Central Contra Costa Sanitary District
FY 2011-12 CAPITAL IMPROVEMENT BUDGET

Table Of Contents

Central Contra Costa Sanitary District

FY 2011-12 CAPITAL IMPROVEMENT BUDGET

SUMMARY

Central Contra Costa Sanitary District's Capital Improvement Budget (CIB) shows planned expenditures of $25,914,000 for Fiscal Year (FY) 2011-12 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 2011-12 is $29,797,000.

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 2011-12, the emphasis will be on 15 large projects, which together account for $16,777,000, or 65 percent of the total estimated expenditures. Estimated FY 2011-12 expenditures for each of these projects are noted below.

Collection Systems Operations Department Facility Improvements
FY 2011-12: $2,025,000 Estimated total project cost: $13,654,000
This project consists of design and construction of a new Collection Systems Operations administration, crew, and warehouse building at 1250 Springbrook Road in Walnut Creek. The project also includes site improvements such as new paving and landscaping. Completion is scheduled for summer 2011.

Lafayette-Pleasant Hill Road Trunk Sewer
FY 2011-12: $1,900,000 Estimated total project cost: $2,411,000
This project will construct a 15-inch relief sewer along Pleasant Hill Road from Springhill Road to Stanley Boulevard in Lafayette. Deficient sewers in nearby neighborhoods will be upsized within their current alignments.

South Orinda Sewer Renovations – Phase 5
FY 2011-12: $1,800,000 Estimated total project cost: $2,167,800
This project will replace/rehabilitate approximately 12,000 feet of 6-inch through 8-inch sewer pipe at several sites in Orinda.

Walnut Creek Sewer Renovations – Phase 8
FY 2011-12: $1,800,000 Estimated total project cost: $2,149,700
This project will replace/rehabilitate approximately 10,000 feet of 6-inch through 8-inch sewer pipe at several sites throughout the City of Walnut Creek and neighboring unincorporated areas.

Lafayette Sewer Renovations – Phase 7
FY 2011-12: $1,790,000 Estimated total project cost: $2,113,600
The project will replace/rehabilitate approximately 13,000 feet of 6-inch and 8-inch sewer pipe at several sites throughout the City of Lafayette and neighboring unincorporated areas.

Treatment Plant Piping Renovations – Phase 6
FY 2011-12: $1,000,000 Estimated Total project cost: $1,145,000
The first five phases of this program renovated or replaced various piping systems. This phase of the project will include work on the following areas: the seal tank on Wet Scrubber #2, the centrate pipe at the Foam Suppression Tank, discharge piping of Aeration Blower #2, a section of the scrubber drain piping in the SCB plenum, leaking connections at the cake pump feed pipelines, and other areas as needed. In addition, a new baffle system will be added to one primary sedimentation tank for evaluation.

Pump & Blower Building Seismic Upgrade
FY 2011-12: $1,000,000 Estimated total project cost: $2,155,000
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.

Vehicles & Equipment Acquisition
FY 2011-12: $891,000 Estimated total project cost: $891,000
Purchases of vehicles and major equipment are made under a capital project.

Auxiliary Boiler Burner Upgrade
FY 2011-12: $750,000 Estimated total project cost: $855,000
This project will replace the burners in the two auxiliary boilers and modify related ancillary systems to meet upcoming BAAQMD regulations that require NO_X emissions to be reduced from the current permit limit of 30 parts per million by volume (ppmv) to 15 ppmv by January 2013 .

Primary Treatment Renovation
FY 2011-12: $750,000 Estimated total project cost: $6,540,000
This project will renovate or replace the water and air supply pipelines at the primary sedimentation tanks. This project also includes improvements to the scum and grit systems.

Treatment Plant Protective Coatings – Phase 4
FY 2011-12: $725,000 Estimated total project cost: $835,000
This project will clean and coat critical renovation areas including headworks, SCB basement, Pump and Blower Building basement, clear well, sludge blending area, and the fuel oil storage tanks. Application of coatings extends the useful life and minimizes corrosion of treatment plant equipment, piping, and surfaces.

Outfall Improvements – Phase 6
FY 2011-12: $685,000 Estimated total project cost: $1,085,000
This project will inspect both the land and submarine portions of the treatment plant outfall as allowed by the current NPDES Permit, and will make repairs as needed.

Information Technology Development
FY 2011-12: $602,000 Estimated total project cost: N/A
This project provides funding for the development of the District's computer and telecommunications technology.

San Ramon Pump Station Upgrades
FY 2011-12: $549,000 Estimated total project cost: $579,000
This project will replace existing dry weather pumps to provide the capacity needed to handle increased flow from the Dougherty Valley. Additional improvements identified by pumping station operators may be added to the project.

Seismic Improvements for HOB
FY 2011-12: $510,000 Estimated total project cost: $2,523,000
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 or replaced to ensure a life-safety level of structural performance.

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 2011-12 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 $9.6 million is estimated to be carried over from previous Board-authorized-but-unspent project budgets in FY 2010-11 and $20.2 million is the total required new Board authorization for projects and project phases beginning in FY 2011-12. The total Board authorization for projects that are active in the CIB in FY 2011-12 is the sum of these two numbers, or $29.8 million. The estimated FY 2011-12 expenditure total is $25.9 million, leaving an estimated $3.9 million in authorizations for projects that carry into future years. These figures will be adjusted when actual FY 2010-11 expenditures are known and actual FY 2010-11 carryover can be determined. At that time, the Board will be informed of the corrected figures for the four programs in the CIB.

