monitors. The replacement console design will allow the use of wide screen monitors and have an option for an ergonomic sit/stand station. The new console will also allow for the additional screens needed to monitor security cameras throughout the distribution system, located in areas identified in the District's Vulnerability Assessment (VA). The control room floor is worn and will be replaced before installing the replacement console. The Water Operations control room and offices will also be painted at this time.

Operations Impact: Improved SCADA control systems and security monitoring. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction	\$14,000	\$74,000					\$88,000
Total	\$14,000	\$74,000	\$0	\$0	\$0	\$0	\$88,000

FY 2020/21 Budget Request - \$10,000

Estimated Project Timeline

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

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: 2021100001

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$4,087,000	\$6,076,000	\$5,938,000	\$6,122,000	\$6,854,000	\$29,077,000
Total	\$0	\$4,087,000	\$6,076,000	\$5,938,000	\$6,122,000	\$6,854,000	\$29,077,000

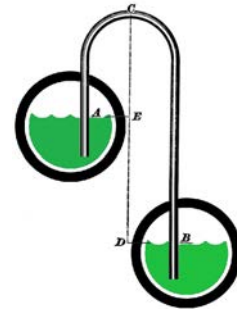
FY 2020/21 Budget Request - \$29,077,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2009						Jun 2025	Jun 2025

Capital Improvement Program Land Outfall Parallel Sewer Section A

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: 100% Fund 220 – Sewer Capacity

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$120,000	\$200,000				\$320,000
Design				\$1,000,000			\$1,000,000
Construction					\$18,025,000	\$7,930,000	\$25,955,000
Total	\$0	\$120,000	\$200,000	\$1,000,000	\$18,025,000	\$7,930,000	\$27,275,000

FY 2020/21 Budget Request - \$27,275,000

Estimated Project Timeline

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

Capital Improvement Program 16-Inch Emergency Bypass Pipeline Rehabilitation

Description: Rehabilitate approximately 4550 feet of existing 16-inch reinforced plastic mortar sewer pipeline with a cured-in-place-pipe (CIPP) liner and replace necessary control valves and appurtenances to operate the line. Provide new access locations at incremental lengths along the alignment.



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 install access to install a cured-in-place-pipe (CIPP) liner and replace appurtenances as needed.

Operations Impact: Restore operation to broken valves and increase life of the bypass sewer line.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$60,000					\$60,000
Design		\$200,000					\$200,000
Construction		\$1,250,000	\$500,000				\$1,750,000
Total	\$0	\$1,510,000	\$500,000	\$0	\$0	\$0	\$2,010,000

FY 2020/21 Budget Request - \$2,010,000

Estimated Project Timeline

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

Capital Improvement Program MRF Headworks - Upgrade/Replace Equipment

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



Project Manager: Robert Salazar

Department: Mechanical/Electrical

Project: 2021100004

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: Vallecitos staff consulted with Misco Water & JWC Environmental to evaluate the existing augers, grinders and flow conditions at the Meadowlark Reclamation Facility (MRF) Headworks. The companies provided their recommendations to update/upgrade existing equipment to satisfy current and future wastewater flow conditions at MRF. This project will replace the existing equipment per their recommendations in order to provide increased efficiency and reliability at the MRF Headworks.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$20,000					\$20,000
Design							
Construction		\$420,000					\$420,000
Total	\$0	\$440,000	\$0	\$0	\$0	\$0	\$440,000

FY 2020/21 Budget Request - \$440,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020					Nov 2020	Jun 2021	Jun 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$5,000					\$5,000
Design		\$20,000					\$20,000
Construction			\$95,000	\$300,000			\$395,000
Total	\$0	\$25,000	\$95,000	\$300,000	\$0	\$0	\$420,000

FY 2020/21 Budget Request - \$420,000

Estimated Project Timeline

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

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: Rob Scholl

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$250,000	\$150,000				\$400,000
Design							
Construction							
Total	\$0	\$250,000	\$150,000	\$0	\$0	\$0	\$400,000

FY 2020/21 Budget Request - \$400,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2020	Jul 2020	Jun 2022	Jul 2022	Jun 2023	Jul 2023	Jun 2024	Jun 2024

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$2,000	\$5,000				\$7,000
Design			\$23,000				\$23,000
Construction				\$270,000			\$270,000
Total	\$0	\$2,000	\$28,000	\$270,000	\$0	\$0	\$300,000

FY 2020/21 Budget Request - \$300,000

Estimated Project Timeline

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

Capital Improvement Program Coggan Pump Station - Generator

Description: Install new permanent generator with automatic transfer switch.



Project Manager: Robert Salazar

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$10,000					\$10,000
Design			\$25,000				\$25,000
Construction			\$250,000				\$250,000
Total	\$0	\$10,000	\$275,000	\$0	\$0	\$0	\$285,000

FY 2020/21 Budget Request - \$285,000

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 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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$250,000					\$250,000
Total	\$0	\$250,000	\$0	\$0	\$0	\$0	\$250,000

FY 2020/21 Budget Request - \$250,000

Estimated Project Timeline

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

Capital Improvement Program Building A Roof Replacement

Description: The roof on building A has had several leaks. After a thorough inspection it was determined that the roof needs to be replaced.



Project Manager: Wes Owen

Department: Warehouse/Purchasing

Project: 2021100010

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

Comments: Re-roof building A salvaging existing tiles where possible.

Operations Impact: None

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$2,000					\$2,000
Design							
Construction			\$138,000				\$138,000
Total	\$0	\$2,000	\$138,000	\$0	\$0	\$0	\$140,000

FY 2020/21 Budget Request - \$140,000

Estimated Project Timeline

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

Capital Improvement Program District-wide Valve Replacement Program

Description: Replace broken or leaking valves throughout the District.



Project Manager: Kevin Anctil

Department: Construction

Project: 2021100011

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$100,000					\$100,000
Total	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000

FY 2020/21 Budget Request - \$100,000

Estimated Project Timeline

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

Capital Improvement Program MRF - Uninterruptible Power Supply Installation

Description: Installation of a Uninterruptible Power Supply for lab equipment in the MRF Control building.



Project Manager: Robert Salazar

Department: Mechanical/Electrical

Project: 2021100012

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: Install an Uninterruptible Power Supply (UPS) to feed backup power to electrical Panel 'B' which feeds power to the Meadowlark Reclamation Facility (MRF) lab area and equipment. During monthly generator exercises and unplanned power outages, lab instruments and equipment with sensitive electronic components can be affected by power surges. In addition, two receptacle circuits feeding power to the SCADA computers in the Control room will be re-fed from Panel 'A' to Panel 'B' to be protected on the UPS.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning		\$10,000					\$10,000
Design							
Construction		\$60,000					\$60,000
Total	\$0	\$70,000	\$0	\$0	\$0	\$0	\$70,000

FY 2020/21 Budget Request - \$70,000

Estimated Project Timeline

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

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: Rob Scholl

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 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$70,000					\$70,000
Total	\$0	\$70,000	\$0	\$0	\$0	\$0	\$70,000

FY 2020/21 Budget Request - \$70,000

Estimated Project Timeline

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

Capital Improvement Program South Lake - Ultrasonic Algae Control System

Description: Installation of an ultrasonic algae control system at South Lake Reservoir.



Project Manager: Shawn Askine

Department: Water Operations

Project: 2021100014

Funding Source: 100% Fund 110 – Water Replacement

Comments: The MPC-Buoy by LG Sonic is an ultrasonic algae control system that will be used to help reduce the amount of algae growth in the water stored in South Lake Reservoir. The ultrasonic device is a floating solar-powered system that combines real-time water quality monitoring and ultrasonic sound waves to control algae effectively. Using ultrasound to control the growth of algae in South Lake Reservoir means less chemicals will need to be used to maintain water quality.

Operations Impact: Reduced chemical usage and improved water quality.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$65,000					\$65,000
Total	\$0	\$65,000	\$0	\$0	\$0	\$0	\$65,000

FY 2020/21 Budget Request - \$65,000

Estimated Project Timeline

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

Capital Improvement Program MRF - Replacement of Valve Actuators

Description: Replacement of tertiary effluent valve actuators.



Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2021100015

Funding Source: 100% Fund 250 - Reclaimed

Comments: The tertiary effluent valve actuators constantly modulate the effluent valves to maintain the tertiary filter level. This constant modulation puts excessive wear on the actuator and over time the actuator will wear out. These actuators are over ten years old and need to be replaced. Replacing the current actuators with the more industrial actuators will provide a much longer lifespan and provide more accurate valve operation and positioning.

Operations Impact: Improve the precision of the valves' position and provide a longer lifespan of the modulating actuators.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$65,000					\$65,000
Total	\$0	\$65,000	\$0	\$0	\$0	\$0	\$65,000

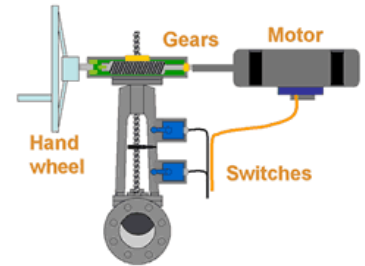
FY 2020/21 Budget Request - \$65,000

Estimated Project Timeline

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

Capital Improvement Program MRF - Flow Control Valve and Actuator

Description: Installation of a valve and actuator for primary skimmer failures.



Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2021100016

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: In the event of a primary skimmer failure in a skimming position, water would be allowed to flow unrestricted to the solids wet well. The high volume of water and skimming material would overflow the solids wet well. This prevents Meadowlark staff from being able to keep the primary skimming system running in auto 24/7. Staff currently places the primary skimmers in the off position at the end of working hours. This creates a buildup of scum and debris which in turn leads to offensive odors, septic conditions, and a potential increase of loading on the system. The buildup of scum and debris that accumulates after hours requires more staff time to skim and clean. The installation of the actuator and valve in the primary skimmer line would allow for the remote isolation of the line during a skimmer failure. With the actuator and valve in place, the primary skimming system would be able to run in automatic operation 24/7. Response to an after hours primary skimmer failure with the valve and actuator in place would eliminate potential spills from the solids wet well.

Operations Impact: The installation of the valve and actuator will improve operations and help to control odors.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$54,000					\$54,000
Total	\$0	\$54,000	\$0	\$0	\$0	\$0	\$54,000

FY 2020/21 Budget Request - \$54,000

Estimated Project Timeline

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

**Capital Improvement Program
VWD Headquarters: Asphalt Repair & Sealcoat**

Description: Repair the damaged asphalt and apply sealcoat at the VWD Headquarters.



Project Manager: Kevin Anctil

Department: Construction

Project: 2021100017

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

Comments: The VWD main facility, including the customer parking area and Operations yard, needs asphalt repair and sealcoating. The asphalt in the Operations yard has areas that are damaged and need to be repaired. The damaged areas will be repaired and the entire facility will be sealcoated to protect the asphalt and extend its useful life. The striping for parking areas will be performed after the sealcoating is completed.

Operations Impact: This work will be completed on the weekend to limit impact to customers, employees and normal operations.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$51,000					\$51,000
Total	\$0	\$51,000	\$0	\$0	\$0	\$0	\$51,000

FY 2020/21 Budget Request - \$51,000

Estimated Project Timeline

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

Capital Improvement Program SSO Training Facility

Description: Installation of an SSO (Sanitary Sewer Overflow) Training Facility in the VWD yard.



Project Manager: Eric Garcia

Department: Construction

Project: 2021100018

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: The SSO (Sanitary Sewer Overflow) Training Facility in the VWD yard will be used for training Wastewater Collection Systems crews how to respond during an SSO. It will help them prepare for a real event by determining the flow in gallons per minute (GPM). It will also be used to train the crew in how to respond, set up traffic control, and to evaluate the best methods, equipment, and materials needed to contain and recover an SSO. How to clean up and properly document the event will also be a part of this training. The Regional Water Quality Control Board requires this training and documentation on how we estimate the SSO flow in GPM. This training facility will assist us in providing a more accurate total volume estimation during an actual SSO by observing a controlled and metered release at various flow rates.

Operations Impact: This will help train the Wastewater Collection Systems crews on SSO response and estimations.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$40,000					\$40,000
Total	\$0	\$40,000	\$0	\$0	\$0	\$0	\$40,000

FY 2020/21 Budget Request - \$40,000

Estimated Project Timeline

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

Capital Improvement Program MRF - Fall Protection Grating Installation

Description: Fall protection grating to be installed in the primary clarifier access hatches.



Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2021100019

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: The primary sedimentation basins at the Meadowlark Reclamation Facility (MRF) have numerous access hatches of various sizes. The hatches serve as an access point for maintenance and cleaning. Opening a hatch creates a fall hazard requiring some form of fall protection. With grating and supports installed, staff can safely open the hatches as needed without the need for any further fall protection devices. Without the grating, staff will need to purchase, install, and maintain a fall arrest system in order to perform normal operational duties at the primary basins. These systems are cumbersome and are required to be reconfigured each time a hatch is opened. The fall protection grating creates a walking surface which will prevent staff from falling into a basin.

Operations Impact: The installation of the grating will provide a safe working surface for staff.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$37,000					\$37,000
Total	\$0	\$37,000	\$0	\$0	\$0	\$0	\$37,000

FY 2020/21 Budget Request - \$37,000

Estimated Project Timeline

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

Capital Improvement Program Meadowlark 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: 2021100020

Funding Source: 100% Fund 110 – Water Replacement

Comments: Staff will be installing a water quality analyzer at the Meadowlark Flow Control Facility (FCF). This device will give the Water Distribution 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 also includes a sample return pump. This 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 recently enacted water conservation regulations.

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

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$30,000					\$30,000
Total	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000

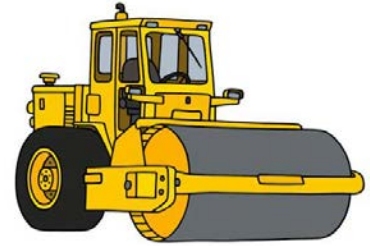
FY 2020/21 Budget Request - \$30,000

Estimated Project Timeline

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

**Capital Improvement Program
Richland Tank II: Asphalt Repair and Sealcoat**

Description: Repair the damaged asphalt and apply sealcoat at the Richland Tank II site.



Project Manager: Kevin Anctil

Department: Construction

Project: 2021100021

Funding Source: 100% Fund 110 – Water Replacement

Comments: Repair damaged areas and sealcoat the asphalt at the Richland Tank II site. The asphalt has cracks, root damage and potholes. The asphalt patches will be completed and then the area will be sealcoated to extend the life of the asphalt.

Operations Impact: No impact to operations.

Project Spending Plan

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

FY 2020/21 Budget Request - \$22,000

Estimated Project Timeline

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

Capital Improvement Program Twin Oaks Reservoir - Safety Climb System

Description: Install ladder climbing system on the salt tank at the Twin Oaks Reservoir Facility to provide a safe work environment for staff.



Project Manager: Shawn Askine

Department: Water Operations

Project: 2021100022

Funding Source: 100% Fund 110 – Water Replacement

Comments: The existing ladder climbing system on the salt tank at the Twin Oaks Reservoir Facility does not meet the current code for climbing and fall protection. The tank access port is at the top of the tank and access to this port is done periodically to observe salt level distribution and during salt deliveries. The new ladder climbing system will have the proper climbing devices and will include a railing at the top of the tank to provide a more secure and safe system as the port is being accessed.

Operations Impact: Improved safety for staff while accessing the top of the salt tank.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$18,000					\$18,000
Total	\$0	\$18,000	\$0	\$0	\$0	\$0	\$18,000

FY 2020/21 Budget Request - \$18,000

Estimated Project Timeline

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

**Capital Improvement Program
MRF - Aeration Influent Channel Mixing**

Description: Installation of an air mixing system in the roughing filter effluent (RFE) channel and the return activated sludge (RAS) channel.



Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2021100023

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: The RFE and RAS channels develop a scum buildup that creates an offensive odor and allows for the buildup of fly eggs and larvae. The channels have dead zones that produce septic conditions and solids buildup. This buildup of scum and septic conditions has a negative effect on plant processes by decreasing aerobic conditions in the RAS, increasing unwanted filament and sulfur producing bacteria. This increases air demand in the aeration basin which increases operational costs. Staff currently has to wash down the channels on a regular basis to remove the buildup. This labor intensive routine produces minimal results and the buildup returns within hours. The installation of air mixers will eliminate the buildup, remove the cause of unfavorable process conditions and minimize operational costs. The addition of air mixers will also improve the odor control program at Meadowlark.

