VALLECITOS WATER DISTRICT

*Water and Wastewater Specialists since 1955*

# Budget

# 2018-2019

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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, James Hernandez (center), Craig Elitharp, Betty Evans and Mike Sannella

Board of Directors

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

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

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VALLECITOS WATER DISTRICT
Water and Wastewater Specialists since 1955

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

Date: June 6, 2018

To: Honorable Board of Directors

Regarding: Fiscal Year 2018/19 Budget

Enclosed is the **Budget** for Fiscal Year 2018/19 (FY 18/19). The budget totals $201.7 million compared to $175.4 million for the 2017/18 budget. The FY 18/19 Budget is comprised of $57 million of operational expenses (a 7.6% increase from the $53 million in 2017/18 operating budget) and a commitment of $144.7 million for capital items and projects ($122.4 million in 2017/18).

The operational increase of $4 million is attributable to a projected $3.7 million increase in cost of water purchases as the District moves further from the drought and purchases more water. The remaining $0.3 million is mainly from planned engineering studies, increasing costs of power, and general and administrative costs. In addition, $9.1 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 approved as part of the cost of service study that accompanied the Fiscal Year 2017/18 budget. No additional rate increases have been incorporated into the Fiscal Year 2018/19 budget. 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 10-year projection of operating costs and capital needs in order to plan for a sound future in water supply and reliability. Fiscal sustainably is absolutely 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 viability of the District. Some of these considerations are: rate affordability; maintaining reserves, assess adequacy to cover debt obligations now and in the future; and a credit worthy cash position. We plan to meet our capital needs and maintain a strong financial position without incurring any new debt.

## ***FINANCIAL HIGHLIGHTS***

The following narratives are financial highlights and comparisons of this budget, FY 2018/19, and last budget, FY 2017/18.

Water Operations (pages 3-14)

Water purchases are projected to total 16,700 acre feet with sales of 15,650 acre feet for 2018/19. The water operating budget increased by $0.4 million from last year's budget, excluding water costs. With water costs, the budget increased $4.1 million, or 10.4%.

Wastewater Operations (pages 15-24)
Wastewater operating costs decreased $0.1 million, or (0.8%), over last year's budget due to savings in personnel costs, efficiencies in treatment, and outside services. 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 2018/19 does not add any new positions. One position was reclassified at no additional cost to the District. Salaries and benefits for 2018/19 decreased from the last budget year by $21 thousand or (0.1%) as a result of vacant positions due to retirement being filled at lower pay rates and for part of the budget year. Management will continue to scrutinize the need for all positions and only fill positions if absolutely necessary.

Capital Budget (pages 33-88)
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 88, followed by requests for easements, vehicles and equipment of $778,000. Of the $143.9 million capital budget, $43.9 million are new requests and $22.9 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 $22.3 million.

Reserve Budget and Projection (pages 98-104)
The Reserve Budget includes revenues and transfers from various sources and summarizes appropriations and expected cash outflows for debt service and capital projects. Page 92 displays the 2018/19 reserve budget for consideration. Pages 93 through 97 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 Pruim, General Manager

BUDGET FOR THE YEAR ENDING JUNE 30, 2019

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# BUDGET FOR THE YEAR ENDING JUNE 30, 2019

## BUDGETARY CONSIDERATIONS

### Mission Statement

*Water and wastewater specialists providing exceptional and sustainable services.*

The budget reflects the mission statement

### Budgetary Approach

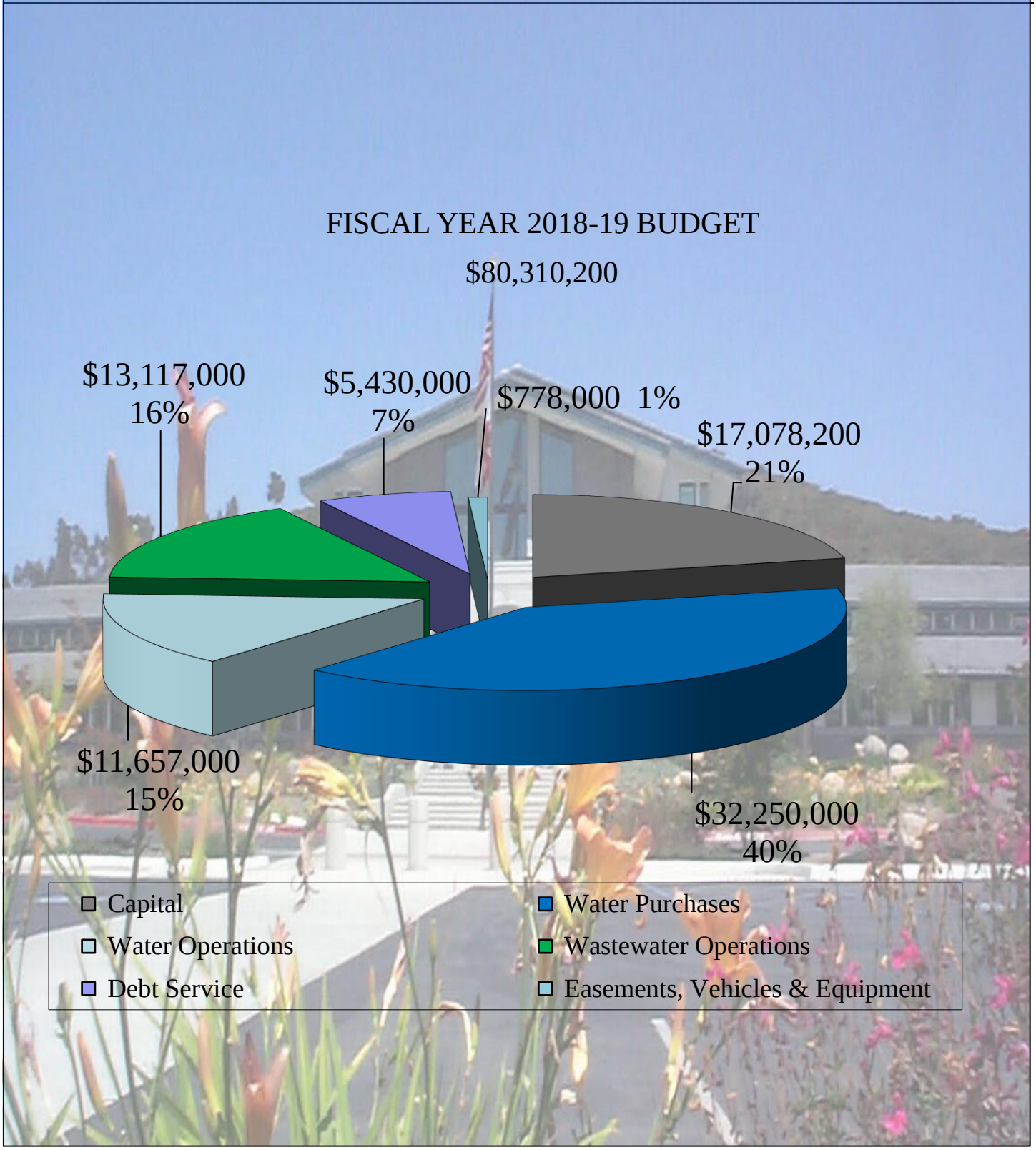
Governmental agencies, such as cities and counties, usually approach their budgets from the "revenue end." Since their revenues are somewhat predictable and restricted, their budgetary considerations are based on setting a level of service (expense total) that can be attained with those available funds.

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.

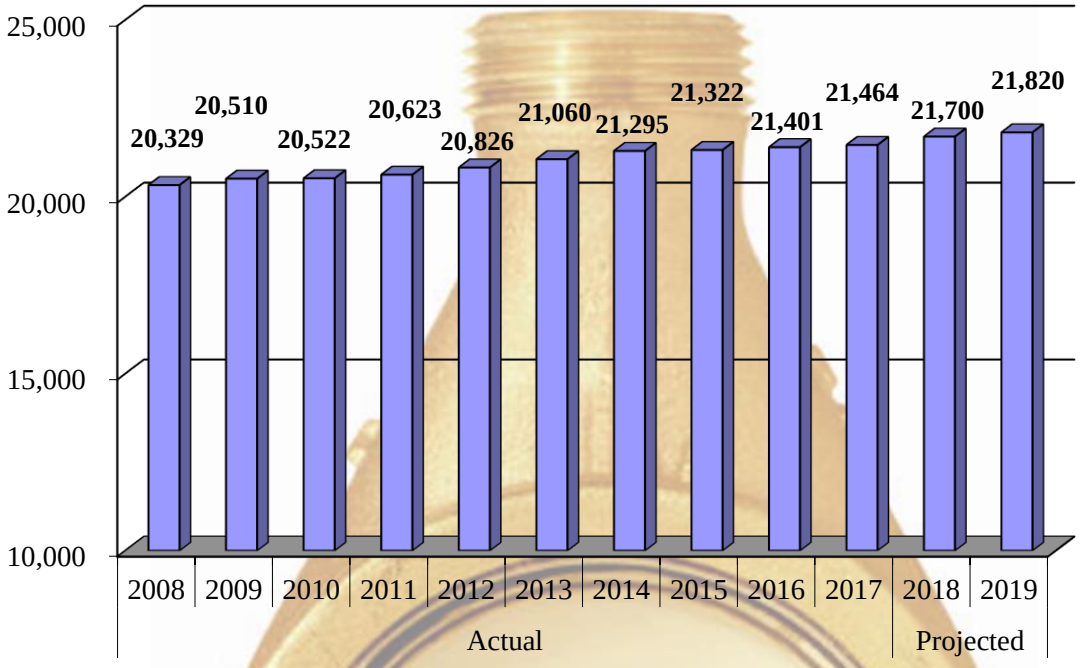

FISCAL YEAR 2018-19 BUDGET
$80,310,200
$13,117,000
16%
$5,430,000
7%
$778,000 1%
$17,078,200
21%
$11,657,000
15%
$32,250,000
40%
Capital
Water Operations
Debt Service
Water Purchases
Wastewater Operations
Easements, Vehicles & Equipment

# 2018-19 OPERATING BUDGET

## WATER

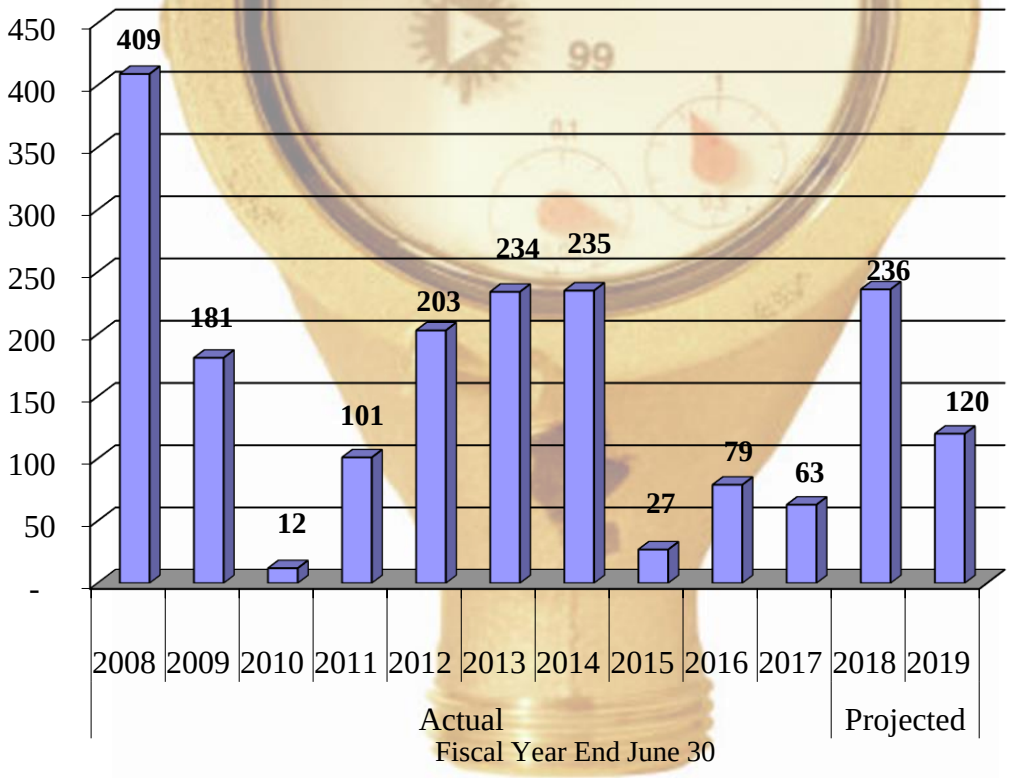
*Double Peak Tank*

METERS IN SERVICE

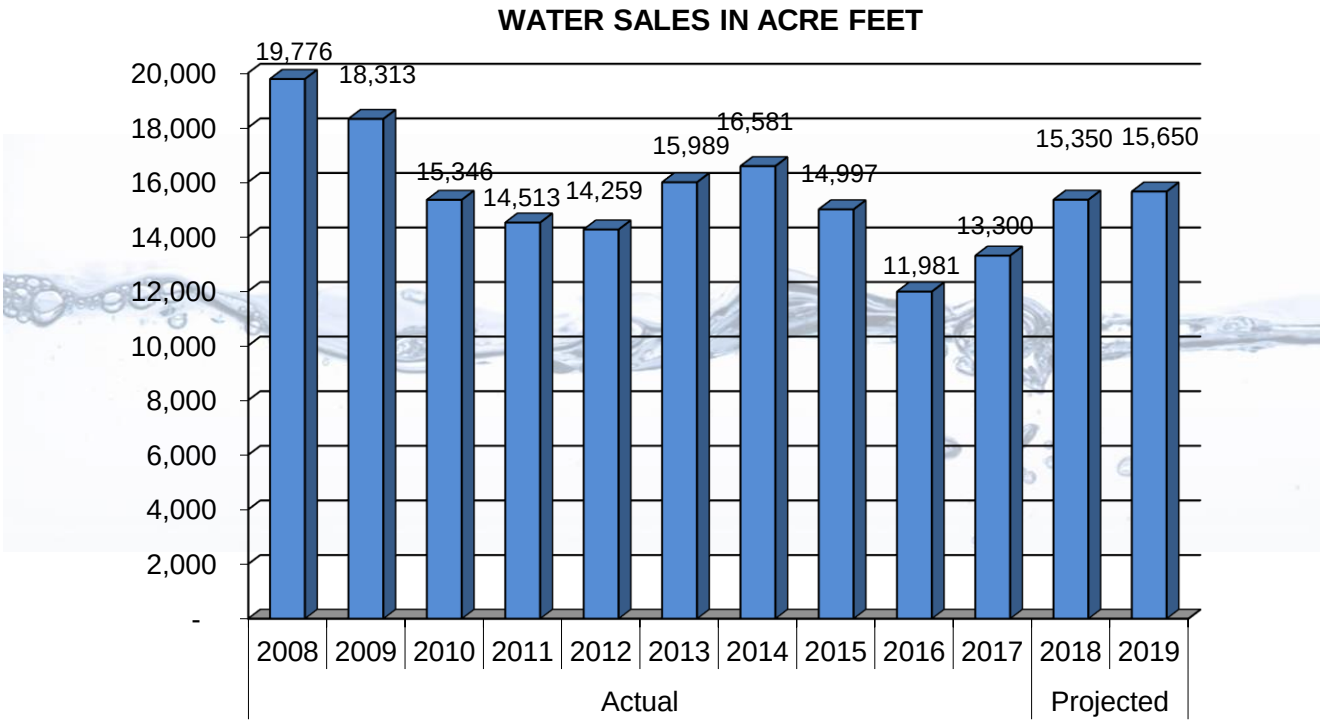



Fiscal Year End June 30

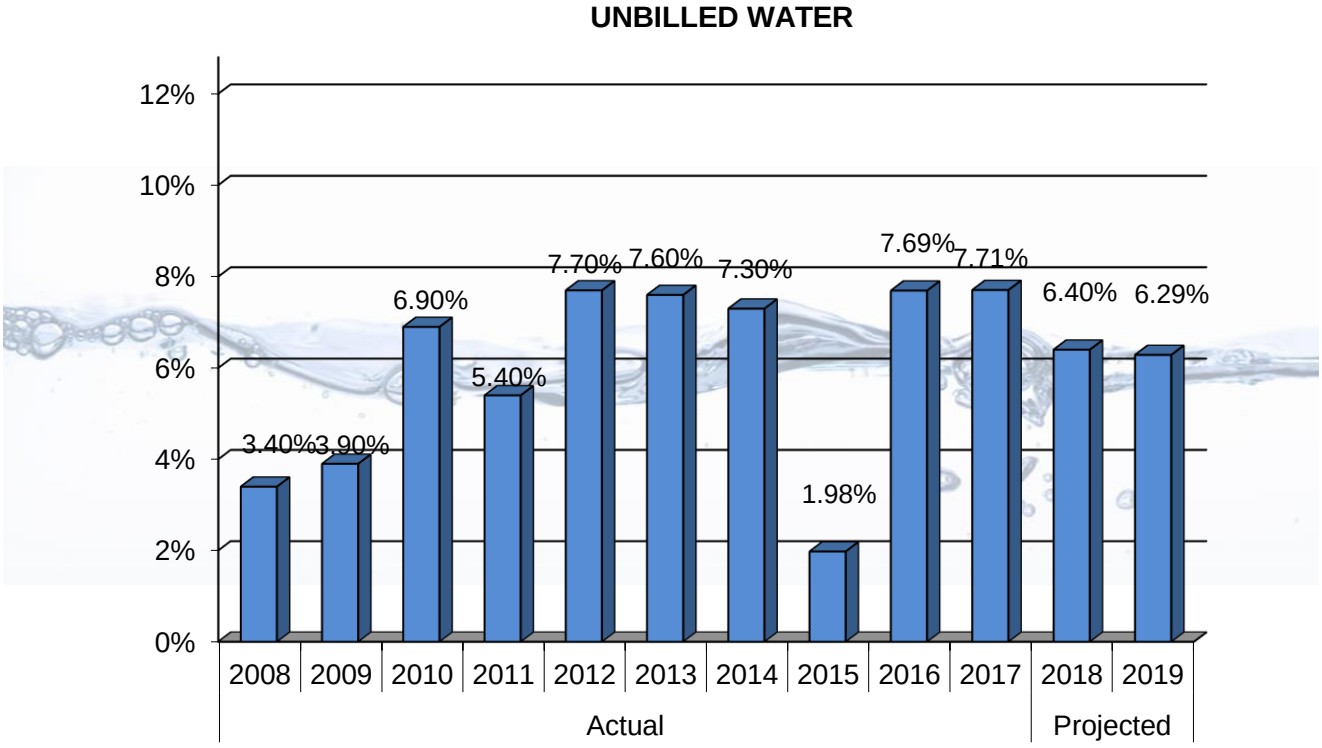
METER ADDITIONS




Fiscal Year End June 30




Year End Jun 30




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.amd timing differences*

BUDGET FOR THE YEAR ENDING JUNE 30, 2019

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.

BUDGET FOR THE YEAR ENDING JUNE 30, 2019

FUNCTION DEFINITIONS - WATER OPERATIONS (Continued)

Meters: Reading approximately 21,800 meters monthly for billing purposes as well as maintenance of all customer meters.

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

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

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

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

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

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

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

General and Administrative
Cost of Labor:

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

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

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

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

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

BUDGET FOR THE YEAR ENDING JUNE 30, 2019

FUNCTION DEFINITIONS - WATER OPERATIONS (Continued)

General and Administrative (continued)

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

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

*Outside Services* are provided by consultants and temporary help.

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

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

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

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

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

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

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

*Travel* costs are for administrative and water personnel.

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

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

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

BUDGET FOR THE YEAR ENDING JUNE 30, 2019

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.

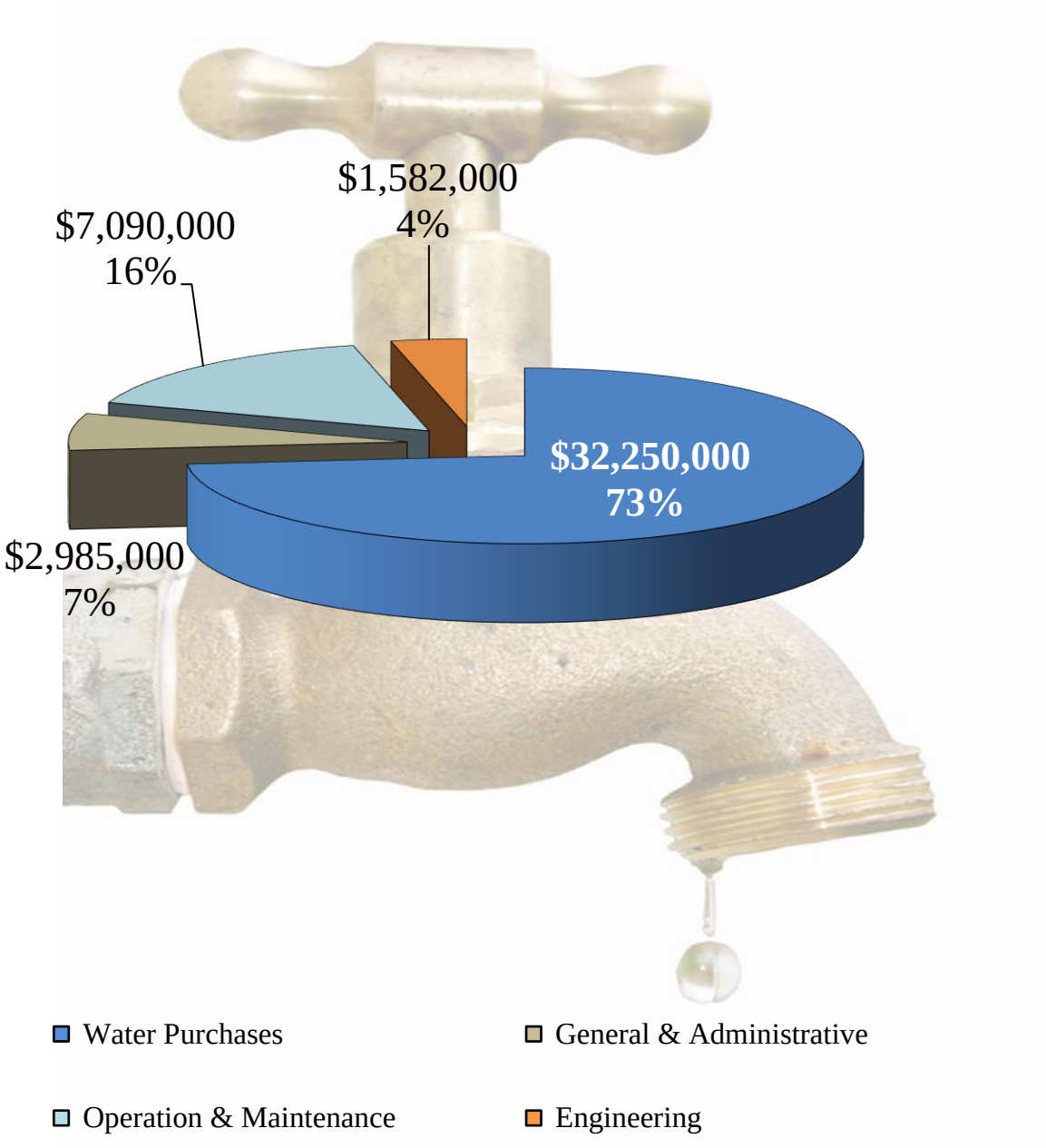
*Director Fees* are paid for attendance of board meetings, professional conferences, and other District-sanctioned organizations.

*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.

