FINAL

CIP Projects FY16/17 to FY25/26

NO.	PROJECT NAME	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	CIP Total	
Equipment Purchase & Replacement													
06-03	SCADA/Telemetry/Electrical Controls Replacement	50,000										50,000	
08-10	Backhoe				80,000							80,000	
08-12	New Service Truck		200,000									200,000	
15-04	Vactor Truck/Trailer			350,000								350,000	
17-02	Forklift for Nunes, Miscellaneous Tools	30,000										30,000	
99-02	Vehicle Replacement			30,000		30,000	30,000		30,000			120,000	
99-03	Computer Systems	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000			40,000	
99-04	Office Equipment/Furniture	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000			24,000	
8	**Equipment Purchase & Replacement Totals**	**88,000**	**208,000**	**388,000**	**88,000**	**38,000**	**38,000**	**8,000**	**38,000**				**894,000**
Facilities & Maintenance													
08-08	PRV Valves Replacement Project	30,000	30,000	30,000	30,000							120,000	
09-07	Advanced Metering Infrastructure	300,000	300,000	300,000	50,000	20,000	20,000	20,000	20,000	20,000	20,000	1,070,000	
09-09	Fire Hydrant Replacement	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000	
09-23	District Digital Mapping	10,000										10,000	
14-14	Pilarcitos Canyon Road Improvements	65,000										65,000	
15-03	District Administration/Operations Center										3,000,000	3,000,000	
16-07	Sample Station Replacement Project		5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000		40,000	
17-11	Pilarcitos PRV Station Valve Replacement	45,000										45,000	
99-01	Meter Change Program	300,000	300,000	300,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	1,040,000	
9	**Facilities & Maintenance Totals**	**790,000**	**675,000**	**675,000**	**145,000**	**85,000**	**85,000**	**85,000**	**85,000**	**85,000**	**3,080,000**		**5,790,000**
Pipeline Projects													
06-01	Avenue Cabrillo Phase 2 & 3 Pipeline Replacement Project	650,000										650,000	
06-02	Highway 1 South Pipeline Replacement Project		80,000	100,000	1,200,000							1,380,000	
07-03	Pilarcitos Canyon Pipeline Replacement							150,000	1,000,000			1,150,000	
07-04	Bell Moon Pipeline Replacement Project								60,000	250,000		310,000	
13-02	Replace 8 Inch Pipeline Under Creek at Pilarcitos Ave.	100,000					400,000					500,000	
14-01	Replace 12" Welded Steel Line on Hwy 92 with 8" DI		300,000			1,000,000	1,000,000	1,000,000				3,300,000	
14-26	Replace 2 Inch Pipe Downtown Half Moon Bay	500,000										500,000	

NO.	PROJECT NAME	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	CIP Total	
14-27	Grandview 2 Inch Replacement								450,000			450,000	
14-28	Replace 2 Inch Hilltop Market to Spanishtown			240,000								240,000	
14-29	Replace 2 Inch GS Purisima Way				125,000							125,000	
14-30	Replace Miscellaneous 2 Inch GS El Granada				60,000							60,000	
14-31	Ferdinand Avenue - Replace 4" WS Ferdinand Ave. to Columbus St.			225,000								225,000	
14-32	Casa Del Mar - Replace Cast Iron Mains						1,000,000	1,000,000				2,000,000	
14-33	Miramar Cast Iron Pipeline Replacement									500,000	1,000,000	1,500,000	
16-09	Slipline 10-inch Pipeline in Magellan at Hwy 1			100,000								100,000	
NN-00	Pipeline Replacement								1,050,000	750,000	500,000	2,300,000	
16	**Pipeline Projects Totals**	**1,250,000**	**380,000**	**665,000**	**1,385,000**	**1,000,000**	**2,400,000**	**2,150,000**	**2,560,000**	**1,500,000**	**1,500,000**		**14,790,000**
Pump Stations/Tanks/Wells													
06-04	Hazen's Tank Replacement	30,000										30,000	
08-14	Alves Tank Recoating, Interior + Exterior			600,000								600,000	
08-16	Cahill Tank Exterior Recoat				15,000							15,000	
08-18	EG Tank #3 Recoating Interior + Exterior	600,000										600,000	
09-18	New Pilarcitos Well		150,000									150,000	
11-02	CSPS Stainless Steel Inlet Valves			100,000								100,000	
11-05	Half Moon Bay Tank #2 Interior + Exterior Recoat		200,000									200,000	
11-06	Half Moon Bay Tank #3 Interior + Exterior Recoat				200,000							200,000	
13-08	Crystal Springs Spare 350 HP Pump & Motor		50,000									50,000	
13-11	EG Tank #1 & Tank #2 Emergency Generators	200,000										200,000	
16-08	New Denniston Well		80,000									80,000	
17-03	Pilarcitos Wells 3 and 3a Rehabilitation	90,000										90,000	
17-05	Crystal Springs Pump Station Motor Controls	50,000										50,000	
17-06	Crystal Springs Pump Station Discharge Valve Replacement	30,000										30,000	
14	**Pump Stations/Tanks/Wells Totals**	**1,000,000**	**480,000**	**700,000**	**215,000**								**2,395,000**
Water Supply Development													
10-02	Bridgeport Drive Pipeline Replacement Project	1,300,000										1,300,000	
12-04	Denniston Treated Water Booster Station	1,300,000										1,300,000	
12-12	San Vicente Diversion and Pipeline			300,000	1,000,000	1,000,000						2,300,000	
13-04	Denniston Reservoir Restoration				1,000,000							1,000,000	
17-12	Recycled Water Project Development	100,000	100,000									200,000	