Operations Impact: The addition of the air mixing system will improve Meadowlark's aeration process, increase operation efficiency, and improve odor control.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$17,000					\$17,000
Total	\$0	\$17,000	\$0	\$0	\$0	\$0	\$17,000

FY 2020/21 Budget Request - \$17,000

Estimated Project Timeline

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

**Capital Improvement Program
MRF - AT&T Phone Line Relocation**

Description: Relocate the AT&T phone line into the Meadowlark Reclamation Facility.



Project Manager: Dawn McDougle

Department: Meadowlark Reclamation Facility

Project: 2021100024

Funding Source: 100% Fund 210 – Sewer Replacement

Comments: SDG&E relocated their power line into the Meadowlark Reclamation Facility (MRF) from their power poles to an underground conduit. AT&T's phone line is on the same power poles and needs to be placed underground as well. SDG&E provided a conduit for AT&T up to the transformer at MRF. AT&T needs to add additional conduit from the transformer to the power pole. Once this conduit has been installed, AT&T can remove their line from the pole and connect to the existing line that goes underground. All power poles can then be removed from MRF's lower road. This project pays for the portion that is owned by Vallecitos.

Operations Impact: The AT&T phone line into the plant will be more reliable during severe weather conditions.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$16,000					\$16,000
Total	\$0	\$16,000	\$0	\$0	\$0	\$0	\$16,000

FY 2020/21 Budget Request - \$16,000

Estimated Project Timeline

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

Capital Improvement Program Mahr - Salt Tank Ladder Climbing System

Description: Replace ladder climbing system on the salt tank at Mahr Reservoir.



Project Manager: Dawn McDougale

Department: Meadowlark Reclamation Facility

Project: 2021100025

Funding Source: 100% Fund 250 - Reclaimed

Comments: The existing ladder climbing system on Mahr's salt tank does not meet the current code for climbing and fall protection. The tank access port is at the top of the tank and access to this port is done periodically to observe salt level distribution and during salt deliveries. The new ladder climbing system will have the proper climbing devices and will include a railing at the top of the tank to provide a more secure and safe system as the port is being accessed.

Operations Impact: Improved safety for staff while accessing the top of the salt tank.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$15,000					\$15,000
Total	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000

FY 2020/21 Budget Request - \$15,000

Estimated Project Timeline

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

Capital Improvement Program Richland Tank I: Asphalt Repair and Sealcoat

Description: Repair the damaged asphalt and apply sealcoat at the Richland Tank I site.



Project Manager: Kevin Anctil

Department: Construction

Project: 2021100026

Funding Source: 100% Fund 110 – Water Replacement

Comments: Repair damaged areas and sealcoat the asphalt at the Richland Tank I site. The asphalt has cracks, root damage and potholes. The asphalt patches will be completed and then the area will be sealcoated to extend the life of the asphalt.

Operations Impact: No impact to operations.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$15,000					\$15,000
Total	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000

FY 2020/21 Budget Request - \$15,000

Estimated Project Timeline

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

Capital Improvement Program Palos Vista Tank: Asphalt Repair and Sealcoat

Description: Repair the damaged asphalt and apply sealcoat at the Palos Vista Tank site.



Project Manager: Kevin Anctil

Department: Construction

Project: 2021100027

Funding Source: 100% Fund 110 – Water Replacement

Comments: Repair damaged areas and sealcoat the asphalt at the Palos Vista tank site. The asphalt has cracks, root damage and potholes. The asphalt patches will be completed and then the area will be sealcoated to extend the life of the asphalt.

Operations Impact: No impact to operations.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$15,000					\$15,000
Total	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000

FY 2020/21 Budget Request - \$15,000

Estimated Project Timeline

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

Capital Improvement Program
Via Vera Cruz Tank: Asphalt Repair and Sealcoat

Description: Repair the damaged asphalt and apply sealcoat at the Via Vera Cruz Tank site.



Project Manager: Kevin Anctil

Department: Construction

Project: 2021100028

Funding Source: 100% Fund 110 – Water Replacement

Comments: Repair damaged areas and sealcoat the asphalt at the Via Vera Cruz tank site. The asphalt has cracks, root damage and potholes. The asphalt patches will be completed and then the area will be sealcoated to extend the life of the asphalt.

Operations Impact: No impact to operations.

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning							
Design							
Construction		\$14,000					\$14,000
Total	\$0	\$14,000	\$0	\$0	\$0	\$0	\$14,000

FY 2020/21 Budget Request - \$14,000

Estimated Project Timeline

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

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

<u>Project:</u>	<u>Amount:</u>	<u>Source:</u>
San Marcos Boulevard West Sewer Replacement	4,100,000	55% Fund 220 – Sewer Capacity, 45% Fund 210 – Sewer Replacement
El Norte Parkway Water Line Extension	4,100,000	100% Fund 110 – Water 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
Nordahl Shopping Center Sewer Replacement	2,300,000	45% Fund 210 – Sewer Replacement, 55% Fund 220 – Sewer 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
Camino de Amigos Sewer Replacement	1,380,000	45% Fund 210 – Sewer Replacement, 55% Fund 220 – Sewer Capacity
Old Questhaven Sewer Replacement	834,000	77% Fund 210 – Sewer Replacement, 23% Fund 220 – Sewer Capacity
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
Richland I Tank Exterior Refurbishment	385,000	100% Fund 110 – Water Replacement
Schoolhouse Water Line Improvements	300,000	36% Fund 120 – Water Capacity, 64% Fund 110 – Water Replacement
Wulff Pressure Reducing Station	45,000	100% Fund 110 – Water Replacement
Total	\$31,179,000	

Comments: These projects are part of the District's capital budget beginning after fiscal year 2020-21.

Operations Impact: Normal Maintenance for infrastructure

Project Spending Plan

Project Phase	Previous Spending	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25 & Thereafter	Total
Planning			\$50,000	\$200,000	\$109,000	\$450,000	\$809,000
Design			\$255,000		\$725,000	\$1,950,000	\$2,930,000
Construction			\$435,000	\$1,525,000		\$25,480,000	\$27,440,000
Total	\$0	\$0	\$740,000	\$1,725,000	\$834,000	\$27,880,000	\$31,179,000

FY 2020/21 Budget Request - \$31,179,000.00

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
	Aug 2001	Jun 2026	Feb 2007	Jun 2027	Jan 2022	Jun 2028	Jun 2028

VALLECITOS WATER DISTRICT

2020-21 CAPITAL BUDGET - EASEMENTS, VEHICLES & EQUIPMENT SCHEDULE

VEHICLES/MOBILE EQUIPMENT						
Existing			New or	<i>Funding Source:</i>		Total
Vehicle #	Description	Project #	Replacement	Water	Sewer	Cost
Engineering Inspection:						
199	2020 Ford F-150 4x4 SuperCab	2021100029	Replacement	23,000	22,000	45,000
Collections:						
214	2020 Ford F-250 XL SuperDuty	2021100030	Replacement		51,000	51,000
213	2021 Vactor - Model 2110 Combination Truck	2021100031	Replacement		502,000	502,000
221	2020 Ford F-550 XL Regular Cab	2021100032	Replacement		53,000	53,000
Construction:						
166	2020 Cat 420F2 Backhoe	2021100033	Replacement	63,700	61,300	125,000
Meters:						
232	2020 Ford F-150 4x4 XL	2021100034	Replacement	45,000		45,000
TOTAL VEHICLES						\$ 821,000
FACILITIES AND EQUIPMENT						
Requesting			New or	<i>Funding Source:</i>		Total
Dept.	Description	Project #	Replacement	Water	Sewer	Cost
Meadowlark Facility:						
	Chlorine Gas Regulators	2021100035	Replacement		30,000	\$ 30,000
Construction:						
	Husqvarna FS-3500 Concrete Saw	2021100036	Replacement	10,200	9,800	20,000
	2020 Paladin Brush Cutter	2021100037	New	5,100	4,900	10,000
TOTAL FACILITIES AND EQUIPMENT						\$ 60,000
VEHICLES & EQUIPMENT TOTAL						\$ 881,000