Table 1: Capital Improvement Budget Summary for Fiscal Year 2011-12
Revised on September 1, 2011 to show actual carryover from FY 2010-11

Program	Estimated Allocation this FY	Actual Carryover from Previous FY	Total Proposed Authorization	Estimated FY 2011-12 Expenditures
Treatment Plant	$5,141,000	$4,873,612	$10,014,612	$7,082,000
Collection System	$10,909,000	$5,733,390	$16,642,390	$12,840,000
General Improvements	$3,952,000	$4,470,836	$8,422,836	$5,442,000
Recycled Water	$215,000	$150,412	$365,412	$550,000
Total this Fiscal Year	**$20,217,000**	**$15,228,250**	**$35,445,250**	**$25,914,000**

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.

This year, staff recommended that the Board of Directors increase the SSC rate by $30 per Residential Unit Equivalent (RUE) to fund needed capital improvements while avoiding significant debt financing. The $30 per RUE SSC increase is reflected in Table 2: Sewer Construction Fund Revenues and Expenditures on the following page. If this SSC rate alternative is implemented, staff projects that expenditures will exceed revenue by approximately 3.7 million, which would require drawing from funds available in the Sewer Construction Fund. This rate alternative has not been approved by the Board of Directors. The SSC rate will be set when the Board of Directors adopts the District's budgets in June 2011.

Table 2: Sewer Construction Fund Revenues And Expenditures

A summary of projected FY 2011-12 Capital Improvement Program revenue and expenditures is presented below:

Recommended Scenario presented in March 3, 2001 Board Financial Planning Workshop

	With $30 Sewer Service Charge Increase *
Revenues	
Facilities Capacity Fees	$4,372,000
Pumped Zone Fees	562,000
Interest	265,000
Property Taxes	6,882,000
Sewer Service Charges	6,534,000
Reimbursements from Others:	
City of Concord	2,549,000
Recycled Water Sales	110,000
Alhambra Valley	481,000
Developer Fees, Charges, Other	491,000
Total Revenues **	$22,246,000
Expenditures	
Treatment Plant Program	$7,082,000
Collection System Program	12,840,000
General Improvements Program	5,442,000
Recycled Water Program	550,000
Total Expenditures	$25,914,000

A summary of Sewer Construction Funds Available impact is presented below:

Projected Revenues	$22,246,000
Projected Expenditures	($25,914,000)
Draw from Funds Available	($3,668,000)

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

* Has not been recommended by Capital Projects Committee or approved by District Board.

** 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.

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 3, 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 $25,000. If an individual equipment item is not included in the CIB, the General Manager can allocate contingency funds up to $15,000 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 authorize construction contracts less than $15,000 and consultant agreements less than $50,000.

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 $15,000, for consultant agreements over $50,000 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 $25,000 must be brought to the Board for authorization.

Table 3: Capital Improvement Program Authorization Limits

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 authorization required
Authorize consultant contracts/amendments		$35,000 or less	$50,000 or less	Greater than $50,000
Award construction contracts		None	$15,000 or less	Greater than $15,000
Authorize construction change orders	Additive	$35,000 or less	$50,000 or less	Greater than $50,000
	Deductive	More than ($50,000)	NA	NA
Allocate funds from program contingency accounts to projects not included in the CIB		$10,000	$25,000 or less per project[1]	Greater than $25,000
Individual equipment items and equipment contingency[6]		None	$15,000 or less	Greater than $15,000
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[3,4,5]	Greater than 15% of final budget
Close out project		None	Projects which have not required prior Board action	Projects which have had prior Board action (informational Position Paper required)

[1] Treatment Plant, Collection System, General Improvements, and Recycled Water Programs
[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
[6] Equipment budget authority limits for the General Manager raised to $15,000 from $5,000 in FY 2010-11

CEQA COMPLIANCE

The CIB 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 4, 5, 6 and 7 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 4: CEQA Compliance Summary for Fiscal Year 2011-12
Treatment Plant Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Reg. Compliance/Planning/Safety		
Co-Gen Replacement		Possible Negative Declaration
Treatment Plant Security Upgrade	X	
Fire Protection System Improvements	X	
TP Hazard Identification & Remediation	X	
Alternative Energy & Greenhouse Gas Reduction Plan	X	
Incinerator Emissions Compliance Modifications	X	
Solids Handling Improvements	X	
Standby Effluent Pumps Refurb - ph 2	X	
TP Safety Improvements Program	X	
Treatment Plant Planning	X	
TP Master Plan Update	X	
Nitrification		
2 One-Time Renovation		
Outfall Improvements, Phase 6	X	
Switchgear Replacement - ph 2	X	
Instr & Control - PLC System Upgrades - ph 2	X	
Centrifuge & Cake Pump Upgrades	X	
Electric Blower Renovation	X	
Standby Power Facility Improvements	X	
Primary Structures Demo	X	
SCB Mechanical Room	X	
Wet Weather Bypass Improvements		Mitigated Neg Dec 2008
POB Seismic Upgrade	X	
Plant Cyber Security	X	
Secondary Process Improvements	X	
Pump & Blower Bldg Seismic Upgrade	X	
Auxiliary Boiler Burner Upgrade	X	
Furnace Burner	X	
SCB Seismic Upgrade	X	
Perimeter Fencing	X	
Wet and Dry Scrubber Replacement	X	
Primary Treatment Renovation	X	
TP Elevators Modernization	X	
3 Recurring Renovation		
Plant Electrical and Instrumentation Repl	X	
Plant Energy Optimization	X	
TP Facilities Renovations	X	
TP Protective Coatings - ph 4	X	
TP Equipment Replacement	X	
TP Asset Management	X	
Piping Renovations - ph 5	X	
Pavement Renovation	X	
TP Cathodic Prot Sys Repl	X	
Concrete Renovation	X	
Piping Renovations - ph 6	X	
4 Expansion		
Primary Treatment Expansion	X	

