CIP Projects FY13/14 to FY22/23

NO.	PROJECT NAME	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	CIP Total	
Equipment Purchase & Replacement													
06-03	SCADA/Telemetry/Electrical Controls Replacement	250,000	250,000	250,000								750,000	
08-10	Backhoe					80,000						80,000	
08-12	New Service Truck				150,000							150,000	
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	5,000	5,000	50,000	
99-04	Office Equipment/Furniture	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	30,000	
6	**Equipment Purchase & Replacement Totals**	**258,000**	**258,000**	**288,000**	**188,000**	**118,000**	**38,000**	**8,000**	**8,000**	**8,000**	**8,000**		**1,180,000**
Facilities & Maintenance													
08-08	PRV Valves Replacement Project	30,000	30,000	30,000	30,000	30,000	30,000	30,000				210,000	
09-07	Advanced Metering Infrastructure		25,000	50,000	400,000	400,000	400,000					1,275,000	
09-09	Fire Hydrant Replacement	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	200,000	
09-23	District Digital Mapping	50,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	275,000	
14-11	Replace 2" and Larger Meters with Omni Meters	30,000	30,000	30,000								90,000	
14-12	Harbor District Vault & Meter Replacement	70,000										70,000	
14-13	New Security Fence at Pilarcitos Well Field		20,000									20,000	
14-14	Grade and Rock First Half of Pilarcitos Canyon Road		20,000									20,000	
14-15	Replace Administration Building Roof	30,000										30,000	
99-01	Meter Change Program	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	200,000	
10	**Facilities & Maintenance Totals**	**250,000**	**190,000**	**175,000**	**495,000**	**495,000**	**495,000**	**95,000**	**65,000**	**65,000**	**65,000**		**2,390,000**
Pipeline Projects													
06-01	Avenue Cabrillo Phase 2 & 3 Pipeline Replacement Project	246,000	479,000									725,000	
06-02	Highway 1 South Pipeline Replacement Project					80,000	100,000	1,200,000				1,380,000	
07-03	Pilarcitos Canyon Pipeline Replacement		75,000	75,000		1,000,000						1,150,000	
07-04	Bell Moon Pipeline Replacement Project					60,000	250,000					310,000	
10-01	Main Street Pipeline Replacement Project-Phase 3		90,000	250,000								340,000	
10-02	Bridgeport Drive Pipeline Replacement Project	110,000	840,000									950,000	
12-02	Wave Valve Automation				50,000							50,000	
12-03	Crystal Springs Pipeline Air/Vacuum Relief Valves	20,000										20,000	
13-01	Miramar Drive Pipeline Connection				50,000							50,000	
13-02	Replace 8 Inch Pipeline Under Creek at Pilarcitos Ave.	25,000	200,000									225,000	
14-01	Replace 12" Welded Steel Line on Hwy 92 with 8" DI			100,000					1,000,000	1,000,000	1,000,000	3,100,000	
14-26	Replace 2 Inch Pipe Downtown Half Moon Bay				500,000							500,000	
14-27	Grandview 2 Inch Replacement					450,000						450,000	