VALLECITOS WATER DISTRICT

DEBT SERVICE BUDGET FOR THE YEAR ENDING JUNE 30, 2021

	Water		Wastewater		Total
	Replacement	Capacity	Replacement	Capacity	
2015 Refunding ⁽¹⁾					
Outstanding principal as of July 1, 2020 ⁽²⁾	\$ -	\$ 21,088,200	\$ -	\$ 20,301,800	\$ 41,390,000
2020/21 Principal Payments	-	(1,082,690)	-	(1,042,310)	(2,125,000)
Outstanding principal as of July 1, 2021	<u>\$ -</u>	<u>\$ 20,005,510</u>	<u>\$ -</u>	<u>\$ 19,259,490</u>	<u>\$ 39,265,000</u>
2008 Private Placement ⁽³⁾					
Outstanding principal as of July 1, 2020	\$ -	\$ -	\$ -	\$ 3,400,000	\$ 3,400,000
2020/21 Principal Payments	-	-	-	(400,000)	(400,000)
Outstanding principal as of June 30, 2021	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 3,000,000</u>	<u>\$ 3,000,000</u>
2012 Debt ⁽⁴⁾					
Outstanding principal as of July 1, 2020	\$ -	\$ -	\$ -	\$ 2,266,000	\$ 2,266,000
2020/21 Principal Payments	-	-	-	(739,000)	(739,000)
Outstanding principal as of June 30, 2021	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,527,000</u>	<u>\$ 1,527,000</u>
2020/21 Debt Service Budget					
2015 Revenue Refunding principal	\$ -	\$ 1,082,690	\$ -	\$ 1,042,310	\$ 2,125,000
2015 Revenue Refunding interest	-	1,027,150	-	988,850	2,016,000
2008 Private Placement - principal	-	-	-	400,000	400,000
2008 Private Placement - interest	-	-	-	36,000	36,000
2012 Debt - principal	-	-	-	739,000	739,000
2012 Debt - interest	-	-	-	38,000	38,000
Total 2020/21 Debt Service Budget	<u>\$ -</u>	<u>\$ 2,109,840</u>	<u>\$ -</u>	<u>\$ 3,244,160</u>	<u>\$ 5,354,000</u>
Projected Debt Service Coverage Ratio ⁽⁵⁾					227%
Excluding Capital Facility Fees					184%
Excluding Capital Facility Fees and Property Tax					143%
Days of Operating Expenses in Unrestricted Cash and Investments					405

⁽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 20/21 principal payment on the refunding bonds is due to bondholders on July 1, 2020. The District is obligated to transfer the payment before June 30, 2020, to a restricted account maintained by the Trustee, and, therefore, was deducted from the projected July 1, 2020 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 1.072%. 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⁾ 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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2020-21 LONG-RANGE PLANNING



VALLECITOS WATER DISTRICT

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2021

	110 Water 120		210 Wastewater 220		Total
	Replacement	Capacity	Replacement	Capacity	
Projected July 1, 2020 Balance	\$ 36,629,000	\$ (9,060,000)	\$ 59,181,000	\$ (5,933,000)	\$ 80,817,000
Revenues					
Operating Transfers	(610,000)	-	6,924,000	-	6,314,000
Capital Facility Fees	-	1,740,000	-	3,510,000	5,250,000
Property Tax	1,293,000	-	1,029,000	-	2,322,000
RDA pass-through	1,050,000	-	1,050,000	-	2,100,000
Project Reimbursements	-	-	86,000	26,000	112,000
Investment Earnings	699,000	(186,000)	1,098,000	(174,000)	1,437,000
Available Balance	<u>39,061,000</u>	<u>(7,506,000)</u>	<u>69,368,000</u>	<u>(2,571,000)</u>	<u>98,352,000</u>
Less 20/21 Expenditures					
San Marcos Interceptor Phase 2	-	-	1,957,500	4,792,500	6,750,000
Encina Wastewater Authority Five Year Plan	-	-	4,087,000	-	4,087,000
16-Inch Emergency Bypass Pipeline Rehabilitation	-	-	1,510,000	-	1,510,000
Montiel Lift Station and Forcemain Replacement	-	-	777,750	747,250	1,525,000
MRF - Biological Selector Improvements	-	-	1,500,000	-	1,500,000
Encina Wastewater Authority FY 19/20	-	-	1,390,000	-	1,390,000
District-wide SCADA Upgrade Project	420,750	-	404,250	-	825,000
Meadowlark Failsafe Rehabilitation	-	-	750,000	-	750,000
Vehicles	131,700	-	689,300	-	821,000
Land Outfall West Condition Assessment	-	-	609,000	-	609,000
North Twin Oaks Tank No. 1 Refurbishment	467,000	-	-	-	467,000
MRF Headworks - Upgrade/Replace Equipment	-	-	440,000	-	440,000
Tres-Amigos Water Line Replacement Phase 1	400,000	-	-	-	400,000
MRF - Tertiary Structural Rehab and Repairs	-	-	400,000	-	400,000
Steel Pipeline Condition Assessment	355,000	-	-	-	355,000
Asset Management Replacement Schedule	150,000	-	150,000	-	300,000
Redundancy for Admin. Wireless Radio Network	142,800	-	137,200	-	280,000
MRF Direct Potable Reuse	-	-	250,000	-	250,000
MRF - Odor Scrubber #1 Replacement	-	-	250,000	-	250,000
DHS- Upgrades for Critical Infrastructure Hardware	121,890	-	117,110	-	239,000
Ductile Iron Pipe Condition Assessment	205,000	-	-	-	205,000
Sage Canyon Tank Refurbishment	165,000	-	-	-	165,000
Technology Infrastructure Upgrades	79,050	-	75,950	-	155,000
HVAC Communication Upgrade	65,280	-	62,720	-	128,000
Land Outfall Parallel Siphon Sewer Section A	-	-	-	120,000	120,000
District-wide Valve Replacement Program	100,000	-	-	-	100,000
MRF - Site Lighting Upgrade and Repairs	-	-	90,000	-	90,000
Fire Services - Backflow Preventer Upgrades	75,000	-	-	-	75,000
Miscellaneous Projects	474,400	-	537,600	10,000	1,022,000
Fund PERS UAL	2,054,000	-	1,973,000	-	4,027,000
Debt Service - 2012 Debt	-	-	-	777,000	777,000
Debt Service - 2008 Loan	-	-	-	436,000	436,000
Debt Service - 2015 Refunding	-	2,139,000	-	2,059,000	4,198,000
Less Total Expenditures	<u>5,406,860</u>	<u>2,139,000</u>	<u>18,158,390</u>	<u>8,941,750</u>	<u>34,646,000</u>
Projected June 30, 2021 Balance	33,654,140	(9,645,000)	51,209,610	(11,512,750)	\$ 63,706,000
Less Operating Reserves	6,310,400	-	6,563,800	-	12,874,200
Projected replacement reserve/restricted funds	<u>\$ 27,343,740</u>	<u>\$ (9,645,000)</u>	<u>\$ 44,645,810</u>	<u>\$ (11,512,750)</u>	<u>\$ 50,831,800</u>
Adopted replacement reserve floor	<u>\$ 9,233,800</u>		<u>\$ 18,557,900</u>		
Adopted replacement reserve ceiling	<u>\$ 36,905,000</u>		<u>\$ 58,145,300</u>		