Table 5: CEQA Compliance Summary for Fiscal Year 2011-12
Collection System Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Renovation		
South Orinda Sewer Renovations - ph 5	X	
Walnut Creek Sewer Renovations - ph 9	X	
TV Inspection Program - ph 2	X	
Concrete Pipe Renovation	X	
Diablo Renovations - ph 2	X	
North Orinda Sewer Renovations - ph 4	X	
Pleasant Hill Sewer Renovations - ph 3	X	
Lafayette Sewer Renovation - ph 7	X	
Manhole Rehab	X	
Cathodic Protection System Replacement	X	
Diablo Renovations - ph 1	X	
Mount Diablo Blvd Main Improvements	X	
Collection System Urgent Projects	X	
Watershed 44 Creek Xing Stabilization	X	
Collection System Renovation Program	X	
South Main/I-680 Trunk Line Sliplining	X	
Walnut Creek Sewer Renovations - ph 8	X	
Pipeburst Blanket Contract	X	
Martinez Sewer Renovations Phase 4	X	
Suspended Pipe Support	X	
CIPP Blanket Contract	X	
Lafayette Sewer Renovation - ph 8	X	
2 Reg. Compliance/Planning/Safety		
Manhole Remote Level Monitoring	X	
Ferrous Pipe Corrosion Control	X	
Collection System Planning	X	
Forcemain Assessment	X	
Martinez Facilities Plan	X	
CNWS Facility Plan	X	
Collection System Modeling Upgrade	X	
3 Expansion		
Contractual Assessment Districts	X	
A-Line Easement Acquisition - ph 2		EIR, 1991
Pleasant Hill Grayson Creek	X	
2011-12 Development Sewerage	X	
Laf-P Hill Rd Trunk Sewer, Laf TR 15-100	X	
Trunk Sewer Expansion Program	X	
4 Pumping Stations		
Pump Station Hazard Identification	X	
Lower Orinda PS Force Main	X	
San Ramon Pump Station Upgrades	X	
Pump Station Safety Improvements	X	
San Ramon Bypass Pump	X	
PS Equip & Piping Repl	X	
Buchanan South Removal	X	
Martinez Bypass Pump	X	
Pumping Station Minor Upgrades	X	
PS SCADA O&M Manual	X	

Table 6: CEQA Compliance Summary for Fiscal Year 2011-12
General Improvements Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Vehicles & Equipment		
Cap Proj Clearing	X	
Vehicles & Equipment Acquisition – 2012	X	
2 Management Information Systems		
Information Technology Development	X	
GDI-SMMS Replacement	X	
GDI - Treatment Plant	X	
3 Projects		
Rental Property Improvements	X	
CSOD Facility Improvements		Mitigated Neg. Dec. 2007
Kiewit Parcel Development		Mitigated Neg. Dec. 2005
HOB Improvements	X	
POD Office Imprvs	X	
District Easements	X	
Capital Improvement Plan and Budget	X	
General Security Access	X	
Martinez Easements	X	
Imhoff Triangle Development		Negative Declaration needed
Seismic Improvements for HOB	X	
CSOD Facilities Improvements	X	
Capital Legal Services - 2010 to 2018	X	
Rental Property Seismic Improvements	X	
District Property Safety Improvements	X	

Table 7: CEQA Compliance Summary for Fiscal Year 2011-12
Recycled Water Program

Subprogram / Project	Exemption	CEQA Documentation Required or Completed
1 Urban Landscaping		
Concord Landscape Project		NEPA Environmental Assessment needed for Federal funds
Refinery Recycled Water Project		Possible Negative Declaration
Concord Naval Weapons REW	X	
Recycled Water Planning	X	
REW - Cathodic Prot Sys Repl	X	
Zone 1 Recycled Water - ph 1C		Mitigated Neg. Dec. 2007

TABLE OF CONTENTS

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 data sheets. These data sheets are found at the appropriately numbered subprogram tab. The numbered tabs represent the following:

TAB NO.	SUBPROGRAM
1	Regulatory Compliance and Safety
2	One-Time Renovation
3	Recurring Renovation
4	Expansion

OVERVIEW

The Treatment Plant Program at $7.1 million comprises 27 percent of the total estimated capital expenditures for FY 2011-12. The Treatment Plant Program continues with asset preservation, and there is now added effort on future regulatory compliance, wet weather flow processing, and seismic strengthening.

Regulatory Compliance/Planning/Safety

This subprogram makes up ten percent of the FY 2011-12 Treatment Plant Program expenditures. Projects emphasize preparing for future regulations and addressing safety issues. The Alternative Energy Study will assess the impacts greenhouse gas (GHG) reduction regulations may have on the District. Improvements will be made to the fire protection systems and work will be done to identify the presence of any hazardous materials.

