AGENDA FOR A WORKSHOP MEETING OF THE BOARD OF DIRECTORS
OF THE VALLECITOS WATER DISTRICT
WEDNESDAY, APRIL 26, 2017, AT 5:00 P.M.
AT THE DISTRICT OFFICE
201 VALLECITOS DE ORO, SAN MARCOS, CALIFORNIA

CALL TO ORDER – PRESIDENT ELITHARP

PLEDGE OF ALLEGIANCE

ROLL CALL

In the case of an emergency, items may be added to the Agenda by a majority vote of the Board of Directors. An emergency is defined as a work stoppage; a crippling disaster; or other activity which severely imperils public health, safety, or both. Also, items which arise after the posting of the Agenda may be added by a two-thirds vote of the Board of Directors.

ADOPT AGENDA FOR THE WORKSHOP MEETING OF APRIL 26, 2017

PUBLIC COMMENT

Persons wishing to address a matter not on the Agenda may be heard at this time; however, no action will be taken until the matter is placed on a future agenda in accordance with Board policy. Public comments are limited to three minutes. A Request to Speak form is required to be submitted to the Executive Secretary prior to the start of the meeting, if possible. Public comment should start by stating name, address and topic. The Board is not permitted during this time to enter into a dialogue with the speaker.

ITEMS FOR DISCUSSION

1. PROPOSED 2017/18 CAPITAL BUDGET REVIEW

*******END OF DISCUSSION ITEMS*******

OTHER BUSINESS

*******END OF OTHER BUSINESS*******

*******END OF AGENDA*******

If you have any disability which would require accommodation in order to enable you to participate in this meeting, please call the Executive Secretary at 760.744.0460 ext. 264 at least 48 hours prior to the meeting.

Audio and video recordings of all Board meetings are available to the public at the District website www.vwd.org

AFFIDAVIT OF POSTING

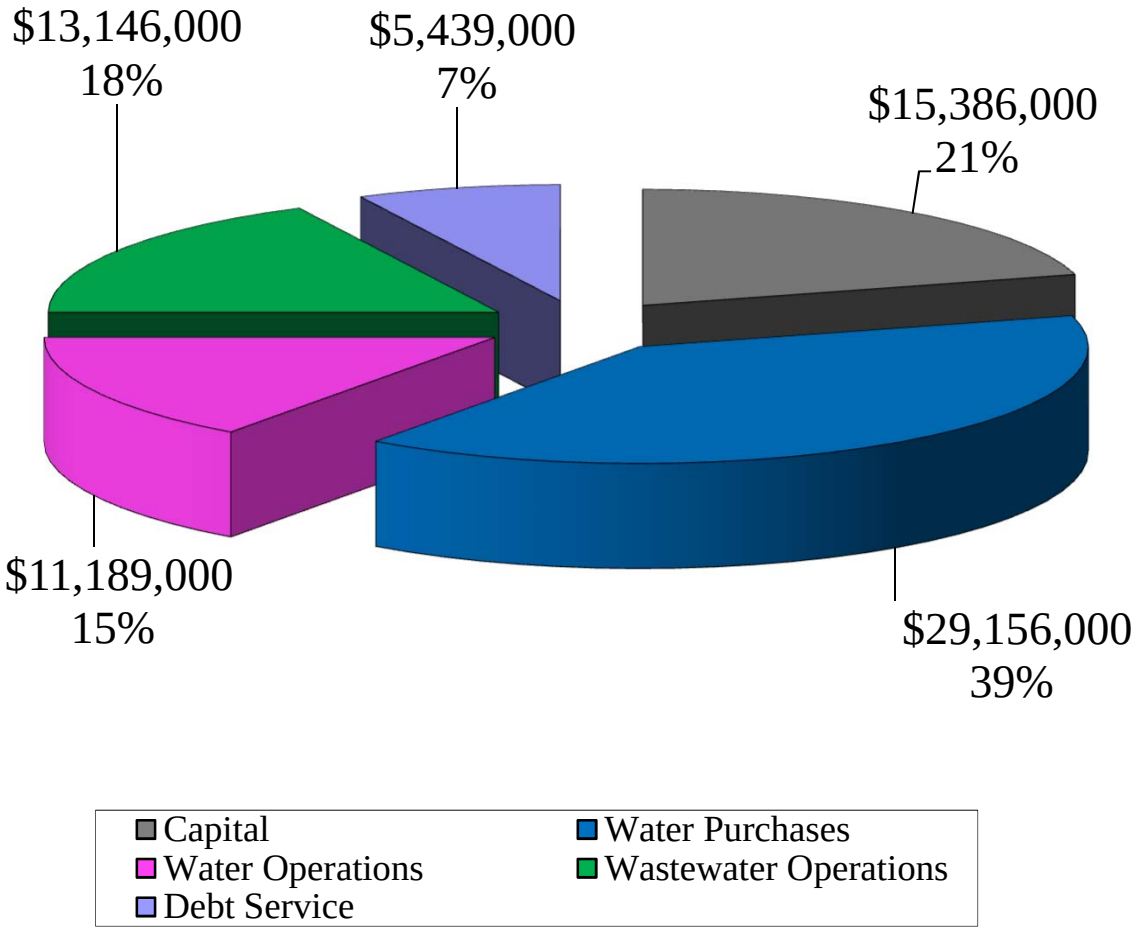
I, Diane Posvar, Executive Secretary of the Vallecitos Water District, hereby certify that I caused the posting of this Agenda in the outside display case at the District office, 201 Vallecitos de Oro, San Marcos, California by 5:00 p.m., Friday, April 21, 2017.

_____

Diane Posvar

DRAFT 2017-18 OVERALL BUDGET

$74,316,000



Capital Budget

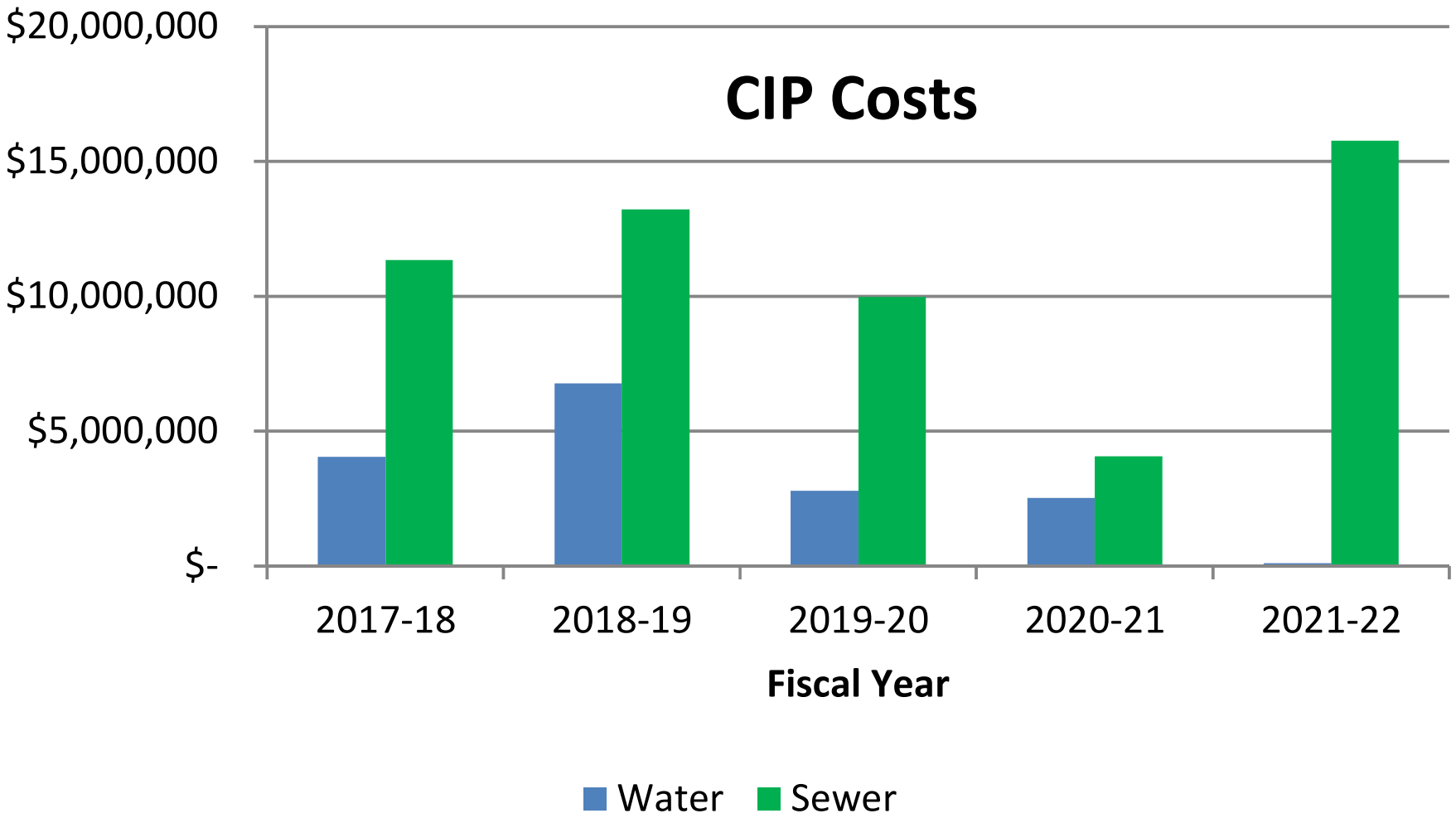
VALLECITOS WATER DISTRICT
Water and Wastewater Specialists since 1955

