FY 2013-14

Capital Improvement BUDGET & TEN-YEAR PLAN

Central Contra Costa Sanitary District

FY 2013-14 CAPITAL IMPROVEMENT BUDGET

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FY 2013-14 CAPITAL IMPROVEMENT BUDGET

SUMMARY

Central Contra Costa Sanitary District's Capital Improvement Budget (CIB) shows planned expenditures of $29,580,000 for Fiscal Year (FY) 2013-14 from the Sewer Construction Fund for planning, design, and construction of capital projects in four CIB programs. The total funding authorization required for projects in the CIB for FY 2013-14 is $38,829,000.

The capital program is designed to meet the following goals:

- Protect public health and the environment,
- Maintain existing assets,
- Respond to regulatory and community concerns,
- Accommodate planned future growth.

By adopting the CIB, the Board of Directors authorizes staff to pursue work on specifically identified projects in the Treatment Plant, Collection System, General Improvements, and Recycled Water Programs.

MAJOR PROJECT EMPHASIS

Although the CIB is made up of funding estimates for many individual projects, each year there are several major projects which together account for a majority of total estimated capital expenditures. In FY 2013-14, the emphasis will be on 13 large projects, which together account for $21,801,000 or 74 percent of the total estimated expenditures. Estimated FY 2013-14 expenditures for each of these projects are noted below.

Primary Treatment Renovation
FY 2013-14: $5,400,000 **Estimated total project cost: $13,500,000**
This project will renovate or replace the water and air supply pipelines at the primary sedimentation tanks. The grit handling facility will be renovated, and the scum collection system will be renovated with new scum sprays, new helical scum skimmers and drives, and a stainless steel scum hopper for Tanks 1 and 2. The scum thickening unit in the Solids Conditioning Building will also be replaced. Other primary tank improvements include installation of new baffles, replacing chain drives, sludge flight drive shafts and bearings, concrete repairs, upgrading hand railings, constructing a new level control structure, and the odor control system will be evaluated and modified as necessary.

Concord Landscape Project
FY 2013-14: $3,060,000 Estimated total project cost: $4,001,000
The project would consist of construction of about 2.5 miles of new recycled water distribution piping and about 34 customer connections. CCCSD has acquired approximately $1,100,000 in grant funding from Department of Water Resources (State Prop 84) and from the United States Bureau of Reclamation (Title 16).

2013 CIPP Project
FY 2013-14: $2,500,000 Estimated total project cost: $4,928,000
This project will renovate approximately 2,600 feet of existing large diameter deteriorated corrugated metal and reinforced concrete pipelines located in South Main between Hill Road and Lilac Drive in Walnut Creek utilizing cured in place pipe (CIPP), a trenchless rehabilitation technology. Approximately 1,450 feet of large diameter deteriorated corrugated metal pipe will also be renovated in Lancaster Road between Westwood Court and Orchard Lane using CIPP. An additional 3,800 feet of large diameter reinforced concrete pipe will be renovated on the Shell Refinery Property and east along Marina Vista to Highway I-680 in Martinez using the same CIPP technology.

Seismic Improvements for HOB
FY 2013-14: $1,800,000 Estimated total project cost: $6,013,000
Structural steel frames constructed before the most recent Northridge earthquake may weaken during an earthquake and be unable to resist the forces generated during a seismic event. These steel framing problems in combination with the building's flexibility are the primary reasons for the HOB's seismic vulnerability. The HOB will be retrofitted to ensure a life-safety level of structural performance. In addition to seismic improvements, the project includes new carpet and interior/exterior painting, ADA improvements, upgrades to the electrical and data communication systems, office space/cubicle improvements, a kitchenette on the third floor, minor upgrades to the HVAC system and potentially the plumbing of REW to bathroom fixtures.

Diablo Renovations – Phase 2
FY 2013-14: $1,500,000 Estimated total project cost: $2,736,000
The Diablo Sewer Renovations, Phase 2 project will replace/relocate approximately 12,000 feet of 6-inch and 8-inch sewer pipe in the public right of way and easements. The project is scheduled for construction in FY 2013-14 and FY 2014-15.

Lafayette Sewer Renovations – Phase 8
FY 2013-14: $1,500,000 Estimated total project cost: $2,304,000
The project will renovate12,000 feet of small-diameter sewers predominately in the Upper Happy Valley Road area from Cowan Road to Los Arabis.

Information Technology Development
FY 2013-14: $1,100,000 Estimated total project cost: $5,485,000
This project provides funding for the District's computer and telecommunication technology needs.

Walnut Creek Renovations – Phase 10
FY 2013-14: $1,000,000 Estimated total project cost: $2,600,000
This project will replace/rehabilitate approximately 8,000 feet of six- and eight-inch sewers in the Walnut Creek area.

Pump & Blower Building Seismic Upgrade
FY 2013-14: $850,000 Estimated total project cost: $4,455,000
In 2009, a seismic evaluation of treatment plant facilities was completed. Included in the evaluation are recommendations to bring the Pump and Blower Building in line with current seismic design standards, which this project will accomplish. Construction will entail installation of shear walls and buttresses and is expected to start in late 2014-15.

Treatment Plant Planning
FY 2013-14: $810,000 Estimated total project cost: $3,233,600
This project provides funding for feasibility and pilot-scale system work that will be needed if emerging regulatory initiatives require process modifications.

Pleasant Hill – Grayson Creek Trunk
FY2013-14: $800,000 Estimated total project cost: $2,800,000
The recommended project involves installing approximately 5,000 feet of 18-inch and 24-inch relief sewers and diverting the sewage away from the capacity deficient sewers.

TV Inspection Program, Phase 2
FY 2013-14: $800,000 Estimated total project cost: $9,000,000
The TV inspection is a large scale, multi-year effort to CCTV inspect the entire CCCSD collection system. Phase 2 of the TV inspection program will inspect all sewers in the service area in the next 5 years where initial inspections or maintenance records indicate follow-up inspection work would be useful. Sewers on a routine maintenance schedule will be inspected once every 10 years. The inspection data will be used to organize and prioritize sewer renovation projects and modify CSOD's maintenance schedules. The initial emphasis of Phase 2 will be sewers in the Lafayette, Orinda and Walnut Creek areas.

2013-14 Development Sewerage
FY 2013-14: $681,000 Estimated total project cost: $681,000
This project provides for appropriate capitalization of District force account labor and other expenses for planning, design, and construction of developer installed and contributed main sewer facilities.

CAPITAL IMPROVEMENT BUDGET SYSTEM

The CIB includes detailed information for projects in the first year of the Ten-year Capital Improvement Plan (CIP). Board authorizations are made to add funds to the four programs prior to the start of the fiscal year.

Under the CIB system, budgets are authorized for project work within the four budget programs. Budgets are established by program since precise costs for individual projects are difficult to estimate when CIB preparation often precedes project initiation by a year or more. Projections of costs for broader categories of project work can more reliably be made during budget preparation since positive and negative variations in project estimates are expected to balance in a program summation. The program contingency accounts can be used to fund new projects which are identified after the CIB is approved, and to cover project budget overruns within specified limits. Program authorizations are expected to exceed annual expenditures during any particular budget year since larger planning studies, engineering designs, and construction contracts typically span more than one fiscal year and the budgets are authorized in full at the beginning of each phase of the projects.

As shown in Table 1, by adopting the FY 2013-14 Capital Improvement Budget (CIB), the Board authorizes allocations from the Sewer Construction Fund for planning, design, and construction of capital projects in the four programs. Approximately $7.7 million is estimated to be carried over from previous Board-authorized-but-unspent project budgets in FY 2012-13 and $31.1 million is the total required new Board authorization for projects and project phases beginning in FY 2013-14. The total Board authorization for projects that are active in the CIB in FY 2013-14 is the sum of these two numbers, or $38.8 million. The estimated FY 2013-14 expenditure total is $29.6 million, leaving an estimated $9.2 million in authorizations for projects that carry into future years. These figures will be adjusted when actual FY 2012-13 expenditures are known and actual FY 2012-13 carryover can be determined. At that time, the Board will be informed of the corrected figures for the four programs in the CIB.

Capital Project Contingency Spending

Two types of contingency funding of capital projects are provided for: project contingency and program contingency. Table 4 identifies staff authority to approve funds for project budget overruns. Department Directors have authorization to spend 5% (up to a maximum of $10,000) of the final project budget, in addition to the final project budget which is established at the time of the award of the construction contract. The General Manager has authority to spend 15% over the final project budget. Any project budget overruns greater than 15% require Board approval.

The program contingency fund is 5% of the total Estimated Allocation (new allocations) amount approved by the Board when the Capital Budget is adopted. This amount is set aside in a separate account and is allocated to new projects that are not in the CIB. A maximum of $100,000 can be allocated to a project not in the CIB by the General Manager. The remaining 95% is placed in an account from which allocations are made for projects included in the CIB.

Table 1: Capital Improvement Budget Summary for Fiscal Year 2013-14

Program	95% of Estimated Allocation for Projects in the CIB	5% Program Contingency for projects not in the CIB	Estimated Allocation this FY (All Projects)	Estimated Carry-over from Previous FY	Total Proposed Authorization	Estimated FY 2013-14 Expenditures
Treatment Plant	$13,515,650	$711,350	$14,227,000	$1,134,000	$15,361,000	$9,038,000
Collection System	$11,931,050	$627,950	$12,559,000	$1,985,000	$14,544,000	$12,370,000
General Improvements	$3,346,850	$176,150	$3,523,000	$1,848,000	$5,371,000	$4,756,000
Recycled Water	$766,650	$40,350	$807,000	$2,746,000	$3,553,000	$3,416,000
Total this Fiscal Year	**$29,560,200**	**$1,555,800**	**$31,116,000**	**$7,713,000**	**$38,829,000**	**$29,580,000**

Table 2: Capital Improvement Budget Summary by Program and Subprogram

Program	Estimated Allocation this FY	Estimated Carry-over from Prior FY	Total Proposed Authorization	Estimated FY 2013-14 Expenditures	% of Total FY 2013-14 Expenditures
Treatment Plant					
Regulatory Compliance/Planning/Safety	$ 1,394,000	$ 502,700	$ 1,896,700	$ 1,128,000	3.8
One-Time Renovation	11,954,000	14,900	11,969,300	7,428,000	25.1
Recurring Renovation	879,000	615,900	1,494,000	482,000	1.6
Expansion	0	0	0	0	0
Program Subtotal	**14,227,000**	**1,133,500**	**15,360,900**	**9,038,000**	**30.6**
Collection System					
Renovation	8,867,000	1,438,700	10,305,700	8,852,000	29.9
Regulatory Compliance/Planning/Safety	471,500	198,500	670,000	520,000	1.8
Expansion	2,482,000	70,400	2,552,400	1,992,000	6.7
Pumping Stations	738,500	277,000	1,015,500	1,006,000	3.4
Program Subtotal	**12,559,000**	**1,984,600**	**14,543,600**	**12,370,000**	**41.8**
General Improvements					
Vehicles & Equipment	646,000	0	646,000	646,000	2.2
Management Information Systems	1,058,800	691,200	1,750,000	1,700,000	5.7
Projects	1,818,000	1,156,900	2,974,900	2,410,000	8.1
Program Subtotal	**3,522,800**	**1,848,100**	**5,370,900**	**4,756,000**	**16.1**
Recycled Water					
Urban Landscaping	806,700	2,745,700	3,552,400	3,416,000	11.5
Program Subtotal	**806,700**	**2,745,700**	**3,552,400**	**3,416,000**	**11.5**
Total FY 2013-14 Budget	**$31,115,900**	**$7,711,900**	**38,827,800**	**29,580,000**	**100.0**

SEWER CONSTRUCTION FUND REVENUES AND EXPENDITURES

The Sewer Construction Fund acts as the bank to finance the Capital Program. In order to ensure that adequate funds are available, each year the expected revenues are reviewed and compared with planned expenditures and a determination made as to whether additional revenues are needed.

The sources of capital revenue are described in detail in the Capital Improvement Plan portion of this document. They fall into four major categories.

First are the capacity and pumped zone fees which are charged to new users when they connect to the sewer system. These fees are based on a calculation of the cost to buy in to the current value of existing District assets. The amount of these fees collected each year varies significantly depending on the health of the housing industry and the number of new homes constructed.

Second is interest earned on the Sewer Construction Fund balance, which varies depending on the economy and the amount of money in the Fund.

Third are reimbursements from others, which consist primarily of reimbursements from the City of Concord, served by the District under contract.

The fourth major source of revenue is sewer service charges (SSC). SSC are the one revenue source that is completely within the discretion of the District Board of Directors. Therefore, each year staff evaluates the District's finances and recommends a SSC rate it determines to be prudent to sustain the Capital Improvement Program without the need for large SSC rate increases or substantial debt financing in the future. If an increase in the SSC rate is proposed, the Board of Directors conducts a public hearing, and considers all available information in coming to a final decision on setting the SSC rate.

Two years ago, the Board of Directors approved an increase in the SSC rate by $30 per Residential Unit Equivalent (RUE) for each of the last two years to fund needed capital improvements while avoiding significant debt financing. The $34 per RUE SSC increase is reflected in Table 3: Sewer Construction Fund Revenues and Expenditures on the following page. With the rate increases, staff projects that expenditures will exceed revenue by approximately $4.3 million, which would require drawing from funds available in the Sewer Construction Fund.

Table 3: Sewer Construction Fund Revenues and Expenditures

A summary of projected FY 2013-14 Capital Improvement Program revenue and expenditures is presented below:

	Assumes $34 SSC Rate Increase
Revenues	
Facilities Capacity Fees	$4,790,000
Pumped Zone Fees	755,000
Interest	193,000
Property Taxes	8,102,000
Sewer Service Charges*	6,628,000
Reimbursements from Others:	
City of Concord	4,277,000
Recycled Water Sales **	63,000
Developer Fees, Charges, Other ***	435,000
Total Revenues	**$25,243,000**
Expenditures	
Treatment Plant Program	$9,038,000
Collection System Program	12,370,000
General Improvements Program	4,756,000
Recycled Water Program	3,416,000
Total Expenditures	**$29,580,000**
A summary of Sewer Construction Funds Available impact is presented below:	
Projected Revenues	$25,243,000
Projected Expenditures	($29,580,000)
Draw from Funds Available	($4,337,000)

More specific information regarding expenditure categories is included in the Capital Improvement Plan.

* Proposed rate increase of $34 has been included.

**Revenue is first recorded in the O&M budget until O&M costs are offset. Any additional revenue will be recorded in the Sewer Construction Fund.

***Does not include CAD and AVAD revenue.

AUTHORIZATION LIMITS

Under the established CIB system, the District Board of Directors and staff have well-defined authority limits. The Board of Directors authorizes funds for the four CIB programs (Treatment Plant, Collection System, General Improvements, and Recycled Water) from the Sewer Construction Fund at the beginning of each fiscal year. The Capital Improvement Program Authorization Limits are detailed in Table 4, which follows.

Once the CIB is approved by the Board, the General Manager has the authority to allocate funds to the individual projects contained in the CIB up to the total program budget. If a project is not included in the CIB, the General Manager can allocate contingency funds up to $100,000. If an individual equipment item is not included in the CIB, the General Manager can allocate contingency funds up to $100,000 per item. The General Manager can allocate funds from program contingency accounts to cover project budget overruns, up to 15 percent of the final project budget established at the time of construction contract award. Finally, the General Manager may award construction contracts less than $100,000 and authorize consultant agreements less than $100,000.

The Board of Directors also has an ongoing role after it approves the CIB and the CIP. Specific Board approval is required for award of construction contracts over $100,000, for consultant agreements over $100,000 and for project overruns in excess of 15 percent of the final project budget established at the time of construction contract award. In addition, any allocation to a new project not included in the CIB that exceeds $100,000 must be brought to the Board for authorization.

Table 4: Capital Improvement Program Authorization Limits[1]

Action		Department Director	General Manager	Board of Directors
Approve Capital Plan		None	None	No limit
Authorize Capital Program budgets		None	None	No limit
Allocate funds to individual project budgets		$25,000 or less	Total program budget plus contingency[2]	No Board authorization required
Authorize Consultant Contracts	Professional Consulting Services	$35,000 or less	$100,000 or less	Greater than $100,000
	Technical Consulting Services.	$35,000 or less	$100,000 or less	Greater than $100,000
	Professional Eng. Services.	$35,000 or less	$100,000 or less	Greater than $100,000
Allocate funds from program contingency accounts to projects not included in the CIB		$10,000	$100,000 or less per project	Greater than $100,000
Individual equipment items and equipment contingency		None	$100,000 or less	Greater than $100,000
Authorize supplemental funds to program budgets/ contingency accounts		Not applicable	Not applicable	Sewer Construction Fund balance
Allocate funds for project budget overruns		5% of final project budget[4] or a maximum of $10,000	15% of final project budget[2,3]	Greater than 15% of final project budget[2,3]
Award construction contracts		None	$100,000 or less	Greater than $100,000
Authorize construction change orders	Additive	$35,000 or less	$100,000 or less	Greater than $100,000
	Deductive	More than ($50,000)	No limit	No Board authorization required
Subcontractor substitutions		None	All substitutions unless protested by subcontractor	Substitutions protested by subcontractor
Construction project acceptance		None	All projects	Informational announcement to the Board
Close out project		None	All projects	Memo provided to the Board at end of FY

[1] General Manager authority was revised by Board Resolution on December 15, 2011
[2] Limited by the remaining balances of the applicable program budget and contingency account
[3] Limited by the remaining balance of the applicable program contingency account
[4] Final project budget is established at time of award of construction contract
[5] Reduced by project overrun allocations previously made by Department Managers

CEQA COMPLIANCE

The CIB document is exempt from the California Environmental Quality Act (CEQA) because it is a planning study (District CEQA Guidelines Section 15262). Some projects included in this CIB are designated as exempt under CEQA. If appropriate, a Notice of Exemption may be filed for such projects following a future action of the Board of Directors, such as an award of a construction contract. Other projects in the CIB are designated as needing a "Negative Declaration" or "Environmental Impact Report" to comply with CEQA. Non-exempt CEQA projects will be considered for Board approval on a case-by-case basis after preparation and certification of the appropriate CEQA documentation.

Tables 5, 6, 7 and 8 present the CEQA compliance status of projects for which staff is requesting an authorization of sewer construction funds. These tables indicate the type of CEQA documentation anticipated being required for each project. The types of documentation are:

Exemption: Staff will prepare a Notice of Exemption, if still appropriate, when each project receives a future Board of Directors' approval.

Negative Declaration: Staff will prepare a Negative Declaration for the project. Board of Directors' approval of the project would follow approval of the Negative Declaration.

Environmental Impact Report (EIR): Staff will direct preparation of an EIR. Board of Directors' approval of the project would follow certification of the EIR.

CEQA Documents Completed: For these projects, CEQA compliance already has been achieved through documents previously prepared and approved.

Table 5: CEQA Compliance Summary for FY 2013-14 - Treatment Plant Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Reg. Compliance/Planning/Safety		
Treatment Plant Planning	X	
TP Master Plan Update	X	
TP Hazard Identification & Remediation	X	
Fire Protection System Improvements	X	
Treatment Plant Security Upgrade - FY2012-13 thru 2021-22	X	
Alternative Energy Facilities		Possible Negative Declaration
Standby Effluent Pumps Refurb - ph 2	X	
Alternative Energy & Greenhouse Gas Reduction Plan	X	
Nitrification	X	
Incinerator Emissions Compliance Modifications	X	
TP Safety Improvements FY 2011-12 thru 2019-20	X	
Treatment Plant Soil Remediation	X	
Permitting Study for New Furnace	X	
PA System Improvements	X	
Future Regulatory Projects	X	
New Solids Handling Facilities (MHF/Digesters)	X	
Ozone Disinfection	X	
Primary Treatment Covers	X	
Nitrification – ph 2	X	
Treatment Plant Security Upgrade – LT	X	
2 One-Time Renovation		
SCB Seismic Upgrade Study	X	
Switchgear Replacement - ph 2	X	
Primary Effl Pumps Refurb - ph 2	X	
Furnace Burner	X	
Instr & Control - PLC System Upgrades - FY 12-13 thru 21-22	X	
Wet and Dry Scrubber Replacement	X	
Aeration System Renovation	X	
Wet Weather Bypass Improvements	X	
Laboratory Seismic Upgrade	X	
Primary Treatment Renovation	X	
POB Seismic Upgrade	X	
Pump & Blower Bldg Seismic Upgrade	X	
Secondary Process Improvements	X	
Plant Cyber Security	X	
Solids Handling Equipment Evaluation	X	
Co-Gen Renovation	X	
Warehouse Seismic Upgrade	X	
Centrifuge & Cake Pump Upgrades	X	
Screenings Removal	X	
SCB Seismic Improvements	X	
3 Recurring Renovation		
TP Facilities Renovations	X	
TP Asset Management	X	
TP Cathodic Prot Sys Repl	X	
TP Equipment Replacement	X	
Pavement Renovation	X	
Concrete Renovation	X	
Plant Energy Optimization	X	
Piping Renovations - ph 7	X	
Electrical Cable Replacement	X	
Coating Renovation	X	
Piping Renovations - ph 8	X	
TP Electric Cable Repl – LT	X	
Plant Electrical and Instrumentation Repl	X	

Table 5: CEQA Compliance Summary for FY 2013-14 - Treatment Plant Program (Continued)

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
3 Recurring Renovation (Continued)		
TP Facilities Renov Prgm – LT	X	
TP Asset Management – LT	X	
Piping Renovations and Replacement Program	X	
TP Cathodic Prot Sys Repl – LT	X	
TP Equipment Replacement – LT	X	
TP Protective Coating – LT	X	
4 Expansion		
Bar Screen for Third Wetwell	X	

Table 6: CEQA Compliance Summary for FY 2013-14 - Collection System Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Renovation		
North Orinda Sewer Renovations - ph 5	X	
Pipeburst Blanket Contract	X	
Lafayette Sewer Renovation - ph 8	X	
Suspended Pipe Support	X	
CIPP Blanket Contract	X	
Martinez Sewer Renovations- ph 4	X	
Walnut Creek Sewer Renovations - ph 9	X	
TV Inspection Program - ph 2	X	
Walnut Creek Sewer Renovations - ph 10	X	
Survey Monument Installation	X	
Concrete Pipe Renovation Program	X	
North Orinda Sewer Renovations - ph 6	X	
Diablo Renovations - ph 2	X	
North Orinda Sewer Renovations - ph 4	X	
Pleasant Hill Sewer Renovations - ph 2	X	
Cathodic Protection System Replacement - 12-13 thru 21-22	X	
Collection System Urgent Projects - FY 2012-13 thru 21-22	X	
Watershed 44 Creek Xing Stabilization	X	
Collection System Renovation Program	X	
2013 & 2014 CIPP Project	X	
Lafayette Sewer Renovations - ph 9	X	
Lafayette Sewer Renovations – ph 10	X	
North Orinda Sewer Renovations – ph 7	X	
Walnut Creek Sewer Renovations – ph 12	X	
South Orinda Sewer Renovations – ph 6	X	
Diablo Renovations – ph 3	X	
Walnut Creek Sewer Renovations – ph 13	X	
Pleasant Hill Sewer Renovations – ph 3	X	
Lafayette Sewer Renovations – ph 11	X	
Walnut Creek Sewer Renovations – ph 11	X	
South Orinda Sewer Renovations – ph 7	X	
Lafayette Sewer Renovations – ph 12	X	
Pleasant Hill Sewer Renovations – ph 4	X	
Martinez Sewer Renovations – ph 5	X	
Walnut Creek Sewer Renovations – ph 14	X	
Mount Diablo Blvd Main Improvements	X	
Lafayette Sewer Renovations – ph 13	X	
Walnut Creek Civic Center Main Improvements	X	
South Orinda Sewer Renovations – ph 8	X	
Walnut Creek Sewer Renovations – ph 15	X	
North Main Trunk Improvements	X	
Locust Street Improvements	X	
Walnut Creek Sewer Renovations – ph 17	X	
TV Inspection Program – ph 3	X	
Walnut Creek Sewer Renovations – ph 16	X	
A-Line Relief – 39-inch Rehab	X	
Collection System Renovation Program – LT	X	
2 Reg. Compliance/Planning/Safety		
Forcemain Assessment	X	
Collection System Planning - LT	X	
Collection System Modeling Upgrade 12-13 thru 17-18	X	
Manhole Remote Level Monitoring	X	
Manhole Remote Level Monitoring – LT	X	
3 Expansion		
Development Sewerage - Capital Plan years	X	
Contractual Assessment Districts	X	
Alhambra Vly Assmt Districts	X	
Pleasant Hill - Grayson Creek Trunk	X	

Table 6: CEQA Compliance Summary for FY 2013-14 - Collection System Program (Continued)

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
3 Expansion (Continued)		
Trunk Sewer Expansion Program	X	
Lancaster Rd Walnut Creek, Trunk 13-600	X	
Moraga Way, Orinda, Trunk 10-200/300	X	
Pleasant Hill Road Corridor	X	
Walnut Creek-Walnut Blvd Corridor – Trunk 29-200	X	
Martinez Alhambra Avenue Trunks	X	
Lafayette – Happy Valley Road Sewer	X	
Walnut Creek – Palmer Road	X	
A-Line Phase 2B		EIR, 1991; possible update
Contractual Assessment Districts – LT	X	
Nelson Ave Sewer Repl	X	
Lafayette Lower Pleasant Hill Road Trunk	X	
Diablo Rd Danville, Trunk 35-400 – ph 1	X	
Danville-Diablo Road Corridor	X	
4 Pumping Stations		
SCADA Master Plan	X	
Pumping Stations Master Plan	X	
Moraga Pumping Station Chopper Pump	X	
Fairview / Maltby Upgrades	X	
Flush Kleen Pumping Station Improvements	X	
PS SCADA O&M Manual	X	
Pump Station Safety Improvements	X	
San Ramon Bypass Pump	X	
PS Equip & Piping Repl	X	
Pumping Station Minor Upgrades	X	
Pump Station Hazard Identification	X	
San Ramon Pumping Station Upgrades	X	
Buchanan South PS Replacement Sewer	X	
Martinez Bypass Pump	X	
Misc. Force Main Improvements	X	
Lower Orinda PS Force Main	X	
PS Equip & Piping Repl – LT	X	
Orinda Crossroads PS Force Main	X	
Buchanan North PS Upgrades	X	
Bates Blvd PS Upgrades	X	
Moraga Pumping Station Force Main	X	
Pump Station Safety Improvements – LT	X	
Clyde Parallel Force Main	X	
Concord Industrial Pumping Station Repl	X	

Table 7: CEQA Compliance Summary for FY 2013-14 - General Improvements Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Vehicles & Equipment		
Cap Proj Clearing	X	
Vehicles and Equipment Acquisition - LT	X	
2 Management Information Systems		
GDI - Treatment Plant	X	
GDI-SMMS Replacement	X	
Information Technology Development	X	
Information Technology Development – LT	X	
3 Projects		
Capital Improvement Plan and Budget	X	
HOB Improvements 12-13 thru 21-22	X	
POD Office Improvements - LT	X	
District Property Safety Improvements	X	
Martinez Easements	X	
Permit Software Evaluation	X	
Imhoff Triangle Development		Mitigated Negative Declaration needed
Seismic Improvements for HOB	X	
District Easements – LT	X	
CSOD Facilities Improvements	X	
Kiewit, DP Safety, Gen Sec, Rental, Imhoff – LT	X	Kiewit: Mitigated Neg. Dec. 2007 Mitigated Neg. Dec. 2005 for clean fill operation Possible Mitigated Neg. Dec. needed for development
Capital Legal Services - 2010 to 2018	X	
General Security Access	X	
CSO Vehicle Maint Bldg	X	
Capital Legal Services – LT	X	
CSOD Facilities Improvements – LT	X	
HOB Improvements 22-23 thru 31-32	X	

Table 8: CEQA Compliance Summary for FY 2013-14 - Recycled Water Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Urban Landscaping		
ReW Line Conco/Maltby RPR	X	
Concord Landscape Project		NEPA Environmental Assessment/Finding of No Significant Impact December 2011
Refinery Recycled Water Project		Possible Negative Declaration/EIR
Concord Naval Weapons REW	X	
Recycled Water Planning	X	
Zone 1 Recycled Water - ph 1C - 2012 to 2022		Mitigated Neg. Dec. 2007
REW - Cathodic Prot Sys Repl	X	
Recycled Water Treatment Facilities Improvements		Possible Negative Declaration
RW – Cathodic Prot Sys Repl – LT	X	
Recycled Water Planning – phase 1B	X	

TREATMENT PLANT PROGRAM

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TREATMENT PLANT PROGRAM

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Recurring Renovation - Tab 3

TREATMENT PLANT PROGRAM

This section includes detailed information for the Treatment Plant Program. Table TP-1 presents project listings and budget information. Detailed project information, schedules, and cash flow tables are presented in individual project sheets.

OVERVIEW

The Treatment Plant Program continues with asset preservation, future regulatory compliance, wet weather flow processing, and seismic strengthening.

Regulatory Compliance/Planning/Safety (Tab 1)

This subprogram includes projects that emphasize preparing for future regulations and treatment plant planning, which includes pilot testing various new technologies. The Alternative Energy Study will assess the impacts greenhouse gas (GHG) reduction regulations may have on the District. Work will be done to investigate new furnace permitting requirements and install incinerator emissions improvements. A plan will be developed in conjunction with Department of Toxic Substances Control (DTSC) to address the issue of contaminated soil at the plant site. A long term project to identify and remove any hazardous materials at the Treatment Plant will continue. In addition further investigations will be conducted on ammonia toxicity and evaluation of appropriate treatment to remove it.

One-Time Renovation (Tab 2)

This subprogram includes three high expenditure projects. The largest project is the Primary Treatment Renovation Project, a two-year effort that will renovate the primary facilities. The second project, Seismic Upgrades for the Pump and Blower Building, will retrofit the Pump and Blower Building to current design standards. The third large project, Co-Gen Renovation, will replace obsolete control systems.

Recurring Renovation (Tab 3)

Projects in this subprogram are targeted at asset preservation. The main project in this program is the Piping Renovations and Replacement, Phase 8. Other projects include Plant Energy Optimization, Asset Management, Concrete Renovation, and Plant Electrical and Instrumentation.

Expansion (Tab 4)

There are no projects in the Expansion program in FY 2013-14. Primary treatment expansion will be explored further by testing new primary tank baffles and the addition of chemicals to enhance primary treatment performance. The results will influence future design decisions and expansion requirements for the primaries and aeration system.

Table TP-1: Treatment Plant Subprogram/Project List

Subprogram / Project No. / Project Title			Estimated Total Project Expenditures	Estimated Expenditures to 06/30/13	Anticipated Allocations FY 2013-14	Estimated Expenditures FY 2013-14
1	**Reg. Compliance/Planning/Safety**					
	7256	Alternative Energy & Greenhouse Gas Reduction Plan	758,600	708,600	0	50,000
	pTP21	Alternative Energy Facilities	6,345,000	0	15,000	15,000
	pTP22	Incinerator Emissions Compliance Modifications	226,000	150,000	76,000	75,000
	pTP20	Nitrification	44,528,000	0	28,000	3,000
	7305	PA System Improvements	110,000	100,000	0	10,000
	pTP31	Permitting Study for New Furnace	35,000	25,000	5,000	5,000
	pTP33	Treatment Plant Soil Remediation	20,722,000	25,000	0	25,000
	pTP12	Standby Effluent Pumps Refurb - ph 2	475,000	20,000	455,000	5,000
	7283	Fire Protection System Improvements	358,000	328,000	0	30,000
	7284	TP Hazard Identification & Remediation	868,000	163,000	105,000	80,000
	7287	TP Master Plan Update	356,700	351,700	10,000	5,000
	7301	Treatment Plant Planning	3,233,600	1,373,600	700,000	810,000
	pTP08	TP Safety Improvements FY 2011-12 thru 2019-20	45,000	10,000	0	5,000
	pTP23	Treatment Plant Security Upgrade – FY 2012-13 thru 2021-22	91,000	1,000	0	10,000
		Subprogram Total	**78,381,900**	**3,265,900**	**1,504,000**	**1,128,000**
2	**One-Time Renovation**					
	7272	Aeration System Renovation	1,447,400	472,400	913,400	150,000
	7295	Auxiliary Boiler Burner Upgrade	230,000	130,000	110,000	100,000
	7308	Co-Gen Renovation	800,000	400,000	400,000	400,000
	pTP03	Plant Cyber Security	70,000	35,000	20,000	25,000
	pTP15	Furnace Burner	1,700,000	50,000	0	50,000
	7304	Instr & Control - PLC System Upgrades - FY 12-13 thru 21-22	800,000	80,000	80,000	80,000
	7302	Primary Effl Pumps Refurb - ph 2	70,000	49,000	0	1,000
	7285	Primary Treatment Renovation	13,500,000	2,329,600	8,065,000	5,400,000
	7294	Secondary Process Improvements	1,429,500	34,500	41,000	45,000
	pTP19	Laboratory Seismic Upgrade	192,000	0	5,000	5,000
	7291	Pump & Blower Bldg Seismic Upgrade	3,800,000	749,000	1,795,000	850,000
	7289	POB Seismic Upgrade	1,297,100	121,100	30,000	1,000
	7296	SCB Seismic Upgrade Study	133,700	128,700	0	5,000
	pTP18	Warehouse Seismic Upgrade	895,000	0	95,000	5,000

Table TP-1: Treatment Plant Subprogram/Project List (Continued)

Subprogram / Project No. / Project Title			Estimated Total Project Expenditures	Estimated Expenditures to 06/30/13	Anticipated Allocations FY 2013-14	Estimated Expenditures FY 2013-14
2	**One-Time Renovation (Continued)**					
	pTP35	Solids Handling Equipment Evaluation	150,000	50,000	50,000	50,000
	7292	Switchgear Replacement - ph 2	1,536,500	146,500	250,000	200,000
	7297	Wet and Dry Scrubber Replacement	6,622,000	51,000	100,000	51,000
	7241	Wet Weather Bypass Improvements	3,320,000	3,310,000	0	10,000
		Subprogram Total	**37,993,200**	**8,136,800**	**11,954,400**	**7,428,000**
3	**Recurring Renovation**					
	pTP26	TP Electric Cable Repl - Long Term	2,810,000	0	250,000	10,000
	none	TP Facilities Renovations	3,950,000	0	147,000	87,000
	pTP16	Coating Renovation	3,376,000	1,000	55,000	25,000
	pTP30	Concrete Renovation	255,000	45,000	0	10,000
	pTP32	Plant Energy Optimization	100,000	50,000	50,000	25,000
	pTP29	Pavement Renovation	316,000	11,000	5,000	5,000
	7298	Piping Renovations Phase 7	1,016,000	1,011,000	0	5,000
	none	Piping Renovations - phase 8	1,250,000	0	100,000	100,000
	7269	TP Asset Management	964,100	664,100	0	150,000
	7254	TP Cathodic Prot Sys Repl	600,000	575,000	0	5,000
	pTP06	Plant Electrical and Instrumentation Repl	100,000	0	20,000	10,000
	7265	TP Equipment Replacement	1,202,000	852,000	252,000	50,000
		Subprogram Total	**16,207,100**	**3,465,100**	**879,000**	**482,000**
		Program Total	**132,582,200**	**14,857,800**	**14,227,400**	**9,038,000**

Alternative Energy and Greenhouse Gas Reduction Plan

Project Manager, Department/Division:
Melody LaBella, Engineering/Environmental Services

Project Purpose:
Evaluate renewable energy sources and make recommendations for meeting future greenhouse gas (GHG) emission reduction requirements. In addition, review current energy use and make recommendations for future energy reduction projects.

Project History:
In 2006, the California Global Warming Solutions Act was enacted to require a statewide reduction in GHG emissions to 1990 levels by 2020. Additional legislation signed by the governor requires an 80 percent reduction in GHG emissions by 2050.

In January 2008, the District was required to begin reporting GHG emissions. Regulations specifying how emission goals will be achieved require compliance starting January 2012. Cap and trade rules that will require actual GHG reductions and/or participation in the carbon trading market are pending.

Project Description:
A study to recommend a power portfolio that will meet the Treatment Plant's energy needs, while complying with regulations. This project will be integrated with the work evaluating options to respond to new air emission requirements for the District's multiple-hearth furnaces.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$758,600
Design	-	-	$0
Construction	07/01/2007	06/20/2014	$0
		Total:	**$758,600**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Alternative Energy & Greenhouse Gas Reduction Plan / 1
Project Number/Filename: 7256 / alt_energy
Project Manager/% Expansion: LaBella / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	6,000	50,000	0	0	0
B. Anticipated Allocations	650,000	109,000	0	0	0	0
C. Authorized this Year	650,000	115,000	50,000	0	0	0
D. Estimated Expenditures	(644,000)	(65,000)	(50,000)	0	0	0
E. Estimated Carry-over	6,000	50,000	0	0	0	0

Alternative Energy Facilities

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
The project will evaluate replacement of the existing cogeneration turbine system to a larger, more efficient, and lower emissions unit.