One-Time Renovation

This subprogram accounts for 58 percent of the Treatment Plant Program expenditures. There are two high expenditure projects. First, the Seismic Upgrades for the Pump and Blower Building, DP 7291, will retrofit the Pump and Blower Building to current design standards. The second project, the Auxiliary Boiler Burners Replacement, DP 7295, will modify the boilers to meet new air quality regulations by January 1, 2013. Work will continue on design and construction of seismic improvements for the Plant Operations and Solids Conditioning Buildings.

Recurring Renovation

This subprogram makes up 32 percent of the FY 2011-12 Treatment Plant Program expenditures. Projects in this subprogram are targeted at asset preservation. The main project is Piping Renovations and Replacement, Phase 6. Other major projects are Treatment Plant Protective Coatings, Phase 4, and Plant Energy Optimization.

Expansion

This subprogram makes up less than one percent of the FY 2011-12 Treatment Plant Program expenditures. Primary Treatment Expansion will be explored further in 2011-12 by adding baffles in one channel and adding chemicals to enhance primary performance. These projects will influence future design decisions and expansion requirements for the primaries.

Table TP-1: Treatment Plant Subprogram/Project List

Subprogram / Project No. / Project Title		Project Manager	Estimated Total Project Expenditures	Anticipated Allocations To 06/30/11	Estimated Expenditures To 06/30/11	Anticipated Allocations FY 2011-12	Estimated Expenditures FY 2011-12
1Reg. Compliance/Planning/Safety							
7256	Alternative Energy & Greenhouse Gas Reduction Plan	LaBella	510,000	510,000	460,000	0	50,000
pTP21	Co-Gen Replacement	Mizutani	7,030,000	0	0	80,000	5,000
pTP22	Incinerator Emissions Compliance Modifications	Mizutani	80,000	0	0	80,000	75,000
pTP20	Nitrification	Chesler	71,020,000	0	0	20,000	5,000
pTP12	Standby Effluent Pumps Refurb - ph 2	Mizutani	570,000	0	0	20,000	10,000
7283	Fire Protection System Improvements	Mizutani	181,000	110,000	6,000	71,000	175,000
7284	TP Hazard Identification & Remediation	Lawson	892,000	150,000	112,000	5,000	5,000
7287	TP Master Plan Update	Chesler	600,000	185,000	185,000	300,000	300,000
pTP07	Treatment Plant Planning	Chesler	1,000,000	0	0	100,000	100,000
none	TP Safety Improvements Program	Than	45,000	0	0	45,000	5,000
8213	Treatment Plant Security Upgrade	Deutsch	184,000	184,000	179,000	0	5,000
7260	Solids Handling Improvements	Rathunde	5,131,500	5,131,500	5,126,500	0	5,000
	Subprogram Total		87,243,500	6,270,500	6,068,500	721,000	740,000
2One-Time Renovation							
7295	Auxiliary Boiler Burner Upgrade	Mizutani	855,000	120,000	5,000	735,000	750,000
7286	Centrifuge & Cake Pump Upgrades	Rathunde	3,197,000	300,000	5,000	0	25,000
pTP03	Plant Cyber Security	Lawson	100,000	0	0	25,000	25,000
7272	Electric Blower Renovation	Shima	2,004,000	500,000	389,000	0	5,000
pTP15	Furnace Burner	Shima	1,850,000	250,000	150,000	100,000	100,000
6169	Instr & Control - PLC System Upgrades - ph 2	McEachen	321,000	321,000	241,000	0	80,000
7290	Outfall Improvements, Phase 6	Lawson	1,085,000	100,000	100,000	685,000	685,000
7282	Perimeter Fencing	Lawson	169,000	19,000	19,000	150,000	150,000
7255	Primary Structures Demo	Shima	1,354,000	130,000	79,000	0	5,000
7285	Primary Treatment Renovation	Rathunde	6,540,000	150,000	50,000	1,000,000	750,000
7277	SCB Mechanical Room	Rathunde	459,000	459,000	454,000	0	5,000
7294	Secondary Process Improvements	Lawson	1,396,000	55,000	31,000	5,000	5,000
7291	Pump & Blower Bldg Seismic Upgrade	Hodges	2,155,000	10,000	150,000	205,000	1,000,000
7289	POB Seismic Upgrade	Penny	1,240,000	10,000	50,000	0	5,000
pTP31	SCB Seismic Upgrade	Shima	5,055,000	55,000	5,000	200,000	50,000
7248	Standby Power Facility Improvements	Mizutani	4,849,000	4,849,000	4,844,000	0	5,000
7292	Switchgear Replacement - ph 2	Lawson	1,164,800	100,000	64,800	550,000	50,000
7281	TP Elevators Modernization	Husain	677,500	677,500	477,500	0	200,000
pTP17	Wet and Dry Scrubber Replacement	Hodges	3,915,000	25,000	5,000	300,000	200,000
7241	Wet Weather Bypass Improvements	Shima	2,818,000	2,818,000	2,813,000	0	5,000
	Subprogram Total		41,204,300	10,948,500	9,932,300	3,955,000	4,100,000
3Recurring Renovation							
pTP30	Concrete Renovation	Lawson	310,000	5,000	5,000	5,000	5,000
pTP32	Plant Energy Optimization	Hodges	100,000	0	0	50,000	25,000
pTP29	Pavement Renovation	Lawson	275,000	5,000	5,000	5,000	5,000
7276	Piping Renovations - ph 5	Husain	2,606,000	2,606,000	2,306,000	0	300,000
7288	Piping Renovations - ph 6	Rathunde	1,145,000	65,000	140,000	320,000	1,000,000
7269	TP Asset Management	Lawson	856,000	856,000	546,000	0	10,000
7254	TP Cathodic Prot Sys Repl	Hodges	589,000	589,000	514,000	0	50,000