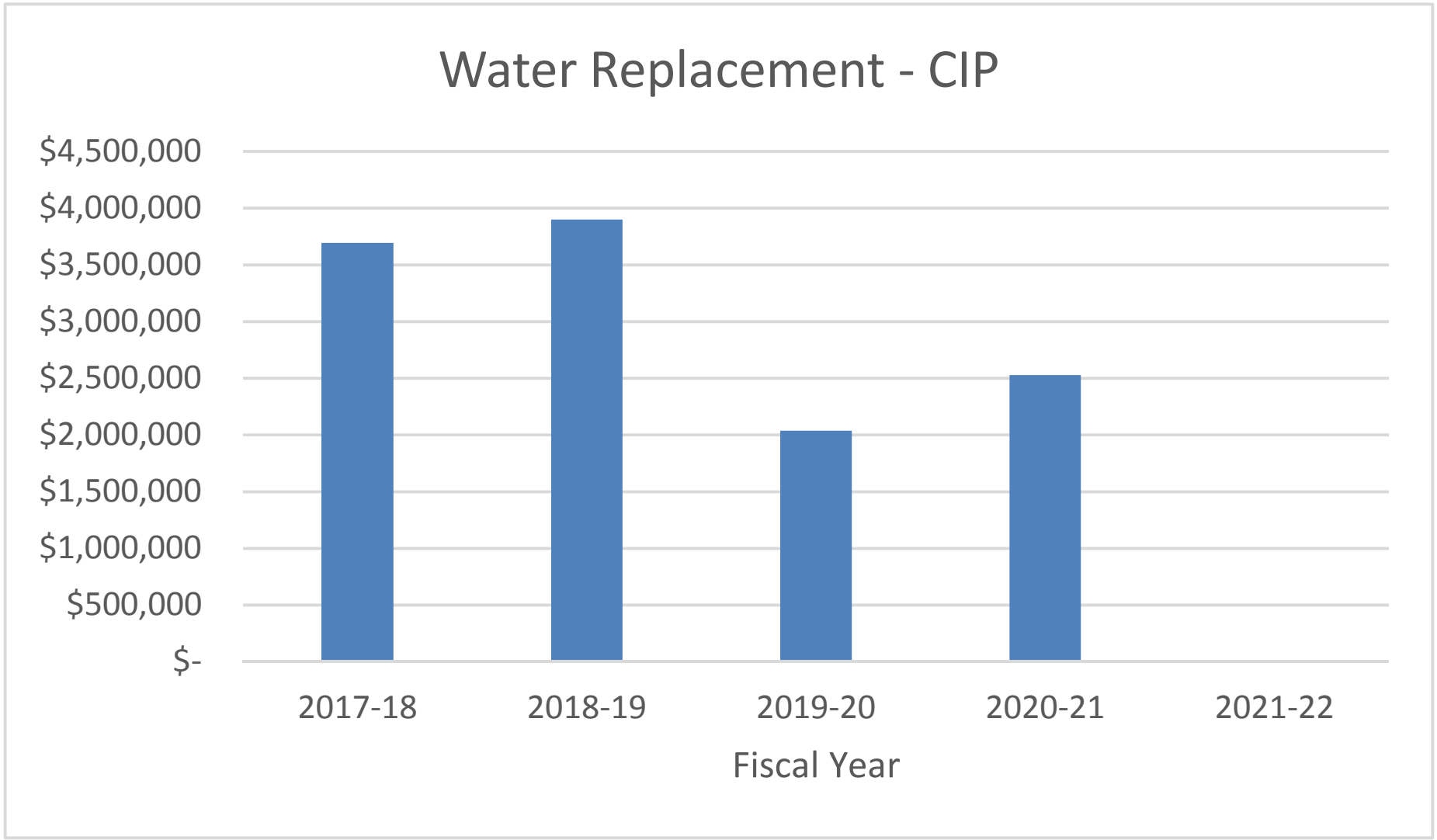
Capital Outlay:

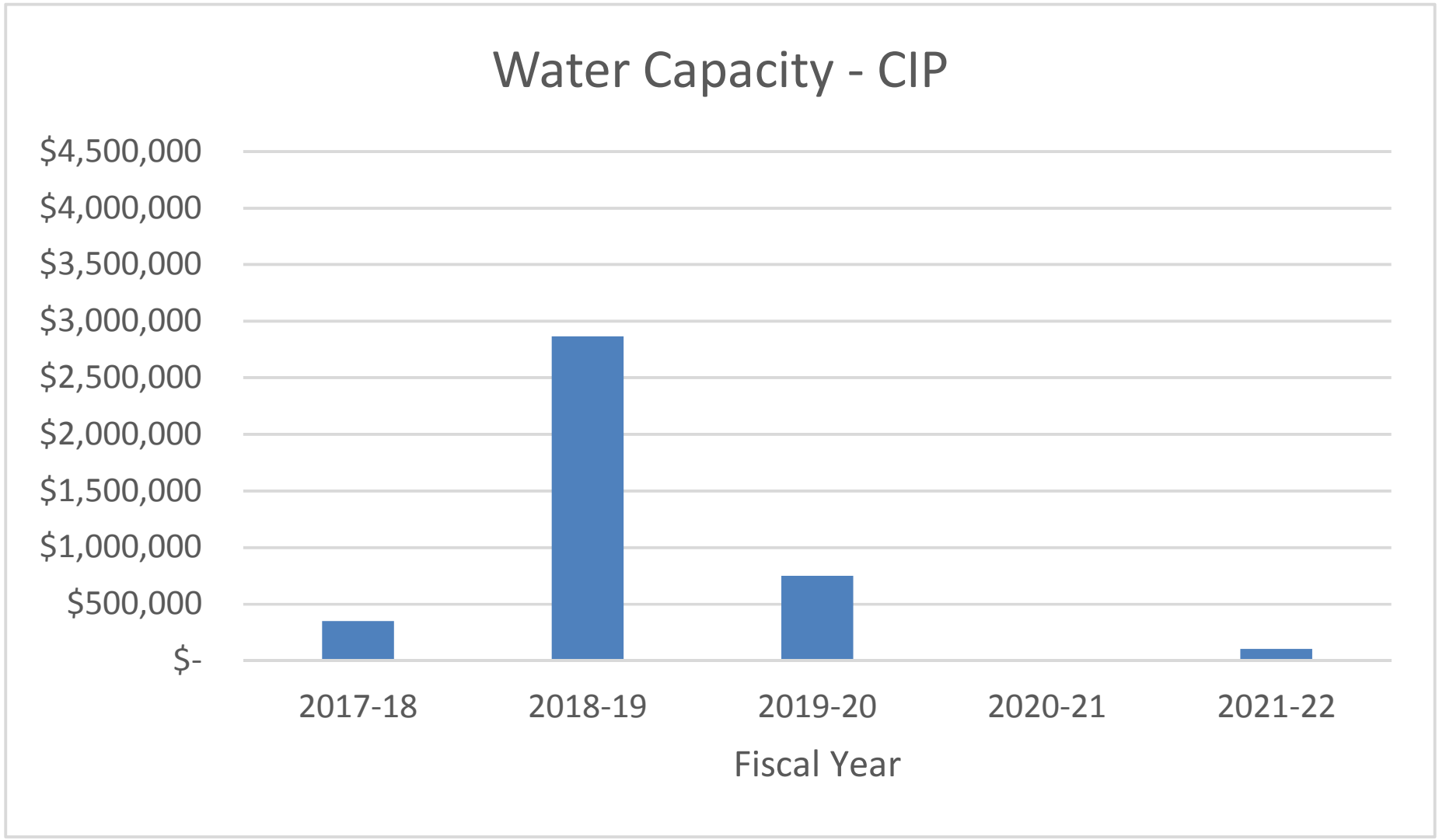
- Existing projects
- New projects
  - EWA Projects
  - Future Projects
  - Easements, vehicles & equipment

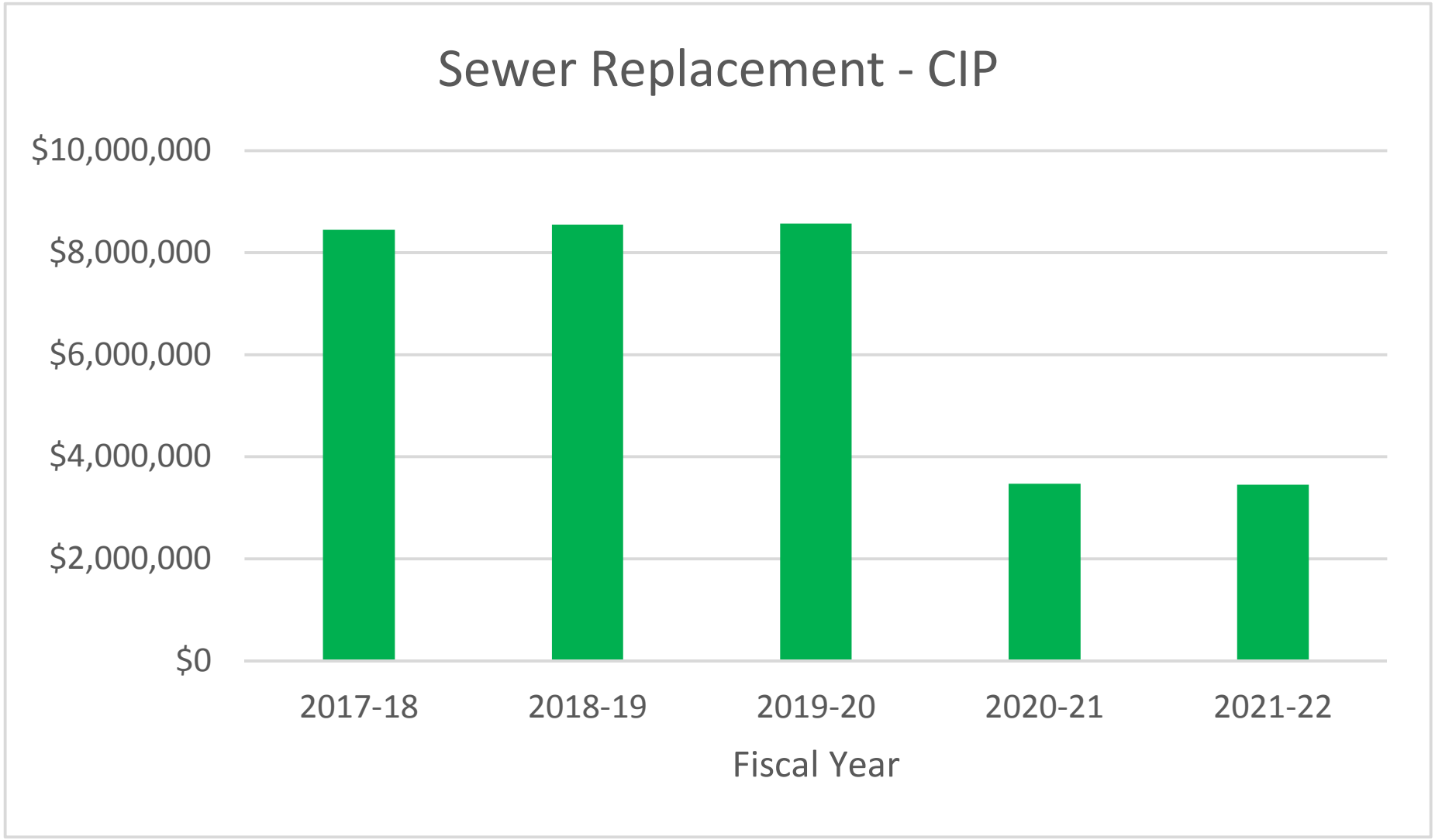
Resources:

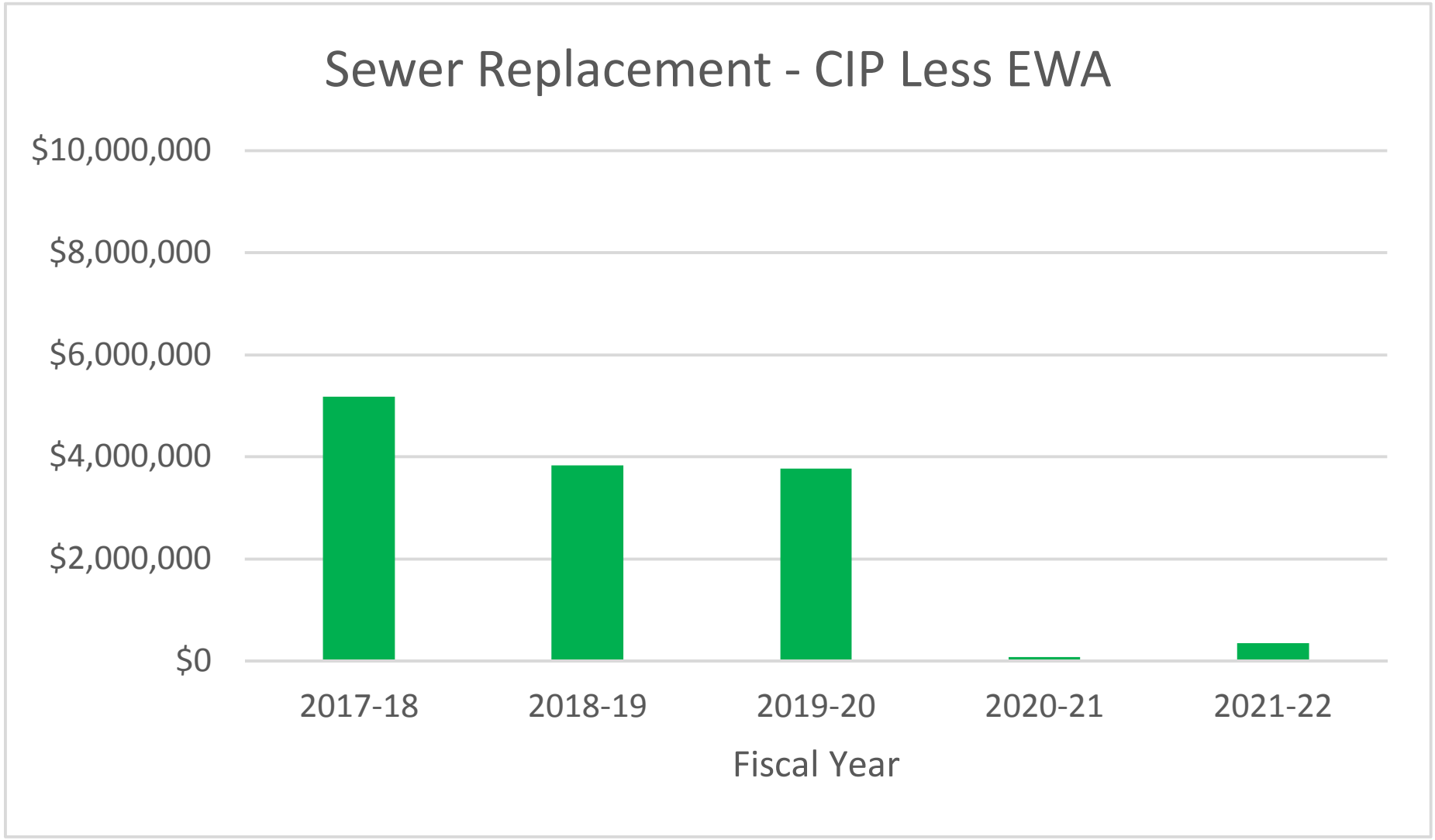
- Current reserves
- Capital facility fees
- Annual excess of revenue over expenses
- Property tax & investment earnings
- New debt

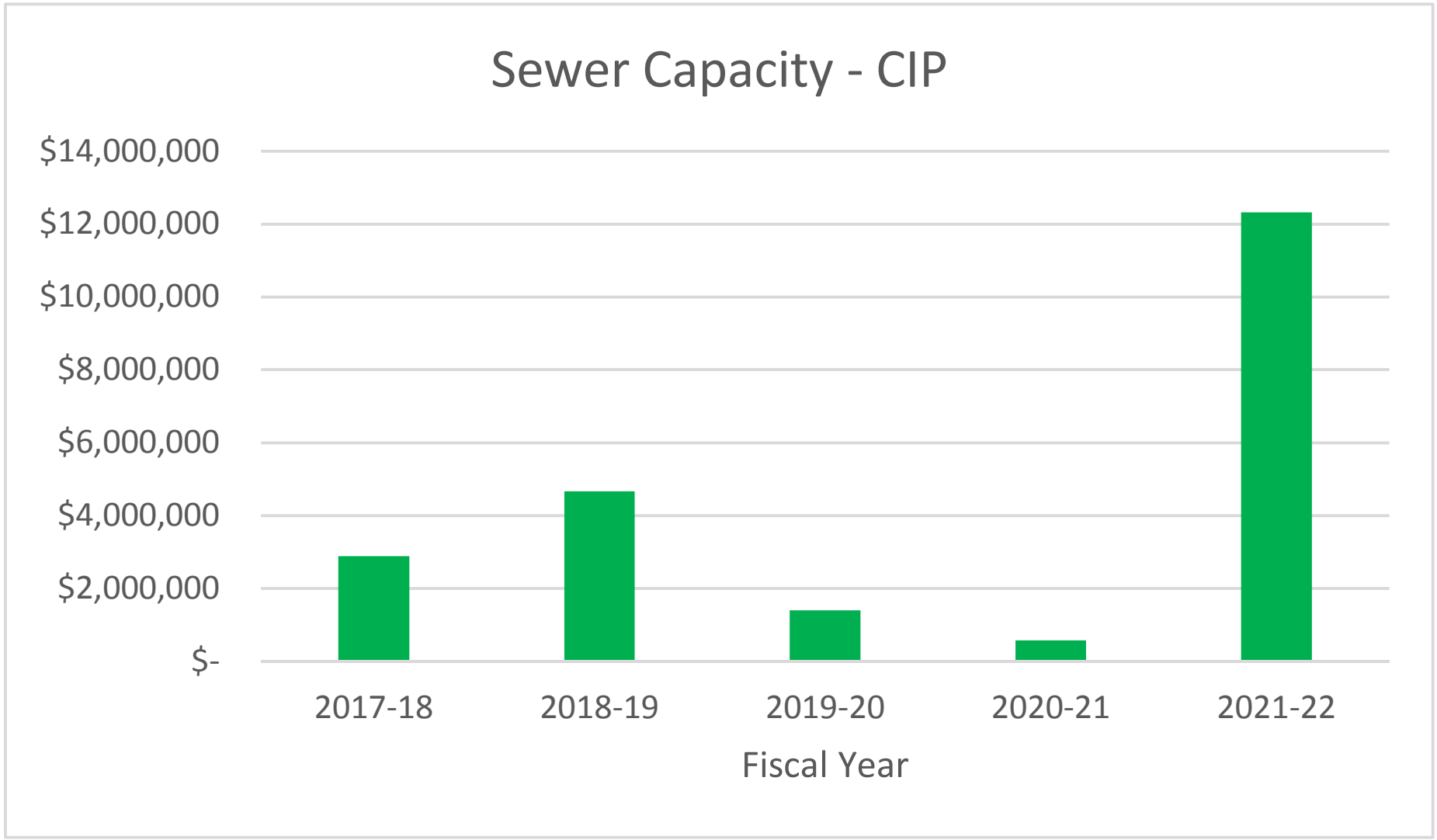

CIP Costs
$20,000,000
$15,000,000
$10,000,000
$5,000,000
$-
2017-18
2018-19
2019-20
2020-21
2021-22
Fiscal Year
Water
Sewer


Water Replacement - CIP
$4,500,000
$4,000,000
$3,500,000
$3,000,000
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$-
2017-18
2018-19
2019-20
2020-21
2021-22
Fiscal Year


Water Capacity - CIP
$4,500,000
$4,000,000
$3,500,000
$3,000,000
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$-
2017-18
2018-19
2019-20
2020-21
2021-22
Fiscal Year


Sewer Replacement - CIP
$10,000,000
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$0
2017-18
2018-19
2019-20
2020-21
2021-22
Fiscal Year


Sewer Replacement - CIP Less EWA
$10,000,000
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$0
2017-18
2018-19
2019-20
2020-21
2021-22
Fiscal Year


Sewer Capacity - CIP
$14,000,000
$12,000,000
$10,000,000
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$-
2017-18
2018-19
2019-20
2020-21
2021-22
Fiscal Year