Project History:
In the mid 1990s, the District installed a 3.2 MW gas turbine cogeneration system that provides the majority of the electrical power for the treatment plant. Newer turbines could provide greater electrical capacity that would reduce the District's imported power costs and improve reliability during utility power outages or periods of high electrical use. The current Greenhouse Gas and Alternative Energy project is examining how cogeneration fits into the overall District-wide energy scheme over the next several years.

Project Description:
Evaluation and replacement of the District's existing cogeneration unit with a new, more efficient power generation unit or use of another alternate energy source. Replacement of the existing cogeneration unit could provide GHG credits to keep the District under the GHG cap. Complete a feasibility study including a cost-benefit analysis and design and installation of new replacement equipment as appropriate.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$45,000
Design	07/01/2013	07/01/2021	$0
Construction	07/01/2021	06/30/2023	$6,300,000
		Total:	**$6,345,000**

Estimated expenditures this FY are: **$15,000**
Anticipated Allocations this FY are: **$15,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Alternative Energy Facilities / 1
Project Number/Filename: pTP21 / alt_energy_facil
Project Manager/% Expansion: Antkowiak / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	15,000	30,000	0	0	0	0
C. Authorized this Year	15,000	30,000	0	0	0	0
D. Estimated Expenditures	(15,000)	(30,000)	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Incinerator Emissions Compliance Modifications

Project Manager, Department/Division:
Craig Mizutani, Engineering/Capital Projects

Project Purpose:
Modify incinerator and install incinerator process systems to ensure compliance with Clean Air Act Sewage Sludge Incinerator Regulations adopted by the EPA in 2011.

Project History:
In early 2011, the EPA made changes to the Clean Air Act (CAA) to include sewage sludge incinerators (SSIs) in category of solid waste incinerators. The regulations include a category for existing multiple hearth furnaces that will establish emission limits on nine pollutants. The limits can be attained by the District's current MHFs. The new regulations require new parametric monitoring of scrubber pH and flow. Under the new regulations, more frequent source testing is required and is budgeted in the O&M budget.

Project Description:
This project will evaluate the regulations and determine what impact they will have on the District's current incinerator operations. Staff will evaluate the impact of the regulations on the incinerators and the treatment process. If necessary, modifications to the incinerator process to reduce emissions to a safe level to assure compliance will be evaluated.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	09/01/2011	$226,000
Design	09/01/2011	07/01/2012	$0
Construction	07/01/2012	12/31/2014	$0
		Total:	**$226,000**

Estimated expenditures this FY are: **$75,000**
Anticipated Allocations this FY are: **$76,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Incinerator Emissions Compliance Modifications / 1
Project Number/Filename: pTP22 / Incinerator_mods
Project Manager/% Expansion: Mizutani / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	1,000	0	0
B. Anticipated Allocations	75,000	75,000	76,000	0	0	0
C. Authorized this Year	75,000	75,000	76,000	1,000	0	0
D. Estimated Expenditures	(75,000)	(75,000)	(75,000)	(1,000)	0	0
E. Estimated Carry-over	0	0	1,000	0	0	0

Nitrification

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Prepare for compliance with future regulatory nitrogen removal requirements. More appropriate funding levels and timing will result as the regulatory or scientific/technical driver continues to evolve.

Project History:
Several District projects have focused on various aspects of nitrification. Recent NPDES permitting of upstream Sacramento Regional WWTP has included requirements to nitrify. Studies are currently being conducted that include the effects of ammonia from the CCCSD effluent on the Suisun Bay-Delta system. Many NGOs are pushing for redefinition of secondary treatment to include nutrient removal. It's hard to know when the District will be required to include processes for nitrogen removal.

Project Description:
Investigate and implement technologies to accomplish process changes as they become necessary. A second phase of this project is scheduled to begin in FY 2021-22 and is projected to bring the total cost of both phases to $70 million.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2013	01/01/2014	$18,000
Design	01/01/2014	05/01/2016	$2,500,000
Construction	05/01/2016	06/30/2022	$42,010,000
		Total:	**$44,528,000**

Estimated expenditures this FY are: **$3,000**
Anticipated Allocations this FY are: **$28,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Nitrification / 1
Project Number/Filename: pTP20 / Nitrification
Project Manager/% Expansion: Shima / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	25,000	20,000	15,000	10,000	10,000
B. Anticipated Allocations	28,000	0	0	0	2,000,000	3,000,000
C. Authorized this Year	28,000	25,000	20,000	15,000	2,010,000	3,010,000
D. Estimated Expenditures	(3,000)	(5,000)	(5,000)	(5,000)	(2,000,000)	(3,000,000)
E. Estimated Carry-over	25,000	20,000	15,000	10,000	10,000	10,000

Public Address System Improvements

Project Manager, Department/Division:
Nate Morales, Engineering/Capital Projects

Project Purpose:
Provide the District with a Public Address system with complete Treatment Plant coverage.

Project History:
The Treatment Plant has an existing Public Address (PA) system that included buildings and the plant site. In October 2011 a safety suggestion was submitted stating that many of the PA system speakers were not working. Testing revealed that the PA system is deficient and in need of repair.

Project Description:
Replace the majority of existing PA speakers and install a new wireless PA system to provide coverage to areas without an existing PA system.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/24/2012	08/01/2012	$0
Design	08/01/2012	12/01/2012	$40,000
Construction	12/01/2012	04/30/2014	$70,000
		Total:	**$110,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: PA System Improvements / 1
Project Number/Filename: 7305 / PA_sys_imp
Project Manager/% Expansion: Morales / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	10,000	0	0	0	0
B. Anticipated Allocations	110,000	0	0	0	0	0
C. Authorized this Year	110,000	10,000	0	0	0	0
D. Estimated Expenditures	(100,000)	(10,000)	0	0	0	0
E. Estimated Carry-over	10,000	0	0	0	0	0

Permitting Study for New Furnace

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Determine feasible future solid handling options.

Project History:
In early 2011, the EPA made changes to the Clean Air Act (CAA) to include sewage sludge incinerators in the category of solid waste incinerators. This changed the emission limits on nine pollutants. Current evaluation shows that the new limits can be attained by the District's existing Multiple Hearth Furnaces. Depending on new regulations the District may need to change the solids handling process. In order to determine feasible future solids handling options the District will investigate what permits and what requirements are needed to replace or install new incinerators.

Project Description:
Investigate what permits and requirements are needed to replace the existing Multiple Hearth Furnaces or install new fluidized bed incinerators. This study will be performed in conjunction with work being done on other projects.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$30,000
Design	-	-	$5,000
Construction	07/01/2012	06/30/2015	$0
		Total:	**$35,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$5,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Permitting Study for New Furnace / 1
Project Number/Filename: pTP31 / permit_study_furnace
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	5,000	5,000	0	0	0
B. Anticipated Allocations	30,000	5,000	0	0	0	0
C. Authorized this Year	30,000	10,000	5,000	0	0	0
D. Estimated Expenditures	(25,000)	(5,000)	(5,000)	0	0	0
E. Estimated Carry-over	5,000	5,000	0	0	0	0

Treatment Plant Soil Remediation

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Relocate or remove and dispose of the contaminated soil in the area northeast of existing aeration tanks.

Project History:
In the 1960s, spoils from the Shell Refinery were brought onto the plant site. The spoils were contaminated with organic sludge, lead, sulfate dirt, tars and other contaminants. Approximately 150,000 cubic yards of the contaminated soil is located in the surcharge area. In order to site any new facilities in this area, the contaminated soil needs to be relocated on site or removed and disposed of at an appropriate class landfill. A separate project is characterizing and developing alternatives for relocation or removal of the contaminated soil.

Project Description:
Refine the alternatives, select the appropriate method and relocate or remove and dispose of the contaminated soils located northeast of the existing aeration tanks.

Project Location:
Treatment Plant area northeast of existing aeration tanks.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2012	07/01/2016	$52,000
Design	07/01/2016	07/01/2018	$550,000
Construction	07/01/2018	06/30/2023	$20,120,000
		Total:	**$20,722,000**

Estimated expenditures this FY are: **$25,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Treatment Plant Soil Remediation / 1
Project Number/Filename: pTP33 / plant_soil_rem
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	27,000	2,000	1,000	0	0
B. Anticipated Allocations	52,000	0	0	0	50,000	500,000
C. Authorized this Year	52,000	27,000	2,000	1,000	50,000	500,000
D. Estimated Expenditures	(25,000)	(25,000)	(1,000)	(1,000)	(50,000)	(500,000)
E. Estimated Carry-over	27,000	2,000	1,000	0	0	0

Standby Effluent Pumps Refurbishment, Phase 2

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Increase reliability and improve operability of the standby effluent pumps.

Project History:
The standby effluent pumps are critical elements in continuously providing discharge capacity to meet wet weather and diurnal peak flow demands. This project will increase the reliability and improve the operability of the standby effluent pumps.

Project Description:
This project will evaluate the condition of, and replace as needed, the electric drive motor, variable speed clutch assembly, right angle gear drive assembly, and pump assembly for Standby Effluent Pump Number 2. It may also install new direct-coupling motors and modernize instrumentation and the control system for both standby effluent pumps.

Project Location:
Pump and Blower Building

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2011	07/01/2013	$75,000
Construction	07/01/2013	06/17/2016	$400,000
		Total:	**$475,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$455,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Standby Effluent Pumps Refurb - ph 2 / 1
Project Number/Filename: pTP12 / standby_effl2
Project Manager/% Expansion: Mizutani / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	10,000	0	450,000	300,000	0
B. Anticipated Allocations	20,000	0	455,000	0	0	0
C. Authorized this Year	20,000	10,000	455,000	450,000	300,000	0
D. Estimated Expenditures	(10,000)	(10,000)	(5,000)	(150,000)	(300,000)	0
E. Estimated Carry-over	10,000	0	450,000	300,000	0	0

Fire Protection System Improvements

Project Manager, Department/Division:
Nathan Morales, Engineering/Capital Projects

Project Purpose:
Modernize and standardize the various fire alarm and protection systems found at the Treatment Plant.

Project History:
There are several types of fire protection systems throughout the Treatment Plant. Many of these systems were installed in the 1980s and 1990s and are outdated. Some of the systems lack proper controls to allow them to be tested correctly and some have been modified so that they do not function as originally intended.

Project Description:
Upgrade and/or replace existing fire alarm panels and accessories. New panels and accessories will be compatible with each other and will meet current codes.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	09/01/2009	11/01/2009	$0
Design	11/01/2009	02/01/2011	$68,000
Construction	02/01/2011	06/30/2014	$290,000
		Total:	**$358,000**

Estimated expenditures this FY are: **$30,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Fire Protection System Improvements / 1
Project Number/Filename: 7283 / TP_Fire_Prot
Project Manager/% Expansion: Morales / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	57,000	30,000	0	0	0
B. Anticipated Allocations	85,000	273,000	0	0	0	0
C. Authorized this Year	85,000	330,000	30,000	0	0	0
D. Estimated Expenditures	(28,000)	(300,000)	(30,000)	0	0	0
E. Estimated Carry-over	57,000	30,000	0	0	0	0

Treatment Plant Hazard Identification & Remediation

Project Manager, Department/Division:
Nathan Morales, Engineering/Capital Projects

Project Purpose:
Increase personnel safety by identifying and reducing exposure to hazardous materials within the treatment plant.

Project History:
Recent construction projects have encountered hazardous materials requiring abatement, such as asbestos in pipe insulation, roofing materials, or lead paint. Exposure amounts and durations are limited by CalOSHA. Knowledge of these materials ahead of time allows District staff, the design engineer, or the contractor to properly prepare and equip themselves with Personal Protective Equipment (PPE), monitors and plan for medical surveillance. District staff performs urgent, and sometimes unscheduled, work to maintain operation of the facility, which hinders the ability to conduct testing in advance of their work to determine if hazardous materials are present and allow proper planning or mitigation to occur.

Project Description:
Develop a remediation plan to identify hazards and begin design and remediation efforts to reduce the potential for exposure within the plant to hazardous materials where feasible.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	10/01/2009	07/01/2012	$263,000
Construction	07/01/2012	06/30/2020	$605,000
		Total:	**$868,000**

Estimated expenditures this FY are: **$ 80,000**
Anticipated Allocations this FY are: **$105,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Hazard Identification & Remediation / 1
Project Number/Filename: 7284 / TP_Hazard_ID
Project Manager/% Expansion: Morales / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	12,000	1,000	26,000	26,000	6,000
B. Anticipated Allocations	125,000	39,000	105,000	75,000	80,000	100,000
C. Authorized this Year	125,000	51,000	106,000	101,000	106,000	106,000
D. Estimated Expenditures	(113,000)	(50,000)	(80,000)	(75,000)	(100,000)	(100,000)
E. Estimated Carry-over	12,000	1,000	26,000	26,000	6,000	6,000

Treatment Plant Master Plan Update

Project Manager, Department/Division:
Samantha Engelage, Engineering/Environmental Services

Project Description:

This project will develop a Biowin model of the treatment plant. Update the last treatment plant master plan to include:

- Facility modifications since 1999
- Conceptual plans to deal with potential air and water regulations such as greenhouse gas, nutrient removals and constituents of emerging concern (CECs)
- Potential increased flow and solids loadings due to developments in the service area

Asset management or regulatory-driven improvements to the sludge incineration process are covered under separate projects but will be incorporated into this overall plan.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2009	07/01/2010	$356,700
Design	07/01/2010	12/31/2011	$0
Construction	12/31/2011	06/17/2014	$0
		Total:	**$356,700**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$10,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Master Plan Update / 1
Project Number/Filename: 7287 / TP_mpUpdate
Project Manager/% Expansion: Gemmell / 80

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	113,000	202,000	207,000	207,000	207,000
B. Anticipated Allocations	365,000	189,000	10,000	0	0	0
C. Authorized this Year	365,000	302,000	212,000	207,000	207,000	207,000
D. Estimated Expenditures	(252,000)	(100,000)	(5,000)	0	0	0
E. Estimated Carry-over	113,000	202,000	207,000	207,000	207,000	207,000

Treatment Plant Planning

Project Manager, Department/Division:
Dana Lawson, Engineering/Environmental Services

Project Purpose:
Provide funding for feasibility and pilot-scale system work that may be needed if emerging regulatory initiatives require Treatment Plant process modifications to maintain compliance. Evolution of wastewater technology could also trigger an investigation under this project.

Project History:
As wastewater regulations continue to develop and as new wastewater treatment technology becomes available, process modifications may be required in the Treatment Plant. Recently, staff has completed the URS model for greenhouse gas and conducted an exercise to scope the plant of the future for CCCSD. The District's NPDES permit for 2012-2017 required submittal of a Facilities Plan which contained three elements:

1. Investigation of potential process optimization
2. Review and evaluation of new technology and proposed regulations
3. Characterization of material east of existing aeration basins

Project Description:
This project includes all three elements listed above. It also includes modeling of effluent ammonia in Suisun Bay and a nitrification rate study that includes potential for cyanide inhibition due to the scrubber water recycle stream. This project may also include pilot studies to assess technologies and develop design/operation parameters.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$3,233,600
Design	-	-	$0
Construction	07/01/2011	06/30/2022	$0
		Total:	**$3,233,600**

Estimated expenditures this FY are: **$810,000**
Anticipated Allocations this FY are: **$700,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Treatment Plant Planning / 1
Project Number/Filename: 7301 / TP_planning
Project Manager/% Expansion: Gemmell / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	61,000	103,000	(7,000)	0	0
B. Anticipated Allocations	100,000	1,377,000	700,000	157,000	150,000	150,000
C. Authorized this Year	100,000	1,438,000	803,000	150,000	150,000	150,000
D. Estimated Expenditures	(39,000)	(1,335,000)	(810,000)	(150,000)	(150,000)	(150,000)
E. Estimated Carry-over	61,000	103,000	(7,000)	0	0	0

Treatment Plant Safety Improvements Program

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
This project will provide funding for safety projects.

Project History:
The District and the treatment plant have very active and aggressive safety programs that are administered by separate committees. These committees are responsible for addressing safety concerns as identified by the craftsmen, or to respond to the ever-changing regulatory requirements. Often this response will require construction of a capital project.

Project Description:
Install safety improvements for the treatment plant identified through District safety programs.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	07/01/2012	$0
Design	-	-	$0
Construction	07/01/2012	06/17/2020	$45,000
		Total:	**$45,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Safety Improvements FY 2011-12 thru 2019-20 / 1
Project Number/Filename: pTP08 / TP_SafetyPGM
Project Manager/% Expansion: Antkowiak / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	40,000	35,000	30,000	25,000	20,000
B. Anticipated Allocations	45,000	0	0	0	0	0
C. Authorized this Year	45,000	40,000	35,000	30,000	25,000	20,000
D. Estimated Expenditures	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
E. Estimated Carry-over	40,000	35,000	30,000	25,000	20,000	15,000

Treatment Plant Security Upgrade – FY 2012-13 thru 2020-21

Project Manager, Department/Division:
Shari Deutsch, Administrative/Safety & Risk Management

Project Purpose:
Reduce the District's exposure to liability and property loss; meet reliability/safety standards and reduce operations and maintenance expenses.

Project History:
The District has experienced loss of property in the past and improvements to the security system are being identified and refined. Also, the current national security situation may require additional security measures for essential public services.

Project Description:
This project will identify and implement projects to improve the security of District personnel and property. This project could include, but is not limited to, installation of alarm systems at critical sites on District property, additional gates in the perimeter security fencing, upgrading plant security cameras, signage, and improving general area lighting.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	03/01/2013	06/30/2022	$91,000
		Total:	**$91,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Treatment Plant Security Upgrade - FY2012-13 thru 2021-
Project Number/Filename: pTP23 / TP_Security
Project Manager/% Expansion: Deutsch / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	39,000	29,000	19,000	9,000	39,000
B. Anticipated Allocations	40,000	0	0	0	40,000	0
C. Authorized this Year	40,000	39,000	29,000	19,000	49,000	39,000
D. Estimated Expenditures	(1,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
E. Estimated Carry-over	39,000	29,000	19,000	9,000	39,000	29,000

Aeration System Renovation

Project Manager, Department/Division:
Clint T. Shima, Engineering/Capital Projects

Project Purpose:
To renovate the existing aeration system to ensure it will meet the treatment plant's aeration air demands when the steam powered turbine blowers are out of service.

Project History:
The electric blower serves as a back up to the two steam-powered turbine blowers. The electric blower has enough capacity to meet the treatment plant's needs during the winter months. However, during the summer months, the treatment plant's air demand increases and the electric blower does not have enough capacity to meet the demand. The existing blowers are in good shape because they were rebuilt in the early 2000's (steam blowers) or because of low run times as a back-up system (electric blowers).

Project Description:
Evaluate the capacity needed by the electric blower. Further refine the most efficient use of the steam and electric blowers.

The following work will be considered:

- Replace guide vanes on the electric blower,
- Install new impeller and high efficiency blower
- Remove channel air from the main aeration system

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$572,400
Construction	01/01/2007	06/17/2017	$875,000
		Total:	**$1,447,400**

Estimated expenditures this FY are: **$150,000**
Anticipated Allocations this FY are: **$913,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Aeration System Renovation / 2
Project Number/Filename: 7272 / aeration_system_reno
Project Manager/% Expansion: Shima / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	12,000	62,000	825,000	25,000	0
B. Anticipated Allocations	434,000	100,000	913,000	0	0	0
C. Authorized this Year	434,000	112,000	975,000	825,000	25,000	0
D. Estimated Expenditures	(422,000)	(50,000)	(150,000)	(800,000)	(25,000)	0
E. Estimated Carry-over	12,000	62,000	825,000	25,000	0	0

Auxiliary Boiler Burner Upgrade

Project Manager, Department/Division:
Craig Mizutani, Engineering/Capital Projects

Project Purpose:
Regulations on NOx emissions, implemented by the BAAQMD, require NOx emissions to be reduced from the current permit limit of 30 ppmv to 9 ppmv by January 2013. A limit of 15 ppmv may be allowed if the District can prove that there is no technology for 9 ppmv on a variable load boiler. In order to meet these limits, the two existing auxiliary boilers will be modified by replacing the existing burners with new low-NOx burners and other emission control devices to meet the regulations.

Project History:
The auxiliary boilers were installed with the treatment plant expansion in 1975. New burners were fitted to both boilers in the 1980s when stricter NOx regulations came into effect. The boilers were upgraded again in 2009 with new direct-acting, solid state, PLC-based controls to improve reliability, turndown, and fuel efficiency. The new controls can be used to provide precise control of the burners and will allow installation of ultra-low NOx burners that will be required to meet the new limits.

Project Description:
This project will replace the burners in the two auxiliary boilers and modify related ancillary systems to meet the upcoming regulations.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2010	07/01/2011	$0
Design	07/01/2011	07/01/2012	$50,000
Construction	07/01/2012	06/30/2014	$180,000
		Total:	**$230,000**

Estimated expenditures this FY are: **$100,000**
Anticipated Allocations this FY are: **$110,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Auxiliary Boiler Burner Upgrade / 2
Project Number/Filename: 7295 / Aux_boiler_burner_upg
Project Manager/% Expansion: Morales / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	118,000	70,000	(10,000)	0	0
B. Anticipated Allocations	120,000	0	0	110,000	0	0
C. Authorized this Year	120,000	118,000	70,000	100,000	0	0
D. Estimated Expenditures	(2,000)	(48,000)	(80,000)	(100,000)	0	0
E. Estimated Carry-over	118,000	70,000	(10,000)	0	0	0

Cogen Renovation

Project Manager, Department/Division:
Dave Robbins, Plant Operations/Operations

Project Purpose:
Replace the obsolete controls for the cogeneration turbine. In order to have a long-term service agreement that covers all parts and labor for a fixed monthly charge.

Project History:
The cogeneration system was installed in the early 1990's and the original control system and electro-hydraulic fuel deliver/control system are now obsolete.

Project Description:
The existing electro-hydraulic fuel deliver/control system will be replaced by an electronically controlled system. The existing control panel will be replaced. Field devices such as fire detection, pressure and temperature switches and other instrumentation will be replaced to work with the new control system. The design and installation of new interconnect wiring and other equipment will be performed by outside vendors and/or District Staff. Additional work that could be included during the controls upgrade include: vibration monitoring equipment, remote monitoring equipment, turbine starting system replacement (with electric starter motor), and related equipment.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	01/01/2013	06/30/2014	$100,000
Construction	01/01/2013	06/30/2014	$700,000
		Total:	**$800,000**

Estimated expenditures this FY are: **$400,000**
Anticipated Allocations this FY are: **$400,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Co-Gen Renovation / 2
Project Number/Filename: 7308 / Co-Gen_Reno
Project Manager/% Expansion: Robbins / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	400,000	400,000	0	0	0	0
C. Authorized this Year	400,000	400,000	0	0	0	0
D. Estimated Expenditures	(400,000)	(400,000)	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Plant Cyber Security

Project Manager, Department/Division:
Nathan Morales, Engineering/Capital Projects

Project Purpose:
Protect the plant from electronic breaches through the plant control system, electrical distribution system, and/or equipment.

Project History:
In 2008, NACWA informed the District of the newly-identified risk for major service interruption through cyber vulnerabilities. The Water Sector Coordinating Council and the Department of Homeland Security developed a security sensitive Mitigation Plan, which included identification of all Programmable Language Controllers and Variable Frequency Drives for the plant's electrical and instrumentation systems; installation of electronic locks and intrusion alarms at Substation 82; installation of additional cameras to monitor the treatment plant; testing the integrity of the existing firewall; and obtaining a Cisco switch for electrical substation security. Some recommendations have already been implemented. This project will address the remaining, more costly measures.

Project Description:
The project will evaluate the plant control system and electrical distribution system and/or equipment for vulnerabilities to electronic breaches. If vulnerabilities are identified, then solutions will be identified, evaluated, and implemented to address these vulnerabilities.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	07/01/2012	$0
Design	07/01/2012	07/01/2013	$45,000
Construction	07/01/2013	06/30/2016	$25,000
		Total:	**$70,000**

Estimated expenditures this FY are: **$25,000**
Anticipated Allocations this FY are: **$20,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Plant Cyber Security / 2
Project Number/Filename: pTP03 / cyber security
Project Manager/% Expansion: Morales / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	15,000	10,000	5,000	0
B. Anticipated Allocations	25,000	25,000	20,000	0	0	0
C. Authorized this Year	25,000	25,000	35,000	10,000	5,000	0
D. Estimated Expenditures	(25,000)	(10,000)	(25,000)	(5,000)	(5,000)	0
E. Estimated Carry-over	0	15,000	10,000	5,000	0	0

MHF Burner Upgrades

Project Manager and Department/Division:
Clint T. Shima, Engineering/Capital Projects

Project Purpose:
Improve the operational flexibility of the existing multiple hearth furnaces and comply with new 129 regulations for organics and NOx.

Project History:
The furnaces were constructed during the early 1970s and made operational in 1985. Bi-annual preventive maintenance has kept the internal refractory and the external shell in good condition, but many components are reaching the end of their useful lives and need replacement. Modifications will also be implemented to ensure compliance with emerging regulations while enhancing the reliability and flexibility of the incineration process.

Project Description:
The original gas fuel system piping will be replaced using welded joints, and a new diesel fuel system will be added as an additional fuel source. The project will include replacement of 2 to 4 of the top hearth burners (8 MMBtu/hr) with smaller low NOx/High mix burners (2 MMBtu/hr). To provide better temperature control to comply with 129 regulations. Modernizing the control system to economize fuel consumption and realize cost savings.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2012	07/01/2014	$100,000
Construction	07/01/2014	06/17/2016	$1,600,000
		Total:	**$1,700,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Furnace Burner / 2
Project Number/Filename: pTP15 / furnace_burner
Project Manager/% Expansion: Shima / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	50,000	0	0	0	0
B. Anticipated Allocations	100,000	0	800,000	800,000	0	0
C. Authorized this Year	100,000	50,000	800,000	800,000	0	0
D. Estimated Expenditures	(50,000)	(50,000)	(800,000)	(800,000)	0	0
E. Estimated Carry-over	50,000	0	0	0	0	0

Instrumentation and Control - PLC System Upgrades
FY 12-13 through 21-22

Project Manager, Department/Division:
David Hefflefinger, Plant Operations/Operations

Project Purpose:
Upgrade Programmable Logic Controller (PLC) system to current technology for increased performance and improved compatibility.

Project History:
The first PLCs were installed in the treatment plant in 1986. The number of PLCs has increased from the original 2 to more than 30. Programming software for the newer PLCs no longer runs efficiently on the older programming units.

Project Description:
This project will continue to upgrade the treatment plant's PLC system by:

- Providing hardware and software necessary to maintain the PLC application.
- Replacing older computers with newer ones capable of running current software.
- Investigating equipment to ensure that the District remains in the mainstream of process control technology.
- Upgrading older PLC models to maintain compatibility with new equipment.
- Installing a new PLC network to allow communication from a central location.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$100,000
Construction	07/01/2012	06/17/2022	$700,000
		Total:	**$800,000**

Estimated expenditures this FY are: **$80,000**
Anticipated Allocations this FY are: **$80,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Instr & Control - PLC System Upgrades - FY 12-13 thru 21-
Project Number/Filename: 7304 / ic_upgrades
Project Manager/% Expansion: Burnash / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	80,000	80,000	80,000	80,000	80,000	80,000
C. Authorized this Year	80,000	80,000	80,000	80,000	80,000	80,000
D. Estimated Expenditures	(80,000)	(80,000)	(80,000)	(80,000)	(80,000)	(80,000)
E. Estimated Carry-over	0	0	0	0	0	0

Primary Effluent Pumps Refurbishment, Phase 2

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
This project will replace the electric drive motor, variable speed clutch assembly, right angle gear drive assembly and pump assembly for Standby Effluent Pump Number 2.

Project History:
There are three primary effluent pumps which transfer flow from the primary sedimentation basin to the secondary aeration facilities. Two pumps were installed in 1975 and the third pump was installed in 1995. All three pumps were rated for 75 mgd, but have never achieved that pumping capacity. In addition, replacement parts are no longer manufactured for the hydraulic variable-speed gear drives on the two older pumps.

Project Description:
Refurbishment of primary effluent pumps number 1 and 2 are included in the scope of work for the Primary Renovation Improvement project. Refurbishment of pump number 2 is an optional item. In case that the standby effluent pump number 2 refurbishment is not awarded under the primary renovation project, it will be bid separately and constructed under this project.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2012	06/30/2013	$0
Design	07/01/2012	06/30/2013	$0
Construction	07/01/2012	06/30/2015	$70,000
		Total:	**$70,000**

Estimated expenditures this FY are: **$1,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Primary Effl Pumps Refurb - ph 2 / 2
Project Number/Filename: 7302 / pri_effl_pumps_ph2
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	21,000	20,000	0	0	0
B. Anticipated Allocations	70,000	0	0	0	0	0
C. Authorized this Year	70,000	21,000	20,000	0	0	0
D. Estimated Expenditures	(49,000)	(1,000)	(20,000)	0	0	0
E. Estimated Carry-over	21,000	20,000	0	0	0	0

Primary Treatment Renovation

Project Manager, Department/Division:
Nathan Morales, Engineering/Capital Projects

Project Purpose:
This project will improve the reliability of the Primary Treatment area of the plant.

Project History:
Two of the four primary sedimentation tanks were constructed in the mid 60s and the other two tanks were constructed in the mid 70s as part of the 5A expansion project. Some components are corroding and nearing the end of their service life.

Project Description:
Renovate or replace the water and air supply pipelines at the primary sedimentation tanks. The scum collection system will be renovated with new scum sprays, new helical scum skimmers and drives, and a stainless steel scum hopper for Tanks 1 and 2. The scum thickening unit in the Solids Conditioning Building will also be replaced. Other primary tank improvements include installation of new baffles, replacing chain drives, sludge flight drive shafts and bearings, concrete repairs, upgrading hand railings, constructing a new level control structure, and the odor control system will be evaluated and modified as necessary. Refurbishment of one primary effluent pump is included in the project with refurbishment of a second pump included as an optional bid item.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2011	$1,179,600
Construction	07/01/2011	06/30/2016	$10,615,000
		Total:	**$11,794,600**

Estimated expenditures this FY are: **$5,400,000**
Anticipated Allocations this FY are: **$8,065,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Primary Treatment Renovation / 2
Project Number/Filename: 7285 / PrimaryTrtRenov
Project Manager/% Expansion: Morales / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	58,000	730,000	0	2,665,000	165,000
B. Anticipated Allocations	100,000	960,000	1,270,000	8,065,000	1,400,000	0
C. Authorized this Year	100,000	1,018,000	2,000,000	8,065,000	4,065,000	165,000
D. Estimated Expenditures	(42,000)	(288,000)	(2,000,000)	(5,400,000)	(3,900,000)	(165,000)
E. Estimated Carry-over	58,000	730,000	0	2,665,000	165,000	0

Secondary Process Improvements

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Improve and/or renovate the Secondary Process including the Mixed Liquor Channel spray system, tank drainage, gate leakage, return activated sludge (RAS) system, the waste activated sludge (WAS) system, and scum collection.

Project History:
In FY 2010/2011 several scope items were assessed including the RAS system, conversion of the southern Primary Effluent Channel into a Selector Channel, flow splitting and dissolved oxygen (DO) control. A workshop was held between Engineer and Plant Operations Departments that reviewed and evaluated the existing scope items. From that workshop, several items were removed and other issues were identified that require further examination.

Project Description:
Evaluate the newly identified scope items including the spray system, tank drainage, gate leakage and scum collection and further investigate improvements to the RAS and WAS systems. The evaluation will consider potential regulations that could affect the Secondary Process, and will attempt to not put investment into areas that could be changed by new regulations in the next ten years. Those items identified for improvement will be designed and constructed.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	02/26/2010	01/01/2011	$0
Design	01/01/2011	07/01/2014	$79,500
Construction	07/01/2014	06/30/2017	$1,350,000
		Total:	**$1,429,500**

Estimated expenditures this FY are: **$45,000**
Anticipated Allocations this FY are: **$41,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Secondary Process Improvements / 2
Project Number/Filename: 7294 / Sec_Process_Imprvs
Project Manager/% Expansion: Antkowiak / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	16,000	20,000	16,000	16,000	16,000
B. Anticipated Allocations	50,000	5,000	41,000	100,000	500,000	742,000
C. Authorized this Year	50,000	21,000	61,000	116,000	516,000	758,000
D. Estimated Expenditures	(34,000)	(1,000)	(45,000)	(100,000)	(500,000)	(750,000)
E. Estimated Carry-over	16,000	20,000	16,000	16,000	16,000	8,000

Seismic Upgrades for the Laboratory

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Improve the seismic safety of the Laboratory Building.

Project History:
In January 2008, California adopted the 2007 California Building Code (2007 CBC). Among the updates in the 2007 CBC were significant changes to seismic design. In 2009 a seismic evaluation was completed of treatment plant facilities (Martinez Wastewater Treatment Plant Seismic Vulnerability Assessment of Selected Facilities, December 2009). Included in the evaluation are recommendations to bring the Laboratory in line with current seismic design standards.

Project Description:
Make seismic improvements to the Laboratory Building. The design of the Laboratory Building seismic upgrades will start in FY 2013-14 with construction starting in FY 2015-16.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2013	07/01/2014	$15,000
Construction	07/01/2014	06/30/2017	$177,000
		Total:	**$192,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$5,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Laboratory Seismic Upgrade / 2
Project Number/Filename: pTP19 / seismic_Lab_upg
Project Manager/% Expansion: Hodges / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	5,000	10,000	77,000	100,000	0	0
C. Authorized this Year	5,000	10,000	77,000	100,000	0	0
D. Estimated Expenditures	(5,000)	(10,000)	(77,000)	(100,000)	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Pump & Blower Building Seismic Upgrades

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Improve the seismic safety of the Pump & Blower Building.

Project History:
In January 2008, California adopted the 2007 California Building Code (2007 CBC). Among the updates in the 2007 CBC were significant changes to seismic design. In 2009 a seismic evaluation was completed of treatment plant facilities (Martinez Wastewater Treatment Plant Seismic Vulnerability Assessment of Selected Facilities, December 2009). Included in the evaluation are recommendations to bring the Pump & Blower Building in line with current seismic design standards.

Project Description:
Make seismic improvements to the Pump & Blower Building.

Project Location:
Pump & Blower Building

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2010	07/01/2011	$0
Design	07/01/2011	01/01/2012	$699,000
Construction	07/01/2013	06/30/2016	$3,101,000
		Total:	**$3,800,000**

Estimated expenditures this FY are: **$850,000**
Anticipated Allocations this FY are: **$1,795,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pump & Blower Bldg Seismic Upgrade / 2
Project Number/Filename: 7291 / seismic_P&B_upg
Project Manager/% Expansion: Hodges / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	31,000	98,000	106,000	1,051,000	1,000
B. Anticipated Allocations	105,000	242,000	58,000	1,795,000	1,600,000	0
C. Authorized this Year	105,000	273,000	156,000	1,901,000	2,651,000	1,000
D. Estimated Expenditures	(74,000)	(175,000)	(50,000)	(850,000)	(2,650,000)	(1,000)
E. Estimated Carry-over	31,000	98,000	106,000	1,051,000	1,000	0

POB Seismic Upgrades

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Improve the seismic safety of the Plant Operations Building (POB).

Project History:
In January 2008, California adopted the 2007 California Building Code, which included significant changes to seismic design. In 2009 a seismic evaluation was completed of treatment plant facilities. Included in the evaluation are recommendations to bring the POB in line with current seismic design standards.

Project Description:
This project will make seismic improvements to the POB. This includes improvements to the Board Room, Administration Offices, and the tunnel area beneath POB.

The Multi-Purpose Room (MPR) has been identified as the District's primary Emergency Operations Center. As such, the MPR will receive additional strengthening to provide continuous service after a design seismic event.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$41,800
Design	07/01/2010	07/01/2011	$230,300
Construction	07/01/2011	06/30/2017	$1,025,000
		Total:	**$1,297,100**

Estimated expenditures this FY are: **$1,000**
Anticipated Allocations this FY are: **$30,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: POB Seismic Upgrade / 2
Project Number/Filename: 7289 / seismic_POB_upg
Project Manager/% Expansion: Hodges / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	43,000	69,000	106,000	135,000	1,024,000
B. Anticipated Allocations	50,000	140,000	38,000	30,000	1,039,000	0
C. Authorized this Year	50,000	183,000	107,000	136,000	1,174,000	1,024,000
D. Estimated Expenditures	(7,000)	(114,000)	(1,000)	(1,000)	(150,000)	(500,000)
E. Estimated Carry-over	43,000	69,000	106,000	135,000	1,024,000	524,000

SCB Seismic Upgrade Study

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Seismic improvements to the Solids Conditioning Building (SCB) will be studied.