Subprogram / Project No. / Project Title		Project Manager	Estimated Total Project Expenditures	Anticipated Allocations To 06/30/11	Estimated Expenditures To 06/30/11	Anticipated Allocations FY 2011-12	Estimated Expenditures FY 2011-12
7247	TP Protective Coatings - ph 4	Rathunde	835,000	835,000	105,000	0	725,000
pTP06	Plant Electrical and Instrumentation Repl	Than	30,000	20,000	0	0	5,000
7265	TP Equipment Replacement	Than	1,235,000	1,150,000	635,000	85,000	100,000
7268	TP Facilities Renovations	Than	166,000	166,000	130,000	0	12,000
	Subprogram Total		8,147,000	6,297,000	4,386,000	465,000	2,237,000
4Expansion							
7264	Primary Treatment Expansion	Lawson	430,000	430,000	425,000	0	5,000
	Subprogram Total		430,000	430,000	425,000	0	5,000
	Program Total		137,024,800	23,946,000	20,811,800	5,141,000	7,082,000

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 (AB 32) was enacted to require a statewide reduction in GHG emissions to 1990 levels by 2020. The California Air Resources Board (CARB) estimates that this would correspond to a 25 percent overall statewide emission reduction. Additional legislation signed by the governor (in an Executive Order) requires an 80 percent reduction in GHG emissions by 2050.

In January 2008, CARB adopted GHG emissions reporting regulations that require the District to begin reporting GHG emissions in April 2009 (for calendar year 2008). CARB is also responsible for developing regulations specifying the details of how the AB 32 emission goals will be achieved. These emission reduction regulations are required to be adopted by CARB by 2012 and would require compliance beginning January 1, 2012 through the year 2020.

The District has the potential to fall into a capped sector of AB 32, if the power cogeneration system in the Treatment Plant continues to operate when the District's local landfill gas supply is exhausted. Facilities that fall within a capped sector have a compliance obligation that can be met with actual GHG reductions and/or participation in the carbon trading market. A San Francisco court ruled in late March 2011 that the state must spend more time studying alternatives to the carbon trading market. Some nonprofit environmental groups are concerned that the rules could increase pollution in low-income, largely minority communities near power plants and oil refineries if those facilities are allowed to trade pollution credits. This may delay implementation of cap and trade rules.

Project Description:
The study will be completed by URS, who was selected by staff after a formal process and who is familiar with energy and GHG emission technologies and reduction strategies. Their effort includes an evaluation of the feasibility of alternative energy technologies such as wind, solar and biofuels. The ultimate product of the study will be a recommended power portfolio that will meet the Treatment Plant's energy needs, while complying with AB 32. 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 Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$510,000
Design	-	-	$0
Construction	07/01/2007	06/20/2012	$0
		Total:	**$510,000**

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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	106,000	50,000	0	0	0
B. Anticipated Allocations	466,000	44,000	0	0	0	0
C. Authorized this Year	466,000	150,000	50,000	0	0	0
D. Estimated Expenditures	(360,000)	(100,000)	(50,000)	0	0	0
E. Estimated Carry-over	106,000	50,000	0	0	0	0

Cogeneration Replacement

Project Manager, Department/Division:
Craig Mizutani, 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 3.2MW gas turbine cogeneration system that provides the majority of the electrical power for the treatment plant. The system includes a waste heat recovery boiler that provides steam for the aeration turbines. Emissions standards, from local, state, and federal regulatory sources are being developed to reduce pollutants of concern (such as oxides of nitrogen) and greenhouse gases. The existing air permit for the turbine limits the amount of power the turbine can produce and the amount of fuel it can use. Upcoming greenhouse gas regulation will penalize facilities that burn fossil fuels.

Cogeneration units are now available that produce less greenhouse gas emissions and are more efficient, thus requiring less fuel. Newer turbines could provide greater electrical capacity that could 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. This planning includes the possibility that the District may adopt a different source of power for the aeration blowers.

Replacing the existing cogeneration system with a new turbine that is more efficient and produces less pollutant is one possible option to meet future energy needs and will allow the District to respond to changing emissions limits.

Project Description:
Complete a feasibility study including a cost-benefit analysis and design and install new replacement equipment as appropriate.

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$80,000
Design	07/01/2011	07/01/2013	$210,000
Construction	07/01/2013	06/30/2018	$6,740,000
		Total:	**$7,030,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$80,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Co-Gen Replacement / 1
Project Number/Filename: pTP21 / Cogen_repl
Project Manager/% Expansion: Mizutani / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	75,000	50,000	448,000	423,000	273,000
B. Anticipated Allocations	80,000	0	423,000	0	0	6,527,000
C. Authorized this Year	80,000	75,000	473,000	448,000	423,000	6,800,000
D. Estimated Expenditures	(5,000)	(25,000)	(25,000)	(25,000)	(150,000)	(4,400,000)
E. Estimated Carry-over	75,000	50,000	448,000	423,000	273,000	2,400,000

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. Previously, limits for emissions from SSIs were included in the regulations for sewage sludge (the "503" regulations). The regulations include a category for existing multiple hearth furnaces that will establish emission limits on nine pollutants: Cadmium, Carbon Monoxide, Hydrochloric Acid, Mercury, Oxides of Nitrogen, Lead, Polychlorinated Dibenzo-P-Dioxins and Polychlorinated Dibenzofurans, Particulate Matter, and Sulfur Dioxide. 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 hire a consultant(s) to evaluate the impact of the regulations on the incinerators, and cross-media impacts (i.e. impacts on the rest of the treatment process). If necessary, modifications to the incinerator process such as replacement of the wet and dry scrubbers to reduce emissions to a safe level to assure compliance will be evaluated. In addition, the study will be performed in conjunction with work being done on other projects that are looking into the affects of the processes on greenhouse gases, energy use, etc.