## 2018-19 WATER OPERATING EXPENSE BUDGET
## $43,907,000



**VALLECITOS WATER DISTRICT**

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| OPERATING REVENUES | | | | | | |
| Water Sales | *4001* | $23,180,452 | $ 24,866,000 | $ 29,800,000 | $ 31,800,000 | $ 33,000,000 |
| Ready to Serve | *4003* | 13,850,592 | 13,619,000 | 13,600,000 | 13,300,000 | 13,752,000 |
| Pumping Charges | *4002* | 171,186 | 250,000 | 250,000 | 340,000 | 420,000 |
| Interest | *4401* | 70,369 | 5,000 | 5,000 | 5,000 | 5,000 |
| Other | *Various* | 740,799 | 675,000 | 675,000 | 685,000 | 695,000 |
| Total Revenue | | 38,013,398 | 39,415,000 | 44,330,000 | 46,130,000 | 47,872,000 |
| OPERATING EXPENSES | | | | | | |
| Water Purchases | *1010* | 27,392,003 | 28,531,000 | 31,800,000 | 32,250,000 | 33,860,000 |
| Pumping | *2010* | 612,069 | 677,000 | 688,000 | 838,000 | 931,000 |
| Water Quality | *2020* | 109,511 | 175,000 | 137,000 | 154,000 | 166,000 |
| Water Treatment | *2030* | 495,332 | 447,000 | 434,000 | 475,000 | 508,000 |
| Tanks & Reservoirs | *2040* | 312,604 | 416,000 | 338,000 | 451,000 | 472,000 |
| Transmission & Dist. | *2050* | 1,747,767 | 1,835,000 | 1,411,000 | 1,719,000 | 1,953,000 |
| Services | *2060* | 138,073 | 245,000 | 249,000 | 139,000 | 157,000 |
| Meters | *2070* | 625,576 | 629,000 | 652,000 | 675,000 | 731,000 |
| Backflow Prevention | *2080* | 74,878 | 64,000 | 48,000 | 66,000 | 68,000 |
| Customer Accounts | *4010* | 563,901 | 614,000 | 546,000 | 635,000 | 669,000 |
| Equipment & Vehicles | *4210* | 285,882 | 304,000 | 284,000 | 320,000 | 319,000 |
| Buildings & Grounds | *4110* | 400,812 | 362,000 | 378,000 | 377,000 | 378,000 |
| Engineering | *5010* | 1,418,906 | 1,388,000 | 1,413,000 | 1,582,000 | 1,556,000 |
| Safety & Reg. Affairs | *5210* | 233,479 | 261,000 | 231,000 | 268,000 | 280,000 |
| Information Technology | *6230* | 728,292 | 1,003,000 | 842,000 | 973,000 | 1,030,000 |
| General & Admin. | *6xxx* | 3,059,757 | 2,812,000 | 2,954,000 | 2,985,000 | 3,265,000 |
| Total Expense | | 38,198,842 | 39,763,000 | 42,405,000 | 43,907,000 | 46,343,000 |
| OPERATING INCOME | | (185,444) | (348,000) | 1,925,000 | 2,223,000 | 1,529,000 |
| LESS TRANSFERS TO REPLACEMENT RESERVE | | (185,444) | (348,000) | 1,925,000 | 2,223,000 | 1,529,000 |
| NET INCOME | | $ - | $ - | $ - | $ - | $ - |

**VALLECITOS WATER DISTRICT**

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| WATER PURCHASES | *5001* | $27,392,003 | $ 28,531,000 | $ 31,800,000 | $ 32,250,000 | $ 33,860,000 |
| PUMPING | | | | | | |
| Cost of Labor | *2010xxx.51xx* | 84,567 | 104,000 | 112,000 | 118,000 | 127,000 |
| Materials & Supplies | *" .53xx* | 24,536 | 30,000 | 30,000 | 80,000 | 88,000 |
| Outside Repair/Service | *" .54xx* | 20,789 | 18,000 | 12,000 | 45,000 | 50,000 |
| Power | *" .5306* | 482,177 | 525,000 | 534,000 | 595,000 | 666,000 |
| Total Pumping | | 612,069 | 677,000 | 688,000 | 838,000 | 931,000 |
| WATER QUALITY | | | | | | |
| Cost of Labor | *2020000.51xx* | 37,144 | 63,000 | 50,000 | 54,000 | 58,000 |
| Materials & Supplies | *" .53xx* | 21,465 | 50,000 | 43,000 | 41,000 | 45,000 |
| Outside Repair/Service | *" .54xx* | 50,902 | 62,000 | 44,000 | 59,000 | 63,000 |
| Total Water Treatment | | 109,511 | 175,000 | 137,000 | 154,000 | 166,000 |
| WATER TREATMENT | | | | | | |
| Cost of Labor | *2030000.51xx* | 408,202 | 375,000 | 362,000 | 393,000 | 417,000 |
| Materials & Supplies | *" .53xx* | 60,709 | 42,000 | 50,000 | 50,000 | 57,000 |
| Outside Repair/Service | *" .54xx* | 16,720 | 20,000 | 15,000 | 20,000 | 22,000 |
| Power | *" .5306* | 9,701 | 10,000 | 7,000 | 12,000 | 12,000 |
| Total Water Treatment | | 495,332 | 447,000 | 434,000 | 475,000 | 508,000 |
| TANKS & RESERVOIRS | | | | | | |
| Cost of Labor | *2040xxx.51xx* | 216,923 | 248,000 | 206,000 | 233,000 | 252,000 |
| Materials & Supplies | *" .53xx* | 15,056 | 25,000 | 24,000 | 47,000 | 42,000 |
| Outside Repair/Service | *" .54xx* | 76,427 | 138,000 | 104,000 | 165,000 | 171,000 |
| Power | *" .5306* | 4,198 | 5,000 | 4,000 | 6,000 | 7,000 |
| Total Tanks & Reservoirs | | 312,604 | 416,000 | 338,000 | 451,000 | 472,000 |
| TRANSMISSION & DISTRIBUTION | | | | | | |
| Cost of Labor | *2050xxx.51xx* | 1,171,448 | 1,178,000 | 993,000 | 1,122,000 | 1,249,000 |
| Materials & Supplies | *" .53xx* | 182,215 | 265,000 | 192,000 | 260,000 | 272,000 |
| Outside Repair | *" .54xx* | 384,023 | 380,000 | 216,000 | 325,000 | 418,000 |
| Power | *" .5306* | 10,081 | 12,000 | 10,000 | 12,000 | 14,000 |
| Total Trans. & Dist. | | 1,747,767 | 1,835,000 | 1,411,000 | 1,719,000 | 1,953,000 |
| SERVICES | | | | | | |
| Cost of Labor | *2060xxx.51xx* | 69,058 | 100,000 | 98,000 | 102,000 | 117,000 |
| Materials & Supplies | *" .53xx* | 19,534 | 25,000 | 29,000 | 12,000 | 12,000 |
| Outside Repair | *" .54xx* | 49,481 | 120,000 | 122,000 | 25,000 | 28,000 |
| Total Services | | 138,073 | 245,000 | 249,000 | 139,000 | 157,000 |

**VALLECITOS WATER DISTRICT**

WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| METERS | | | | | | |
| Cost of Labor | *2070xxx.51xx* | $ 595,587 | $ 565,000 | $ 580,000 | $ 622,000 | $ 684,000 |
| Materials & Supplies | *" .53xx* | 24,087 | 53,000 | 66,000 | 42,000 | 39,000 |
| Outside Service/Repair | *" .54xx* | 5,902 | 11,000 | 6,000 | 11,000 | 8,000 |
| Total Meters | | 625,576 | 629,000 | 652,000 | 675,000 | 731,000 |
| BACKFLOW PREVENTION | | | | | | |
| Cost of Labor | *2080000.51xx* | 70,939 | 25,000 | 4,000 | 20,000 | 22,000 |
| Materials & Supplies | *" .53xx* | 3,939 | 2,000 | 1,000 | 2,000 | 2,000 |
| Outside Service | *" .54xx* | - | 37,000 | 43,000 | 44,000 | 44,000 |
| Total Backflow | | 74,878 | 64,000 | 48,000 | 66,000 | 68,000 |
| CUSTOMER ACCOUNTS | | | | | | |
| Cost of Labor | *4010000.51xx* | 456,320 | 487,000 | 423,000 | 466,000 | 521,000 |
| Materials & Supplies | *" .53xx* | 49,037 | 55,000 | 64,000 | 85,000 | 77,000 |
| Outside Service/Repair | *" .54xx* | 32,401 | 32,000 | 22,000 | 44,000 | 39,000 |
| Uncollectible Accts. | *" .5703* | 26,143 | 40,000 | 37,000 | 40,000 | 32,000 |
| Total Cust. Accts. | | 563,901 | 614,000 | 546,000 | 635,000 | 669,000 |
| EQUIPMENT & VEHICLES | | | | | | |
| Cost of Labor | *4210000.51xx* | 91,514 | 114,000 | 81,000 | 122,000 | 129,000 |
| Materials & Supplies | *" .53xx* | 66,270 | 65,000 | 59,000 | 65,000 | 67,000 |
| Fuel | *" .5307* | 88,783 | 95,000 | 84,000 | 93,000 | 97,000 |
| Outside Repair | *" .54xx* | 39,315 | 30,000 | 60,000 | 40,000 | 26,000 |
| Total Equip. & Vehicles | | 285,882 | 304,000 | 284,000 | 320,000 | 319,000 |
| BUILDINGS & GROUNDS | | | | | | |
| Cost of Labor | *4110000.51xx* | 208,064 | 173,000 | 175,000 | 163,000 | 158,000 |
| Materials & Supplies | *" .53xx* | 23,023 | 63,000 | 31,000 | 62,000 | 64,000 |
| Outside Services | *" .54xx* | 73,489 | 76,000 | 61,000 | 92,000 | 94,000 |
| Power | *" .5306* | 96,236 | 50,000 | 111,000 | 60,000 | 62,000 |
| Total Bldg. & Grnd. | | 400,812 | 362,000 | 378,000 | 377,000 | 378,000 |
| ENGINEERING | | | | | | |
| Cost of Labor | *5010000.51xx* | 1,363,299 | 1,315,000 | 1,370,000 | 1,419,000 | 1,500,000 |
| Materials & Supplies | *" .53xx* | 12,255 | 25,000 | 8,000 | 15,000 | 17,000 |
| Outside Services | *" .54xx* | 43,352 | 48,000 | 35,000 | 148,000 | 39,000 |
| Total Engineering | | 1,418,906 | 1,388,000 | 1,413,000 | 1,582,000 | 1,556,000 |

**VALLECITOS WATER DISTRICT**

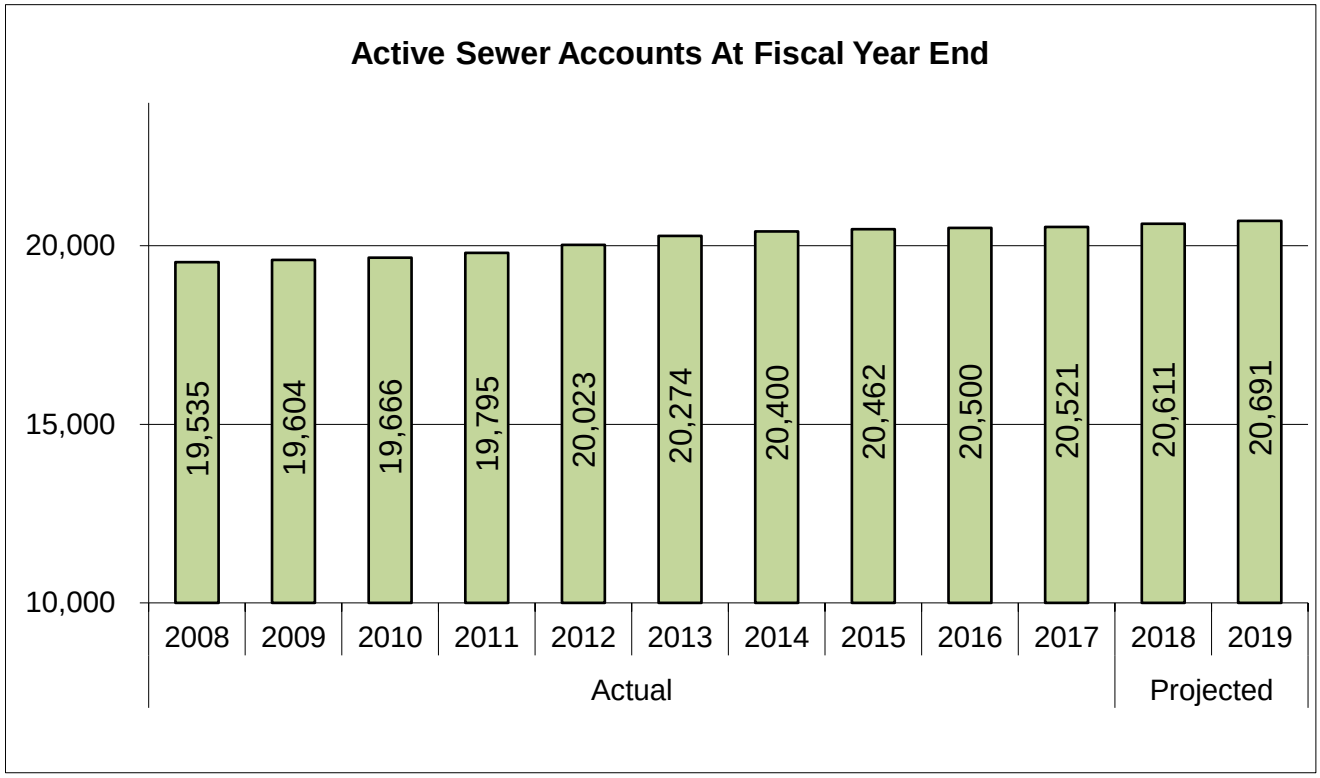
WATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

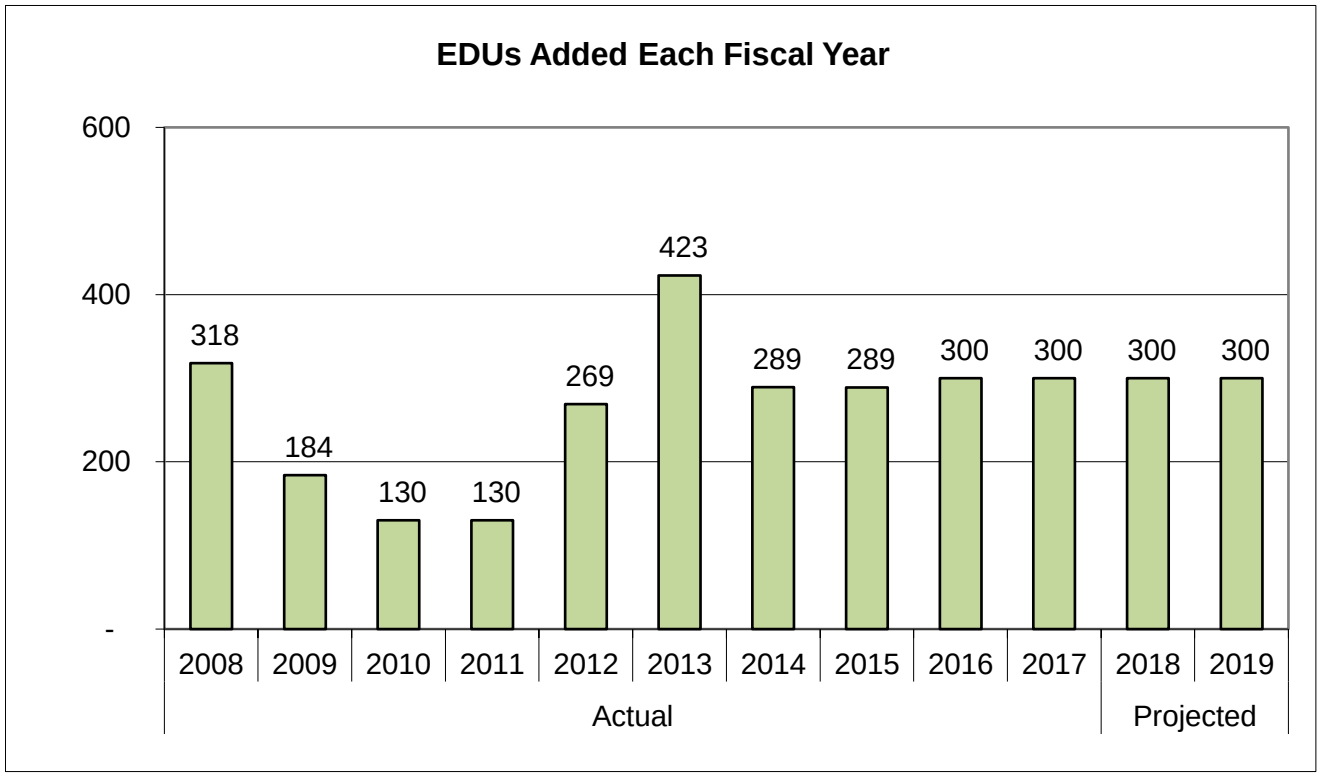
| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| SAFETY & REG. AFFAIRS | | | | | | |
| Cost of Labor | *5210000.51xx* | $ 215,209 | $ 234,000 | $ 211,000 | $ 238,000 | $ 250,000 |
| Materials & Supplies | *" .53xx* | 7,994 | 14,000 | 6,000 | 13,000 | 13,000 |
| Safety Support | *" .54xx* | 10,276 | 13,000 | 14,000 | 17,000 | 17,000 |
| Total Safety | | 233,479 | 261,000 | 231,000 | 268,000 | 280,000 |
| INFORMATION TECHNOLOGY | | | | | | |
| Cost of Labor | *6230000.51xx* | 438,533 | 523,000 | 365,000 | 525,000 | 570,000 |
| Materials & Supplies | *" .53xx* | 79,969 | 143,000 | 195,000 | 62,000 | 64,000 |
| Outside Services | *" .54xx* | 209,790 | 337,000 | 282,000 | 386,000 | 396,000 |
| Total Information Tech | | 728,292 | 1,003,000 | 842,000 | 973,000 | 1,030,000 |
| GENERAL & ADMINISTRATION | | | | | | |
| Cost of Labor | *6xxxxx.51xx* | 3,080,347 | 2,987,000 | 3,011,000 | 3,035,000 | 3,329,000 |
| Directors Fees | *" .5101* | 50,703 | 62,000 | 62,000 | 62,000 | 64,000 |
| District Insurance | *" .5201* | 137,963 | 163,000 | 144,000 | 161,000 | 179,000 |
| Travel | *" .5202* | 11,261 | 8,000 | 12,000 | 8,000 | 8,000 |
| Meetings & Seminars | *" .5203* | 20,642 | 31,000 | 18,000 | 31,000 | 32,000 |
| Dues & Subscriptions | *" .5204* | 53,791 | 72,000 | 69,000 | 73,000 | 75,000 |
| Directors Expenses | *" .5205* | 43,343 | 50,000 | 43,000 | 50,000 | 51,000 |
| Office Supplies | *" .5301* | 38,058 | 50,000 | 27,000 | 45,000 | 46,000 |
| Awareness/Conservation | *" .5303* | 91,026 | 77,000 | 102,000 | 79,000 | 81,000 |
| Postage | *" .5304* | 7,121 | 3,000 | 2,000 | 3,000 | 3,000 |
| Outside Services | *" .5401* | 94,921 | 90,000 | 48,000 | 102,000 | 105,000 |
| Legal | *" .5402* | 111,869 | 130,000 | 99,000 | 130,000 | 140,000 |
| Auditing | *" .5403* | 16,083 | 20,000 | 15,000 | 13,000 | 15,000 |
| Bank/Investment Svcs | *" .5501* | 17,390 | 20,000 | 20,000 | 45,000 | 46,000 |
| Regulatory Fees | *" .5502* | 57,061 | 57,000 | 73,000 | 57,000 | 58,000 |
| Election & Annexation | *" .5503* | 6,127 | 2,000 | - | 2,000 | 2,000 |
| Other/Reimbursements | | (40,648) | 10,000 | 10,000 | 10,000 | 10,000 |
| Admin Credit Transfer. | *4702* | (737,301) | (1,020,000) | (801,000) | (921,000) | (979,000) |
| Total Gen. & Admin. | | 3,059,757 | 2,812,000 | 2,954,000 | 2,985,000 | 3,265,000 |
| TOTAL EXPENSES | | $38,198,842 | $ 39,763,000 | $ 42,405,000 | $ 43,907,000 | $ 46,343,000 |

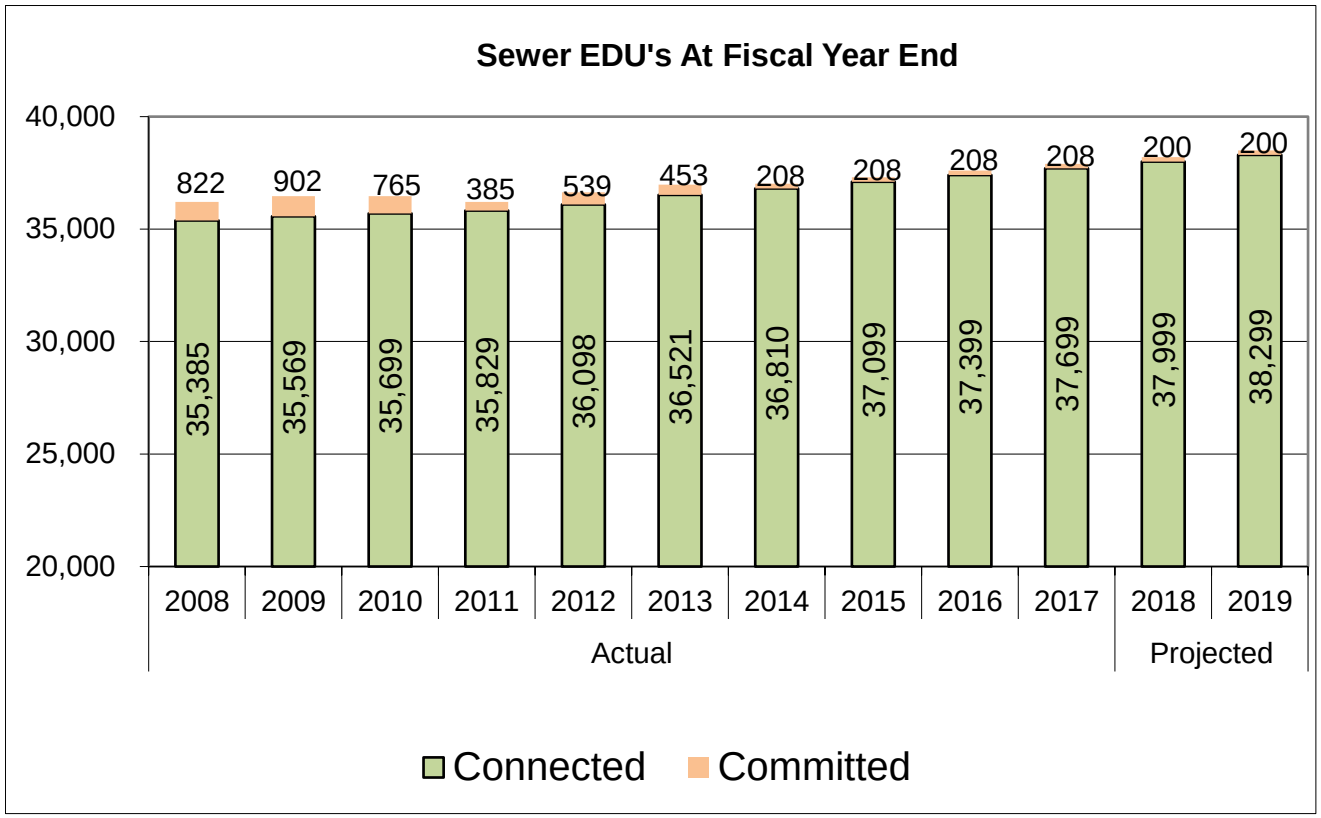
# 2018-19 OPERATING BUDGET

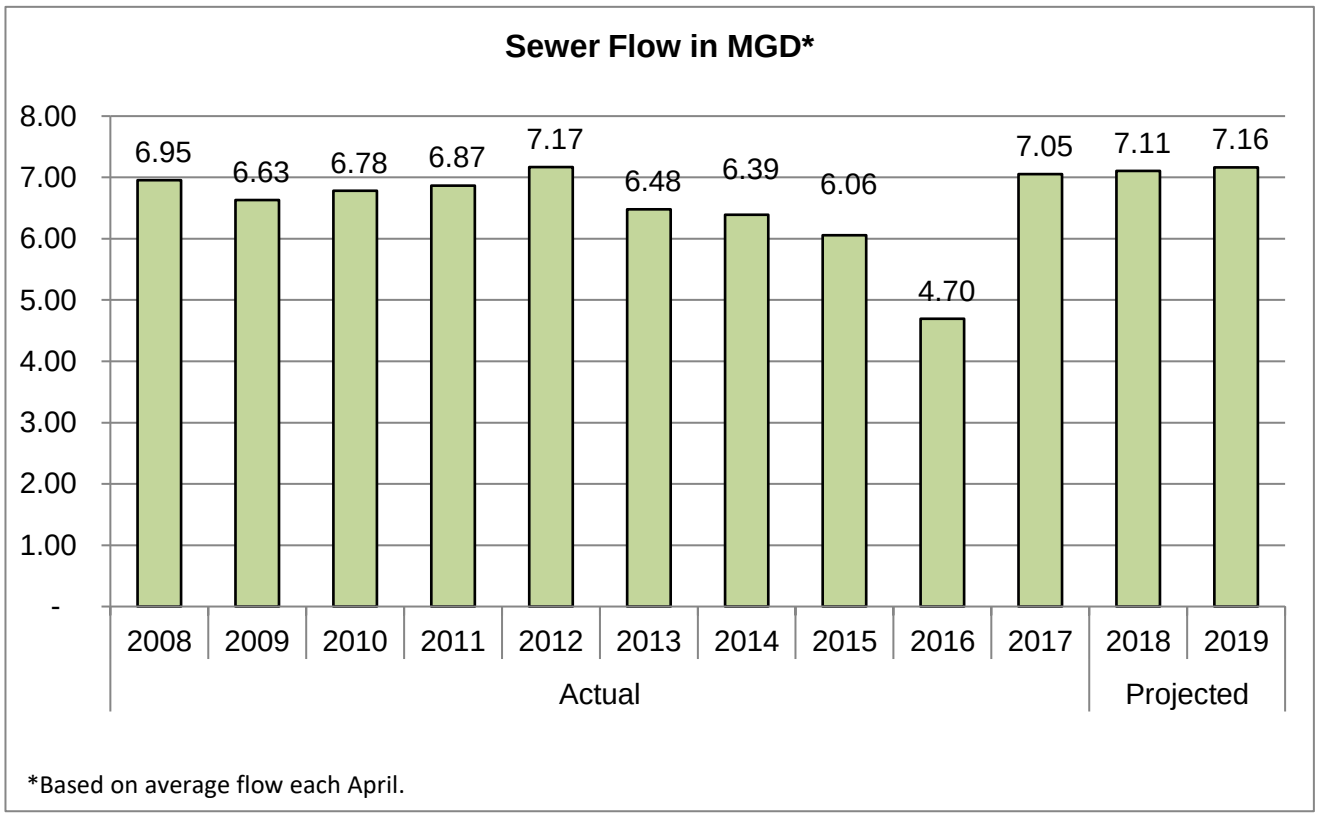
# WASTEWATER

*Chlorine Contact Tank at Meadowlark Wastewater Reclamation Facility*


Active Sewer Accounts At Fiscal Year End
20,000
15,000
10,000
19,535
19,604
19,666
19,795
20,023
20,274
20,400
20,462
20,500
20,521
20,611
20,691
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Actual
Projected


EDUs Added Each Fiscal Year
600
400
200
-
318
184
130
130
269
423
289
289
300
300
300
300
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Actual
Projected




*Based on average flow each April.

BUDGET FOR THE YEAR ENDING JUNE 30, 2019

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.

BUDGET FOR THE YEAR ENDING JUNE 30, 2019

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.

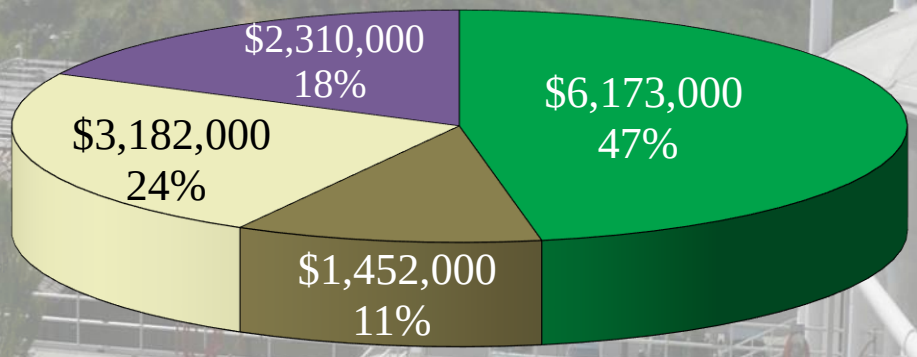
*Dues and Subscriptions* are periodical costs for sewer-related activities.