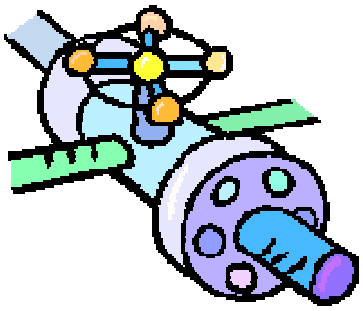
VALLECITOS WATER DISTRICT

Draft Comprehensive Project List

Page Number	Project Number	Project Title	Funding Source	Previous Budget & Amendments	Estimated Amt Expended @ 6/30/17	Fiscal Year 2017-18 Carryforward	Fiscal Year 2017-18 New Request	Project Total	Spending by Fiscal Year 2017-18	2018-19	2019-20	2020-21	2021-22	2022 to 2027	Page Number
Carryover Projects															
36	90001	Encina Parallel Land Outfall	220	$ 28,150,000	$ 140,000	$ 28,010,000	$ 2,850,000	$ 31,000,000	$ 80,000	$ 150,000	$ 500,000	$ 500,000	$ 11,900,000	$ 17,730,000	36
37	71004	San Marcos Interceptor	210 & 220	19,700,000	13,600,000	6,100,000	-	19,700,000	1,600,000	4,500,000	-	-	-	-	37
38	2013100001	Coronado Hills Tank #2	120	6,000,000	-	6,000,000	-	6,000,000	-	-	-	-	-	6,000,000	38
39	2016100003	Montiel Gravity Outfall	210 & 220	1,750,000	145,000	1,605,000	2,975,000	4,725,000	380,000	2,560,000	1,640,000	-	-	-	39
40	2016100002	Chlorine Contact Tank Expansion	220	1,950,000	160,000	1,790,000	2,865,000	4,815,000	1,000	1,000	1,000	1,000	1,000	4,650,000	40
41	71084	Meadowlark Tank No. 3	110 & 120	4,552,000	500,000	4,052,000	-	4,552,000	-	3,052,000	1,000,000	-	-	-	41
42	71219	Mountain Belle Pump Station	120	3,860,000	100,000	3,760,000	-	3,860,000	-	-	-	-	-	3,760,000	42
43	90003	Rock Springs Sewer Replacement	210 & 220	2,460,000	525,000	1,935,000	705,000	3,165,000	2,640,000	-	-	-	-	-	43
44	2017100002	MRF: On-site Generation of Sodium Hypochlorite	210	2,000,000	-	2,000,000	-	2,000,000	-	300,000	1,700,000	-	-	-	44
45	2017100001	Encina Wastewater Authority FY 16/17	210	2,869,000	1,200,000	1,669,000	(1,219,000)	1,650,000	450,000	-	-	-	-	-	45
46	2012100002	Richland Invert Replacement	210	1,135,000	13,000	1,122,000	350,000	1,485,000	12,000	300,000	1,160,000	-	-	-	46
47	71177	Land Outfall Clearing & Access Road	210	945,000	350,000	595,000	205,000	1,150,000	800,000	-	-	-	-	-	47
48	2014100003	Water and Sewer Master Plan	110 & 210	1,050,000	950,000	100,000	-	1,050,000	100,000	-	-	-	-	-	48
49	80001	Old Questhaven Sewer Replacement	210 & 220	835,000	1,000	834,000	-	835,000	-	-	-	-	-	834,000	49
50	90007	City of San Marcos Joint Projects	110 & 210	670,000	90,000	580,000	80,000	750,000	650,000	-	10,000	-	-	-	50
51	2015100002	Audiovisual Upgrade	110 & 210	500,000	500,000	-	250,000	750,000	250,000	-	-	-	-	-	50
52	2016100005	Expansion of the Men's Locker Room in Building B	110 & 210	575,000	140,000	435,000	135,000	710,000	570,000	-	-	-	-	-	52
53	2016100004	District-wide Valve Replacement Program	110	700,000	350,000	350,000	-	700,000	175,000	175,000	-	-	-	-	53
54	2013100006	High Point Pipeline	120	700,000	-	700,000	-	700,000	-	700,000	-	-	-	-	54
55	2014100002	N W Lake San Marcos Sewer Replacement & Relining Project	210	605,000	2,000	603,000	-	605,000	78,000	525,000	-	-	-	-	55
56	2014100004	Asset Management Replacement Schedule	110 & 210	600,000	-	600,000	-	600,000	200,000	200,000	200,000	-	-	-	56
57	71126	Vulnerability Assessment Improvements	110 & 210	447,700	336,700	111,000	-	447,700	111,000	-	-	-	-	-	57
58	2014100008	North Vista Pressure Reducing Station Upgrade	110	242,000	60,000	182,000	123,000	365,000	305,000	-	-	-	-	-	58
59	2017100004	Lift Station 1 Wet Well Room Repairs	210	295,000	240,000	55,000	-	295,000	55,000	-	-	-	-	-	59
60	2016100007	Rock Springs Valve Replacement	110	250,000	-	250,000	15,000	265,000	15,000	220,000	30,000	-	-	-	60
61	2014100007	South Vista Pressure Reducing Station Upgrade	110	234,000	60,000	174,000	21,000	255,000	195,000	-	-	-	-	-	61
62	2017100005	Fire Services - Backflow Preventer Upgrades	110	250,000	50,000	200,000	-	250,000	50,000	50,000	50,000	50,000	-	-	62
63	2016100014	Via Vera Cruz Tank Hill Stabilization	110	135,000	8,000	127,000	10,000	145,000	137,000	-	-	-	-	-	63
64	2016100011	Fulton Road and NCTD Sewer Line Rehabilitation	210	143,000	30,000	113,000	-	143,000	113,000	-	-	-	-	-	64
65	2016100008	Palos Vista Pump Station - Motor Replacement	110	118,000	54,000	64,000	-	118,000	32,000	32,000	-	-	-	-	65
66	2017100009	Building B Laminate Floor Replacement	110 & 210	40,000	-	40,000	-	40,000	40,000	-	-	-	-	-	66
67	2017100011	Lake San Marcos Lift Station - Motor Replacement	210	36,000	18,000	18,000	-	36,000	18,000	-	-	-	-	-	67
68	2017100016	HVAC Pump and Motor Replacement	110 & 210	20,000	-	20,000	-	20,000	20,000	-	-	-	-	-	68
				$ 83,816,700	***$ 19,622,700***	***$ 64,194,000***	***$ 9,365,000***	***$ 93,181,700***	***$ 9,077,000***	***$ 12,765,000***	***$ 6,291,000***	***$ 551,000***	***$ 11,901,000***	***$ 32,974,000***	
New Projects															
69	2018100001	Encina Wastewater Authority Five Year Plan	210	-	-	-	19,293,000	19,293,000	3,265,000	4,713,000	4,805,000	3,401,000	3,109,000	-	69
70	2018100002	Elser Lane Water Line Improvements	110	-	-	-	1,765,000	1,765,000	15,000	65,000	410,000	1,275,000	-	-	70
71	2018100003	Schoolhouse Tank Refurbishment	110	-	-	-	675,000	675,000	675,000	-	-	-	-	-	71
72	2018100004	Las Posas 10-inch Water Main Replacement	110	-	-	-	580,000	580,000	15,000	565,000	-	-	-	-	72
73	2018100005	Stargaze Court Water Line Replacement	110	-	-	-	400,000	400,000	400,000	-	-	-	-	-	73
74	2018100006	Palos Vista Pump Station – Generator	120	-	-	-	325,000	325,000	325,000	-	-	-	-	-	74
75	2018100007	Solar Panel Invertor Replacement	110 & 210	-	-	-	295,000	295,000	295,000	-	-	-	-	-	75
76	2018100008	Laurels Sewer Lining	210	-	-	-	210,000	210,000	210,000	-	-	-	-	-	76
77	2018100009	MRF - Replace the Influent Pumps & Motors	210	-	-	-	195,000	195,000	65,000	65,000	65,000	-	-	-	77
78	2018100010	Nursery Valve Relocation	210	-	-	-	190,000	190,000	190,000	-	-	-	-	-	78
79	2018100011	MRF - Tertiary Influent Chamber Repairs	250	-	-	-	115,000	115,000	115,000	-	-	-	-	-	79
80	2018100012	Sewer Replacement and I&I Repairs	210	-	-	-	100,000	100,000	100,000	-	-	-	-	-	80
81	2018100013	South Lake - Facility Upgrades	110	-	-	-	95,000	95,000	95,000	-	-	-	-	-	81
82	2018100014	Replace Roofs on Equipment Storages	110 & 210	-	-	-	77,000	77,000	77,000	-	-	-	-	-	82
83	2018100015	Coronado Hills Chlorine Injection System	110	-	-	-	65,000	65,000	65,000	-	-	-	-	-	83
84	2018100016	Building A Kitchens	110	-	-	-	65,000	65,000	65,000	-	-	-	-	-	84
85	2018100017	Refurbish Pumps at North Twin Oaks Pump Station	110	-	-	-	63,000	63,000	63,000	-	-	-	-	-	85
86	2018100018	Wulff Pump Station Pumps & Motors	110	-	-	-	60,000	60,000	60,000	-	-	-	-	-	86
87	2018100019	South Lake Pump Station Valves	110	-	-	-	45,000	45,000	45,000	-	-	-	-	-	87
88	2018100020	Solar Panels at Poinsettia Odor Control Injection	220	-	-	-	35,000	35,000	35,000	-	-	-	-	-	88
89	2018100021	Admin Emergency Generator - Auto Transfer Switch	110 & 210	-	-	-	30,000	30,000	30,000	-	-	-	-	-	89
90	2018100022	Gates for Twin Oaks Reservoir Access Road	120	-	-	-	25,000	25,000	25,000	-	-	-	-	-	90
91	2018100023	Palomar Tank - Valve Replacement	110	-	-	-	25,000	25,000	25,000	-	-	-	-	-	91
92	2018100024	Mountain Belle Tank - Valve Replacement	110	-	-	-	20,000	20,000	20,000	-	-	-	-	-	92
93	2018100025	Office Wall for Senior Construction Workers	110 & 210	-	-	-	17,000	17,000	17,000	-	-	-	-	-	93
94	2018100026	Office Wall for Applications Specialist Staff	110 & 210	-	-	-	17,000	17,000	17,000	-	-	-	-	-	94
95	TBA	Future Projects				-	22,853,000	22,853,000	-	1,810,000	1,190,000	1,363,000	875,000	17,615,000	95
				$ -	***$ -***	***$ -***	***$ 47,635,000***	***$ 47,635,000***	***$ 6,309,000***	***$ 7,218,000***	***$ 6,470,000***	***$ 6,039,000***	***$ 3,984,000***	***$ 17,615,000***	
				$ 83,816,700	***$ 19,622,700***	***$ 64,194,000***	***$ 57,000,000***	***$ 140,816,700***	***$ 15,386,000***	***$ 19,983,000***	***$ 12,761,000***	***$ 6,590,000***	***$ 15,885,000***	***$ 50,589,000***	
						$121,194,000									

Capital Improvement Program
Encina Parallel Land Outfall

Description: This project calls for the installation of approximately 43,500 feet of new outfall pipeline varying between 18 and 30 inches in diameter. The pipeline will parallel the existing sewer interceptor from Lift Station No. 1 to the Encina Water Pollution Control Facility



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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$140,000	$80,000	$100,000				$320,000
Design			$50,000	$500,000	$500,000	$1,900,000	$2,950,000
Construction						$27,730,000	$27,730,000
Total	$140,000	$80,000	$150,000	$500,000	$500,000	$29,630,000	**$31,000,000**

FY 2017/18 Budget Request - $2,850,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2008	Jan 2009	Dec 2018	Jan 2019	Jun 2021	Jul 2021	Jun 2025	Jun 2025

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 $77,000 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 $400,000. 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$800,000	$130,000					$930,000
Design	$2,600,000	$270,000					$2,870,000
Construction	$10,200,000	$1,200,000	$4,500,000				$15,900,000
Total	$13,600,000	$1,600,000	$4,500,000	$0	$0	$0	**$19,700,000**

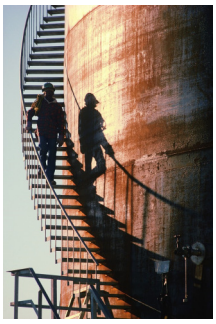
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 1996	Jul 1996	Jun 2007	Jul 1998	Apr 2019	May 2019	Jan 2020	Jan 2019

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & 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**

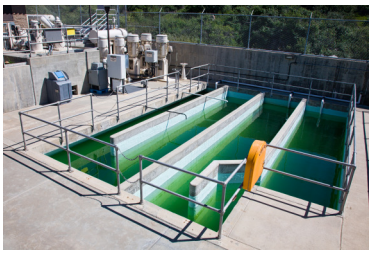
FY 2017/18 Budget Request - $0

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
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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$160,000	$1,000	$1,000	$1,000	$1,000	$1,000	$165,000
Design						$350,000	$350,000
Construction						$4,300,000	$4,300,000
Total	$160,000	$1,000	$1,000	$1,000	$1,000	$4,651,000	**$4,815,000**

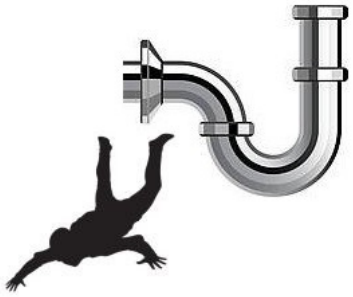
FY 2017/18 Budget Request - $2,865,000

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
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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$145,000	$260,000	$20,000				$425,000
Design		$120,000	$100,000				$220,000
Construction			$2,440,000	$1,640,000			$4,080,000
Total	$145,000	$380,000	$2,560,000	$1,640,000	$0	$0	**$4,725,000**

FY 2017/18 Budget Request - $2,975,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Feb 2016	Feb 2018	Mar 2018	Nov 2018	Dec 2018	Nov 2019	Nov 2019

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. The 1.25 million gallon tank will be demolished and replaced by a new 2.8 million gallon tank. As part of this project, grading for a future 2.8 million gallon Meadowlark Tank No. 4 will also occur. Site improvements include grading and clearing, landscaping, and installation of new 20" and 16" inlet/outlet piping.