NO.	PROJECT NAME	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	CIP Total	
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							1,000,000	1,000,000			2,000,000	
19	**Pipeline Projects Totals**	**401,000**	**1,684,000**	**425,000**	**600,000**	**1,590,000**	**815,000**	**2,385,000**	**2,000,000**	**2,000,000**	**2,000,000**		**13,900,000**
Pump Stations/Tanks/Wells													
06-04	Hazen's Tank Replacement	400,000										400,000	
08-14	AlvesTank Recoating, Interior + Exterior	400,000										400,000	
08-16	Cahill Tank Exterior Recoat			150,000								150,000	
08-17	EG Tank #2 Recoat + Ladder	300,000										300,000	
08-18	EG Tank #3 Recoating Interior + Exterior		260,000									260,000	
09-18	New Pilarcitos Well					150,000						150,000	
11-02	CSPS Stainless Steel Inlet Valves						100,000					100,000	
11-03	Miramar Tank Altitude Valve Replacement	30,000		0								30,000	
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	
12-06	CSPS Surge Tank Control Improvements	80,000										80,000	
12-09	EG Tank #2 Fence Replacement	25,000										25,000	
12-11	Miramar Tank Fence Replacement	25,000										25,000	
13-08	Crystal Springs Spare 350 HP Pump & Motor	50,000				50,000						100,000	
13-11	EG Tank #1 & Tank #2 Emergency Generators			75,000	200,000							275,000	
14-17	Crystal Springs Pump Station Electrical Controls Upgrades	50,000										50,000	
14-18	Crystal Springs Pump Station Spare 12 Inch Check Valve		25,000									25,000	
14-23	Alves Tank Generator Enclosure	15,000										15,000	
18	**Pump Stations/Tanks/Wells Totals**	**1,375,000**	**285,000**	**225,000**	**200,000**	**400,000**	**100,000**	**200,000**					**2,785,000**
Water Supply Development													
12-12	San Vicente Diversion and Pipeline	300,000	1,000,000	1,000,000								2,300,000	
13-12	CCWD-MWSD Emergency Intertie – Planning	25,000										25,000	
14-24	Denniston/San Vicente EIR & Permitting	100,000	50,000	50,000								200,000	
14-25	Water Shortage Plan Development	50,000	50,000	100,000								200,000	
4	**Water Supply Development Totals**	**475,000**	**1,100,000**	**1,150,000**									**2,725,000**
Water Treatment Plants													
08-06	Nunes Filter to Waste System				80,000							80,000	
08-07	Nunes Filter Valve Replacement						30,000	30,000	30,000	30,000	30,000	150,000	
12-04	Denniston Treated Water Booster Station	600,000										600,000	

NO.	PROJECT NAME	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	CIP Total	
12-05	Nunes Access Road Repaving	100,000										100,000	
12-14	Nunes - Hydropneumatic System Improvements	40,000										40,000	
13-04	Denniston Reservoir Restoration				1,000,000							1,000,000	
13-05	Denniston WTP Emergency Power						500,000					500,000	
14-02	Nunes - Replace Sludge Pond Media	25,000	25,000									50,000	
14-04	Denniston - Dust Control	10,000										10,000	
14-06	Nunes - New 1720E Turbidimeters (4)		35,000									35,000	
14-07	Nunes - New Surface Scatter 7 Turbidimeter	7,000										7,000	
14-08	Nunes - New Storage Container	7,000										7,000	
14-10	Nunes - Emergency Power Switchgear	30,000										30,000	
99-05	Denniston Maintenance Dredging	60,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	3,500	35,000	343,500	
14	**Water Treatment Plants Totals**	**879,000**	**95,000**	**35,000**	**1,115,000**	**35,000**	**565,000**	**65,000**	**65,000**	**33,500**	**65,000**		**2,952,500**
Grand Total		**3,638,000**	**3,612,000**	**2,298,000**	**2,598,000**	**2,638,000**	**2,013,000**	**2,753,000**	**2,138,000**	**2,106,500**	**2,138,000**	**25,932,500**	

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.

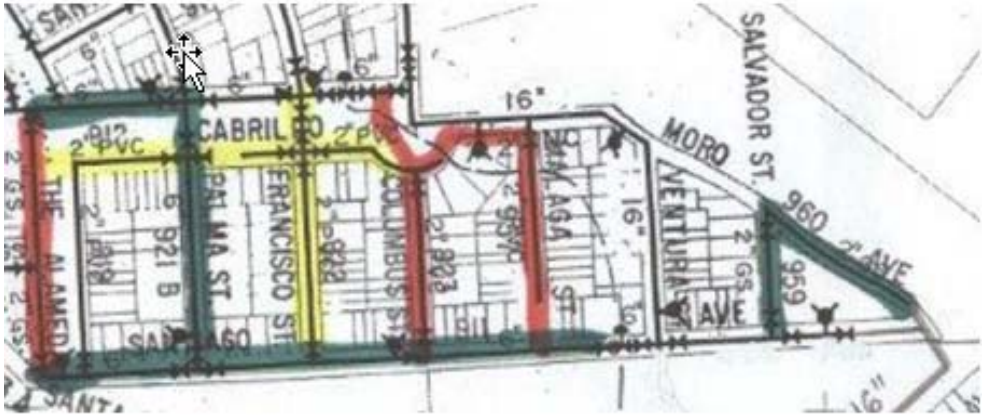
		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$725,000	246,000	479,000								

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 district awarded Phase 1 of the project to Stoloski & Gonzales in September 2012, and the contractor completed construction in February 2013.

Because Phase 1 addressed the most serious problems, timing for Phases 2 & 3 is somewhat flexible. It will be advantageous to complete this construction in the near future, however, before San Mateo County's planned pavement overlay project.