Project History:
In January 2008, California adopted the 2007 California Building Code, which included significant changes to seismic design. In 2009 a seismic evaluation was completed of treatment plant facilities (Martinez Wastewater Treatment Plant Seismic Vulnerability Assessment of Selected Facilities, December 2009). Included in the evaluation are recommendations to bring the SCB in line with current seismic design standards.

Project Description:
A report presenting seismic retrofit options to the building and furnaces will be finalized. However, the potential of new regulatory requirements may necessitate addition of new emissions control equipment or replacement of the existing Multiple Hearth Furnaces (MHF) with Fluidized Bed Furnaces, Digesters, or other solids handling facilities. If the MHF has to be replaced, a new building may need to be constructed. Therefore, seismic upgrades of the SCB are not recommended at this time. This study will be completed and then placed on hold until the future for solids handling facilities is determined.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$127,700
Design	07/01/2010	07/01/2021	$6,000
Construction	07/01/2021	06/30/2023	$0
		Total:	**$133,700**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: SCB Seismic Upgrade Study / 2
Project Number/Filename: 7296 / seismic_SCB_upg
Project Manager/% Expansion: Hodges / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	149,000	23,000	22,000	17,000	17,000
B. Anticipated Allocations	150,000	0	0	0	0	0
C. Authorized this Year	150,000	149,000	23,000	22,000	17,000	17,000
D. Estimated Expenditures	(1,000)	(126,000)	(1,000)	(5,000)	0	0
E. Estimated Carry-over	149,000	23,000	22,000	17,000	17,000	17,000

Warehouse Seismic Upgrade

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Improve the seismic safety of the Warehouse/Mechanics Shop.

Project History:
In January 2008, California adopted the 2007 California Building Code (2007 CBC). Among the updates in the 2007 CBC were significant changes to seismic design. In 2009 a seismic evaluation was completed of treatment plant facilities (Martinez Wastewater Treatment Plant Seismic Vulnerability Assessment of Selected Facilities, December 2009). Included in the evaluation are recommendations to bring the Warehouse facility in line with current seismic design standards.

Project Description:
Make seismic improvements to the Warehouse/Mechanics Shop.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2013	07/01/2014	$15,000
Construction	07/01/2014	06/30/2017	$880,000
		Total:	**$895,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$95,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Warehouse Seismic Upgrade / 2
Project Number/Filename: pTP18 / seismic_Warehouse_upg
Project Manager/% Expansion: Hodges / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	90,000	80,000	0	0	0
B. Anticipated Allocations	95,000	0	0	800,000	0	0
C. Authorized this Year	95,000	90,000	80,000	800,000	0	0
D. Estimated Expenditures	(5,000)	(10,000)	(80,000)	(800,000)	0	0
E. Estimated Carry-over	90,000	80,000	0	0	0	0

Solids Handling Equipment Evaluation

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Review and implement modifications to improve the reliability and performance of the sludge dewatering system.

Project History:
The existing centrifuges and cake pumps have been in service for more than 20 years. The design life of rotating equipment is generally around 15 years. While routine rotation of the operational and stand-by centrifuge helps increase the operating lifespan, Operations can expect more frequent and extensive O&M requirements as the centrifuges and cake pumps continue to age. In addition, as centrifuge design and materials of construction continue to develop, the next generation centrifuges are expecting to last longer and cost less to operate.

Project Description:
Evaluate the condition of the existing centrifuges and cake pumps; recommend, and implement necessary modifications to extend useful life and improve the reliability and performance of the existing equipment.

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$150,000
Design	-	-	$0
Construction	07/01/2012	06/30/2015	$0
		Total:	**$150,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Solids Handling Equipment Evaluation / 2
Project Number/Filename: pTP35 / solids_hdlg_equipt
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	50,000	50,000	50,000	0	0	0
C. Authorized this Year	50,000	50,000	50,000	0	0	0
D. Estimated Expenditures	(50,000)	(50,000)	(50,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Switchgear Refurbishment, Phase 2

Project Manager, Department/Division:
Clint T. Shima, Engineering/Capital Projects

Project Purpose:
Refurbish electrical switchgear to maintain the electrical reliability of the treatment plant.

Project History:
The electrical switchgear throughout the plant was installed in the 1970s and has been well maintained using preventative techniques, such as thermographic imaging, to identify potential problems and correct them prior to failure. Inspections in 2003 and 2004 showed that many of the trip units on the circuit breakers required replacement. Circuit breakers have been sent out for Class 1 reconditioning and trip unit replacement on an as-needed basis.

Project Description:
The remaining 480v circuit breakers (approx 66, Westinghouse/Cutler-Hammer), will be refurbished over a five-year period. Work also includes replacement of the switchgear and circuit breakers in Substation 16, as well as 2400v breakers at Substation 52, Substation 40, and air breakers at Substation 82. The labor and coordination will be performed by District maintenance staff.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	01/01/2010	07/01/2013	$246,500
Construction	07/01/2013	06/30/2018	$1,290,000
		Total:	**$1,536,500**

Estimated expenditures this FY are: **$200,000**
Anticipated Allocations this FY are: **$250,000**

Project Fiscal Year Allocation/Expenditure Table:
Project Title/Subprogram: Switchgear Replacement - ph 2 / 2
Project Number/Filename: 7292 / switch_2
Project Manager/% Expansion: Shima / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	(2,000)	53,000	103,000	(17,000)	(27,000)
B. Anticipated Allocations	100,000	100,000	250,000	120,000	310,000	490,000
C. Authorized this Year	100,000	98,000	303,000	223,000	293,000	463,000
D. Estimated Expenditures	(102,000)	(45,000)	(200,000)	(240,000)	(320,000)	(490,000)
E. Estimated Carry-over	(2,000)	53,000	103,000	(17,000)	(27,000)	(27,000)

Wet and Dry Scrubber Replacement

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Replace the wet and dry scrubbers on each Multiple Hearth Furnace (MHF) based on the recommendations from the November 2005 Solids Handling Facilities Plan Update and the 2008 Black & Veatch Metals Removal Report.

Project History:
The Solids Handling Facilities Plan was updated in 2005. Incinerator Rx and Industrial Furnace Company (IFCO) determined that the Multiple Hearth Furnaces were in excellent condition and could last 20 or more years with current O&M practices. Included in the recommendations was that both the dry cyclone and the wet particulate scrubber were showing signs of wear and could use updating or replacement. Operations staff has also reported problems with the scrubber piping.

Project Description:
Replace the wet and dry scrubbers, and their associated piping and equipment on the MHFs. The project also includes side stream treatment of the scrubber water for the removal of cyanide if nitrification is required.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	06/01/2010	$102,000
Design	06/01/2010	07/01/2016	$700,000
Construction	07/01/2016	06/30/2019	$5,820,000
		Total:	**$6,622,000**

Estimated expenditures this FY are: **$51,000**
Anticipated Allocations this FY are: **$100,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Wet and Dry Scrubber Replacement / 2
Project Number/Filename: 7297 / wet_scrub_repl
Project Manager/% Expansion: Hodges / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	5,000	(41,000)	8,000	8,000	8,000
B. Anticipated Allocations	5,000	5,000	100,000	200,000	500,000	5,000,000
C. Authorized this Year	5,000	10,000	59,000	208,000	508,000	5,008,000
D. Estimated Expenditures	0	(51,000)	(51,000)	(200,000)	(500,000)	(3,000,000)
E. Estimated Carry-over	5,000	(41,000)	8,000	8,000	8,000	2,008,000

Wet Weather Bypass Improvements Project

Project Manager, Department/Division:
Clint T. Shima, Engineering/Capital Projects

Project Purpose:
Make improvements to the wet weather emergency discharge system.

Project History:
In the early 1990s, the District conducted evaluations and planning for the relocation of the Basin C discharge point as part of the Wet Weather Overflow Project and the Basin Discharge Hydraulics project in an effort to decrease the risk of overflows from the basins during the wet weather season. The construction phase of this project has been completed. The District is required to monitor the wetland area north of Basin B.

Project Description:
This project constructed necessary improvements to the wet weather discharge system. A small amount of work remains in order to complete the project.

Project Location:
Basin B and Basin C

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	09/01/2004	09/01/2005	$2,000
Design	09/01/2005	07/01/2006	$469,100
Construction	07/01/2006	06/17/2015	$2,848,900
		Total:	**$3,320,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Wet Weather Bypass Improvements / 2
Project Number/Filename: 7241 / wet_weather_bypass
Project Manager/% Expansion: Shima / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	40,000	10,000	0	0	0
B. Anticipated Allocations	3,320,000	0	0	0	0	0
C. Authorized this Year	3,320,000	40,000	10,000	0	0	0
D. Estimated Expenditures	(3,280,000)	(30,000)	(10,000)	0	0	0
E. Estimated Carry-over	40,000	10,000	0	0	0	0

Treatment Plant Electrical Cable Replacement

Project Manager, Department/Division:
Nathan Morales, Engineering/ Capital Projects

Project Purpose:
The purpose of this project is to identify deficiencies in the existing electrical system and replace cables prior to failure.

Project History:
Treatment Plant operation is dependant on the electrical power system including the collection of feeders from the main substations to the local area substations. Loss or failure of these power conveyances would disrupt the plant's electrical system.

Project Description:
This project will evaluate the treatment plant's electrical feeders, and replace deficient cables due to age, undersize or functional obsolescence.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2013	06/30/2023	$2,810,000
		Total:	**$2,810,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$10,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Electrical Cable Replacement / 3
Project Number/Filename: pTP26 / TP_E_cable
Project Manager/% Expansion: Antkowiak / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	10,000	50,000	250,000	250,000	250,000	250,000
C. Authorized this Year	10,000	50,000	250,000	250,000	250,000	250,000
D. Estimated Expenditures	(10,000)	(50,000)	(250,000)	(250,000)	(250,000)	(250,000)
E. Estimated Carry-over	0	0	0	0	0	0

Treatment Plant Facilities Renovations

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
This project will investigate and renovate the treatment plant facilities including buildings, roofs, roads, HVAC, and the drainage system.

Project History:
In the mid-1980s, the treatment plant building roofs and paved areas were inspected and evaluated. A priority list was developed and a replacement program was implemented. Several other facilities will also be evaluated. Heavy construction traffic also continues to deteriorate the existing pavement within the plant site.

Project Description:
The Treatment Plant Asset Management Plan project is documenting recent renewal and replacement projects and will ultimately be used to provide recommendations for any additional renewal and replacement needs of equipment and facilities at the treatment plant due to aging or functional obsolescence.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2013	06/17/2023	$3,950,000
		Total:	**$3,950,000**

Estimated expenditures this FY are: **$87,000**
Anticipated Allocations this FY are: **$147,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Facilities Renovations / 3
Project Number/Filename: none / TP_FacilRenov
Project Manager/% Expansion: Antkowiak / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	60,000	0	0	0	0
B. Anticipated Allocations	147,000	15,000	500,000	500,000	500,000	500,000
C. Authorized this Year	147,000	75,000	500,000	500,000	500,000	500,000
D. Estimated Expenditures	(87,000)	(75,000)	(500,000)	(500,000)	(500,000)	(500,000)
E. Estimated Carry-over	60,000	0	0	0	0	0

Coating Renovation

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Extend the useful life and minimize corrosion of select treatment plant equipment, piping, and surfaces through the application of coatings.

Project History:
The original treatment plant was built in the late 1940s. Since then, there have been multiple additions and expansions. Much of the process infrastructure has received limited coating or repainting. Prior phases of this project applied coatings to many components at the plant. During the summer of 2009, KTA-Tator, Inc. performed an evaluation of the protective coatings on the components around the treatment plant. The work was part of the Treatment Plant Protective Coatings, Phase 4 (DP 7247) project.

The Treatment Plant Asset Management Plan project (DP 7269) is documenting recent renewal and replacement projects and will ultimately provide recommendations for future renewal and/or replacement of equipment and facilities at the treatment plant.

Project Description:
Recommendations from both projects listed above will be used to plan future phases of the long-term protective coating program.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$1,000
Design	07/01/2012	07/01/2013	$25,000
Construction	07/01/2013	06/30/2023	$3,350,000
		Total:	**$3,376,000**

Estimated expenditures this FY are: **$25,000**
Anticipated Allocations this FY are: **$55,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Coating Renovation / 3
Project Number/Filename: pTP16 / Coating_renov
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	24,000	54,000	104,000	104,000	54,000
B. Anticipated Allocations	25,000	55,000	100,000	500,000	450,000	500,000
C. Authorized this Year	25,000	79,000	154,000	604,000	554,000	554,000
D. Estimated Expenditures	(1,000)	(25,000)	(50,000)	(500,000)	(500,000)	(500,000)
E. Estimated Carry-over	24,000	54,000	104,000	104,000	54,000	54,000

Concrete Renovation

Project Manager, Department/Division:
Michael Penny, Engineering/Capital Projects

Project Purpose:
Renovate concrete throughout the treatment plant.

Project History:
In 2009, the TP Asset Management project funded several condition assessments in the plant including one for concrete structures by Villalobos & Associates. Defects identified included cracking, corrosion, and spalling. The defects were prioritized for repair.

Project Description:
Renovate concrete structures where urgent repairs were identified in the condition assessment. This work will be incorporated into concurrent capital projects as appropriate. Future phases will address the remaining repairs and any additional ones that are identified.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2012	$10,000
Construction	07/01/2012	06/30/2018	$245,000
		Total:	**$255,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Concrete Renovation / 3
Project Number/Filename: pTP30 / Concrete_renov
Project Manager/% Expansion: Antkowiak / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	0	0	15,000	5,000	0
B. Anticipated Allocations	5,000	5,000	50,000	0	45,000	50,000
C. Authorized this Year	5,000	5,000	50,000	15,000	50,000	50,000
D. Estimated Expenditures	(5,000)	(5,000)	(35,000)	(10,000)	(50,000)	(50,000)
E. Estimated Carry-over	0	0	15,000	5,000	0	0

Plant Energy Optimization

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Increase energy efficiency and decrease greenhouse gas emissions for the treatment plant.

Project History:
The implementation of AB 32 causes energy consumers to evaluate their energy use and develop carbon offsetting efficiencies to comply with new regulations. A number of potential energy efficiency projects are being refined. Many of these concepts are from the 2010 HDR report "AB 32 Compliance and Energy Optimization Evaluation." These project concepts require further evaluation and an understanding of potential implementation issues before implementation can move forward.

Project Description:
Evaluate proposed energy optimization projects. Many projects include rebates from PG&E. Staff will coordinate work with PG&E in order to obtain rebates and improve the payback of implemented projects. Current proposals to be evaluated include installing VFD's on the furnace's combustion air blowers. As other energy efficiency proposals are made they will be included in this evaluation project.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	12/01/2011	$0
Design	12/01/2011	08/01/2012	$100,000
Construction	08/01/2012	06/30/2015	$0
		Total:	**$100,000**

Estimated expenditures this FY are: **$25,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Plant Energy Optimization / 3
Project Number/Filename: pTP32 / energy optimize
Project Manager/% Expansion: Hodges / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	25,000	0	25,000	0	0
B. Anticipated Allocations	50,000	0	50,000	0	0	0
C. Authorized this Year	50,000	25,000	50,000	25,000	0	0
D. Estimated Expenditures	(25,000)	(25,000)	(25,000)	(25,000)	0	0
E. Estimated Carry-over	25,000	0	25,000	0	0	0

Pavement Renovation

Project Manager, Department/Division:
Michael Penny, Engineering/Capital Projects

Project Purpose:
Renovate pavement throughout the treatment plant to maximize service life and maintain safe conditions.

Project History:
In 2009, the TP Asset Management project funded several condition assessments in the plant including one for asphalt pavement by Fugro West, which identified future renovations.

Project Description:
Renovate asphalt pavement as identified in multiple phases based on the condition assessment and changing condition of the pavement over time.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2015	$66,000
Construction	07/01/2015	06/30/2020	$250,000
		Total:	**$316,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$5,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pavement Renovation / 3
Project Number/Filename: pTP29 / Pavement_renov
Project Manager/% Expansion: Antkowiak / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	5,000	5,000	1,000	5,000	50,000	50,000
C. Authorized this Year	5,000	5,000	1,000	5,000	50,000	50,000
D. Estimated Expenditures	(5,000)	(5,000)	(1,000)	(5,000)	(50,000)	(50,000)
E. Estimated Carry-over	0	0	0	0	0	0

Piping Renovations, Phase 7

Project Manager, Department/Division:
Edgar Lopez, Engineering/Capital Projects

Project Purpose:
Improve the reliability of the piping systems above and below ground in the treatment plant by inspection, renovation, and replacement where required.

Project History:
During the 5A project, numerous piping systems were installed throughout the treatment plant. These pipes carry the processed wastewater, sludge, steam, air, and other utility services between the various sections of the plant. These pipes have been in place for more than 35 years and some are leaking due to corrosion. The first six phases of this program renovated or replaced various piping systems.

Project Description:
This phase of the Treatment Plant Piping Renovations Project includes:

- Centrate piping at the centrifuges
- Discharge and hypochlorite piping and valves at the RAS pump stations
- Ash hopper dust collector
- Ventilation and odor control systems at the sludge truck loading facility
- Sluice gates at the filter plant forebay
- Flow meters and pH meters on the scrubber water pipelines

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	09/01/2011	10/01/2011	$5,200
Design	10/01/2011	07/01/2012	$55,800
Construction	07/01/2012	06/30/2014	$955,000
		Total:	**$1,008,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Piping Renovations Phase 7 / 3
Project Number/Filename: 7298 / PipeRen7
Project Manager/% Expansion: Lopez / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	14,000	64,000	0	0	0
B. Anticipated Allocations	75,000	992,000	0	0	0	0
C. Authorized this Year	75,000	1,006,000	64,000	0	0	0
D. Estimated Expenditures	(61,000)	(942,000)	(5,000)	0	0	0
E. Estimated Carry-over	14,000	64,000	59,000	0	0	0

Piping Renovations, Phase 8

Project Manager, Department/Division:
Edgar Lopez, Engineering/Capital Projects

Project Purpose:
To improve the reliability of the piping systems above and below ground in the treatment plant by inspection, renovation, and replacement where required.

Project History:
During the 5A project, numerous piping systems were installed throughout the treatment plant. These pipes carry the processed wastewater, sludge, steam, air, and other utility services between the various sections of the plant. These pipes have been in place for more than 35 years. Some of these pipes are leaking due to corrosion. The first seven phases of this program renovated or replaced various piping systems.

Project Description:
This phase of the Treatment Plant Piping Renovations Project will include previously identified piping renovations and replacement work not yet included in a construction project.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$100,000
Design	-	-	$150,000
Construction	07/01/2013	06/30/2016	$1,000,000
		Total:	**$1,250,000**

Estimated expenditures this FY are: **$100,000**
Anticipated Allocations this FY are: **$100,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Piping Renovations - phase 8 / 3
Project Number/Filename: none / piping_reno_8
Project Manager/% Expansion: Lopez / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	100,000	150,000	1,000,000	0	0	0
C. Authorized this Year	100,000	150,000	1,000,000	0	0	0
D. Estimated Expenditures	(100,000)	(150,000)	(1,000,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Treatment Plant Asset Management Plan

Project Manager, Department/Division:
Dana Lawson, Engineering/Environmental Services

Project Purpose:
Manage the lifecycle cost of owning, operating, and maintaining assets while continuing to meet the District's mission through the treatment and disposal of wastewater.

Project History:
The District has averaged $9 M/year reinvestment into the treatment plant through capital expenditures since 1990. While projects over the next few years are well defined in the Capital Budget and Plan, additional evaluations will be used to better define the long-term needs of the District. Anticipating the primary mode of failure for assets is critical to appropriately scope and budget projects for the future.

Project Description:
Future phases of the Treatment Plant Asset Management Project include additional condition assessments; field inventory of piping & conduits; confirming assigned values for consequence of failure; confirming rehabilitation assumptions for structures and coatings; developing written procedure for entering information into the CMMS to ensure all data is available on new assets for future analysis; formalizing the project prioritization process; and evaluating alternative asset management software.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	12/01/2005	07/01/2007	$104,300
Design	07/01/2007	06/30/2015	$859,800
Construction	06/30/2015	06/30/2016	$0
		Total:	**$964,100**

Estimated expenditures this FY are: **$150,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Asset Management / 3
Project Number/Filename: 7269 / tp_asset_man
Project Manager/% Expansion: Lawson / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	560,000	520,000	370,000	220,000	220,000
B. Anticipated Allocations	1,184,000	0	0	0	0	0
C. Authorized this Year	1,184,000	560,000	520,000	370,000	220,000	220,000
D. Estimated Expenditures	(624,000)	(40,000)	(150,000)	(150,000)	0	0
E. Estimated Carry-over	560,000	520,000	370,000	220,000	220,000	220,000

Cathodic Protection Systems Replacement

Project Manager, Department/Division:
Nathan Morales, Engineering/Capital Projects

Project Purpose:
To extend the useful life of the District treatment plant facilities, structures and pipelines through cathodic protection.

Project History:
A master plan for treatment plant cathodic protection was prepared in 2006-07 and updated in 2010-11. The update identified facilities that needed replacement and improvements over the next five-year period and identified existing facilities requiring further investigation.

Project Description:
The current project will prioritize and implement urgent work recommended by the master plan update. Cathodic protection systems that are not providing adequate protection will be repaired and/or replaced, and any other facilities that may require cathodic protection will be identified. It is anticipated that several systems will require refurbishment over the next few years.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2006	02/01/2007	$297,900
Construction	02/01/2007	06/17/2016	$302,100
		Total:	**$600,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Cathodic Prot Sys Repl / 3
Project Number/Filename: 7254 / TP_cathodic
Project Manager/% Expansion: Antkowiak / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	67,000	25,000	20,000	10,000	0
B. Anticipated Allocations	600,000	0	0	0	0	0
C. Authorized this Year	600,000	67,000	25,000	20,000	10,000	0
D. Estimated Expenditures	(533,000)	(42,000)	(5,000)	(10,000)	(10,000)	0
E. Estimated Carry-over	67,000	25,000	20,000	10,000	0	0

Treatment Plant Electrical/Instrumentation Replacement Program

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Identify deficiencies in the existing electrical and instrumentation system components and replace them prior to failure.

Project History:
The electrical/instrumentation system throughout the plant was installed in the mid-1970s, with significant upgrades from several major projects. However, the majority of equipment is 35 years old.

Project Description:
Replace antiquated and poor-performing field instrumentation and electrical equipment and systems. Appropriate upgrading will also be included to meet the latest governing codes such as the National Electric Code.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2013	06/17/2023	$100,000
		Total:	**$100,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$20,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Plant Electrical and Instrumentation Repl / 3
Project Number/Filename: pTP06 / TP_ElecInstr
Project Manager/% Expansion: Antkowiak / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	10,000	0	10,000	0	10,000
B. Anticipated Allocations	20,000	0	20,000	0	20,000	0
C. Authorized this Year	20,000	10,000	20,000	10,000	20,000	10,000
D. Estimated Expenditures	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
E. Estimated Carry-over	10,000	0	10,000	0	10,000	0

Treatment Plant Equipment Replacement Program

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Reduce maintenance costs, increase reliability, and improve operations through replacement or reconditioning of technologically obsolete, worn-out, maintenance intensive equipment, or equipment that is no longer supported by its manufacturer.

Project History:
The initial work on this project assembled a list of current equipment; verified equipment name, number, and size; acquired design records; and estimated equipment life and replacement cost. Several major pieces of equipment are reaching the end of their service life and require replacement/upgrading or reconditioning. The Treatment Plant Asset Management Plan project is documenting recent projects and will be used to provide recommendations for additional renewal and replacement needs.

Project Description:
Following are examples of equipment included in this project:

- Filter Plant Polymer Pumps (2)
- Headworks Air Conditioners (2)
- Waste Steam Exchanger Shell (1)
- Grease Separator
- Influent Pump Wear Rings (4)
- 3WLP 12" Strainer (1)
- Scum Tank Assembly (1)

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$732,000
Construction	07/01/2007	06/17/2018	$470,000
		Total:	**$1,202,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$252,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Equipment Replacement / 3
Project Number/Filename: 7265 / TP_EquipRepl
Project Manager/% Expansion: Antkowiak / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	218,000	98,000	300,000	200,000	100,000
B. Anticipated Allocations	950,000	0	252,000	0	0	0
C. Authorized this Year	950,000	218,000	350,000	300,000	200,000	100,000
D. Estimated Expenditures	(732,000)	(120,000)	(50,000)	(100,000)	(100,000)	(100,000)
E. Estimated Carry-over	218,000	98,000	300,000	200,000	100,000	0

COLLECTION SYSTEM PROGRAM

TABLE OF CONTENTS

Pumping Stations - TAB 4

COLLECTION SYSTEM PROGRAM

This section includes detailed information for the Collection System Program. Table CS-1 presents specific project listings showing authorizations and allocations for total project costs. The subprogram names are used to categorize the projects among the several reasons for which the District does work.

OVERVIEW

The major points of emphasis for the Collection System Program in FY 2013-14 are:

- Renovate sewers as they reach the end of their useful lives to avoid structural failure, reduce dry-weather overflows, and control maintenance costs;
- Expand sewer and pumping facilities to accommodate approved growth in the District's service area;
- Upgrade District sewers to relieve capacity constraints;
- Improve the reliability of pumping stations; and
- Respond to regulatory requirements related to sanitary sewer overflows (SSOs).

The process for project identification, prioritization, and scheduling includes six major components:

- The Collection System Master Plan Update (2010), which identified capacity limitations for lines 10 inches in diameter and larger;
- Results from the District's TV inspection program that identify lines in need of rehabilitation or replacement;
- CSO maintenance records including overflows and stoppages;
- The Pumping Station Inventory Update (2011), which identified necessary capacity and reliability improvements;
- Collection system facility plans, which identify capacity limitations in the six through ten inch lines; and
- Coordination with capital improvement programs for paving and pipeline projects of other agencies/utilities.

This process allows staff to establish priorities and schedules for the individual elements of the system that are incorporated into the capital budget and plan. Assessment tools, such as CCTV inspection, are utilized to confirm the need for projects. After priorities and schedules are set, projects proceed to design and construction. At each step of the process, the level of accuracy in project scope, schedule and cost improves. The Collection System Program is comprised of the following subprograms.

Renovation (Tab 1)

Currently, there are more than 1,500 miles of sewer in the District's Collection System. Sewers and associated facilities have fixed useful lives. When a sewer nears the end of its useful life, maintenance costs, infiltration/inflow rates, and the threat of structural

degradation increase. Proper management of the District's Collection System requires a program for the renovation of sewers that have reached the end of their useful lives.

In the FY 2013-14 Capital Budget, the largest renovation projects focus on multiple sites in Orinda, Lafayette and Diablo.

The FY 2001-02 CIB initiated a District-wide TV inspection program to help identify and prioritize renovation needs. In FY 2013-14, the TV inspection program will focus on high maintenance and problem areas in Orinda, Lafayette, and Walnut Creek.

Urgent projects may arise during a fiscal year or in the closing months of the prior fiscal year. These projects, which cannot afford the longer timeline to be incorporated in the year-long budget process, are included in this category of projects.

Smaller collection system projects are initiated through the ongoing collection system planning process. This planning activity evaluates capacity of sewers smaller than 12-inches in diameter on a case-by-case basis when triggered by one of the following:

- Capacity-related overflows
- Structural failure in a pipe
- Maintenance records indicate a persistent problem

Regulatory Compliance/Planning/Safety (Tab 2)

The collection system planning process ensures timely reconstruction and replacement of the sewer collection system as needed. In the short term, the process ensures that developers pay their fair share for downstream improvements to provide capacity needed within the sewer main system. In the long term, it ensures that developments are not connected to deficient sewers. The Collection System Master Plan update process was completed in FY 2009-10 to accommodate the changing general and specific plans of the County and the municipalities that are served where higher densities of development are being widely adopted.

A Pumping Station Inventory document is periodically updated to include information as projects are completed.

Expansion (Tab 3)

Priorities called out in the Collection System Master Plan Update of 2010 have been used to establish the list of projects to be included in the Capital Improvement Plan for capacity reasons. Design of the trunk sewer improvements along the Grayson Creek Corridor in Pleasant Hill started in FY 2012-13 and will continue in FY 2013-14 with construction in 2014-15. The subprogram includes Development Sewerage for 2013-14 and Contractual Assessment District projects.

Pumping Stations (Tab 4)

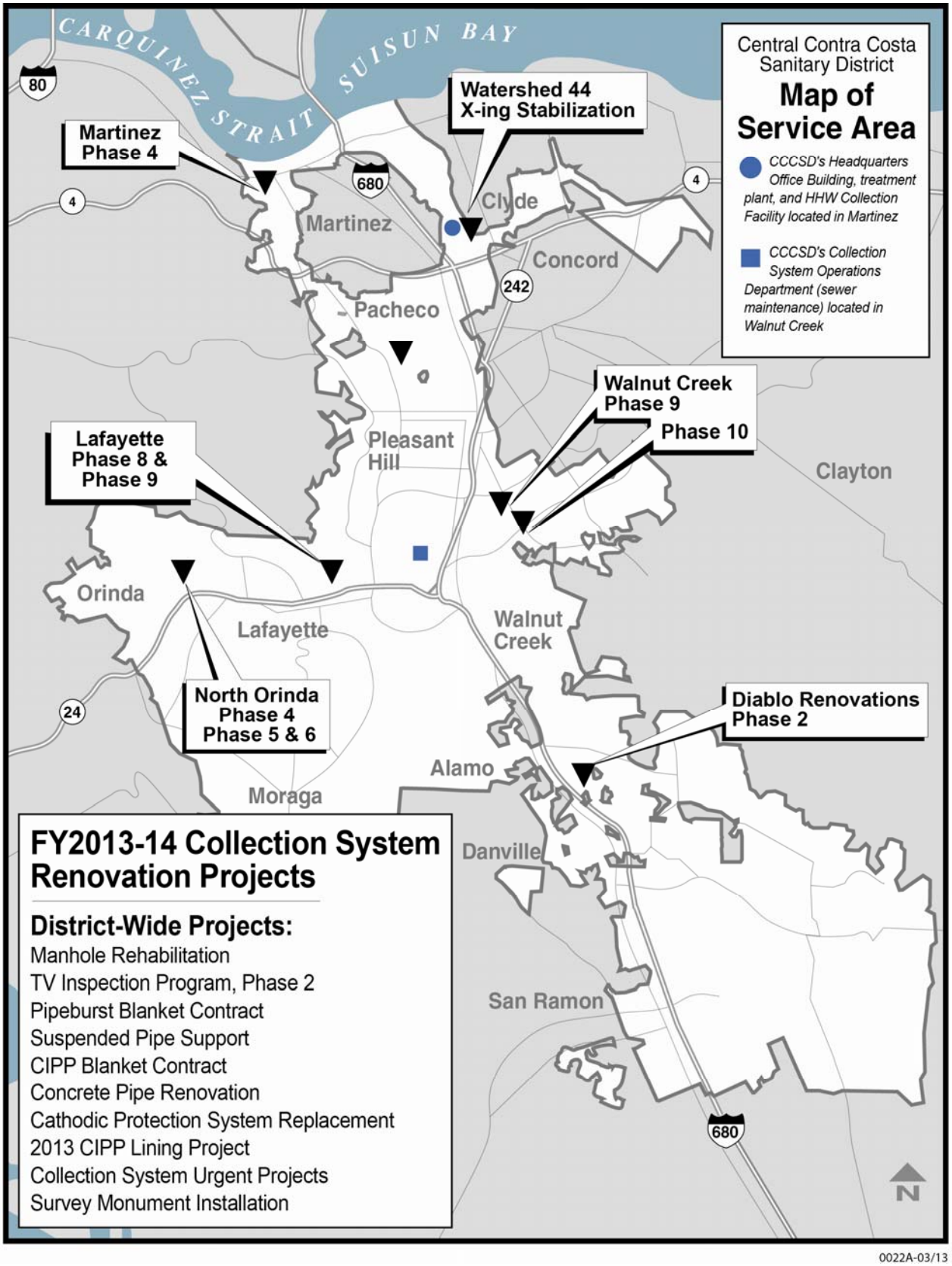
The Pumping Stations subprogram focuses on reliability, safety and operational improvements of pumping stations. The Buchanan South Pumping Station Replacement Sewer project will include removal of the South Buchanan Station and conversion to a gravity system.

Table CS-1: Collection System Subprogram / Project List

Subprogram / Project No. / Project Title			Estimated Total Project Expenditures	Estimated Expenditures To 06/30/13	Anticipated Allocations FY 2013-14	Estimated Expenditures FY 2013-14
1	**Renovation**					
	pCS22	Concrete Pipe Renovation Program	10,000	1,000	1,000	1,000
	8410	Cathodic Protection System Replacement - 12-13 thru 21-22	1,000,000	150,000	0	50,000
	5976	Diablo Renovations - ph 2	2,736,000	636,000	1,526,000	1,500,000
	8404	Lafayette Sewer Renovation - ph 8	2,619,000	809,000	1,919,000	1,500,000
	pCS36	Lafayette Sewer Renovations - ph 9	2,060,000	10,000	110,000	250,000
	8415	Martinez Sewer Renovations – ph 4	2,060,000	10,000	425,000	250,000
	5973	North Orinda Sewer Renovations - ph 4	2,589,000	2,579,000	0	10,000
	8411	North Orinda Sewer Renovations - ph 5	2,650,000	400,000	550,000	550,000
	pCS16	Collection System Renovation Program	20,350,000	0	50,000	50,000
	8405	2013 CIPP Project	4,928,000	478,000	2,500,000	2,500,000
	8401	Walnut Creek Sewer Renovations - ph 9	3,088,000	3,087,000	0	1,000
	8413	Walnut Creek Sewer Renovations - ph 10	2,600,000	400,000	1,000,000	1,000,000
	5982	Blanket Contract for Pipebursting	623,500	423,500	0	100,000
	5999	Blanket Contract for CIPP	213,000	13,000	0	100,000
	pCS40	Collection System Urgent Projects - FY 2012-13 thru 21-22	500,000	50,000	50,000	50,000
	8417	Survey Monument Installation	500,000	50,000	50,000	50,000
	5955	Suspended Pipe Support	274,000	234,000	36,000	40,000
	5948	TV Inspection Program - ph 2	8,401,000	1,601,000	600,000	800,000
	pCS99	Watershed 44 Creek Crossing Stabilization	130,000	80,000	50,000	50,000
		Subprogram Total	**59,814,500**	**11,144,500**	**8,867,000**	**8,852,000**
2	**Regulatory Compliance/Planning Safety**					
	8418	Collection System Modeling Upgrade 12-13 thru 17-18	550,000	100,000	250,000	250,000
	8419	Collection System Planning - FY2013-14 to 2022-23	1,450,000	0	120,000	120,000
	5993	Forcemain Assessment	177,000	77,000	26,000	50,000
	5962	Manhole Remote Level Monitoring	325,500	125,500	75,500	100,000
		Subprogram Total	**2,502,500**	**302,500**	**471,500**	**520,000**

Table CS-1: Collection System Subprogram/Project List (Continued)

Subprogram / Project No. / Project Title			Estimated Total Project Expenditures	Estimated Expenditures To 06/30/13	Anticipated Allocations FY 2013-14	Estimated Expenditures FY 2013-14
3	**Expansion**					
	5937	Alhambra Valley Assmt Districts	134,600	129,600	0	5,000
	8402	Contractual Assessment Districts	5,000,000	1,000,000	500,000	500,000
	pCS17	2013-14 Development Sewerage	7,881,000	0	681,000	681,000
	pCS33	Trunk Sewer Capacity Expansion Prgm	10,000	1,000	1,000	6,000
	8412	Pleasant Hill - Grayson Creek Trunk	2,900,000	500,000	800,000	800,000
		Subprogram Total	**15,925,600**	**1,630,600**	**1,982,000**	**1,992,000**
4	**Pumping Stations**					
	8403	Buchanan South PS Replacement	451,000	50,000	400,000	400,000
	pCS29	Fairview / Maltby Upgrades	150,000	50,000	50,000	50,000
	pCS28	Flush Kleen Pumping Station Improvements	350,000	50,000	50,000	50,000
	pCS34	Misc. Force Main Improvements	40,000	20,000	20,000	20,000
	8414	Moraga Pumping Station Chopper Pump	400,000	200,000	0	200,000
	8407	Martinez Bypass Pump	78,500	77,500	-121,500	1,000
	pCS31	Pump Station Hazard Identification	30,000	5,000	20,000	20,000
	5941	PS Equipment & Piping Replacement	845,500	545,500	100,000	75,000
	8408	Pumping Stations Master Plan	120,000	50,000	70,000	70,000
	8406	Pump Station Safety Improvements	540,000	60,000	60,000	60,000
	8409	PS SCADA O&M Manual	20,000	10,000	0	10,000
	pCS19	Pumping Station Minor Upgrades	15,000	0	15,000	15,000
	pCS25	SCADA Master Plan	50,000	25,000	0	25,000
	6003	San Ramon Pumping Station Upgrades	458,000	453,000	56,000	5,000
	5995	San Ramon Bypass Pump Replacement	74,000	69,000	19,000	5,000
		Subprogram Total	**3,622,000**	**1,665,000**	**738,500**	**1,006,000**
		Program Total	**81,864,600**	**14,742,600**	**12,059,000**	**12,370,000**


CARQUINEZ STRAIT
SUISUN BAY
Central Contra Costa Sanitary District
Map of Service Area
CCCSD's Headquarters Office Building, treatment plant, and HHW Collection Facility located in Martinez
CCCSD's Collection System Operations Department (sewer maintenance) located in Walnut Creek
Watershed 44 X-ing Stabilization
Martinez Phase 4
Lafayette Phase 8 & Phase 9
Walnut Creek Phase 9
Phase 10
North Orinda Phase 4 Phase 5 & 6
Diablo Renovations Phase 2
Martinez
Clyde
Concord
Pacheco
Pleasant Hill
Clayton
Orinda
Lafayette
Walnut Creek
Alamo
Moraga
Danville
San Ramon
80
680
4
242
24
N
FY2013-14 Collection System Renovation Projects
District-Wide Projects:
Manhole Rehabilitation
TV Inspection Program, Phase 2
Pipeburst Blanket Contract
Suspended Pipe Support
CIPP Blanket Contract
Concrete Pipe Renovation
Cathodic Protection System Replacement
2013 CIPP Lining Project
Collection System Urgent Projects
Survey Monument Installation
0022A-03/13

Cathodic Protection Systems Replacement
FY 2012-13 through 2021-22

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
This project will continue a District-wide cathodic protection survey of all underground facilities, including the pumping stations and buried metallic piping, by replacing existing spent facilities and installing new systems where required.