Project Manager: Jason Hubbard

Department: Engineering

Project: 71084

Work Order: 71084

Funding Source: 35% Fund 110 – Water Replacement
65% Fund 120 – Water Capacity

Comments: The site was master planned during the 76-1 Assessment District to accommodate three tanks total. The final tank is not expected to be needed until 2021. At build-out, the Meadowlark Tanks will provide a total storage capacity of 8.35 million gallons.

Operations Impact: The project will increase capacity at the site by 1.55 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$123,000						$123,000
Design	$377,000		$41,000				$418,000
Construction			$3,011,000	$1,000,000			$4,011,000
Total	$500,000	$0	$3,052,000	$1,000,000	$0	$0	**$4,552,000**

FY 2017/18 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	Jun 2013	Nov 2018	Sep 2019	Sep 2019

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & 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 2017/18 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	Apr 2022	May 2022	May 2023	May 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$50,000						$50,000
Design	$475,000						$475,000
Construction		$2,640,000					$2,640,000
Total	$525,000	$2,640,000	$0	$0	$0	$0	**$3,165,000**

FY 2017/18 Budget Request - $705,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2008	Jul 2008	Jan 2010	Feb 2010	Jul 2017	Aug 2017	Feb 2018	Feb 2018

Capital Improvement Program
MRF: On-site Generation of Sodium Hypochlorite

Description: Replace the use of chlorine gas at the Meadowlark Water Reclamation Facility with onsite generation of sodium hypochlorite (bleach).

Project Manager: Jason Hubbard **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 onsite generation of sodium hypochlorite removes the acute hazard of chlorine gas and replaces it with a mild form of bleach (0.8%) that removes the District's requirement to maintain the extensive safety programs for that site. Use of the bleach will not require a hazardous materials response 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. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning			$50,000				$50,000
Design			$200,000				$200,000
Construction			$50,000	$1,700,000			$1,750,000
Total	$0	$0	$300,000	$1,700,000	$0	$0	**$2,000,000**

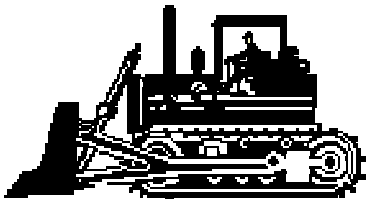
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2018	Sep 2018	Oct 2018	May 2019	Jun 2019	Nov 2019	Aug 2019

Capital Improvement Program
Encina Wastewater Authority FY 16/17

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: Tom Scaglione **Department:** General Manager

Project: 2017100001 **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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction	$1,200,000	$450,000					$1,650,000
Total	$1,200,000	$450,000	$0	$0	$0	$0	**$1,650,000**

FY 2017/18 Budget Request - ($1,219,000)

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2009							Jun 2017

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$13,000	$12,000					$25,000
Design			$150,000				$150,000
Construction			$150,000	$1,160,000			$1,310,000
Total	$13,000	$12,000	$300,000	$1,160,000	$0	$0	**$1,485,000**

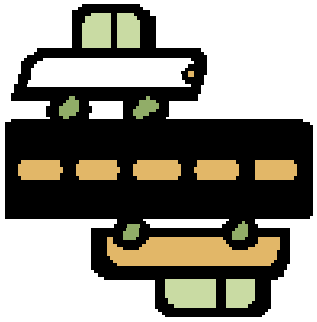
FY 2017/18 Budget Request - $350,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2011	Apr 2012	Jul 2018	Jul 2018	Apr 2019	May 2019	Jan 2020	Jan 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 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$250,000	$600,000					$850,000
Design	$40,000						$40,000
Construction	$60,000	$200,000					$260,000
Total	$350,000	$800,000	$0	$0	$0	$0	**$1,150,000**

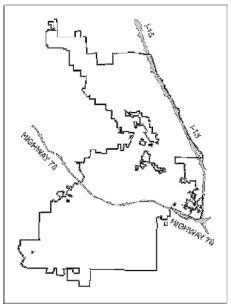
FY 2017/18 Budget Request - $205,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2006	Jul 2006	Jun 2017	Feb 2008	Jun 2017	Jul 2008	Jun 2018	Jun 2018

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 110 – Water Replacement
50% Fund 210 – Sewer Replacement

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$950,000	$100,000					$1,050,000
Design							
Construction							
Total	$950,000	$100,000	$0	$0	$0	$0	**$1,050,000**

FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2013	Jul 2013	Dec 2017					Dec 2017

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & 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**

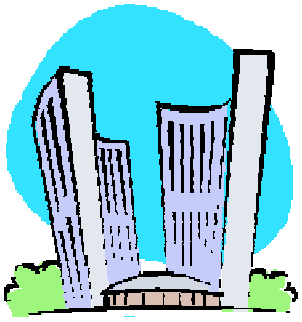
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2007	Jul 2007	Aug 2021	Sep 2021	Dec 2022	Jan 2023	Apr 2024	Apr 2024

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:
Rancho Santa Fe Rd Resurfacing	$85,000	Water/Sewer 55% / 45%
Discovery St Improvements	$550,000	Water/Sewer 90% / 10%
Misc. Relocations/Adjustments	$70,000	Water/Sewer 75% / 25%
Armorlite Dr	$35,000	Water/Sewer 80% / 20%
Discovery/Bent/Via Vera Cruz	$10,000	Water/Sewer 100%
Total	$750,000	

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

Operations Impact: Normal maintenance for infrastructure.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction	$90,000	$650,000		$10,000			$750,000
Total	$90,000	$650,000	$0	$10,000	$0	$0	**$750,000**

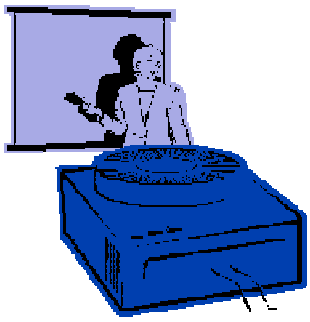
FY 2017/18 Budget Request - $80,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
						Jan 2020	Jan 2020

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: Karla Fisher

Department: Information Technology

Project: 2015100002

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.

Operations Impact: Routine Maintenance

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design	$45,000						$45,000
Construction	$455,000	$250,000					$705,000
Total	$500,000	$250,000	$0	$0	$0	$0	**$750,000**

FY 2017/18 Budget Request - $250,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
	Jul 2014	Jun 2017					Jun 2017

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 **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 double the size of the locker room. The number of lockers, showers, sinks and urinals will also be doubled. 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design	$140,000						$140,000
Construction		$570,000					$570,000
Total	$140,000	$570,000	$0	$0	$0	$0	**$710,000**

FY 2017/18 Budget Request - $135,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015			Aug 2016	Apr 2017	Jul 2017	Jan 2018	Jan 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction	$350,000	$175,000	$175,000				$700,000
Total	$350,000	$175,000	$175,000	$0	$0	$0	**$700,000**

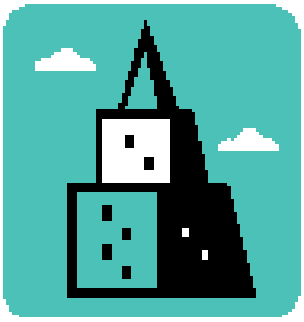
FY 2017/18 Budget Request - $0

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction			$700,000				$700,000
Total	$0	$0	$700,000	$0	$0	$0	**$700,000**

FY 2017/18 Budget Request - $0

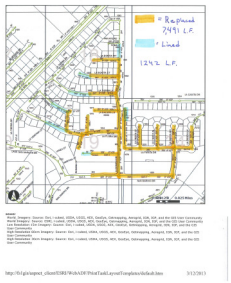
Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2012					Oct 2018	Jun 2019	Jun 2018

Capital Improvement Program

Northwest Lake San Marcos Sewer Replacement and Relining Project

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$2,000	$3,000					$5,000
Design		$75,000	$30,000				$105,000
Construction			$495,000				$495,000
Total	$2,000	$78,000	$525,000	$0	$0	$0	**$605,000**

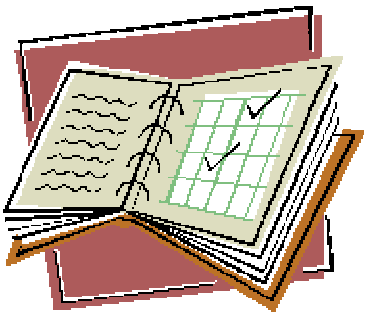
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2013	Jul 2016	Dec 2017	Jan 2018	Jan 2019	Feb 2019	Aug 2019	Feb 2018

Capital Improvement Program
Asset Management Replacement Schedule

Description: Create a prioritized Asset/Infrastructure replacement schedule 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.

Operations Impact:

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning		$200,000	$200,000	$200,000			$600,000
Design							
Construction							
Total	$0	$200,000	$200,000	$200,000	$0	$0	**$600,000**

FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2013	Jul 2017	Jun 2020					Jun 2020

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction	$336,700	$111,000					$447,700
Total	$336,700	$111,000	$0	$0	$0	$0	**$447,700**

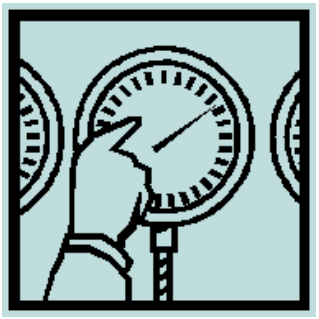
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2004							

Capital Improvement Program
North Vista Pressure Reducing Station Upgrade

Description: Upgrade the existing North Vista Pressure Reducing Station with electrical power and bring it up to current standards.



Project Manager: Jason Hubbard **Department:** Water Operations

Project: 2014100008 **Funding Source:** 100% Fund 110 – Water Replacement

Work Order: 133165

Comments: North Vista Pressure Reducing Station is one of the oldest in the District. VWD does not have a SCADA system at this site due to lack of electrical power. The station is one of the few remaining sites in the District without SCADA monitoring. The funds requested are for design and construction to upgrade the pressure reducing station to meet all current standards, including electrical power and SCADA monitoring equipment.

Operations Impact: Routine Maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design	$60,000	$2,000					$62,000
Construction		$303,000					$303,000
Total	$60,000	$305,000	$0	$0	$0	$0	**$365,000**

FY 2017/18 Budget Request - $123,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2013			Jul 2013	Aug 2017	Sep 2017	Nov 2017	Nov 2017

Capital Improvement Program
Lift Station 1 Wet Well Room Repairs

Description: The room above the Lift Station No.1 wet well is in need of repairs due to the corrosion from the concentration of excessive hydrogen sulfide gases.

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

Project: 2017100004 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: To control noxious odors at the lift station, the main entrance to the wet well room was enclosed and carbon scrubbers added. The beneficial reduction in odors has had the resultant side effect of increased corrosion to all the metal, concrete, and masonry block surfaces within the room, including the ceiling, floors, walls, door jambs, and various fixtures due to the higher concentration of hydrogen sulfide gases. A combination of repairs, including polyurethane and epoxy coatings to the various surfaces and reinforcement of the ceiling, will prevent further deterioration.