See significant assumptions on page 110

VALLECITOS WATER DISTRICT

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2022

	110	Water	120	210	Wastewater	220	Total
	Replacement		Capacity	Replacement		Capacity	
Projected July 1, 2021 Balance	\$ 33,654,140		\$ (9,645,000)	\$ 51,209,610		\$ (11,512,750)	\$ 63,706,000
Revenues							
Debt Proceeds	-		10,000,000	-		-	10,000,000
Operating Transfers	18,000		-	7,207,000		-	7,225,000
Capital Facility Fees	-		1,539,000	-		5,822,000	7,361,000
Project Reimbursements				836,000			836,000
Property Tax	1,321,000		-	1,051,000		-	2,372,000
RDA pass-through	1,103,000			1,060,000		-	2,163,000
Investment Earnings	587,000		(99,000)	981,000		(229,000)	1,240,000
Available Balance	<u>36,683,140</u>		<u>1,795,000</u>	<u>62,344,610</u>		<u>(5,919,750)</u>	<u>94,903,000</u>
Less 21/22 Expenditures							
Encina Wastewater Authority Five Year Plan	-		-	6,076,000		-	6,076,000
City of San Marcos Creek District Phase 1	2,737,500		-	912,500		-	3,650,000
Montiel Lift Station and Forcemain Replacement	-		-	1,767,150		1,697,850	3,465,000
Tres-Amigos Water Line Replacement Phase 1	2,000,000		-	-		-	2,000,000
Sage Canyon Tank Refurbishment	860,000		-	-		-	860,000
Future Projects	110,000		-	283,000		347,000	740,000
16-Inch Emergency Bypass Pipeline Rehabilitation	-		-	500,000		-	500,000
Land Outfall Gravity Sewer Sec D Phs 1	-		-	320,000		80,000	400,000
Las Posas Water Line Replacement	300,000		-	-		-	300,000
Meadowlark Failsafe Rehabilitation	-		-	300,000		-	300,000
Coggan Pump Station - Generator	275,000		-	-		-	275,000
Steel Pipeline Condition Assessment	250,000		-	-		-	250,000
MRF: Conversion to Sodium Hypochlorite	-		-	235,000		-	235,000
Land Outfall Parallel Siphon Sewer Section A	-		-	-		200,000	200,000
Ductile Iron Pipe Condition Assessment	200,000		-	-		-	200,000
Richland Invert Replacement	-		-	175,000		-	175,000
MRF Direct Potable Reuse	-		-	150,000		-	150,000
Asset Management Replacement Schedule	75,000		-	75,000		-	150,000
Upgrades to Surveillance Video Management System	76,500		-	73,500		-	150,000
District-wide Valve Replacement Program	70,380		-	67,620		-	138,000
Building B Laminate Floor Replacement	56,100		-	53,900		-	110,000
Miscellaneous Projects	316,040		-	79,960		-	396,000
Vehicles and Equipment	332,000		-	318,000		-	650,000
Fund PERS UAL	3,709,000		-	3,564,000		-	7,273,000
Debt Service - 2012 Debt	-		-	-		778,000	778,000
Debt Service - 2008 Loan	-		-	-		433,000	433,000
Debt Service - 2015 Refunding	-		2,138,400	-		2,058,600	4,197,000
Less Total Expenditures	<u>11,367,520</u>		<u>2,138,400</u>	<u>14,950,630</u>		<u>5,594,450</u>	<u>34,051,000</u>
Projected June 30, 2022 Balance	25,315,620		(343,400)	47,393,980		(11,514,200)	\$ 60,852,000
Less Operating Reserves	<u>6,605,300</u>		<u>-</u>	<u>6,772,900</u>		<u>-</u>	<u>13,378,200</u>
Projected replacement reserve/restricted funds	<u>\$ 18,710,320</u>		<u>\$ (343,400)</u>	<u>\$ 40,621,080</u>		<u>\$ (11,514,200)</u>	<u>\$ 47,473,800</u>
Adopted replacement reserve floor	<u>\$ 10,081,800</u>			<u>\$ 19,405,100</u>			
Adopted replacement reserve ceiling	<u>\$ 39,071,600</u>			<u>\$ 61,664,200</u>			

<i>Debt service coverage</i>	376%
<i>Debt service coverage without cap fees</i>	240%
<i>Debt service coverage without cap fees or property tax & RDA</i>	157%
<i>Days of Operating Expenses in Unrestricted Cash and Investments</i>	366

See significant assumptions on page 110

VALLECITOS WATER DISTRICT

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2023

	110	Water	120	210	Wastewater	220	
	<u>Replacement</u>		<u>Capacity</u>	<u>Replacement</u>		<u>Capacity</u>	<u>Total</u>
Projected July 1, 2022 Balance	\$ 25,315,620		\$ (343,400)	\$ 47,393,980		\$ (11,514,200)	\$ 60,852,000
Revenues							
Operating Transfers	830,000		-	7,904,000		-	8,734,000
Capital Facility Fees	-		2,511,000	-		5,175,000	7,686,000
Property Tax	1,349,000		-	1,074,000		-	2,423,000
RDA pass-through	1,136,000		-	1,091,890		-	2,227,890
Investment Earnings	515,000		(7,000)	912,000		(238,000)	1,182,000
Available Balance	<u>29,145,620</u>		<u>2,160,600</u>	<u>58,375,870</u>		<u>(6,577,200)</u>	<u>83,104,890</u>
Less 22/23 Expenditures							
Encina Wastewater Authority Five Year Plan	-		-	5,938,000		-	5,938,000
Land Outfall Gravity Sewer Sec D Phs 1	-		-	4,000,000		1,000,000	5,000,000
Future Projects	775,000		-	428,000		522,000	1,725,000
MRF: Conversion to Sodium Hypochlorite	-		-	1,525,000		-	1,525,000
Richland Invert Replacement	-		-	1,325,000		-	1,325,000
Land Outfall Parallel Siphon Sewer Section A	-		-	-		1,000,000	1,000,000
Tres-Amigos Water Line Replacement Phase 1	615,000		-	-		-	615,000
Coronado Hills Tank Exterior Refurbishment	300,000		-	-		-	300,000
Rancheros Drive Sewer Replacement	-		-	270,000		-	270,000
Chlorine Contact Tank Expansion	-		-	264,000		-	264,000
Steel Pipeline Condition Assessment	250,000		-	-		-	250,000
Ductile Iron Pipe Condition Assessment	200,000		-	-		-	200,000
Rock Springs Valve Replacement	200,000		-	-		-	200,000
Asset Management Replacement Schedule	50,000		-	50,000		-	100,000
Via Vera Cruz Tank Hill Stabilization	20,000		-	-		-	20,000
Vehicles and Equipment	332,000		-	318,000		-	650,000
Debt Service - 2012 debt	-		-	-		780,000	780,000
Debt Service - 2008 Loan	-		-	-		431,000	431,000
Debt Service - 2022	-		400,000	-		-	400,000
Debt Service - 2015 Refunding	-		2,139,400	-		2,059,600	4,199,000
Less Total Expenditures	<u>2,742,000</u>		<u>2,539,400</u>	<u>14,118,000</u>		<u>5,792,600</u>	<u>25,192,000</u>
Projected June 30, 2023 Balance	26,403,620		(378,800)	44,257,870		(12,369,800)	\$ 57,912,890
Less Operating Reserves	<u>6,773,900</u>		<u>-</u>	<u>6,872,100</u>		<u>-</u>	<u>13,646,000</u>
Projected replacement reserve/restricted funds	<u>\$ 19,629,720</u>		<u>\$ (378,800)</u>	<u>\$ 37,385,770</u>		<u>\$ (12,369,800)</u>	<u>\$ 44,266,890</u>
Adopted replacement reserve floor	<u>\$ 10,675,300</u>			<u>\$ 20,212,600</u>			
Adopted replacement reserve ceiling	<u>\$ 41,194,500</u>			<u>\$ 64,999,700</u>			

<i>Debt service coverage</i>	364%
<i>Debt service coverage without cap fees</i>	232%
<i>Debt service coverage without cap fees or property tax & RDA</i>	171%
<i>Days of Operating Expenses in Unrestricted Cash and Investments</i>	334