Project History:
The District is responsible for maintenance and operation of pumping stations and collection system pipelines. These facilities and systems along with other miscellaneous underground structures require continuous protection and monitoring. A comprehensive cathodic protection survey of the collection system, pumping stations and treatment plant was originally prepared in 2008 and was updated in 2012.

Project Description:
This project will include required maintenance, replacement, and/or addition of cathodic protection. Work on this project will be coordinated with similar efforts in the treatment plant and recycled water systems.

Project Location:
Throughout the District service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$454,000
Construction	07/01/2012	06/30/2023	$546,000
		Total:	**$1,000,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Cathodic Protection System Replacement - 12-13 thru 21-22
Project Number/Filename: 8410 / cs_cathodic
Project Manager/% Expansion: Mestetsky / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	50,000	0	0	0	0
B. Anticipated Allocations	200,000	0	100,000	100,000	100,000	100,000
C. Authorized this Year	200,000	50,000	100,000	100,000	100,000	100,000
D. Estimated Expenditures	(150,000)	(50,000)	(100,000)	(100,000)	(100,000)	(100,000)
E. Estimated Carry-over	50,000	0	0	0	0	0

Collection System Renovation Program

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
To systematically replace or renovate small-diameter sewers to control future maintenance requirements and costs, to minimize the number of overflows, to limit the quantity of rainfall entering the collection system, and to improve the level of service provided (as measured by stoppages, private property damage, traffic problems, entry onto private property) to the residents/ratepayers.

Project History:
The District's over 1,500-mile collection system has pipe segments that range in age from new to more than 100 years old. Some of the pipe segments are at or near the end of their useful life as evidenced by their need for frequent maintenance, high rate of infiltration, and/or threat of structural collapse. More than 300 miles of the small-diameter sewers in the collection system were constructed prior to 1956. The methods and materials of construction used at that time do not currently perform well, and they are the source of over 90 percent of the dry-weather collection system overflows.

In January 2001, USEPA released a proposed regulation setting out requirements for capacity analysis, management, operation and maintenance of sewer systems. The proposed regulation was immediately withdrawn by the incoming administration. In the absence of the federal program, all California Regional Water Quality Control Boards have included similar requirements in regulation. An order was also promulgated by the State Water Resources Control Board during 2005. In many regions, the State program has replaced the Regional program. While the State's Order has precedence over the Regional regulation for the SF Bay region, periodically, there are issues requiring duplicate reporting.

The District implemented a sewer renovation program in 1991. Since that time, an annual allowance for this renovation program has been included in the Capital Improvement Budget and Plan.

Project Description:
The Collection System Renovation Program is an ongoing series of projects. Candidate sewer line segments are identified, evaluated, and placed on a priority list for replacement or renovation. Within the Collection System Operations and Engineering Departments, staff identifies the candidate sewer lines. These line segments are grouped by geographical area into projects totaling 5,000 to 15,000 feet of sewer replacement or renovation. In FY 2013-14, the renovation program plan is to construct the 2013 CIPP project in Martinez and Walnut Creek, the Lafayette Sewer Renovations, Phase 8 project in Lafayette, Diablo Sewer renovations, Phase 2 in the Diablo area, and Suspended pipe Renovations throughout the District's service area. In addition, design

will begin or continue on North Orinda Phase 5, Walnut Creek Sewer Renovations, Phase 10 project, Pleasant Hill Phase 2, Martinez Phase 4, Lafayette Phase 3, Pleasant Hill Grayson Creek Trunk sewer in Pleasant Hill, and Watershed 44 Stabilization across the Walnut Creek Channel.

A blanket contract for cured-in-place lining will be bid and construction started this fiscal year. A multi-year pipe burst blanket contract was bid 2 years ago and will continue during this fiscal year. The blanket contracts will allow the District to address critical renovations throughout the service area in a more timely fashion. A multi-year cathodic protection program to evaluate and renovate existing systems will continue during this fiscal year.

The multi-year television inspection of the collection system is helping to develop a comprehensive database of system condition. This information will be used in conjunction with the renovation strategy to develop the appropriate yearly expenditure levels. In addition, technology demonstration projects will be conducted to evaluate various manhole rehabilitation products and no dig pipeline rehabilitation methods.

Project Location:
Locations throughout the District service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$25,000
Construction	07/01/2013	06/30/2022	$20,325,000
		Total:	**$20,350,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Collection System Renovation Program / 1
Project Number/Filename: pCS16 / csr_program_LT
Project Manager/% Expansion: Mestetsky / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	50,000	100,000	100,000	100,000	100,000	1,600,000
C. Authorized this Year	50,000	100,000	100,000	100,000	100,000	1,600,000
D. Estimated Expenditures	(50,000)	(100,000)	(100,000)	(100,000)	(100,000)	(1,600,000)
E. Estimated Carry-over	0	0	0	0	0	0

Diablo Sewer Renovations, Phase 2

Project Manager, Department/Division:
Mark Wenslawski, Engineering/Capital Projects

Project Purpose:
The existing sewer running along Calle Arroyo and through property at #1903 to #1963 Alameda Diablo are very shallow (as little as 1-ft of cover), notoriously flat and generally in poor condition. Diablo Phase 2 proposes to lower and increase fall for these lines by re-laying downstream lines at lower slopes and realigning the sewer in various places to avoid conflicts.

Project Description:
The Diablo Sewer Renovations, Phase 2 project will replace/relocate approximately 8,000 feet of 6-inch and 8-inch sewer pipe in the public right of way and easements. The project is scheduled for construction in FY 2012-13 and FY 2013-14.

Project Location:
Diablo service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	08/01/2009	06/01/2009	$0
Design	06/01/2009	06/01/2013	$636,000
Construction	06/01/2013	06/17/2015	$2,100,000
		Total:	**$2,736,000**

Estimated expenditures this FY are: **$1,500,000**
Anticipated Allocations this FY are: **$1,526,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Diablo Renovations - ph 2 / 1
Project Number/Filename: 5976 / csr_diablo2
Project Manager/% Expansion: Wenslawski / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	114,000	(26,000)	0	0	0
B. Anticipated Allocations	200,000	410,000	1,526,000	600,000	0	0
C. Authorized this Year	200,000	524,000	1,500,000	600,000	0	0
D. Estimated Expenditures	(86,000)	(550,000)	(1,500,000)	(600,000)	0	0
E. Estimated Carry-over	114,000	(26,000)	0	0	0	0

Lafayette Sewer Renovations, Phase 8

Project Manager, Department/Division:
Nancy Molina, Engineering/Capital Projects

Project Purpose:
The Lafayette Sewer Renovations, Phase 8 project will replace/rehabilitate approximately 8,300 feet of 6 and 8-inch sewer pipe predominately in the South Peardale area. The design of this project has been completed with construction scheduled to be completed this fiscal year.

Project Location:
Locations throughout city of Lafayette service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2010	07/01/2011	$0
Design	07/01/2011	07/01/2012	$809,000
Construction	07/01/2012	06/30/2015	$1,495,000
		Total:	**$2,304,000**

Estimated expenditures this FY are: **$1,500,000**
Anticipated Allocations this FY are: **$1,919,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Lafayette Sewer Renovation - ph 8 / 1
Project Number/Filename: 8404 / csr_laf8
Project Manager/% Expansion: Molina / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	(1,000)	(59,000)	(409,000)	10,000	0
B. Anticipated Allocations	0	250,000	150,000	1,919,000	0	0
C. Authorized this Year	0	249,000	91,000	1,810,000	10,000	0
D. Estimated Expenditures	(1,000)	(308,000)	(500,000)	(1,500,000)	(10,000)	0
E. Estimated Carry-over	(1,000)	(59,000)	(409,000)	10,000	0	0

Lafayette Sewer Renovations, Phase 9

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
The Lafayette Sewer Renovations, Phase 9 project will replace/rehabilitate approximately 8,000 feet of 6 and 8-inch sewer in Lafayette. The design of this project will start in FY 2013-14 with construction scheduled for FY 2014-15.

Project Location:
Locations mainly in the city of Lafayette service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2012	09/01/2012	$0
Design	09/01/2012	07/01/2013	$260,000
Construction	07/01/2013	06/30/2015	$1,800,000
		Total:	**$2,060,000**

Estimated expenditures this FY are: **$250,000**
Anticipated Allocations this FY are: **$110,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Lafayette Sewer Renovations - ph 9 / 1
Project Number/Filename: pCS36 / csr_Lafayette9
Project Manager/% Expansion: Mestetsky / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	240,000	100,000	0	0	0
B. Anticipated Allocations	250,000	110,000	1,700,000	0	0	0
C. Authorized this Year	250,000	350,000	1,800,000	0	0	0
D. Estimated Expenditures	(10,000)	(250,000)	(1,800,000)	0	0	0
E. Estimated Carry-over	240,000	100,000	0	0	0	0

Martinez Sewer Renovations, Phase 4

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Description:
The Martinez Sewer Renovations, Phase 4 project will replace or rehabilitate approximately 8,000 feet of 6 and 8-inch sewer pipe located in the public right of way and easements. Design started in FY 2012-13 with major construction in FY 2014-15.

Project Location:
Locations mainly in the city of Martinez service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2012	07/01/2014	$260,000
Construction	07/01/2014	06/30/2015	$1,800,000
		Total:	**$2,060,000**

Estimated expenditures this FY are: **$250,000**
Anticipated Allocations this FY are: **$425,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Martinez Sewer Renovations Phase 4 / 1
Project Number/Filename: 8415 / csr_Martinez4
Project Manager/% Expansion: Wenslawski / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	140,000	315,000	0	0	0
B. Anticipated Allocations	150,000	425,000	1,485,000	0	0	0
C. Authorized this Year	150,000	565,000	1,800,000	0	0	0
D. Estimated Expenditures	(10,000)	(250,000)	(1,800,000)	0	0	0
E. Estimated Carry-over	140,000	315,000	0	0	0	0

North Orinda Sewer Renovations, Phase 4

Project Manager, Department/Division:
Mark Wenslawski, Engineering/Capital Projects

Project Purpose:
The North Orinda Sewer Renovations, Phase 4 project will replace/rehabilitate approximately 13,000 feet of 6 and 8-inch sewers predominantly in the El Toyonal and Claremont areas of North Orinda. The design started in FY 2010-11 with construction scheduled for completion in FY 2013-14.

Project Location:
Locations mainly in the city of Orinda service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$22,000
Design	08/01/2010	07/01/2012	$526,000
Construction	07/01/2012	06/15/2014	$2,041,000
		Total:	**$2,589,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: North Orinda Sewer Renovations - ph 4 / 1
Project Number/Filename: 5973 / csr_no_orinda4
Project Manager/% Expansion: Mestetsky / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	198,000	2,025,000	10,000	0	0
B. Anticipated Allocations	300,000	2,289,000	0	0	0	0
C. Authorized this Year	300,000	2,487,000	2,025,000	10,000	0	0
D. Estimated Expenditures	(102,000)	(462,000)	(2,015,000)	(10,000)	0	0
E. Estimated Carry-over	198,000	2,025,000	10,000	0	0	0

North Orinda Sewer Renovations, Phase 5

Project Manager, Department/Division:
Mark Wenslawski, Engineering/Capital Projects

Project Purpose:
The North Orinda Sewer Renovations, Phase 5 project will replace/rehabilitate approximately 8,000 feet of 6 and 8-inch line in North Orinda. The design started in FY 2012-13 with construction scheduled for completion in FY 2013-14.

Project Location:
Locations mainly in the city of Orinda service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2012	09/01/2012	$0
Design	09/01/2012	07/01/2013	$650,000
Construction	07/01/2013	06/30/2015	$2,300,000
		Total:	**$2,950,000**

Estimated expenditures this FY are: **$550,000**
Anticipated Allocations this FY are: **$550,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: North Orinda Sewer Renovations - ph 5 / 1
Project Number/Filename: 8411 / csr_NOrinda5
Project Manager/% Expansion: Wenslawski / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	400,000	550,000	2,000,000	0	0	0
C. Authorized this Year	400,000	550,000	2,000,000	0	0	0
D. Estimated Expenditures	(400,000)	(550,000)	(2,000,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Walnut Creek Renovations, Phase 9

Project Manager, Department/Division:
Nancy Molina, Engineering/Capital Projects

Project Purpose:
The Walnut Creek Sewer Renovations, Phase 9 project will replace/rehabilitate approximately 10,000 feet of 6 and 8-inch sewer pipes predominately in the Rudgear Road, Hawthorne Drive and Mountain View Blvd. areas. The project is scheduled for construction in FY 2012-13 and FY 2013-14.

Project Location:
Majority locations in the city of Walnut Creek service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	01/01/2011	$0
Design	01/01/2011	07/01/2012	$569,000
Construction	07/01/2012	06/15/2014	$2,519,000
		Total:	**$3,088,000**

Estimated expenditures this FY are: **$1,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Walnut Creek Sewer Renovations - ph 9 / 1
Project Number/Filename: 8401 / csr_wc9
Project Manager/% Expansion: Antkowiak / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	(269,000)	1,000	0	0	0
B. Anticipated Allocations	300,000	2,788,000	0	0	0	0
C. Authorized this Year	300,000	2,519,000	1,000	0	0	0
D. Estimated Expenditures	(569,000)	(2,518,000)	(1,000)	0	0	0
E. Estimated Carry-over	(269,000)	1,000	0	0	0	0

Walnut Creek Renovations, Phase 10

Project Manager, Department/Division:
Nancy Molina, Engineering/Capital Projects

Project Purpose:
The Walnut Creek Sewer Renovations, Phase 10 project will replace/rehabilitate approximately 8,000 feet of 6 and 8-inch sewer in the public right of way and easements throughout the City of Walnut Creek. Design of this project started in FY 2013-14 with construction scheduled for FY 2014-15.

Project Location:
Majority locations in the city of Walnut Creek service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2012	09/01/2012	$0
Design	09/01/2012	07/01/2013	$800,000
Construction	07/01/2013	06/30/2015	$1,800,000
		Total:	**$2,600,000**

Estimated expenditures this FY are: **$1,000,000**
Anticipated Allocations this FY are: **$1,000,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Walnut Creek Sewer Renovations - ph 10 / 1
Project Number/Filename: 8413 / csr_WC10
Project Manager/% Expansion: Molina / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	400,000	1,000,000	1,200,000	0	0	0
C. Authorized this Year	400,000	1,000,000	1,200,000	0	0	0
D. Estimated Expenditures	(400,000)	(1,000,000)	(1,200,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

2013 CIPP Project

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Description:
This project will renovate approximately 2,600 feet of existing large diameter deteriorated corrugated metal and reinforced concrete pipeline located in South Main between Hill Road and Lilac Drive in Walnut Creek utilizing cured in place pipe (CIPP). Approximately 1,450 feet of large diameter deteriorated corrugated metal pipe will also be renovated in Lancaster Road between Westwood Court and Orchard Lane using CIPP. An additional 3,800 feet of large diameter reinforced concrete pipe will be renovated on the Shell Refinery Property and east along Marina Vista to Highway I-680.

Project Location:
Locations in the cities of Martinez and Walnut Creek.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	06/30/2012	$0
Design	06/30/2012	05/03/2013	$438,000
Construction	05/03/2013	06/17/2016	$4,490,000
		Total:	**$4,928,000**

Estimated expenditures this FY are: **$2,500,000**
Anticipated Allocations this FY are: **$2,500,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: 2013 & 2014 CIPP Project / 1
Project Number/Filename: 8405 / csr_SouthMainSlip
Project Manager/% Expansion: Mestetsky / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	122,000	22,000	22,000	22,000	0
B. Anticipated Allocations	260,000	240,000	2,500,000	150,000	1,778,000	0
C. Authorized this Year	260,000	362,000	2,522,000	172,000	1,800,000	0
D. Estimated Expenditures	(138,000)	(340,000)	(2,500,000)	(150,000)	(1,800,000)	0
E. Estimated Carry-over	122,000	22,000	22,000	22,000	0	0

Collection System Urgent Projects
FY 2012-13 through 2021-22

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
This project will restore and protect sewers damaged or threatened during winter storms. In addition, the program will address structurally deficient sewers identified by CSO.

Project History:
During major storm events, sewers at various locations may be damaged or threatened. In some cases, landslides or soil erosion may undermine the sewers. The repair and restoration of these sewers is typically time sensitive. In addition, the District has embarked on an extensive investigation of the condition of its sewer system. Occasionally, sewers in very poor condition are identified and cannot wait for incorporation into the CIB/CIP. Such situations will be addressed under this program.

Project Location:
Throughout the District.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2012	06/17/2023	$500,000
		Total:	**$500,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Collection System Urgent Projects - FY 2012-13 thru 21-22
Project Number/Filename: pCS40 / csu_LT
Project Manager/% Expansion: Mestetsky / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	50,000	50,000	50,000	50,000	50,000	50,000
C. Authorized this Year	50,000	50,000	50,000	50,000	50,000	50,000
D. Estimated Expenditures	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
E. Estimated Carry-over	0	0	0	0	0	0

Blanket Contract for Pipebursting

Project Manager:
Alex Rozul, Collection Systems Operation

Project Description:
Urgent pipeline projects which require immediate repairs may arise anytime during current fiscal year.

These projects may be triggered by one of the following situations:

- imminent threat of pipe break or collapse
- potential for an overflow
- structural failure in a pipe

Projects included in this category are those that cannot be completed by the District's Collection System Operations Department, and cannot afford the longer timeline to be incorporated in the year-long budget process. This project will include bidding and executing a blanket contract that will allow the District to use a contractor to perform urgent pipebursting work.

Project Location:
Throughout the service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	03/01/2011	$18,000
Construction	03/01/2011	06/30/2015	$605,500
		Total:	**$623,500**

Estimated expenditures this FY are: **$100,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pipeburst Blanket Contract / 1
Project Number/Filename: 5982 / csu_burst
Project Manager/% Expansion: Rozul / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	42,000	505,000	405,000	305,000	205,000
B. Anticipated Allocations	93,000	735,000	0	0	0	0
C. Authorized this Year	93,000	777,000	505,000	405,000	305,000	205,000
D. Estimated Expenditures	(51,000)	(272,000)	(100,000)	(100,000)	(100,000)	0
E. Estimated Carry-over	42,000	505,000	405,000	305,000	205,000	205,000

Blanket Contract for CIPP

Project Manager:
Nancy Molina, Engineering/Capital Projects

Project Description:
Urgent pipeline projects which require immediate repairs may arise anytime during current fiscal year.

These projects may be triggered by one of the following situations:

- imminent threat of pipe break or collapse
- potential for an overflow
- structural failure in a pipe

Projects included in this category are those that cannot be completed by the District's Collection System Operations Department, and cannot afford the longer timeline to be incorporated in the year-long budget process. This project will include bidding and executing a blanket contract that will allow the District to use a contractor to perform urgent CIPP lining work.

Project Location:
Throughout the service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	08/14/2013	$10,000
Construction	08/14/2013	06/30/2015	$203,000
		Total:	**$213,000**

Estimated expenditures this FY are: **$100,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: CIPP Blanket Contract / 1
Project Number/Filename: 5999 / csu_CIPP
Project Manager/% Expansion: Molina / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	89,000	89,000	189,000	89,000	0
B. Anticipated Allocations	92,000	0	110,000	0	11,000	0
C. Authorized this Year	92,000	89,000	199,000	189,000	100,000	0
D. Estimated Expenditures	(3,000)	0	(10,000)	(100,000)	(100,000)	0
E. Estimated Carry-over	89,000	89,000	189,000	89,000	0	0

Suspended Pipe Support Evaluation and Repair

Project Manager:
Michael Penny, Engineering/Capital Projects

Project Description:
The Suspended Pipe Support Evaluation and Repair project identifies 12 pipes suspended from bridges that need repairs and modifications necessary to the support systems. The project is scheduled for construction in FY 2013-14. Sites are located throughout the District.

Project History:
The supports for the 16-inch Recycled Water line suspended from the Imhoff Place bridge over Grayson creek failed in September 2009. Due to this failure it was determined that it would be prudent to investigate, evaluate, and repair as necessary the other pipes suspended from bridges or similar structures.

Project Location:
Throughout the service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2010	05/01/2011	$0
Design	05/01/2011	05/01/2012	$40,000
Construction	05/01/2012	06/30/2014	$234,000
		Total:	**$274,000**

Estimated expenditures this FY are: **$40,000**
Anticipated Allocations this FY are: **$36,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Suspended Pipe Support / 1
Project Number/Filename: 5955 / suspended_pipe_support
Project Manager/% Expansion: Mestetsky / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	15,000	40,000	4,000	0	0
B. Anticipated Allocations	25,000	65,000	148,000	36,000	0	0
C. Authorized this Year	25,000	80,000	188,000	40,000	0	0
D. Estimated Expenditures	(10,000)	(40,000)	(184,000)	(40,000)	0	0
E. Estimated Carry-over	15,000	40,000	4,000	0	0	0

Concrete Pipe Renovation Program

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
Identify concrete pipe that will require remedial action.

Project History:
Large diameter sewers are usually made of concrete. This project will identify and schedule concrete sewers requiring remedial action.

Project Description:
The ongoing corrosion inspection and TV inspection programs will identify additional reaches of concrete pipe that will need some level of remedial action. This information will be used to identify and schedule needed projects.

Project Location:
Locations throughout the District.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$10,000
Construction	07/01/2012	06/17/2022	$0
		Total:	**$10,000**

Estimated expenditures this FY are: **$1,000**
Anticipated Allocations this FY are: **$1,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Concrete Pipe Renovation Program / 1
Project Number/Filename: pCS22 / con_co
Project Manager/% Expansion: Mestetsky / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	1,000	1,000	1,000	1,000	1,000	1,000
C. Authorized this Year	1,000	1,000	1,000	1,000	1,000	1,000
D. Estimated Expenditures	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
E. Estimated Carry-over	0	0	0	0	0	0

Survey Monument Installation Project

Project Manager, Department/Division:
Greg St. John, Engineering/Environmental Services

Project Purpose:
This project will provide resources necessary to fulfill Survey's professional and legal obligation to reference and replace survey monuments that are destroyed during the construction process.

Project History:
Sewer renovation projects frequently remove survey monuments either because the monument lies directly in the path of the new sewer or in the pavement restoration zone. The survey monument installations will be throughout the District service area wherever sewer renovation projects have been completed. Survey monuments must be replaced according to California law (§8771 Business and Professions Code).

Project Description:
The current project scope of work consists of the installation of survey monuments that were removed during sewer renovation. This project will allow Survey staff to work with a contractor to restore the required survey monuments.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	10/05/2012	06/30/2022	$500,000
		Total:	**$500,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Survey Monument Installation / 1
Project Number/Filename: 8417 / survey_monument
Project Manager/% Expansion: St. John / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	50,000	50,000	50,000	50,000	50,000	50,000
C. Authorized this Year	50,000	50,000	50,000	50,000	50,000	50,000
D. Estimated Expenditures	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
E. Estimated Carry-over	0	0	0	0	0	0

TV Inspection Program, Phase 2

Project Manager, Department/Division:
Alex Rozul, Collection Systems Operations

Project Purpose:
Inspect all existing sewers and develop a comprehensive assessment of the District's collection system.

Project History:
Phase 1 of the TV Inspection Program has completely inspected sewers in Orinda, Walnut Creek, Lafayette, Danville, Diablo, Pleasant Hill, Martinez, Moraga, and San Ramon. Phase 2 of the TV inspection program will inspect all sewers in the District's service area where initial inspections or maintenance records indicate follow-up inspection work would be useful. Additionally, sewers such as tunnels/force mains requiring specialty contractors will be included.

Project Description:
The TV Inspection Program is a large scale, multi-year effort to CCTV inspect the entire CCCSD collection system. Data will be integrated with existing CCTV inspection data and existing sewer information databases. Sewers identified as in fair or poor condition in Phase 1 but not yet renovated will be re-inspected.

Project Location:
The entire collection system

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$181,000
Construction	07/01/2010	06/17/2020	$8,220,000
		Total:	**$8,401,000**

Estimated expenditures this FY are: **$800,000**
Anticipated Allocations this FY are: **$600,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TV Inspection Program - ph 2 / 1
Project Number/Filename: 5948 / TVI_2
Project Manager/% Expansion: Rozul / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	353,000	399,000	546,000	346,000	346,000
B. Anticipated Allocations	700,000	500,000	947,000	600,000	1,000,000	1,000,000
C. Authorized this Year	700,000	853,000	1,346,000	1,146,000	1,346,000	1,346,000
D. Estimated Expenditures	(347,000)	(454,000)	(800,000)	(800,000)	(1,000,000)	(1,000,000)
E. Estimated Carry-over	353,000	399,000	546,000	346,000	346,000	346,000

Watershed 44 Creek Crossing Stabilization

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Description:
This project will evaluate/construct stabilization of approximately 250 feet of an existing 39-inch reinforced concrete gravity sewer pipe crossing the Walnut Creek Channel near the District's North Concord Metering Station, north of State Highway 4.

The design of the project will start in FY 2013-14 with major construction, if needed, in FY 2013-14.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$80,000
Construction	07/01/2012	06/30/2014	$50,000
		Total:	**$130,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Watershed 44 Creek Xing Stabilization / 1
Project Number/Filename: pCS99 / wat44_creek
Project Manager/% Expansion: Mestetsky / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	80,000	50,000	0	0	0	0
C. Authorized this Year	80,000	50,000	0	0	0	0
D. Estimated Expenditures	(80,000)	(50,000)	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Collection System Modeling Upgrade
FY 2012-13 through 2017-18

Project Manager, Department/Division:
Justin Waples, Engineering/Environmental Services

Project Purpose:
Implement and calibrate a hydraulically dynamic model of the Collection System by acquiring a commercially available modeling platform.

Project History:
At the completion of the 1985-86 Collection System Master Plan, the District implemented the static hydraulic modeling software (Sewer Network Analysis Program) used by the consultant. Over the years, it was used extensively to assess impacts from large developments and to predict flows in sewers and pumping stations. The existing hydraulic model is dated and does not meet present industry standards.

Project Description:

The District will migrate to a commercial, hydraulically dynamic modeling platform that is widely used by the wastewater industry.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$550,000
Design	-	-	$0
Construction	07/01/2012	06/30/2018	$0
		Total:	**$550,000**

Estimated expenditures this FY are: **$250,000**
Anticipated Allocations this FY are: **$250,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Collection System Modeling Upgrade 12-13 thru 17-18 / 2
Project Number/Filename: 8418 / cs_model
Project Manager/% Expansion: Waples / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	100,000	250,000	50,000	50,000	50,000	50,000
C. Authorized this Year	100,000	250,000	50,000	50,000	50,000	50,000
D. Estimated Expenditures	(100,000)	(250,000)	(50,000)	(50,000)	(50,000)	(50,000)
E. Estimated Carry-over	0	0	0	0	0	0

Collection System Planning
FY 2013-14 through 2022-23

Project Manager, Department/Division:
Justin Waples, Engineering/Environmental Services

Project Purpose:
To identify, evaluate, and schedule short and long-term sewer improvement projects and to provide design flow rates for major facility plans.

Project History:
Staff performs on-going Collection System Planning and project priority analyses to ensure that District goals for collection system performance are met.

Project Description:
Collection System Planning studies provide the basis for improvements to the District's sewer system and flow rates for facility plans. Studies focus on six major activities:

Local Capacity Studies (LCS)

1. ***LCS in response to proposed developments***. Upon receipt of a proposed development plan, staff performs an LCS to determine the existing sewer system capacity and capacity required to serve future proposed developments. If additional sewer capacity is required to serve the proposed developments, staff takes steps to ensure that capacity is provided.

2. ***LCS to identify and define existing deficiencies in the sewer main system***. A capacity analysis of the trunk sewer system was completed as part of the Collection System Master Plan (2010). A capacity analysis may be performed when one of the following situations occurs:

    - When there is a structural failure in a pipe.
    - When there has been a wet-weather overflow from the system.
    - When there has been a dry-weather overflow from the system.
    - When Collection System Operations maintenance requests indicate a persistent and continuous problem.

3. ***Land Use and Collection System Database Management***. As new development is connected to the District's sewerage system and sewer improvement projects are completed, those sewers are incorporated into the Mapping database. This information is periodically provided as downloads of data for the Sewer Network Analysis Program (ArcSNAP). Computer hardware and software may be purchased under this project to provide the capability to use County and District records for more comprehensive updating of the land use database.

4. ***Flow Rates for Facility Plans***. Upon receipt of a request for flow rates for a collection system facilities plan, staff updates the land use data and the sewer network in the computer, based upon current and proposed land use plans.

5. ***Special Studies***. Special studies are required to assure District sewer renovation plans and priorities are consistent with capacity, routing, and acceptable service level guidelines. Capacity studies determine flow limits for release of water from water district reservoirs to the District's sewer system.

Project Location:
Throughout the collection system.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$1,450,000
Design	-	-	$0
Construction	07/01/2013	06/17/2023	$0
		Total:	**$1,450,000**

Estimated expenditures this FY are: **$120,000**
Anticipated Allocations this FY are: **$120,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Collection System Planning - Long Term / 2
Project Number/Filename: pCS41 / CS_PlanLT
Project Manager/% Expansion: Waples / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	120,000	120,000	120,000	120,000	120,000	170,000
C. Authorized this Year	120,000	120,000	120,000	120,000	120,000	170,000
D. Estimated Expenditures	(120,000)	(120,000)	(120,000)	(120,000)	(120,000)	(170,000)
E. Estimated Carry-over	0	0	0	0	0	0

Force Main Assessment

Project Manager, Department/Division:
Justin Waples, Engineering/Environmental Services

Project Purpose:
The District owns and or operates 19 pumping stations (PS), which pump flow into a series of force mains. Nearly all pumping stations have more than one force main to carry flow onward toward the treatment plant. This project will document the condition and issues of the inventory of force mains.

Project History:
In some prior collection system projects, force main condition assessments were conducted. These assessments are more than 10 years old.

Project Description:

The District will inspect the condition of force mains, with consultant assistance. The District may conduct a feasibility study for installing launching platforms and cleaning junctions at pump stations and force mains, and conduct preliminary investigations on the integrity and remaining service lives of force mains.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$177,000
Design	-	-	$0
Construction	07/01/2009	06/30/2015	$0
		Total:	**$177,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$26,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Forcemain Assessment / 2
Project Number/Filename: 5993 / FM_assessment
Project Manager/% Expansion: Waples / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	38,000	74,000	50,000	0	0
B. Anticipated Allocations	100,000	51,000	26,000	0	0	0
C. Authorized this Year	100,000	89,000	100,000	50,000	0	0
D. Estimated Expenditures	(62,000)	(15,000)	(50,000)	(50,000)	0	0
E. Estimated Carry-over	38,000	74,000	50,000	(0)	0	0

Manhole Remote Level Monitoring

Project Manager, Department/Division:
Justin Waples, Engineering/Environmental Services

Project Description:
The District has approximately 30,000 active manhole structures throughout the service area. Some of these manholes are in remote areas where an overflow may not be detected for weeks, or in environmentally sensitive areas where an overflow would cause significant harm to creeks or reservoirs.

This project will include the identification and modification of manholes with the installation of remote level monitoring products. The remote monitoring product will alert dispatch or on-call crew members via cell phone of a potential overflow or stoppage event. The early notification will allow crews to respond more quickly, reducing impacts to the environment, potential fines, and District liability.

Project Location:
Throughout the service area

Project Schedule and Cost:

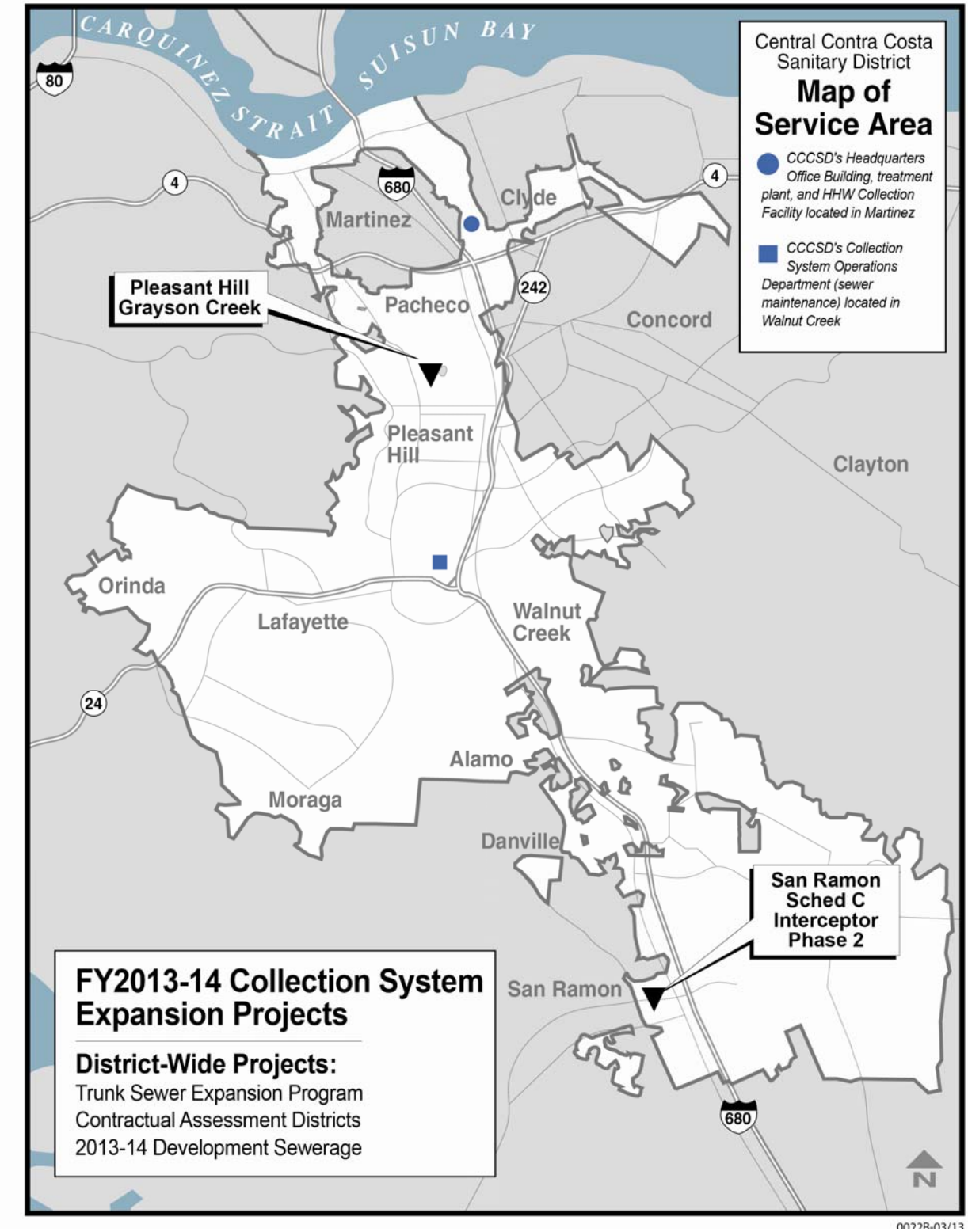
	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2009	10/01/2009	$0
Design	10/01/2009	07/01/2010	$73,300
Construction	07/01/2010	06/30/2015	$252,200
		Total:	**$325,500**

Estimated expenditures this FY are: **$100,000**
Anticipated Allocations this FY are: **$75,500**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Manhole Remote Level Monitoring / 2
Project Number/Filename: 5962 / manhole_rem_mon
Project Manager/% Expansion: Waples / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	174,000	224,000	200,000	0	0
B. Anticipated Allocations	250,000	100,000	75,500	0	0	0
C. Authorized this Year	250,000	274,000	300,000	200,000	0	0
D. Estimated Expenditures	(76,000)	(50,000)	(100,000)	(100,000)	0	0
E. Estimated Carry-over	174,000	224,000	200,000	100,000	0	0


CARQUINEZ STRAIT
SUISUN BAY
80
4
680
Martinez
Clyde
4
Pleasant Hill
Grayson Creek
Pacheco
242
Concord
Pleasant Hill
Clayton
Orinda
Lafayette
Walnut Creek
24
Alamo
Moraga
Danville
San Ramon Sched C Interceptor Phase 2
San Ramon
680
N
Central Contra Costa Sanitary District
Map of Service Area
CCCSD's Headquarters Office Building, treatment plant, and HHW Collection Facility located in Martinez
CCCSD's Collection System Operations Department (sewer maintenance) located in Walnut Creek
FY2013-14 Collection System Expansion Projects
District-Wide Projects:
Trunk Sewer Expansion Program
Contractual Assessment Districts
2013-14 Development Sewerage
0022R-03/13

Alhambra Valley Assessment Districts

Project Manager, Department/Division:
Russell Leavitt, Engineering/Environmental Services

Project Purpose:
To provide a financing mechanism for the extension of public sewers into areas of Alhambra Valley currently served by septic tanks.