Operations Impact: Reduced risk of the loss of structural integrity for the building and increased safety. Reduced maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design	$40,000						$40,000
Construction	$200,000	$55,000					$255,000
Total	$240,000	$55,000	$0	$0	$0	$0	**$295,000**

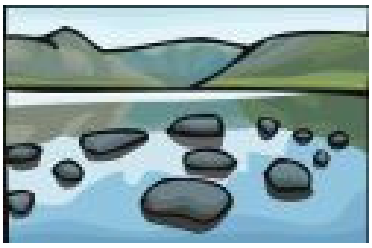
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2016	Jul 2016	Jul 2016	Apr 2017	May 2017	Jul 2017	Jul 2017

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning		$15,000					$15,000
Design			$60,000				$60,000
Construction			$160,000	$30,000			$190,000
Total	$0	$15,000	$220,000	$30,000	$0	$0	**$265,000**

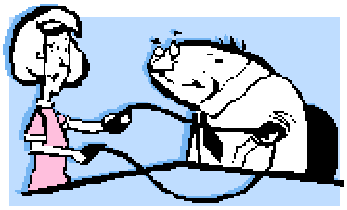
FY 2017/18 Budget Request - $15,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Apr 2018	Jun 2018	Jul 2018	Mar 2019	Apr 2019	Aug 2019	Aug 2019

Capital Improvement Program
South Vista Pressure Reducing Station Upgrade

Description: Replace the existing South Vista Pressure Reducing Station with a larger vault and bring it up to current standards.



Project Manager: Jason Hubbard **Department:** Water Operations

Project: 2014100007 **Funding Source:** 100% Fund 110 – Water Replacement

Work Order: 133166

Comments: South Vista Pressure Reducing Station is one of the oldest in the District. We do not have a SCADA system at this site due to lack of electrical power. The pressure station vault is extremely small with minimal working space. The station is one of the few remaining sites in the District without SCADA monitoring. The funds requested are for design and construction to replace the pressure reducing station with a new vault that meets all current standards, including electrical power and SCADA monitoring equipment.

Operations Impact: Routine Maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design	$60,000	$3,000					$63,000
Construction		$192,000					$192,000
Total	$60,000	$195,000	$0	$0	$0	$0	**$255,000**

FY 2017/18 Budget Request - $21,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2011			Jul 2013	Aug 2017	Sep 2017	Nov 2017	Nov 2017

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction	$50,000	$50,000	$50,000	$50,000	$50,000		$250,000
Total	$50,000	$50,000	$50,000	$50,000	$50,000	$0	**$250,000**

FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design	$8,000	$10,000					$18,000
Construction		$127,000					$127,000
Total	$8,000	$137,000	$0	$0	$0	$0	**$145,000**

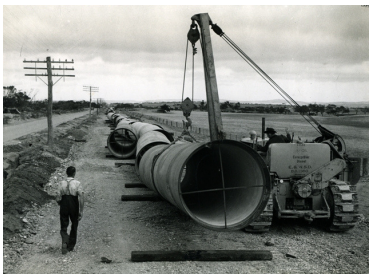
FY 2017/18 Budget Request - $10,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jan 2016	Mar 2016	Apr 2016	Mar 2018	Apr 2018	Jun 2018	Jun 2018

Capital Improvement Program
Fulton Road and NCTD Sewer Line Rehabilitation

Description: Two sewer line sections need rehabilitation and/or replacement to lengthen the life of the aging main line.



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

Project: 2016100011 **Funding Source:** 100% Fund 210 – Sewer Replacement

Work Order: 161280

Comments: Currently 2 sections, (1) a 600 foot section of 8 inch VCP located approximately 600 feet east on Fulton Road from the intersection with Richland Road, and (2) a 100 foot section of 8 inch DIP under North County Transit District's (NCTD) railroad tracks located 550 feet east of the intersection of the tracks with Woodland Parkway are in need of rehabilitation and/or replacement to restore pipe integrity. Due to extensive longitudinal cracking, a portion of the pipeline on Fulton Road will need to be replaced, however a majority can be rehabilitated using a Cured in Place Pipe (CIPP). Due to the location of the pipeline across the NCTD railroad, rehabilitation of the line will also use the CIPP method. These pipe sections have become compromised either due to age, material type, or ground settlement requiring rehabilitation/replacement. Significant costs will be accrued upon line failure if the sections of pipe are not rehabilitated or replaced.

Operations Impact: Restored or replace structural integrity and increased service life of sewer line sections.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning	$5,000						$5,000
Design	$25,000	$15,000					$40,000
Construction		$98,000					$98,000
Total	$30,000	$113,000	$0	$0	$0	$0	**$143,000**

FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2016	Mar 2017	Apr 2017	Jul 2017	Aug 2017	Dec 2018	Dec 2018

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction	$54,000	$32,000	$32,000				$118,000
Total	$54,000	$32,000	$32,000	$0	$0	$0	**$118,000**

FY 2017/18 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
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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$40,000					$40,000
Total	$0	$40,000	$0	$0	$0	$0	**$40,000**

FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016							Jun 2017

Capital Improvement Program
Lake San Marcos Lift Station - Motor Replacement

Description: Replace outdated motors with new efficient motors.

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

Project: 2017100011 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: Motors at this site were installed almost nineteen years ago and have exceeded their useful life. Although they have been repaired or reconditioned over the years, it is cost effective at this time to purchase new Premium Efficiency motors to save on energy costs and increase reliability of operation.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction	$18,000	$18,000					$36,000
Total	$18,000	$18,000	$0	$0	$0	$0	**$36,000**

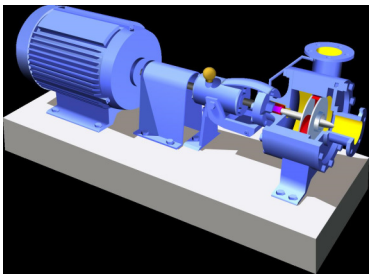
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$20,000					$20,000
Total	$0	$20,000	$0	$0	$0	$0	**$20,000**

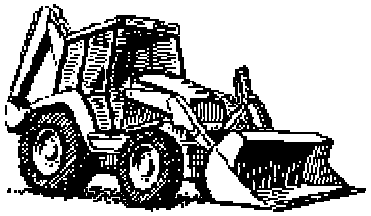
FY 2017/18 Budget Request - $0

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016							Jun 2017

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: Tom Scaglione **Department:** General Manager

Project: 2018100001 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: These miscellaneous capital projects are budgeted each year

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

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$3,265,000	$4,713,000	$4,805,000	$3,401,000	$3,109,000	$19,293,000
Total	$0	$3,265,000	$4,713,000	$4,805,000	$3,401,000	$3,109,000	**$19,293,000**

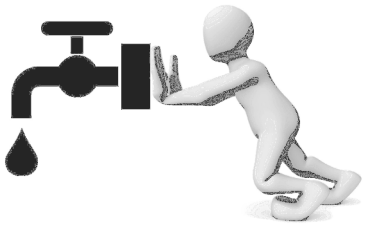
FY 2017/18 Budget Request - $19,293,000

Estimated Project Timeline

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

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & 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 2017/18 Budget Request - $1,765,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2017	May 2018	Sep 2018	Oct 2018	Oct 2019	Nov 2018	Jun 2019	Jun 2019

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

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. Routine maintenance

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning		$5,000					$5,000
Design		$40,000					$40,000
Construction		$630,000					$630,000
Total	$0	$675,000	$0	$0	$0	$0	**$675,000**

FY 2017/18 Budget Request - $675,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2017	Jul 2017	Jul 2017	Aug 2017	Oct 2017	Jan 2018	May 2018	May 2018

Capital Improvement Program
Las Posas 10-inch Water Main Replacement

Description: Replace 495 feet of existing 10" ACP pipe along Las Posas Road from Linda Vista Drive to Stone Drive.

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

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

Comments: The 10" ACP water main along Las Posas Road from Linda Vista Drive to 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 crossing underneath an existing double reinforced box culvert with a new steel casing.

Operations Impact: Prevent future breaks. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning		$15,000					$15,000
Design			$25,000				$25,000
Construction			$540,000				$540,000
Total	$0	$15,000	$565,000	$0	$0	$0	**$580,000**

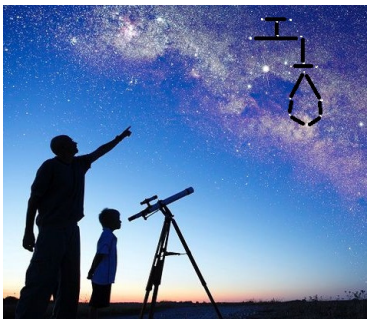
FY 2017/18 Budget Request - $580,000

Estimated Project Timeline

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

Capital Improvement Program
Stargaze Court Water Line Replacement

Description: Replace approximately 729 LF of existing 8" water line in Stargaze Court. The pipeline has failed 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

Comments: This project will prevent the existing pipeline from further failure due to corrosion by replacing the ductile iron pipe with a non-corrosive pipe material.

Operations Impact: The existing waterline is corroding and subject to replacement. Operations and maintenance repair costs will be minimized at this location.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	Total
Planning		$20,000					$20,000
Design		$60,000					$60,000
Construction		$320,000					$320,000
Total	$0	$400,000	$0	$0	$0	$0	**$400,000**

FY 2017/18 Budget Request - $400,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2017	Jul 2017	Aug 2017	Jul 2017	Sep 2017	Nov 2017	Feb 2018	Feb 2018

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 120 – Water Capacity

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 17/18	FY 19/20	FY 20/21	FY 21/22	Thereafter	Total
Planning		$3,000					$3,000
Design		$27,000					$27,000
Construction		$295,000					$295,000
Total	$0	$325,000	$0	$0	$0	$0	**$325,000**

FY 2017/18 Budget Request - $325,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2017	Aug 2017	Sep 2017	Jan 2018	Feb 2018	May 2018	May 2018

Capital Improvement Program
Solar Panel Invertor Replacement

Description: Replace two existing invertors with new Solectria invertors 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 invertors 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 invertors 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning		$10,000					$10,000
Design		$20,000					$20,000
Construction		$265,000					$265,000
Total	$0	$295,000	$0	$0	$0	$0	**$295,000**

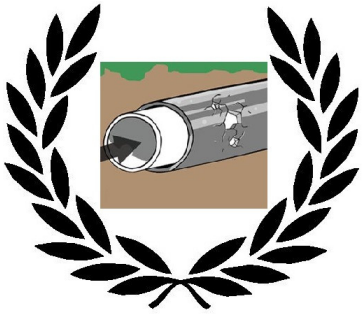
FY 2017/18 Budget Request - $295,000

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	Jun 2018	Jun 2018

Capital Improvement Program
Laurels Sewer Lining

Description: Clean and repair of approximately 1,130 feet of 8" sewer lines in Acacia Street, Sequoia Street and adjacent District easements.



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

Project: 2018100008 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: The 8" sewer line in Acacia Street, Sequoia Street and in adjacent District easements are in need of cleaning and repairs. Cleaning, CIPP liner, and point repairs are necessary.