Project Location:
Treatment Plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2011	09/01/2011	$80,000
Design	09/01/2011	07/01/2012	$0
Construction	07/01/2012	12/31/2016	$0
		Total:	**$80,000**

Estimated expenditures this FY are: **$75,000**
Anticipated Allocations this FY are: **$80,000**

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	5,000	0	0	0	0
B. Anticipated Allocations	80,000	0	0	0	0	0
C. Authorized this Year	80,000	5,000	0	0	0	0
D. Estimated Expenditures	(75,000)	(5,000)	0	0	0	0
E. Estimated Carry-over	5,000	0	0	0	0	0

Nitrification

Project Manager, Department/Division:
Gail Chesler, PhD, Engineering/Environmental Services

Project Purpose:
This project provides minor funding for next steps in moving forward, as needed, into new process implementation for nitrification. More appropriate funding levels 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. It's hard to know when the District will be required to include processes for nitrogen removal.

Project Description:
The project will be used to fund continuing investigation of technology to accomplish process changes as they become necessary.

Project Location:
Treatment Plant - primarily the secondary process.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	01/01/2012	01/01/2014	$0
Design	01/01/2014	05/01/2016	$0
Construction	05/01/2016	12/30/2020	$71,020,000
		Total:	**$71,020,000**

Estimated expenditures this FY are: **$5,000**
Anticipated Allocations this FY are: **$20,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	15,000	10,000	5,000	0	0
B. Anticipated Allocations	20,000	0	0	0	3,000,000	5,000,000
C. Authorized this Year	20,000	15,000	10,000	5,000	3,000,000	5,000,000
D. Estimated Expenditures	(5,000)	(5,000)	(5,000)	(5,000)	(3,000,000)	(5,000,000)
E. Estimated Carry-over	15,000	10,000	5,000	0	0	0

Standby Effluent Pumps Refurbishment, Phase 2

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

Project Purpose:
This project will increase effluent discharge capacity to meet wet weather and diurnal peak flow demands.

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 replace the electric drive motor, variable speed clutch assembly, right angle gear drive assembly and pump assembly for Standby Effluent Pump Numbers 1 and 2. It will also install new direct-coupling motors and modernization of instrumentation and the control system for both standby effluent pumps.

Project Location:
Pump and Blower Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2011	07/01/2013	$20,000
Construction	07/01/2013	06/17/2014	$550,000
		Total:	**$570,000**

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

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	0	0	0
B. Anticipated Allocations	20,000	0	550,000	0	0	0
C. Authorized this Year	20,000	10,000	550,000	0	0	0
D. Estimated Expenditures	(10,000)	(10,000)	(550,000)	0	0	0
E. Estimated Carry-over	10,000	0	0	0	0	0

Treatment Plant Fire Protection System Improvement

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

Project Purpose:
The purpose of the project is to 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:
The project will upgrade and/or replace existing fire alarm panels and accessories. It will replace the existing ozone-depleting Halon gas fire suppression materials with a replacement gas that is more environmentally friendly. New panels will be compatible with each other and will meet current codes.

Project Location:
Treatment Plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	09/01/2009	11/01/2009	$0
Design	11/01/2009	02/01/2011	$6,000
Construction	02/01/2011	06/30/2012	$175,000
		Total:	**$181,000**

Estimated expenditures this FY are: **$175,000**
Anticipated Allocations this FY are: **$71,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	9,000	104,000	0	0	0
B. Anticipated Allocations	10,000	100,000	71,000	0	0	0
C. Authorized this Year	10,000	109,000	175,000	0	0	0
D. Estimated Expenditures	(1,000)	(5,000)	(175,000)	0	0	0
E. Estimated Carry-over	9,000	104,000	0	0	0	0

Treatment Plant Hazard Identification & Remediation

Project Manager, Department/Division:
Dana Lawson, 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, or plan for medical surveillance. District staff perform 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.

In 2010, KellcoMACS conducted a plant-wide survey for hazardous materials, such as asbestos, lead, CAM 17 heavy metals, etc., by certified inspectors. The findings were summarized in a report and a database was developed to track the information.

Project Description:
This project will develop a remediation plan and begin design and remediation efforts to reduce the potential for exposure within the plant to hazardous materials where feasible.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	10/01/2009	07/01/2012	$257,000
Construction	07/01/2012	06/30/2020	$635,000
		Total:	**$892,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	38,000	38,000	38,000	38,000	38,000
B. Anticipated Allocations	100,000	50,000	5,000	75,000	75,000	75,000
C. Authorized this Year	100,000	88,000	43,000	113,000	113,000	113,000
D. Estimated Expenditures	(62,000)	(50,000)	(5,000)	(75,000)	(75,000)	(75,000)
E. Estimated Carry-over	38,000	38,000	38,000	38,000	38,000	38,000

Treatment Plant Master Plan Update

Project Manager, Department/Division:
Gail Chesler, Engineering/Environmental Services

Project Description:
The last thorough review of each Treatment Plant process was done in 1999. After 12 years, a review is useful. Several modifications have been made to the Treatment Plant to optimize operations, decrease energy use, and accommodate wet weather flow; these should be captured. From a flow perspective, there is the potential for significant growth in the District's service area due to pending development at the Concord Naval Weapons Station, but that is likely quite a few years in the future.