Project History:
In 2008, the District completed construction of the Alhambra Valley Trunk Sewer project, which not only serves as the backbone of a future wastewater collection system in Alhambra Valley, but also directly serves more than 65 residential parcels situated along its alignment.

Project Description:
The goals of the AVAD Program are to assist property owners with septic tanks to finance the cost of extending and connecting to the public sewer; to avoid future use of septic systems and sewage pumping systems in Alhambra Valley; and to facilitate direct and indirect connections to the Alhambra Valley trunk.

Project Location:
Throughout Alhambra Valley, unincorporated Martinez

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$132,000
Design	11/01/2007	02/01/2008	$0
Construction	02/01/2008	06/17/2014	$2,600
		Total:	**$134,600**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Alhambra Vly Assmt Districts / 3
Project Number/Filename: 5937 / AVAD
Project Manager/% Expansion: Leavitt / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	72,000	70,000	0	0	0
B. Anticipated Allocations	200,000	0	0	0	0	0
C. Authorized this Year	200,000	72,000	70,000	0	0	0
D. Estimated Expenditures	(128,000)	(2,000)	(5,000)	0	0	0
E. Estimated Carry-over	72,000	70,000	65,000	0	0	0

Contractual Assessment Districts

Project Manager, Department/Division:
Russell Leavitt, Engineering/Environmental Services

Project Purpose:
The District developed a Contractual Assessment District (CAD) Program to provide a financing mechanism for the extension of public sewers into areas which are currently served by septic tanks.

Project History:
In certain instances, the cost to extend public sewers into an area serviced by septic tanks can be an extreme financial burden for one owner or even a small group of owners. The District developed the CAD Program to address this burden. The CAD process provides a means to finance the cost of sewer improvements over time at a fixed interest rate.

Project Description:
A number of CADs will likely be proposed during the budget year.

Project Location:
To be determined. CADs are currently being considered in neighborhoods in Alamo, Danville, Lafayette and Orinda.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2011	06/30/2021	$5,000,000
		Total:	**$5,000,000**

Estimated expenditures this FY are: **$500,000**
Anticipated Allocations this FY are: **$500,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Contractual Assessment Districts / 3
Project Number/Filename: 8402 / CAD
Project Manager/% Expansion: Leavitt / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	(335,000)	0	0	0	0
B. Anticipated Allocations	165,000	835,000	500,000	500,000	500,000	500,000
C. Authorized this Year	165,000	500,000	500,000	500,000	500,000	500,000
D. Estimated Expenditures	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)
E. Estimated Carry-over	(335,000)	0	0	0	0	0

2013-14 Development Sewerage

Project Manager, Department/Division:
Tom Godsey, Engineering/Environmental Services

Project Purpose:
This project provides for appropriate capitalization of District force account labor and other expenses for planning, design, and construction of developer installed and contributed main sewer facilities.

Project Description:
The District requires property owners to pay for the main sewers needed to serve their property. Where sewers are designed and installed by developers or other private parties, District planning, plan review, right-of-way, inspection and record drawing/mapping effort is required to ensure that contributed sewers meet the District's Standard Specifications for Design and Construction. These activities are capitalized under this project. A portion of the revenue collected for plan review, right-of-way, and inspection is credited to the Sewer Construction Fund and offsets some of the expenditures made under this capital project.

Project Location:
Wherever development occurs

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$1,158,000
Design	-	-	$1,808,000
Construction	07/01/2013	06/30/2023	$4,915,000
		Total:	**$7,881,000**

Estimated expenditures this FY are: **$681,000**
Anticipated Allocations this FY are: **$681,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Development Sewerage - Capital Plan years / 3
Project Number/Filename: pCS17 / devt sewer
Project Manager/% Expansion: Godsey / 100

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	681,000	800,000	800,000	800,000	800,000	800,000
C. Authorized this Year	681,000	800,000	800,000	800,000	800,000	800,000
D. Estimated Expenditures	(681,000)	(800,000)	(800,000)	(800,000)	(800,000)	(800,000)
E. Estimated Carry-over	0	0	0	0	0	0

Trunk Sewer Capacity Expansion Program

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
To achieve the Collection System Program goal of reducing sanitary sewer overflows by increasing the capacity of trunk sewers to accommodate planned growth by the municipalities served by CCCSD and repairing any structural deficiencies in the District's trunk sewer system (pipelines between 12-inches and 24-inches in diameter).

Project History:
In 1986, the Wastewater Collection System Master Plan identified and prioritized trunk sewer capacity deficiencies. Since then, a significant investment in the highest priority projects have been completed. An update of the Collection System Master Plan was completed in March 2010 and the program was modified to reflect the new priorities established by the Master Plan Update.

Project Description:
Under this program capacity needs will be reassessed and projects throughout the District's service area prioritized. The next capacity project is scheduled to take place in the Grayson Creek area in Pleasant Hill during fiscal year 2013-14 and 2014-15. Specific project descriptions are included on the following pages.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2012	06/17/2022	$10,000
		Total:	**$10,000**

Estimated expenditures this FY are: **$6,000**
Anticipated Allocations this FY are: **$1,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Trunk Sewer Expansion Program / 3
Project Number/Filename: pCS33 / trunk
Project Manager/% Expansion: Mestetsky / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	5,000	0	3,000	2,000	1,000
B. Anticipated Allocations	6,000	1,000	4,000	0	0	0
C. Authorized this Year	6,000	6,000	4,000	3,000	2,000	1,000
D. Estimated Expenditures	(1,000)	(6,000)	(1,000)	(1,000)	(1,000)	(1,000)
E. Estimated Carry-over	5,000	0	3,000	2,000	1,000	0

Pleasant Hill – Grayson Creek Trunk Sewer

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Description:
The Collection System Master Plan 2010 Update analyzed the District's entire sewer system using an updated ArcSNAP hydraulic model. The design flows to the sewers in this project corridor were calculated at 130% to 270% of full pipe capacity. The capacity deficient sewers includes a 12-inch pipe that runs along Mercury Way from Pleasant Hill Rd. and connects into a 15-inch sewer that runs parallel to Grayson Creek to Milburn Dr.

The recommended project involves installing approximately 5,000 feet of 18-inch and 24-inch relief sewers and diverting the sewage away from the capacity deficient sewers. The relief sewer alignment is within city streets and extends from Pleasant Hill Rd. along Westover Dr., then Maureen Ln and Elinora Dr. The relief sewer will connect to a 36-inch trunk sewer at Elinora Dr. and Ardith Lane. The City of Pleasant Hill expects to receive grant funding for paving. The District may need to include replacement of additional sewer lines to this project to avoid work in the proposed paving areas.

Project Schedule and Cost:

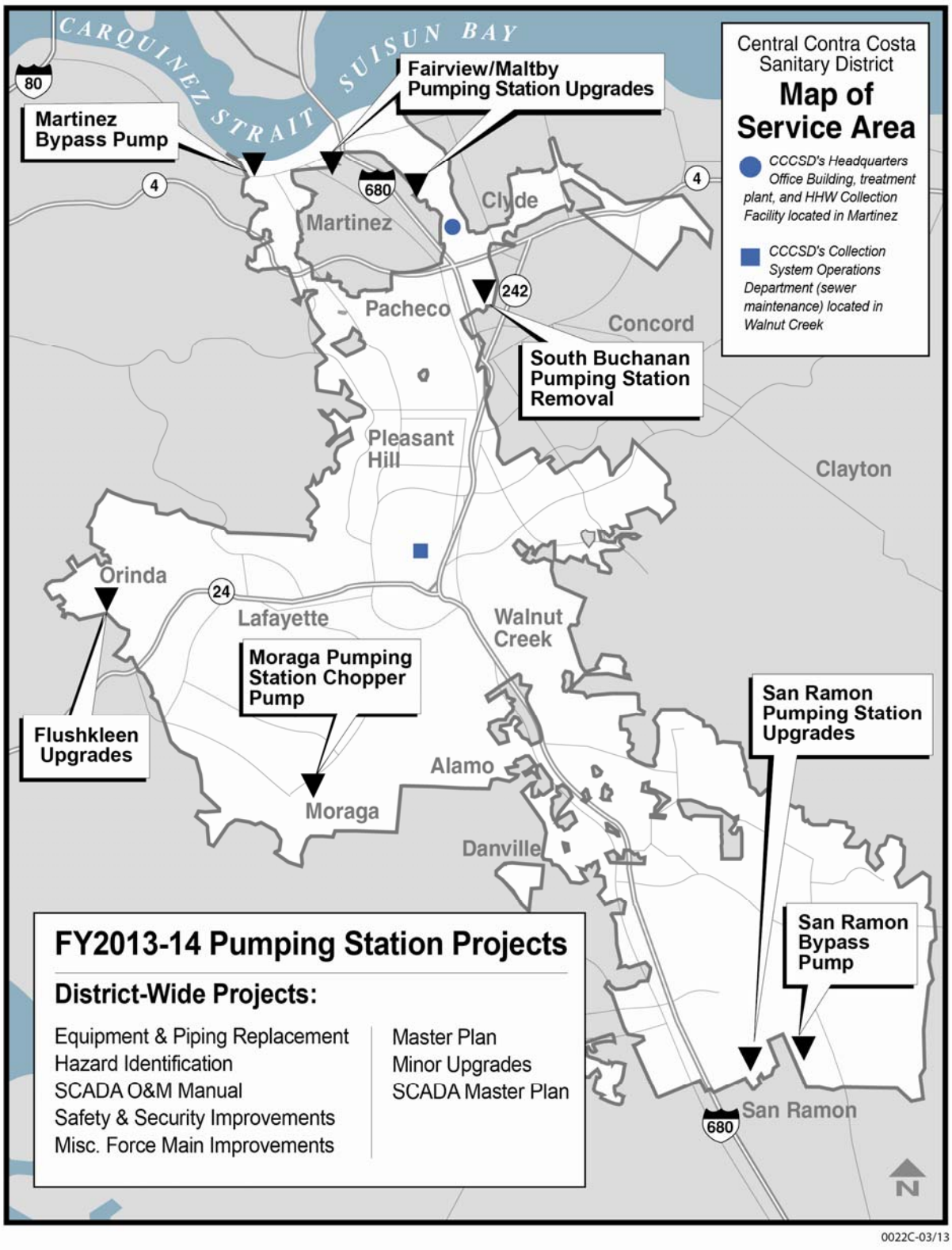
	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2012	04/01/2013	$0
Construction	04/01/2013	06/30/2015	$2,900,000
		Total:	**$2,900,000**

Estimated expenditures this FY are: **$800,000**
Anticipated Allocations this FY are: **$800,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pleasant Hill - Grayson Creek Trunk / 3
Project Number/Filename: 8412 / trunk_Ph_graysoncrk
Project Manager/% Expansion: Mestetsky / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	500,000	800,000	1,600,000	0	0	0
C. Authorized this Year	500,000	800,000	1,600,000	0	0	0
D. Estimated Expenditures	(500,000)	(800,000)	(1,600,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0


CARQUINEZ STRAIT
SUISUN BAY
80
Martinez Bypass Pump
Fairview/Maltby Pumping Station Upgrades
4
680
Martinez
Clyde
4
242
Pacheco
Concord
South Buchanan Pumping Station Removal
Pleasant Hill
Clayton
Orinda
24
Lafayette
Walnut Creek
Moraga Pumping Station Chopper Pump
Flushkleen Upgrades
San Ramon Pumping Station Upgrades
Alamo
Moraga
Danville
San Ramon Bypass Pump
San Ramon
680
N
Central Contra Costa Sanitary District
Map of Service Area
CCCSD's Headquarters Office Building, treatment plant, and HHW Collection Facility located in Martinez
CCCSD's Collection System Operations Department (sewer maintenance) located in Walnut Creek
FY2013-14 Pumping Station Projects
District-Wide Projects:
Equipment & Piping Replacement
Hazard Identification
SCADA O&M Manual
Safety & Security Improvements
Misc. Force Main Improvements
Master Plan
Minor Upgrades
SCADA Master Plan
0022C-03/13

Buchanan South Pumping Station Replacement

Project Manager, Department/Division:
Danea Gemmell, Engineering/Environmental Services

Project Purpose:
This project will replace both (North and South) Buchanan Pumping Stations with new gravity main sewers.

Project History:
The two pumping stations serving the Buchanan Field Airport are nearing the end of their useful service lives. It would be relatively expensive to replace the stations in-kind, and ongoing operations and maintenance are resource intensive, particularly staff effort and electrical energy. Replacing the two stations with new gravity sewers would reduce the District's carbon footprint by about 9.4 metric tons of CO2 equivalent per year.

Project Description:
This project will replace both North and South Buchanan Pumping Stations with new gravity main sewers.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	06/29/2012	07/01/2012	$15,000
Construction	07/01/2012	12/31/2014	$436,000
		Total:	**$451,000**

Estimated expenditures this FY are: **$400,000**
Anticipated Allocations this FY are: **$400,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Buchanan South PS Replacement Sewer / 4
Project Number/Filename: 8403 / Buchanan_south_removal
Project Manager/% Expansion: Gemmell / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	50,000	0	0	0	0
B. Anticipated Allocations	50,000	0	400,000	1,000	0	0
C. Authorized this Year	50,000	50,000	400,000	1,000	0	0
D. Estimated Expenditures	0	(50,000)	(400,000)	(1,000)	0	0
E. Estimated Carry-over	50,000	0	0	0	0	0

Fairview/Maltby Upgrades

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
This project will perform necessary repairs/improvements to prevent corrosion of the underground steel structures housing the Fairfiew and Maltby Pump Stations.

Project History:
The Maltby and Fairview pump station were installed over 40 years ago. Staff has recently identified internal corrosion of the underground steel structure housing the Fairview and Maltby Pumping Station.

Project Description:
Perform repairs and improvements to prevent corrosion of the underground steel structures housing the Fairview and Maltby Pump Station.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	03/01/2013	07/01/2013	$0
Construction	07/01/2013	06/30/2015	$150,000
		Total:	**$150,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Fairview / Maltby Upgrades / 4
Project Number/Filename: pCS29 / fairview_maltby_upg
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	50,000	50,000	50,000	0	0	0
C. Authorized this Year	50,000	50,000	50,000	0	0	0
D. Estimated Expenditures	(50,000)	(50,000)	(50,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Flush Kleen Pumping Station Improvements

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
This project will replace existing valves and pipes at the Flush Kleen Pump Station.

Project History:
The original pump station was installed in 1950. The current pumps were brought over from the Clyde pump station in 1991. The pipes and valves have reached the end of their useful lives.

Project Description:
The project will replace the existing pipes and valves, evaluate the pumps and replace if necessary. Ancillary equipment including the ventilation system will be evaluated and replaced if necessary.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2012	07/01/2013	$150,000
Construction	07/01/2013	06/30/2015	$200,000
		Total:	**$350,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$50,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Flush Kleen Pumping Station Improvements / 4
Project Number/Filename: pCS28 / flush_kleen_PS
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	50,000	50,000	250,000	0	0	0
C. Authorized this Year	50,000	50,000	250,000	0	0	0
D. Estimated Expenditures	(50,000)	(50,000)	(250,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Miscellaneous Force Main Improvements

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
Install improvements to force main to allow for a condition inspection/assessment and future cleaning.

Project History:
The District maintains 16 public owned pump stations with almost 21 miles of force mains ranging in size from 4 inches to 30 inches. Due to physical limitations, inspection for force main condition has been limited to TV inspection of short reaches at the downstream end. No cleaning of force main has been performed.

Project Description:
Evaluate and install, if practical, the ability to inspect, assess and clean force mains.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2012	07/01/2013	$20,000
Construction	07/01/2013	06/30/2014	$20,000
		Total:	**$40,000**

Estimated expenditures this FY are: **$20,000**
Anticipated Allocations this FY are: **$20,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Misc. Force Main Improvements / 4
Project Number/Filename: pCS34 / misc_force_main
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	20,000	20,000	0	0	0	0
C. Authorized this Year	20,000	20,000	0	0	0	0
D. Estimated Expenditures	(20,000)	(20,000)	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Moraga Pumping Station Chopper Pump

Project Manager, Department/Division:
Nathaniel Morales, Engineering/Capital Projects

Project Purpose:
This project will evaluate and install either a chopper pump or a grinder to eliminate rag and disposal wipe clogging issues.

Project History:
Since the installation of the new pumps at Moraga, the pumps have been subjected to clogging due to rags and disposal wipes in the wastewater.

Project Description:
Evaluate the necessity of a chopper pump or a grinder to deal with the rag/wipe issue. The preferred alternative will be constructed in FY 2013-14.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2012	07/01/2013	$0
Design	-	-	$100,000
Construction	07/01/2013	06/30/2014	$300,000
		Total:	**$400,000**

Estimated expenditures this FY are: **$200,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Moraga Pumping Station Chopper Pump / 4
Project Number/Filename: 8414 / moraga_ps_grinder
Project Manager/% Expansion: Morales / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	200,000	0	0	0	0
B. Anticipated Allocations	400,000	0	0	0	0	0
C. Authorized this Year	400,000	200,000	0	0	0	0
D. Estimated Expenditures	(200,000)	(200,000)	0	0	0	0
E. Estimated Carry-over	200,000	0	0	0	0	0

Martinez Bypass Pump

Project Manager, Department/Division:
Nathaniel Morales, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to provide an emergency bypass pump to allow for pumping of dry weather flow during catastrophic pumping station failure.

Project History:
In 2009, a bypass pump connection was installed at the Martinez Pumping Station. Other stations in the Martinez, Concord, and Clyde area already have emergency bypass connections. A portable bypass pump will provide the means for emergency pumping in case of a catastrophic failure of any pumping station in the Concord, Martinez and Clyde area. The pump was purchased in the FY 2012-13.

Project Description:
An emergency bypass pump will be stationed at the Martinez Pumping Station.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2011	07/30/2013	$78,500
		Total:	**$78,500**

Estimated expenditures this FY are: **$1,000**
Anticipated Allocations this FY are: **($122,000)**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Martinez Bypass Pump / 4
Project Number/Filename: 8407 / Mtz_Bypass_Pump
Project Manager/% Expansion: Morales / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	198,000	123,000	0	0	0
B. Anticipated Allocations	200,000	0	(122,000)	0	0	0
C. Authorized this Year	200,000	198,000	1,000	0	0	0
D. Estimated Expenditures	(2,000)	(75,000)	(1,000)	0	0	0
E. Estimated Carry-over	198,000	123,000	0	0	0	0

Pumping Stations Hazard Identification and Remediation

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Increase personnel safety by identifying and reducing exposure to hazardous materials within District's pumping stations.

Project History:
Existing pumping stations may require some renovation in the near future or may require urgent work to maintain operations. Knowledge of materials such as asbestos in pipe insulation, roofing materials, or lead paint ahead of time allows District staff, the design engineer, or the contractor to properly prepare and equip themselves with Personal Protective Equipment (PPE), monitors, or plan for medical surveillance.

Project Description:
This project will investigate the presence of hazardous materials requiring abatement at pumping stations and will develop a plan for remediation efforts to reduce the potential for exposure within the plant to hazardous materials where feasible.

Project Location:
Pumping stations throughout the District service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$30,000
Construction	12/01/2012	06/30/2015	$0
		Total:	**$30,000**

Estimated expenditures this FY are: **$20,000**
Anticipated Allocations this FY are: **$20,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pump Station Hazard Identification / 4
Project Number/Filename: pCS31 / ps hazard ID
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	5,000	20,000	5,000	0	0	0
C. Authorized this Year	5,000	20,000	5,000	0	0	0
D. Estimated Expenditures	(5,000)	(20,000)	(5,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Pumping Stations Equipment and Piping Replacement

Project Manager, Department/Division:
Don Rhoads, Collection System Operations

Project Purpose:
The purpose of this project is to replace or recondition failed and obsolete pumps, piping, valves, and other equipment; to provide for proper emergency response at District pumping stations; to purchase major spare assemblies for various pieces of pumping stations equipment; and to meet new regulatory requirements.

Project Description:
The scope of work for this project includes, as examples, the following:

- Addition of control and isolation valves for shutdown and protection of the stations;
- Revisions to control strategies and equipment response times;
- Possible protections for pumping stations and equipment, if flooded;
- Investigation and installation of "pump around" capabilities;
- Development of emergency response procedures and purchasing equipment;
- Reconditioning of major pieces of equipment to original factory specifications;
- Purchase of large-dollar spare assemblies for major PS equipment;
- Other work or equipment requirements that might be defined by regulators.

Project Location:
All pumping stations

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2007	06/30/2017	$845,600
		Total:	**$845,600**

Estimated expenditures this FY are: **$75,000**
Anticipated Allocations this FY are: **$100,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: PS Equip & Piping Repl / 4
Project Number/Filename: 5941 / PS_Equip
Project Manager/% Expansion: Rhoads / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	29,000	(16,000)	11,000	0	0
B. Anticipated Allocations	500,000	30,000	100,000	64,000	75,000	75,000
C. Authorized this Year	500,000	59,000	86,000	75,000	75,000	75,000
D. Estimated Expenditures	(471,000)	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)
E. Estimated Carry-over	29,000	(16,000)	11,000	0	0	0

Pumping Stations Master Plan

Project Manager, Department/Division:
Justin Waples, Engineering/Environmental Services

Project Purpose:
This project will document a comprehensive framework for strategic planning activities associated pumping stations.

Project History:
The District's Pumping Station Master Plan was updated in 1989. Subsequently, various Planning activities associated with Pumping Stations have lacked continuity of strategic goals and have also been wanting in terms of attaining clearly defined objectives, in terms of a whole system approach.

Project Description:
To create a living document for guiding the future management of Pumping Station assets and to provide a road map for methodically integrating pumping station related Planning activities, including but not limited to, Force Main assessment, Hydrogen Sulfide control and Pumping Station Inventory. It will also provide a metric for measuring progress toward the defined goals. A consultant may be required to assist with this project.

Project Location:
Pumping stations throughout the District service area.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$120,000
Design	-	-	$0
Construction	07/01/2012	06/30/2014	$0
		Total:	**$120,000**

Estimated expenditures this FY are: **$70,000**
Anticipated Allocations this FY are: **$70,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pumping Stations Master Plan / 4
Project Number/Filename: 8408 / ps_master_plan
Project Manager/% Expansion: Waples / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	(30,000)	(30,000)	0	0	0
B. Anticipated Allocations	20,000	70,000	30,000	0	0	0
C. Authorized this Year	20,000	40,000	0	0	0	0
D. Estimated Expenditures	(50,000)	(70,000)	0	0	0	0
E. Estimated Carry-over	(30,000)	(30,000)	0	0	0	0

Pumping Station Safety and Security Improvements

Project Manager, Department/Division:
Don Rhoads, Collection System Operations

Project Purpose:
This project will provide funding for safety and security-related projects at the District's pumping stations.

Project History:
The District has active safety programs administered by both department/ division committees and a District committee. One of the many responsibilities of these committees is to address and support solutions for safety and security concerns that are identified by operations or maintenance personnel, and to respond to changes mandated by regulatory requirements in both these sectors. Recent security and compliance concerns have caused the District to identify projects that will increase security at pumping station facilities.

Project Description:
This project provides funding to install safety and security improvements in the District's pumping stations. These projects include miscellaneous upgrades at all pumping stations.

Project Location:
Potential locations are at all pumping stations.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	05/01/2012	$60,000
Design	05/01/2012	02/01/2014	$0
Construction	02/01/2014	06/30/2021	$480,000
		Total:	**$540,000**

Estimated expenditures this FY are: **$60,000**
Anticipated Allocations this FY are: **$60,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pump Station Safety Improvements / 4
Project Number/Filename: 8406 / PS_SafetyImprvs
Project Manager/% Expansion: Rhoads / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	60,000	20,000	20,000	20,000	20,000
B. Anticipated Allocations	60,000	20,000	60,000	60,000	60,000	60,000
C. Authorized this Year	60,000	80,000	80,000	80,000	80,000	80,000
D. Estimated Expenditures	0	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)
E. Estimated Carry-over	60,000	20,000	20,000	20,000	20,000	20,000

Pumping Station SCADA O&M Manual

Project Manager and Department/Division:
Don Rhoads, Collection Systems Operation

Project Purpose:
This project will provide an operations manual for use by the pumping station staff for the supervisory control and data acquisition (SCADA) system.

Project History:
The Pumping Station SCADA project is complete. Pumping Station staff has been trained in the use of the system. It is appropriate that, as experience is gained with the system, an operations manual be prepared to document the operation of the system, particularly for future staff members.

Project Description:
A consultant will be retained to prepare an operations manual.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2011	06/17/2014	$20,000
		Total:	**$20,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: PS SCADA O&M Manual / 4
Project Number/Filename: 8409 / PS_SCADAMan
Project Manager/% Expansion: Rhoads / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	20,000	20,000	0	0	0
B. Anticipated Allocations	20,000	10,000	0	0	0	0
C. Authorized this Year	20,000	30,000	20,000	0	0	0
D. Estimated Expenditures	0	(10,000)	(10,000)	0	0	0
E. Estimated Carry-over	20,000	20,000	10,000	0	0	0

Pumping Station Minor Upgrades

Project Manager, Department/Division:
Sasha Mestetsky, Engineering/Capital Projects

Project Purpose:
This project will improve the reliability and maintainability of the pumping stations as needed.

Project Description:
This project will identify and install minor upgrades and miscellaneous improvements at various pumping stations throughout the District.

Project Location:
Various pumping stations throughout the District.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$15,000
Design	-	-	$0
Construction	07/01/2013	06/30/2014	$0
		Total:	**$15,000**

Estimated expenditures this FY are: **$15,000**
Anticipated Allocations this FY are: **$15,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pumping Station Minor Upgrades / 4
Project Number/Filename: pCS19 / PS_upgrades
Project Manager/% Expansion: Morales / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	15,000	0	0	0	0	0
C. Authorized this Year	15,000	0	0	0	0	0
D. Estimated Expenditures	(15,000)	0	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

SCADA Master Plan

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Evaluate the existing SCADA system and develop a Master Plan for upgrades and replacement.

Project History:
The current SCADA system was put into service over ten years ago. Staff has identified several improvements that would be beneficial to implement, such as uploading equipment run hours. In addition, minor quirks in the system have been noticed.

Project Description:
This project will evaluate and make recommendations for system improvements and will develop a long-term plan for upgrades and replacement.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$50,000
Design	07/01/2012	07/01/2013	$0
Construction	07/01/2013	06/30/2014	$0
		Total:	**$50,000**

Estimated expenditures this FY are: **$25,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: SCADA Master Plan / 4
Project Number/Filename: pCS25 / SCADA_master_plan
Project Manager/% Expansion: Antkowiak / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	25,000	0	0	0	0
B. Anticipated Allocations	50,000	0	0	0	0	0
C. Authorized this Year	50,000	25,000	0	0	0	0
D. Estimated Expenditures	(25,000)	(25,000)	0	0	0	0
E. Estimated Carry-over	25,000	0	0	0	0	0

San Ramon Pumping Station Upgrades

Project Manager, Department/Division:
Clint Shima, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to replace existing pumps to provide capacity needed to handle increased flow from the Dougherty Valley development. Additional improvements identified by pumping station operators may be added to the project.

Project History:
In 2004 the San Ramon Pumping Station underwent a major renovation. At that time, smaller pumps appropriate for the initial stage of Dougherty Valley development were installed. Currently, due to the development, the pumping station receives increased flows and the pumps need to be replaced with larger pumps. The project construction is scheduled for FY 2012-13 and FY 2013-14.

Project Description:
Replace one existing smaller dry weather pump with a larger pump sized to match the existing larger pumps.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	05/01/2011	09/01/2011	$51,500
Construction	09/01/2011	06/30/2014	$406,100
		Total:	**$457,600**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$56,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: San Ramon Pumping Station Upgrades / 4
Project Number/Filename: 6003 / SR PS upgrades
Project Manager/% Expansion: Shima / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	25,000	349,000	97,000	247,000	247,000
B. Anticipated Allocations	25,000	377,000	148,000	155,000	0	0
C. Authorized this Year	25,000	402,000	497,000	252,000	247,000	247,000
D. Estimated Expenditures	0	(53,000)	(400,000)	(5,000)	0	0
E. Estimated Carry-over	25,000	349,000	97,000	247,000	247,000	247,000

San Ramon Bypass Pump Replacement

Project Manager, Department/Division:
Nathaniel Morales, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to provide emergency bypass of dry weather flow during catastrophic pumping station failure. Some additional improvements identified by pumping station operators may be added to the project.

Project History:
In 2004 the San Ramon Pumping Station underwent a major renovation. That same year, an overflow occurred which resulted in raw sewage entering the local creek. This event highlighted the need to have an emergency bypass system available to allow the pump station to be bypassed during an emergency. Staff has worked with the Dublin- San Ramon Services District to install a passive bypass to their system.

Project Description:
- Staff will further evaluate the need for emergency bypass pumps.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2010	07/01/2009	$0
Design	07/01/2009	07/01/2011	$69,000
Construction	07/01/2011	06/30/2014	$5,000
		Total:	**$74,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$19,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: San Ramon Bypass Pump / 4
Project Number/Filename: 5995 / SR_Pump_repl
Project Manager/% Expansion: Morales / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	20,000	11,000	(14,000)	(19,000)	(19,000)
B. Anticipated Allocations	55,000	0	0	0	0	0
C. Authorized this Year	55,000	20,000	11,000	(14,000)	(19,000)	(19,000)
D. Estimated Expenditures	(35,000)	(9,000)	(25,000)	(5,000)	0	0
E. Estimated Carry-over	20,000	11,000	(14,000)	(19,000)	(19,000)	(19,000)

GENERAL IMPROVEMENTS PROGRAM

TABLE OF CONTENTS

GENERAL IMPROVEMENTS PROGRAM

Table GI-1 presents project listings and detailed budget information. Detailed project information, schedules, and cash flow tables are presented in individual project sheets.

OVERVIEW

The General Improvements Program is primarily concerned with the property, administrative buildings, and equipment needs of the District.

Vehicles and Equipment Acquisition (Tab 1)

The Vehicles and Equipment subprogram comprises the items budgeted and purchased under the annual District Equipment Budget, which is included in this document. The Capital Improvement Budget includes an allowance for the equipment budget. Specific equipment items are approved through the annual budget process.

Management Information Systems (Tab 2)

The Management Information Systems subprogram reflects the importance of information technology in the daily operation of the District. The District has developed an Information Technology Master Plan which envisions implementing specific improvements and extends five years into the future. An allowance to meet anticipated future information technology needs has been included in the ten-year Capital Improvement Plan. Funding for upgrades of the District's GDI systems is included in the CIB.

Projects (Tab 3)

The Projects subprogram includes improvements to the Headquarters Office Building (HOB) and other properties, CIB preparation, easement and right-of-way acquisition, seismic upgrades of certain buildings, and projects related to District property improvements.

In FY 2013-14, funds will be spent for seismic upgrades to the HOB, followed by painting and replacement of worn carpeting and furniture. HOB staff has been temporarily relocated to other areas in order to carry out the seismic upgrades. Money is also budgeted for seismic upgrades of various District rental properties.

Table GI-1: General Improvements Subprogram / Project List

Subprogram / Project No. / Project Title			Estimated Total Project Expenditures	Estimated Expenditures To 06/30/13	Anticipated Allocations FY 2013-14	Estimated Expenditures FY 2013-14
1	**Vehicles & Equipment Acquisition**					
	8514	Vehicles and Equipment Acquisition	645,000	0	645,000	645,000
	9999	Capital Project Clearing	36,500	31,500	1,000	1,000
		Subprogram Total	**681,500**	**31,500**	**646,000**	**646,000**
2	**Management Information Systems**					
	8227	GDI - Treatment Plant	525,800	370,800	25,800	150,000
	8232	GDI-SMMS Replacement	833,000	338,000	133,000	450,000
	8195	Information Technology Development	5,485,000	4,385,000	900,000	1,100,000
		Subprogram Total	**6,843,800**	**5,093,800**	**1,058,800**	**1,700,000**
3	**Projects**					
	none	District Easements - LT	740,000	0	140,000	75,000
	none	Kiewit, Rental Property Improvements - LT	300,000	0	90,000	30,000
	pGI05	POD Office Improvements - LT	575,000	0	150,000	75,000
	8230	Capital Legal Services - 2010 to 2018	465,000	115,000	140,000	70,000
	8217	Capital Improvement Plan and Budget	1,021,000	731,000	80,000	90,000
	8233	CSOD Facilities Improvements	350,000	30,000	100,000	30,000
	8223	District Property Safety Improvements	174,000	94,000	40,000	60,000
	8207	General Security Access	73,000	63,000	0	10,000
	8234	HOB Improvements 12-13 thru 21-22	1,385,000	600,000	160,000	160,000
	8225	Imhoff Triangle Development	55,100	50,100	0	5,000
	8229	Martinez Easements	144,000	139,000	0	5,000
	8226	Seismic Improvements for HOB	6,221,000	4,421,000	918,000	1,800,000
		Subprogram Total	**11,503,100**	**6,243,100**	**1,818,000**	**2,410,000**
		Program Total	**19,028,400**	**11,368,400**	**3,522,800**	**4,756,000**

Vehicles and Equipment Acquisition – 2013-14

Project Manager, Department/Division:
Thea Vassallo, Administrative/Finance and Accounting

Project Purpose:
To provide the District with safe and cost-effective vehicles and equipment.

Project Description:
This is the District's 2013-14 capital project for purchase of vehicles and equipment.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2013	06/17/2014	$645,000
		Total:	**$645,000**

Estimated expenditures this FY are: **$645,000**
Anticipated Allocations this FY are: **$645,000**

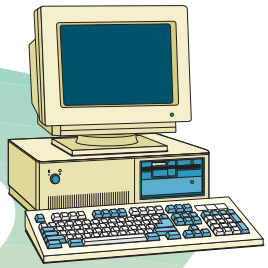
Project Fiscal Year Allocation/Expenditure Table:

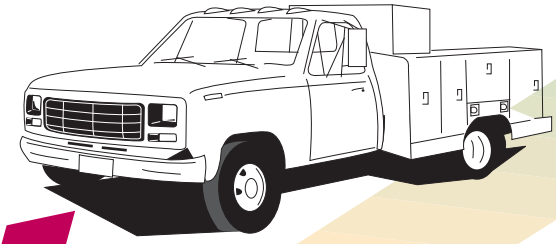
Project Title/Subprogram: Vehicles & Equipment Acquisition / 1
Project Number/Filename: 8514 / veh_equip14
Project Manager/% Expansion: Vassallo / 0

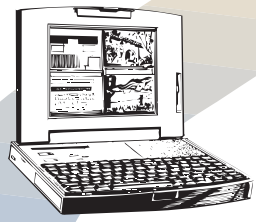
	Prior to 7/01/13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	0	645,000	0	0	0	0
C. Authorized this Year	0	645,000	0	0	0	0
D. Estimated Expenditures	0	(645,000)	0	0	0	0
E. Estimated Carry-over	0	(0)	0	0	0	0

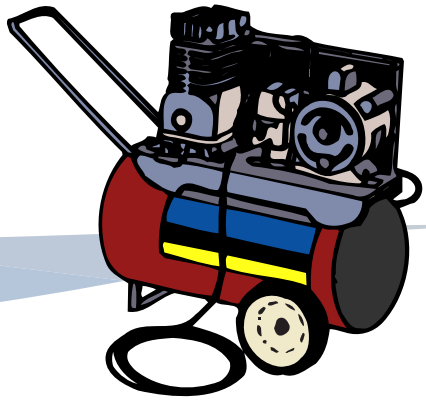
2013-2014 EQUIPMENT BUDGET

Central Contra Costa Sanitary District









1127B-2/13

2013 - 2014 EQUIPMENT BUDGET

Introduction/Routine Procedures: The following tables show items anticipated to be purchased via the 2013 - 2014 Equipment Budget. In addition to the specific purchases, a $100,000 contingency is budgeted for unanticipated needs. When the contingency budget is utilized, a memo is sent to the General Manager who can approve purchases up to $100,000. Equipment purchased over $100,000 will be submitted for Board approval as a part of the Capital Improvement Budget.