Operations Impact:

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning		$5,000					$5,000
Design		$15,000					$15,000
Construction		$190,000					$190,000
Total	$0	$210,000	$0	$0	$0	$0	**$210,000**

FY 2017/18 Budget Request - $210,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jun 2017	Jul 2017	Sep 2017	Oct 2017	Feb 2018	Mar 2018	May 2018	May 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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$65,000	$65,000	$65,000			$195,000
Total	$0	$65,000	$65,000	$65,000	$0	$0	**$195,000**

FY 2017/18 Budget Request - $195,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Nursery Valve Relocation

Description: Relocate the 16" and 18" control valves for the RSF-MRF Conveyance and Emergency Bypass sewer line out of Rancho Santa Fe Road.

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

Project: 2018100010 **Funding Source:** 100% Fund 210 – Sewer Replacement

Comments: Control valves in Rancho Santa Fe Road, south of Via Cancion, located at the junction between the 18" RSF-MRF Conveyance sewer pipeline and the 16" Emergency Bypass sewer pipeline require full lane shutdown of southbound traffic on Rancho Santa Fe Road. Additionally, the 18" gate valve is no longer functioning. Project will relocate the 18" gate valve to the southside of Redwing Street and the 16" gate valve to the District's easement off Brighton Glen Road. Double sweep cleanouts will be installed upstream of the 16" gate valve to assist in routine cleaning and maintenance.

Operations Impact: Reduce traffic control costs and improve safety. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	Total
Planning							
Design		$15,000					$15,000
Construction		$175,000					$175,000
Total	$0	$190,000	$0	$0	$0	$0	**$190,000**

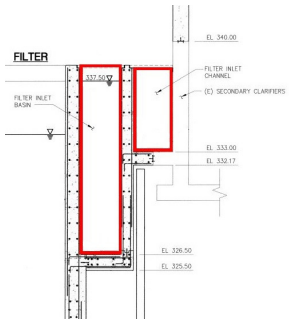
FY 2017/18 Budget Request - $190,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2017			Jul 2017	Sep 2017	Oct 2017	Dec 2017	Dec 2017

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.



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. Using bypass methods, the chamber's protective lining will need to be repaired, including any support brackets and piping, during the low flow season.

Operations Impact: Repairs to the coating will maintain the integrity of the concrete structure.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$115,000					$115,000
Total	$0	$115,000	$0	$0	$0	$0	**$115,000**

FY 2017/18 Budget Request - $115,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2017	Aug 2017	Aug 2017	Sep 2017	Nov 2017	Dec 2017	Jan 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: 2018100012 **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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$100,000					$100,000
Total	$0	$100,000	$0	$0	$0	$0	**$100,000**

FY 2017/18 Budget Request - $100,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015							

Capital Improvement Program
South Lake - Facility Upgrades

Description: Upgrade the facilities at South Lake to comply with state regulations.

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

Project: 2018100013 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: South Lake has not been used for potable water storage since 1984, but the pipeline into the lake is still connected to the distribution system. We have been unable to correct this because the sluice gate on the dam has not been operational. The sluice gate was recently replaced and we can now disconnect the lake from the potable distribution system. A section of pipe will be removed just downstream from the dam with new valves and blind flanges installed in case a future connection is desired. A new drain valve will be installed for the lake and the leak pumping system will be relocated above ground. The facility upgrades are necessary to comply with state regulations regarding the operation of South Lake Dam.

Operations Impact: Removal of a potential cross-connection to the distribution system, enhanced operation of the lake, and compliance with state regulations.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$95,000					$95,000
Total	$0	$95,000	$0	$0	$0	$0	**$95,000**

FY 2017/18 Budget Request - $95,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

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 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & 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 2017/18 Budget Request - $77,000

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	Jun 2018	Jun 2018

Capital Improvement Program
Coronado Hills Chlorine Injection System

Description: Installation of a calcium hypochlorite injection system at Coronado Hills Tank for residual maintenance and control of nitrification.

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

Project: 2018100015 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: Coronado Hills 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 weekly 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 pumping 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 17/18	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**

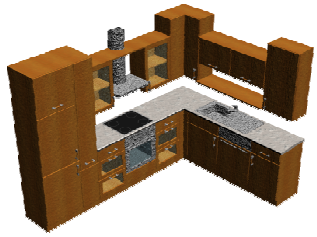
FY 2017/18 Budget Request - $65,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015							

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 17/18	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**

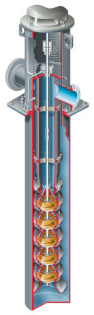
FY 2017/18 Budget Request - $65,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016							Jun 2017

Capital Improvement Program
Refurbish Pumps at North Twin Oaks Pump Station

Description: Refurbish three 4-stage vertical turbine pumps and motors.



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

Project: 2018100017 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: It is industry standard to inspect and refurbish vertical turbine pumps every 7 to 10 years. These pumps have been in service for approximately 10 years. A refurbishment of the pumps and motors will extend the life of the equipment and maintain peak operating efficiency.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$63,000					$63,000
Total	$0	$63,000	$0	$0	$0	$0	**$63,000**

FY 2017/18 Budget Request - $63,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Wulff Pump Station Pumps & Motors

Description: Remove and refurbish all three 5-stage vertical turbine pumps and motors.

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

Project: 2018100018 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: It is industry standard to inspect and refurbish vertical turbine pumps every 7 to 10 years. These pumps have been in service for approximately 8 years. A refurbishment of the pumps and motors will extend the life of the equipment and maintain peak operating efficiency.

Operations Impact: Improved efficiency. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$60,000					$60,000
Total	$0	$60,000	$0	$0	$0	$0	**$60,000**

FY 2017/18 Budget Request - $60,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
South Lake Pump Station Valves

Description: Replace the check valves and plug valves on pump #1 and #2.

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

Project: 2018100019 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The existing check valves are 35 years old and need replacing. The plug valves are the same age and no longer operate in isolating the pumps when maintenance and service is required.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$45,000					$45,000
Total	$0	$45,000	$0	$0	$0	$0	**$45,000**

FY 2017/18 Budget Request - $45,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Solar Panels at Poinsettia Odor Control Injection

Description: Install solar panels at Poinsettia odor control injection station.

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

Project: 2018100020 **Funding Source:** 100% Fund 220 – Sewer Capacity

Comments: The power supplying the station was intended to be temporary 13 years ago while testing the site's effectiveness. A cost effective permanent power source needs to be installed. Connecting to the power utility would be extremely expensive. Installing solar panels severs the District's dependency on the City of Carlsbad's lift station as a power source.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$35,000					$35,000
Total	$0	$35,000	$0	$0	$0	$0	**$35,000**

FY 2017/18 Budget Request - $35,000

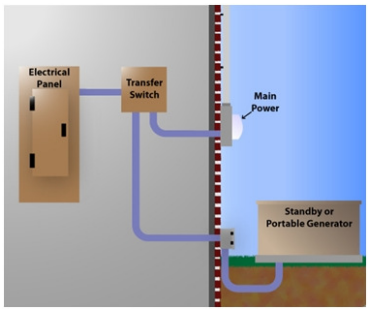
Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program

Admin Emergency Generator - Auto Transfer Switch

Description: Replace auto transfer switch that facilitates emergency power from the standby generator to dedicated emergency circuits within the Administrative facilities/buildings during planned and unplanned power outages.



Project Manager: Robert Salazar

Department: Mechanical/Electrical

Project: 2018100021

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

Comments: The existing auto transfer switch is outdated and no longer supported by the manufacturer. The reliability of the switch is in question as electronic components have failed recently. A new auto transfer switch will ensure the reliability of having emergency power available when required.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$30,000					$30,000
Total	$0	$30,000	$0	$0	$0	$0	**$30,000**

FY 2017/18 Budget Request - $30,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Gates for Twin Oaks Reservoir Access Road

Description: Install solar powered automatic gates on the Twin Oaks Reservoir access road.

Project Manager: Ed Pedrazzi **Department:** Operations and Maintenance

Project: 2018100022 **Funding Source:** 100% Fund 120 – Water Capacity

Comments: The Twin Oaks Reservoir access road currently has a large, pole type gate at each end that is designed for occasional use. District staff and vendors routinely use El Paso Alto Road to access the Twin Oaks Reservoir facility. It was recently discovered that El Paso Alto is not a county owned road and is a private road owned by the surrounding nursery. The new gates will allow staff easy access to the District facilities and keep them and our vendors off of the private road. The gate motors and controls will be solar powered which will save the cost of running power to the two gates. The gates will also have a strobe sensor which will provide the fire department emergency access to our facility.

Operations Impact: Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$25,000					$25,000
Total	$0	$25,000	$0	$0	$0	$0	**$25,000**

FY 2017/18 Budget Request - $25,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Palomar Tank - Valve Replacement

Description: Replacement of a 16" gate valve at Palomar Tank.

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

Project: 2018100023 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The 16" gate valve used to isolate the tank does not operate. We are repairing the asphalt at this site and need to replace the valve before that project begins.

Operations Impact: Ability to isolate the tank. Routine maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning							
Design							
Construction		$25,000					$25,000
Total	$0	$25,000	$0	$0	$0	$0	**$25,000**

FY 2017/18 Budget Request - $25,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Mountain Belle Tank - Valve Replacement

Description: Replacement of two 12" gate valves at Mountain Belle Tank.

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

Project: 2018100024 **Funding Source:** 100% Fund 110 – Water Replacement

Comments: The two 12" butterfly valves used to isolate the tank do not operate. We are repairing the asphalt at this site and need to replace the valves before that project begins. We will replace the two butterfly valves with gate valves which provide better isolation.

Operations Impact: Ability to isolate the tank. Routine maintenance.

Project Spending Plan

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

FY 2017/18 Budget Request - $20,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Office Wall for Senior Construction Workers

Description: Build a wall for the Senior Construction Worker office.

Project Manager: Ed Pedrazzi **Department:** Operations and Maintenance

Project: 2018100025 **Funding Source:** 50% Fund 110 – Water Replacement
50% Fund 210 – Sewer Replacement

Comments: The current office for the two Senior Construction Workers does not have a wall that separates them from the staff traveling through the Operations building. This is very distracting and disruptive when they are trying to complete their daily computer work. This project will provide a wall for the office and create a hallway for other staff to use when accessing the Construction crew room.

Operations Impact: Improved work environment for Senior Construction Workers.

Project Spending Plan

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

FY 2017/18 Budget Request - $17,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

Capital Improvement Program
Office Wall for Application Specialist Staff

Description: Build a wall for the Application Specialist staff

Project Manager: Karla Fisher **Department:** Information Technology

Project: 2018100026 **Funding Source:** 50% Fund 110 – Water Replacement
50% Fund 210 – Sewer Replacement

Comments: The current work area for the two Application Specialists does not have a wall that separates them from the main hallway. These positions work with confidential district, employee and customer data as part of their role supporting the business application infrastructure.

Operations Impact: Application Specialist staff work with confidential district, employee and customer data as part of their role supporting the district's business application software enterprise.

Project Spending Plan

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

FY 2017/18 Budget Request - $17,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	

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 2017-18.