*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.

# 2018-19 WASTEWATER OPERATING EXPENSE BUDGET

## $13,117,000




- Encina & Meadowlark Plant
- General & Administrative
- Operation & Maintenance
- Collection & Conveyance

**VALLECITOS WATER DISTRICT**

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| OPERATING REVENUES | | | | | | |
| Sewer Service | *4101* | $ 17,503,448 | $ 17,510,000 | $ 17,900,000 | $ 17,954,000 | $ 18,008,000 |
| Reclaimed Water Sales | *4102* | 1,711,156 | 2,055,000 | 1,805,000 | 1,974,000 | 2,024,000 |
| Other | *Various* | 264,441 | 78,000 | 107,000 | 80,000 | 80,000 |
| Total Revenue | | 19,479,045 | 19,643,000 | 19,812,000 | 20,008,000 | 20,112,000 |
| OPERATING EXPENSES | | | | | | |
| Collection & Conveyance | *3010000* | 1,896,688 | 2,256,000 | 1,918,000 | 2,310,000 | 2,466,000 |
| Lift Stations | *3020000* | 294,520 | 310,000 | 232,000 | 293,000 | 321,000 |
| Source Control | *3060000* | 160,789 | 178,000 | 164,000 | 190,000 | 204,000 |
| Encina Disposal | *3070000* | 2,529,715 | 2,870,000 | 2,759,000 | 2,777,000 | 2,860,000 |
| Meadowlark Plant | *3410000* | 2,993,914 | 3,474,000 | 2,986,000 | 3,396,000 | 3,482,000 |
| Customer Accounts | *4010000* | 394,365 | 458,000 | 368,000 | 469,000 | 493,000 |
| Equipment & Vehicles | *4210000* | 185,498 | 229,000 | 204,000 | 241,000 | 235,000 |
| Buildings & Grounds | *4110000* | 229,039 | 257,000 | 237,000 | 260,000 | 277,000 |
| Engineering | *5010000* | 569,291 | 710,000 | 550,000 | 681,000 | 647,000 |
| Safety & Compliance | *5210000* | 158,939 | 189,000 | 167,000 | 203,000 | 212,000 |
| Information Technology | *6230000* | 592,553 | 831,000 | 741,000 | 845,000 | 887,000 |
| General & Admin. | *6xxx000* | 1,341,681 | 1,455,000 | 1,270,000 | 1,452,000 | 1,624,000 |
| Total Expense | | 11,346,992 | 13,217,000 | 11,596,000 | 13,117,000 | 13,708,000 |
| OPERATING INCOME | | 8,132,053 | 6,426,000 | 8,216,000 | 6,891,000 | 6,404,000 |
| LESS: TRANSFERS TO REPLACEMENT RESERVE | | 8,132,053 | 6,426,000 | 8,216,000 | 6,891,000 | 6,404,000 |
| NET INCOME | | $ - | $ - | $ - | $ - | $ - |

**VALLECITOS WATER DISTRICT**

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| COLLECTION/CONVEYANCE | | | | | | |
| Cost of Labor | *3010xxx.51xx* | $ 1,422,004 | $ 1,517,000 | $ 1,367,000 | $ 1,566,000 | $ 1,703,000 |
| Materials & Supplies | *" .53xx* | 92,870 | 120,000 | 93,000 | 154,000 | 158,000 |
| Chemicals | *" .5350* | 241,625 | 300,000 | 289,000 | 350,000 | 359,000 |
| Outside Services/Power | *" .5xxx* | 140,189 | 319,000 | 169,000 | 240,000 | 246,000 |
| Total Collection/Conveyance | | 1,896,688 | 2,256,000 | 1,918,000 | 2,310,000 | 2,466,000 |
| LIFT STATIONS | | | | | | |
| Cost of Labor | *3020xxx.51xx* | 157,923 | 187,000 | 120,000 | 168,000 | 193,000 |
| Materials & Supplies | *" .53xx* | 19,586 | 45,000 | 29,000 | 40,000 | 41,000 |
| Outside Services | *" .54xx* | 66,053 | 28,000 | 33,000 | 30,000 | 31,000 |
| Power | *" .5306* | 50,958 | 50,000 | 50,000 | 55,000 | 56,000 |
| Total Lift Stations | | 294,520 | 310,000 | 232,000 | 293,000 | 321,000 |
| SOURCE CONTROL | | | | | | |
| Cost of Labor | *3060000.51xx* | 146,018 | 153,000 | 145,000 | 164,000 | 177,000 |
| Materials & Supplies | *" .53xx* | 14,771 | 21,000 | 15,000 | 22,000 | 23,000 |
| Outside Services | *" .54xx* | - | 4,000 | 4,000 | 4,000 | 4,000 |
| Total Industrial Waste | | 160,789 | 178,000 | 164,000 | 190,000 | 204,000 |
| ENCINA DISPOSAL | *3070000.551* | 2,529,715 | 2,870,000 | 2,759,000 | 2,777,000 | 2,860,000 |
| MEADOWLARK LIFT STATION | | | | | | |
| Cost of Labor | *3710000.51xx* | 76,523 | 102,000 | 87,000 | 105,000 | 118,000 |
| Materials & Supplies | *" .53xx* | 8,289 | 60,000 | 38,000 | 45,000 | 46,000 |
| Chemicals | *" .5350* | 101,791 | 150,000 | 114,000 | 150,000 | 154,000 |
| Outside Services | *" .54xx* | 31,741 | 117,000 | 56,000 | 55,000 | 56,000 |
| Power | *" .5306* | 89,791 | 105,000 | 92,000 | 110,000 | 113,000 |
| Total Lift Sta. | | 308,135 | 534,000 | 387,000 | 465,000 | 487,000 |

**VALLECITOS WATER DISTRICT**

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| MEADOWLARK PLANT | | | | | | |
| Cost of Labor | *3410000.51xx* | $ 981,193 | $ 1,009,000 | $ 912,000 | $ 1,023,000 | $ 1,154,000 |
| Materials & Supplies | *" .53xx* | 369,359 | 375,000 | 355,000 | 437,000 | 375,000 |
| Chemicals | *" .5350* | 468,966 | 385,000 | 327,000 | 350,000 | 359,000 |
| Outside Services | *" .54xx* | 233,051 | 474,000 | 392,000 | 417,000 | 375,000 |
| Power | *" .5306* | 413,397 | 435,000 | 355,000 | 435,000 | 448,000 |
| Telephone | *" .5305* | 117 | 2,000 | 2,000 | 2,000 | 2,000 |
| Total Meadowlark | | 2,466,083 | 2,680,000 | 2,343,000 | 2,664,000 | 2,713,000 |
| MAHR RESERVOIR | | | | | | |
| Cost of Labor | *3810000.51xx* | 65,759 | 96,000 | 77,000 | 84,000 | 95,000 |
| Materials & Supplies | *" .53xx* | 15,196 | 10,000 | 36,000 | 21,000 | 22,000 |
| Chemicals | *" .5350* | 23,292 | 30,000 | 33,000 | 30,000 | 29,000 |
| Outside Services | *" .54xx* | 58,446 | 64,000 | 57,000 | 67,000 | 69,000 |
| Power | *" .5306* | 57,003 | 60,000 | 53,000 | 65,000 | 67,000 |
| Total Mahr Reservoir | | 219,696 | 260,000 | 256,000 | 267,000 | 282,000 |
| CUSTOMER ACCOUNTS | | | | | | |
| Cost of Labor | *4010000.51xx* | 303,605 | 364,000 | 273,000 | 334,000 | 367,000 |
| Materials & Supplies | *" .53xx* | 45,344 | 52,000 | 61,000 | 79,000 | 81,000 |
| Outside Services | *" .54xx* | 31,564 | 27,000 | 21,000 | 41,000 | 30,000 |
| Uncollectible Accts. | *" .5703* | 13,852 | 15,000 | 13,000 | 15,000 | 15,000 |
| Total Cust. Accts. | | 394,365 | 458,000 | 368,000 | 469,000 | 493,000 |
| EQUIPMENT & VEHICLES | | | | | | |
| Cost of Labor | *4210000.51xx* | 106,020 | 107,000 | 112,000 | 124,000 | 130,000 |
| Materials & Supplies | *" .53xx* | 30,890 | 50,000 | 21,000 | 50,000 | 51,000 |
| Fuel | *" .5307* | 32,517 | 47,000 | 29,000 | 42,000 | 43,000 |
| Outside Services | *" .54xx* | 16,071 | 25,000 | 42,000 | 25,000 | 11,000 |
| Total Equip. & Veh. | | 185,498 | 229,000 | 204,000 | 241,000 | 235,000 |
| BUILDINGS & GROUNDS | | | | | | |
| Cost of Labor | *4110000.51xx* | 59,918 | 98,000 | 55,000 | 77,000 | 89,000 |
| Materials & Supplies | *" .53xx* | 15,152 | 43,000 | 23,000 | 53,000 | 54,000 |
| Outside Services | *" .54xx* | 62,048 | 61,000 | 53,000 | 75,000 | 77,000 |
| Power | *" .5306* | 91,921 | 55,000 | 106,000 | 55,000 | 57,000 |
| Total Buildings & Grounds | | 229,039 | 257,000 | 237,000 | 260,000 | 277,000 |
| ENGINEERING | | | | | | |
| Cost of Labor | *5010000.51xx* | 560,599 | 612,000 | 543,000 | 588,000 | 620,000 |
| Materials & Supplies | *" .53xx* | 3,846 | 18,000 | 1,000 | 14,000 | 14,000 |
| Outside Services | *" .54xx* | 4,846 | 80,000 | 6,000 | 79,000 | 13,000 |
| Total Engineering | | 569,291 | 710,000 | 550,000 | 681,000 | 647,000 |

**VALLECITOS WATER DISTRICT**

WASTEWATER OPERATIONS BUDGET FOR THE YEAR ENDING JUNE 30, 2019

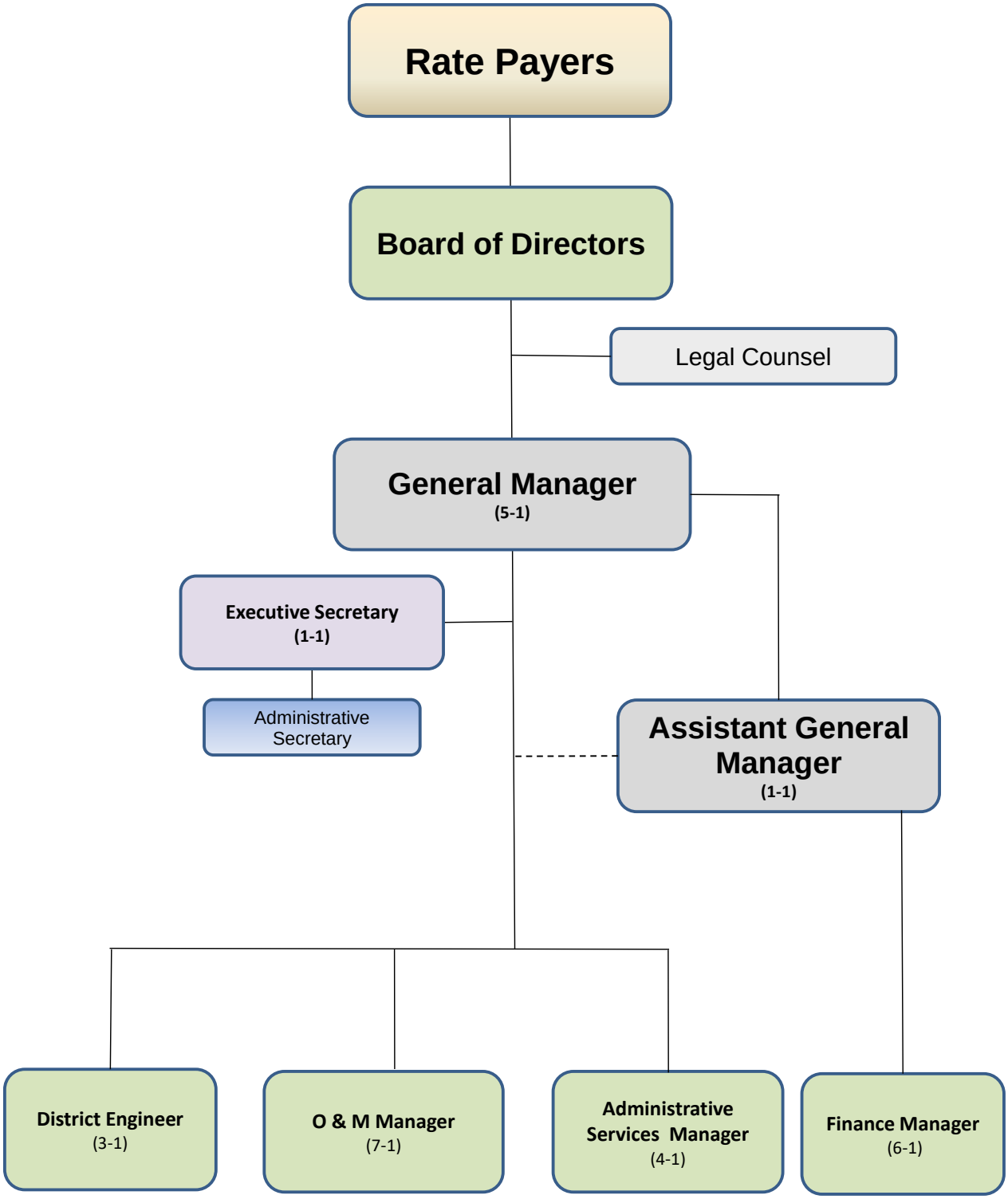
| | | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|---|
| SAFETY & REGULATORY AFFAIRS | | | | | | |
| Cost of Labor | *5210000.51xx* | $ 150,064 | $ 163,000 | $ 149,000 | $ 176,000 | $ 185,000 |
| Materials & Supplies | *" .53xx* | 266 | 13,000 | 5,000 | 12,000 | 12,000 |
| Safety Support | *" .54xx* | 8,609 | 13,000 | 13,000 | 15,000 | 15,000 |
| Total Safety/Reg Affairs | | 158,939 | 189,000 | 167,000 | 203,000 | 212,000 |
| INFORMATION TECH | | | | | | |
| Cost of Labor | *6230000.51xx* | 296,379 | 371,000 | 243,000 | 366,000 | 396,000 |
| Materials & Supplies | *" .53xx* | 75,747 | 137,000 | 184,000 | 58,000 | 59,000 |
| Outside Services | *" .54xx* | 220,427 | 323,000 | 314,000 | 421,000 | 432,000 |
| Total Information Tech | | 592,553 | 831,000 | 741,000 | 845,000 | 887,000 |
| GENERAL & ADMINISTRATION | | | | | | |
| Cost of Labor | *6xxxxx.51xx* | 1,480,649 | 1,498,000 | 1,252,000 | 1,445,000 | 1,614,000 |
| Directors Fees | *" .5101* | 42,899 | 58,000 | 55,000 | 58,000 | 59,000 |
| District Insurance | *" .5201* | 132,552 | 157,000 | 138,000 | 148,000 | 166,000 |
| Travel | *" .5202* | - | 1,000 | 1,000 | 1,000 | 1,000 |
| Meetings & Seminars | *" .5203* | 50 | 10,000 | 1,000 | 9,000 | 9,000 |
| Dues & Subscriptions | *" .5204* | 16,155 | 39,000 | 43,000 | 41,000 | 42,000 |
| Office Supplies | *" .5301* | 12,427 | 11,000 | 9,000 | 11,000 | 11,000 |
| Postage | *" .5304* | 4,528 | 6,000 | 2,000 | 6,000 | 6,000 |
| Outside Services | *" .5401* | 14,730 | 40,000 | 5,000 | 65,000 | 67,000 |
| Legal | *" .5402* | 111,829 | 142,000 | 99,000 | 142,000 | 153,000 |
| Auditing | *" .5403* | 15,477 | 17,000 | 14,000 | 12,000 | 14,000 |
| Bank/Investment Svcs | *" .5501* | 16,708 | 16,000 | 18,000 | 33,000 | 34,000 |
| Regulatory Fees | *" .5502* | - | 3,000 | 3,000 | 3,000 | 3,000 |
| Other | *" .5702* | (7,592) | 5,000 | 5,000 | 5,000 | 5,000 |
| Admin Credit Trans | *4702* | (498,731) | (548,000) | (375,000) | (527,000) | (560,000) |
| Total Gen. & Admin. | | 1,341,681 | 1,455,000 | 1,270,000 | 1,452,000 | 1,624,000 |
| TOTAL EXPENSES | | $ 11,346,992 | $ 13,217,000 | $ 11,596,000 | $ 13,117,000 | $ 13,708,000 |

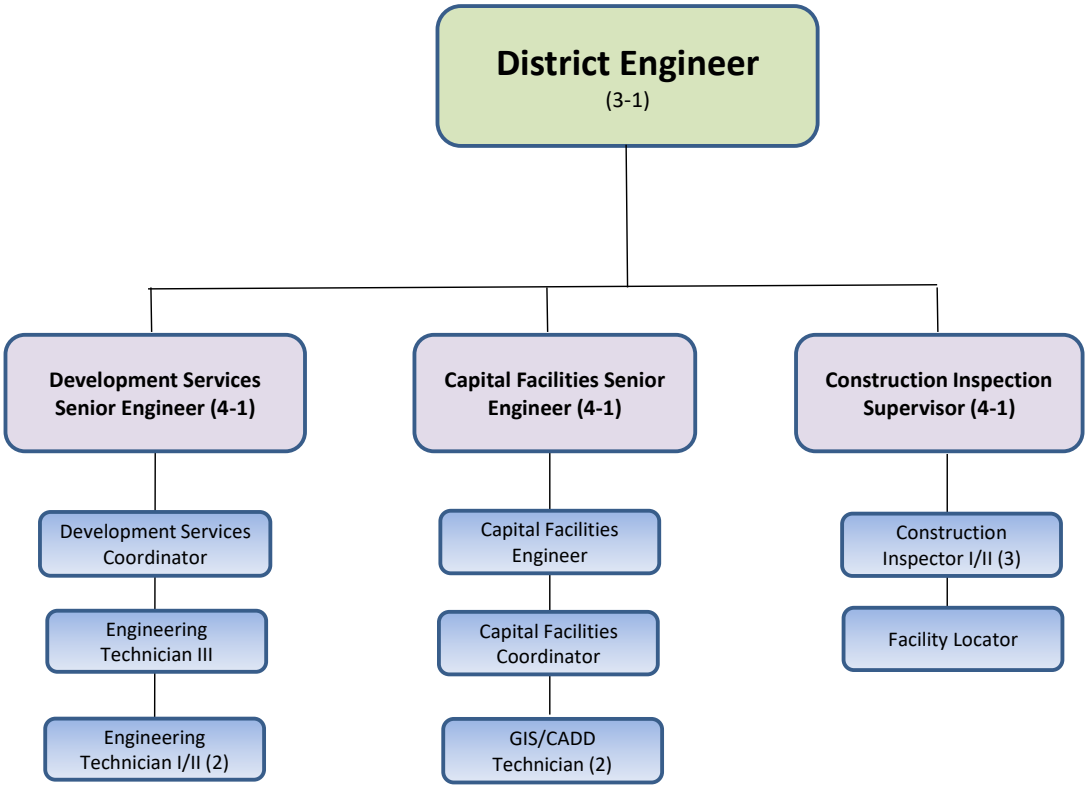
BUDGET FOR THE YEAR ENDING JUNE 30, 2019

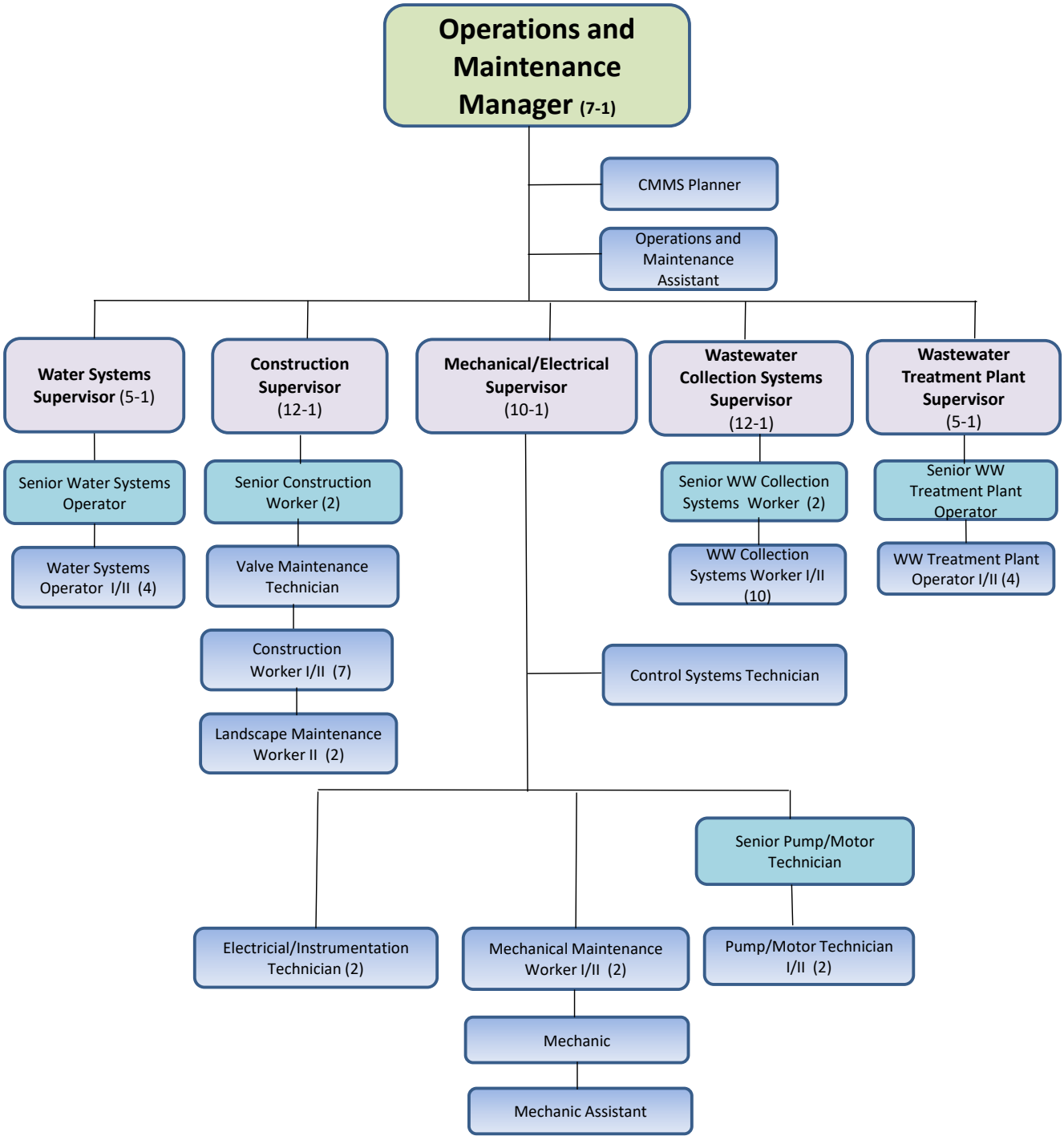
SALARY AND BENEFIT RECAP

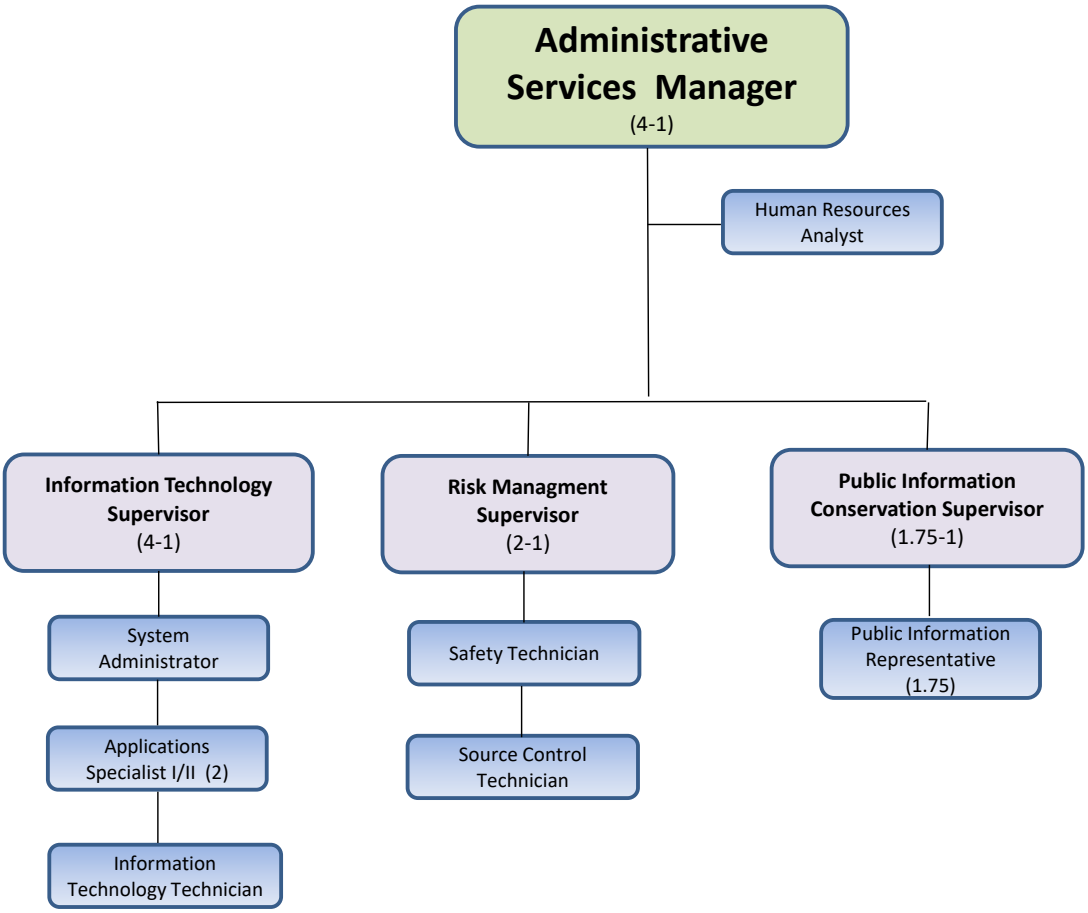
| | Actual FY 16-17 | Budget FY 17-18 | Projected FY 17-18 | Budget FY 18-19 | Estimated FY 19-20 |
|---|---|---|---|---|---|
| SALARIES | | | | | |
| Water Operations | $ 5,268,737 | $ 5,117,000 | $ 4,977,000 | $ 5,255,000 | $ 5,554,000 |
| Wastewater Operations | 3,551,900 | 3,783,000 | 3,255,000 | 3,786,000 | 4,050,000 |
| Subtotal | 8,820,637 | 8,900,000 | 8,232,000 | 9,041,000 | 9,604,000 |
| Labor Posted to Work Orders* | 617,221 | 772,000 | 699,000 | 667,000 | 699,000 |
| TOTAL SALARIES | 9,437,858 | 9,672,000 | 8,931,000 | 9,708,000 | 10,303,000 |
| BENEFITS | | | | | |
| Public Employee Retirement | 2,197,716 | 2,097,000 | 1,918,000 | 2,113,000 | 2,718,596 |
| Group Insurance | 2,273,265 | 2,677,000 | 2,392,000 | 2,603,000 | 2,738,000 |
| Social Security | 705,577 | 740,000 | 656,000 | 743,000 | 788,000 |
| Workers' Comp Insurance | 200,055 | 218,000 | 165,000 | 212,000 | 232,000 |
| 457 Contribution Match | 173,938 | 108,000 | 104,000 | 108,000 | 108,000 |
| Other Taxes and Benefits | 30,154 | 28,000 | 26,000 | 32,000 | 35,000 |
| TOTAL BENEFITS | 5,580,705 | 5,868,000 | 5,261,000 | 5,811,000 | 6,619,596 |
| TOTAL SALARIES & BENEFITS | $ 15,018,563 | $ 15,540,000 | $ 14,192,000 | $ 15,519,000 | $ 16,922,596 |
| Benefits as a Percentage of Salaries | 59.1% | 60.7% | 58.9% | 59.9% | 64.2% |
| Operations | 52.00 | 52.00 | 49.00 | 52.00 | 52.00 |
| Engineering | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 |
| Finance | 22.75 | 23.00 | 23.00 | 23.00 | 23.00 |
| Administration | 16.75 | 16.75 | 15.75 | 16.75 | 16.75 |
| Total Funded FTEs | 107.50 | 107.75 | 103.75 | 107.75 | 107.75 |