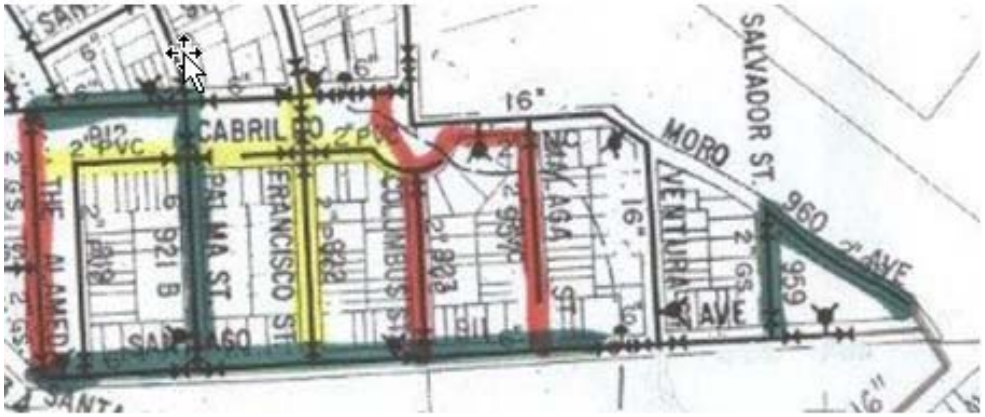
NO.	PROJECT NAME	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	CIP Total	
5	**Water Supply Development Totals**	**2,700,000**	**100,000**	**300,000**	**2,000,000**	**1,000,000**							**6,100,000**
Water Treatment Plants													
08-07	Nunes Filter Valve Replacement			30,000	30,000	30,000	30,000	30,000				150,000	
13-05	Denniston WTP Emergency Power			500,000								500,000	
17-01	Nunes Water Treatment Plant Treated Water Meter	50,000										50,000	
17-04	Denniston Dam Spillway Repairs	10,000	90,000									100,000	
17-07	Denniston WTP Site Improvements for Erosion Control	50,000										50,000	
17-08	Nunes Filter Surface Wash Repairs	50,000										50,000	
17-10	Nunes Backwash Pond Sand Replacement	65,000										65,000	
99-05	Denniston Maintenance Dredging	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	350,000	
8	**Water Treatment Plants Totals**	**260,000**	**125,000**	**565,000**	**65,000**	**65,000**	**65,000**	**65,000**	**35,000**	**35,000**	**35,000**		**1,315,000**
Grand Total		**6,088,000**	**1,968,000**	**3,293,000**	**3,898,000**	**2,188,000**	**2,588,000**	**2,308,000**	**2,718,000**	**1,620,000**	**4,615,000**	**31,284,000**	

06-01 Avenue Cabrillo Phase 2 & 3 Pipeline Replacement Project Pipeline Projects

Priority: 2 Improves water service and fire protection, eliminates frequent leak repairs, reduces water loss.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$650,000	650,000									

Description: The Avenue Cabrillo project replaces old, undersized PVC and galvanized mains in the area of El Granada shown in the sketch below (Red = Phase 1, Yellow = Phase 2, Green = Phase 3). This area has been plagued by numerous leaks and by low-pressure. The project consists of 1) constructing 1,520 linear feet of 8-inch diameter and 8,560 linear feet of 6-inch diameter water pipelines to replace old, leaky pipelines, 2) replacing 8 existing fire hydrants and installing 3 new ones, and 3) replacing or reconnecting 149 existing customer water service pipelines. The project was first placed on the CIP in FY 05/06. District Engineer Jim Teter completed the project documents, breaking construction into three phases in order to spread out the construction costs. The work scheduled for FY16/17 represents the final portion of the third phase and will bring the entire project to completion.

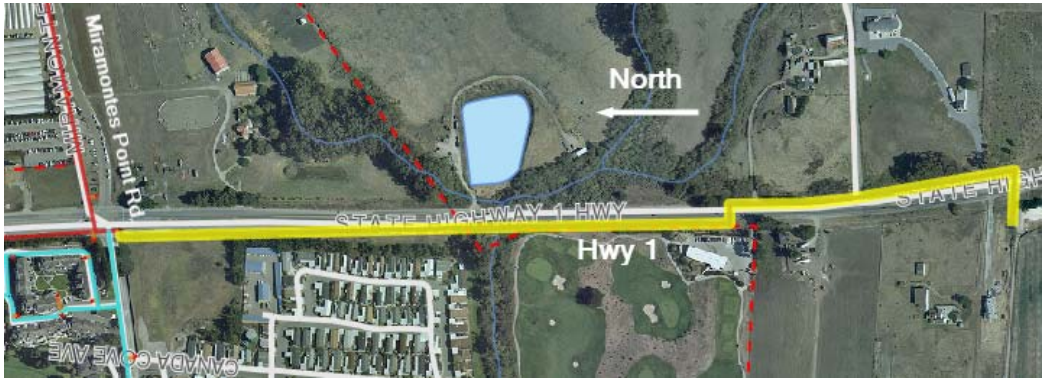


06-02 Highway 1 South Pipeline Replacement Project Pipeline Projects

Priority: 2 Replaces obsolete, substandard main and improves water service, fire protection, water quality.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,380,000		80,000	100,000	1,200,000						

Description: This project would replace about 3500 feet of 2 inch galvanized steel pipe running south along Highway 1 from Miramontes Point Road. The pipeline was part of the Citizens Utilities system acquired when the district was formed in 1948. It serves six connections, one at the approximate midpoint and five at the southern end of the line. These services experience low-pressure problems due to the size and length of the pipe in the prevailing lower pressures in the southernmost part of the District.The low-pressure also creates the risk of water quality problems. District Engineer Teter completed design drawings for the replacement project in November 2008 and prepared an Engineer's Report detailing environmental and permitting requirements and suggesting possible alternatives to replacing the existing pipe with an 8 inch ductile iron main.The District will evaluate the alternatives further before proceeding with the replacement project.