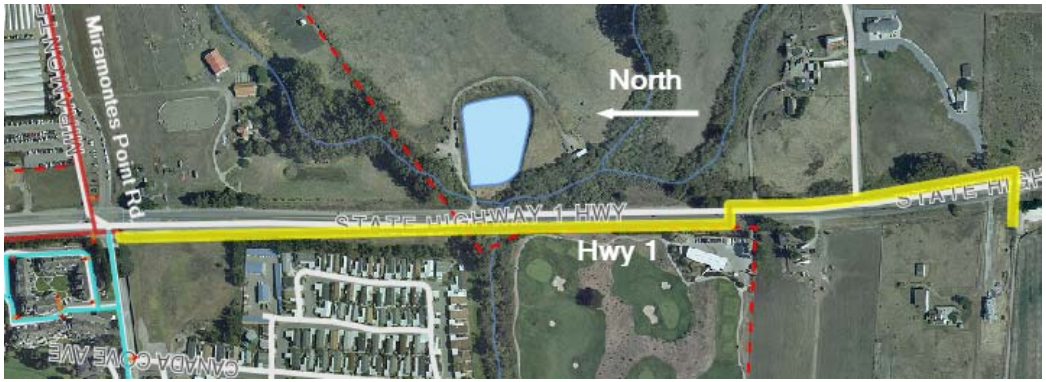
06-02 Highway 1 South Pipeline Replacement Project Pipeline Projects

Priority: 3 Replaces obsolete, substandard main and improves water service, fire protection, water quality.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$750,000	250,000	250,000	250,000							

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.

Transmission of essential data from District facilities to the operations center currently depends on a variety of communication channels, including leased telephone lines, radio links, and cellular network links. These communication links are not under the control of the District, vary in reliability, and can be expensive. This project will connect all District facilities with a reliable, District-owned, ethernet radio network.

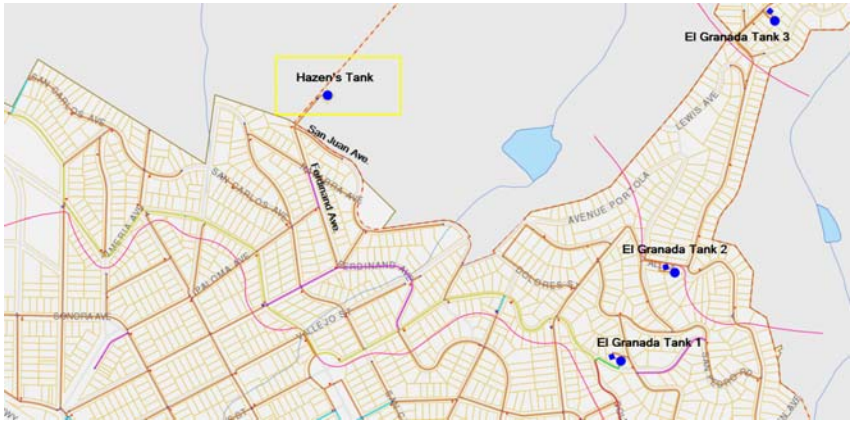
06-04 Hazen's Tank Replacement Pump Stations/Tanks/Wells

Priority: 1 Replaces essential district infrastructure.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$400,000	400,000									

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. The new tank will be a bolted steel 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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$1,150,000		75,000	75,000		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. 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 13/14 and FY 14/15 for the feasibility study, initial environmental review, and preliminary design. The FY 18/19 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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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.

08-06 Nunes Filter to Waste System Water Treatment Plants

Priority: 2 Improves Nunes Water Treatment Plant operationalflexibility and reliability.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$80,000				80,000						

Description: This project would provide piping and controls to allow diversion of Nunes filter effluent to the backwash holding ponds. The capability to temporarily divert water which does not meet drinking water standards increases the operational flexibility of the plant, giving operators the ability to stabilize the filter process rather than shutting the plant down.

08-07 Nunes Filter Valve Replacement Water Treatment Plants

Priority: 3 Maintains essential District facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$210,000	30,000	30,000	30,000	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 seven remaining older PRV's at one PRV per year.

08-10 Backhoe Equipment Purchase & Replacement

Priority: 2 Replaces essential District equipment.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$150,000				150,000						

Description:

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

Priority: 1 Maintains critical district infrastructure.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$400,000	400,000									

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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$150,000			150,000							

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.