See significant assumptions on page 110

VALLECITOS WATER DISTRICT

RESERVE PROJECTION FOR THE YEARS ENDING JUNE 30, 2024

	110	Water	120	210	Wastewater	220	
	<u>Replacement</u>		<u>Capacity</u>	<u>Replacement</u>		<u>Capacity</u>	<u>Total</u>
Projected July 1, 2023 Balance	\$ 26,403,620		\$ (378,800)	\$ 44,257,870		\$ (12,369,800)	\$ 57,912,890
Revenues							
Operating Transfers	626,000		-	8,005,000		-	8,631,000
Capital Facility Fees	-		2,512,000	-		5,178,000	7,690,000
Property Tax	1,378,000		-	1,097,000		-	2,475,000
RDA pass-through	1,170,000		-	1,125,000		-	2,295,000
Debt Proceeds	-		5,000,000	-		22,000,000	27,000,000
Project Reimbursements	-		-	226,000		57,000	283,000
Investment Earnings	555,000		(6,000)	871,000		(190,000)	1,230,000
Available Balance	<u>30,132,620</u>		<u>7,127,200</u>	<u>55,581,870</u>		<u>14,675,200</u>	<u>107,516,890</u>
Less 23/24 Expenditures							
Land Outfall Parallel Siphon Sewer Section A	-		-	-		18,025,000	18,025,000
Encina Wastewater Authority Five Year Plan	-		-	6,122,000		-	6,122,000
Meadowlark Tank No. 3	-		4,062,000	-		-	4,062,000
Chlorine Contact Tank Expansion	-		-	3,212,000		-	3,212,000
Land Outfall Gravity Sewer Sec D Phs 1	-		-	2,392,000		598,000	2,990,000
Future Projects	250,000		-	282,000		302,000	834,000
Via Vera Cruz Tank Hill Stabilization	195,000		-	-		-	195,000
Vehicles and Equipment	332,000		-	318,000		-	650,000
Debt Service - 2008 Loan	-		-	-		427,000	427,000
Debt Service - 2022	-		1,164,000	-		-	1,164,000
Debt Service - 2015 Refunding	-		2,140,400	-		2,060,600	4,201,000
Less Total Expenditures	<u>777,000</u>		<u>7,366,400</u>	<u>12,326,000</u>		<u>21,412,600</u>	<u>41,882,000</u>
Projected June 30, 2024 Balance	29,355,620		(239,200)	43,255,870		(6,737,400)	\$ 65,634,890
Less Operating Reserves	7,041,700		-	7,039,700		-	14,081,400
Projected replacement reserve/restricted funds	<u>\$ 22,313,920</u>		<u>\$ (239,200)</u>	<u>\$ 36,216,170</u>		<u>\$ (6,737,400)</u>	<u>\$ 51,553,490</u>
Adopted replacement reserve floor	<u>\$ 10,853,500</u>			<u>\$ 21,133,900</u>			
Adopted replacement reserve ceiling	<u>\$ 42,141,100</u>			<u>\$ 68,148,400</u>			

<i>Debt service coverage</i>	385%
<i>Debt service coverage without cap fees</i>	253%
<i>Debt service coverage without cap fees or property tax & RDA</i>	170%
<i>Days of Operating Expenses in Unrestricted Cash and Investments</i>	367

See significant assumptions on page 110

VALLECITOS WATER DISTRICT

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2025

	110	Water	120	210	Wastewater	220	
	<u>Replacement</u>		<u>Capacity</u>	<u>Replacement</u>		<u>Capacity</u>	<u>Total</u>
Projected July 1, 2024 Balance	\$ 29,355,620		\$ (239,200)	\$ 43,255,870		\$ (6,737,400)	\$ 65,634,890
Revenues							
Operating Transfers	581,000		-	8,284,000		-	8,865,000
Capital Facility Fees	-		2,513,000	-		5,181,000	7,694,000
Property Tax	1,408,000		-	1,121,000		-	2,529,000
RDA pass-through	1,206,000		-	1,158,000		-	2,364,000
Debt Proceeds	-		1,000,000	-		12,000,000	13,000,000
Project Reimbursements	-		-	2,586,000		646,000	3,232,000
Investment Earnings	637,000		(22,000)	981,000		(129,000)	1,467,000
Available Balance	<u>33,187,620</u>		<u>3,251,800</u>	<u>57,385,870</u>		<u>10,960,600</u>	<u>104,785,890</u>
Less 24/25 Expenditures							
Future Projects	4,294,000		901,000	3,150,000		3,300,000	11,645,000
Land Outfall Parallel Siphon Sewer Section A	-		-	-		7,930,000	7,930,000
Encina Wastewater Authority Five Year Plan	-		-	6,854,000		-	6,854,000
Chlorine Contact Tank Expansion	-		-	1,175,000		-	1,175,000
Elser Lane Water Line Improvements	20,000		-	-		-	20,000
Vehicles and Equipment	332,000		-	318,000		-	650,000
Debt Service - 2022 Debt	-		1,164,000	-		-	1,164,000
Debt Service - 2008 Loan	-		-	-		423,000	423,000
Debt Service - 2024	-		832,000	-		2,248,000	3,080,000
Debt Service - 2015 Refunding	-		2,140,400	-		2,060,600	4,201,000
Less Total Expenditures	<u>4,646,000</u>		<u>5,037,400</u>	<u>11,497,000</u>		<u>15,961,600</u>	<u>37,142,000</u>
Projected June 30, 2025 Balance	28,541,620		(1,785,600)	45,888,870		(5,001,000)	\$ 67,643,890
Less Operating Reserves	7,335,100		-	7,207,400		-	14,542,500
Projected replacement reserve/restricted funds	<u>\$ 21,206,520</u>		<u>\$ (1,785,600)</u>	<u>\$ 38,681,470</u>		<u>\$ (5,001,000)</u>	<u>\$ 53,101,390</u>
Adopted replacement reserve floor	<u>\$ 11,671,000</u>			<u>\$ 23,448,600</u>			
Adopted replacement reserve ceiling	<u>\$ 43,255,500</u>			<u>\$ 71,420,200</u>			

<i>Debt service coverage</i>	258%
<i>Debt service coverage without cap fees</i>	172%
<i>Debt service coverage without cap fees or property tax & RDA</i>	117%
<i>Days of Operating Expenses in Unrestricted Cash and Investments</i>	367

See significant assumptions on page 110

LONG RANGE RESERVE PROJECTION

	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>	<u>2028/29</u>	<u>2029/30</u>
Projected Beginning Balance	\$ 67,644,000	\$ 76,514,000	\$ 85,744,000	\$ 95,348,000	\$ 103,792,000
Revenues					
Operating transfers	9,042,000	9,223,000	9,407,000	9,595,000	9,787,000
Capital facility fees	7,694,000	7,694,000	7,694,000	5,771,000	5,771,000
Property tax	2,583,000	2,639,000	2,696,000	2,754,000	2,813,000
Investment earnings	1,434,000	1,614,000	1,802,000	1,981,000	2,153,000
Capital outlay	(3,010,000)	(3,070,000)	(3,131,000)	(3,194,000)	(3,258,000)
Debt service	(8,873,000)	(8,870,000)	(8,864,000)	(8,463,000)	(8,462,000)
Projected Ending Balance	\$ 76,514,000	\$ 85,744,000	\$ 95,348,000	\$ 103,792,000	\$ 112,596,000
Operating reserves	<u>14,906,000</u>	<u>15,279,000</u>	<u>15,661,000</u>	<u>16,053,000</u>	<u>16,454,000</u>
Projected replacement reserve/restricted funds	<u>\$ 61,608,000</u>	<u>\$ 70,465,000</u>	<u>\$ 79,687,000</u>	<u>\$ 87,739,000</u>	<u>\$ 96,142,000</u>
Adopted replacement reserve floor	<u>\$ 35,120,000</u>	<u>\$ 37,895,000</u>	<u>\$ 40,500,000</u>	<u>\$ 40,736,000</u>	<u>\$ 41,845,000</u>
Adopted replacement reserve ceiling	<u>\$ 114,676,000</u>	<u>\$118,139,000</u>	<u>\$120,878,000</u>	<u>\$ 118,178,000</u>	<u>\$ 115,590,000</u>

Significant Assumptions

Operating Transfers - the result of operating activity transferred from the disbursements fund during the year. Operating transfers from FY 2025 through 2029 will increase by 2%.

Rates - Combined water and sewer rates for the average single family resident are estimated to increase by 3.5% each year the first 2 years with estimated increases of 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 26% and wholesale fixed charges will increase 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 2020/21, and 100 to 120 in 2021/22 and every year thereafter. The District will add 100 to 120 sewer accounts in 2020/21 and approximately 100 to 120 in 2021/22 and each year thereafter.

Capital Facility Fees – The District will collect capacity charges for 200 water EDUs in fiscal year 2020/21 and between 225 and 300 EDUs in each fiscal year, 2021/22 through 2024/25. The District will collect capacity charges for 250 sewer EDUs in 2020/21 and between 250 and 425 sewer EDUs from 2021/22 through 2024/25. 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.