Equipment Item Overrun: When the actual cost of an equipment budget item is more than the budgeted amount, the following guidelines should be observed:

- If the overrun does not exceed $5,000 or 10%, whichever is greater, and there are sufficient funds in the department's Equipment Budget line account to cover the overrun, then the purchase can proceed. An informational memo should be sent to the General Manager in these cases, to keep him/her aware of budget variances. When Purchasing receives their copy of the memo, the purchase may proceed.

- If the overrun exceeds the above criteria, a contingency memo, or position paper will be required. If the dollar overrun is less than $100,000, the additional funds may be requested through contingency. If the dollar overrun is more than $100,000, a position paper is required.

Substitutions: Occasionally, the need to substitute a functionally different equipment item for a previously authorized Equipment Budgeted item arises. The following procedure should be followed in these instances:

- Situation One: Where a substitution is necessary, but the total does not exceed the authorized Equipment Budgeted amount, a memo will be sent to the General Manager detailing the need for the substitution.

- Situation Two: If the substitution or an unanticipated cost increase will result in the purchase exceeding the authorized Equipment Budgeted amount, a contingency memo (up to $100,000) should be sent to the General Manager outlining the need for substitution and/or the additional amount from contingency that is required for purchase.

  In both situations, if the substitution is warranted, the General Manager will approve the memo, and Purchasing can then proceed with the procurement process after their copy of the memo is received. Changes to authorized Equipment Budgeted purchases exceeding $100,000 additional cost must be requested by a position paper to the Board.

Summarized below is a comparison of the 2013-2014 Equipment Budget with the approved budgets of the four prior years:

	2013-2014	2012-2013	2011-2012	2010-2011	2009-2010
Administrative	0	0	0	30,000	9,000
Engineering	0	0	34,867	0	0
Collection System Operations	0	0	0	0	57,500
Plant Operations	0	0	154,133	0	84,400
Pump Stations	0	0	0	0	0
*All Others between $5,000-$100,000	138,400	370,654	30,930	31,500	
Subtotal	138,400	370,654	219,930	61,500	150,900
Vehicles					
New	0	0	0	290,000	0
Replacement	0	333,000	619,000	35,200	141,500
*All Others between $5,000-$100,000	407,000	153,000			
Subtotal	407,000	486,000	619,000	325,200	141,500
Equipment Request Total	545,400	856,654	838,930	386,700	292,400
Contingency	100,000	100,000	60,000	60,000	60,000
District Total	**$645,400**	**$956,654**	**$898,930**	**$446,700**	**$352,400**

Contingency as a % of Total Budget	15.49%	10.45%	6.67%	13.43%	17.03%

*Per approval of the Capital Budget Committee, any equipment request between $5,000 and $100,000 will not be detailed as a separate request, but will be combined as a one-line item. However, any equipment $5,000 and over must still be capitalized. Any item $100,000 or less can be approved by the General Manager.

For 2013-2014 fiscal year "All Others" are comprised of:

General Equipment:				
Professional camcorder			$8,000	
Concrete hauler & mixer			$26,000	
Mini-camera systems			$48,000	
2 Cushman trucks with attachments for buildings and grounds			$36,540	
Utility pickup for Instrument shop			$11,150	
Surface grinder with accessories			$8,710	$138,400
Vehicles:				
3 3/4-ton 2 X 4 trucks			$135,000	
2 1/2-ton 4 X 4 trucks			$74,000	
3 1/2-ton 2 X 4 trucks			$102,000	
3 Mid-Size 2 X 4 trucks			$96,000	$407,000
			$545,400	$545,400

Capital Project Clearing Account

Project Manager, Department/Division:
Thea Vassallo, Administrative/Finance and Accounting

Project Purpose:
Provide Accounting with a mechanism within the Capital Improvement Budget to record transactions for projects that are currently not available.

Project Description:
The District's capital project clearing account used in Accounting for various reasons. Transactions are typically entered in this account under the following circumstances:

- During payroll timesheet entry when a capital project has not yet opened, has been closed, or the project number is transposed and cannot be identified at that time.
- To record purchases under projects that are not opened yet. For instance, purchases under the following year's equipment budget.
- To record unanticipated additional charges to closed projects.

The account is reconciled monthly, and transactions are re-classified to the appropriate project or asset accounts.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2008	07/01/2009	$0
Design	-	-	$0
Construction	07/01/2009	06/17/2019	$36,500
		Total:	**$36,500**

Estimated expenditures this FY are: **$1,000**
Anticipated Allocations this FY are: **$1,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Cap Proj Clearing / 1
Project Number/Filename: 9999 / cap_proj_clearing
Project Manager/% Expansion: Vassallo / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	22,000	1,000	1,000	1,000	1,000
B. Anticipated Allocations	28,000	4,000	1,000	1,000	1,000	2,000
C. Authorized this Year	28,000	26,000	2,000	2,000	2,000	3,000
D. Estimated Expenditures	(6,000)	(25,000)	(1,000)	(1,000)	(1,000)	(1,000)
E. Estimated Carry-over	22,000	1,000	1,000	1,000	1,000	2,000

GDI – Treatment Plant

Project Manager, Department/Division:
Carolyn Knight, Engineering/Capital Projects

Project Purpose:
Improve the effectiveness of treatment plant operations and maintenance and facilitate design of treatment plant projects by providing an interactive map of treatment plant facilities linked to various existing and proposed data sets.

Project History:
The successful implementation of the collection system graphics device interface (GDI) has indicated that a similar implementation of a GDI for the treatment plant could provide faster and more efficient access to existing and/or hard to access asset data. A pilot treatment plant GDI has been completed, and is currently being used by staff.

Project Description:
Implement a geographically based asset management tool for the treatment plant. The Treatment Plant GDI will be modeled on the collection system GDI; mirroring the graphic interface and functionality but accessing and delivering treatment plant related data sets.

Project Location:
Treatment Plant

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2008	09/01/2008	$0
Design	09/01/2008	07/01/2009	$270,800
Construction	07/01/2009	06/30/2015	$255,000
		Total:	**$525,800**

Estimated expenditures this FY are: **$150,000**
Anticipated Allocations this FY are: **$26,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: GDI - Treatment Plant / 2
Project Number/Filename: 8227 / GDI_tp
Project Manager/% Expansion: Antkowiak / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	279,000	129,000	5,000	0	0
B. Anticipated Allocations	500,000	0	26,000	0	0	0
C. Authorized this Year	500,000	279,000	155,000	5,000	0	0
D. Estimated Expenditures	(221,000)	(150,000)	(150,000)	(5,000)	0	0
E. Estimated Carry-over	279,000	129,000	5,000	0	0	0

GDI-SMMS Replacement

Project Manager, Department/Division:
Carolyn Knight, Engineering/Capital Projects

Project Purpose:
Improve the effectiveness of the collection system operations and maintenance.

Project History:
Various computer-based management information systems have substantially improved the ability of District staff to manage the collection system. The disparate software programs that these systems operate on have kept staff from further improving operations by integrating these systems. The alternative to consolidating these systems is to spend significant sums upgrading the different systems.

Project Description:
Update and integrate the District's GDI software and implement GPS capability. Detailed specifications will be developed for hardware, software, programming, and training to provide a single interface, database, underlying map and modular application functionality to the asset management functions that support collection system maintenance, assessment, and renovation.

Project Location:
District-wide

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2011	$188,000
Construction	07/01/2011	06/30/2015	$645,000
		Total:	**$833,000**

Estimated expenditures this FY are: **$450,000**
Anticipated Allocations this FY are: **$133,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: GDI-SMMS Replacement / 2
Project Number/Filename: 8232 / GDI-SMMS_repl
Project Manager/% Expansion: Knight / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	200,000	112,000	362,000	45,000	0
B. Anticipated Allocations	200,000	0	500,000	133,000	0	0
C. Authorized this Year	200,000	200,000	612,000	495,000	45,000	0
D. Estimated Expenditures	0	(88,000)	(250,000)	(450,000)	(45,000)	0
E. Estimated Carry-over	200,000	112,000	362,000	45,000	0	0

Information Technology Development

Project Manager, Department/Division:
Roy Li, Administrative/Information Systems

Project Purpose:
An Information Technology Development Plan was developed by Information Technology staff to centralize efforts and funding in the development of computer and telecommunication technology within the District.

Project Description:
Due to competing funding and staffing priorities, the Information Technology Development Plan expenditure requests are being spread over more than a three-year period. The prioritization of these expenditures will be revisited on an ongoing basis and some adjustments may be made to allow funding of higher priority projects. See the following document for specific work planned.

Project Location:
District-wide

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2004	06/30/2014	$5,485,000
		Total:	**$5,485,000**

Estimated expenditures this FY are: **$1,100,000**
Anticipated Allocations this FY are: **$900,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Information Technology Development / 2
Project Number/Filename: 8195 / INF_Tech
Project Manager/% Expansion: Li / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	210,000	200,000	0	0	0
B. Anticipated Allocations	4,095,000	490,000	900,000	0	0	0
C. Authorized this Year	4,095,000	700,000	1,100,000	0	0	0
D. Estimated Expenditures	(3,885,000)	(500,000)	(1,100,000)	0	0	0
E. Estimated Carry-over	210,000	200,000	0	0	0	0

Central Contra Costa Sanitary District

INFORMATION TECHNOLOGY DEVELOPMENT

CAPITAL IMPROVEMENT BUDGET PLAN
2013 – 2014

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EXECUTIVE SUMMARY

The Information Technology Development CIB Plan provides direction and flexibility to meet the District's future information technology needs. Each year, District staff submits project recommendations, requests and write-ups to the Information Technology Administrator. The Management team gives their final review of the proposed CIB and IT projects, providing revisions and recommendations prior to appearing before the Capital Projects Committee for review and the Board of Directors for final approval.

The Information Technology Development CIB Plan is developed to provide funding for IT projects in the following areas:

- PC hardware and software
- District and specialized networks, systems and software applications
- Network infrastructure, security and reliability
- Data storage, backups and disaster recovery
- Internet and Intranet development
- Wireless access
- Telecommunications improvements
- Information Technology customer service and support
- Cost savings, power conservation & green alternatives

2013-2014 IT DEVELOPMENT PLAN
Proposed 2013-14 Project Expenditures

Project Description	In Thousands
1. PC Replacement - Replace approx 60 PCs/Laptops (4 yrs and older) LCD monitors, network & desktop printers	$100
2. Engineering Support – Replacement GIS workstations, storage, software	$112
3. POD – MainSaver replacement or migration	$90 *
4. Pilot field use of mobile tablets by pump station crews, IT	$35
5. District Server Replication, Backup, and Redundancy	$250
6. Software Volume Discount Licensing	$85
7. Replacement of old District network equipments and server	$88
8. Record retention and document management system	$250 *
9. Communication Services – Community outreach presentation hardware/software and public website conversion	$35 *
10. Miscellaneous / Contingency	$50 *
Total Proposed Budget	**$1,095**

* Capital Projects Committee recommendation is to place these portions of the IT Plan on hold and use the funds to pay for a comprehensive IT master plan instead.

PROPOSED 2013-14 PROJECTS SUMMARY

- PC Replacement
  - Four year life cycle replacement of 60 desktop PCs, laptops, LCD monitors, desktop and network printers

- Engineering Support Upgrades
  - Replacement for GIS workstations
  - Storage capacity improvements
  - AutoCAD, Carlson, and GIS related software licensing

- POD (Plant) - MainSaver software/server replacement or migration
  - Possible replacement or migration into a similar product

- Mobile Tablets
  - Pilot project with 18 mobile devices for field use by pump station crews and IT

- District Server Replication, Backup, and Redundancy

  To improve business continuity and address existing risks in our current IT infrastructure, a two (2) year project encompassing planning, implementation and training to improve District core network replication, data backup and redundancy is needed. Part of this project will include sub-projects such as upgrading the fiber network connection between CSO and HOB; upgrading the backup system; setting up fail-over system for HOB's network core switch; implement redundant storage, physical and virtual servers and systems at CSO and/or other site
  - This is the 2nd of 2 year building capacity for server disaster recovery, business continuity, data backup, and redundancy

- Software Volume Discount Licensing
  - 2nd of 3 year installment for 300 MS Office licenses, and 14 Windows server licenses

- Replacement of old District network and server equipments
  - Replacement of 2 end-of-support Dell PowerEdge servers
  - Replacement of 4 end-of-support CISCO network security equipments

- Record retention and document management system
  - New system for District record and retention management, document collaboration, version control, archiving, etc.
  - Covers system costs, implementation, licensing, support and consulting/professional services

- Communication Services
    - Conversion/migration of external website to another vendor. Existing vendor no longer provides support
    - Community outreach presentation laptop hardware/software and hardware/ software replacement for video studio

- Miscellaneous / Contingency
    - Investigate virtual desktops

FUTURE PROJECTS

EVALUATION FOR REPLACEMENT OF SUNGARD (HTE/GREEN SCREEN) SOFTWARE

Evaluate options for projected replacement of SunGard in FY 2015-2016

CLOUD TECHNOLOGY

Investigate software-as-a-service (SaaS), cloud services that allows District to share data with other government agencies and for disaster recovery (DR)

TEST LABS

Set up a test lab for testing new software, upgrades or configuration changes before rolling out changes District wide

VOLUME LICENSING OF MICROSOFT SOFTWARE LICENSES

Investigate additional volume licensing opportunities of various Microsoft or other software into a more cost effective program

District Easement Acquisition

Project Manager and Department/Division:
Thomas Brightbill, Engineering/Environmental Services

Project Purpose:
To perfect or acquire new property land rights for existing or new sanitary sewers that are located on private properties and are not associated with a current capital project for sewer renovation work.

Project History:
As capital projects are designed, sanitary sewer easements may have to be acquired through budgets for those specific projects. This project provides funds for the acquisition of easements for projects where specific funds are not identified in the Capital Improvement Budget.

Project Description:
Easements that may be acquired through this project include:

- Locations where easements need to be purchased for existing sewers
- Sewers that need upgraded easement rights or access rights
- Sewers relocated through other public agency projects
- Recycled Water Program

Projects included in the Collection System Program generally have funds budgeted specifically for right of way acquisition within the project budget.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2013	06/30/2023	$740,000
		Total:	**$740,000**

Estimated expenditures this FY are: **$75,000**
Anticipated Allocations this FY are: **$140,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: District Easements / 3
Project Number/Filename: none / District_Easements
Project Manager/% Expansion: Brightbill / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	65,000	0	75,000	0	75,000
B. Anticipated Allocations	140,000	0	150,000	0,000	150,000	0
C. Authorized this Year	140,000	65,000	150,000	75,000	150,000	75,000
D. Estimated Expenditures	(75,000)	(65,000)	(75,000)	(75,000)	(75,000)	(75,000)
E. Estimated Carry-over	65,000	0	75,000	0	75,000	0

Kiewit, Rental Property Improvements

Project Manager, Department/Division:
Shari Deutsch/Administrative Department

Project Purpose:
Protect and enhance the District's property through additions, improvements, replacements, and extraordinary repairs.

Project History:
The District owns various properties surrounding the Treatment Plant, including the Kiewit parcel, 4849 Imhoff and 4737 Imhoff. The Kiewit parcel has served as a buffer zone for the Treatment Plant and has been the site of a clean fill operation for several years. The property at 4849 Imhoff is used to house District employees displaced by the work being done in the HOB, and will be used as rental property when that work is complete. The property at 4737 Imhoff Place also houses displaced HOB employees, and several spaces are currently rented to commercial tenants. Both properties serve as buffer zones between the treatment plant and nearby neighborhoods.

Project Description:
This will be a multi-year project to install needed improvements to the District's rental properties, surrounding parking lots and grounds. These improvements would typically be triggered by equipment or building failure, or a need to improve the property. A five-year improvement plan has been developed and will be reviewed at least annually identifying future needed projects.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2013	06/30/2023	$300,000
		Total:	**$300,000**

Estimated expenditures this FY are: **$30,000**
Anticipated Allocations this FY are: **$90,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Kiewit, Rental Property Improvements / 3
Project Number/Filename: none / Kiewit and Rental Prop
Project Manager/% Expansion: Deutsch / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	60,000	30,000	0	60,000	30,000
B. Anticipated Allocations	90,000	0	0	90,000	0	0
C. Authorized this Year	90,000	60,000	30,000	90,000	60,000	30,000
D. Estimated Expenditures	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)
E. Estimated Carry-over	60,000	30,000	0	60,000	30,000	0

POD Office Improvements Project

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
The project purpose is to make improvements to the interior and exterior of the Plant Operations Department (POD) Administration building.

Project History:
The POD Administration building is over 30 years old. There is an ongoing need to renovate or reconfigure office and workstation space to match employee needs and duties, to replace outdated or worn out furniture, meet ADA requirements, and to incorporate new office technologies.

Replacement of carpeting and repainting has been completed. Modular furniture has been replaced in several cubicles.

Project Description:
This multi-year project will provide an allowance to renovate and upgrade the interior and exterior of the POD Administration offices and the Emergency Operations Center (EOC) located in the Multi-Purpose Room. Anticipated projects include installation of cabinetry for storage of EOC equipment and sidewalk modifications for ADA access.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2013	06/30/2023	$230,000
Design	07/01/2013	06/30/2023	$345,000
Construction	-	-	$0
		Total:	**$575,000**

Estimated expenditures this FY are: **$75,000**
Anticipated Allocations this FY are: **$150,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: POD Office Improvements / 3
Project Number/Filename: pGI05 / POD_Office_Imp
Project Manager/% Expansion: Hodges / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	75,000	0	50,000	0	50,000
B. Anticipated Allocations	150,000	0	125,000	0	100,000	0
C. Authorized this Year	150,000	75,000	125,000	50,000	100,000	50,000
D. Estimated Expenditures	(75,000)	(75,000)	(75,000)	(50,000)	(50,000)	(50,000)
E. Estimated Carry-over	75,000	0	50,000	0	50,000	0

Capital Legal Services

Project Manager, Department/Division:
Russell Leavitt, Engineering/Environmental Services

Project Purpose:
Streamline the processing of legal bills.

Project History:
In the past, legal expenses were charged to individual capital projects. This process required extra staff time each month to review legal bills and get approvals from several different project managers.

Project Description:
Capital legal service expenses are no longer charged to individual capital projects. Instead, legal expenses are charged to one capital account with four charge numbers for the four programs. This reduces the amount of time all parties must spend processing the legal bill.

Project Location:
Not applicable

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$465,000
Design	-	-	$0
Construction	07/01/2010	06/30/2018	$0
		Total:	**$465,000**

Estimated expenditures this FY are: **$70,000**
Anticipated Allocations this FY are: **$140,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Capital Legal Services - 2010 to 2018 / 3
Project Number/Filename: 8230 / CapLegal_2010
Project Manager/% Expansion: Leavitt / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	180,000	165,000	95,000	165,000	95,000
B. Anticipated Allocations	210,000	0	0	140,000	0	0
C. Authorized this Year	210,000	180,000	165,000	235,000	165,000	95,000
D. Estimated Expenditures	(30,000)	(15,000)	(70,000)	(70,000)	(70,000)	(70,000)
E. Estimated Carry-over	180,000	165,000	95,000	165,000	95,000	25,000

Capital Improvement Plan and Budget

Project Manager, Department/Division:
Earlene Millier, Engineering/Environmental Services

Project Purpose:
Provide for the capitalization of the staff time necessary for the data gathering and production of the Capital Improvement Budget and Plan, and for upgrades to the software used for maintaining the capital projects database.

Project History:
Custom software is used to maintain a database to track capital project budget information and produce the annual CIB and CIP. A number of interim reports and cash flow analyses are also produced.

Project Description:
Facility planning and master planning have traditionally been capital activities. It is appropriate that the resources required to produce the District's capital planning document, the CIB/CIP, also be classified as capital expenditures. Staff time charged to this capital project will be mainly from the capital improvement budget coordinator. Other costs include modifications and upgrades to the software used for maintaining the capital projects database and for printing the actual CIB/CIP documents.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2006	06/30/2015	$1,021,000
Design	06/30/2015	01/30/2016	$0
Construction	01/30/2016	06/30/2016	$0
		Total:	**$1,021,000**

Estimated expenditures this FY are: **$90,000**
Anticipated Allocations this FY are: **$80,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Capital Improvement Plan and Budget / 3
Project Number/Filename: 8217 / CIB_CIP
Project Manager/% Expansion: Millier / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	22,000	42,000	32,000	32,000	0
B. Anticipated Allocations	663,000	110,000	80,000	100,000	68,000	0
C. Authorized this Year	663,000	132,000	122,000	132,000	100,000	0
D. Estimated Expenditures	(641,000)	(90,000)	(90,000)	(100,000)	(100,000)	0
E. Estimated Carry-over	22,000	42,000	32,000	32,000	0	0

CSOD Facility Improvements

Project Manager, Department/Division:
Alex Rozul, Collection System Operations

Project Purpose:
Improve the safety, reliability, and maintainability of the Collection System Operations Department facilities in Walnut Creek, including the vehicle maintenance shop.

Project History:
none

Project Description:
This is a multi-year program to construct capital improvements to the CSOD site in Walnut Creek. Projects will include improvements to the vehicle maintenance shop, which was not included in the CSOD Administration, Crew and Warehouse Facility project, and replacement of the permeable concrete in the middle yard, if needed.

Project Location:
1250 Springbrook Road, Walnut Creek.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	01/01/2012	01/01/2022	$350,000
		Total:	**$350,000**

Estimated expenditures this FY are: **$30,000**
Anticipated Allocations this FY are: **$100,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: CSOD Facilities Improvements / 3
Project Number/Filename: 8233 / CSOD_Fac_LT
Project Manager/% Expansion: Rozul / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	100,000	70,000	140,000	110,000	180,000
B. Anticipated Allocations	100,000	0	100,000	0	100,000	0
C. Authorized this Year	100,000	100,000	170,000	140,000	210,000	180,000
D. Estimated Expenditures	0	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)
E. Estimated Carry-over	100,000	70,000	140,000	110,000	180,000	150,000

District Property Safety Improvements

Project Manager, Department/Division:
Shari Deutsch, Administrative/Safety & Risk Management

Project Purpose:
Implement projects necessary to meet worker health and safety requirements.

Project History:
Urgent safety improvements to District facilities and equipment are triggered by equipment failures, accidents and near misses. Improvements also are made based on results of safety audits and suggestions received by the District's Safety Committee and the various department-level safety teams. The issues addressed in any given year vary widely in scope and location.

Project Description:
This project is a multi-year program to install safety improvements. The project encompasses safety improvements to the District's buildings, surrounding parking lots and grounds, District-owned buffer properties, general use vehicles and equipment, and other safety improvements that are not included in treatment plant or collection system projects.

Project Location:
District-wide

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2007	06/17/2015	$174,000
		Total:	**$174,000**

Estimated expenditures this FY are: **$60,000**
Anticipated Allocations this FY are: **$40,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: District Property Safety Improvements / 3
Project Number/Filename: 8223 / DistPropSafety
Project Manager/% Expansion: Deutsch / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	36,000	40,000	20,000	0	0
B. Anticipated Allocations	50,000	84,000	40,000	0	0	0
C. Authorized this Year	50,000	120,000	80,000	20,000	0	0
D. Estimated Expenditures	(14,000)	(80,000)	(60,000)	(20,000)	0	0
E. Estimated Carry-over	36,000	40,000	20,000	0	0	0

General Security Access

Project Manager, Department/Division:
Shari Deutsch, Administrative/Safety & Risk Management

Project Purpose:
Improve public and employee safety; meet reliability/safety standards; reduce the District's exposure to liability; reduce loss of District's property; and reduce Operations and Maintenance expenses.

Project History:
The District has experienced property losses in the past and improvements to the security system are continually identified and refined. Also, the current national security situation may soon require additional security measures for essential public services.

Project Description:
This project includes installing alarm systems, adding gates in the perimeter security fencing, upgrading security cameras, improving general area lighting, fencing and signage.

Project Location:
District properties.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2007	06/17/2014	$73,000
		Total:	**$73,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: General Security Access / 3
Project Number/Filename: 8207 / GenSec
Project Manager/% Expansion: Deutsch / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	12,000	10,000	0	0	0
B. Anticipated Allocations	60,000	13,000	0	0	0	0
C. Authorized this Year	60,000	25,000	10,000	0	0	0
D. Estimated Expenditures	(48,000)	(15,000)	(10,000)	0	0	0
E. Estimated Carry-over	12,000	10,000	0	0	0	0

HOB Improvements 2012-13 to 2021-22

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Improve the safety, serviceability, maintainability, usability, and appearance of the interior and exterior of the Headquarters Office Building (HOB).

Project History:
The HOB was completed in 1983. After 27 years of use, the interior needs upgrading. The current seismic upgrade of the HOB will require remodeling parts of the interior.

Project Description:
The HOB interior walls will be painted, repaired or replaced, along with the replacement of damaged ceiling tiles, and carpeting. In addition, lighting systems will be upgraded and some office spaces will be reconfigured. Interior and exterior changes will be made to bring the building into compliance with ADA requirements. Improvements will also be made to resist inclement weather. The Permit Vault will be reconfigured into a common workspace to be used by Permit Counter staff and others.

Project Location:
Headquarters Office Building.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2012	08/01/2012	$500,000
Design	08/01/2012	10/01/2012	$425,000
Construction	10/01/2012	06/17/2023	$460,000
		Total:	**$1,385,000**

Estimated expenditures this FY are: **$160,000**
Anticipated Allocations this FY are: **$160,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: HOB Improvements 12-13 thru 21-22 / 3
Project Number/Filename: 8234 / HOB_imprvs
Project Manager/% Expansion: Hodges / 0

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
A. Current Carry-over	0	0	0	50,000	0	95,000
B. Anticipated Allocations	600,000	160,000	100,000	0	145,000	0
C. Authorized this Year	600,000	160,000	100,000	50,000	145,000	95,000
D. Estimated Expenditures	(600,000)	(160,000)	(50,000)	(50,000)	(50,000)	(95,000)
E. Estimated Carry-over	0	0	50,000	0	95,000	0

Imhoff Triangle Development

Project Manager, Department/Division:
Thomas Brightbill, Engineering/Environmental Services

Project Purpose:
The purpose of this project is to develop the District's property located on Imhoff Drive.

Project History:
The District declared this land surplus on August 9, 2007. Prospective lessees have shown interest, but before the land can be leased, various surveys and permitting will be required along with culverting a seasonal channel that bisects the property. This property serves as a buffer zone between the treatment plant/Household Hazardous Waste Collection Facility and nearby residential and commercial neighborhoods.

Project Description:
This project will be a multi-year program for initial development costs associated with the triangular property located off of Imhoff Drive. The scope of work includes: a) engineering services connected with the rerouting or relocation of the seasonal creek bed, b) other in-house engineering services, and c) in-house survey services.

Project Location:
The triangular property is approximately 1.1 acres and is located south of Imhoff Drive and northwest of the District's Household Hazardous Waste Collection Facility.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$45,100
Design	-	-	$0
Construction	12/15/2007	06/17/2014	$10,000
		Total:	**$55,100**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Imhoff Triangle Development / 3
Project Number/Filename: 8225 / Imhoff_tri
Project Manager/% Expansion: Brightbill / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	18,000	13,000	8,000	8,000	8,000
B. Anticipated Allocations	63,000	0	0	0	0	0
C. Authorized this Year	63,000	18,000	13,000	8,000	8,000	8,000
D. Estimated Expenditures	(45,000)	(5,000)	(5,000)	0	0	0
E. Estimated Carry-over	18,000	13,000	8,000	8,000	8,000	8,000

Martinez Easement Acquisition

Project Manager and Department/Division:
Ricardo Hernandez, Engineering/Environmental Services

Project Purpose:
Obtain and document needed easements in the City of Martinez.

Project History:
An agreement with the City of Martinez when CCCSD became responsible for the Martinez sewers included the requirement that the District acquire needed easements.

Project Description:
Over the next ten years the District will be renovating or replacing many of the older sewer pipes within the City of Martinez. This project will acquire up to 125 missing or insufficient sewer easements required to support this planned renovation work. The City of Martinez will reimburse CCCSD for the costs associated with acquisition of these easements.

Project Location:
City of Martinez

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	08/20/2009	12/01/2000	$35,000
Design	12/01/2000	12/01/2009	$109,000
Construction	12/01/2009	06/17/2014	$0
		Total:	**$144,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Martinez Easements / 3
Project Number/Filename: 8229 / mtz_easements
Project Manager/% Expansion: Hernandez / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	21,000	5,000	0	0	0
B. Anticipated Allocations	130,000	14,000	0	0	0	0
C. Authorized this Year	130,000	35,000	5,000	0	0	0
D. Estimated Expenditures	(109,000)	(30,000)	(5,000)	0	0	0
E. Estimated Carry-over	21,000	5,000	0	0	0	0

Seismic Improvements for HOB

Project Manager, Department/Division:
Nathan Hodges, Engineering/Capital Projects

Project Purpose:
Upgrade the Headquarters Office Building (HOB) to current seismic safety standards.

Project History:
Since the construction of the HOB in the mid-1980s, a great deal has been learned from the Loma Prieta and Northridge earthquakes and earthquake code requirements have changed. In 2008 Complete Project Solutions, Inc. (CPS) completed an analysis of HOB identifying significant seismic deficiencies based on current design standards.

CPS' analysis of HOB revealed issues with the building columns and the steel moment frames. While no building constructed with steel moment frames has collapsed in the United States, there are unique aspects to the HOB that warrant additional concern. Combining the unique aspects of the HOB and the lack of meeting current design standards indicate that HOB may not provide basic life safety to occupants.

Project Description:
Seismically retrofit HOB to provide up to an enhanced life safety level of structural performance. Work will be coordinated with HOB Improvements for carpeting, painting, and other office space enhancements.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/16/2008	03/01/2012	$721,000
Construction	03/01/2012	12/31/2013	$5,500,000
		Total:	**$6,221,000**

Estimated expenditures this FY are: **$1,800,000**
Anticipated Allocations this FY are: **$918,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Seismic Improvements for HOB / 3
Project Number/Filename: 8226 / seismic_HOB
Project Manager/% Expansion: Hodges / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	249,000	882,000	0	0	0
B. Anticipated Allocations	970,000	4,333,000	918,000	0	0	0
C. Authorized this Year	970,000	4,582,000	1,800,000	0	0	0
D. Estimated Expenditures	(721,000)	(3,700,000)	(1,800,000)	0	0	0
E. Estimated Carry-over	249,000	882,000	0	0	0	0

RECYCLED WATER PROGRAM

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RECYCLED WATER PROGRAM

Table RW-1 presents project listings and detailed budget information. Detailed project information, schedules, and cash flow tables are presented in individual project data sheets.

OVERVIEW

The District currently delivers about 200 million gallons per year of recycled water to 35 customers located within the Zone 1 service area for landscape irrigation and commercial uses. These customers are located along the Interstate 680 corridor in Pleasant Hill, Concord, and Martinez. The District also uses about 400 million gallons per year at the treatment plant for process water and landscape irrigation. The Regional Water Quality Control Board (RWQCB) encourages the District to expand its recycled water program, and activities must be reported annually to the RWQCB. The District continues to pursue a number of projects as described in the following pages.

The major emphasis of the Recycled Water Program for the next fiscal year will be pursuing development of a large industrial re-use project and construction of the Concord Landscape Project. The District will also continue efforts to add new cost-effective customers in the District's Zone 1 service area, and pursue outside funding assistance, such as federal and state grants.

Table RW-1: Recycled Water Subprogram / Project List

Subprogram / Project No. / Project Title			Estimated Total Project Expenditures	Estimated Expenditures To 06/30/13	Anticipated Allocations FY 2013-14	Estimated Expenditures FY 2013-14
1	**Urban Landscaping**					
	7299	Concord Landscape Project	4,336,000	1,275,000	336,000	3,060,000
	7300	Refinery Recycled Water Project	406,100	106,100	100,000	100,000
	7259	Recycled Water Planning	1,759,000	1,329,000	100,000	105,000
	7306	Zone 1 Recycled Water - ph 1C - 2012 to 2022	3,271,000	0	220,000	136,000
	7279	Concord Naval Weapons REW	321,000	291,000	41,000	5,000
	7261	REW - Cathodic Prot Sys Repl	34,700	19,700	9,700	5,000
	7303	ReW Line Conco/Maltby RPR	178,500	173,500	0	5,000
		Subprogram Total	**10,306,300**	**3,194,300**	**806,700**	**3,416,000**
		Program Total	**$10,306,300**	**$3,194,300**	**$806,700**	**$3,416,000**

Concord Landscape Project

Project Manager, Department/Division:
Michael Penny, Engineering/Capital Projects

Project Purpose:
Extend the recycled water distribution system from the Buchanan Fields Golf Course to the Diamond/Meridian Park Blvd area of Concord for landscape irrigation purposes at businesses and roadway medians. Completion of this project will provide up to 190 acre-feet per year (AFY) of recycled water for landscape irrigation customers.

Project History:
This area is included in the 1995 Zone One Project Agreement with the Contra Costa Water District. Design was completed in early 2013.

Project Description:
Construction of about 2.5 miles of new recycled water distribution piping and approximately 34 customer connections. The project will be partially funded by grants from the Federal and State governments. As customers are connected, additional recycled water sales revenue will be generated, and will be used to first fund O&M expenses, and then the Sewer Construction Fund.

Project Location:
Concord, Zone One Project area

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2011	09/01/2011	$855,000
Construction	09/01/2011	06/30/2015	$3,480,000
		Total:	**$4,335,000**

Estimated expenditures this FY are: **$3,060,000**
Anticipated Allocations this FY are: **$336,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Concord Landscape Project / 1
Project Number/Filename: 7299 / Concord_LS
Project Manager/% Expansion: Penny / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	255,000	2,725,000	1,000	0	0
B. Anticipated Allocations	540,000	3,460,000	336,000	0	0	0
C. Authorized this Year	540,000	3,715,000	3,061,000	1,000	0	0
D. Estimated Expenditures	(285,000)	(990,000)	(3,060,000)	(1,000)	0	0
E. Estimated Carry-over	255,000	2,725,000	(1,000)	0	0	0

Refinery Recycled Water Project

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
Develop and implement a project to provide recycled water to the Shell and Tesoro refineries in Martinez.

Project History:
The two refineries use a combined total of approximately 22,500 acre feet per year (AFY) of Delta water for cooling towers and boiler feed water applications. CCCSD discharges over 40,000 AFY of secondary effluent to Suisun Bay that could be recycled and reused at the refineries to replace Delta water. Some of the infrastructure required for this project already exists, but new filtration facilities and nitrification facilities to meet refinery water quality requirements are needed. The project could be cost-effective compared to other water supply alternatives if outside funding assistance is obtained.

Project Description:
Construct new recycled water treatment facilities including nitrification, filtration, and disinfection facilities. The total estimated project cost is $85 to $100 million. In 2011, CCCSD was awarded a grant from the U.S. Bureau of Reclamation to prepare a feasibility study and environmental documentation. The feasibility study is expected to be completed in 2013. At this time, budget is only included for project planning activities and to pursue funding and project partners.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2011	07/01/2014	$406,000
Design	-	-	$0
Construction	07/01/2014	06/17/2016	$0
		Total:	**$406,000**

Estimated expenditures this FY are: **$100,000**
Anticipated Allocations this FY are: **$100,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Refinery Recycled Water Project / 1
Project Number/Filename: 7300 / refinery ReW
Project Manager/% Expansion: Berger / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	144,000	144,000	144,000	144,000	0
B. Anticipated Allocations	150,000	100,000	100,000	100,000	30,000	0
C. Authorized this Year	150,000	244,000	244,000	244,000	174,000	0
D. Estimated Expenditures	(6,000)	(100,000)	(100,000)	(100,000)	(100,000)	0
E. Estimated Carry-over	144,000	144,000	144,000	144,000	0	0

Recycled Water Planning

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
Develop and implement a comprehensive long-term Recycled Water Program that provides recycled water for landscape irrigation, industrial reuse, and other applications.