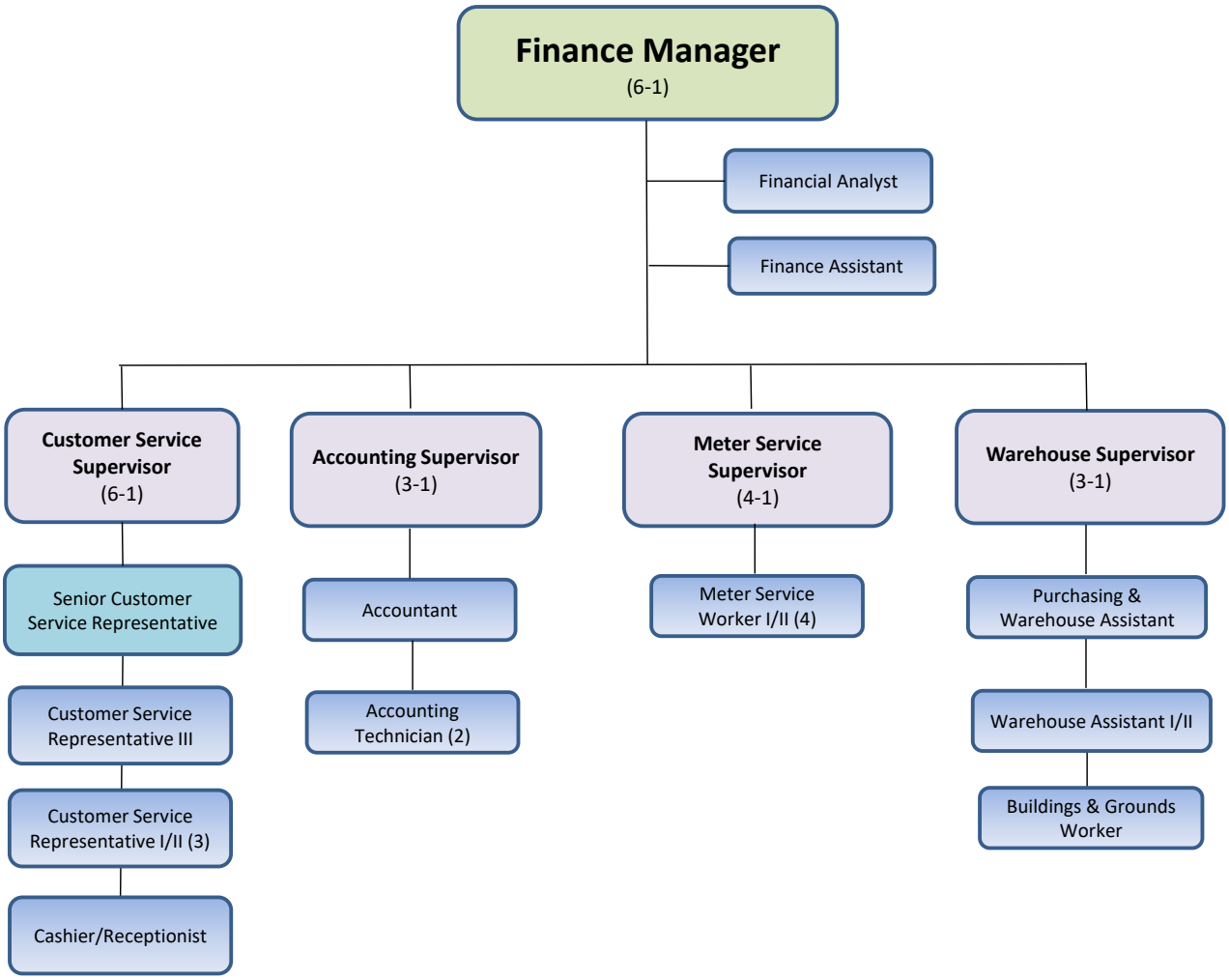
* There is also a labor overhead charge to work orders to cover benefit costs which are a part the credit in the General and Administration sections of Water and Wastewater operations.


Rate Payers
Board of Directors
Legal Counsel
General Manager
(5-1)
Executive Secretary
(1-1)
Administrative Secretary
Assistant General Manager
(1-1)
District Engineer
(3-1)
O & M Manager
(7-1)
Administrative Services Manager
(4-1)
Finance Manager
(6-1)


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


Operations and Maintenance Manager (7-1)
CMMS Planner
Operations and Maintenance Assistant
Water Systems Supervisor (5-1)
Construction Supervisor (12-1)
Mechanical/Electrical Supervisor (10-1)
Wastewater Collection Systems Supervisor (12-1)
Wastewater Treatment Plant Supervisor (5-1)
Senior Water Systems Operator
Water Systems Operator I/II (4)
Senior Construction Worker (2)
Valve Maintenance Technician
Construction Worker I/II (7)
Landscape Maintenance Worker II (2)
Senior WW Collection Systems Worker (2)
WW Collection Systems Worker I/II (10)
Senior WW Treatment Plant Operator
WW Treatment Plant Operator I/II (4)
Control Systems Technician
Senior Pump/Motor Technician
Electricial/Instrumentation Technician (2)
Mechanical Maintenance Worker I/II (2)
Pump/Motor Technician I/II (2)
Mechanic
Mechanic Assistant


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


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

# 2018-19 PERSONNEL BUDGET

## POSITIONS/PERSONNEL:

Management will scrutinize the need for all positions and only fill positions if absolutely necessary. The fiscal year 2018-19 budget includes: one reclassification as outlined below.

## RECLASSIFICATIONS:

Engineering Aide to Engineering Technician I - Estimated Additional Annual Cost: $0

This position's job description was updated to better reflect the duties performed by the incumbent. There is no additional annual cost since both classifications are at the same pay range and the employee's pay is not changing.

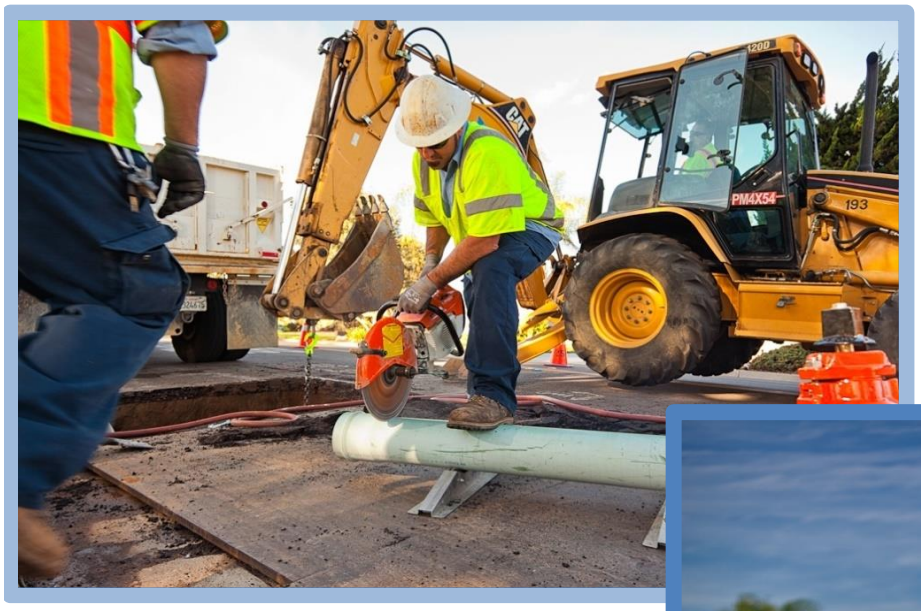
## VALLECITOS WATER DISTRICT

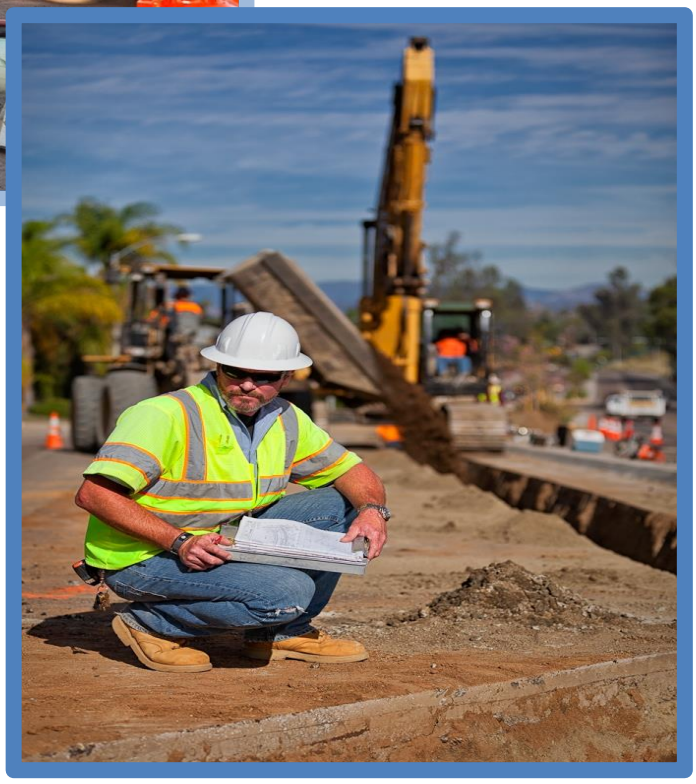
2018-19 PUBLIC AWARENESS AND CONSERVATION PROGRAM BUDGET

| | | | |
|---|---|---|---|
| **REBATE PROGRAMS *** | Prj 2019100025 | W/O 117447 | |
| To encourage the purchase of qualified low flow devices, appliances, artificial turf or rebates to customers who remove their existing truf grass and install a low-water landscape (i.e., Cash for Grass program.) | | | $ 1,000 |
| **OUTREACH & ADVERTISING** | Prj 2019100026 | 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. | | | 52,000 |
| **VIDEO PRODUCTION** | Prj 2019100027 | 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. | | | 5,200 |
| **EDUCATION** | Prj 2019100028 | 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. | | | 7,600 |
| **COOPERATIVE PROGRAMS*** | Prj 2019100029 | 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 |
| **WATERWISE LANDSCAPE** | Prj 2019100030 | 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.<br>** Demonstration gardens include: Sustainable Demonstration Garden at VWD Administration building, Heritage Park native plant garden and Jack's Pond Park native plant garden. | | | 5,500 |
| **MEMBERSHIPS & EQUIPMENT** | Prj 2019100031 | W/O 117454 | |
| To maintain memberships in related organizations and committees and for the purchases of new or replacement equipment. | | | 2,500 |
| **COMMERCIAL/INDUSTRIAL** | Prj 2019100032 | W/O 117455 | |
| To assist large commercial and public agency customers by providing workshops, written materials, monetary incentives, and using outside consultants. | | | 1,200 |
| **TOTAL PUBLIC AWARENESS/CONSERVATION PROGRAM BUDGET** | | | **$ 79,000** |

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

# 2018-19 CAPITAL BUDGET



## VALLECITOS WATER DISTRICT

### *Comprehensive Project List*

| Page Number | Project Number | Project Title | Funding Source | Previous Budget & Amendments | Estimated Amt Expended @ 6/30/18 | Fiscal Year 2018-19 Carryforward | Fiscal Year 2018-19 New Request |
|---|---|---|---|---|---|---|---|
| ***Carryover Projects*** | | | | | | | |
| 36 | 90001 | Encina Parallel Land Outfall | 220 | $ 31,000,000 | $ 150,000 | $ 30,850,000 | $ 13,730,000 |
| 37 | 71004 | San Marcos Interceptor | 210 & 220 | 19,700,000 | 13,720,000 | 5,980,000 | 200,000 |
| 38 | 2013100001 | Coronado Hills Tank #2 | 120 | 6,000,000 | - | 6,000,000 | - |
| 39 | 2016100003 | Montiel Gravity Outfall | 210 & 220 | 4,725,000 | 243,000 | 4,482,000 | - |
| 40 | 2016100002 | Chlorine Contact Tank Expansion | 220 | 4,815,000 | 64,000 | 4,751,000 | (96,000) |
| 41 | 71084 | Meadowlark Tank No. 3 | 120 | 4,552,000 | 490,000 | 4,062,000 | - |
| 42 | 90007 | City of San Marcos Joint Projects | 110 & 210 | 750,000 | 260,000 | 490,000 | 3,258,000 |
| 43 | 71219 | Mountain Belle Pump Station | 120 | 3,860,000 | 100,000 | 3,760,000 | - |
| 44 | 90003 | Rock Springs Sewer Replacement | 210 & 220 | 3,165,000 | 640,000 | 2,525,000 | 225,000 |
| 45 | 2018100001 | Encina Wastewater Authority FY 17/18 | 210 & 220 | 3,236,000 | 2,409,000 | 827,000 | - |
| 46 | 2017100002 | MRF: Conversion to Sodium Hypochlorite | 210 | 2,000,000 | - | 2,000,000 | - |
| 47 | 2018100002 | Elser Lane Water Line Improvements | 110 | 1,765,000 | - | 1,765,000 | - |
| 48 | 2012100002 | Richland Invert Replacement | 210 | 1,485,000 | 15,000 | 1,470,000 | - |
| 49 | 71177 | Land Outfall Clearing & Access Road | 210 | 1,150,000 | 360,000 | 790,000 | - |
| 50 | 2014100003 | Water and Sewer Master Plan | 120 & 220 | 1,050,000 | 1,075,000 | (25,000) | 75,000 |
| 51 | 80001 | Old Questhaven Sewer Replacement | 210 & 220 | 835,000 | 1,000 | 834,000 | - |
| 52 | 2016100005 | Expansion of the Men's Locker Room in Building B | 110 & 210 | 810,000 | 210,000 | 600,000 | (40,000) |
| 53 | 2015100002 | Audiovisual Upgrade | 110 & 210 | 750,000 | 455,000 | 295,000 | - |
| 54 | 2016100004 | District-wide Valve Replacement Program | 110 | 700,000 | 460,000 | 240,000 | - |
| 55 | 2013100006 | High Point Pipeline | 120 | 700,000 | - | 700,000 | - |
| 56 | 2014100002 | NW Lake San Marcos Sewer Replacement and Lining | 210 | 605,000 | 2,500 | 602,500 | - |
| 57 | 2014100004 | Asset Management Replacement Schedule | 110 & 210 | 600,000 | 13,000 | 587,000 | - |
| 58 | 2018100003 | Schoolhouse Tank Refurbishment | 110 | 675,000 | 25,000 | 650,000 | (85,000) |
| 59 | 2018100005 | Stargaze Court and River Run Circle Water Line Rehabilitation | 110 | 482,000 | 80,000 | 402,000 | - |
| 60 | 71126 | Vulnerability Assessment Improvements | 110 & 210 | 447,700 | 50,000 | 397,700 | - |
| 61 | 2018100004 | Las Posas 10-inch Water Main Replacement | 110 | 580,000 | - | 580,000 | (160,000) |
| 62 | 2018100006 | Palos Vista Pump Station – Generator | 110 | 325,000 | 66,000 | 259,000 | - |
| 63 | 2016100007 | Rock Springs Valve Replacement | 110 | 265,000 | 5,000 | 260,000 | 35,000 |
| 64 | 2018100007 | Solar Panel Inverter Replacement | 110 & 210 | 295,000 | 10,000 | 285,000 | - |
| 65 | 2017100005 | Fire Services - Backflow Preventer Upgrades | 110 | 250,000 | 40,000 | 210,000 | - |
| 66 | 2016100014 | Via Vera Cruz Tank Hill Stabilization | 110 | 145,000 | 62,000 | 83,000 | 75,000 |
| 67 | 2018100009 | MRF - Replace the Influent Pumps & Motors | 210 | 195,000 | 65,000 | 130,000 | - |
| 68 | 2018100011 | MRF - Tertiary Influent Chamber Repairs | 250 | 115,000 | - | 115,000 | 50,000 |
| 69 | 2016100008 | Palos Vista Pump Station - Motor Replacement | 110 | 118,000 | 84,000 | 34,000 | - |
| 70 | 2018100014 | Replace Roofs on Equipment Storages | 110 & 210 | 77,000 | - | 77,000 | - |
| 71 | 2018100016 | Building A Kitchens | 110 & 210 | 65,000 | - | 65,000 | - |
| 72 | 2017100009 | Building B Laminate Floor Replacement | 110 & 210 | 40,000 | - | 40,000 | - |
| 73 | 2017100016 | HVAC Pump and Motor Replacement | 110 & 210 | 20,000 | 17,000 | 3,000 | - |
| | | | | ***$ 98,347,700*** | ***$ 21,171,500*** | ***$ 77,176,200*** | ***$ 17,267,000*** |
| ***New Projects*** | | | | | | | |
| 74 | 2019100001 | Encina Wastewater Authority Five Year Plan | 210 & 220 | - | - | - | 23,576,000 |
| 75 | 2019100002 | MRF - Biological Selector Improvements | 250 | - | - | - | 1,666,000 |
| 76 | 2019100003 | North Twin Oaks Tank No. 1 Refurbishment | 110 | - | - | - | 425,000 |
| 77 | 2019100004 | OSHA Compliant Ladder Climb Safety Systems | 110 | - | - | - | 200,000 |
| 78 | 2019100005 | Sewer Rehabilitation and Repairs 2019 | 210 | - | - | - | 188,000 |
| 79 | 2019100006 | Sewer Bypass Repair | 210 | - | - | - | 142,000 |
| 80 | 2019100007 | Sewer Replacement and I&I Repairs | 210 | - | - | - | 100,000 |
| 81 | 2019100008 | Effluent & Backwash Sluice Gate | 250 | - | - | - | 80,000 |
| 82 | 2019100009 | Vallecitos 9 Turnout Pipeline Repair | 110 | - | - | - | 70,000 |
| 83 | 2019100010 | Mountain Belle Tank - Chlorine Injection System | 110 | - | - | - | 65,000 |
| 84 | 2019100011 | Ultrasonic Algae Control System | 250 | - | - | - | 65,000 |
| 85 | 2019100012 | Door Access Control System Expansion | 110 & 210 | - | - | - | 20,000 |
| 86 | 2019100013 | HVAC System Upgrade | 110 & 210 | - | - | - | 20,000 |
| 87 | 2019100014 | Cooling Tower Media Replacement | 110 & 210 | - | - | - | 12,000 |
| 88 | TBA | Future Projects | | - | - | - | 22,853,000 |
| | | | | ***$ -*** | ***$ -*** | ***$ -*** | ***$ 49,482,000*** |
| | | | | ***$ 98,347,700*** | ***$ 21,171,500*** | ***$ 77,176,200*** | ***$ 66,749,000*** |
| | | | | | | ***$143,925,200*** | |

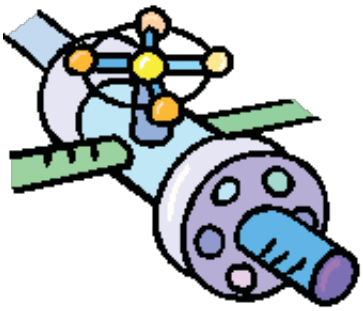
## VALLECITOS WATER DISTRICT

***Comprehensive Project List***

| Project Total | Spending by Fiscal Year 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023 to 2027 | Page Number |
|---|---|---|---|---|---|---|---|
| $ 44,730,000 | $ 270,000 | $ 1,120,000 | $ 6,000,000 | $ 5,000,000 | $ - | $ 32,190,000 | 36 |
| 19,900,000 | 1,580,000 | 4,600,000 | - | - | - | - | 37 |
| 6,000,000 | - | - | - | - | 6,000,000 | - | 38 |
| 4,725,000 | 402,000 | 3,315,000 | 765,000 | - | - | - | 39 |
| 4,719,000 | 1,000 | 1,000 | 1,000 | 1,000 | 4,651,000 | - | 40 |
| 4,552,000 | - | 3,132,000 | 930,000 | - | - | - | 41 |
| 4,008,000 | 70,000 | 647,000 | 912,000 | 2,119,000 | - | - | 42 |
| 3,860,000 | - | - | - | - | - | 3,760,000 | 43 |
| 3,390,000 | 2,750,000 | - | - | - | - | - | 44 |
| 3,236,000 | 827,000 | - | - | - | - | - | 45 |
| 2,000,000 | 50,000 | 950,000 | 1,000,000 | - | - | - | 46 |
| 1,765,000 | 15,000 | 65,000 | 410,000 | 1,275,000 | - | - | 47 |
| 1,485,000 | 85,000 | 225,000 | 1,160,000 | - | - | - | 48 |
| 1,150,000 | 790,000 | - | - | - | - | - | 49 |
| 1,125,000 | 50,000 | - | - | - | - | - | 50 |
| 835,000 | - | - | - | - | 34,000 | 800,000 | 51 |
| 770,000 | 560,000 | - | - | - | - | - | 52 |
| 750,000 | 295,000 | - | - | - | - | - | 53 |
| 700,000 | 120,000 | 120,000 | - | - | - | - | 54 |
| 700,000 | - | 700,000 | - | - | - | - | 55 |
| 605,000 | 27,500 | 475,000 | 100,000 | - | - | - | 56 |
| 600,000 | 292,000 | 150,000 | 145,000 | - | - | - | 57 |
| 590,000 | 565,000 | - | - | - | - | - | 58 |
| 482,000 | 402,000 | - | - | - | - | - | 59 |
| 447,700 | 397,700 | - | - | - | - | - | 60 |
| 420,000 | 5,000 | 415,000 | - | - | - | - | 61 |
| 325,000 | 259,000 | - | - | - | - | - | 62 |
| 300,000 | 75,000 | 220,000 | - | - | - | - | 63 |
| 295,000 | 285,000 | - | - | - | - | - | 64 |
| 250,000 | 50,000 | 55,000 | 55,000 | 50,000 | - | - | 65 |
| 220,000 | 158,000 | - | - | - | - | - | 66 |
| 195,000 | 65,000 | 65,000 | - | - | - | - | 67 |
| 165,000 | 165,000 | - | - | - | - | - | 68 |
| 118,000 | 34,000 | - | - | - | - | - | 69 |
| 77,000 | 77,000 | - | $ - | $ - | $ - | $ - | 70 |
| 65,000 | 65,000 | - | - | - | - | - | 71 |
| 40,000 | 40,000 | - | - | - | - | - | 72 |
| 20,000 | 3,000 | - | - | - | - | - | 73 |
| ***$ 115,614,700*** | ***$ 10,830,200*** | ***$ 16,255,000*** | ***$ 11,478,000*** | ***$ 8,445,000*** | ***$ 10,685,000*** | ***$ 36,750,000*** | |
| 23,576,000 | 4,795,000 | 5,438,000 | 4,558,000 | 3,721,000 | 5,064,000 | - | 74 |
| 1,666,000 | 66,000 | 520,000 | 1,080,000 | | - | - | 75 |
| 425,000 | 425,000 | - | - | - | - | - | 76 |
| 200,000 | 200,000 | - | - | - | - | - | 77 |
| 188,000 | 188,000 | - | - | - | - | - | 78 |
| 142,000 | 142,000 | - | - | - | - | - | 79 |
| 100,000 | 100,000 | - | - | - | - | - | 80 |
| 80,000 | 80,000 | - | - | - | - | - | 81 |
| 70,000 | 70,000 | - | - | - | - | - | 82 |
| 65,000 | 65,000 | - | - | - | - | - | 83 |
| 65,000 | 65,000 | - | - | - | - | - | 84 |
| 20,000 | 20,000 | - | - | - | - | - | 85 |
| 20,000 | 20,000 | - | - | - | - | - | 86 |
| 12,000 | 12,000 | - | - | - | - | - | 87 |
| 22,853,000 | - | 1,710,000 | 1,348,000 | 1,975,000 | 980,000 | 16,840,000 | 88 |
| ***$ 49,482,000*** | ***$ 6,248,000*** | ***$ 7,668,000*** | ***$ 6,986,000*** | ***$ 5,696,000*** | ***$ 6,044,000*** | ***$ 16,840,000*** | |
| ***$ 165,096,700*** | ***$ 17,078,200*** | ***$ 23,923,000*** | ***$ 18,464,000*** | ***$ 14,141,000*** | ***$ 16,729,000*** | ***$ 53,590,000*** | |

# Capital Improvement Program
## Encina Parallel Land Outfall

**Description:** This project calls for the installation of approximately 34,000 feet of new outfall pipeline from Lift Station No. 1 to the Encina Water Pollution Control Facility. The pipeline will either parallel the existing sewer interceptor or it will replace certain undersized segments.