08-17 EG Tank #2 Recoat + Ladder Pump Stations/Tanks/Wells

Priority: 1 Maintains essential district facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$300,000	300,000									

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 #2 is a 150,000 gallon steel tank located at 431 El Granada Blvd.. District Engineer J. Teter prepared a January 2009 report indicating that the tank is structurally sound but requires repair of significant corrosion damage in some areas. This project provides for tank repairs, interior and exterior recoating, and additional upgrades, including a new tank ladder.

District Engineer Teter will complete the bid documents for this project in April 2013, and the work will be done in FY 13/14. The project will be challenging due to the steepness and small size of the site and the need to provide a temporary storage tank before taking the existing tank out of service.

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

Priority: 1 Maintains essential district facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$260,000		260,000								

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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$1,275,000		25,000	50,000	400,000	400,000	400,000				

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 has proven the concept of automated meter reading with approximately 500 currently installed meters. These meters operate on a drive-by reading system.

The CIP budget provides funds for evaluation and planning over two fiscal years beginning with FY 14/15, followed by phased AMI implementation over three years beginning with FY 16/17.

09-09 Fire Hydrant Replacement Facilities & Maintenance

Priority: 2 Maintains essential district infrastructure.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$200,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000

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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$275,000	50,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000

Description: This project provides continuing 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.

10-01 Main Street Pipeline Replacement Project-Phase 3 Pipeline Projects

Priority: 1 This remaining section of 10 inch welded steel pipe restricts flow and pressure in the portion of the District south of Pilarcitos Creek. Failure of the pipe on the bridge would cause significant environmental damage and water loss.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$340,000		90,000	250,000							

Description: The El Granada Pipeline Replacement Project, completed in 2008, included replacing the existing 10 inch welded steel pipe along Main Street with a new 16 inch ductile iron pipeline. The section crossing Pilarcitos Creek, which is suspended from the Main Street bridge, was left out of the project because it was anticipated that the City of Half Moon Bay would construct a new bridge within a few years. The City is currently evaluating alternatives for repairing or replacing the bridge and anticipates moving forward with the project. As of March 2013, the City has not decided whether it will replace or repair the existing bridge. The schedule for design and construction of the District's pipeline replacement will depend on the City's project.

10-02 Bridgeport Drive Pipeline Replacement Project Pipeline Projects

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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$950,000	110,000	840,000								

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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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.

11-03 Miramar Tank Altitude Valve Replacement Pump Stations/Tanks/Wells

Priority: 2 Maintains essential district facilities, prevents water loss

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$30,000	30,000		0							

Description: This project provides for replacement of the altitude valve on Miramar Tank. The altitude valve prevents overfilling of the reservoir and the resulting loss of water.

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

Priority: 1 Maintains essential District facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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.

12-02 Wave Valve Automation Pipeline Projects

Priority: 3 Improves system operation, water quality due to better circulation control, employee safety.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$50,000				50,000						

Description: The Wave Valve, located on the 16 inch El Granada Pipeline adjacent to the Highway 1 frontage road near Wave Avenue, allows isolating the northern part of the District from the southern area. Closing the valve occasionally may be necessary for operational reasons. This project would retrofit the existing valve with an electrically operated actuator, eliminating a strenuous manual operation which raises safety concerns and providing operators with the ability to control the valve remotely in the event of an emergency or other operational need.

12-03 Crystal Springs Pipeline Air/Vacuum Relief Valves Pipeline Projects

Priority: 1 Reduces water loss, protects critical infrastructure.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$20,000	20,000									

Description: This project replaces air/vacuum relief valves on the pipeline between Crystal Springs Pump Station and the Cahill Ridge surge tank. Valves which fail to function properly can leak water, reduce pipeline flow, or jeopardize pipeline integrity.

12-04 Denniston Treated Water Booster Station Water Treatment Plants

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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$600,000	600,000									

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.

12-05 Nunes Access Road Repaving Water Treatment Plants

Priority: 1 Ensures continued reliable delivery of essential Nunes Water Treatment Plant chemicals and supplies.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$100,000	100,000									

Description: Over the last several years, the pavement on the steep access road to the Nunes water treatment plant has deteriorated significantly. The road' s condition represents a hazard for the heavy trucks delivering essential chemicals and supplies to the plant, and the deterioration accelerates as the pavement breaks down. Frequent patching has kept the road serviceable, but it is now necessary to resurface it.