06-03 SCADA/Telemetry/Electrical Controls Replacement Equipment Purchase & Replacement

Priority: 1 Improves operational efficiency, ensures reliable facility control and communication of critical operations data.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$50,000	50,000									

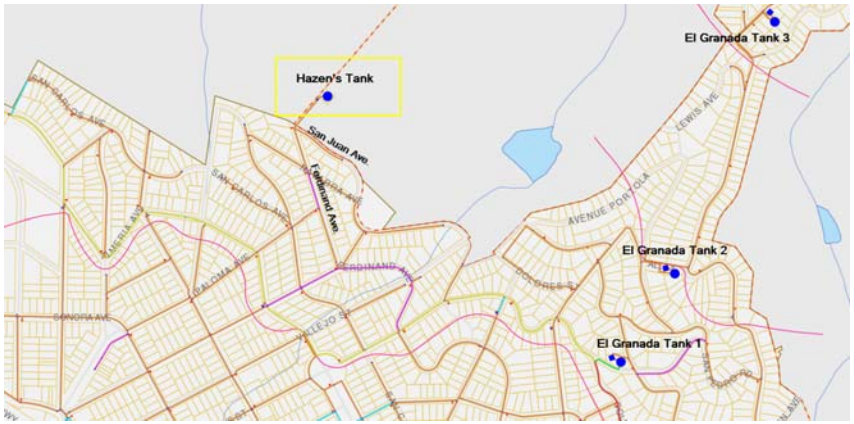
Description: This project provides for phased upgrading of controls at all the District's facilities and construction of a radio-based data communications network. Digital controllers at the District's facilities monitor reservoir levels, control treatment processes and pump stations, communicate critical data to the District's operations center, and notify operators of alarm conditions. Many of the District's operations run on controllers installed in the 1990s. These controllers are obsolete and can no longer be repaired when they fail. Replacing them before they fail prevents the disruption and higher costs associated with emergency replacements.

06-04 Hazen's Tank Replacement Pump Stations/Tanks/Wells

Priority: 3

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$30,000	30,000									

Description: Hazen's tank is a 50,000 gallon redwood tank of uncertain age which was moved to the present site near the intersection of San Juan Ave. and Ferdinand Avenue in the mid-1960s. Its purpose is to stabilize water pressures in the nearby higher elevation areas of El Granada within the El Granada Tank 2 pressure zone. This tank has reached the end of its useful life, and its redwood construction raises the risk of water quality problems. Hazen's Tank may no longer be needed when the Denniston Treated Water Booster Station (Project 12-04) becomes operational. The current budget of $30,000 would cover removal of the existing tank.



07-03 Pilarcitos Canyon Pipeline Replacement Pipeline Projects

Priority: 1 This project is vital because gravity flow from Pilarcitos saves up to $40,000 per month in Crystal Springs pumping costs and provides a backup water source for the district in the event of a Crystal Springs pump station failure.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,150,000							150,000	1,000,000		

Description: The Pilarcitos Canyon Pipeline (also called Stone Dam Pipeline) conveys water from SFPUC's Pilarcitos Reservoir by gravity into the District's system.The original 12 inch welded steel pipeline, built in 1948, failed in an inaccessible area of the pipeline alignment in August 2012. Due to the age and condition of the pipe and the difficulty of working at the failure site, District staff concluded that repairing the pipeline was not feasible. In November 2012, the District obtained a permit from San Francisco to install an emergency temporary replacement pipeline to supply water while the District plans, designs, and constructs a permanent replacement pipe. District staff and contractors completed construction of the temporary line in December 2012. Conditions of the San Francisco permit require the District to conduct a feasibility study for the permanent replacement pipeline and undertake an environmental evaluation of the replacement project by May 2014 and complete construction by November 2015. These deadlines will likely be extended by mutual agreement. This work will require significant coordination between the District and SFPUC. Given the sensitivity of the Pilarcitos Canyon environment and regulatory interest in Pilarcitos stream flows, completion of the permanent replacement could take significantly longer than the three years contemplated in the permit. The temporary pipeline will serve the district's needs during this time. The CIP budgets $75,000 per year in FY 14/15 and FY 15/16 for the feasibility study, initial environmental review, and preliminary design. The FY 17/18 CIP includes a construction cost placeholder of $1 million.

07-04 Bell Moon Pipeline Replacement Project Pipeline Projects

Priority: 3 The District's welded steel pipelines are generally at least 50 years old and subject to increasing risk of failure.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$310,000								60,000	250,000	

Description: Replaces approximately 725 feet of 12 inch welded steel pipeline serving the light industrial area between Lewis Foster Drive and Highway 92.

08-07 Nunes Filter Valve Replacement Water Treatment Plants

Priority: 3 Maintains essential District facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$150,000			30,000	30,000	30,000	30,000	30,000			

Description:

08-08 PRV Valves Replacement Project Facilities & Maintenance

Priority: 1 Maintains distribution system circulation and water quality

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$120,000	30,000	30,000	30,000	30,000						

Description: 14 pressure reducing valves (PRV) divide the District's distribution system into four pressure zones. As the valves reach the end of their service life, they may stop or restrict the flow between zones, creating dead ends in the system and increasing the risk of water quality problems. This project provides funding to replace PRV's at one PRV per year.

08-10 Backhoe Equipment Purchase & Replacement

Priority: 2 Replaces essential District equipment.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$80,000				80,000						

Description: District crews use a backhoe on a frequent basis for leak repairs. The District purchased its current backhoe used in 2006. This project would replace the backhoe with a late-model used unit.

08-12 **New Service Truck** Equipment Purchase & Replacement

Priority: 2 Maintains essential District equipment.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$200,000		200,000								

Description: The District's single service truck is the field crew's most important asset in responding to leaks, main breaks, and other critical system maintenance tasks. The current truck is near the end of its service life and does not have sufficient load capacity to carry necessary equipment safely and efficiently.

08-14 Alves Tank Recoating, Interior + Exterior Pump Stations/Tanks/Wells

Priority: 1 Maintains critical district infrastructure.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$600,000			600,000							

Description: Under a comprehensive program initiated in 2008, the District has inspected and performed long-deferred maintenance on its steel treated water storage tanks. The maintenance generally consists of repairing corrosion damage, recoating the interior and exterior of the tank, and bringing ladders, manways, railings and other tank features up to current standards. The Alves Tank, located above Miramontes Point Road east of Highway 1, is the District's largest at 2.0 million gallons. This project provides for repairing and recoating the Alves Tank. Project costs will include installation and operation of a temporary pump station to ensure adequate flow and pressure to customers in the southernmost area of the District during the tank shutdown. The project also includes replacement of the tank's altitude valve (formerly shown as Project 13-10 at a cost of $50,000).