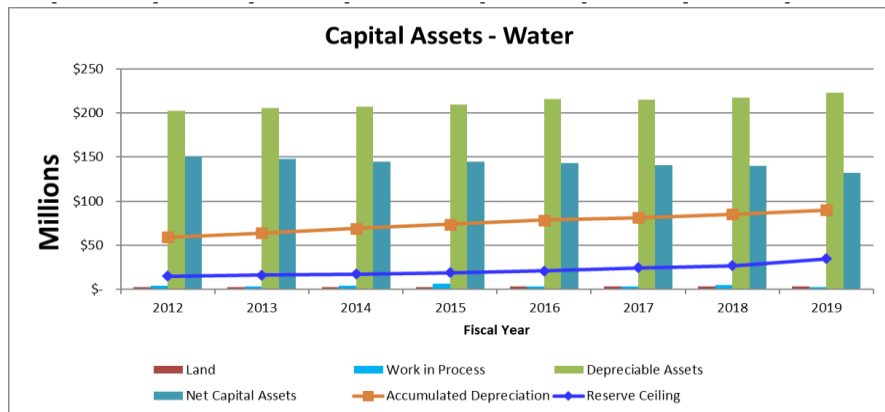
Investment Earnings - assumed at 1.9%.

Capital Outlay scheduled after Fiscal Year 2025 will be expended evenly over six years.

Vallecitos Water District
 Replacement Reserve Limits - Water System
 For the 2020-21 Budget year

ENR Index (as of March 2020) 11397

Year Added	Original Cost	ENR Factor	2020 Costs	Year of Replacement									
				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1957	\$ 923,038	15.74	\$ 14,530,199	468,716	468,716	468,716	468,716	468,716	468,716	468,716	-	-	-
1958	134,201	15.02	2,015,137	65,004	65,004	65,004	65,004	65,004	65,004	65,004	65,004	65,004	65,004
1963	2,067,687	12.65	26,154,749	843,702	843,702	843,702	843,702	843,702	843,702	843,702	843,702	843,702	843,702
1964	181,560	12.18	2,210,726	71,314	71,314	71,314	71,314	71,314	71,314	71,314	71,314	71,314	71,314
1965	256,377	11.74	3,009,195	97,071	97,071	97,071	97,071	97,071	97,071	97,071	97,071	97,071	97,071
1966	107,429	11.18	1,201,539	38,759	38,759	38,759	38,759	38,759	38,759	38,759	38,759	38,759	38,759
1967	122,039	10.61	1,295,045	41,776	41,776	41,776	41,776	41,776	41,776	41,776	41,776	41,776	41,776
1968	37,421	9.87	369,253	11,911	11,911	11,911	11,911	11,911	11,911	11,911	11,911	11,911	11,911
1969	39,742	8.98	356,926	11,514	11,514	11,514	11,514	11,514	11,514	11,514	11,514	11,514	11,514
1970	37,955	8.25	313,232	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104	10,104
1971	90,080	7.21	649,362	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947
1972	77,091	6.50	501,201	16,168	16,168	16,168	16,168	16,168	16,168	16,168	16,168	16,168	16,168
1973	169,427	6.01	1,018,976	32,870	32,870	32,870	32,870	32,870	32,870	32,870	32,870	32,870	32,870
1974	141,987	5.64	801,102	25,842	25,842	25,842	25,842	25,842	25,842	25,842	25,842	25,842	25,842
1975	230,530	5.15	1,187,771	38,315	38,315	38,315	38,315	38,315	38,315	38,315	38,315	38,315	38,315
1976	296,066	4.75	1,405,358	45,334	45,334	45,334	45,334	45,334	45,334	45,334	45,334	45,334	45,334
1977	303,133	4.42	1,341,152	43,263	43,263	43,263	43,263	43,263	43,263	43,263	43,263	43,263	43,263
1978	3,353,752	4.11	13,768,988	444,161	444,161	444,161	444,161	444,161	444,161	444,161	444,161	444,161	444,161
1979	933,794	3.80	3,543,939	114,321	114,321	114,321	114,321	114,321	114,321	114,321	114,321	114,321	114,321
1980	390,894	3.52	1,376,280	44,396	44,396	44,396	44,396	44,396	44,396	44,396	44,396	44,396	44,396
1981	397,944	3.22	1,282,989	41,387	41,387	41,387	41,387	41,387	41,387	41,387	41,387	41,387	41,387
1982	1,933,811	2.98	5,761,998	185,871	185,871	185,871	185,871	185,871	185,871	185,871	185,871	185,871	185,871
1983	3,393,243	2.80	9,511,262	-	306,815	306,815	306,815	306,815	306,815	306,815	306,815	306,815	306,815
1984	5,435,002	2.75	14,940,356	-	-	481,947	481,947	481,947	481,947	481,947	481,947	481,947	481,947
1985	675,452	2.72	1,835,072	-	-	-	59,196	59,196	59,196	59,196	59,196	59,196	59,196
1986	611,788	2.65	1,623,410	-	-	-	-	52,368	52,368	52,368	52,368	52,368	52,368
1987	799,052	2.59	2,066,908	-	-	-	-	-	66,674	66,674	66,674	66,674	66,674
1988	8,585,267	2.52	21,652,199	-	-	-	-	-	-	698,458	698,458	698,458	698,458
1989	1,572,104	2.47	3,882,399	-	-	-	-	-	-	-	125,239	125,239	125,239
1990	2,124,484	2.41	5,116,810	-	-	-	-	-	-	-	-	165,058	165,058
1991	1,777,396	2.36	4,189,655	-	-	-	-	-	-	-	-	-	135,150
1992	8,263,508	2.29	18,892,518	-	-	-	-	-	-	-	-	-	-
1993	3,727,844	2.19	8,154,748	-	-	-	-	-	-	-	-	-	-
1994	2,198,280	2.11	4,632,729	-	-	-	-	-	-	-	-	-	-
1995	4,438,365	2.08	9,245,850	-	-	-	-	-	-	-	-	-	-
1996	1,872,216	2.03	3,796,734	-	-	-	-	-	-	-	-	-	-
1997	3,075,659	1.96	6,016,699	-	-	-	-	-	-	-	-	-	-
1998	4,236,142	1.93	8,155,289	-	-	-	-	-	-	-	-	-	-
1999	1,216,379	1.88	2,288,013	-	-	-	-	-	-	-	-	-	-
2000	33,016,987	1.83	60,487,800	-	-	-	-	-	-	-	-	-	-
2001	1,599,452	1.80	2,873,870	-	-	-	-	-	-	-	-	-	-
2002	2,243,174	1.74	3,910,287	-	-	-	-	-	-	-	-	-	-
2003	8,148,602	1.70	13,872,235	-	-	-	-	-	-	-	-	-	-
2004	4,803,706	1.60	7,694,826	-	-	-	-	-	-	-	-	-	-
2005	4,945,039	1.53	7,568,998	-	-	-	-	-	-	-	-	-	-
2006	6,296,020	1.47	9,257,611	-	-	-	-	-	-	-	-	-	-
2007	9,123,102	1.43	13,052,472	-	-	-	-	-	-	-	-	-	-
2008	7,200,501	1.37	9,875,344	-	-	-	-	-	-	-	-	-	-
2009	32,403,360	1.33	43,092,310	-	-	-	-	-	-	-	-	-	-
2010	4,510,327	1.29	5,840,059	-	-	-	-	-	-	-	-	-	-
2011	2,053,547	1.26	2,580,405	-	-	-	-	-	-	-	-	-	-
2012	1,249,525	1.22	1,529,957	-	-	-	-	-	-	-	-	-	-
2013	3,574,225	1.21	4,307,438	-	-	-	-	-	-	-	-	-	-
2014	1,464,242	1.16	1,701,812	-	-	-	-	-	-	-	-	-	-
2015	1,950,156	1.14	2,217,050	-	-	-	-	-	-	-	-	-	-
2016	6,131,372	1.14	6,970,498	-	-	-	-	-	-	-	-	-	-
2017	-	1.11	-	-	-	-	-	-	-	-	-	-	-
2018	3,142,674	1.02	3,215,464	-	-	-	-	-	-	-	-	-	-
2019	4,082,656	1.02	4,144,107	-	-	-	-	-	-	-	-	-	-
	\$ 196,941,476		\$ 406,928,740	2,712,746	3,019,561	3,501,508	3,560,704	3,613,072	3,679,746	4,378,204	4,034,727	4,134,781	4,269,931