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

**Project:** 90001 **Funding Source:** 100% Fund 220 – Sewer Capacity

**Comments:** This project will increase the District's sewer handling capacity by allowing more wastewater flow to the Encina Water Pollution Control Facility. 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.

**Operations Impact:** Increased sewerage handling capacity and additional flexibility & redundancy in outfall system during average and low flow periods. Annual, routine sewer pipeline maintenance is expected with the completion of this project.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $150,000 | $170,000 | | | | | $320,000 |
| Design | | $100,000 | $1,120,000 | | | $2,930,000 | $4,150,000 |
| Construction | | | | $6,000,000 | $5,000,000 | $29,260,000 | $40,260,000 |
| **Total** | $150,000 | $270,000 | $1,120,000 | $6,000,000 | $5,000,000 | $32,190,000 | **$44,730,000** |

***FY 2018/19 Budget Request - $13,730,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2008 | Jan 2009 | Dec 2018 | Jan 2019 | Jun 2038 | Jan 2021 | Jun 2040 | Jun 2040 |

# Capital Improvement Program
## San Marcos Interceptor

**Description:** The project consists of three separate phases constructing approximately 9,000 LF of 36" sewer interceptor replacing an existing 21" sewer line. The existing line is prone to groundwater inflow and infiltration (I&I) and at risk for failure. The sewer interceptor runs along San Marcos Creek from north of the 78 FWY past McMahr Road. The project includes open cut and tunnel section as well as right of way acquisition.


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

**Project:** 71004 **Funding Source:** 31% Fund 210 – Sewer Replacement
69% Fund 220 – Sewer Capacity

**Comments:** This project is identified in the 2002 Master Plan. The reduction of I&I will help extend the life of the sewer system downstream of the San Marcos interceptor and reduce unnecessary treatment of groundwater at Encina and Meadowlark. The new line will also reduce the likelihood of spills within San Marcos Creek. Design and land acquisition will move forward in FY 13/14 for the last phase between Via Vera Cruz and Pacific Street in order to be consistent with the future road within the Creek District. The City of San Marcos will reimburse VWD for approximately $95,000 in design costs for the last phase of this project. The last phase will also include a construction cost reimbursement from the City which is estimated at $250,000. The construction cost reimbursement will be finalized after actual bid prices are received for the project.

**Operations Impact:** Minimal impact is anticipated as this project increases the size of an existing sewer line and does not add significant lineal footage of sewer for maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $800,000 | $130,000 | | | | | $930,000 |
| Design | $2,720,000 | $250,000 | | | | | $2,970,000 |
| Construction | $10,200,000 | $1,200,000 | $4,600,000 | | | | $16,000,000 |
| **Total** | $13,720,000 | $1,580,000 | $4,600,000 | $0 | $0 | $0 | **$19,900,000** |

***FY 2018/19 Budget Request - $200,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 1996 | Jul 1996 | Jun 2007 | Jul 1998 | Feb 2019 | Apr 2019 | Feb 2020 | Feb 2020 |

# Capital Improvement Program
## Coronado Hills Tank #2

**Description:** Build-out demands for the 1530, 1115 and 1320 pressure zones are projected to require a storage volume of 9.63 million gallons over and above existing storage capacity. This project will add 4.73 million gallons of potable water storage to meet the projected near-term total storage deficits in the 1530 and neighboring pressure zones. This reservoir will be constructed on the same site as the existing Coronado Hills Tank.

**Project Manager:** Jason Hubbard **Department:** Engineering

**Project:** 2013100001 **Funding Source:** 100% Fund 120 – Water Capacity

**Comments:** The existing Coronado Hills Tank resides on a large, flat parcel that can accommodate additional storage reservoirs with little grading and preparation efforts. The ultimate plan is to locate a total of 3 tanks at this site, with a Coronado Hills #3 tank sized for 3.21 million gallons being constructed around 2030. The Master Plan has identified this as Project R-3.

**Operations Impact:** The project will add 4.73 million gallons of potable water storage to the service system.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | $50,000 | $50,000 |
| Design | | | | | | $690,000 | $690,000 |
| Construction | | | | | | $5,260,000 | $5,260,000 |
| **Total** | $0 | $0 | $0 | $0 | $0 | $6,000,000 | **$6,000,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2012 | Oct 2022 | Dec 2022 | Jan 2023 | Aug 2023 | Sep 2023 | Mar 2024 | Mar 2024 |

# Capital Improvement Program
## Montiel Gravity Outfall

**Description:** This project involves the study and potential construction of approximately 7,720 feet of new 10-inch gravity sewer main underneath SR-78 from the Montiel Lift Station to Mission Road and continuing on Mission Road, Andreasen Drive, and Simpson Way to Hale Avenue. This will effectively reroute the sewer that is currently pumped from the Montiel Lift Station to the City of Escondido's sewer system in Mission Road just east of Nordahl Road.

**Project Manager:** Rob Scholl

**Department:** Engineering

**Project:** 2016100003

**Work Order:** 165996

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

**Comments:** To offset the Montiel Lift Station Replacement, the Montiel Lift Station Force Main Replacement, and the Nordahl Shopping Center Sewer Replacement projects as identified in the Master Plan and consistent with the District's Strategic Plan – Strategic Focus Area 1.4, staff is investigating the possibility of constructing a gravity sewer outfall to the City of Escondido's sewer system. Upon entering an agreement with the City of Escondido for a new gravity sewer connection, which may include possible reimbursement to the District, the Montiel Lift Station Replacement and the Montiel Lift Station Force Main Replacement will be eliminated and the Nordahl Shopping Center Sewer Replacement project may be eliminated. These projects amount to approximately $4,700,000 to construct and $25,000 annually to operate and maintain.

**Operations Impact:** Annual and routine sewer pipline maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $243,000 | $240,000 | | | | | $483,000 |
| Design | | $162,000 | $5,000 | | | | $167,000 |
| Construction | | | $3,310,000 | $765,000 | | | $4,075,000 |
| **Total** | $243,000 | $402,000 | $3,315,000 | $765,000 | $0 | $0 | **$4,725,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2015 | Feb 2016 | Dec 2019 | Nov 2018 | Aug 2019 | Sep 2019 | Sep 2020 | Sep 2020 |

# Capital Improvement Program
## Chlorine Contact Tank Expansion

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

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

**Project:** 2016100002 **Funding Source:** 100% Fund 220 – Sewer Capacity

**Work Order:** 167177

**Comments:** The existing CCT were part of the original expansion of MRF in the 80's. During the latest expansion of MRF which started in 2005, the CCTs were rerated 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% Federal Grants for the project budget total and construction of the CCT expansion will be contingent on acquiring these funds.

**Operations Impact:** Normal maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $64,000 | $1,000 | $1,000 | $1,000 | $1,000 | $1,000 | $69,000 |
| Design | | | | | | $350,000 | $350,000 |
| Construction | | | | | | $4,300,000 | $4,300,000 |
| **Total** | $64,000 | $1,000 | $1,000 | $1,000 | $1,000 | $4,651,000 | **$4,719,000** |

***FY 2018/19 Budget Request - ($96,000)***

### 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 tank and a second 2.75 million gallon tank. As part of this project, a new 2.5 million gallon Meadowlark Tank No. 3 will be built.

**Project Manager:** Jason Hubbard **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 tank is not expected to be needed until 2036, when it will replace the 1.25 million gallon tank #1. At build-out, the Meadowlark Tanks will provide a total storage capacity of 8.75 million gallons.

**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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $123,000 | | | | | | $123,000 |
| Design | $367,000 | | $51,000 | | | | $418,000 |
| Construction | | | $3,081,000 | $930,000 | | | $4,011,000 |
| **Total** | $490,000 | $0 | $3,132,000 | $930,000 | $0 | $0 | **$4,552,000** |

***FY 2018/19 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 2019 | Nov 2019 | Sep 2020 | Sep 2020 |

# Capital Improvement Program
## City of San Marcos Joint Projects

**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:** 90007 **Funding Source:** See Below

**Comments:**

| Project: | Amount: | Source: |
|---|---|---|
| San Marcos Blvd Rehabilitation | $85,000 | Water/Sewer 50% / 50% |
| Discovery St Widening* | $647,000 | Water/Sewer 95% / 5% |
| Bent Ave Bridge* | $912,000 | Water/Sewer 70% / 30% |
| Via Vera Cruz Bridge* | $2,034,000 | Water/Sewer 70% / 30% |
| Misc. Relocations/Adjustments | $70,000 | Water/Sewer 75% / 25% |
| Total | $3,748,000 | |

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

* - Projects to start construction Jan 2019 with estimated completion 2021/22

**Operations Impact:** Normal maintenance for infrastructure.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $260,000 | $70,000 | $647,000 | $912,000 | $2,119,000 | | $4,008,000 |
| **Total** | $260,000 | $70,000 | $647,000 | $912,000 | $2,119,000 | $0 | **$4,008,000** |

***FY 2018/19 Budget Request - $3,258,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2009 | | | | | | Jun 2022 | Jun 2022 |

# Capital Improvement Program
## Mountain Belle Pump Station

**Description:** This project involves the construction of three 1,000 gallon-per-minute pumps and 125 horsepower motors, along with all corresponding electronics, within a new building next to the existing Mountain Belle Reservoir. Approximately 1,800 feet of 16-inch connector pipe from the pump station to an existing 10" pipeline in the North Twin Oaks (1330') Pressure Zone will also be installed.

**Project Manager:** Jason Hubbard **Department:** Engineering

**Project:** 71219 **Funding Source:** 100% Fund 120 – Water Capacity

**Comments:** The Mountain Belle Pump Station is intended to serve as a completely redundant water supply to the new North Twin Oaks (1330') pump station. It will be sized to meet ultimate build-out demands in the North Twin Oaks 1330' Pressure Zone, the 1059' Pressure Zone, and the North 1228' Pressure Zone. A pad for this pump station has already been placed next to the Mountain Belle Reservoir (see picture above).

**Operations Impact:** Redundant pumping capacity to the North Twin Oaks Pressure Zone. Daily, routine monitoring and inspections of the pump station is expected, as are regular maintenance efforts and some infrequent repair work.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $10,000 | | | | | | $10,000 |
| Design | $90,000 | | | | | $310,000 | $400,000 |
| Construction | | | | | | $3,450,000 | $3,450,000 |
| **Total** | $100,000 | $0 | $0 | $0 | $0 | $3,760,000 | **$3,860,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2006 | Aug 2006 | Feb 2007 | Feb 2007 | Jun 2022 | Jul 2022 | Aug 2023 | Aug 2023 |

# Capital Improvement Program
## Rock Springs Sewer Replacement

**Description:** Abandonment and/or removal of approximately 2,500 feet of 8" VCP sewer main and 10 manholes within Rock Springs Road and adjacent greenbelt. This project will bring relief to a section of existing sewer pipe within a greenbelt drainage area that is currently operating beyond its design limits.

**Project Manager:** Jason Hubbard

**Department:** Engineering

**Project:** 90003

**Work Order:** 090003

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

**Comments:** The 2500' of existing vitrified clay pipe (VCP) will be replaced by 2,700 feet of new PVC sewer main, including 16 new manholes and the rehabilitation of 4 existing manholes. This will eliminate an existing surcharging condition in the District's collection system between Woods Dr. and Hannigans Way within a greenbelt drainage area south of Rock Springs Rd. The 2008 Master Plan has identified this upgrade as project SP-5.

**Operations Impact:** Less inflow and infiltration into the collection system; reduced risk of sewer spilling. Annual, routine sewer pipeline maintenance is expected with the completion of this project.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $50,000 | | | | | | $50,000 |
| Design | $590,000 | | | | | | $590,000 |
| Construction | | $2,750,000 | | | | | $2,750,000 |
| **Total** | $640,000 | $2,750,000 | $0 | $0 | $0 | $0 | **$3,390,000** |

***FY 2018/19 Budget Request - $225,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2008 | Jul 2008 | Jan 2010 | Feb 2010 | Mar 2018 | Jul 2018 | Mar 2019 | Mar 2019 |

# Capital Improvement Program
## Encina Wastewater Authority FY 17/18

**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:** Glenn Pruim **Department:** General Manager

**Project:** 2018100001 **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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $2,409,000 | $827,000 | | | | | $3,236,000 |
| **Total** | $2,409,000 | $827,000 | $0 | $0 | $0 | $0 | **$3,236,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2009 | | | | | | | Aug 2018 |

# 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).


**Project Manager:** Ed Pedrazzi **Department:** Engineering

**Project:** 2017100002 **Funding Source:** 100% Fund 210 – Sewer Replacement

**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.

**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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | $50,000 | | | | | $50,000 |
| Design | | | $200,000 | | | | $200,000 |
| Construction | | | $750,000 | $1,000,000 | | | $1,750,000 |
| **Total** | $0 | $50,000 | $950,000 | $1,000,000 | $0 | $0 | **$2,000,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2016 | Jul 2018 | Jun 2019 | Jul 2019 | Dec 2019 | Jan 2020 | Aug 2020 | Aug 2020 |

# Capital Improvement Program
## Elser Lane Water Line Improvements

**Description:** Project will insure reliability and improve water quality for residents along Elser Lane by transferring water services to a new 6" distribution main instead of the existing 18" transmission main.

**Project Manager:** Jason Hubbard **Department:** Engineering

**Project:** 2018100002 **Funding Source:** 100% Fund 110 – Water Replacement

**Comments:** An existing 18" steel (CML&C) transmission main between Rees Road and Rock Springs Road was installed in 1956. This line runs between homes, underneath structures, and in backyards where access is limited. Should repairs need to be made to this line, there is a greater chance of damage to property owners. This line also serves approximately 21 residential meters. This project will bring this area into District standards by extending new 6" 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, insuring 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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | $15,000 | $15,000 | $60,000 | | | $90,000 |
| Design | | | $50,000 | $100,000 | | | $150,000 |
| Construction | | | | $250,000 | $1,275,000 | | $1,525,000 |
| **Total** | $0 | $15,000 | $65,000 | $410,000 | $1,275,000 | $0 | **$1,765,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2017 | Mar 2019 | Sep 2020 | Sep 2019 | Jan 2021 | Mar 2022 | Jun 2022 | Jun 2022 |

# 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 or by a new 15-inch gravity pipeline in Mission Road and a new crossing further to the west.

**Project Manager:** Jason Hubbard **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, they surcharge 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 crosses underneath San Marcos Creek, and staff anticipates environmental wetland permitting requirements. The 2008 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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $15,000 | $10,000 | | | | | $25,000 |
| Design | | $75,000 | $75,000 | | | | $150,000 |
| Construction | | | $150,000 | $1,160,000 | | | $1,310,000 |
| **Total** | $15,000 | $85,000 | $225,000 | $1,160,000 | $0 | $0 | **$1,485,000** |

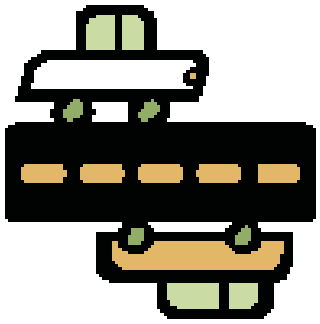
***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jun 2011 | Apr 2012 | Nov 2018 | Apr 2019 | May 2020 | Jun 2020 | Dec 2020 | Dec 2020 |

# Capital Improvement Program
## Land Outfall Clearing & Access Road

**Description:** The Land Outfall is located within easements for a significant portion of its length where it runs within the Encina Creek riparian area parallel to Palomar Airport Road in Carlsbad. The District is attempting to remove the overgrown vegetation within the easement and construct a drivable path to access the pipeline for maintenance and emergencies. Streambed alteration permitting and habitat mitigation are the major challenges associated with this project.



**Project Manager:** Rob Scholl **Department:** Engineering

**Project:** 71177 **Funding Source:** 100% Fund 210 – Sewer Replacement

**Comments:** Clearing for the access road impacts is an estimated 1 acre of designated wetland at a cost of approximately $600,000/acre. The Land Outfall is owned by the District and shares capacity in this stretch with the cities of Carlsbad and Vista and the Buena Sanitation District. The joint agreement requires them to pay their proportionate share of this maintenance activity. Approximate responsibility of cost:

Buena Sanitation District - 68%
City of Carlsbad - 12%
Vallecitos Water District - 20%

**Operations Impact:** Routine maintenance

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $260,000 | $540,000 | | | | | $800,000 |
| Design | $40,000 | $50,000 | | | | | $90,000 |
| Construction | $60,000 | $200,000 | | | | | $260,000 |
| **Total** | $360,000 | $790,000 | $0 | $0 | $0 | $0 | **$1,150,000** |

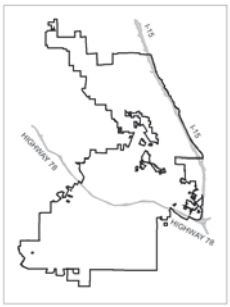
***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2006 | Jul 2006 | Jun 2019 | Feb 2008 | Dec 2018 | Jul 2008 | Jun 2019 | Jun 2019 |

# Capital Improvement Program
## Water and Sewer Master Plan

**Description:** Master Plans are typically updated every 5 years because project priorities shift and land use agencies approve zoning changes in the Districts' boundaries. Since the adoption of the 2008 Master Plan, VWD's per capita water and wastewater demands have declined due to drought and the recession, and the City of San Marcos has approved several developments with zoning changes. VWD has also inked contracts for the purchase of treated water from the Olivenhain Water District and desalinated water directly from Poseidon Resources – both of which will likely shift capital project priorities. These reasons will trigger the need for a master plan update. This item is part of the VWD Strategic Plan – Strategic Focus Areas 1.3 and 6.4




**Project Manager:** Rob Scholl

**Department:** Engineering

**Project:** 2014100003

**Funding Source:** 50% Fund 120 – Water Capacity
50% Fund 220 – Sewer Capacity

**Comments:** An Environmental Impact Report will be prepared in conjunction with the master plan update. This document will detail the impacts, at a programmatic level, that the master plan projects may create on the community and the environment. The District's water and wastewater models will also be updated during this master plan update, and a water supply planning section that will analyze expansion of recycled water use will be included.

**Operations Impact:** Will identify new projects that will likely require frequent maintenance activities by Operations.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $1,075,000 | $50,000 | | | | | $1,125,000 |
| Design | | | | | | | |
| Construction | | | | | | | |
| **Total** | $1,075,000 | $50,000 | $0 | $0 | $0 | $0 | **$1,125,000** |

***FY 2018/19 Budget Request - $75,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2013 | Jul 2013 | Sep 2018 | | | | | Sep 2018 |

# Capital Improvement Program
## Old Questhaven Sewer Replacement

**Description:** Installation of 1400 feet of 24" PVC sewer main in the old Questhaven Road right-of-way, along with 6 new manholes; abandonment of 935 feet of 21" VCP and 255 feet of 21" PVC temporary sewer pipe in the old Questhaven Road right-of-way; abandonment of 1470 feet of 24" DIP temporary sewer pipe in Rancho Santa Fe Road.

**Project Manager:** Jason Hubbard

**Department:** Engineering

**Project:** 80001

**Funding Source:** 77% Fund 210 – Sewer Replacement
23% Fund 220 – Sewer Capacity

**Comments:** This project will replace a section of existing temporary sewer pipe in the old Questhaven Road right-of-way. The new pipe section will be higher in elevation to connect to the permanent pipeline in Rancho Santa Fe Road and allow the temporary pipeline in both old Rancho Santa Fe Road and old Questhaven Road right-of-way and San Marcos Creek to be abandoned.

**Operations Impact:** Less inflow and infiltration into the collection system; abandonment of a temporary sewer pipeline. Annual, routine sewer pipeline maintenance is expected with the completion of this project.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $1,000 | | | | | $9,000 | $10,000 |
| Design | | | | | | $75,000 | $75,000 |
| Construction | | | | | | $750,000 | $750,000 |
| **Total** | $1,000 | $0 | $0 | $0 | $0 | $834,000 | **$835,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2007 | Jul 2007 | Aug 2022 | Sep 2022 | Dec 2023 | Jan 2024 | Jan 2025 | Jan 2025 |

# Capital Improvement Program
## Expansion of the Men's Locker Room in Building B

**Description:** Expansion of the men's locker room in Building B for Operations & Maintenance staff.


**Project Manager:** Ed Pedrazzi

**Department:** Operations and Maintenance

**Project:** 2016100005

**Work Order:** 167386

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

**Comments:** The Operations & Maintenance (O&M) men's locker room in Building B is no longer large enough to accommodate the number of employees utilizing it. The expansion will increase the size of the locker room by 783 SF. This will provide adequate space for O&M staff to clean up and change uniforms.

**Operations Impact:** Routine maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | $210,000 | | | | | | $210,000 |
| Construction | | $560,000 | | | | | $560,000 |
| **Total** | $210,000 | $560,000 | $0 | $0 | $0 | $0 | **$770,000** |

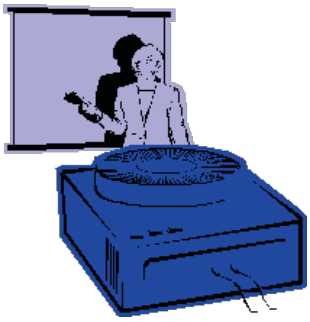
***FY 2018/19 Budget Request - ($40,000)***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2015 | | | Aug 2016 | May 2018 | Jun 2018 | Dec 2018 | Dec 2018 |

# Capital Improvement Program
## Audiovisual Upgrade

**Description:** Various audiovisual improvements to upgrade technology in the board room and several conference rooms and the training room.



**Project Manager:** Matias Labarrere

**Department:** Information Technology

**Project:** 2015100002

**Work Order:** 157943

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

**Comments:** The audiovisual systems in the District Board Room, Training Room, and Conference Rooms have become outdated and were installed with the construction of Building A. This project will upgrade existing technology to accommodate televised Board of Director meetings and create a consistency between conference rooms and the training room. Phase I: Select a design consultant to determine upgrade requirements , design the audiovisual systems, and approximate cost. The design consultant will create RFP, assist with selection of a contractor, and oversee project through testing, training and completion. Phase II: Select contractor to implement design from Phase I. District Board Room upgrades will be performed last as a separate contract.

**Operations Impact:** Routine Maintenance

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | $45,000 | | | | | | $45,000 |
| Construction | $410,000 | $295,000 | | | | | $705,000 |
| **Total** | $455,000 | $295,000 | $0 | $0 | $0 | $0 | **$750,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2015 | Jul 2014 | Jun 2017 | | Mar 2018 | | Sep 2018 | Sep 2018 |

# Capital Improvement Program
## District-wide Valve Replacement Program

**Description:** Replace broken or leaking valves throughout the District.


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

**Project:** 2016100004 **Funding Source:** 100% Fund 110 – Water Replacement

**Comments:** The valve crew has discovered many broken valves requiring replacement. This project targets 20 valves per year over four years.

**Operations Impact:** Routine maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $460,000 | $120,000 | $120,000 | | | | $700,000 |
| **Total** | $460,000 | $120,000 | $120,000 | $0 | $0 | $0 | **$700,000** |

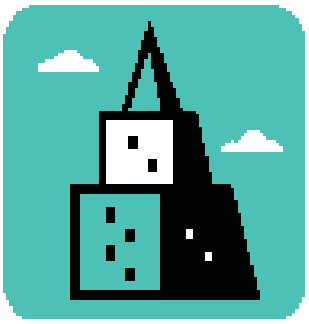
***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2015 | | | | | Jul 2015 | Jul 2019 | Jun 2019 |

# Capital Improvement Program
## High Point Pipeline

**Description:** Approximately 2,800 feet of 12" PVC potable water pipeline is proposed to connect the 1625 High Point Pressure Zone to the 1567 Wulff Pressure Zone. This project also includes the construction of a pressure reducing valve to the 1567 Wulff Pressure Zone's hydraulic grade line. The High Point development is responsible for installation of an 8" pipeline as part of its development conditions, and the District will reimburse the developer for upsizing the pipeline to 12".



**Project Manager:** Rob Scholl **Department:** Engineering

**Project:** 2013100006 **Funding Source:** 100% Fund 120 – Water Capacity

**Comments:** This pipeline provides an auxiliary feed from the 1625 High Point Pressure Zone to the 1567 Wulff Pressure Zone. And with the completion and acceptance of the High Point Hydro-pneumatic Pump Station, the District will have some limited ability to transfer potable water from the 920 Pressure Zone to the higher northern pressure zones that does not currently exist. The 2008 Master Plan has identified this pipeline as Project P-43.

**Operations Impact:** Annual and routine potable water pipeline maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | | $700,000 | | | | $700,000 |
| **Total** | $0 | $0 | $700,000 | $0 | $0 | $0 | **$700,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2012 | | | | | Oct 2019 | Jun 2020 | Jun 2020 |

# Capital Improvement Program
## NW Lake San Marcos Sewer Replacement and Lining

**Description:** This project involves the replacement of approximately 1000 feet of existing 8-inch VCP sewer pipeline with new 8-inch PVC pipe. In addition, approximately 750 feet of adjacent VCP pipeline will be lined to extend its useful life. This item is part of the VWD Strategic Plan – Strategic Focus Area 1.4

**Project Manager:** Jason Hubbard **Department:** Engineering

**Project:** 2014100002 **Funding Source:** 100% Fund 210 – Sewer Replacement

**Work Order:** 167352

**Comments:** The sewer pipeline in the northwest Lake San Marcos area is being compromised due to lime leaching into the pipe. This pipe was installed between 1964 and 1971 and is reaching the end of its useful life. While lime damage warrants replacement of most of the pipe in this area, some pipeline can be relined instead to extend its life.