08-16 Cahill Tank Exterior Recoat Pump Stations/Tanks/Wells

Priority: 3 Maintains essential district facilities

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$15,000				15,000						

Description: Under a comprehensive program initiated in 2008, the District has inspected and performed long-deferred maintenance on its steel treated water storage tanks. The maintenance generally consists of repairing corrosion damage, recoating the interior and exterior of the tank, and bringing ladders, manways, railings and other tank features up to current standards. The Cahill tank is a 250,000 gallon surge tank located on the ridge above Crystal Springs Reservoir, near Skylawn Cemetery. The tank receives raw water from the Crystal Springs pumps and provides for a uniform flow into the Nunes Water Treatment Plant. This project provides for exterior recoding of the Cahill tank.

08-18 EG Tank #3 Recoating Interior + Exterior Pump Stations/Tanks/Wells

Priority: 1 Maintains essential district facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$600,000	600,000									

Description: Under a comprehensive program initiated in 2008, the District has inspected and performed long-deferred maintenance on its steel treated water storage tanks. The maintenance generally consists of repairing corrosion damage, recoating the interior and exterior of the tank, and bringing ladders, manways, railings and other tank features up to current standards. El Granada Tank #3 is a 250,000 gallon steel tank located at 712 El Granada Boulevard. It supplies the District's highest elevation zone. District Engineer J. Teter completed an inspection report for the tank in January 2009. The inspection found the tank structurally sound and in need of exterior and interior recoding to prevent corrosion.

09-07 Advanced Metering Infrastructure Facilities & Maintenance

Priority: 2 Ensures efficient District operation and customer service, particularly during water shortages

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,070,000	300,000	300,000	300,000	50,000	20,000	20,000	20,000	20,000	20,000	20,000

Description: Advanced Metering Infrastructure (AMI) represents an essential element of a larger District initiative to prepare the District to operate efficiently and meet the needs of its customers during future water shortages. An AMI network transmits meter readings directly to the District's office, eliminating the current labor-intensive manual reading process. AMI provides the ability to read meters daily – or even more frequently – rather than monthly or bimonthly.This facilitates leak detection and allows us to give customers timely feedback that helps them manage their water use. The District plans to implement AMI in conjunction with replacement of most of its meters over a three-year period beginning in FY16-17 (Project 99-01). Project 09-07 provides funding for the radio transmitters used to collect meter data. The AMI budget assumes installation of radios for 2,000 meters per year for three years, at a cost of approximately $150 per meter location. District field staff will install the new meters and radios. The budget provides for a lower level of installations and replacements after the initial three years.

09-09 Fire Hydrant Replacement Facilities & Maintenance

Priority: 3 Maintains essential district infrastructure.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$400,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000

Description: This project provides continuing funding for replacement of fire hydrants that have reached the end of their service life. The district has about 620 fire hydrants, and the cost of replacing a hydrant ranges from $2000-$5000.

09-18 New Pilarcitos Well Pump Stations/Tanks/Wells

Priority: 2 Maintains essential district facilities, reduces water purchased costs.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$150,000		150,000								

Description: Water from a number of wells located on District property along upper Pilarcitos Creek represents an important water source for the District. Under the terms of a permanent water rights license, the District may pump up to 117 million gallons from these wells in the period from November 1 through March 31.Use of the wells results in substantial water cost savings versus the high cost of water purchased from San Francisco Public Utilities Commission. A new well producing 300 gallons per minute could reduce SFPUC water purchase costs by more than $350,000 in a single pumping season (based on projected FY 18/19 SFPUC cost of $4.35 per hundred cubic feet) This project provides for drilling a new Pilarcitos well to replace several older wells which have, over time, become less productive.

09-23 District Digital Mapping Facilities & Maintenance

Priority: 1 Provides an essential tool for District asset management.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$10,000	10,000									

Description: This project provides funding for implementation of the District's Geographic Information System (GIS).The GIS effort began in FY 10/11 with conversion of the District's paper distribution system maps to digital format.

10-02 Bridgeport Drive Pipeline Replacement Project Water Supply Development

Priority: 1 This project is critical to the District's efforts to make maximum use of local water sources. It must be completed as soon as possible in order to comply with timing requirements of water rights permits for Denniston/San Vicente.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,300,000	1,300,000									

Description: The Denniston Water Treatment Plant has a capacity of 1000 gpm, but gravity flow from Denniston WTP into the rest of the District's system is limited to about 400 gpm by the existing 8 inch and 10 inch cast iron pipelines along Bridgeport Drive. This limitation precludes making maximum use of the District's economical local water source. The solution to this problem has two elements: 1) construction of a treated water booster station adjacent to the Denniston pump station, and 2) construction of a 3,500 foot, 12 inch ductile iron pipeline bypassing the Bridgeport Drive bottleneck. This project (10-02) would construct the new pipeline. The Denniston treated water booster station is covered by CIP project 12-04.

11-02 CSPS Stainless Steel Inlet Valves Pump Stations/Tanks/Wells

Priority: 3 Maintains essential district infrastructure.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$100,000			100,000							

Description: This project would replace the existing carbon steel butterfly valves on the Crystal Springs Pump Station raw water inlets with stainless steel valves. The existing valves are submerged in the Crystal Springs inlet tunnel and subject to corrosion which could render them inoperable. These valves supplement inlet valves located in Crystal Springs reservoir to provide a second barrier against water entering the tunnel when it is necessary to dewater and enter the tunnel for maintenance or inspection purposes. Replacement of the steel inlet valves will complete a project initiated in 2011 to improve reliability and lower maintenance costs of the Crystal Springs Pump Station. The first project phases, completed in 2012, removed two pneumatically operated inlet valves from the tunnel, modified them for manual operation, and relocated them under the inlet screens in Crystal Springs reservoir.