Project History:
The District has worked with local water purveyors over the years to develop partnerships and identify opportunities to expand recycled water use. Recent planning efforts have focused on an industrial recycled water project; the use of recycled water on buffer properties near the treatment plant; dual plumbing applications; and the use of satellite treatment facilities to provide recycled water to landscape irrigation customers in remote areas.

Project Description:
Perform planning studies for the District's recycled water program. To address implementation issues such as funding, regulations, public education, and gaining political support from public agencies. Documents to comply with State Water Resources Control Board requirements for salt and nutrient management plans will be prepared.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$1,760,000
Design	-	-	$0
Construction	01/01/2008	06/17/2017	$0
		Total:	**$1,760,000**

Estimated expenditures this FY are: **$105,000**
Anticipated Allocations this FY are: **$100,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Recycled Water Planning / 1
Project Number/Filename: 7259 / rew_01planning
Project Manager/% Expansion: Berger / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	(69,000)	(109,000)	(104,000)	(105,000)	(105,000)
B. Anticipated Allocations	1,010,000	210,000	100,000	105,000	63,000	158,000
C. Authorized this Year	1,010,000	141,000	(209,000)	(209,000)	(168,000)	(263,000)
D. Estimated Expenditures	(1,079,000)	(250,000)	(105,000)	(104,000)	(63,000)	(158,000)
E. Estimated Carry-over	(69,000)	(109,000)	(104,000)	(105,000)	(105,000)	(105,000)

Zone 1 Recycled Water

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
Develop and implement a project to provide recycled water for landscape irrigation and other identified uses in the Zone 1 Project area, which includes Pleasant Hill and portions of Concord and Martinez near the I-680 freeway.

Project History:
In 2001, the District completed the Zone 1 Implementation Plan that provided estimated connection costs and revenues for customers identified in the CCWD Zone 1 Project Agreement. Depending on the extent of use, demand for recycled water in Zone 1 for landscape irrigation and commercial uses could be up to 400 million gallons per year. A recycled water distribution main for the Zone 1 area was constructed as part of the Pleasant Hill Relief Interceptor project to take advantage of cost-saving opportunities. New customers will continue to be added to the system where technically and economically feasible. The District is focusing on connecting cost-effective landscape irrigation sites near existing recycled water distribution pipelines.

Project Description:
This project provides funds for the planning, design, and construction of recycled water facilities for landscape irrigation customers and other identified uses in the Zone 1 Project area. Subsequent phases of this project continue in future fiscal years.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$276,000
Design	-	-	$350,000
Construction	07/01/2013	06/17/2023	$2,645,000
		Total:	**$3,271,000**

Estimated expenditures this FY are: **$136,000**
Anticipated Allocations this FY are: **$220,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Zone 1 Recycled Water - ph 1C - 2012 to 2022 / 1
Project Number/Filename: 7306 / rew_02zone1
Project Manager/% Expansion: Berger / 0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. Current Carry-over	0	84,000	84,000	84,000	84,000	84,000
B. Anticipated Allocations	220,000	335,000	335,000	340,000	340,000	240,000
C. Authorized this Year	220,000	419,000	419,000	424,000	424,000	324,000
D. Estimated Expenditures	(136,000)	(335,000)	(335,000)	(340,000)	(340,000)	(240,000)
E. Estimated Carry-over	84,000	84,000	84,000	84,000	84,000	84,000

Concord Naval Weapons Station Recycled Water Planning

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
Identify recycled water infrastructure necessary to serve the extensive development being planned at the Concord Naval Weapons Station (CNWS) site as part of the Concord Community Reuse Project.

Project History:
The planned redevelopment of the CNWS property provides an excellent opportunity to expand recycled water use in the District's service area. In 2009, the City of Concord selected a preferred development plan and in 2010, the Final Environmental Impact Report (EIR) was completed. It includes recycled water demand scenarios of up to 2,749 AFY for landscape irrigation. In 2012, the District completed a Recycled Water Facilities plan for the CNWS Redevelopment that identified the conceptual recycled water infrastructure necessary to serve the irrigation demands identified in the EIR.

Project Description:
As CNWS redevelopment plans move forward, the Recycled Water Facilities Plan will form the basis of future work to ensure that appropriate recycled water projects are identified for timely inclusion in the District's capital budget and that Concord Community Reuse Project's appropriate contribution to the cost of such infrastructure can be ascertained.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	07/01/2010	07/01/2012	$321,000
Design	07/01/2012	07/01/2015	$0
Construction	07/01/2015	06/30/2019	$0
		Total:	**$321,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$41,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Concord Naval Weapons REW / 1
Project Number/Filename: 7279 / rew_03CNWS
Project Manager/% Expansion: Berger / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	40,000	39,000	(11,000)	(47,000)	(42,000)
B. Anticipated Allocations	230,000	50,000	0	41,000	0	0
C. Authorized this Year	230,000	90,000	39,000	(52,000)	(47,000)	(42,000)
D. Estimated Expenditures	(190,000)	(51,000)	(50,000)	(5,000)	(5,000)	(5,000)
E. Estimated Carry-over	40,000	39,000	(11,000)	(47,000)	(42,000)	(37,000)

Cathodic Protection System Replacement - ReW

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Cathodic protection for all recycled water facilities will be provided by replacing existing expended facilities and installing new systems where required.

Project History:
To extend the useful life of the District recycled water facilities, structures and pipelines, cathodic protection systems need to be monitored and maintained. A master plan for treatment plant, recycled water and collection systems cathodic protection was prepared and identified facilities that needed replacement and improvements over the next five-year period. The report also identified existing facilities requiring further investigation.

Project Description:
Based on the recommendations from the master plan, cathodic protection systems that are not providing adequate protection will be repaired and/or replaced, and any other facilities that may require cathodic protection will be identified.

Project Location:
Throughout the recycled water distribution system

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	07/01/2006	02/01/2007	$34,700
Construction	02/01/2007	06/01/2016	$0
		Total:	**$34,700**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$9,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: REW - Cathodic Prot Sys Repl / 1
Project Number/Filename: 7261 / rew_cathodic
Project Manager/% Expansion: Antkowiak / 0

	Prior to 7/01/12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	5,000	5,000	9,000	5,000	3,000
B. Anticipated Allocations	20,000	5,000	9,000	1,000	3,000	0
C. Authorized this Year	20,000	10,000	14,000	10,000	8,000	3,000
D. Estimated Expenditures	(15,000)	(5,000)	(5,000)	(5,000)	(5,000)	0
E. Estimated Carry-over	5,000	5,000	9,000	5,000	3,000	3,000

REW Line to Conco & Maltby PS Repair

Project Manager, Department/Division:
Andrew Antkowiak, Engineering/Capital Projects

Project Purpose:
Repair failed portions of the recycled water line that serves Conco and the District's Maltby Pumping Station.

Project History:
Several leaks have developed over the last ten years on the recycled water line serving Conco and the Maltby Pumping Station. More recently, a small leak was discovered in Basin C. Staff identified failing glued joints as the source of the leaks.

Project Description:
This project will evaluate, design and repair the active leak(s), and replace pipe at risk of future failure. A flow meter to monitor for future leaks will be installed.

Project Schedule and Cost:

	Start Date	*Completion Date*	*Total Cost*
Planning	-	-	$0
Design	03/01/2012	07/01/2012	$23,500
Construction	07/01/2012	06/30/2014	$155,000
		Total:	**$178,500**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: ReW Line Conco/Maltby RPR / 1
Project Number/Filename: 7303 / REW_conco_repl
Project Manager/% Expansion: Lopez / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	1,000	(9,000)	0	0	0
B. Anticipated Allocations	25,000	140,000	0	0	0	0
C. Authorized this Year	25,000	141,000	(9,000)	0	0	0
D. Estimated Expenditures	(24,000)	(150,000)	(5,000)	0	0	0
E. Estimated Carry-over	1,000	(9,000)	0	0	0	0

2013 CAPITAL IMPROVEMENT PLAN
TEN YEARS ENDING JUNE 30, 2023

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2013 CAPITAL IMPROVEMENT PLAN
TEN YEARS ENDING JUNE 30, 2023

PURPOSE

The Central Contra Costa Sanitary District (District) is responsible for the collection, treatment and disposal of wastewater for a population of approximately 462,000 in central Contra Costa County. The District has developed a ten-year Capital Improvement Plan (CIP) for the District's capital facilities and financing needs. The CIP is updated every year. Specifically, the plan identifies and prioritizes capital projects needed to accomplish the District's mission. It also includes cost estimates for proposed project work and projections for the various sources of revenue needed to meet the cash flow requirements of the CIP.

The principal purpose of the CIP is to provide the District's Board of Directors with the information needed to formulate long-range policy regarding:

- Priority and Schedule – identify, prioritize, and schedule the projects necessary to accomplish the District's mission.
- Financing – plan sufficient financial resources for completion of the projects proposed in the CIP.

The following discussion provides: 1) a general description of the plan, 2) a discussion of potential, unbudgeted future projects, and 3) a cash flow discussion.

CAPITAL IMPROVEMENT EXPENDITURES

This plan covers the ten-year period from FY 2013-14 through FY 2022-23. The plan includes projected expenditures totaling $365,172,000 (2013 dollars).

In addition to providing the basis for policy decisions concerning the District's long-range Capital Improvement Program and management of the Sewer Construction Fund, the CIP also serves as the framework for fee analysis and is the basis for the FY 2013-14 Capital Improvement Budget (CIB) (the first year of the CIP).

The following discussion gives an overview of the plan's goals and the programs proposed to meet these goals. A description of the District's guiding financial principles and a brief summary of the CIP's cash flow are also presented.

Capital Improvement Program Objectives

The District has identified three principal objectives for its Capital Improvement Program:

- Support the District's mission to protect public health and the environment by:
  - Collecting and treating wastewater
  - Recycling high quality water
  - Promoting pollution prevention

- Accommodate future growth in the service area as approved by the city and county planning agencies responsible for land use policy decisions.

- Respond to issues of community concern by:
  - Managing the cost of operating and maintaining facilities
  - Reducing objectionable odors
  - Cooperating with other public agencies to avoid duplication of effort and improve service delivery
  - Reducing power consumption through energy management

Programs

Capital improvement projects are grouped into four programs: Treatment Plant, Collection System, General Improvements, and Recycled Water. A summary of the ten years of planned expenditures by program, without inflation, is contained in Table 1. Below is a brief discussion of each ten-year program.

Treatment Plant

The Treatment Plant Program includes projects that will meet changing regulatory mandates, address recurring renovation needs, and upgrade the wastewater treatment plant in areas such as hydraulic/process and solids handling capacity. The emphasis of the Treatment Plant Program will be on the renovation needs of the aging infrastructure of our complex treatment facility and on meeting increasingly stringent regulatory requirements. Capacity improvements will be primarily limited to those needed for the solids handling processes and to handle wet weather flows. One large regulatory project faces the District in the next ten years: the $70 million Nutrient Removal project.

Collection System

The Collection System Program includes projects needed to renovate aging sewers and to serve new development in the District's service area. Specific near-term and long-term goals include upgrading the system where necessary to address capacity

needs, improving the reliability of the District's pumping stations, and implementing projects to address renovation needs. The District wide TV inspection program, the Collection System Master Plan and hydraulic model analysis have been used to identify and prioritize the collection system projects.

Since its inception in FY 2002-03, the District Wide TV Inspection program has been used to identify line segments in need of renovation. The TV inspection results, coupled with CSO maintenance records and hydraulic analysis are used to prioritize lines in need of renovation. The areas of concern are then grouped geographically and bid as District projects. The Collection System Master Plan is updated periodically District-wide and is revisited on a routine basis when changes in development patterns occur. This plan documents the sewers which will need to be upsized to increase capacity over approximately the next 30 years. As this capacity is needed, these lines are added to the capital program. The Collection System Program also provides for pumping station and force main improvements to increase station capacity, provide emergency power, and upgrade old equipment to increase capacity and improve reliability.

General Improvements

This program addresses the property and equipment needs of the District. Specific projects include property acquisition, improvements to the Headquarters Office Building and other District properties, information system and data management upgrades (computer hardware and software) and other miscellaneous equipment, including vehicles. This program includes seismic upgrades to general use District buildings.

Recycled Water

The District will continue to expand its urban landscaping projects in a cost-effective way by linking recycled water pipeline projects with sewer construction projects. Major projects include identifying the infrastructure needed to supply recycled water to the Concord Naval Weapons Station and construction of the Concord Landscape project. District staff will also continue to pursue financial partners for the Refinery Recycled Water project, although this project is not currently budgeted except for small expenditures to cover planning activities.

Table 1: 2013 Ten-year Capital Improvement Program Expansion-Upgrade/Replacement

Program/Subprogram	Estimated Expenditures * 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals	% of Total
Treatment Plant												
Reg. Compliance/Planning/Safety	1,128,000	432,000	571,000	320,000	2,765,000	10,915,000	28,165,000	24,321,000	27,271,000	13,140,000	109,028,000	29.9
One-Time Renovation	7,428,000	8,845,000	5,123,000	12,145,000	6,420,000	100,000	80,000	80,000	80,000	600,000	40,901,000	11.2
Recurring Renovation	482,000	720,000	2,520,000	2,490,000	2,570,000	2,970,000	2,970,000	2,920,000	1,870,000	1,670,000	21,182,000	5.8
Expansion	0	0	0	0	0	0	0	0	100,000	440,000	540,000	0.1
Subtotal	**9,038,000**	**9,997,000**	**8,214,000**	**14,955,000**	**11,755,000**	**13,985,000**	**31,215,000**	**27,321,000**	**29,321,000**	**15,850,000**	**171,651,000**	**47.0**
Collection System												
Renovation	8,852,000	9,811,000	10,351,000	12,651,000	12,164,000	13,651,000	10,981,000	13,201,000	13,130,000	9,020,000	113,812,000	31.2
Reg. Compliance/Planning/Safety	520,000	320,000	270,000	270,000	270,000	270,000	270,000	170,000	170,000	170,000	2,700,000	0.7
Expansion	1,992,000	3,301,000	4,151,000	3,401,000	3,536,000	3,066,000	4,252,000	3,652,000	2,752,000	9,828,000	39,931,000	10.9
Pumping Stations	1,006,000	441,000	135,000	255,000	1,635,000	610,000	1,635,000	635,000	1,915,000	1,935,000	10,202,000	2.8
Subtotal	**12,370,000**	**13,873,000**	**14,907,000**	**16,577,000**	**17,605,000**	**17,597,000**	**17,138,000**	**17,658,000**	**17,967,000**	**20,953,000**	**166,645,000**	**45.6**
General Improvements												
Vehicles & Equipment	646,000	501,000	501,000	501,000	501,000	500,000	500,000	500,000	500,000	500,000	5,150,000	1.4
Mgmt. Information Systems	1,700,000	550,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	6,250,000	1.7
Projects	2,410,000	490,000	470,000	485,000	855,000	480,000	480,000	480,000	480,000	480,000	7,110,000	1.9
Subtotal	**4,756,000**	**1,541,000**	**1,471,000**	**1,486,000**	**1,856,000**	**1,480,000**	**1,480,000**	**1,480,000**	**1,480,000**	**1,480,000**	**18,510,000**	**5.1**
Recycled Water												
Urban Landscaping	3,416,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	8,366,000	2.3
Subtotal	**3,416,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**8,366,000**	**2.3**
TOTAL	**29,580,000**	**25,961,000**	**25,142,000**	**33,568,000**	**31,766,000**	**33,612,000**	**50,383,000**	**47,009,000**	**49,318,000**	**38,833,000**	**365,172,000**	**100.0**

* All figures shown in 2013 dollars.

Potential Future Projects Not Included in 2013 Capital Plan

The projects listed in this CIP are those that are reasonably certain to be undertaken by the District. However, when evaluating project priority and cash flow impacts, consideration must be given to potential projects that are uncertain and not currently included in the plan. If some or all of these potential projects listed below are required to be undertaken, there could be a significant impact on the financial forecasts contained in the plan.

Table 2 - Potential Projects Not in 2013 Capital Improvement Plan

Description	Time frame	Estimated total project cost	Estimated probability
Treatment Plant			
Greenhouse Gas Reduction – Regulations are under development that will require significant reductions in greenhouse gas emissions. The appropriate reduction plan may include diversifying our energy portfolio by adding a renewable energy source, such as solar or wind. Alternatively, the requirements may be satisfied by buying carbon dioxide allowances on the open market or shutting down or cogeneration facility.	2-5 yrs	$15 - $30 million	Medium
Nutrient Removal – Construct facilities for nitrogen and phosphorus removal to address more stringent receiving water standards.	10-20 yrs	$70 million	Low
Mercury Removal From Furnace Emission - Although the 129 Regulations relaxed the Mercury emissions to a level that could be met with the District's current emission control systems, the Bay Area Air Quality District has indicated that it may impose a more stringent emission requirement for mercury which may necessitate the addition of new emission control systems for the furnaces.	3-6 yrs	$25-35 million	Medium
Recycled Water Projects			
Martinez Refinery Recycled Water Project - Construct new treatment and distribution facilities to supply up to 20 MGD to the Shell and Tesoro refineries for cooling tower makeup and boiler feed water. Money for planning activities only is budgeted.	5-10 yrs	$100 million	Medium

CAPITAL IMPROVEMENT REVENUE

Current revenue sources for funding capital improvements have been identified for the four programs of capital improvement projects and are shown in Table 3.

Table 3 - Capital Improvement Program Revenue Sources

Program	Subfund	Revenue Source
Treatment Plant	**Expansion -** Additional capacity to serve new customers	◦ Capacity Fees ◦ City of Concord
	Upgrading/Replacement - Improvement of existing facilities to serve current customers	◦ Property Taxes[c] ◦ City of Concord ◦ Sewer Service Charge[d] ◦ Debt Financing
Collection System[a]	**Expansion -** Additional capacity to serve new customers	◦ Capacity Fees ◦ Pumped Zone Fees ◦ Developer Fees
	Upgrading/Replacement - Improvement of existing facilities to serve current customers	◦ Property Taxes[c] ◦ Sewer Service Charge[d] ◦ Debt Financing
General Improvements [b]	----------	◦ Property Taxes[c] ◦ Sewer Service Charge[d]
Recycled Water	----------	◦ Property Taxes[c] ◦ City of Concord ◦ Sewer Service Charge[d] ◦ Customer Revenue ◦ Loans[e] ◦ Debt Financing ◦ Grant funds [f]

(a) Includes pumping station facilities.
(b) Includes improvements to administrative facilities (Headquarters Office Building and CSO yard), land purchases, vehicles, equipment, and furniture.
(c) Property taxes may be used for any District purpose at the discretion of the Board of Directors within Proposition 4 limits and Clean Water Grant regulations; however, the uses indicated are recommended as the most equitable.
(d) A capital improvements increment was added to the annual sewer service charge in 1992 to supplement ad valorem taxes for upgrading/replacement of District capital facilities.
(e) State Water Reclamation Loan Program
(f) DWR Prop 84 Funds, Bureau of Reclamation Title 16

Revenue Sources

Capital Improvement revenue sources include the following:

Property Tax Revenue

Beginning in FY 1992-93, the State of California reduced District's historic property tax revenues by 40 percent to help meet the state's educational funding obligations. As a result, property tax revenue that would have been received in the 11 years from FY 1992-93 through FY 2002-03 was reduced by about $38,000,000. The 40 percent decrease in property tax is now considered permanent and is not considered in any projections of future property tax revenues. Proposition 1A, passed by the California voters in November 2004, allowed the State of California to divert property tax revenues from local government for two years, 2004-05 and 2005-06. Effective 2006-07, Proposition 1A dictates that no additional property tax diversion will occur. The State can, however, borrow a portion of the tax revenue twice in the next ten years, but must pay it back, with interest, within three years. The State elected to borrow approximately $1 million of our property tax in 2009-10 and this amount is still receivable from the State.

Sewer Service Charge Revenue (SSC)

The Sewer Service Charge (SSC) is the District's only discretionary source of revenue. It has traditionally been used to supplement all other sources of revenue as needed to fund Operations and Maintenance. When the District lost 40 percent of the property tax revenue in 1992-93, it compensated by adding a capital project component to the SSC. Until FY 2000-01, $31 per Residential Unit Equivalent (RUE) of the SSC was for capital projects. In 2000-01, the capital component of the SSC was reduced from $31 per RUE to $15 per RUE. This resulted in a significant shortage of revenue as compared to expenditures in the capital program and Sewer Construction Fund reserves were used to cover the shortfall. In 2001-02, 2002-03, 2003-04 and 2004-05, the capital component of the SSC was gradually increased and more recently it has varied each year, depending on the capital revenue available from other sources and the planned expenditures. Since 2006-07, the capital component has been reduced from $76 to $11 in order to continue to fund operations and maintenance while not raising rates for 2009-10 and 2010-11. The Capital component was raised to $39 in 2011-12 but was reduced to $27 in 2012-13 due to higher budget projections in O&M expenses, increased largely by a rise in O&M benefits of $3.1 million. This is mainly due to the CCCERA rate increase of 13.79% applied to salaries.

Interest on Investments

A projection of the rate of return on the invested Sewer Construction Funds Available is needed to predict interest revenues in the future. The investment strategy of the District is designed to attain a market-average rate of return while exercising a minimum of risk. The District's current areas of investment are United States Treasury Bills and Notes, Commercial Paper, CD's and the Local Agency Investment Fund of the State of California. The weighted average of interest on investments for the sewer construction investment portfolio for 2013-14 is projected to be 0.40 percent. It is anticipated that interest rates will begin to climb again in the future.

Capacity Fee Revenue/Number of New Connections

A capacity fee is paid by each new connector to the District. This fee is recalculated each year and represents the cost of buying into the existing assets of the District. Capacity fee revenue projections from new connections have been adjusted downward from the figures reported in the last several years to account for the continuing and worsening downturn in the housing market. Unfortunately, the housing market is difficult to predict and can have a substantial impact on the available revenues for the capital program. The housing market also drives revenue from rates and charges for developer services, and SSCs from new connections. All these revenues are reduced along with capacity fee revenues when the housing market cools. The revenue model assumes that the housing market will not fully recover until FY 2015-16.

Debt Financing

The District has on occasion used debt financing to fund projects. In December of 1994, $25,000,000 in long-term (20 years) debt financing was completed to fund several large projects including the Pleasant Hill Relief Interceptor and Outfall Improvement projects. The 1994 debt was refunded with 1998 refunding Revenue Bonds to achieve significant savings in debt service costs through lower interest rates. In 1998-1999 the District received a total of $2,916,872 in loans for the recycled water program from the State of California. In 2002, an additional $16,600,000 million in long-term (20 years) debt financing was completed to allow escalation of schedules for several major projects needed to serve the Dougherty Valley in San Ramon. In 2009, the District issued $54,125,000 in Certificates of Participation (COP) which retired the 1998 and 2002 debt to take advantage of favorable bond interest rates, and included $30 million in debt which was issued to fund some large, needed one-time projects. A separate Debt Fund has been established to collect revenue and repay debt; therefore, debt repayment is not reflected in Capital Program cash flow projections.

FINANCIAL PRINCIPLES

The District has developed and maintained a capital fee system, which equitably divides the cost obligations of the capital program between the existing customers of District facilities and new customers of these facilities. Under this “fair share” approach, existing customers, primarily through property taxes and a capital component of the annual SSC, and new users through capacity fees based on a proportional “buy-in” to the current value of all existing capital assets, fund facilities upgrade, renovation and replacement costs as well as expansion projects needed to accommodate growth.

The Board of Directors has generally preferred a pay-as-you-go financing approach, raising sewer service charge rates as needed to fund the capital program. Occasionally, the District has bond-financed capital projects, particularly when such projects are large, one-time expenditures that will benefit current and future ratepayers.

Going forward, the two discretionary sources of capital revenue for the District Board are sewer service charge and bond financing. Thus, any reduction in capital revenue from other sources, such as capacity fees, would have to be made up by an increase in the sewer service charge, by a like reduction in expenditures on the capital program, or by borrowing.

SEWER CONSTRUCTION FUND CASH FLOW

District investments are recorded in the Sewer Construction Fund. Sewer Construction Funds are utilized during the year as the District bank to meet short-term cash flow needs created by the receipt of revenue from the County only twice per year. The minimum balance required to meet cash flow needs over a six month period ranges from $30 to $40 million over the ten year period. Each year a comprehensive Ten-Year Financial Plan, which incorporates both Capital and O&M expense and revenue, is prepared and presented to the Board to inform that year's decisions on sewer service charge rate increases.

Table 4 on the following page contains the ten-year cash flow projection for the CIP and assumes that sewer service charge rates will be raised as needed to fund the plan. Table 5 contains the basic assumptions used to develop the cash flow projection.

Table 4: Ten-Year Plan Recommended Scenario: Cash Flow Projection

SEWER CONSTRUCTION FUND	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23
INCOME										
INTEREST ON INVESTMENTS	193	257	322	478	532	794	1,144	1,292	1,634	1,831
FACILITIES CAPACITY FEE	4,790	5,250	5,728	6,220	6,727	7,248	7,782	8,327	8,885	9,453
PUMPED ZONE FEE	755	779	821	863	905	668	198	203	208	212
AD VALOREM TAXES *	8,102	7,052	10,642	9,074	9,247	9,732	10,084	10,503	10,952	11,406
SEWER SERVICE CHARGES	6,628	6,994	11,383	10,941	17,098	20,268	25,023	28,983	26,575	35,683
REIMBURSEMENTS FROM OTHERS:										
CITY OF CONCORD	4,277	3,553	3,065	5,474	4,536	5,411	12,089	10,966	12,127	6,926
BOND PROCEEDS										
DEVELOPER FEES AND CHARGES, MISC	498	509	520	531	542	554	566	578	592	603
Subtotal	25,243	24,394	32,481	33,581	39,587	44,675	56,886	60,852	60,973	66,114

* Ad valorem revenue funds debt service first; the balance goes to the capital program.

EXPENDITURES										
TREATMENT PLANT PROGRAM	9,038	10,197	8,630	16,183	13,102	16,055	36,910	33,275	36,782	20,480
COLLECTION SYSTEM PROGRAM	12,370	14,150	15,661	17,938	19,622	20,202	20,265	21,506	22,539	27,073
GENERAL IMPROVEMENTS PROGRAM	4,756	1,572	1,545	1,608	2,069	1,699	1,750	1,803	1,857	1,912
RECYCLED WATER PROGRAM	3,416	561	578	595	613	631	650	670	690	711
Subtotal	29,580	26,480	26,414	36,325	35,406	38,587	59,576	57,254	61,868	50,176
NET INCREASE (DECREASE)	(4,337)	(2,086)	6,067	(2,744)	4,181	6,088	(2,690)	3,598	(895)	15,938

Table 5: Assumptions Used to Calculate Cash Flow Tables

Fiscal Year	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Interest %	0.50%	0.75%	1.00%	1.25%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%
Inflation %	0.0%	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
# of New Connections	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250
Ad Valorem Tax Escalation*	0.0%	0.0%	1.0%	1.0%	1.5%	2.0%	2.5%	3.0%	3.0%	3.0%
Total Sewer Service Charge (SSC)	$ 405	$ 439	$ 473	$ 506	$ 538	$ 570	$ 601	$ 624	$ 624	$ 624
SSC Capital Component	$ 40	$ 42	$ 68	$ 65	$ 101	$ 119	$ 146	$ 168	$ 153	$ 204
Sewer Service Charge	Assumes sufficient SSC rate increases to fully fund the capital component needed.									

*Debt Service is funded first, any remaining property tax funds the capital program.

COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The CIP is exempt from CEQA because it is a planning study (District Guidelines Section 15262). Projects included in this plan could have construction-related, air quality, water quality, land use, and growth-inducing impacts. The impacts of projects not exempt from CEQA will be addressed in the appropriate CEQA documentation after each project is initiated but prior to project approval.

SPECIFIC PROJECTS IN THE TEN-YEAR PLAN

A brief description of each program and a list of projects for the ten years of this plan are provided in the Capital Plan sections for each of the four programs.

SUMMARY

This Capital Improvement Plan assumes that funds will be available to support the plan. These funds come from all the sources of revenue previously discussed. The only two discretionary sources of revenue are the sale of bonds or adjustment of the capital component of the Sewer Service Charge. This document is for planning purposes only. The District Board has not voted to increase SSC revenues or sell bonds to fund this planned program. The plan is funded on a year-by-year basis when the Capital Improvement Budget for the upcoming fiscal year is formally authorized and adopted by the Board. Changes in capital revenue forecasts or changes in recommended expenditures may result in changes to this ten-year plan.

TREATMENT PLANT PROGRAM

This section is a listing of the projects in the ten-year Capital Improvement Plan (CIP) that pertain to the District's wastewater treatment plant. The CIP is based on the recognition that plant facilities require ongoing renovations and replacement. Environmental regulations will become more stringent, and the District is on a gradual but steady pace towards build-out over the next 20 years. Major emphasis is on maintaining existing assets, improving processes when cost effective, and ensuring regulatory compliance.

The treatment plant program for the CIP is broken down into four areas: 1) Regulatory Compliance and Safety, 2) One-Time Renovation, 3) Recurring Renovation, and 4) Expansion.

Regulatory Compliance and Safety

The goals of the Regulatory Compliance and Safety projects are to ensure that existing and future facilities meet safety and regulatory requirements. These projects cover a wide variety of subjects to optimize energy use and reduce emissions of pollutants to the environment, and meet future regulatory requirement. Budgeted projects to address regulatory requirements include nitrification (ammonia toxicity issues), alternative energy (Greenhouse Gas), multiple hearth furnaces (MHF) improvements (emissions requirements), and soil remediation.

One-Time Renovation

One-Time Renovation projects address major renovation needs that are well defined and expected to occur infrequently. These projects include Burner Upgrades (Furnace Renovation), Primary Treatment Renovation, Wet & Dry Scrubber Replacement, Pump and Blower Building Seismic Upgrade, Alternative Energy Facilities, Aeration System Renovations, Centrifuge & Cake Pump Upgrades, and Screenings Removal.

Recurring Renovation

The goals of the Recurring Renovation Program are to provide for ongoing or future renovation activities. This subprogram provides capital funds for replacement or rehabilitation of aging treatment plant infrastructure. The categories include Equipment Replacement, Piping Renovations and Replacement, Electrical and Instrumentation Replacement, Cathodic Protection System Replacement, and the development of an Asset Management Plan.

Expansion

The goals of the expansion projects are to upgrade and improve existing facilities to meet increasing flow due to in-fill, new development and wet weather. There are two wet weather capacity issues that will be addressed, i.e., addition of increased primary treatment capacity and the installation of a new bar screen. Pre-design work will be completed for primary treatment expansion while the design and construction is projected to take place beyond the ten-year CIP window.

Treatment Plant Regulatory Compliance and Safety Projects in the 2013 Capital Improvement Plan:			
Project Title	**Year**	**Location**	**Description**
Nitrification – ph. 2	2022	Aeration Basins and Clarifiers	The District may be required to remove ammonia from effluent flow in the future. This will require either an expansion of the aeration tanks and clarifiers or use of other technologies and significant capital expenditures.
Ozone Disinfection	2021	Ultraviolet Disinfection	Depending on future regulatory requirements and necessary modifications to the treatment plant an alternative disinfection method may be required.
New Solids Handling	2021	Entire Treatment Plant	There are a number of potential regulatory changes that may be implemented within the next ten years. These changes may include requirements that will necessitate replacement of the existing Multiple Hearts Furnaces with Fluidized Bed Incinerators or construction of Anaerobic Digesters or use of other available technology for treatment and disposal of sludge. These anticipated changes in solids handling will require significant capital expenditures in the next fifteen years.
TP Safety Improvements Program	2021	Entire Treatment Plant	Improvements will be made to enhance and provide safe working environment throughout the treatment plant.
Future Regulatory Projects	2021	Entire Treatment Plant	Potential new regulations that impact operation of the treatment plant will emerge in the future. Studies will be undertaken and projects constructed to address these issues.
Primary Treatment Covers	2022	Primary Sed Basins	Primary tanks may need to be covered to meet regulations and reduce odors.

Treatment Plant One-Time Renovation Projects in the 2013 Capital Improvement Plan:			
Project Title	**Year**	**Location**	**Description**
Centrifuge & Cake Pumps Upgrades	2015	Solids Conditioning Building	Review and implement modifications to improve the reliability and performance of the sludge dewatering system.
Screenings Removal	2015	Headworks	Removal of screenings from wastewater flow will protect the treatment plant facilities, and reduce wear and tear and maintenance of equipment.
SCB Seismic Improvements	2022	Solids Conditioning Building	Design and construct seismic improvements based upon the recommendations provided in work done under the Treatment Plant Seismic Evaluation Project (DP 7267). The improvements will meet requirements of the latest building codes. Timing/need for this project will be coordinated with the recommendations from the New Solids Handling project.

Treatment Plant Recurring Renovation Projects in the 2013 Capital Improvement Plan:			
Project Title	**Year**	**Location**	**Description**
Treatment Plant Protective Coating Renovation - LT	2023	Entire Treatment Plant	The Treatment Plant Asset Management Plan Project (DP 7269) is documenting the condition of District facilities and equipment and will be used to recommend needed coating projects.
TP Cathodic Protection System Replacement – LT	2017 thru 2022	Entire Treatment Plant	Provide the long-term maintenance and replacement of the cathodic protection system.

Treatment Plant Recurring Renovation Projects in the 2013 Capital Improvement Plan (Continued):			
Project Title	**Year**	**Location**	**Description**
TP Equipment Replacement - LT	2018 thru 2022	Entire Treatment Plant	Investigate and replace plant equipment to reduce maintenance costs, increase reliability, and improve treatment operations through replacement or reconditioning of technologically obsolete, worn-out, maintenance-intensive equipment, or equipment that is no longer supported by its manufacturer.

Treatment Plant Expansion Projects in the 2013 Capital Improvement Plan:			
Project Title	**Year**	**Location**	**Description**
Bar Screen for Third Wet Well	2022	Headworks	This project will install a new bar screen on the third wet well in the headworks facilities. Installing a new automatic bar screen on the third wet well will protect plant treatment facilities, in addition to providing plant operators additional flexibility in routing incoming plant flows.