Three-Year Minimum Reserve Balance

<-----\$9,233,814----->

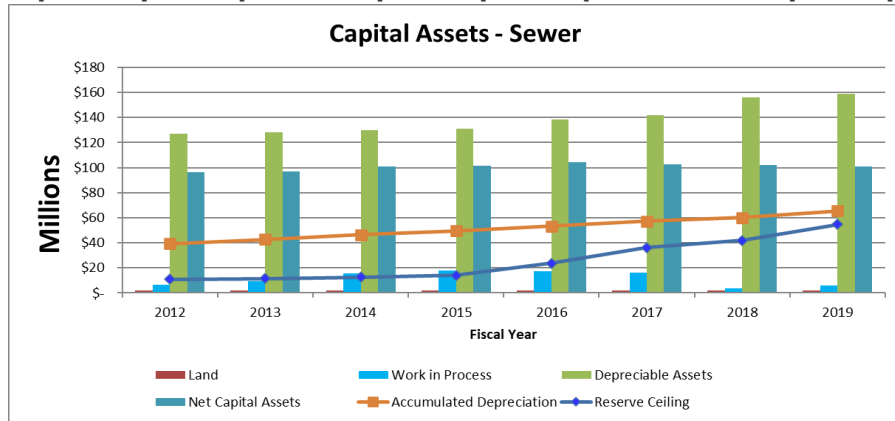
Ten-Year Maximum Reserve Balance

<-----\$36,904,978----->

Vallecitos Water District
 Replacement Reserve Limits - Wastewater System
 For the 2020-21 Budget year

ENR Index (as of March 2020) 11397

Year Added	Original Cost	ENR Factor	2020 Costs	Year of Replacement											
				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
1964	\$ 1,421,340	12.18	\$ 17,306,637	-	-	-	-	-	-	-	-	-	-	-	-
1965	394,116	11.74	4,625,891	-	-	-	-	-	-	-	-	-	-	-	-
1966	110,183	11.18	1,232,341	-	-	-	-	-	-	-	-	-	-	-	-
1967	41,816	10.61	443,740	-	-	-	-	-	-	-	-	-	-	-	-
1968	24,352	9.87	240,294	-	-	-	-	-	-	-	-	-	-	-	-
1969	28,784	8.98	258,512	-	-	-	-	-	-	-	-	-	-	-	-
1970	1,617,466	8.25	13,348,487	-	-	-	-	-	-	-	-	-	-	-	-
1971	53,601	7.21	386,395	24,150	-	-	-	-	-	-	-	-	-	-	-
1972	78,755	6.50	512,020	32,001	32,001	-	-	-	-	-	-	-	-	-	-
1973	149,279	6.01	897,801	56,113	56,113	56,113	-	-	-	-	-	-	-	-	-
1974	409,501	5.64	2,310,437	144,402	144,402	144,402	144,402	-	-	-	-	-	-	-	-
1975	189,378	5.15	975,742	60,984	60,984	60,984	60,984	60,984	-	-	-	-	-	-	-
1976	151,559	4.75	719,416	44,964	44,964	44,964	44,964	44,964	44,964	-	-	-	-	-	-
1977	394,775	4.42	1,746,604	109,163	109,163	109,163	109,163	109,163	109,163	109,163	-	-	-	-	-
1978	930,683	4.11	3,820,963	238,810	238,810	238,810	238,810	238,810	238,810	238,810	238,810	-	-	-	-
1979	697,184	3.80	2,645,956	165,372	165,372	165,372	165,372	165,372	165,372	165,372	165,372	165,372	-	-	-
1980	139,384	3.52	490,751	30,672	30,672	30,672	30,672	30,672	30,672	30,672	30,672	30,672	30,672	-	-
1981	192,586	3.22	620,906	38,807	38,807	38,807	38,807	38,807	38,807	38,807	38,807	38,807	38,807	38,807	-
1982	4,772,279	2.98	14,219,520	888,720	888,720	888,720	888,720	888,720	888,720	888,720	888,720	888,720	888,720	888,720	-
1985	5,149,309	2.72	13,989,672	874,355	874,355	874,355	874,355	874,355	874,355	874,355	874,355	874,355	874,355	874,355	-
1986	19,355,791	2.65	51,361,572	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098	3,210,098
1987	381,136	2.59	985,884	61,618	61,618	61,618	61,618	61,618	61,618	61,618	61,618	61,618	61,618	61,618	61,618
1988	1,232,431	2.52	3,108,213	-	194,263	194,263	194,263	194,263	194,263	194,263	194,263	194,263	194,263	194,263	194,263
1989	2,001,761	2.47	4,943,460	-	-	308,966	308,966	308,966	308,966	308,966	308,966	308,966	308,966	308,966	308,966
1990	3,031,169	2.41	7,300,556	-	-	-	456,285	456,285	456,285	456,285	456,285	456,285	456,285	456,285	456,285
1991	1,864,618	2.36	4,395,254	-	-	-	-	274,703	274,703	274,703	274,703	274,703	274,703	274,703	274,703
1992	3,162,421	2.29	7,230,113	-	-	-	-	-	451,882	451,882	451,882	451,882	451,882	451,882	451,882
1993	13,446,724	2.19	29,415,031	-	-	-	-	-	-	1,838,439	1,838,439	1,838,439	1,838,439	1,838,439	1,838,439
1994	2,113,222	2.11	4,453,475	-	-	-	-	-	-	-	278,342	278,342	278,342	278,342	278,342
1995	3,276,618	2.08	6,825,739	-	-	-	-	-	-	-	-	-	426,609	426,609	426,609
1996	1,199,768	2.03	2,433,053	-	-	-	-	-	-	-	-	-	-	-	152,066
1997	988,964	1.96	1,934,642	-	-	-	-	-	-	-	-	-	-	-	-
1998	4,670,391	1.93	8,991,292	-	-	-	-	-	-	-	-	-	-	-	-
1999	1,047,495	1.88	1,970,342	-	-	-	-	-	-	-	-	-	-	-	-
2000	3,954,391	1.83	7,244,526	-	-	-	-	-	-	-	-	-	-	-	-
2001	2,705,995	1.80	4,862,088	-	-	-	-	-	-	-	-	-	-	-	-
2002	109,018	1.74	190,039	-	-	-	-	-	-	-	-	-	-	-	-
2003	9,260,829	1.70	15,765,697	-	-	-	-	-	-	-	-	-	-	-	-
2004	3,031,642	1.60	4,856,241	-	-	-	-	-	-	-	-	-	-	-	-
2005	2,984,298	1.53	4,567,840	-	-	-	-	-	-	-	-	-	-	-	-
2006	7,245,244	1.47	10,653,341	-	-	-	-	-	-	-	-	-	-	-	-
2007	(10,129,834)	1.43	(14,492,809)	-	-	-	-	-	-	-	-	-	-	-	-
2008	9,022,922	1.37	12,374,758	-	-	-	-	-	-	-	-	-	-	-	-
2009	37,476,922	1.33	49,839,496	-	-	-	-	-	-	-	-	-	-	-	-
2010	3,860,825	1.29	4,999,071	-	-	-	-	-	-	-	-	-	-	-	-
2011	1,487,477	1.26	1,869,104	-	-	-	-	-	-	-	-	-	-	-	-
2012	3,612,924	1.22	4,423,775	-	-	-	-	-	-	-	-	-	-	-	-
2013	(1,398,127)	1.19	(1,669,053)	-	-	-	-	-	-	-	-	-	-	-	-
2014	2,007,273	1.16	2,332,948	-	-	-	-	-	-	-	-	-	-	-	-
2015	(1,576,814)	1.14	(1,792,613)	-	-	-	-	-	-	-	-	-	-	-	-
2016	792,086	1.14	900,489	-	-	-	-	-	-	-	-	-	-	-	-
2017	1,984,324	1.11	2,200,364	-	-	-	-	-	-	-	-	-	-	-	-
2018	1,984,324	1.02	2,030,285	-	-	-	-	-	-	-	-	-	-	-	-
2019	1,422,607	1.02	1,444,020	-	-	-	-	-	-	-	-	-	-	-	-
	<u>\$ 151,150,234</u>		<u>\$325,266,011</u>	<u>5,980,227</u>	<u>6,150,341</u>	<u>6,427,306</u>	<u>6,827,478</u>	<u>6,957,779</u>	<u>7,348,678</u>	<u>9,142,153</u>	<u>9,311,333</u>	<u>9,499,131</u>	<u>9,485,825</u>		



Three-Year Minimum Reserve Balance <-----\$18,557,875----->

Eight-Year Maximum Reserve Balance <-----\$58,145,296----->