11-05 Half Moon Bay Tank #2 Interior + Exterior Recoat Pump Stations/Tanks/Wells

Priority: 1 Maintains essential District facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$200,000		200,000								

Description: Under a comprehensive program initiated in 2008, the District has inspected and performed long-deferred maintenance on its steel treated water storage tanks. The maintenance generally consists of repairing corrosion damage, recoating the interior and exterior of the tank, and bringing ladders, manways, railings and other tank features up to current standards. Half Moon Bay Tank #2 Is a 400,000 gallon steel tank, one of three tanks located on the Nunes Treatment Plant site.The District completed repair and recoating of Half Moon Bay Tank #1, the smallest and the oldest of the three tanks, in 2012. The Tank #1 project also included providing improved access to the roof of Tank #2 via a catwalk from the roof of Tank #1, eliminating Tank #2's access ladder. This project provides for recoating the interior and exterior of Half Moon Bay Tank #2.

11-06 Half Moon Bay Tank #3 Interior + Exterior Recoat Pump Stations/Tanks/Wells

Priority: 1 Maintains essential District facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$200,000				200,000						

Description: Under a comprehensive program initiated in 2008, the District has inspected and performed long-deferred maintenance on its steel treated water storage tanks. The maintenance generally consists of repairing corrosion damage, recoating the interior and exterior of the tank, and bringing ladders, manways, railings and other tank features up to current standards. Half Moon Bay Tank #2 Is a 400,000 gallon steel tank, one of three tanks located on the Nunes Treatment Plant site.The District completed repair and recoating of Half Moon Bay Tank #1, the smallest and the oldest of the three tanks, in 2012. This project provides for recoating the interior and exterior of Half Moon Bay Tank #3.

12-04 Denniston Treated Water Booster Station Water Supply Development

Priority: 1 This project is critical to the District's efforts to make maximum use of local water sources. It must be completed as soon as possible in order to comply with timing requirements of water rights permits for Denniston/San Vicente.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,300,000	1,300,000									

Description: The Denniston Water Treatment Plant has a capacity of 1000 gpm, but gravity flow from Denniston WTP into the rest of the District's system is limited to about 400 gpm by the existing 8 inch and 10 inch cast iron pipelines along Bridgeport Drive. This limitation precludes making maximum use of the District's economical local water source. The solution to this problem has two elements: 1) construction of a treated water booster station adjacent to the Denniston pump station, and 2) construction of a 3,500 foot, 12 inch ductile iron pipeline bypassing the Bridgeport Drive bottleneck. This project (12-04) would construct the new pump station. The Bridgeport pipeline replacement is covered by CIP project 10-02.

12-12 San Vicente Diversion and Pipeline Water Supply Development

Priority: 1 Essential to secure vital local source water rights.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$2,300,000			300,000	1,000,000	1,000,000					

Description: A water rights permit issued in 1969 allows the District to divert up to 2 cubic feet per second, year-round, from San Vicente Creek. In order to secure this water right on a permanent basis, the District must divert water from San Vicente. Although the District laid a temporary pipeline and diverted a small quantity of water in the 1980s, San Vicente diversion rights have essentially gone unused. The San Vicente Diversion and Pipeline Project includes the following: 1) construction of a new diversion structure and pumping station at the District owned diversion site on San Vicente Creek. 2) replacement of the existing District owned pipeline from the diversion site to Upper San Vicente Reservoir (approximately 2300 feet). 3) construction of flow control and bypass piping at Upper San Vicente Reservoir. 4) construction of a new pipeline from Upper San Vicente Reservoir to the Denniston pump station (approximately 4000 feet).

13-02 Replace 8 Inch Pipeline Under Creek at Pilarcitos Ave. Pipeline Projects

Priority: 1 Prevents water loss and environmental damage, protects water quality.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$500,000	100,000					400,000				

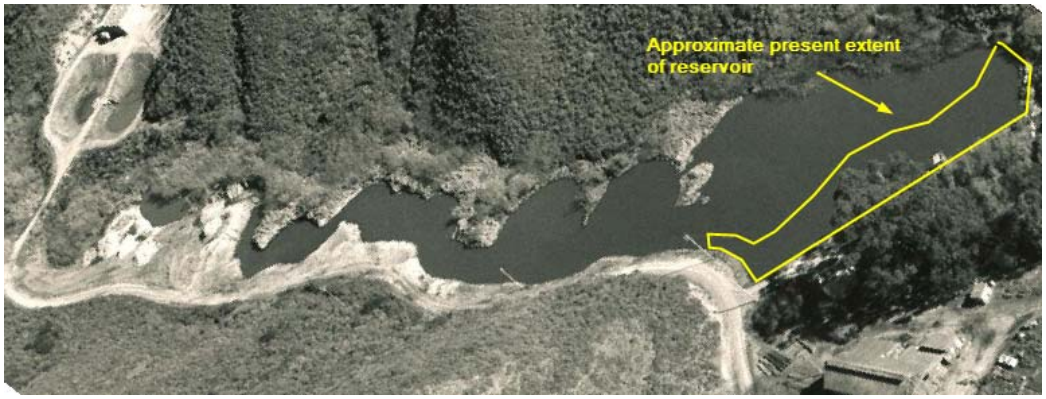
Description: The 8 inch pipeline crossing Pilarcitos Creek between the end of Pilarcitos Avenue just south of the creek and Strawflower Shopping Center is one of only two pipelines supplying water to areas of the district south of Pilarcitos Creek. The pipe's age, current condition, and exact location in the creek are unknown. A break occurring in the section of pipe underneath the creek bed would be very difficult to detect and could cause significant water loss, serious water quality issues which could result in a District-wide boil water order, and environmental damage with potential fines. This project will replace the section of pipe under the creek with either 1) a pipe running over the creek, attached to the existing footbridge between the end of Pilarcitos Avenue and the shopping center, or 2) a pipe installed under the creek by horizontal directional drilling between Jenna Lane and the southwest corner of Strawflower Shopping Center. Work to be done in FY17 will consist of installing approximately 400 feet of 8-inch pipe within the Strawflower access road from Highway 92, which would ensure water supply to commercial customers in the event of a problem with the existing pipe in the creek.

13-04 Denniston Reservoir Restoration Water Supply Development

Priority: 2 Improves yield, quality, and reliability of the District's primary local water source.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,000,000				1,000,000						

Description: Siltation in Denniston reservoir has reduced its volume to a small fraction of the capacity that existed when the District built the Denniston treatment plant. This reduction in volume reduces available yield during the dryer months and results in poor water quality during the wet months due to lack of settling time. This project would substantially restore the original volume of Denniston reservoir. The Environmental Impact Report completed in 2015 for the Denniston/San Vicente Water Supply Project includes consideration of Denniston reservoir dredging.