12-06 CSPS Surge Tank Control Improvements Pump Stations/Tanks/Wells

Priority: 1 Replaces essential systems and improves worker safety.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$80,000	80,000									

Description: The large pumps at the Crystal Springs Pump Station discharge through a large underground hydropneumatic tank which buffers pressure surges as the pumps start and stop. The water level probes designed to control the level of the air-water interface in the tank are not working, requiring District staff to enter the underground fault more frequently and creating safety concerns.

This project will provide new electronic water level probes and bring the surge tank controls into the pump station's automated control system, giving operators the ability to monitor the tank remotely and eliminating the need to open and enter the tank vault.

12-09 EG Tank #2 Fence Replacement Pump Stations/Tanks/Wells

Priority: 1 Maintains security of essential District facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$25,000	25,000									

Description: This project replaces the fence surrounding El Granada Tank #2 with a new fence meeting the District's current appearance and security standards.

12-11 Miramar Tank Fence Replacement Pump Stations/Tanks/Wells

Priority: 1

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$25,000	25,000									

Description:

12-12 San Vicente Diversion and Pipeline Water Supply Development

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

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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).

This project includes $300,000 in funding for design in FY 13/14 and $2 million for construction in FY 14/15 and FY 15/16

12-14 Nunes - Hydropneumatic System Improvements Water Treatment Plants

Priority: 1 Improves water treatment plant reliability and efficiency.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$40,000	40,000									

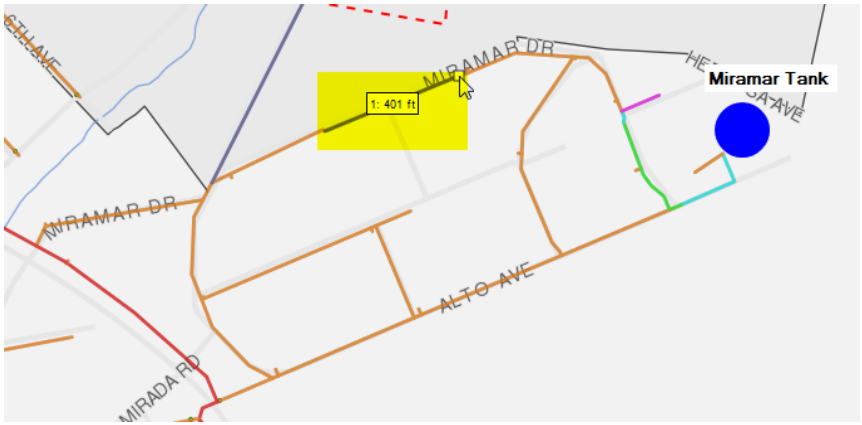
Description: Following modifications that removed emergency generator cooling water demand from the Nunes plant utility water system, capacity of the existing large utility water pumps and hydropneumatic tank exceeds the plant's needs. This results in excessive pump starts and high power consumption. This project would replace the existing pumps with units sized to current needs and upgrade utility water system controls.

13-01 Miramar Drive Pipeline Connection Pipeline Projects

Priority: 3 Improves circulation, water quality, service.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$50,000				50,000						

Description: This project provides a new pipeline bridging an approximate 400 foot gap between existing segments of 6 inch pipe along Miramar Drive below the Miramar Tank. The project would improve service to existing and future residences along Miramar Drive, improve water quality due to better circulation, and provide a second line to increase capacity between the Miramar Tank and the District's system. The Miramar Tank is currently connected only by a 6 inch line along Alto Avenue.



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

Priority: 2 Prevents water loss and environmental damage, protects water quality.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$225,000	25,000	200,000								

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.

The objective of this project is to replace the section of pipe under the creek with a pipe running over the creek, possibly attached to the existing footbridge between the end of Pilarcitos Avenue and the shopping center.