Ten-Year Program Estimated Expenditures – Treatment Plant

Proj #	Project Title	Start Year	Manager	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals
1 - Reg. Compliance/Planning/Safety														
7256	Alternative Energy & Greenhouse	07/07	LaBella	50,000	0	0	0	0	0	0	0	0	0	50,000
7287	TP Master Plan Update	07/09	Gemmell	5,000	0	0	0	0	0	0	0	0	0	5,000
7301	Treatment Plant Planning	07/13	Gemmell	810,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	2,160,000
7283	Fire Protection System Improvements	09/09	Morales	30,000	0	0	0	0	0	0	0	0	0	30,000
7284	TP Hazard Identification &	10/09	Morales	80,000	75,000	100,000	100,000	100,000	250,000	0	0	0	0	705,000
pTP08	TP Safety Improvements FY 2011-	07/11	Antkowiak	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0	0	0	35,000
pTP12	Standby Effluent Pumps Refurb - ph	07/11	Mizutani	25,000	150,000	300,000	0	0	0	0	0	0	0	475,000
pTP22	Incinerator Emissions Compliance	07/11	Mizutani	75,000	1,000	0	0	0	0	0	0	0	0	76,000
pTP31	Permitting Study for New Furnace	07/12	Antkowiak	25,000	5,000	0	0	0	0	0	0	0	0	30,000
pTP33	Treatment Plant Soil Remediation	07/12	Antkowiak	25,000	1,000	1,000	50,000	500,000	7,500,000	12,500,000	100,000	20,000	0	20,697,000
7305	PA System Improvements	07/12	Morales	10,000	0	0	0	0	0	0	0	0	0	10,000
pTP23	Treatment Plant Security Upgrade -	03/13	Deutsch	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	90,000
pTP21	Alternative Energy Facilities	07/13	Antkowiak	15,000	30,000	0	0	0	0	0	0	3,000,000	3,300,000	6,345,000
pTP20	Nitrification	07/13	Shima	50,000	5,000	5,000	5,000	2,000,000	3,000,000	15,500,000	24,000,000	10,000	0	44,575,000
none	Future Regulatory Projects	07/20	Antkowiak	0	0	0	0	0	0	0	5,000	175,000	150,000	330,000
pTP07	New Solids Handling Facilities	07/20	Antkowiak	0	0	0	0	0	0	0	1,000	200,000	4,000,000	4,201,000
none	TP Safety Improvements Program	07/20	Antkowiak	0	0	0	0	0	0	0	5,000	5,000	5,000	15,000
pTP34	Ozone Disinfection	07/20	Antkowiak	0	0	0	0	0	0	0	50,000	1,500,000	3,500,000	5,050,000
none	Primary Treatment Covers	07/21	Hodges	0	0	0	0	0	0	0	0	1,000	25,000	26,000
none	Nitrification - Phase 2	07/21	Antkowiak	0	0	0	0	0	0	0	0	22,200,000	2,000,000	24,200,000
none	Treatment Plant Security Upgrade - LT	07/22	Deutsch	0	0	0	0	0	0	0	0	0	10,000	10,000
none	Auxiliary Boiler Burner Upgrade	07/13	Antkowiak	100,000	0	0	0	0	0	0	0	0	0	100,000
2 - One-Time Renovation														
7241	Wet Weather Bypass Improvements	09/04	Shima	10,000	0	0	0	0	0	0	0	0	0	10,000
7272	Aeration System Renovation	01/07	Shima	150,000	800,000	25,000	0	0	0	0	0	0	0	975,000
7292	Switchgear Replacement - ph 2	01/10	Shima	200,000	240,000	320,000	490,000	140,000	0	0	0	0	0	1,390,000
7294	Secondary Process Improvements	02/10	Antkowiak	45,000	100,000	500,000	750,000	0	0	0	0	0	0	1,395,000
7291	Pump & Blower Bldg Seismic	07/10	Hodges	850,000	2,200,000	1,000	0	0	0	0	0	0	0	2,841,000
7289	POB Seismic Upgrade	07/10	Hodges	1,000	150,000	500,000	525,000	0	0	0	0	0	0	1,176,000
7296	SCB Seismic Upgrade Study	07/10	Hodges	5,000	0	0	0	0	0	0	0	0	0	5,000
7285	Primary Treatment Renovation	07/10	Morales	5,400,000	3,900,000	165,000	0	0	0	0	0	0	0	9,465,000
7297	Wet and Dry Scrubber Replacement	07/11	Hodges	51,000	200,000	500,000	3,000,000	2,800,000	20,000	0	0	0	0	6,521,000
pTP03	Plant Cyber Security	07/11	Morales	25,000	5,000	5,000	0	0	0	0	0	0	0	35,000
pTP15	Furnace Burner	07/12	Shima	50,000	800,000	800,000	0	0	0	0	0	0	0	1,650,000
7302	Primary Effl Pumps Refurb - ph 2	07/12	Antkowiak	1,000	20,000	0	0	0	0	0	0	0	0	21,000
pTP35	Solids Handling Equipment	07/12	Antkowiak	50,000	50,000	0	0	0	0	0	0	0	0	100,000
7304	Instr & Control - PLC System	07/12	Burnash	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	0	720,000

Ten-year Program Estimated Expenditures – Treatment Plant (continued)

Proj #	Project Title	Start Year	Manager	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals
7308	Co-Gen Renovation	01/13	Robbins	400,000	0	0	0	0	0	0	0	0	0	400,000
pTP18	Warehouse Seismic Upgrade	07/13	Hodges	5,000	10,000	80,000	800,000	0	0	0	0	0	0	895,000
pTP19	Laboratory Seismic Upgrade	07/13	Hodges	5,000	10,000	77,000	100,000	0	0	0	0	0	0	192,000
7286	Centrifuge & Cake Pump Upgrades	07/14	Antkowiak	0	280,000	1,520,000	2,000,000	1,000,000	0	0	0	0	0	4,800,000
7307	Screenings Removal	04/16	Antkowiak	0	0	550,000	4,400,000	2,400,000	0	0	0	0	0	7,350,000
pTP36	SCB Seismic Improvements	07/21	Antkowiak	0	0	0	0	0	0	0	0	0	600,000	600,000
3 - Recurring Renovation														
7269	TP Asset Management	12/05	Lawson	150,000	150,000	0	0	0	0	0	0	0	0	300,000
7254	TP Cathodic Prot Sys Repl	07/06	Antkowiak	5,000	10,000	10,000	0	0	0	0	0	0	0	25,000
7265	TP Equipment Replacement	07/07	Antkowiak	50,000	100,000	100,000	100,000	0	0	0	0	0	0	350,000
pTP29	Pavement Renovation	07/10	Antkowiak	5,000	50,000	50,000	50,000	50,000	50,000	50,000	0	0	0	305,000
pTP30	Concrete Renovation	07/10	Antkowiak	10,000	50,000	50,000	50,000	50,000	0	0	0	0	0	210,000
pTP32	Plant Energy Optimization	07/11	Hodges	25,000	25,000	0	0	0	0	0	0	0	0	50,000
7298	Piping Renovations Phase 7	09/11	Lopez	5,000	0	0	0	0	0	0	0	0	0	5,000
pTP16	Coating Renovation	07/12	Antkowiak	25,000	50,000	500,000	500,000	500,000	500,000	500,000	500,000	300,000	0	3,375,000
none	Piping Renovations - phase 8	07/13	Lopez	100,000	150,000	1,000,000	0	0	0	0	0	0	0	1,250,000
pTP06	Plant Electrical and Instrumentation	07/13	Antkowiak	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
none	TP Facilities Renov Pgm - LT	07/13	Antkowiak	87,000	75,000	500,000	500,000	500,000	500,000	500,000	500,000	400,000	400,000	3,950,000
pTP26	TP Electric Cable Repl - Long Term	07/13	Antkowiak	10,000	50,000	250,000	250,000	250,000	500,000	500,000	500,000	400,000	100,000	2,810,000
none	TP Asset Management - LT	07/15	Antkowiak	0	0	50,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	120,000
pTP37	Piping Renovations and	07/16	Antkowiak	0	0	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	400,000	400,000	5,800,000
none	TP Cathodic Prot Sys Repl - LT	01/17	Antkowiak	0	0	0	20,000	100,000	100,000	100,000	100,000	50,000	50,000	520,000
pTP13	TP Equipment Replacement - LT	01/18	Antkowiak	0	0	0	0	100,000	300,000	300,000	300,000	300,000	200,000	1,500,000
none	TP Protective Coating - LT	07/22	Antkowiak	0	0	0	0	0	0	0	0	0	500,000	500,000
4 - Expansion														
none	Bar Screen for Third Wetwell	07/21	Antkowiak	0	0	0	0	0	0	0	0	100,000	440,000	540,000
		Program Total:		9,038,000	9,997,000	8,214,000	14,955,000	11,755,000	13,985,000	31,215,000	27,321,000	29,321,000	15,850,000	171,651,000

COLLECTION SYSTEM PROGRAM

The Collection System Program includes projects to provide renovation of the collection system infrastructure and to serve new development in the District's service area. Projects also provide improvements to pumping stations and force mains. These improvements provide capacity and renovation to reduce the likelihood of sewage overflows during dry and wet weather.

Renovation

The renovation program goal is to address recurring renovation needs. In prior years, renovation needs were identified by CSOD through their critical line segments list. This information is now augmented by a comprehensive TV inspection program of the entire collection system that is proceeding within the Plan years at an approximate cost of $10.0 million. This information is being utilized to develop improved estimates of the short and long term recurring renovation needs. The District's collection system contains pipe reaches of many material types, sizes, ages, and other installation conditions that must be evaluated and replaced on an appropriate cycle. This cycle is determined by the condition of the pipe.

Regulatory Compliance/Planning/Safety

For the past few years, the District has anticipated more stringent regulations with respect to the operation and maintenance of the collection system to reduce overflows. The local Regional Water Quality Control Board staff implemented such a program in 2005, and the State Board implemented a similar requirement in 2006. Both regulatory bodies require each collection system agency to have prepared a Sewer System Management Plan (SSMP). They require careful review and documentation of the District's continuing evaluation and planning for the collection system in the areas of capacity management, operation, and maintenance.

Expansion

As part of the ongoing Collection System Master Plan Update (2010), the District's sewer system hydraulic model was updated; capacity deficiencies were identified and prioritized. Large capacity projects that are planned over the next ten years include trunk sewer improvements in locations in Pleasant Hill, along Lancaster Road and the Walnut Boulevard Corridor in Walnut Creek, Moraga Way in Orinda, in San Ramon (Schedule C Interceptor), and trunk sewers along Alhambra Avenue in Martinez. Developer sewers and other projects throughout the District relieve and expand capacity limited pipe sections.

Pumping Stations

Significant funds have been invested in the pumping stations over the last several years, and by now, all major pumping stations in the service area have been improved and/or renovated.

Collection System Renovation Projects in the 2013 Capital Improvement Plan:			
Project Title	**Year**	**Location**	**Description**
Collection System Renovation Program	ongoing	Throughout the collection system	Systematically replace or renovate small diameter sewers to minimize overflows, limit the quantity of rainfall entering the collection system, control future maintenance requirements and costs, and improve the level of service provided (as measured by stoppages, private property damage, impacted traffic, entry onto private property) to the residents/ratepayers. The ongoing TV inspection program will be the major source of these future projects.
Cathodic Protection System	ongoing	Throughout the collection system	Survey, evaluate and rehabilitate cathodic protection systems throughout the collection system and pumping stations
Concrete Pipe Renovation	ongoing	Throughout the collection system	Identify, evaluate and schedule remediation for concrete pipes
Collection System Urgent Projects	ongoing	Throughout the collection system	Identify and restore sewers damaged or threatened by storms or found to be structurally deficient by CSO.
Mount Diablo Boulevard Main Improvements	2018	Mount Diablo Blvd.	Rehabilitate or replace sewers within the Mount Diablo Blvd corridor in Walnut Creek, as identified in the Downtown Walnut Creek Facilities Plan.
Walnut Creek Civic Center Main Improvements	2018	Walnut Creek Civic Center area	Rehabilitate or replace sewers within the Civic Center/Main Street corridor in Walnut Creek, as identified in the Downtown Walnut Creek Facilities Plan.
North Main Trunk improvements	2019	North Main between Civic Drive and Carlback Avenue in Walnut Creek	Rehabilitate or replace sewers along North Main between Civic Drive and Carlback Avenue in Walnut Creek, as identified in the Downtown Walnut Creek Facilities Plan.
Locust Street Improvements	2019	Locust Street in Walnut Creek	Rehabilitate or replace sewers within the Locust Street corridor in Walnut Creek, as identified in the Downtown Walnut Creek Facilities Plan.

Collection System Renovation Projects in the 2013 Capital Improvement Plan (continued):			
Project Title	**Year**	**Location**	**Description**
A-line Relief-39 Inch Rehab	2021	A-line near Treatment Plant	Twenty million gallons of relief capacity for the existing A-Line near the Treatment Plant could be achieved by rehabilitating the old 39-inch Trunk No. 1.
TV Inspection Program	ongoing	Throughout the collection system	The video inspection work completed under this project provides the data needed to prioritize the renovation program projects.

Collection System Regulatory Compliance/Planning/Safety Projects in the 2013 Capital Improvement Plan:			
Project Title	**Year**	**Location**	**Description**
Manhole Remote Level Monitoring	ongoing	Throughout the collection system	Identification and modification of manholes with the installation of remote level monitoring products to alert dispatch or on-call crew members via cell phone of a potential overflow or stoppage.
Collection System Planning	ongoing	Throughout the collection system	Identifies, evaluates, and schedule short and long-term sewer capacity projects and provide design flow rates for major facility plans.

The Collection System Master Plan Update (2010) identified capacity deficiencies in the following trunk sewers. The expansion projects to correct these deficiencies are defined below.

Collection System Expansion Projects in the 2013 Capital Improvement Plan:			
Project Title	**Year**	**Location**	**Description**
Contractual Assessment Districts	ongoing	Throughout the service area.	Provides a financing mechanism for the extension of public sewers into areas which are currently served by septic tanks.

Collection System Expansion Projects in the 2013 Capital Improvement Plan (Continued):			
Project Title	**Year**	**Location**	**Description**
Trunk Sewer Expansion Program	ongoing	Throughout the collection system	Systematically upsize and increase the capacity of trunk sewers to prevent sewer overflows and accommodate planned growth as identified in the Collection System Master Plan.
Lancaster Road, Walnut Creek, TR 13-600	2016	Lancaster Road and Meadow Road	Replace approximately 5,100 feet of the existing trunk sewer with 15 to 18-inch lines
Moraga Way, Orinda TR10-200/300	2017	In El Camino Moraga, Del Rey School, Moraga Way, Orinda	Replace approximately 3,400 feet of existing main and trunk sewers with 12 to 18-inch lines
Pleasant Hill Road Corridor	2018	Pleasant Hill Road between Mercury Way and near Virginia Hills Drive	Replace approximately 2,800 feet of the existing trunk sewer with an 18-inch line
Walnut Blvd, Walnut Creek, TR 29-200 - phase1	2019	In Walnut Boulevard from Homestead Avenue to Norlyn Drive	Replace approximately 7,000 feet of the existing trunk sewer with 18 to 24-inch lines
Martinez Alhambra Avenue Trunks	2019	In Alhambra Avenue from Highway 4 to C Street	Replace approximately 5,700 feet of the existing trunk sewer with 18 to 24-inch lines
Lafayette – Happy Valley Road	2021	In Happy Valley Road from Baker to Franklin	Replace approximately 3200 feet of the existing trunk sewer with 15 to 18-inch lines

Collection System Expansion Projects in the 2013 Capital Improvement Plan (Continued):			
Project Title	**Year**	**Location**	**Description**
Walnut Creek – Palmer Road	2021	In Palmer Road between Sylvan Road and Hawthorne Drive	Replace approximately 1,000 feet of the existing trunk sewer with 15 inch line
A-line Relief Interceptor – phase 2B	2021	From Galaxy Way to Willow Pass Road along the bank of Walnut Creek.	Approximately 4,000 feet of new 72-inch line
Contractual Assessment Districts – Long Term	2022	Throughout the service area.	Provides a financing mechanism for the extension of public sewers into areas which are currently served by septic tanks.

Collection System Pumping Stations Projects in the 2013 Capital Improvement Plan:		
Project Title	**Year**	**Description**
Lower Orinda Pumping Station Force Mains	2017	Evaluate the condition of the existing force mains, implement any needed rehabilitation and install a third force main for reliability.
Orinda Crossroads Pumping Station Force Mains	2019	Evaluate the condition of the existing force mains and implement any needed rehabilitation.
Moraga Pumping Station Force Mains	2021	Evaluate the condition of the existing force mains and implement any needed rehabilitation.
Concord Industrial Pumping Station Replacement	2022	Evaluate the flows from the North Concord service area and additional flows that may come from the development of the Concord Naval Weapons Station. This information will be utilized to install a new station in the same or different location. Evaluate elimination of the Clyde and Bates Avenue Pumping Stations.
Clyde Parallel Force Main	2022	Evaluate the potential to eliminate the Clyde Pumping Station as the Concord Naval Weapons Station is developed. If the station cannot be eliminated, a new parallel force main will be constructed to insure reliable operation of the pumping station.
PS Equipment & Piping Replacement - LT	2019	Replace or recondition failed and obsolete pumps, piping, valves, electrical, instrumentation, and other support equipment
Pump Station Safety Improvements - LT	2022	Investigate the presence of hazardous materials requiring abatement and perform remediation efforts to reduce the potential for exposure
Buchanan North PS Upgrades	2019	In case the Buchanan North PS is not replaced by a gravity sewer, it will need to be renovated.
Bates Blvd PS Upgrades	2020	Evaluate and implement needed improvements.

Ten-year Program Estimated Expenditures – Collection System

Proj #	Project Title	Start Year	Manager	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals
1 - Renovation														
5991	Pleasant Hill Sewer Renovations -	12/08	Mestetsky	0	250,000	2,100,000	0	0	0	0	0	0	0	2,350,000
5976	Diablo Renovations - ph 2	08/09	Wenslawski	1,500,000	600,000	0	0	0	0	0	0	0	0	2,100,000
8405	2013 & 2014 CIPP Project	07/10	Mestetsky	2,500,000	150,000	1,800,000	0	0	0	0	0	0	0	3,450,000
5999	CIPP Blanket Contract	07/10	Molina	100,000	100,000	0	0	0	0	0	0	0	0	200,000
5955	Suspended Pipe Support	07/10	Mestetsky	40,000	0	0	0	0	0	0	0	0	0	40,000
5982	Pipeburst Blanket Contract	07/10	Rozul	100,000	100,000	0	0	0	0	0	0	0	0	200,000
8404	Lafayette Sewer Renovation - ph 8	07/10	Molina	1,800,000	10,000	0	0	0	0	0	0	0	0	2,110,000
5948	TV Inspection Program - ph 2	07/10	Rozul	800,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	0	0	0	6,800,000
5973	North Orinda Sewer Renovations -	08/10	Mestetsky	10,000	0	0	0	0	0	0	0	0	0	10,000
8401	Walnut Creek Sewer Renovations -	07/11	Antkowiak	1,000	0	0	0	0	0	0	0	0	0	1,000
pCS22	Concrete Pipe Renovation Program	07/12	Mestetsky	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0	9,000
8413	Walnut Creek Sewer Renovations -	07/12	Molina	1,000,000	1,200,000	0	0	0	0	0	0	0	0	2,200,000
8410	Cathodic Protection System	07/12	Mestetsky	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	0	850,000
pCS40	Collection System Urgent Projects -	07/12	Mestetsky	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	0	450,000
8415	Martinez Sewer Renovations Phase 4	07/12	Wenslawski	250,000	1,800,000	0	0	0	0	0	0	0	0	2,225,000
pCS36	Lafayette Sewer Renovations - ph 9	07/12	Mestetsky	250,000	1,800,000	0	0	0	0	0	0	0	0	2,200,000
8411	North Orinda Sewer Renovations -	07/12	Wenslawski	250,000	2,000,000	0	0	0	0	0	0	0	0	2,000,000
pCS99	Watershed 44 Creek Xing	07/12	Mestetsky	50,000	0	0	0	0	0	0	0	0	0	50,000
8417	Survey Monument Installation	10/12	St. John	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	0	450,000
pCS42	North Orinda Sewer Renovations -	07/13	Antkowiak	0	250,000	1,800,000	0	0	0	0	0	0	0	2,200,000
none	Lafayette Sewer Renovations - ph	07/14	Antkowiak	0	250,000	2,100,000	0	0	0	0	0	0	0	2,350,000
none	Walnut Creek Sewer Renovations -	07/14	Antkowiak	0	0	0	250,000	2,000,000	0	0	0	0	0	2,250,000
none	North Orinda Sewer Renovations -	07/14	Antkowiak	0	250,000	2,100,000	0	0	0	0	0	0	0	2,350,000
none	Walnut Creek Sewer Renovations -	07/15	Antkowiak	0	0	0	0	250,000	2,000,000	0	0	0	0	2,250,000
none	Walnut Creek Sewer Renovations -	07/15	Antkowiak	0	0	250,000	2,000,000	0	0	0	0	0	0	2,250,000
none	South Orinda Sewer Renovations -	07/15	Antkowiak	0	0	250,000	2,000,000	0	0	0	0	0	0	2,250,000
none	Diablo Renovations - ph 3	07/15	Antkowiak	0	0	250,000	2,000,000	0	0	0	0	0	0	2,250,000
none	Lafayette Sewer Renovations - ph	07/15	Antkowiak	0	0	250,000	2,000,000	0	0	0	0	0	0	2,250,000
pCS32	Pleasant Hill Sewer Renovations -	07/15	Mestetsky	0	0	250,000	2,000,000	0	0	0	0	0	0	2,250,000
none	Martinez Sewer Renovations - ph 5	07/16	Antkowiak	0	0	0	250,000	1,800,000	0	0	0	0	0	2,050,000
none	Pleasant Hill Sewer Renovations -	07/16	Antkowiak	0	0	0	250,000	1,800,000	0	0	0	0	0	2,050,000
none	Lafayette Sewer Renovations - ph	07/16	Antkowiak	0	0	0	250,000	2,000,000	0	0	0	0	0	2,250,000
none	Walnut Creek Sewer Renovations -	07/16	Antkowiak	0	0	0	0	0	250,000	2,000,000	0	0	0	2,250,000
none	South Orinda Sewer Renovations -	07/16	Antkowiak	0	0	0	250,000	2,100,000	0	0	0	0	0	2,350,000
none	South Orinda Sewer Renovations -	07/17	Antkowiak	0	0	0	0	250,000	2,100,000	0	0	0	0	2,350,000

Ten-year Program Estimated Expenditures – Collection System (continued)

Proj #	Project Title	Start Year	Manager	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals
none	Walnut Creek Sewer Renovations -	07/17	Antkowiak	0	0	0	0	0	0	280,000	2,100,000	0	0	2,380,000
pCS23	Walnut Creek Civic Center Main	07/17	Mestetsky	0	0	0	0	200,000	1,500,000	0	0	0	0	1,700,000
none	Lafayette Sewer Renovations - ph	07/17	Antkowiak	0	0	0	0	250,000	2,100,000	0	0	0	0	2,350,000
pCS06	Mount Diablo Blvd Main	07/17	Mestetsky	0	0	0	0	213,000	2,000,000	0	0	0	0	2,213,000
none	Locust Street Improvements	07/18	Mestetsky	0	0	0	0	0	450,000	2,600,000	0	0	0	3,050,000
none	North Main Trunk Improvements	07/18	Mestetsky	0	0	0	0	0	300,000	1,700,000	0	0	0	2,000,000
none	Walnut Creek Sewer Renovations -	07/19	Antkowiak	0	0	0	0	0	0	0	0	300,000	2,000,000	2,300,000
none	Walnut Creek Sewer Renovations -	07/20	Antkowiak	0	0	0	0	0	0	0	300,000	2,100,000	0	2,400,000
pCS11	TV Inspection Program - Phase 3	07/20	Antkowiak	0	0	0	0	0	0	0	1,000,000	1,000,000	1,000,000	3,000,000
none	A-Line Relief-39 Inch Rehab	08/20	Antkowiak	0	0	0	0	0	0	0	100,000	1,829,000	200,000	2,129,000
none	Collection System Renovation	07/13	Mestetsky	50,000	100,000	100,000	100,000	100,000	1,600,000	3,300,000	9,500,000	7,700,000	0	22,550,000
none	Collection System Renovation LT	07/22	Mestetsky	0	0	0	0	0	0	0	0	0	7,000,000	7,000,000
2 - Reg. Compliance/Planning/Safety														
5993	Forcemain Assessment	07/09	Waples	50,000	50,000	0	0	0	0	0	0	0	0	100,000
5962	Manhole Remote Level Monitoring	07/09	Waples	100,000	100,000	0	0	0	0	0	0	0	0	200,000
8418	Collection System Modeling	07/12	Waples	250,000	50,000	50,000	50,000	50,000	0	0	0	0	0	450,000
pCS41	Collection System Planning - Long	07/13	Waples	120,000	120,000	120,000	120,000	120,000	170,000	170,000	170,000	170,000	170,000	1,450,000
none	Manhole Remote Level Monitoring -	07/15	Rhoads	0	0	100,000	100,000	100,000	100,000	100,000	0	0	0	500,000
3 - Expansion														
5937	Alhambra Vly Assmt Districts	11/07	Leavitt	5,000	0	0	0	0	0	0	0	0	0	5,000
8402	Contractual Assessment Districts	07/11	Leavitt	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	0	0	4,000,000
pCS33	Trunk Sewer Expansion Program	07/12	Mestetsky	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0	9,000
8412	Pleasant Hill - Grayson Creek Trunk	07/12	Mestetsky	800,000	1,600,000	0	0	0	0	0	0	0	0	2,400,000
pCS17	Development Sewerage - Capital	07/13	Godsey	681,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	7,881,000
pCS09	San Ramon Sched C Interceptor -	07/13	Mestetsky	5,000	400,000	2,600,000	0	0	0	0	0	0	0	3,005,000
pCS08	Lancaster Rd WC, Tr 13-600	07/15	Mestetsky	0	0	250,000	1,600,000	0	0	0	0	0	0	1,850,000
pCS20	Moraga Way Orinda, Tr 10-200/300	07/16	Mestetsky	0	0	0	500,000	2,000,000	0	0	0	0	0	2,500,000
pCS38	Pleasant Hill Road Corridor	07/17	Mestetsky	0	0	0	0	235,000	965,000	0	0	0	0	1,200,000
none	Martinez Alhambra Avenue Trunks	07/18	Mestetsky	0	0	0	0	0	600,000	1,250,000	2,050,000	50,000	0	3,950,000
none	Walnut Creek-Walnut Blvd Corridor-	07/18	Rozul	0	0	0	0	0	200,000	1,700,000	0	0	0	1,900,000
pCS18	Trunk Sewer Expansion Program - LT	07/19	Antkowiak	0	0	0	0	0	0	1,000	1,000	1,000	1,000	4,000
none	Lafayette - Happy Valley Road	07/20	Mestetsky	0	0	0	0	0	0	0	200,000	1,000,000	0	1,200,000
none	A-Line-Phase 2B	07/20	Mestetsky	0	0	0	0	0	0	0	50,000	100,000	7,500,000	7,650,000
pCS10	Walnut Creek - Palmer Road	07/20	Mestetsky	0	0	0	0	0	0	0	50,000	300,000	500,000	850,000
none	Contractual Assessment Districts -	07/21	Leavitt	0	0	0	0	0	0	0	0	500,000	500,000	1,000,000
none	Nelson Ave Sewer Repl	07/22	Mestetsky	0	0	0	0	0	0	0	0	0	70,000	70,000
none	Lafayette Lower Pleasant Hill Road	07/22	Mestetsky	0	0	0	0	0	0	0	0	0	257,000	257,000
none	Diablo Rd Dan, Tr 35-400 Phase 1	07/22	Mestetsky	0	0	0	0	0	0	0	0	0	100,000	100,000

Ten-year Program Estimated Expenditures – Collection System (continued)

Proj #	Project Title	Start Year	Manager	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals
none	Danville-Diablo Road Corridor	07/22	Mestetsky	0	0	0	0	0	0	0	0	0	100,000	100,000
4 - Pumping Stations														
5941	PS Equip & Piping Repl	07/07	Rhoads	75,000	75,000	75,000	75,000	0	0	0	0	0	0	300,000
5995	San Ramon Bypass Pump	07/10	Morales	5,000	0	0	0	0	0	0	0	0	0	5,000
6003	San Ramon Pumping Station	05/11	Shima	5,000	0	0	0	0	0	0	0	0	0	5,000
8409	PS SCADA O&M Manual	07/11	Rhoads	10,000	0	0	0	0	0	0	0	0	0	10,000
8406	Pump Station Safety Improvements	07/11	Rhoads	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	0	0	480,000
8407	Martinez Bypass Pump	07/11	Morales	1,000	0	0	0	0	0	0	0	0	0	1,000
8403	Buchanan South PS Replacement	06/12	Gemmell	400,000	1,000	0	0	0	0	0	0	0	0	401,000
pCS25	SCADA Master Plan	07/12	Antkowiak	25,000	0	0	0	0	0	0	0	0	0	25,000
8408	Pumping Stations Master Plan	07/12	Waples	70,000	0	0	0	0	0	0	0	0	0	70,000
8414	Moraga Pumping Station Chopper	07/12	Morales	200,000	0	0	0	0	0	0	0	0	0	200,000
pCS28	Flush Kleen Pumping Station	07/12	Antkowiak	50,000	250,000	0	0	0	0	0	0	0	0	300,000
pCS34	Misc. Force Main Improvements	07/12	Antkowiak	20,000	0	0	0	0	0	0	0	0	0	20,000
pCS31	Pump Station Hazard Identification	12/12	Antkowiak	20,000	5,000	0	0	0	0	0	0	0	0	25,000
pCS29	Fairview / Maltby Upgrades	03/13	Antkowiak	50,000	50,000	0	0	0	0	0	0	0	0	100,000
pCS19	Pumping Station Minor Upgrades	07/13	Morales	15,000	0	0	0	0	0	0	0	0	0	15,000
pCS24	Lower Orinda PS Force Main	07/16	Mestetsky	0	0	0	120,000	1,500,000	0	0	0	0	0	1,620,000
none	PS Equip & Piping Repl - LT	01/18	Rhoads	0	0	0	0	75,000	75,000	75,000	75,000	75,000	75,000	450,000
pCS39	Orinda Crossroads PS Force Main	07/18	Antkowiak	0	0	0	0	0	400,000	1,200,000	0	0	0	1,600,000
none	Buchanan North PS Upgrades	07/18	Antkowiak	0	0	0	0	0	75,000	250,000	0	0	0	325,000
none	Bates Blvd PS Upgrades	07/19	Antkowiak	0	0	0	0	0	0	50,000	250,000	0	0	300,000
none	Moraga Pumping Station Force Main	07/20	Antkowiak	0	0	0	0	0	0	0	250,000	1,400,000	0	1,650,000
none	Concord Industrial Pumping Station	07/21	Antkowiak	0	0	0	0	0	0	0	0	280,000	1,000,000	1,280,000
none	Clyde Parallel Force Main	07/21	Antkowiak	0	0	0	0	0	0	0	0	100,000	800,000	900,000
none	Pump Station Safety Improvements	07/21	Rhoads	0	0	0	0	0	0	0	0	60,000	60,000	120,000
		Program Total:		12,370,000	13,873,000	14,907,000	16,577,000	17,605,000	17,597,000	17,138,000	17,658,000	17,967,000	20,953,000	166,645,000

GENERAL IMPROVEMENTS PROGRAM

This General Improvements Program is dedicated to funding the property, equipment, office and corporation yard improvements, map production, and information technology needs of the District. The General Improvements Program also provides funding for activities associated with the capital program such as capital project legal expenses; preparation of the CIB/CIP each year; and easement acquisition.

The focus of General Improvements Program over the next ten years will be for the equipment budget, improvements in the District's management information systems, renovation of the District Headquarters Office Building in Martinez, and seismic upgrades to various District buildings.

While consistent investment in our treatment and collection systems has occurred over the last 30 years, the District office and other buildings have not had consistent capital improvements. With most of these buildings over 25 years of age, the CIP includes more projects for renovations of the interiors and exteriors of the buildings, such as upgrading kitchen and lunch rooms, painting or sealing walls, replacing ceiling tiles, upgrading lighting fixtures and replacing worn or outdated flooring and furniture, as well as bringing the buildings up to current seismic standards. The General Improvements Program expenditures have been increased to address these planned building renovations.

General Improvements Projects in the 2013 Capital Improvement Plan		
Project Title	**Year**	**Description**
Permit Software Review	2014	Evaluate potential replacement software for the version of SunGard software currently in use for permit issuance and tracking.
CSO Vehicle Maintenance Building	2018	Improvements to the CSO Vehicle Maintenance Building and the attached office structure were not included in the new CSOD Facility Project and will be undertaken separately. This project will evaluate alternatives for repair or replacement of the office building structure attached to the vehicle maintenance structure. Originally built in 1972, the office building has experienced significant differential settlement in the floor slab in recent years that needs to be addressed.
CSOD Facilities Improvements – Long Term	2021	Provide capital improvements to the Collection System Operations Department facilities in Walnut Creek.
HOB Improvements – Long Term	2022	Provide capital improvements to the HOB facilities (interior and exterior) in Martinez.

Ten-year Program Estimated Expenditures – General Improvements Program

Proj #	Project Title	Start Year	Manager	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals
1 - Vehicles & Equipment														
9999	Cap Proj Clearing	07/08	Vassallo	1,000	1,000	1,000	1,000	1,000	0	0	0	0	0	5,000
pGI03	Vehicles and Equipment Acquisition	07/13	Vassallo	645,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,145,000
2 - Management Information Systems														
8195	Information Technology	07/04	Li	1,100,000	0	0	0	0	0	0	0	0	0	1,100,000
8227	GDI - Treatment Plant	07/08	Antkowiak	150,000	5,000	0	0	0	0	0	0	0	0	155,000
8232	GDI-SMMS Replacement	07/10	Knight	450,000	45,000	0	0	0	0	0	0	0	0	495,000
none	Information Technology	07/14	Li	0	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	4,500,000
3 - Projects														
8217	Capital Improvement Plan and Budget	07/06	Millier	90,000	100,000	100,000	0	0	0	0	0	0	0	290,000
8223	District Property Safety Improvements	07/07	Deutsch	60,000	20,000	0	0	0	0	0	0	0	0	80,000
8207	General Security Access	07/07	Deutsch	10,000	0	0	0	0	0	0	0	0	0	10,000
8225	Imhoff Triangle Development	12/07	Brightbill	5,000	0	0	0	0	0	0	0	0	0	5,000
8226	Seismic Improvements for HOB	07/08	Hodges	1,800,000	0	0	0	0	0	0	0	0	0	1,800,000
8229	Martinez Easements	08/09	Hernandez	5,000	0	0	0	0	0	0	0	0	0	5,000
8230	Capital Legal Services - 2010 to 2017	07/10	Leavitt	70,000	70,000	70,000	70,000	70,000	0	0	0	0	0	350,000
8233	CSOD Facilities Improvements	01/12	Rozul	30,000	30,000	30,000	30,000	50,000	50,000	50,000	50,000	0	0	320,000
8234	HOB Improvements 12-13 thru 21-22	07/12	Hodges	160,000	50,000	50,000	50,000	95,000	95,000	95,000	95,000	95,000	0	785,000
pGI05	POD Office Improvements - LT	07/13	Hodges	75,000	75,000	75,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	575,000
none	District Easements - LT	01/14	Brightbill	75,000	65,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	740,000
none	Kiewit, DP Safety, Gen Sec, Rental, etc	01/14	Deutsch	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	300,000
8235	Permit Software Evaluation	07/13	Brightbill	0	50,000	10,000	0	0	0	0	0	0	0	60,000
none	CSO Vehicle Maint Bldg	07/15	Berger	0	0	30,000	70,000	375,000	0	0	0	0	0	475,000
none	Capital Improvement Plan and Budget	01/17	Millier	0	0	0	110,000	110,000	110,000	110,000	110,000	110,000	110,000	770,000
none	Capital Legal Services - LT	07/18	Leavitt	0	0	0	0	0	70,000	70,000	70,000	70,000	70,000	350,000
none	CSOD Facilities Improvements - LT	07/21	Rozul	0	0	0	0	0	0	0	0	50,000	50,000	100,000
none	HOB Improvements 22-23 thru 31-32	07/22	Hodges	0	0	0	0	0	0	0	0	0	95,000	95,000
		Program Total:		4,756,000	1,541,000	1,471,000	1,486,000	1,856,000	1,480,000	1,480,000	1,480,000	1,480,000	1,480,000	18,510,000

RECYCLED WATER PROGRAM

The Recycled Water Program includes projects to meet the District's goal of developing additional cost-effective recycled water customers.

Capital expenditures over the next ten years are primarily focused on planning to develop a large-scale industrial reuse project (such as the refineries or power plant use) and construction of the Concord Landscape Project, which was awarded state and federal grant funding. Budget is also included for completing the remaining connections to landscape irrigation customers in the Zone 1 Project Area located in Pleasant Hill, Concord, and Martinez near the I-680 freeway, and for planning work associated with providing recycled water to the proposed development at the Concord Naval Weapons Station site. No budget is currently provided for implementation of a large-scale industrial reuse project; however, budget is included for planning work and for continuing efforts to obtain outside funding assistance.

Recycled Water Projects in the 2013 Capital Improvement Plan		
Project Title	**Year**	**Description**
Recycled Water Treatment Facilities Improvements	2015	This project will investigate and implement improvements to the District's Recycled Water Treatment Facilities.

Ten-year Program Estimated Expenditures – Recycled Water Program

Proj #	Project Title	Start Year	Manager	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Totals
1 - Urban Landscaping														
7261	REW - Cathodic Prot Sys Repl	07/06	Antkowiak	5,000	5,000	5,000	0	0	0	0	0	0	0	15,000
7259	Recycled Water Planning	01/08	Berger	105,000	105,000	63,000	158,000	0	0	0	0	0	0	431,000
7279	Concord Naval Weapons REW	07/10	Berger	5,000	5,000	5,000	5,000	5,000	5,000	0	0	0	0	30,000
7299	Concord Landscape Project	07/11	Gronlund	3,060,000	0	0	0	0	0	0	0	0	0	3,060,000
7300	Refinery Recycled Water Project	07/11	Berger	100,000	100,000	100,000	0	0	0	0	0	0	0	300,000
7303	ReW Line Conco/Maltby RPR	03/12	Lopez	5,000	0	0	0	0	0	0	0	0	0	5,000
7306	Zone 1 Recycled Water - ph 1C -	07/13	Berger	136,000	335,000	335,000	340,000	340,000	240,000	340,000	355,000	355,000	495,000	3,271,000
none	Recycled Water Treatment Facilities	07/15	Antkowiak	0	0	42,000	42,000	60,000	160,000	0	0	0	0	304,000
none	RW - Cathodic Prot Sys Repl LT	01/17	Antkowiak	0	0	0	5,000	5,000	5,000	5,000	5,000	5,000	5,000	35,000
none	Recycled Water Planning - phase	07/17	Berger	0	0	0	0	140,000	140,000	205,000	190,000	190,000	50,000	915,000
		Program Total:		3,416,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	8,366,000