13-05 Denniston WTP Emergency Power Water Treatment Plants

Priority: 2 Improves water supply reliability, emergency preparedness.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$500,000			500,000							

Description: This project would provide emergency backup power and associated switchgear for the Denniston Water Treatment Plant and Denniston Pump Station. Denniston provides the only backup to the District's SFPUC water supply, which comes into the district via a single pipeline. Should the SFPUC supply be disrupted for an extended period – by an earthquake, for example – having emergency power at Denniston would ensure continuous flow of water to the District's customers.

13-08 Crystal Springs Spare 350 HP Pump & Motor Pump Stations/Tanks/Wells

Priority: 2 Ensures reliability of critical facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$50,000		50,000								

Description: The Crystal Springs Pump Station has two 350 HP pumps and one 500 HP pump. Because failure of any one of the three pumps during peak demand months could impose an immediate water shortage on the District, the District maintains spare replacement units for pumps and motors. This ensures that the District could bring a failed pump back online with in a few days, rather than waiting the 10 to 14 weeks it could take to order and receive a new unit. This project provides a spare 350 HP pump and motor which could replace either of the operating 350 HP units in the event of a failure. The pump was purchased in FY 13/14 and the motor is budgeted for FY 17/18.

13-11 EG Tank #1 & Tank #2 Emergency Generators Pump Stations/Tanks/Wells

Priority: 1 Ensures adequate water supplies, fire flows.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$200,000	200,000									

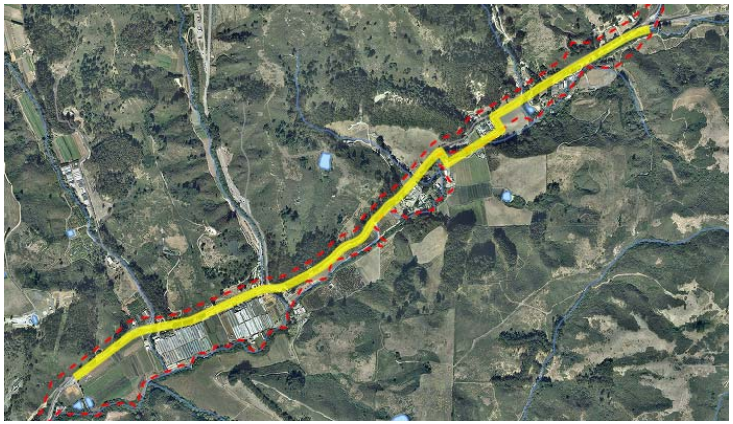
Description: The pump station at El Granada (EG) Tank #1 llifts water to EG Tank #2, where the EG Tank #2 pump station pumps the water further up El Granada Boulevard to EG Tank #3. In the event of a power failure at EG Tank #1, the higher elevation areas served by tanks 2 and 3 would have only the limited supply (400,000 gallons) contained in those tanks. This would significantly reduce the system's ability to provide adequate fire flows. This project will provide emergency generators and associated switchgear for the EG Tank #1 and EG Tank #2 pump stations.

14-01 Replace 12" Welded Steel Line on Hwy 92 with 8" DI Pipeline Projects

Priority: 2 Replacing this pipeline is important to reduce costs, lower environmental risks, and improve water quality.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$3,300,000		300,000			1,000,000	1,000,000	1,000,000			

Description: When the District built the new Pilarcitos East Pipeline to bring untreated water from Pilarcitos Reservoir and Crystal Springs to the Nunes Water Treatment Plant, the existing 12 inch welded steel raw water pipeline running along Highway 92 was repurposed to supply treated water to services along Highway 92. This (approximately) 12,000 foot pipeline is one of the oldest in the District and, like other welded steel pipelines, is at the end of its useful life. District crews have repaired a number of leaks along the pipe in recent years, and we would expect the frequency of repairs to increase. A large leak in a section of pipeline close to Pilarcitos Creek could cause significant environmental damage. In addition,the large size of the pipe relative to the low flow demands of the limited number of services along Highway 92 creates water quality problems. We are currently addressing water quality concerns with a schedule of regular flushing, but the flushing itself raises additional issues, including discharge of treated water into Pilarcitos Creek. Given its length and the challenges of construction along the busy highway, replacing this pipe will be expensive – on the order of several million dollars. Construction would occur in phases, beginning with the sections at highest risk for costly failures.



14-14 Pilarcitos Canyon Road Improvements Facilities & Maintenance

Priority: 3 Maintains essential District facilities and infrastructure

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$65,000	65,000									

Description: This project provides for improvement of a portion of the road leading to the District's essential facilities in Pilarcitos Canyon. A layer of base rock placed on the road facilitates year-round access. The upper portion of the road, approximately a half mile long, was improved in a previous project.

14-26 Replace 2 Inch Pipe Downtown Half Moon Bay Pipeline Projects

Priority: 1 Replaces obsolete infrastructure, improves water service, fire protection.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$500,000	500,000									

Description: This project would replace approximately 2500 feet of 2 inch galvanized mains in and around downtown Half Moon Bay. These mains are old, subject to frequent leaks, and incapable of supplying required pressures and flows. Replacing them will allow the District to increase the water pressure in downtown Half Moon Bay and areas to the south.

14-27 Grandview 2 Inch Replacement Pipeline Projects

Priority: 3 Replaces substandard infrastructure, improves water service, fire flows.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$450,000								450,000		

Description: This project would replace approximately 2300 feet of 2 inch plastic mains in the Grandview Boulevard neighborhood. These mains are substandard and do not provide the required pressure and flow for fire protection.

14-28 Replace 2 Inch Hilltop Market to Spanishtown Pipeline Projects

Priority: 3 Replaces obsolete infrastructure, improves water service, fire flows.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$240,000			240,000							

Description: This project would replace approximately 1200 feet of 2 inch galvanized steel main running along Highway 92 from Hilltop Market to Spanishtown.This main is old, substandard, and incapable of providing required flow and pressure.