Operations Impact: Normal Maintenance for infrastructure

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning			$460,000	$5,000	$58,000	$460,000	$983,000
Design			$220,000	$170,000	$100,000	$1,315,000	$1,805,000
Construction			$1,130,000	$1,015,000	$1,205,000	$16,715,000	$20,065,000
Total	$0	$0	$1,810,000	$1,190,000	$1,363,000	$18,490,000	**$22,853,000**

FY 2017/18 Budget Request - $22,853,000.00

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
					Jan 2019	Jun 2026	Jun 2026

Capital Improvement Program
El Norte Parkway Water Line Extension

Description: Construct 1 mile of new 18 inch steel waterline along El Norte Parkway between Rees Road and Woodland Parkway.

Project Status: Future

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

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

Comments: The existing configuration of water mains does not allow for a direct connection from the 18" transmission main on El Norte Parkway to the 24" transmission main on Woodland Parkway and the 30" transmission main that connects to it which restricts the ability to move water and take our full flow capacity from our Vallecitos II connection. This project will extend facilities in El Norte parkway and allow for the movement of water from the existing 18" main in Rees Road. This project will also consider a possible future connection to the City of Escondido system, allowing the District to purchase water from their treatment plant.

Operations Impact: Increase water quality, flow capacity, and operation control of the system for this area.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning						$190,000	$190,000
Design						$450,000	$450,000
Construction						$9,890,000	$9,890,000
Total	$0	$0	$0	$0	$0	$10,530,000	**$10,530,000**

FY 2017/18 Budget Request - $10,530,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2022	Jun 2023	Jul 2023	Jun 2025	Jul 2025	Jun 2026	Jun 2026

Capital Improvement Program
Rees Road 18" Water Line Relocation

Description: This project will relocate 2000 feet of an existing 18 inch steel waterline between Rees Road and Bennet Avenue

Project Status: Future

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

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

Comments: The project involves the condition assessment of a section of 18“ CML&C water line from Rees Road to Bennett Ave to evaluate the integrity of the line. This information will be evaluated to schedule the replacement and relocation of this line, incorporating a more appropriate pipe easement than the existing alignment. The existing 18” alignment from Rees Road to Bennett Ave is through front yards, between a home and the home’s detached garage, and is in a neighborhood with limited access in the event of repairs.

Operations Impact: Increase access for repairs. Reduced liability from adjacent property owners.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning			$100,000			$240,000	$340,000
Design						$650,000	$650,000
Construction						$4,790,000	$4,790,000
Total	$0	$0	$100,000	$0	$0	$5,680,000	**$5,780,000**

FY 2017/18 Budget Request - $5,780,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jul 2018	Jun 2019	Jan 2023	Apr 2024	May 2024	Nov 2025	Nov 2025

Capital Improvement Program
Tres-Amigos Water Line Replacement Phase 1

Description: The Tres-Amigos Water Line consists of approximately 19,000 feet of pipelines ranging from 6" to 12" which are failing in various areas and in need of replacement. Phase 1 will replace the northern most portions of the pipeline along Fairview Drive.

Project Status: Future

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

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

Comments: This project will replace the Tres-Amigos pipeline located in the northern part of the District, extending from North Twin Oaks Tank No. 2 off Pleasant Heights Drive to Fairview Drive and Via del Cerro/Carrio Drive. Approximately 50% of the water lines are located within streets with the remaining 50% located within easements on private property. Due to the frequency of repairs, this project will be phased to construct the portion that affects residents along Fairview Drive first. Phase 1 will involve the installation of 4100 feet of new 6" and 8" PVC pipe. The new pipeline alignment will relocate the failing existing pipe out of backyards and into more accessible areas. Phase 1 will also perform a condition assessment on approximately 7500 feet of existing 6", 8", and 10" steel pipe located south of Gopher Canyon Road to Green Hills Way. Recommendations from the condition assessment will be used to develop future CIP projects including additional assessment of the remaining southerly alignment.

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

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning			$340,000				$340,000
Design			$125,000	$150,000			$275,000
Construction				$575,000	$1,205,000		$1,780,000
Total	$0	$0	$465,000	$725,000	$1,205,000	$0	**$2,395,000**

FY 2017/18 Budget Request - $2,395,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2018	Jan 2019	Feb 2019	Apr 2020	May 2020	Dec 2020	Dec 2020

Capital Improvement Program
Camino de Amigos Sewer Replacement

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

Project Status: Future

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

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

Comments: Based on the master plan for phase 3, the 8 inch gravity main along Camino de Amigos from Alga Road south to La Costa Meadows Drive will need to be upsized from 8 inch VCP to 12 inch PVC

Operations Impact: Annual and routine sewer pipline maintenance.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning					$58,000		$58,000
Design					$100,000	$70,000	$170,000
Construction						$1,135,000	$1,135,000
Total	$0	$0	$0	$0	$158,000	$1,205,000	**$1,363,000**

FY 2017/18 Budget Request - $1,363,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jul 2020	Dec 2020	Jan 2021	Sep 2021	Oct 2021	Nov 2022	Nov 2022

Capital Improvement Program
Sage Canyon Tank Refurbishment

Description: Sage Canyon Tank requires interior refurbishment.

Project Status: Future

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

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

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

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

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning			$5,000				$5,000
Design			$45,000				$45,000
Construction			$700,000	$140,000			$840,000
Total	$0	$0	$750,000	$140,000	$0	$0	**$890,000**

FY 2017/18 Budget Request - $890,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2018	Aug 2018	Sep 2018	Jan 2019	Feb 2019	Sep 2019	Sep 2019

Capital Improvement Program
Deer Springs Pump Station Improvements

Description: The pumping capacity of this pump station will be increase from 1,500 gpm to 3,200 gpm by replacing the three 775 gpm pumps with new 1,600 gpm pumps. The additional capacity is needed to meet build out demands for the 1235 and 1568 zones.

Project Status: Future

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

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

Comments: The master plan has identified this as Project PS-3.

Operations Impact: The project will increase pumping capacity to the 1235 and 1568 zones.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning						$5,000	$5,000
Design						$100,000	$100,000
Construction						$450,000	$450,000
Total	$0	$0	$0	$0	$0	$555,000	**$555,000**

FY 2017/18 Budget Request - $555,000

Estimated Project Timeline

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

Capital Improvement Program
Deer Springs Tank No.2

Description: The existing 0.57 MG Deer Springs Tank is nearing the end of its useful life and does not provide adequate storage to meet existing demands of the 1235 Zone, with a deficit of 1.24 MG. Build-out demands for the 1235 Zone will require a storage volume of 3.94. This project will construct a new 1.0 MG tank so that the aging 0.57 MG tank can be removed from service.

Project Status: Future

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

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

Comments: The Master Plan has identified this as Project R-4.

Operations Impact: The project will add 0.43 million gallons of potable water storage to the service system.

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning						$25,000	$25,000
Design						$45,000	$45,000
Construction						$450,000	$450,000
Total	$0	$0	$0	$0	$0	$520,000	**$520,000**

FY 2017/18 Budget Request - $520,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2015	Jul 2021	Jan 2022					

Capital Improvement Program
Coronado Hills Tank Exterior Refurbishment

Description: Coronado Hills Tank requires exterior refurbishment.

Project Status: Future

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

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

Comments: The 2.6 MG tank was inspected in September 2012. Re-coating was recommended in 5-7 years.

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

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning			$5,000				$5,000
Design			$25,000				$25,000
Construction			$280,000				$280,000
Total	$0	$0	$310,000	$0	$0	$0	**$310,000**

FY 2017/18 Budget Request - $310,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2018	Jul 2018	Aug 2018	Dec 2018	Jan 2019	Apr 2019	Apr 2019

Capital Improvement Program
Coggan Pump Station - Generator

Description: Install new permanent generator with automatic transfer switch.

Project Status: Future

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

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

Comments: Coggan 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 automatic transfer switch, enclosure, concrete pad, and conduit.

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

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning			$10,000				$10,000
Design			$25,000				$25,000
Construction			$150,000	$100,000			$250,000
Total	$0	$0	$185,000	$100,000	$0	$0	**$285,000**

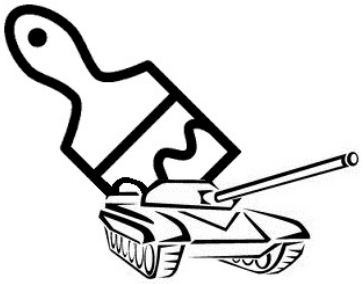
FY 2017/18 Budget Request - $285,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2018	Aug 2018	Sep 2018	Mar 2019	Apr 2019	Aug 2019	Aug 2019

Capital Improvement Program
Richland I Tank Exterior Refurbishment

Description: Richland I Tank requires exterior refurbishment.



Project Status: Future

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

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

Comments: The 1.3 MG tank was inspected in December 2014. Re-coating repairs are recommended.

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

Project Spending Plan

Project Phase	Previous Spending	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22 & Thereafter	Total
Planning				$5,000			$5,000
Design				$20,000			$20,000
Construction				$200,000			$200,000
Total	$0	$0	$0	$225,000	$0	$0	**$225,000**

FY 2017/18 Budget Request - $225,000

Estimated Project Timeline

Project Approval	Planning		Design		Construction		Completion
	Begin	End	Begin	End	Begin	End	
Jul 2016	Jul 2019	Jul 2019	Aug 2019	Dec 2019	Jan 2020	Apr 2020	Apr 2020

VALLECITOS WATER DISTRICT

2017-18 CAPITAL BUDGET - EASEMENTS, VEHICLES & EQUIPMENT SCHEDULE

EASEMENTS

Requesting Dept.	Description	Project #		Funding Source: Water	Funding Source: Sewer	Total Cost
	Development Services:					
	Easement	2018100027			$ 50,000	$ 50,000

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
217	Ford-F150 Super Duty	2018100029	Replacement	62,000		62,000
	Mechanical/Electrical:					
172	Ford-F550 2WD Chassis with Service Body and Crane	2018100030	Replacement	61,700	59,300	121,000
	Collections:					
	Water Truck - Model 108SD with ISL Cummins	2018100031	New		101,000	101,000
	Meadowlark Facility:					
	Forklift	2018100032	New		36,000	36,000
	Water Operations:					
219	Ford F-150 SuperCab XL	2018100033	Replacement	33,000		33,000
	Buildings and Grounds					
170	Ford Think Cart	2018100034	Replacement	7,600	7,400	15,000
TOTAL VEHICLES						*$ 567,000*

FACILITIES AND EQUIPMENT

Requesting Dept.	Description	Project #	New or Replacement	Funding Source: Water	Funding Source: Sewer	Total Cost
	Collections:					
	Poly Chemical Tank - 6,500 Gallon for Lift Station 1	2018100035	New		45,000	45,000
252	CCTV Transporter	2018100036	Replacement		26,000	26,000
	Water Operations:					
	Tank Cleaning and Disenfection Trailer	2018100037	New	45,000		45,000
	Meadowlark Facility:					
	Chemical Mixer	2018100038	New		35,000	$ 35,000
	Augers Rotating Assemblies (2)	2018100039	Replacement		16,000	16,000
	Turbidity Meters	2018100040	Replacement		18,000	18,000
	Construction:					
	NuConcepts Portable Toilet with Hand Wash Station	2018100041	Replacement	8,200	7,800	16,000
TOTAL FACILITIES AND EQUIPMENT						*$ 201,000*

VEHICLES & EQUIPMENT TOTAL **$ 818,000**