**Operations Impact:** Annual and routine sewer pipeline maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $2,500 | $2,500 | | | | | $5,000 |
| Design | | $25,000 | $80,000 | | | | $105,000 |
| Construction | | | $395,000 | $100,000 | | | $495,000 |
| **Total** | $2,500 | $27,500 | $475,000 | $100,000 | $0 | $0 | **$605,000** |

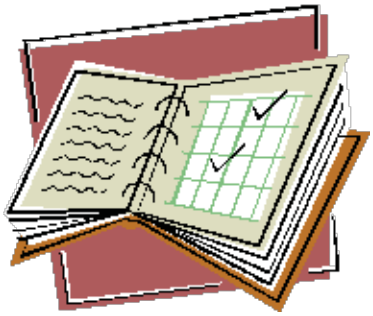
***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2013 | Jul 2016 | Feb 2019 | Mar 2019 | Mar 2020 | Apr 2020 | Nov 2020 | Nov 2020 |

# Capital Improvement Program
## Asset Management Replacement Schedule

**Description:** Create a 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:** James Gumpel

**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 insure 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) also known as Maximo to implement and track preventative, corrective, and emergency maintenance/repairs on all assets or infrastructure. This project will take the CMMS information and prioritize a replacement schedule as well as cost over the expected life of all assets/infrastructure. Consultants will be utilized to perform condition assessment on pipelines identified from the Districts Asset Management schedule. Data from condition assessment will identify future repair and replacement projects.

**Operations Impact:** An asset management schedule will help to prevent costly line breaks.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $13,000 | $113,000 | $150,000 | $50,000 | | | $326,000 |
| Design | | | | | | | |
| Construction | | $179,000 | | $95,000 | | | $274,000 |
| **Total** | $13,000 | $292,000 | $150,000 | $145,000 | $0 | $0 | **$600,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2013 | Jul 2017 | Jun 2021 | | | | | Jun 2021 |

# Capital Improvement Program
## Schoolhouse Tank Refurbishment

**Description:** Schoolhouse Tank requires interior refurbishment.

**Project Manager:** Jason Hubbard **Department:** Engineering

**Project:** 2018100003 **Funding Source:** 100% Fund 110 – Water Replacement

**Work Order:** 189273

**Comments:** The existing interior lining of the 2.4 MG tank has deteriorated and requires full refurbishment. This project will remove the existing lining and install a new interior lining. Repairs to the ceiling rafters and equipment upgrades may also be necessary.

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

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $5,000 | | | | | | $5,000 |
| Design | $20,000 | $5,000 | | | | | $25,000 |
| Construction | | $560,000 | | | | | $560,000 |
| **Total** | $25,000 | $565,000 | $0 | $0 | $0 | $0 | **$590,000** |

***FY 2018/19 Budget Request - ($85,000)***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jun 2017 | Jul 2017 | Jul 2017 | Aug 2017 | Oct 2018 | Nov 2018 | Mar 2019 | Mar 2019 |

# Capital Improvement Program

## Stargaze Court and River Run Circle Water Line Rehabilitation

**Description:** Rehabilitate approximately 730 LF of existing 8" water line in Stargaze Court and 870 LF of existing 8" water line in River Run Circle. The pipeline in these two streets have failed on numerous occasions over the past few years due to excessive corrosion and more failures are anticipated due to highly corrosive subsurface conditions.

**Project Manager:** Jason Hubbard

**Department:** Engineering

**Project:** 2018100005

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

**Work Order:** 196556

**Comments:** This project will prevent the existing pipeline from further failure due to corrosion by rehabilitating the ductile iron pipe with a new internal structural liner. Trenchless methods used on the rehabilitation process will reduce disruptions to the community.

**Operations Impact:** The existing waterlines are corroding and subject to replacement or rehabilitation. Operations and maintenance repair costs will be minimized at these locations.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $3,000 | | | | | | $3,000 |
| Design | $6,000 | | | | | | $6,000 |
| Construction | $71,000 | $402,000 | | | | | $473,000 |
| **Total** | $80,000 | $402,000 | $0 | $0 | $0 | $0 | **$482,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jun 2017 | Jul 2017 | Feb 2018 | Mar 2018 | May 2018 | Jun 2016 | Aug 2018 | Aug 2018 |

# Capital Improvement Program
## Vulnerability Assessment Improvements

**Description:** The District completed the Vulnerability Assessment as required by the Department of Homeland Security. Recommended improvements were identified and being phased in. Fiscal year 2014/15 purchases are for security devices and a 500 kW generator.

**Project Manager:** Jerome Janus

**Department:** Engineering - Safety

**Project:** 71126

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

**Comments:** Implementing safety measures to mitigate vulnerabilities is an on-going process. Due to the highly confidential and sensitive nature of the assessment findings, specific improvements are not defined in this document. Security measures are implemented with the most vulnerable areas addressed first.

**Operations Impact:** Continual review of measures implemented and discovery of unidentified areas.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $50,000 | $397,700 | | | | | $447,700 |
| **Total** | $50,000 | $397,700 | $0 | $0 | $0 | $0 | **$447,700** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2004 | | | | | | | Jun 2018 |

# Capital Improvement Program
## Las Posas 10-inch Water Main Replacement

**Description:** Replace an existing 10" DIP water main crossing underneath an existing double reinforced box culvert on Las Posas Road.

**Project Manager:** Jason Hubbard **Department:** Engineering

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

**Comments:** A 10" 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 ACP located on either side of the double RBC.

**Operations Impact:** Prevent future breaks. Routine maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | $5,000 | $10,000 | | | | $15,000 |
| Design | | | $25,000 | | | | $25,000 |
| Construction | | | $380,000 | | | | $380,000 |
| **Total** | $0 | $5,000 | $415,000 | $0 | $0 | $0 | **$420,000** |

***FY 2018/19 Budget Request - ($160,000)***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jun 2017 | Jun 2018 | Aug 2018 | Sep 2018 | Dec 2018 | Mar 2019 | Apr 2019 | Apr 2019 |

# Capital Improvement Program
## Palos Vista Pump Station – Generator

**Description:** Install new permanent generator with manual transfer switch.

**Project Manager:** Robert Salazar **Department:** Mechanical/Electrical

**Project:** 2018100006 **Funding Source:** 100% Fund 110 – Water Replacement

**Comments:** Palos Vista Pump Station has no permanent generator for emergency power. To insure reliability to this facility, an APCD/CARB compliant generator will need to be installed at the station. Improvements will also include an manual 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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $3,000 | | | | | | $3,000 |
| Design | $38,000 | | | | | | $38,000 |
| Construction | $25,000 | $259,000 | | | | | $284,000 |
| **Total** | $66,000 | $259,000 | $0 | $0 | $0 | $0 | **$325,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2016 | Jul 2017 | Aug 2017 | Feb 2018 | Mar 2018 | May 2018 | Nov 2018 | Nov 2018 |

# 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:** Jason Hubbard **Department:** Engineering

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

**Comments:** This project will allow proper control of the water system and prevent further failures.

**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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $5,000 | $10,000 | | | | | $15,000 |
| Design | | $65,000 | | | | | $65,000 |
| Construction | | | $220,000 | | | | $220,000 |
| **Total** | $5,000 | $75,000 | $220,000 | $0 | $0 | $0 | **$300,000** |

***FY 2018/19 Budget Request - $35,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2015 | Jun 2018 | Aug 2018 | Sep 2018 | Jun 2019 | Jul 2019 | Oct 2019 | Oct 2019 |

# Capital Improvement Program
## Solar Panel Inverter Replacement

**Description:** Replace two existing inverters with new Solectria inverters to insure proper operation and solar efficiency.

**Project Manager:** Dennis Bowman

**Department:** Warehouse/Purchasing

**Project:** 2018100007

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

**Comments:** Our solar panel inverters are very old and the company that made them went out of business. It is very difficult to find the necessary materials to make repairs which costs the district money when they are down. We would like to replace them with updated inverters to insure proper operation and energy efficiency.

**Operations Impact:** Engineering impact for larger contract preparation Warehouse impact when quotes are gather and meetings with contractors.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | $10,000 | | | | | | $10,000 |
| Design | | $20,000 | | | | | $20,000 |
| Construction | | $265,000 | | | | | $265,000 |
| **Total** | $10,000 | $285,000 | $0 | $0 | $0 | $0 | **$295,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2017 | Jul 2017 | Jun 2018 | Jul 2017 | Jun 2018 | Jul 2017 | Jul 2018 | Jul 2018 |

# 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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $40,000 | $50,000 | $55,000 | $55,000 | $50,000 | | $250,000 |
| **Total** | $40,000 | $50,000 | $55,000 | $55,000 | $50,000 | $0 | **$250,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2017 | | | | | | | Jun 2021 |

# 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:** Jason Hubbard

**Department:** Engineering

**Project:** 2016100014

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

**Work Order:** 162901

**Comments:** A portion of the existing slope adjacent to the Visa 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. This project will apply a mesh or tensioned slope stabilization system to approximately 2200 SF of steep slope to prevent further failures and/or a debris barrier along a portion of the perimeter to catch failing rocks. 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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | $10,000 | $15,000 | | | | | $25,000 |
| Construction | $52,000 | $143,000 | | | | | $195,000 |
| **Total** | $62,000 | $158,000 | $0 | $0 | $0 | $0 | **$220,000** |

***FY 2018/19 Budget Request - $75,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2015 | Jan 2016 | Mar 2016 | Apr 2016 | Jul 2018 | Apr 2018 | Oct 2018 | Oct 2018 |

# Capital Improvement Program
## MRF - Replace the Influent Pumps & Motors

**Description:** Replacement of the three influent dry-pit submersible pump & motor units with vertical, modular type pump & motor units.

**Project Manager:** Robert Salazar **Department:** Mechanical/Electrical

**Project:** 2018100009 **Funding Source:** 100% Fund 210 – Sewer Replacement

**Comments:** The current dry-pit submersible pump units have to be delivered to a facility that specializes in the repair of sealed pump units. A modular vertical type pump & motor unit can be disassembled, serviced and repaired by District maintenance staff. This reduces repair costs and allows for less down time of the equipment.

**Operations Impact:** Reduced repair costs and down time. Routine maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $65,000 | $65,000 | $65,000 | | | | $195,000 |
| **Total** | $65,000 | $65,000 | $65,000 | $0 | $0 | $0 | **$195,000** |

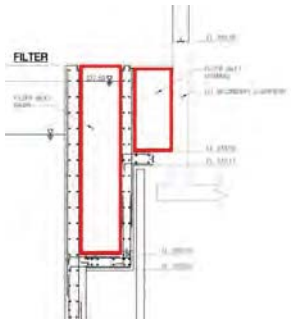
***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2017 | | | | | | | Jun 2020 |

# Capital Improvement Program
## MRF - Tertiary Influent Chamber Repairs

**Description:** The Tertiary Influent Chamber at the Meadowlark Water Reclamation Facility (MRF) requires repairs to the protective coating and mixing air line.




**Project Manager:** Dawn McDougle

**Department:** Meadowlark Reclamation Facility

**Project:** 2018100011

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

**Comments:** The existing high solids epoxy, lining the MRF Tertiary Influent Chamber, is failing and in need of repair. The chamber transitions Secondary wastewater effluent to the Tertiary Filter basins. The 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 during the low flow season.

**Operations Impact:** Repairs to the coating maintain the integrity of the concrete structure. Replacement of the mixing air line will prevent leaks and maintain operational processes.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | $15,000 | | | | | $15,000 |
| Construction | | $150,000 | | | | | $150,000 |
| **Total** | $0 | $165,000 | $0 | $0 | $0 | $0 | **$165,000** |

***FY 2018/19 Budget Request - $50,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2017 | Apr 2018 | Jun 2018 | Jul 2018 | Dec 2018 | Jan 2019 | Mar 2019 | Mar 2019 |

# Capital Improvement Program
## Palos Vista Pump Station - Motor Replacement

**Description:** Replace the motors on all four pumps at Palos Vista Pump Station.

**Project Manager:** Robert Salazar **Department:** Mechanical/Electrical

**Project:** 2016100008 **Funding Source:** 100% Fund 110 – Water Replacement

**Comments:** The existing pump motors have been in service for over 20 years. They are no longer efficient and should be upgraded to the new premium efficiency motors. The new motors will operate more efficiently and save on energy costs.

**Operations Impact:** Improved reliability and efficiency at Palos Vista Pump Station. Potential savings in electrical costs. Normal maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 19/20 | FY 20/21 | FY 21/22 & FY 22/23 | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $84,000 | $34,000 | | | | | $118,000 |
| **Total** | $84,000 | $34,000 | $0 | $0 | $0 | $0 | **$118,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2015 | | | | | Jul 2015 | Jun 2019 | Jun 2019 |

# Capital Improvement Program
## Replace Roofs on Equipment Storages

**Description:** Replace roofs on the car wash, fuel island, and two equipment storages with more durable metal roofing.

**Project Manager:** Dennis Bowman

**Department:** Warehouse/Purchasing

**Project:** 2018100014

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

**Comments:** The fiberglass corrugated roofing is 22 years old and and needs to be replaced because it is a safety concern.

**Operations Impact:** Warehouse and Administrative impact for quoting and contract write up/organization.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | $5,000 | | | | | $5,000 |
| Design | | $2,000 | | | | | $2,000 |
| Construction | | $70,000 | | | | | $70,000 |
| **Total** | $0 | $77,000 | $0 | $0 | $0 | $0 | **$77,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2017 | Jul 2017 | Jun 2019 | Jul 2017 | Jun 2019 | Jul 2017 | Jun 2019 | Jun 2019 |

# Capital Improvement Program
## Building A Kitchens

**Description:** Remove and replace old counters with higher grade materials and replace the floor with industrial grade laminate.

**Project Manager:** Dennis Bowman

**Department:** Warehouse/Purchasing

**Project:** 2018100016

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

**Comments:** The Building A kitchen and kitchenettes are roughly 20 years old and experience daily use.

**Operations Impact:** None

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $65,000 | | | | | $65,000 |
| **Total** | $0 | $65,000 | $0 | $0 | $0 | $0 | **$65,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2017 | | | | | | | Jun 2018 |

# 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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $40,000 | | | | | $40,000 |
| **Total** | $0 | $40,000 | $0 | $0 | $0 | $0 | **$40,000** |

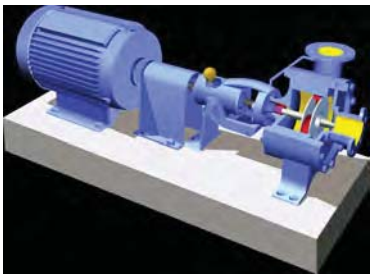
***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2016 | | | | | | | Jun 2018 |

# Capital Improvement Program
## HVAC Pump and Motor Replacement

**Description:** There are two pumps that supply the cold water to the building for adequate temperature and proper operation. One motor had to be replaced in an emergency and the other is starting to fail.



**Project Manager:** Dennis Bowman

**Department:** Warehouse/Purchasing

**Project:** 2017100016

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

**Comments:** Remove old pump and motor skid. Drain the system and install new unit to maintain proper operation of the HVAC system.

**Operations Impact:** None

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | $17,000 | $3,000 | | | | | $20,000 |
| **Total** | $17,000 | $3,000 | $0 | $0 | $0 | $0 | **$20,000** |

***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2016 | | | | | | | Jun 2018 |

# 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:** Glenn Pruim **Department:** General Manager

**Project:** 2019100001 **Funding Source:** 77% Fund 210 – Sewer Replacement
23% Fund 220 – Sewer Capacity

**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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $4,795,000 | $5,438,000 | $4,558,000 | $3,721,000 | $5,064,000 | $23,576,000 |
| **Total** | $0 | $4,795,000 | $5,438,000 | $4,558,000 | $3,721,000 | $5,064,000 | **$23,576,000** |

***FY 2018/19 Budget Request - $23,576,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2009 | | | | | | 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 MRF.

**Project Manager:** James Gumpel **Department:** Meadowlark Reclamation Facility

**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.

**Operations Impact:** Reduce operation and maintenance costs.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | $66,000 | | | | | $66,000 |
| Design | | | $160,000 | | | | $160,000 |
| Construction | | | $360,000 | $1,080,000 | | | $1,440,000 |
| **Total** | $0 | $66,000 | $520,000 | $1,080,000 | $0 | $0 | **$1,666,000** |

***FY 2018/19 Budget Request - $1,666,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | Jul 2018 | Jun 2019 | Jul 2019 | Dec 2019 | Jan 2020 | Dec 2020 | Dec 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:** Jason Hubbard **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 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.

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

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | $60,000 | | | | | $60,000 |
| Construction | | $365,000 | | | | | $365,000 |
| **Total** | $0 | $425,000 | $0 | $0 | $0 | $0 | **$425,000** |

***FY 2018/19 Budget Request - $425,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jun 2018 | Jul 2018 | Jul 2018 | Sep 2018 | Mar 2019 | Mar 2019 | Jun 2019 | Jun 2019 |

# Capital Improvement Program
## OSHA Compliant Ladder Climb Safety Systems

**Description:** OSHA compliance and increased safety for ladder climb systems for 17 above ground steel tanks in the District's distribution system.

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

**Project:** 2019100004 **Funding Source:** 100% Fund 110 – Water Replacement

**Comments:** The District's above ground steel water tanks have fixed ladder climb systems which are no longer in compliance with current OSHA safety regulations. District staff and contractors use these systems to access the top of the tanks to perform inspections and maintenance on the structures. The District has reached out to certified safety contractors for this type of work in order to evaluate what will be required to bring the ladder climb systems up to current standards. The work may include adding additional connection points to the top of the tanks, as well as at the transition from the ladder to the top of the tank. We have 17 tanks in the distribution system that require retrofitting.

**Operations Impact:** OSHA Compliance and increased safety for workers using the ladder climb systems on above ground steel tanks.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $200,000 | | | | | $200,000 |
| **Total** | $0 | $200,000 | $0 | $0 | $0 | $0 | **$200,000** |

***FY 2018/19 Budget Request - $200,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | | | | | Jun 2019 |

# Capital Improvement Program
## Sewer Rehabilitation and Repairs

**Description:** Several sewer line sections located throughout the District need rehabilitation to lengthen the life of the aging pipe.

**Project Manager:** Eric Garcia **Department:** Systems Collection

**Project:** 2019100005 **Funding Source:** 100% Fund 210 – Sewer Replacement

**Comments:** Sewer line sections on San Pablo Drive, Bennett Road, Ficus Lane, North Pacific Street, Avenida Fragata, Sutter Lane, and Woods Drive and within the Districts easements on Jennileah Lane and La Sombra Drive totaling approximately 1000 feet are in need of rehabilitation to restore pipe integrity and flow capacity. These pipe sections have become compromised either due to age, pipe material type, ground settlement, or root intrusion. Significant costs will be accrued upon line failures if the sections of pipe are not rehabilitated.

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

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | $8,000 | | | | | $8,000 |
| Construction | | $180,000 | | | | | $180,000 |
| **Total** | $0 | $188,000 | $0 | $0 | $0 | $0 | **$188,000** |

***FY 2018/19 Budget Request - $188,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | Jul 2018 | Aug 2018 | Aug 2018 | Sep 2018 | Oct 2018 | Nov 2018 | Nov 2018 |

# Capital Improvement Program
## Sewer Bypass Repair

**Description:** The 16" Emergency Sewer Bypass pipeline is in need of a point repair. A condition assessment will be made of the adjacent pipeline sections during the repair.

**Project Manager:** Jason Hubbard **Department:** Engineering

**Project:** 2019100006 **Funding Source:** 100% Fund 210 – Sewer Replacement

**Comments:** The 16" Emergency Sewer Bypass pipeline serves to divert sewer flows from lift station #1 and the Lake San Marcos lift station away from the Meadowlark Water Reclamation Facility (MRF) to the Land Outfall. This minimizes flows into MRF during scheduled maintenance or during plant capacity emergencies. Currently the emergency sewer bypass line has a break in the pipe at a connection between a section of techite pipe and ductile iron pipe. This section of pipe will need to be replaced with new PVC pipe and reconnected. District staff will take advantage of the pipe being open during the repair to clean the adjacent pipelines and perform a pipeline condition assessment to evaluate the need for any future improvements.

**Operations Impact:** Restore integrity to the pipeline to allow normal operations.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | $8,000 | | | | | $8,000 |
| Construction | | $134,000 | | | | | $134,000 |
| **Total** | $0 | $142,000 | $0 | $0 | $0 | $0 | **$142,000** |

***FY 2018/19 Budget Request - $142,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | Jul 2018 | Aug 2018 | Sep 2018 | Oct 2018 | Oct 2018 |

# Capital Improvement Program
## Sewer Replacement and I&I Repairs

**Description:** During the course of the year, unexpected damage and emergency repairs are needed. This budget item sets aside money to perform necessary repairs.

**Project Manager:** Eric Garcia **Department:** Systems Collection

**Project:** 2019100007 **Funding Source:** 100% Fund 210 – Sewer Replacement

**Comments:** These funds will only be used after review and approval by the District Engineer and the Operations and Maintenance Manager.

**Operations Impact:** None.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $100,000 | | | | | $100,000 |
| **Total** | $0 | $100,000 | $0 | $0 | $0 | $0 | **$100,000** |

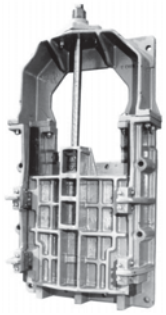
***FY 2018/19 Budget Request - $0***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | | | | | Jun 2019 |

# Capital Improvement Program
## Effluent & Backwash Sluice Gate

**Description:** Replace the existing sluice gate located in the Chlorine Contact Tank - Effluent and Backwash Pump Station.



**Project Manager:** Dawn McDougle

**Department:** Meadowlark Reclamation Facility

**Project:** 2019100008

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

**Comments:** 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.

**Operations Impact:** Restore operational functionality. Normal maintenance.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | $15,000 | | | | | $15,000 |
| Construction | | $65,000 | | | | | $65,000 |
| **Total** | $0 | $80,000 | $0 | $0 | $0 | $0 | **$80,000** |

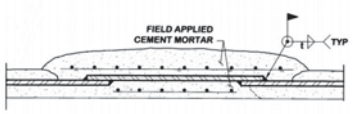
***FY 2018/19 Budget Request - $80,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | Jul 2018 | Dec 2018 | Jan 2019 | Feb 2019 | Feb 2019 |

# Capital Improvement Program
## Vallecitos 9 Turnout Pipeline Repair

**Description:** A joint on the turnout pipeline to Vallecitos 9 flow control facility is in need of repair to restore interior mortar lining.




**Project Manager:** Jason Hubbard **Department:** Engineering

**Project:** 2019100009 **Funding Source:** 100% Fund 110 – Water Replacement

**Comments:** The Vallecitos 9 flow control facility receives desalinated water from the San Diego County Water Authority (SDCWA) via a 16" CML&C steel pipeline through the SDCWA's Pipeline Interconnection Facilities (PIF). Though this line was installed by the District, it is owned and operated by the SDCWA. During a warranty inspection of the turnout pipeline, the mortar lining for an interior joint was determined to be in need of repair.

**Operations Impact:** Restore protective coating to pipeline to prevent corrosion.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | $13,000 | | | | | $13,000 |
| Construction | | $57,000 | | | | | $57,000 |
| **Total** | $0 | $70,000 | $0 | $0 | $0 | $0 | **$70,000** |

***FY 2018/19 Budget Request - $70,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | Jul 2018 | Aug 2028 | Sep 2018 | Oct 2018 | Oct 2018 |

# Capital Improvement Program
## Mountain Belle Tank - Chlorine Injection System

**Description:** Installation of a calcium hypochlorite injection system at Mountain Belle Tank for residual maintenance and control of nitrification.

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

**Project:** 2019100010 **Funding Source:** 100% Fund 110 – Water Replacement

**Comments:** Mountain Belle Tank is one of our reservoirs that consistently experiences problems with water quality due to its large size and low demand conditions. Water System Operators are required to add additional chlorine to this reservoir on a frequent basis for at least nine months of the year. This requires significant staff time and addition of chlorine in an inefficient process. The chlorine injection equipment will allow operators to load the equipment with chlorine tablets and then use the SCADA computer control systems to treat the reservoir during the filling cycle. This will allow for an improved mixing of the chlorine in the reservoir and reduce staff time. An online chlorine analyzer will also be installed at this location to monitor the water quality and transmit the data into our Water Operations control room.

**Operations Impact:** Improved water quality within the reservoir and reduced staff time.

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $65,000 | | | | | $65,000 |
| **Total** | $0 | $65,000 | $0 | $0 | $0 | $0 | **$65,000** |

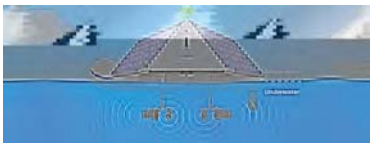
***FY 2018/19 Budget Request - $65,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | | | | | Jun 2019 |

# Capital Improvement Program
## Ultrasonic Algae Control System

**Description:** The MPC-Buoy is a floating, solar powered, platform that combines continuous online water quality monitoring, web-based software, and ultrasonic technology to effectively control harmful algal blooms in large water surfaces, such as lakes and larger ponds.



**Project Manager:** Ed Pedrazzi

**Department:** Meadowlark Reclamation Facility

**Project:** 2019100011

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

**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 reclaimed water stored in Mahr 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 Mahr 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 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $65,000 | | | | | $65,000 |
| **Total** | $0 | $65,000 | $0 | $0 | $0 | $0 | **$65,000** |

***FY 2018/19 Budget Request - $65,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | | | | | Jun 2019 |

# Capital Improvement Program
## Door Access Control System Expansion

**Description:** Add 6 doors to our current BlueWave control access system to allow keyless entry

**Project Manager:** Matias Labarrere

**Department:** Information Technology

**Project:** 2019100012

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

**Comments:** There is a need to convert the Finance Safe and Computer rooms and IDF's for IT to keyless entry and add them to our existing BlueWave access 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. It will also provide improved control over access.