14-29 Replace 2 Inch GS Purisima Way Pipeline Projects

Priority: 3 Replaces obsolete infrastructure, improves water service, fire flows.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$125,000				125,000						

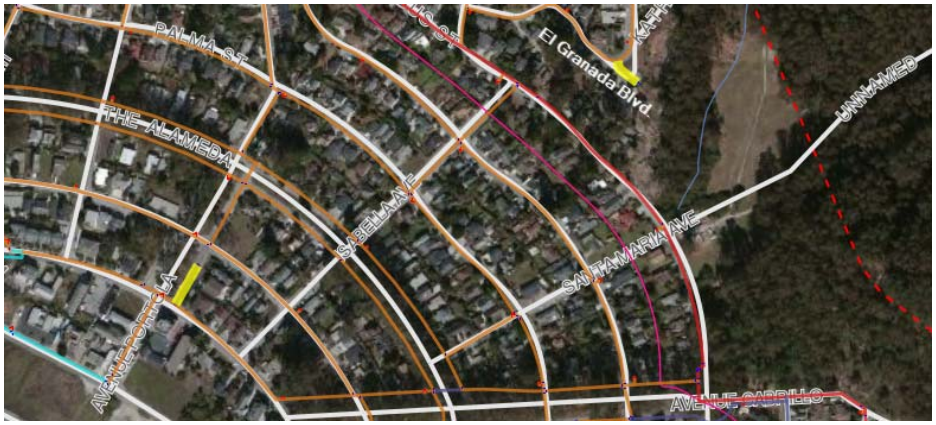
Description: This project would replace approximately 700 feet of 2 inch galvanized steel main along Purisima Way, north of Miramar Drive. The steel main is substandard and does not provide required flow and pressure.

14-30 Replace Miscellaneous 2 Inch GS El Granada Pipeline Projects

Priority: 3

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$60,000				60,000						

Description: This project would replace approximately 300 feet of 2 inch galvanized steel mains in El Granada that were not included under other projects.



14-31 Ferdinand Avenue - Replace 4" WS Ferdinand Ave. to Columbus St. Pipeline Projects

Priority: 1 Pipeline is welded steel, more than 50 years old, has had numerous leaks.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$225,000			225,000							

Description: This project would replace approximately 1500 feet of 4 inch welded steel pipeline in El Granada, running along Carmel Avenue and along Ferdinand from Carmel to Columbus (partially paper street). It may be possible to abandon rather than replace the 360 foot section running in the undeveloped Ferdinand right-of-way between Vallejo and Columbus.

14-32 Casa Del Mar - Replace Cast Iron Mains Pipeline Projects

Priority: 2 These cast iron pipelines are nearing the end of their useful life, leaks are increasing, and repairs are expensive.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$2,000,000						1,000,000	1,000,000			

Description: Cast iron mains in the Casa Del Mar neighborhood (between Kehoe Avenue and Wave Avenue) were installed between 1965 and 1976. This project would replace approximately 10,700 feet of 4 inch, 6 inch, 8 inch, and 10 inch cast iron pipelines. There have been numerous leaks in this neighborhood, and leaks have caused significant pavement damage due to high pressure in the area.

14-33 Miramar Cast Iron Pipeline Replacement Pipeline Projects

Priority: 2 Maintains essential District infrastructure

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,500,000									500,000	1,000,000

Description: This project would replace about 11,000 feet of 8 inch and 10 inch cast iron mains in an area of Miramar bounded approximately by Highway 1, Medio Avenue, and Washington Blvd. Most of these pipes were installed in the mid-1960's.

15-03 District Administration/Operations Center Facilities & Maintenance

Priority: 3

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$3,000,000										3,000,000

Description: Evaluation of District space needs performed in connection with the 2014 administration building remodeling project indicated that the District's current facilities are inadequate to meet the District's long-term needs. This project is included in the CIP as a placeholder in anticipation of the need to provide additional space for District operations and administration functions.

15-04 Vactor Truck/Trailer Equipment Purchase & Replacement

Priority: 2 Maintains essential District facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$350,000			350,000							

Description: Due to increased regulation of potable water discharges and risks associated with excavating around existing underground utilities, many water agencies have adopted the use of vacuum equipment for excavation of leaks. This item would fund purchase of a vactor trailer or a used vactor truck.

16-07 Sample Station Replacement Project Facilities & Maintenance

Priority: 3

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$40,000		5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	

Description: Our present sample stations are not suitably designed for use on the coast. The housing corrodes causing difficulty with opening and closing. In addition, many stations need to be raised above the ground level. This project would replace three stations per year over eight years.

16-08 New Denniston Well Pump Stations/Tanks/Wells

Priority: 2

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$80,000		80,000								

Description: Due to deterioration over 40+ years of life, the Denniston wells produce a minimal quantity of water. Denniston wells 2, 3 and 4 are beyond repair. Wells on the south side of creek (3 and 4) are very low producers (<20 gpm) and have a serious iron bacteria problem. The casing in well 2 is damaged beyond repair. Subject to further evaluation of potential water availability by our hydrologists, this project would abandon the existing wells and install a new well on the site of well

16-09 Slipline 10-inch Pipeline in Magellan at Hwy 1 Pipeline Projects

Priority: 1

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$100,000			100,000							

Description: On the night of November 23, 2014, the 10-inch cast iron pipeline which runs down Magellan from 5th Avenue and across Highway 1 failed in the field east of Highway 1, causing the loss of more than 750,000 gallons of water and leading to a boil order in some El Granada neighborhoods. This project will prevent similar problems with this line in the future by lining it with a smaller pipe.

17-01 Nunes Water Treatment Plant Treated Water Meter Water Treatment Plants

Priority: 1 Needed to comply with regulatory requirements for water audit in accordance with SB555.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$50,000	50,000									

Description: The WSO water audit performed in 2015-2016 identified the need for water treatment plant production meters to measure treatment plant output accurately without the need to correct for in-plant flows. This project provides a treated water meter for the Nunes plant. The Denniston Booster Station Project will add a treated water meter to the Denniston plant.