More importantly, however, over the next ten years, not only will the District face compliance with greenhouse gas (GHG) reduction regulations, but probably nutrient reduction and other air and water quality regulations. For the most part, the existing treatment plant was designed and constructed in the 1970s. While the plant was state of the art technology then, it is no longer so. Because of the age of the existing treatment facilities and the probability of more stringent air and water quality regulations, staff will develop conceptual plans for a new future treatment plant based on several regulatory scenarios. To comply with GHG regulations, each conceptual plan will address reduction of greenhouse gases and incorporate facilities that are energy neutral or energy positive.

Asset management or regulatory-driven improvements to the sludge incineration process are covered under separate projects.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2009	07/01/2010	$575,000
Design	07/01/2010	12/31/2011	$0
Construction	12/31/2011	06/17/2013	$25,000
		Total:	**$600,000**

Estimated expenditures this FY are: **$300,000**
Anticipated Allocations this FY are: **$300,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	25,000	160,000	300,000	115,000	0	0
C. Authorized this Year	25,000	160,000	300,000	115,000	0	0
D. Estimated Expenditures	(25,000)	(160,000)	(300,000)	(115,000)	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Treatment Plant Planning

Project Manager, Department/Division:
Gail Chesler, Engineering/Environmental Services

Project Purpose:
The purpose of this project is to provide funding for pre-design and pilot-scale system work that may be needed in the event that 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 at the regional, state, and national level, and as new wastewater treatment technology becomes available, process modifications may be desired in the Treatment Plant. One such example is the possibility of mandatory nutrient removal in the 10-year plan window. Expansion of the secondary treatment process will be very costly and being able to conduct planning-level pre-design informed by pilot studies is helpful to develop the most cost-effective design.

Project Description:
A number of projects could profit from having CCCSD-specific design information available as project design takes place. This project may fund process-specific pilot projects to obtain such data. Other investigations may be paper studies to determine the applicability of state-of-the-art processes to our situation. Additional pre-design work that may occur in this project would include investigation and establishment of sizing criteria for process optimization opportunities. It will be useful to obtain CCCSD-specific design information for use in final designs, particularly for aeration, primary clarifier, and incinerator design.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$1,000,000
Design	-	-	$0
Construction	07/01/2011	06/30/2021	$0
		Total:	**$1,000,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Treatment Plant Planning / 1
Project Number/Filename: pTP07 / TP_planning
Project Manager/% Expansion: Chesler / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	100,000	100,000	100,000	100,000	100,000	100,000
C. Authorized this Year	100,000	100,000	100,000	100,000	100,000	100,000
D. Estimated Expenditures	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)
E. Estimated Carry-over	0	0	0	0	0	0

Treatment Plant Safety Improvements Program

Project Manager, Department/Division:
Ba T. Than, 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:
This project provides funding to install safety improvements for the treatment plant.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*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: **$45,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Safety Improvements Program / 1
Project Number/Filename: none / TP_SafetyPGM
Project Manager/% Expansion: Than / 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

Project Manager, Department/Division:
Shari Deutsch, Administrative Department

Project Purpose:
This project will 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 to allow more efficient access for District personnel and equipment, upgrading plant security cameras, signage, and improving general area lighting.

Project Location:
Various sites on the treatment plant property

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	03/01/2005	07/01/2007	$2,000
Construction	07/01/2007	06/30/2012	$182,000
		Total:	**$184,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Treatment Plant Security Upgrade / 1
Project Number/Filename: 8213 / TP_Security
Project Manager/% Expansion: Deutsch / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	10,000	5,000	0	0	0
B. Anticipated Allocations	184,000	0	0	0	0	0
C. Authorized this Year	184,000	10,000	5,000	0	0	0
D. Estimated Expenditures	(174,000)	(5,000)	(5,000)	0	0	0
E. Estimated Carry-over	10,000	5,000	0	0	0	0

Solids Handling Improvements

Project Manager, Department/Division:
Gary E. Rathunde, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to design and construct improvements recommended in the Solids Handling Facilities Plan Update of September 2005 for emergency and non-routine handling of biosolids.

Project History:
The Solids Handling Facilities Plan was updated in September of 2005. One recommendation in that update was to improve the equipment for handling biosolids during emergency (e.g., catastrophic multiple hearth furnace (MHF) failure) or non-routine (e.g., short-term spike in solids production) that exceeds the capacity of one MHF; or regulatory changes, such as mercury emissions requiring MHF shut-down while an alternative process or emission controls are designed and built. A properly designed sludge truck loading station was constructed in FY 2010-11 and is currently in startup phase.

Project Description:
This work provided improvements to the solids processing equipment to meet the ultimate solids capacity needs (Year 2035) as recommended in the final draft of the 2005 Solids Handling Facilities Plan. The major goal for this project is to improve dewatered sludge handling capability to address emergency or non-routine operation.

This project constructed a sludge truck loading facility with odor control facilities and sludge cake hoppers to store sludge cake generated in overnight hours or on holidays, if the MHF is down due to an unforeseen regulation or emergency, when hauling to landfills is not possible.