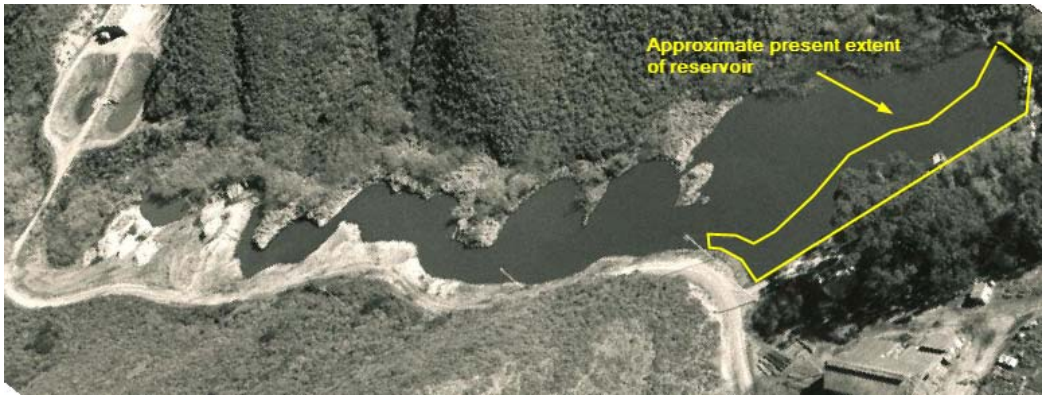
13-04 Denniston Reservoir Restoration Water Treatment Plants

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

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 currently under preparation 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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$100,000	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 would provide 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 and motor will be purchased in FY 13/14 and FY 17/18, respectively.

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

Priority: 1 Ensures adequate water supplies, fire flows.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$275,000			75,000	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.

13-12 CCWD-MWSD Emergency Intertie – Planning Water Supply Development

Priority: 3 Enhances water supply reliability

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$25,000	25,000									

Description: In October 2010, Coastside County Water District and Montara Water and Sanitary District signed an Agreement for Emergency Water Supply providing for the agencies to provide each other with a temporary, interruptible water supply in the event of a water shortage emergency. The agreement does not specify the means by which the emergency supply would be provided. There is currently no point of connection between the two water systems.

This project provides funding for the District's share of planning and preliminary engineering for an intertie between the CCWD and MWSD systems

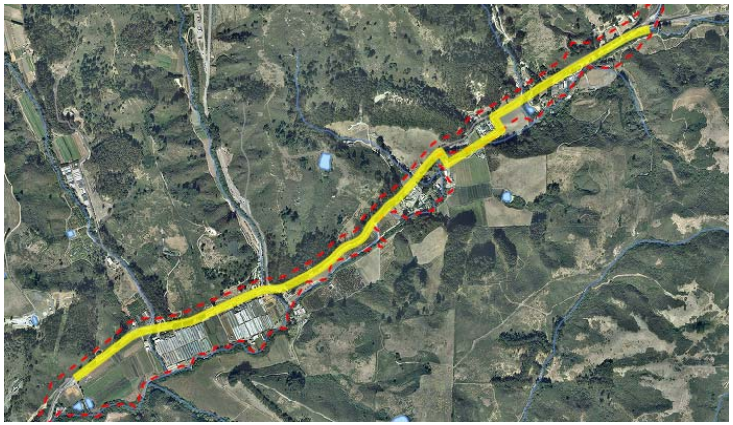
14-01 Replace 12" Welded Steel Line on Hwy 92 with 8" DI Pipeline Projects

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

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$3,100,000			100,000					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. The CIP budget for the project includes $100,000 for planning in FY 15/16 and construction cost placeholders of $1 million per year in FY 20/21 through FY 22/23.



14-02 Nunes - Replace Sludge Pond Media Water Treatment Plants

Priority: 2 Maintains essential District facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$50,000	25,000	25,000								

Description: The Nunes Water Treatment Plant facilities include two backwash solids drying ponds. Filter backwash water flows to the ponds, where the water drains through a bed of sand and gravel media, leaving concentrated sludge solids on the surface of the media. The clarified water returns to the plant influent. Solids deposited on the surface of the media dry and are removed for disposal. Over time, solids penetrate the media and the mechanical equipment used to remove the solids breaks down the media, reducing drying performance and necessitating media replacement.

This project will replace the media in the Nunes backwash ponds over a two-year period from FY 13/14 to FY 14/15.

14-04 Denniston - Dust Control Water Treatment Plants

Priority: 2 Maintains essential District facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$10,000	10,000									

Description: The Denniston Water Treatment Plant site is unpaved, and vehicle traffic and wind can raise dust. The dust interferes with sensitive equipment and instruments. This project provides for application of a dust control agent on the Denniston site.

14-06 Nunes - New 1720E Turbidimeters (4) Water Treatment Plants

Priority: 1 Improves treatment plant reliability.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$35,000		35,000								

Description: This project would replace existing Nunes water treatment plant turbidity meters. The manufacturer no longer supports the model currently installed, making it more difficult to keep the units and reliable service.