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

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $20,000 | | | | | $20,000 |
| **Total** | $0 | $20,000 | $0 | $0 | $0 | $0 | **$20,000** |

***FY 2018/19 Budget Request - $20,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | | | | | Jun 2019 |

# Capital Improvement Program
## HVAC System Upgrade

**Description:** Replace current HVAC system with a 3-ton ducted split system in the server room.

**Project Manager:** Dennis Bowman

**Department:** Warehouse/Purchasing

**Project:** 2019100013

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

**Comments:** The current heating, ventilation, and air conditioning (HVAC) system cannot sufficiently cool the District's servers in order to ensure proper functionality. A 3-ton ducted split system is required.

**Operations Impact:** None

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $20,000 | | | | | $20,000 |
| **Total** | $0 | $20,000 | $0 | $0 | $0 | $0 | **$20,000** |

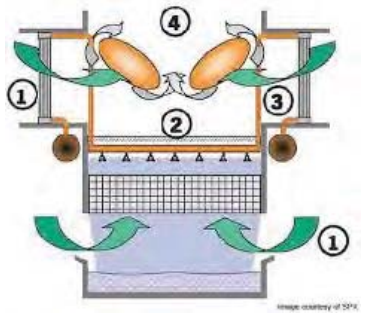
***FY 2018/19 Budget Request - $20,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | | | | | Jun 2019 |

# Capital Improvement Program
## Cooling Tower Media Replacement

**Description:** Remove and Replace Fill Media




**Project Manager:** Dennis Bowman

**Department:** Warehouse/Purchasing

**Project:** 2019100014

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

**Comments:** The existing fill media in the cooling tower is clogged and needs to be replaced.

**Operations Impact:** None

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | | | | | |
| Design | | | | | | | |
| Construction | | $12,000 | | | | | $12,000 |
| **Total** | $0 | $12,000 | $0 | $0 | $0 | $0 | **$12,000** |

***FY 2018/19 Budget Request - $12,000***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| Jul 2018 | | | | | | | Jun 2019 |

# 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:** Jason Hubbard **Department:** Engineering

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

| Project: | Amount: | Source: |
|---|---|---|
| El Norte Parkway Water Line Extension | 10,530,000 | 100% Fund 110 – Water Replacement |
| Rees Road 18" Water Line Relocation | 5,780,000 | 100% Fund 110 – Water Replacement |
| Tres-Amigos Water Line Replacement Phase 1 | 2,395,000 | 100% Fund 110 – Water Replacement |
| Camino de Amigos Sewer Replacement | 1,363,000 | 45% Fund 210 – Sewer Replacement, 55% Fund 220 – Sewer Capacity |
| Sage Canyon Tank Refurbishment | 890,000 | 100% Fund 110 – Water Replacement |
| Deer Springs Pump Station Improvements | 555,000 | 100% Fund 120 – Water Capacity |
| Deer Springs Tank No.2 | 520,000 | 100% Fund 120 – Water Capacity |
| Coronado Hills Tank Exterior Refurbishment | 310,000 | 100% Fund 110 – Water Replacement |
| Coggan Pump Station - Generator | 285,000 | 100% Fund 120 – Water Capacity |
| Richland I Tank Exterior Refurbishment | 225,000 | 100% Fund 110 – Water Replacement |
| Total | $22,853,000 | |

**Comments:** These projects are part of the District's capital budget beginning after fiscal year 2018-19.

**Operations Impact:** Normal Maintenance for infrastructure

### Project Spending Plan

| Project Phase | Previous Spending | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 & Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Planning | | | $360,000 | $63,000 | | $460,000 | $883,000 |
| Design | | | $220,000 | $270,000 | $70,000 | $1,245,000 | $1,805,000 |
| Construction | | | $1,130,000 | $1,015,000 | $1,905,000 | $16,115,000 | $20,165,000 |
| **Total** | $0 | $0 | $1,710,000 | $1,348,000 | $1,975,000 | $17,820,000 | **$22,853,000** |

***FY 2018/19 Budget Request - $22,853,000.00***

### Estimated Project Timeline

| Project Approval | Planning | | Design | | Construction | | Completion |
|---|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End | |
| | | | | | Jan 2020 | Jun 2027 | Jun 2027 |

## VALLECITOS WATER DISTRICT

### 2018-19 CAPITAL BUDGET - EASEMENTS, VEHICLES & EQUIPMENT SCHEDULE

***EASEMENTS***

| Requesting Dept. | Description | Project # | | Funding Source: Water | Funding Source: Sewer | Total Cost |
|---|---|---|---|---|---|---|
| | Development Services: | | | | | |
| | Caminito A Casa Waterline Easement | 2019100015 | | $ 50,000 | $ - | $ 50,000 |
| | Poutler Waterline Easement | 2019100016 | | 30,000 | | 30,000 |
| ***TOTAL EASEMENTS*** | | | | | | *$ 80,000* |

***VEHICLES/MOBILE EQUIPMENT***

| Existing Vehicle # | Description | Project # | New or Replacement | Funding Source: Water | Funding Source: Sewer | Total Cost |
|---|---|---|---|---|---|---|
| | Construction: | | | | | |
| | Peterbilt 367 10 Wheeler Dump Truck & Construction Bed | 2018100028 | New | 199,000 | | 199,000 |
| 179 | Ford F250 4X4 Regular Cab | 2019100017 | Replacement | 23,500 | 22,500 | 46,000 |
| 229 | Ford F550 - Small Dump Truck | 2019100018 | Replacement | 40,800 | 39,200 | 80,000 |
| 230 | Ford F550 - Small Dump Truck | 2019100019 | Replacement | 40,800 | 39,200 | 80,000 |
| 198 | Construction Crew Truck with Service Bed | 2019100020 | Replacement | 96,900 | 93,100 | 190,000 |
| | Water Operations: | | | | | |
| 234 | Ford F-250 SuperCab | 2019100021 | Replacement | 48,000 | | 48,000 |
| | Meters: | | | | | |
| 168 | Ford Transit Connect XLT | 2019100022 | Replacement | 31,000 | | 31,000 |
| ***TOTAL VEHICLES*** | | | | | | *$ 674,000* |

***FACILITIES AND EQUIPMENT***

| Requesting Dept. | Description | Project # | New or Replacement | Funding Source: Water | Funding Source: Sewer | Total Cost |
|---|---|---|---|---|---|---|
| | Meters: | | | | | |
| | VGB Reading Unit | 2019100024 | New | 24,000 | | 24,000 |
| ***TOTAL FACILITIES AND EQUIPMENT*** | | | | | | *$ 24,000* |

**VEHICLES & EQUIPMENT TOTAL** **$ 778,000**

DEBT SERVICE BUDGET FOR THE YEAR ENDING JUNE 30, 2019

| | Water | | Wastewater | | |
|---|---|---|---|---|---|
| | Replacement | Capacity | Replacement | Capacity | Total |
| ***2005 COP & 2015 Refunding*** | | | | | |
| Outstanding principal as of July 1, 2018[1] | $ - | $ 23,088,000 | $ - | $ 22,227,000 | $ 45,315,000 |
| 2018/19 Principal Payments | - | (970,600) | - | (934,400) | (1,905,000) |
| Outstanding principal as of July 1, 2019 | $ - | $ 22,117,400 | $ - | $ 21,292,600 | $ 43,410,000 |
| ***2008 Private Placement*** [2] | | | | | |
| Outstanding principal as of July 1, 2018 | $ - | $ - | $ - | $ 4,200,000 | $ 4,200,000 |
| 2018/19 Principal Payments | - | - | - | (400,000) | (400,000) |
| Outstanding principal as of June 30, 2019 | $ - | $ - | $ - | $ 3,800,000 | $ 3,800,000 |
| ***2012 Debt*** [3] | | | | | |
| Outstanding principal as of July 1, 2018 | $ - | $ - | $ - | $ 3,732,000 | $ 3,732,000 |
| 2018/19 Principal Payments | - | - | - | (741,000) | (741,000) |
| Outstanding principal as of June 30, 2019 | $ - | $ - | $ - | $ 2,991,000 | $ 2,991,000 |
| ***2018/19 Debt Service Budget*** | | | | | |
| 2015 Revenue Refunding principal | $ - | $ 970,600 | $ - | $ 934,400 | $ 1,905,000 |
| 2015 Revenue Refunding interest | - | 1,125,490 | - | 1,083,510 | 2,209,000 |
| 2008 Private Placement - principal | - | - | - | 400,000 | 400,000 |
| 2008 Private Placement - interest | - | - | - | 108,000 | 108,000 |
| 2012 Debt - principal | - | - | - | 741,000 | 741,000 |
| 2012 Debt - interest | - | - | - | 67,000 | 67,000 |
| Total 2018/19 Debt Service Budget | $ - | $ 2,096,090 | $ - | $ 3,333,910 | $ 5,430,000 |

| | |
|---|---|
| ***Projected Debt Service Coverage Ratio*** [4] | 364% |
| Excluding Capital Facility Fees | 253% |
| Excluding Capital Facility Fees and Property Tax | 184% |
| Days of Operating Expenses in Unrestricted Cash and Investments | 410 |

*[1] The 18/19 principal payment on the refunding bonds is due to bondholders on July 1, 2018. The District is obligated to transfer the payment before June 30, 2018, to a restricted account maintained by the Trustee, and, therefore, was deducted from the projected July 1, 2018 balance presented in the Reserve Budget.*

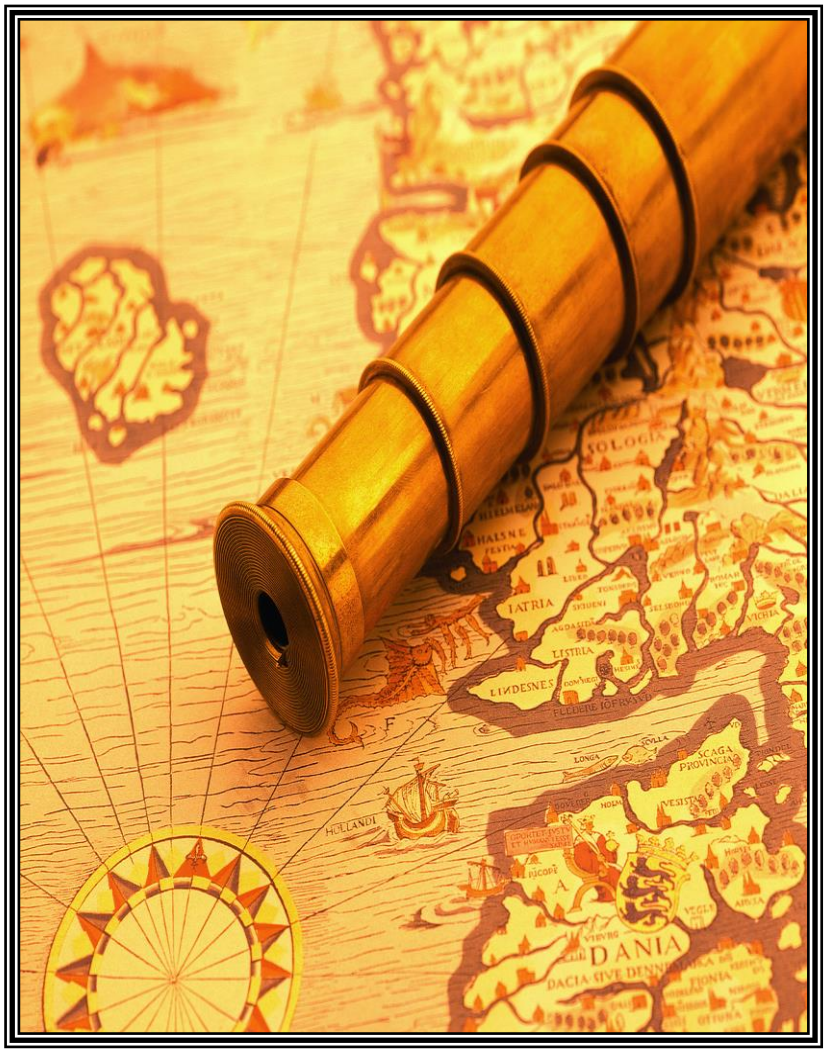
*[2] Cash and corresponding amounts of debt were transferred from replacement funds to restricted capital facility funds to reduce deficit balances.*

*[2] The District and Union Bank of California executed an $8 million 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 2.44403%. 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.*

*[3] 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.*

*[4] Per the 2005 Certificate of Participation 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".*

# 2018-19 LONG-RANGE PLANNING



RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2019

| | 110 Water 120 | | 210 Wastewater 220 | | |
|---|---|---|---|---|---|
| | Replacement | Capacity | Replacement | Capacity | Total |
| Projected July 1, 2018 Balance | $ 32,709,000 | $ (9,531,000) | $ 51,305,000 | $ (7,220,000) | $ 67,263,000 |
| Revenues | | | | | |
| Operating Transfers | 2,223,000 | - | 6,891,000 | - | 9,114,000 |
| Capital Facility Fees | - | 2,837,000 | - | 3,268,000 | 6,105,000 |
| Property Tax | 1,244,000 | - | 993,000 | - | 2,237,000 |
| RDA pass-through | 800,000 | - | 800,000 | - | 1,600,000 |
| Investment Earnings | 496,000 | (139,000) | 764,000 | (135,000) | 986,000 |
| Available Balance | 37,472,000 | (6,833,000) | 60,753,000 | (4,087,000) | 87,305,000 |
| Less 18/19 Expenditures | | | | | |
| Encina Wastewater Authority Five Year Plan | - | - | 4,791,000 | 4,000 | 4,795,000 |
| Rock Springs Sewer Replacement | - | - | 1,237,500 | 1,512,500 | 2,750,000 |
| San Marcos Interceptor | - | - | 489,800 | 1,090,200 | 1,580,000 |
| Encina Wastewater Authority FY 17/18 | - | - | 636,790 | 190,210 | 827,000 |
| Land Outfall Clearing & Access Road | - | - | 790,000 | - | 790,000 |
| Vehicles | 479,700 | - | 194,300 | - | 674,000 |
| Schoolhouse Tank Refurbishment | 565,000 | - | - | - | 565,000 |
| Expansion of the Men's Locker Room in Building B | 286,100 | - | 273,900 | - | 560,000 |
| North Twin Oaks Tank No. 1 Refurbishment | 425,000 | - | - | - | 425,000 |
| Stargaze Court and River Run Circle Water Line Reha | 402,000 | - | - | - | 402,000 |
| Montiel Gravity Outfall | - | - | 180,900 | 221,100 | 402,000 |
| Vulnerability Assessment Improvements | 202,827 | - | 194,873 | - | 397,700 |
| Audiovisual Upgrade | 150,450 | - | 144,550 | - | 295,000 |
| Asset Management Replacement Schedule | 146,390 | - | 145,610 | - | 292,000 |
| Solar Panel Inverter Replacement | 145,350 | - | 139,650 | - | 285,000 |
| Encina Parallel Land Outfall | - | - | - | 270,000 | 270,000 |
| Palos Vista Pump Station – Generator | 259,000 | - | - | - | 259,000 |
| OSHA Compliant Ladder Climb Safety Systems | 200,000 | - | - | - | 200,000 |
| Sewer Rehabilitation and Repairs 2019 | - | - | 188,000 | - | 188,000 |
| MRF - Tertiary Influent Chamber Repairs | - | - | 165,000 | - | 165,000 |
| Via Vera Cruz Tank Hill Stabilization | 157,600 | - | 400 | - | 158,000 |
| Sewer Bypass Repair | - | - | 142,000 | - | 142,000 |
| District-wide Valve Replacement Program | 120,000 | - | - | - | 120,000 |
| Sewer Replacement and I&I Repairs | - | - | 100,000 | - | 100,000 |
| Miscellaneous Projects | 589,980 | 25,000 | 573,520 | 26,000 | 1,214,500 |
| Debt Service - 2012 Debt | - | - | - | 808,000 | 808,000 |
| Debt Service - 2008 Loan | - | - | - | 506,000 | 506,000 |
| Debt Service - 2015 Refunding | - | 2,135,000 | - | 2,056,000 | 4,191,000 |
| Less Total Expenditures | 4,130,127 | 2,160,000 | 10,387,723 | 6,683,350 | 23,361,200 |
| Projected June 30, 2019 Balance | 33,341,873 | (8,993,000) | 50,365,277 | (10,770,350) | ***$ 63,943,800*** |
| Less Operating Reserves | 5,748,700 | - | 6,468,600 | - | 12,217,300 |
| Projected replacement reserve/restricted funds | $ 27,593,173 | $ (8,993,000) | $ 43,896,677 | $ (10,770,350) | $ 51,726,500 |
| Adopted replacement reserve floor | $ 7,428,200 | | $ 15,665,900 | | |
| Adopted replacement reserve ceiling | $ 32,224,700 | | $ 48,081,900 | | |

*See significant assumptions on page 97*

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2020

| | 110 Water 120 | | 210 Wastewater 220 | | |
|---|---|---|---|---|---|
| | Replacement | Capacity | Replacement | Capacity | Total |
| Projected July 1, 2019 Balance | $ 33,341,873 | $ (8,993,000) | $ 50,365,277 | $ (10,770,350) | $ 63,943,800 |
| Revenues | | | | | |
| Operating Transfers | 1,529,000 | - | 6,404,000 | - | 7,933,000 |
| Capital Facility Fees | - | 2,646,000 | - | 3,273,000 | 5,919,000 |
| Property Tax | 1,271,000 | - | 1,014,000 | - | 2,285,000 |
| RDA pass-through | 800,000 | | 800,000 | - | 1,600,000 |
| Investment Earnings | 509,000 | (163,000) | 742,000 | (210,000) | 878,000 |
| Available Balance | 37,450,873 | (6,510,000) | 59,325,277 | (7,707,350) | 82,558,800 |
| Less 19/20 Expenditures | | | | | |
| Encina Wastewater Authority Five Year Plan | - | - | 5,437,000 | 1,000 | 5,438,000 |
| San Marcos Interceptor | - | - | 1,426,000 | 3,174,000 | 4,600,000 |
| Montiel Gravity Outfall | - | - | 1,491,750 | 1,823,250 | 3,315,000 |
| Meadowlark Tank No. 3 | - | 3,132,000 | - | - | 3,132,000 |
| Future Projects | 1,525,000 | 185,000 | - | - | 1,710,000 |
| Encina Parallel Land Outfall | - | - | - | 1,120,000 | 1,120,000 |
| MRF: Conversion to Sodium Hypochlorite | - | - | 950,000 | - | 950,000 |
| High Point Pipeline | - | 700,000 | - | - | 700,000 |
| City of San Marcos Joint Projects | 478,780 | - | 168,220 | - | 647,000 |
| MRF - Biological Selector Improvements | - | - | 520,000 | - | 520,000 |
| NW Lake San Marcos Sewer Replacement and Lining | - | - | 475,000 | - | 475,000 |
| Las Posas 10-inch Water Main Replacement | 415,000 | - | - | - | 415,000 |
| Richland Invert Replacement | - | - | 225,000 | - | 225,000 |
| Rock Springs Valve Replacement | 220,000 | - | - | - | 220,000 |
| Asset Management Replacement Schedule | 75,000 | - | 75,000 | - | 150,000 |
| District-wide Valve Replacement Program | 120,000 | - | - | - | 120,000 |
| Miscellaneous Projects | 120,000 | - | 65,000 | 1,000 | 186,000 |
| Debt Service - 2012 Debt | - | - | - | 777,000 | 777,000 |
| Debt Service - 2008 Loan | - | - | - | 502,000 | 502,000 |
| Debt Service - 2015 Refunding | - | 2,137,400 | - | 2,057,600 | 4,195,000 |
| Less Total Expenditures | 2,953,780 | 6,154,400 | 10,832,970 | 9,455,850 | 29,397,000 |
| Projected June 30, 2020 Balance | 34,497,093 | (12,664,400) | 48,492,307 | (17,163,200) | ***$ 53,161,800*** |
| Less Operating Reserves | 6,156,000 | - | 6,760,100 | - | 12,916,100 |
| Projected replacement reserve/restricted funds | $ 28,341,093 | $ (12,664,400) | $ 41,732,207 | $ (17,163,200) | $ 40,245,700 |
| Adopted replacement reserve floor | $ 7,941,800 | | $ 18,157,700 | | |
| Adopted replacement reserve ceiling | $ 33,810,600 | | $ 53,450,600 | | |

| | |
|---|---|
| *Debt service coverage* | *340%* |
| *Debt service coverage without cap fees* | *232%* |
| *Debt service coverage without cap fees or property tax & RDA* | *161%* |
| *Days of Operating Expenses in Unrestricted Cash and Investments* | *323* |

*See significant assumptions on page 97*

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2021

| | 110 Water 120 | | 210 Wastewater 220 | | |
|---|---|---|---|---|---|
| | Replacement | Capacity | Replacement | Capacity | Total |
| Projected July 1, 2020 Balance | $ 34,497,093 | $ (12,664,400) | $ 48,492,307 | $ (17,163,200) | $ 53,161,800 |
| Revenues | | | | | |
| Operating Transfers | 994,000 | - | 6,273,000 | - | 7,267,000 |
| Capital Facility Fees | - | 2,648,000 | - | 3,279,000 | 5,927,000 |
| Property Tax | 1,298,000 | - | 1,036,000 | - | 2,334,000 |
| RDA pass-through | 800,000 | | 800,000 | | 1,600,000 |
| Debt Proceeds | - | 1,030,000 | - | 6,507,750 | 7,537,750 |
| Investment Earnings | 528,000 | (188,000) | 731,000 | (261,000) | 810,000 |
| Available Balance | 38,117,093 | (9,174,400) | 57,332,307 | (7,637,450) | 78,637,550 |
| Less 20/21 Expenditures | | | | | |
| Encina Parallel Land Outfall | - | - | - | 6,000,000 | 6,000,000 |
| Encina Wastewater Authority Five Year Plan | - | - | 4,422,000 | 136,000 | 4,558,000 |
| Future Projects | 1,090,000 | 100,000 | 71,000 | 87,000 | 1,348,000 |
| Richland Invert Replacement | - | - | 1,160,000 | - | 1,160,000 |
| Future Projects | - | - | 1,080,000 | - | 1,080,000 |
| MRF: Conversion to Sodium Hypochlorite | - | - | 1,000,000 | - | 1,000,000 |
| Meadowlark Tank No. 3 | - | 930,000 | - | - | 930,000 |
| City of San Marcos Joint Projects | 674,880 | - | 237,120 | - | 912,000 |
| Montiel Gravity Outfall | - | - | 344,250 | 420,750 | 765,000 |
| Elser Lane Water Line Improvements | 410,000 | - | - | - | 410,000 |
| Asset Management Replacement Schedule | 72,500 | - | 72,500 | - | 145,000 |
| NW Lake San Marcos Sewer Replacement and Lining | - | - | 100,000 | - | 100,000 |
| Miscellaneous Projects | 55,000 | - | - | 1,000 | 56,000 |
| Debt Service - 2012 debt | - | - | - | 777,000 | 777,000 |
| Debt Service - 2008 Loan | - | - | - | 496,000 | 496,000 |
| Debt Service - 2015 Refunding | - | 2,138,900 | - | 2,059,100 | 4,198,000 |
| Less Total Expenditures | 2,302,380 | 3,168,900 | 8,486,870 | 9,976,850 | 23,935,000 |
| Projected June 30, 2021 Balance | 35,814,713 | (12,343,300) | 48,845,437 | (17,614,300) | ***$ 54,702,550*** |
| Less Operating Reserves | 6,504,700 | - | 6,979,600 | - | 13,484,300 |
| Projected replacement reserve/restricted funds | $ 29,310,013 | $ (12,343,300) | $ 41,865,837 | $ (17,614,300) | $ 41,218,250 |
| Adopted replacement reserve floor | $ 8,878,900 | | $ 17,844,700 | | |
| Adopted replacement reserve ceiling | $ 35,486,700 | | $ 55,910,700 | | |

| | |
|---|---|
| *Debt service coverage* | *313%* |
| *Debt service coverage without cap fees* | *205%* |
| *Debt service coverage without cap fees or property tax & RDA* | *148%* |
| *Days of Operating Expenses in Unrestricted Cash and Investments* | *319* |

*See significant assumptions on page 97*

RESERVE PROJECTION FOR THE YEARS ENDING JUNE 30, 2022

| | 110 Water 120 | | 210 Wastewater 220 | | |
|---|---|---|---|---|---|
| | Replacement | Capacity | Replacement | Capacity | Total |
| Projected July 1, 2021 Balance | $ 35,814,713 | $ (12,343,300) | $ 48,845,437 | $ (17,614,300) | $ 54,702,550 |
| Revenues | | | | | |
| Operating Transfers | 847,000 | - | 6,248,000 | - | 7,095,000 |
| Capital Facility Fees | - | 2,650,000 | - | 3,285,000 | 5,935,000 |
| Property Tax | 1,326,000 | - | 1,058,000 | - | 2,384,000 |
| RDA pass-through | 800,000 | - | 800,000 | - | 1,600,000 |
| Debt Proceeds | - | - | - | 5,423,500 | 5,423,500 |
| Investment Earnings | 533,000 | (183,000) | 767,000 | (276,000) | 841,000 |
| Available Balance | 39,320,713 | (9,876,300) | 57,718,437 | (9,181,800) | 77,981,050 |
| Less 21/22 Expenditures | | | | | |
| Encina Parallel Land Outfall | - | - | - | 5,000,000 | 5,000,000 |
| Encina Wastewater Authority Five Year Plan | - | - | 3,587,000 | 134,000 | 3,721,000 |
| City of San Marcos Joint Projects | 1,568,060 | - | 550,940 | - | 2,119,000 |
| Future Projects | 1,205,000 | - | 346,500 | 423,500 | 1,975,000 |
| Elser Lane Water Line Improvements | 1,275,000 | - | - | - | 1,275,000 |
| Fire Services - Backflow Preventer Upgrades | 50,000 | - | - | - | 50,000 |
| Chlorine Contact Tank Expansion | - | - | - | 1,000 | 1,000 |
| Debt Service - 2012 Debt | - | - | - | 778,000 | 778,000 |
| Debt Service - 2008 Loan | - | - | - | 490,000 | 490,000 |
| Debt Service - 2021 | - | - | - | 1,072,000 | 1,072,000 |
| Debt Service - 2015 Refunding | - | 2,138,400 | - | 2,058,600 | 4,197,000 |
| Less Total Expenditures | 4,098,060 | 2,138,400 | 4,484,440 | 9,957,100 | 20,678,000 |
| Projected June 30, 2022 Balance | 35,222,653 | (12,014,700) | 53,233,997 | (19,138,900) | ***$ 57,303,050*** |
| Less Operating Reserves | 6,839,500 | - | 7,226,600 | - | 14,066,100 |
| Projected replacement reserve/restricted funds | $ 28,383,153 | $ (12,014,700) | $ 46,007,397 | $ (19,138,900) | $ 43,236,950 |
| Adopted replacement reserve floor | $ 9,694,300 | | $ 18,659,400 | | |
| Adopted replacement reserve ceiling | $ 37,570,000 | | $ 59,294,400 | | |

| | |
|---|---|
| *Debt service coverage* | *273%* |
| *Debt service coverage without cap fees* | *182%* |
| *Debt service coverage without cap fees or property tax & RDA* | *121%* |
| *Days of Operating Expenses in Unrestricted Cash and Investments* | *321* |