17-02 Forklift for Nunes, Miscellaneous Tools Equipment Purchase & Replacement

Priority: 2

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$30,000	30,000									

Description: Pressure Recorders $5,000 Pipe Locator $5,000 Nunes Forklift $20,000 This budget item provides and replaces essential tools for treatment plant and field operations. Treatment plant operators at Nunes need a forklift to safely unload bulk deliveries of salt used in the on-site hypochlorite generation process.

17-03 Pilarcitos Wells 3 and 3a Rehabilitation Pump Stations/Tanks/Wells

Priority: 2 This project will have a very short payback period through saving water on SFPUC water costs.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$90,000	90,000									

Description: Restoring and improving the pumping capacity of the Pilarcitos wells delivers immediate savings - $5,000/million gallons - in SFPUC water purchase costs. When restored, these wells should deliver a total of about 180 gallons per minute, saving over $1,000 per day in water cost.

17-04 Denniston Dam Spillway Repairs Water Treatment Plants

Priority: 2 Maintains essential District facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$100,000	10,000	90,000								

Description: The overflow/spillway structure in the middle of Denniston dam, which dates back to the dam's original construction in the 1930's, includes two openings into the reservoir to allow for draining of water and sediment. The redwood boards covering one of these openings began leaking in 2014, raising concern that the boards could fail and release damaging flows of water and sediment. District staff and contractors applied a temporary fix in 2015 to stop the leak. This project will provide a more permanent solution for both spillway openings to prevent future problems and improve reservoir operations.

17-05 Crystal Springs Pump Station Motor Controls Pump Stations/Tanks/Wells

Priority: 1 Improvement in operability and reliability.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$50,000	50,000									

Description: This project will upgrade the controls for the Crystal Springs pumps to allow operators to remotely start, stop, and reset the pumps.

17-06 Crystal Springs Pump Station Discharge Valve Replacement Pump Stations/Tanks/Wells

Priority: 1 Replacement of critical components needed for maintenance and safety.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$30,000	30,000									

Description: Crystal Springs pump discharge valves which isolate the pumps and check valves from the high pressure from Cahill Ridge Tank are leaking and must be replaced.

17-07 Denniston WTP Site Improvements for Erosion Control Water Treatment Plants

Priority: 1 Required to maintain operability of water treatment plant.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$50,000	50,000									

Description: Following changes in Denniston WTP site drainage associated with the Denniston improvements project completed in 2013, hillside runoff has caused erosion on the site. This project will add paving and drainage improvements to prevent erosion.

17-08 Nunes Filter Surface Wash Repairs Water Treatment Plants

Priority: 1 Essential to maintain water treatment plant function and efficiency.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$50,000	50,000									

Description: The Nunes WTP filter surface wash valves and actuators are at the end of their useful life and must be replaced. This project will also include installation of surface wash flow meters, which will allow treatment operators to more closely monitor and control the surface wash phase of filter backwash.

17-10 Nunes Backwash Pond Sand Replacement Water Treatment Plants

Priority: 1 Required to maintain treatment plant operating efficiency.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$65,000	65,000									

Description: Sand in the Nunes backwash ponds must be replaced periodically in order to maintain the drainage that separates solids from the backwash water, allowing the clarified water to be recycled into the plant influent.

17-11 Pilarcitos PRV Station Valve Replacement Facilities & Maintenance

Priority: 1 Required to maintain operability of critical infrastructure.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$45,000	45,000									

Description: The Pilarcitos Pressure Reducing Valve is a critical infrastructure component that reduces the pressure coming from Cahill Ridge Tank - about 300 pounds per square inch (psi)- to the approximately 70 psi required to move flow from Pilarcitos Canyon to the Nunes WTP. The large valves used to isolate the pressure reducing valve in the event it needs service are worn, leaking, and need to be replaced.

17-12 Recycled Water Project Development Water Supply Development

Priority: 2 Addresses District need to diversify water supply portfolio, lower water costs, develop drought-proof supply.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$200,000	100,000	100,000								

Description: This project provides funding for planning and development of a future recycled water project.

99-01 Meter Change Program Facilities & Maintenance

Priority: 1 Ensures accuracy of metering for billing purposes.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$1,040,000	300,000	300,000	300,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000

Description: This project provides funding for the District's replacement of meters that have reached the end of their service life. As of 1/2016, 36% of residential meters are more than 20 years old. The District plans to replace most of its meters over a three-year period beginning in FY16/17 in conjunction with the implementation of advanced metering infrastructure (AMI). New meters will be digital ultrasonic meters, guaranteed to maintain their original accuracy for 20 years. Existing mechanical meters, which lose their accuracy over time, will be phased out. The budget assumes replacement of 2,000 meters per year for three years, at a cost of approximately $150 per meter location ($120 for meter, $30 for AMI radio-compatible replacement lid). District field staff will install the new meters. Following the 3-year AMI implementation period, the budget provides for a lower level of continuing meter replacement.

99-02 Vehicle Replacement Equipment Purchase & Replacement

Priority: 2 Replaces essential District equipment.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$120,000			30,000		30,000	30,000		30,000		

Description: The District generally considers vehicles – primarily pickup trucks – to have a useful life of 10 years or 100,000 miles. This project provides funding for periodic replacement of the vehicle fleet.

99-03 Computer Systems Equipment Purchase & Replacement

Priority: 2 Maintains essential District facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$40,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000		

Description: Provides for ongoing replacement of computer systems on a lifecycle of 3 to 5 years.

99-04 Office Equipment/Furniture Equipment Purchase & Replacement

Priority: 2 Maintains essential district facilities.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$24,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000		

Description: Provides for ongoing replacement of District office equipment and furniture.

99-05 Denniston Maintenance Dredging Water Treatment Plants

Priority: 1 Dredging is essential to maintain storage capacity and improve the quality of water going into the Denniston Water Treatment Plant.

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$350,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000

Description: This CIP item provides funding for annual maintenance dredging of Denniston Reservoir.The budget for FY 13/14 is higher to provide for planned reestablishment of the creek channel.

NN-00 Pipeline Replacement Pipeline Projects

Priority: 3

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Total Budgeted:	$2,300,000								1,050,000	750,000	500,000

Description: Placeholder for cost of continuing pipeline replacement.