14-07 Nunes - New Surface Scatter 7 Turbidimeter Water Treatment Plants

Priority: 1 Improves treatment plant reliability.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$7,000	7,000									

Description: The Nunes plant's existing raw water turbidity meter is not appropriate for an application with higher solids, resulting in frequent plugging. This project would supply a surface scatter turbidity meter, which is more suitable for use with raw water.

14-08 Nunes - New Storage Container Water Treatment Plants

Priority: 3 Equipment replacement.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$7,000	7,000									

Description: Replaces rusted out shipping container used for storage at the Nunes treatment plant.

14-10 Nunes - Emergency Power Switchgear Water Treatment Plants

Priority: 1 Replaces critical water treatment plant emergency power equipment.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$30,000	30,000									

Description: The emergency power transfer switch at the Nunes water treatment plant switches the plant to emergency power in the event of a power failure but does not work automatically to return to utility power when the power is restored. The switchgear supplier has determined that the existing unit cannot be repaired, necessitating its replacement.

14-11 Replace 2" and Larger Meters with Omni Meters Facilities & Maintenance

Priority: 2 Ensures equitable collection of revenue from larger customers.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$90,000	30,000	30,000	30,000							

Description: This program provides for replacing 2 inch and larger meters with newer technology that more accurately measures low flows, ensuring equitable collection of revenue.

14-12 Harbor District Vault & Meter Replacement Facilities & Maintenance

Priority: 2 Improves worker safety and ensures equitable revenue collection.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$70,000	70,000									

Description: The large meter vault serving the Harbor District, located off Capistrano Road and the harbor entrance presents safety and accessibility issues for district staff. Reading the meter currently requires climbing into the vault. This project would install larger vault and a newer meter equipped for drive-by automated reading.

14-13 New Security Fence at Pilarcitos Well Field Facilities & Maintenance

Priority: 2 Maintains security of district property and facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$20,000		20,000								

Description: Replaces the fence and gate leading into the District's property in Pilarcitos Canyon. The fence separates District property from the public areas of the adjoining Christmas tree farm. The current fence and gate do not provide adequate security.

14-14 Grade and Rock First Half of Pilarcitos Canyon Road Facilities & Maintenance

Priority: 3 Maintains essential District facilities and infrastructure

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$20,000		20,000								

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.

14-15 Replace Administration Building Roof Facilities & Maintenance

Priority: 2 Maintains essential district facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$30,000	30,000									

Description: The District's administration building has not been reroofed since the building was constructed in the 1980s. The roof has been repaired numerous times, and the increasing need to fix leaks indicates that the roof has reached the end of its useful life.

14-17 Crystal Springs Pump Station Electrical Controls Upgrades Pump Stations/Tanks/Wells

Priority: 1 Required for operational flexibility, compliance with safety regulations.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$50,000	50,000									

Description: In order to switch the existing main circuit breakers for the large pumps at Crystal Springs Pump Station, operators must open the electrical cabinets. Electrical safety standards promulgated since the Crystal Springs station was built recognize the hazards of exposure to unshielded conductors within electrical cabinets and require that cabinets be opened only by trained, qualified personnel wearing specified protective equipment. It is not practical for the District to bring in specialized personnel each time these breakers must be operated.

This project addresses significant safety and operational flexibility issues by modifying Crystal Springs pump switchgear to allow switching the main circuit breakers from outside the electrical cabinets.

14-18 Crystal Springs Pump Station Spare 12 Inch Check Valve Pump Stations/Tanks/Wells

Priority: 3 Improves operational reliability of critical facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$25,000		25,000								

Description: A discharge check valve on each of the three pumps at Crystal Springs Pump Station prevents water from flowing back through the pump into the pump station wet well when the pump is off. Because the failure of a single check valve can significantly reduce capacity of the pump station by taking a pump out of service, and because the valves are long-lead items, it is desirable to maintain a spare valve. This project provides for the purchase of a spare check valve.

14-23 Alves Tank Generator Enclosure Pump Stations/Tanks/Wells

Priority: 2 Maintains essential district facilities.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$15,000	15,000									

Description: This project replaces the corrosion-damaged emergency generator enclosure at the Alves tank site.In the event of a power failure, the generator supplies power for the pumps that lift water from Alves to the Miramontes Tank, which serves the Moonridge subdivision.