*See significant assumptions on page 97*

RESERVE PROJECTION FOR THE YEAR ENDING JUNE 30, 2023

| | 110 Water 120 | | 210 Wastewater 220 | | |
|---|---|---|---|---|---|
| | Replacement | Capacity | Replacement | Capacity | Total |
| Projected July 1, 2022 Balance | $ 35,222,653 | $ (12,014,700) | $ 53,233,997 | $ (19,138,900) | $ 57,303,050 |
| Revenues | | | | | |
| Operating Transfers | 783,000 | - | 6,248,000 | - | 7,031,000 |
| Capital Facility Fees | - | 2,652,000 | - | 3,291,000 | 5,943,000 |
| Property Tax | 1,355,000 | - | 1,081,000 | - | 2,436,000 |
| RDA pass-through | 800,000 | - | 800,000 | - | 1,600,000 |
| Investment Earnings | 552,000 | (224,000) | 832,000 | (340,000) | 820,000 |
| Available Balance | 38,712,653 | (9,586,700) | 62,194,997 | (16,187,900) | 75,133,050 |
| Less 22/23 Expenditures | | | | | |
| Coronado Hills Tank #2 | - | 6,000,000 | - | - | 6,000,000 |
| Encina Wastewater Authority Five Year Plan | - | - | 4,356,000 | 708,000 | 5,064,000 |
| Chlorine Contact Tank Expansion | - | - | - | 4,651,000 | 4,651,000 |
| Future Projects | 440,000 | 105,000 | 195,750 | 239,250 | 980,000 |
| Old Questhaven Sewer Replacement | - | - | 26,180 | 7,820 | 34,000 |
| Debt Service - 2012 Debt | - | - | - | 780,000 | 780,000 |
| Debt Service - 2008 Loan | - | - | - | 482,000 | 482,000 |
| Debt Service - 2021 | - | - | - | 1,072,000 | 1,072,000 |
| Debt Service - 2015 Refunding | - | 2,139,400 | - | 2,059,600 | 4,199,000 |
| Less Total Expenditures | 440,000 | 8,244,400 | 4,577,930 | 9,999,670 | 23,262,000 |
| Projected June 30, 2023 Balance | 38,272,653 | (17,831,100) | 57,617,067 | (26,187,570) | ***$ 51,871,050*** |
| Less Operating Reserves | 7,222,200 | - | 7,463,300 | - | 14,685,500 |
| Projected replacement reserve/restricted funds | $ 31,050,453 | $ (17,831,100) | $ 50,153,767 | $ (26,187,570) | $ 37,185,550 |
| Adopted replacement reserve floor | $ 10,265,000 | | $ 19,435,800 | | |
| Adopted replacement reserve ceiling | $ 39,611,300 | | $ 62,501,700 | | |

| | |
|---|---|
| *Debt service coverage* | *273%* |
| *Debt service coverage without cap fees* | *182%* |
| *Debt service coverage without cap fees or property tax & RDA* | *120%* |
| *Days of Operating Expenses in Unrestricted Cash and Investments* | *279* |

*See significant assumptions on page 97*

LONG RANGE RESERVE PROJECTION

| | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 |
|---|---|---|---|---|---|
| Projected Beginning Balance | $ 51,871,000 | $ 52,987,000 | $ 55,307,000 | $ 58,079,000 | $ 61,311,000 |
| Revenues | | | | | |
| Operating transfers | 7,242,000 | 7,459,000 | 7,683,000 | 7,913,000 | 8,150,000 |
| Capital facility fees | 6,062,000 | 6,183,000 | 6,307,000 | 6,433,000 | 6,433,000 |
| Property tax | 2,488,000 | 2,541,000 | 2,596,000 | 2,652,000 | 2,709,000 |
| Investment earnings | 787,000 | 813,000 | 852,000 | 897,000 | 948,000 |
| Capital outlay | (8,930,000) | (8,930,000) | (8,930,000) | (8,930,000) | (8,930,000) |
| Debt service | (6,533,000) | (5,746,000) | (5,736,000) | (5,733,000) | (5,722,000) |
| Projected Ending Balance | $ 52,987,000 | $ 55,307,000 | $ 58,079,000 | $ 61,311,000 | $ 64,899,000 |
| Operating reserves | 15,053,000 | 15,429,000 | 15,815,000 | 16,210,000 | 16,615,000 |
| Projected replacement reserve/restricted funds | $ 37,934,000 | $ 39,878,000 | $ 42,264,000 | $ 45,101,000 | $ 48,284,000 |
| Adopted replacement reserve floor | $ 30,758,000 | $ 33,770,000 | $ 36,438,000 | $ 38,944,000 | $ 39,170,000 |
| Adopted replacement reserve ceiling | $ 106,051,000 | $110,269,000 | $113,599,000 | $ 116,233,000 | $ 113,636,000 |

*Significant Assumptions*

***Operating Transfers*** - the result of operating activity transferred from the disbursements fund during the year. Operating transfers from FY 2023 through 2027 will increase by 3%.

***Rates*** - Combined water and sewer rates for the average single family resident will increase by 4% each year, the first 2 years with water only increases, with 3% increase to sewer effective January 1, 2021, and a 4% sewer increase effective January 1, 2022.

***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 120 water accounts in 2018/19, and 120 in 2019/20 and every year thereafter. The District will add 120 sewer accounts in 2018/19 and approximately 120 in 2019/20 and each year thereafter.

***Capital Facility Fees*** – The District will collect capacity charges for 300 water EDUs in fiscal year 2017/18 and between 325 and 350 EDUs in each fiscal year, 2018/19 through 2022/23. The District will collect capacity charges for 290 sewer EDUs in 2017/18 and between 300 and 325 sewer EDUs from 2018/19 through 2022/23. The rate per EDU will increase by 2.0% each year.

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

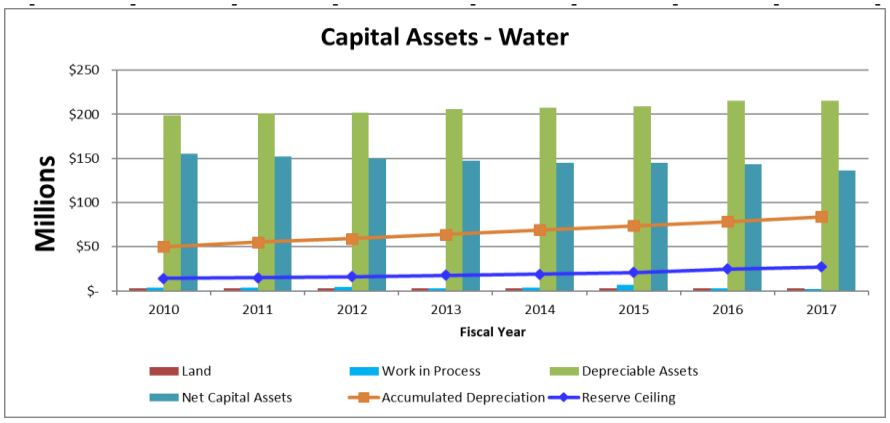
***Investment Earnings*** - assumed at 1.502%.

***Capital Outlay*** scheduled after Fiscal Year 2022 will be expended evenly over six years.

Vallecitos Water District
Replacement Reserve Limits - Water System
For the 2018-19 Budget year

| ENR Index (as of March 2018) | 10959 |
|---|---|

| Year Added | Original Cost | ENR Factor | 2018 Costs | Year of Replacement 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1957 | $ 923,038 | 15.14 | $ 13,971,787 | 450,703 | 450,703 | 450,703 | 450,703 | 450,703 | 450,703 | 450,703 | 450,703 | 450,703 | - |
| 1958 | 134,201 | 14.44 | 1,937,693 | 62,506 | 62,506 | 62,506 | 62,506 | 62,506 | 62,506 | 62,506 | 62,506 | 62,506 | 62,506 |
| 1963 | 2,067,687 | 12.16 | 25,149,591 | 811,277 | 811,277 | 811,277 | 811,277 | 811,277 | 811,277 | 811,277 | 811,277 | 811,277 | 811,277 |
| 1964 | 181,560 | 11.71 | 2,125,765 | 68,573 | 68,573 | 68,573 | 68,573 | 68,573 | 68,573 | 68,573 | 68,573 | 68,573 | 68,573 |
| 1965 | 256,377 | 11.29 | 2,893,548 | 93,340 | 93,340 | 93,340 | 93,340 | 93,340 | 93,340 | 93,340 | 93,340 | 93,340 | 93,340 |
| 1966 | 107,429 | 10.75 | 1,155,363 | 37,270 | 37,270 | 37,270 | 37,270 | 37,270 | 37,270 | 37,270 | 37,270 | 37,270 | 37,270 |
| 1967 | 122,039 | 10.20 | 1,245,275 | 40,170 | 40,170 | 40,170 | 40,170 | 40,170 | 40,170 | 40,170 | 40,170 | 40,170 | 40,170 |
| 1968 | 37,421 | 9.49 | 355,062 | 11,454 | 11,454 | 11,454 | 11,454 | 11,454 | 11,454 | 11,454 | 11,454 | 11,454 | 11,454 |
| 1969 | 39,742 | 8.64 | 343,209 | 11,071 | 11,071 | 11,071 | 11,071 | 11,071 | 11,071 | 11,071 | 11,071 | 11,071 | 11,071 |
| 1970 | 37,955 | 7.94 | 301,194 | 9,716 | 9,716 | 9,716 | 9,716 | 9,716 | 9,716 | 9,716 | 9,716 | 9,716 | 9,716 |
| 1971 | 90,080 | 6.93 | 624,407 | 20,142 | 20,142 | 20,142 | 20,142 | 20,142 | 20,142 | 20,142 | 20,142 | 20,142 | 20,142 |
| 1972 | 77,091 | 6.25 | 481,940 | 15,546 | 15,546 | 15,546 | 15,546 | 15,546 | 15,546 | 15,546 | 15,546 | 15,546 | 15,546 |
| 1973 | 169,427 | 5.78 | 979,816 | 31,607 | 31,607 | 31,607 | 31,607 | 31,607 | 31,607 | 31,607 | 31,607 | 31,607 | 31,607 |
| 1974 | 141,987 | 5.43 | 770,315 | 24,849 | 24,849 | 24,849 | 24,849 | 24,849 | 24,849 | 24,849 | 24,849 | 24,849 | 24,849 |
| 1975 | 230,530 | 4.95 | 1,142,124 | 36,843 | 36,843 | 36,843 | 36,843 | 36,843 | 36,843 | 36,843 | 36,843 | 36,843 | 36,843 |
| 1976 | 296,066 | 4.56 | 1,351,348 | 43,592 | 43,592 | 43,592 | 43,592 | 43,592 | 43,592 | 43,592 | 43,592 | 43,592 | 43,592 |
| 1977 | 303,133 | 4.25 | 1,289,610 | 41,600 | 41,600 | 41,600 | 41,600 | 41,600 | 41,600 | 41,600 | 41,600 | 41,600 | 41,600 |
| 1978 | 3,353,752 | 3.95 | 13,239,830 | 427,091 | 427,091 | 427,091 | 427,091 | 427,091 | 427,091 | 427,091 | 427,091 | 427,091 | 427,091 |
| 1979 | 933,794 | 3.65 | 3,407,742 | 109,927 | 109,927 | 109,927 | 109,927 | 109,927 | 109,927 | 109,927 | 109,927 | 109,927 | 109,927 |
| 1980 | 390,894 | 3.39 | 1,323,388 | 42,690 | 42,690 | 42,690 | 42,690 | 42,690 | 42,690 | 42,690 | 42,690 | 42,690 | 42,690 |
| 1981 | 397,944 | 3.10 | 1,233,683 | - | 39,796 | 39,796 | 39,796 | 39,796 | 39,796 | 39,796 | 39,796 | 39,796 | 39,796 |
| 1982 | 1,933,811 | 2.87 | 5,540,558 | - | - | 178,728 | 178,728 | 178,728 | 178,728 | 178,728 | 178,728 | 178,728 | 178,728 |
| 1983 | 3,393,243 | 2.70 | 9,145,733 | - | - | - | 295,024 | 295,024 | 295,024 | 295,024 | 295,024 | 295,024 | 295,024 |
| 1984 | 5,435,002 | 2.64 | 14,366,181 | - | - | - | - | 463,425 | 463,425 | 463,425 | 463,425 | 463,425 | 463,425 |
| 1985 | 675,452 | 2.61 | 1,764,548 | - | - | - | - | - | 56,921 | 56,921 | 56,921 | 56,921 | 56,921 |
| 1986 | 611,788 | 2.55 | 1,561,021 | - | - | - | - | - | - | 50,356 | 50,356 | 50,356 | 50,356 |
| 1987 | 799,052 | 2.49 | 1,987,474 | - | - | - | - | - | - | - | 64,112 | 64,112 | 64,112 |
| 1988 | 8,585,267 | 2.43 | 20,820,080 | - | - | - | - | - | - | - | - | 671,615 | 671,615 |
| 1989 | 1,572,104 | 2.37 | 3,733,193 | - | - | - | - | - | - | - | - | - | 120,426 |
| 1990 | 2,124,484 | 2.32 | 4,920,165 | - | - | - | - | - | - | - | - | - | - |
| 1991 | 1,777,396 | 2.27 | 4,028,642 | - | - | - | - | - | - | - | - | - | - |
| 1992 | 8,263,508 | 2.20 | 18,166,456 | - | - | - | - | - | - | - | - | - | - |
| 1993 | 3,727,844 | 2.10 | 7,841,352 | - | - | - | - | - | - | - | - | - | - |
| 1994 | 2,198,280 | 2.03 | 4,454,688 | - | - | - | - | - | - | - | - | - | - |
| 1995 | 4,438,365 | 2.00 | 8,890,521 | - | - | - | - | - | - | - | - | - | - |
| 1996 | 1,872,216 | 1.95 | 3,650,821 | - | - | - | - | - | - | - | - | - | - |
| 1997 | 3,075,659 | 1.88 | 5,785,470 | - | - | - | - | - | - | - | - | - | - |
| 1998 | 4,236,142 | 1.85 | 7,841,872 | - | - | - | - | - | - | - | - | - | - |
| 1999 | 1,216,379 | 1.81 | 2,200,082 | | | | | | | | | | - |
| 2000 | 33,016,987 | 1.76 | 58,163,183 | | | | | | | | | | - |
| 2001 | 1,599,452 | 1.73 | 2,763,423 | | | | | | | | | | - |
| 2002 | 2,243,174 | 1.68 | 3,760,010 | | | | | | | | | | - |
| 2003 | 8,148,602 | 1.64 | 13,339,108 | | | | | | | | | | - |
| 2004 | 4,803,706 | 1.54 | 7,399,104 | | | | | | | | | | - |
| 2005 | 4,945,039 | 1.47 | 7,278,113 | | | | | | | | | | - |
| 2006 | 6,296,020 | 1.41 | 8,901,830 | | | | | | | | | | - |
| 2007 | 9,123,102 | 1.38 | 12,550,850 | | | | | | | | | | - |
| 2008 | 7,200,501 | 1.32 | 9,495,823 | | | | | | | | | | - |
| 2009 | 32,403,360 | 1.28 | 41,436,222 | | | | | | | | | | - |
| 2010 | 4,510,327 | 1.25 | 5,615,618 | | | | | | | | | | - |
| 2011 | 2,053,547 | 1.21 | 2,481,237 | | | | | | | | | | - |
| 2012 | 1,249,525 | 1.18 | 1,471,159 | | | | | | | | | | - |
| 2013 | 3,574,225 | 1.16 | 4,141,898 | | | | | | | | | | - |
| 2014 | 1,464,242 | 1.12 | 1,636,409 | | | | | | | | | | - |
| 2015 | 1,950,156 | 1.09 | 2,131,846 | | | | | | | | | | - |
| 2016 | 6,131,372 | 1.09 | 6,702,614 | - | - | - | - | - | - | - | - | - | - |
| 2017 | - | 1.07 | - | - | - | - | - | - | - | - | - | - | - |
| | $ 196,941,476 | | $ 391,289,994 | 2,389,968 | 2,429,764 | 2,608,492 | 2,903,515 | 3,366,941 | 3,423,862 | 3,474,217 | 3,538,329 | 4,209,945 | 3,879,667 |



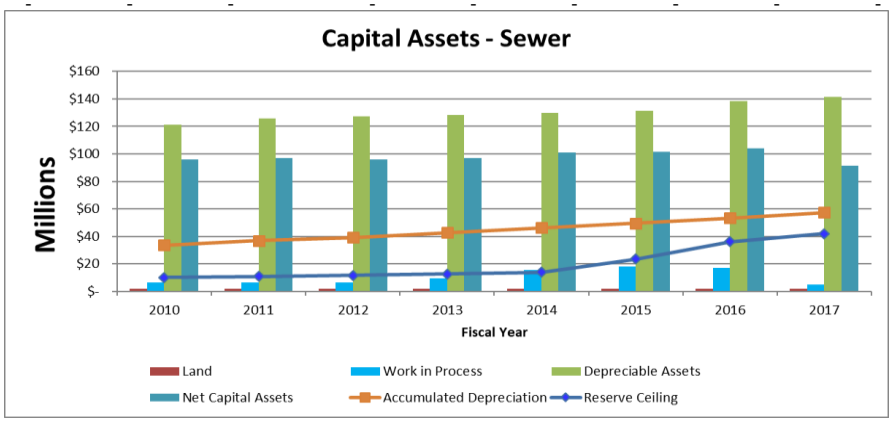

Three-Year Minimum Reserve Balance <-------$7,428,224------->

Ten-Year Maximum Reserve Balance <---------- $32,224,700 ---------->

Vallecitos Water District
Replacement Reserve Limits - Wastewater System
For the 2018-19 Budget year

| ENR Index (as of March 2018) | 10959 |
|---|---|

| Year Added | Original Cost | ENR Factor | 2018 Costs | Year of Replacement 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1964 | $ 1,421,340 | 11.71 | $ 16,641,523 | - | - | - | - | - | - | - | - | - | - |
| 1965 | 394,116 | 11.29 | 4,448,113 | - | - | - | - | - | - | - | - | - | - |
| 1966 | 110,183 | 10.75 | 1,184,981 | - | - | - | - | - | - | - | - | - | - |
| 1967 | 41,816 | 10.20 | 426,687 | - | - | - | - | - | - | - | - | - | - |
| 1968 | 24,352 | 9.49 | 231,059 | - | - | - | - | - | - | - | - | - | - |
| 1969 | 28,784 | 8.64 | 248,577 | 15,536 | - | - | - | - | - | - | - | - | - |
| 1970 | 1,617,466 | 7.94 | 12,835,489 | 802,218 | 802,218 | - | - | - | - | - | - | - | - |
| 1971 | 53,601 | 6.93 | 371,545 | 23,222 | 23,222 | 23,222 | - | - | - | - | - | - | - |
| 1972 | 78,755 | 6.25 | 492,342 | 30,771 | 30,771 | 30,771 | 30,771 | - | - | - | - | - | - |
| 1973 | 149,279 | 5.78 | 863,297 | 53,956 | 53,956 | 53,956 | 53,956 | 53,956 | - | - | - | - | - |
| 1974 | 409,501 | 5.43 | 2,221,644 | 138,853 | 138,853 | 138,853 | 138,853 | 138,853 | 138,853 | - | - | - | - |
| 1975 | 189,378 | 4.95 | 938,243 | 58,640 | 58,640 | 58,640 | 58,640 | 58,640 | 58,640 | 58,640 | - | - | - |
| 1976 | 151,559 | 4.56 | 691,768 | 43,236 | 43,236 | 43,236 | 43,236 | 43,236 | 43,236 | 43,236 | 43,236 | - | - |
| 1977 | 394,775 | 4.25 | 1,679,480 | 104,967 | 104,967 | 104,967 | 104,967 | 104,967 | 104,967 | 104,967 | 104,967 | 104,967 | - |
| 1978 | 930,683 | 3.95 | 3,674,119 | 229,632 | 229,632 | 229,632 | 229,632 | 229,632 | 229,632 | 229,632 | 229,632 | 229,632 | 229,632 |
| 1979 | 697,184 | 3.65 | 2,544,269 | 159,017 | 159,017 | 159,017 | 159,017 | 159,017 | 159,017 | 159,017 | 159,017 | 159,017 | 159,017 |
| 1980 | 139,384 | 3.39 | 471,890 | 29,493 | 29,493 | 29,493 | 29,493 | 29,493 | 29,493 | 29,493 | 29,493 | 29,493 | 29,493 |
| 1981 | 192,586 | 3.10 | 597,044 | 37,315 | 37,315 | 37,315 | 37,315 | 37,315 | 37,315 | 37,315 | 37,315 | 37,315 | 37,315 |
| 1982 | 4,772,279 | 2.87 | 13,673,047 | 854,565 | 854,565 | 854,565 | 854,565 | 854,565 | 854,565 | 854,565 | 854,565 | 854,565 | 854,565 |
| 1985 | 5,149,309 | 2.61 | 13,452,033 | 840,752 | 840,752 | 840,752 | 840,752 | 840,752 | 840,752 | 840,752 | 840,752 | 840,752 | 840,752 |
| 1986 | 19,355,791 | 2.55 | 49,387,687 | - | 3,086,730 | 3,086,730 | 3,086,730 | 3,086,730 | 3,086,730 | 3,086,730 | 3,086,730 | 3,086,730 | 3,086,730 |
| 1987 | 381,136 | 2.49 | 947,996 | - | - | 59,250 | 59,250 | 59,250 | 59,250 | 59,250 | 59,250 | 59,250 | 59,250 |
| 1988 | 1,232,431 | 2.43 | 2,988,761 | - | - | - | 186,798 | 186,798 | 186,798 | 186,798 | 186,798 | 186,798 | 186,798 |
| 1989 | 2,001,761 | 2.37 | 4,753,478 | - | - | - | - | 297,092 | 297,092 | 297,092 | 297,092 | 297,092 | 297,092 |
| 1990 | 3,031,169 | 2.32 | 7,019,988 | - | - | - | - | - | 438,749 | 438,749 | 438,749 | 438,749 | 438,749 |
| 1991 | 1,864,618 | 2.27 | 4,226,339 | - | - | - | - | - | - | 264,146 | 264,146 | 264,146 | 264,146 |
| 1992 | 3,162,421 | 2.20 | 6,952,251 | - | - | - | - | - | - | - | 434,516 | 434,516 | 434,516 |
| 1993 | 13,446,724 | 2.10 | 28,284,577 | - | - | - | - | - | - | - | - | 1,767,786 | 1,767,786 |
| 1994 | 2,113,222 | 2.03 | 4,282,322 | - | - | - | - | - | - | - | - | - | 267,645 |
| 1995 | 3,276,618 | 2.00 | 6,563,417 | - | - | - | - | - | - | - | - | - | - |
| 1996 | 1,199,768 | 1.95 | 2,339,548 | - | - | - | - | - | - | - | - | - | - |
| 1997 | 988,964 | 1.88 | 1,860,291 | - | - | - | - | - | - | - | - | - | - |
| 1998 | 4,670,391 | 1.85 | 8,645,746 | - | - | - | - | - | - | - | - | - | - |
| 1999 | 1,047,495 | 1.81 | 1,894,619 | | | | | | | | | | - |
| 2000 | 3,954,391 | 1.76 | 6,966,110 | | | | | | | | | | - |
| 2001 | 2,705,995 | 1.73 | 4,675,232 | | | | | | | | | | - |
| 2002 | 109,018 | 1.68 | 182,736 | | | | | | | | | | - |
| 2003 | 9,260,829 | 1.64 | 15,159,803 | | | | | | | | | | - |
| 2004 | 3,031,642 | 1.54 | 4,669,610 | | | | | | | | | | - |
| 2005 | 2,984,298 | 1.47 | 4,392,292 | | | | | | | | | | - |
| 2006 | 7,245,244 | 1.41 | 10,243,921 | | | | | | | | | | - |
| 2007 | (10,129,834) | 1.38 | (13,935,834) | | | | | | | | | | - |
| 2008 | 9,022,922 | 1.32 | 11,899,182 | | | | | | | | | | - |
| 2009 | 37,476,922 | 1.28 | 47,924,106 | | | | | | | | | | - |
| 2010 | 3,860,825 | 1.25 | 4,806,951 | | | | | | | | | | - |
| 2011 | 1,487,477 | 1.21 | 1,797,272 | | | | | | | | | | - |
| 2012 | 3,612,924 | 1.18 | 4,253,764 | | | | | | | | | | - |
| 2013 | (1,398,127) | 1.15 | (1,604,910) | | | | | | | | | | - |
| 2014 | 2,007,273 | 1.12 | 2,243,290 | | | | | | | | | | - |
| 2015 | (1,576,814) | 1.09 | (1,723,721) | | | | | | | | | | - |
| 2016 | 792,086 | 1.09 | 865,882 | - | - | - | - | - | - | - | - | - | - |
| 2017 | 1,984,324 | 1.07 | 2,115,801 | - | - | - | - | - | - | - | - | - | - |
| | $ 151,150,234 | | $312,765,659 | 3,422,174 | 6,493,369 | 5,750,400 | 5,913,976 | 6,180,297 | 6,565,090 | 6,690,384 | 7,066,259 | 8,790,810 | 8,953,488 |




Three-Year Minimum Reserve Balance <------$15,665,943------->

Eight-Year Maximum Reserve Balance <---------- $48,081,950 ---------->