14-24 Denniston/San Vicente EIR & Permitting Water Supply Development

Priority: 1 Essential to the District's efforts to secure vital local water sources.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$200,000	100,000	50,000	50,000							

Description: Preparing an Environmental Impact Report (EIR) for the Denniston/San Vicente Water Supply Project is a key element of the District's efforts to secure its rights to vital local water supply sources. Given the environmental sensitivity of the Denniston and San Vicente watersheds and the number of interested parties – the State Water Resources Control Board, farmers, the National Park Service, Montara Water and Sanitary District, Peninsula Open Space Trust, California Department of Fish and Game, National Marine Fisheries Service, San Mateo County, the California Coastal Commission, and others – completing the EIR and obtaining permits for the District's projects and water diversions will require significant resources. This project provides funding for work on Denniston/San Vicente by the District's EIR consultant, water rights counsel, legal counsel, hydrology consultants, biologists, fisheries consultants, and others.

14-25 Water Shortage Plan Development Water Supply Development

Priority: 1 Ensures the district will be able to meet customer needs, equitably recover revenue, and manage water supplies during a water shortage.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$200,000	50,000	50,000	100,000							

Description: Although the District has a Drought Contingency Plan which broadly specifies actions to be taken in response to various levels of water shortage, the District does not have in place the policies, procedures, and administrative infrastructure to efficiently control water demand, ensure equitable revenue recovery, and provide increased levels of customer service during a severe water shortage. The District's utility billing software, for example, does not have the capability to bill each customer based on the customer's water allocation or to apply surcharges for use exceeding the allocation. In addition, the District needs to establish a water shortage rate structure.

This project provides funding for a multi-year effort aimed at preparing the District to manage water shortages. Elements of this effort include:

- Conducting a drought rate study.
- Implementing a drought rate and fee schedule through the required public input and board decision-making processes.
- Reviewing and obtaining public input on water allocations to classes of users.
- Identifying and evaluating alternatives for modifying or replacing the District's utility billing software.
- Implementing new or revised utility billing software.
- Developing plans for the significant increase in billing and customer service resources that would be required during a water shortage.

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

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

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$125,000							125,000			

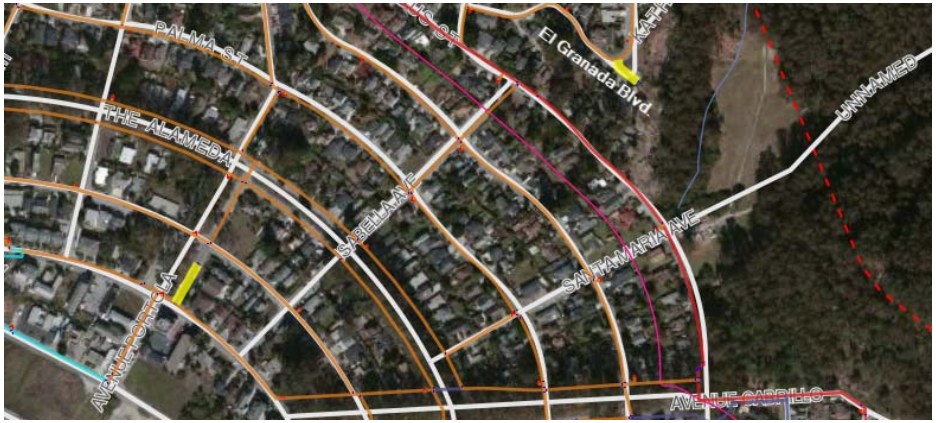
Description: This project would replace approximately 700 feet of 2 inch galvanized steel main along Purisima Way, north of Miramar Drive. The steel main is substandard and does not provide required flow and pressure.

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

Priority: 3

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$2,000,000							1,000,000	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.

99-01 Meter Change Program Facilities & Maintenance

Priority: 1 Ensures accuracy of metering for billing purposes.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$200,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000

Description: This project provides on-going funding for the District's replacement of meters that have reached the end of their service life. In addition to routine replacement of residential meters, this program includes replacing larger meters with newer technology that can read low flows more accurately, improving equitable collection of water revenue.

99-02 Vehicle Replacement Equipment Purchase & Replacement

Priority: 2 Replaces essential District equipment.

		FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$50,000	5,000	5,000	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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$30,000	3,000	3,000	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 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23
Total Budgeted:	$343,500	60,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	3,500	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.