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	10/01/2006	03/31/2007	$10,900
Design	03/31/2007	05/31/2009	$753,800
Construction	05/31/2009	06/17/2012	$4,366,800
		Total:	**$5,131,500**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Solids Handling Improvements / 1
Project Number/Filename: 7260 / TP_solids
Project Manager/% Expansion: Rathunde / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	25,000	5,000	0	0	0
B. Anticipated Allocations	4,501,000	630,000	0	0	0	0
C. Authorized this Year	4,501,000	655,000	5,000	0	0	0
D. Estimated Expenditures	(4,476,000)	(650,000)	(5,000)	0	0	0
E. Estimated Carry-over	25,000	5,000	0	0	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. They 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 Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2010	07/01/2011	$0
Design	07/01/2011	07/01/2012	$80,000
Construction	07/01/2012	06/30/2013	$775,000
		Total:	**$855,000**

Estimated expenditures this FY are: **$750,000**
Anticipated Allocations this FY are: **$735,000**

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: Mizutani / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	115,000	100,000	0	0	0
B. Anticipated Allocations	120,000	735,000	0	0	0	0
C. Authorized this Year	120,000	850,000	100,000	0	0	0
D. Estimated Expenditures	(5,000)	(750,000)	(100,000)	0	0	0
E. Estimated Carry-over	115,000	100,000	0	0	0	0

Centrifuge and Cake Pump Upgrades

Project Manager, Department/Division:
Gary E. Rathunde, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to improve the reliability of the sludge dewatering equipment.

Project History:
The existing centrifuges and cake pumps will have been in service for more than 20 years by 2010. 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 expected to last longer, cost less to operate, and produce a drier sludge, which requires less fuel to burn.

Project Description:
This project will:

- Evaluate the condition of the existing centrifuges and cake pumps,
- Review state-of-the-art dewatering technologies,
- Analyze if the existing centrifuges should be replaced with state-of-the-art dewatering equipment,
- Evaluate the state-of-the-art drive units for the cake pumps, and
- Evaluate the impact on the furnaces if a drier sludge is produced.

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2010	01/01/2011	$0
Design	01/01/2011	04/01/2012	$55,000
Construction	04/01/2012	12/31/2015	$3,142,000
		Total:	**$3,197,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Centrifuge & Cake Pump Upgrades / 2
Project Number/Filename: 7286 / cent_cake_pump_upg
Project Manager/% Expansion: Rathunde / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	295,000	270,000	245,000	1,565,000	1,400,000
B. Anticipated Allocations	300,000	0	0	1,500,000	1,397,000	
C. Authorized this Year	300,000	295,000	270,000	1,745,000	2,962,000	
D. Estimated Expenditures	(5,000)	(25,000)	(25,000)	(180,000)	(1,562,000)	(1,400,000)
E. Estimated Carry-over	295,000	270,000	245,000	1,565,000	1,400,000	

Plant Cyber Security

Project Manager, Department/Division:
Dana Lawson, Engineering/ Capital Projects

Project Purpose:
Protect the plant from electronic breaches through 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 (WSCC) along with the Department of Homeland Security (DHS) developed a security sensitive Mitigation Plan. A special task force was created to review the Mitigation Plan and implement recommendations, which included:

- Identification of all Programmable Language Controllers (PLCs) and Variable Frequency Drives (VFDs) 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
- 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 Location:
Plant-wide.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2011	07/01/2012	$0
Design	07/01/2012	07/01/2013	$50,000
Construction	07/01/2013	06/30/2015	$50,000
		Total:	**$100,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

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

Electric Blower Renovation

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

Project Purpose:
To renovate the existing electric blower 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 is started every two weeks to make sure that it is still operational. It has a capacity of 45,000 scfm while each of the steam powered turbine blowers has a capacity of 75,000 scfm. 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 significantly increases; specifically the demand of the air increases in the secondary aeration process, and the electric blower does not have enough capacity to meet the demand.

In March of 2007, the District began this study to evaluate the aeration needs for the treatment plant's activated sludge process. Preliminary results indicate that the District can defer the renovation of the aeration process by seven to ten years. This is possible due to the significant air loss savings achieved by recently completed aeration basin renovation project phases 1 and 2, and the ability to upgrade the capacity of the existing electric blower by ten percent, and the possibility of enhancing capacity by adding a highly efficient small blower system for the aerated grit chamber.

The evaluation also indicates that if full treatment plant flow nitrification is mandated by regulations in the future, renovation of the existing aeration system would be needed to meet the additional air demands. The study determined the most cost effective approach for providing nitrification of the entire treatment plant flow thus allowing proper completion of the electric blower study. This nitrification feasibility study looks at:

- Conventional nitrification
- Integrated Fixed-film Activated Sludge
- Moving Bed Biofilm Reactor (MBBR)
- Biological Aerated Filter (BAF)

Project Description:
This project determines the capacity needed by the electric blower. Improving the capacity of the electric blower is a potential project in FY 2012-13. Funds will be used to further refine the most efficient use of the steam and electric blower, which are assets in very good shape because they were rebuilt in the early 2000's (steam blowers) or lack of use as a back-up system (electric blowers). Innovative uses of the existing assets coupled with a highly efficient system for the grit chambers are areas of study for FY 2011/12.

Project Location:
Pump and Blower Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$499,000
Construction	01/01/2007	06/17/2016	$1,505,000
		Total:	**$2,004,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Electric Blower Renovation / 2
Project Number/Filename: 7272 / e_blower
Project Manager/% Expansion: Shima / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	96,000	111,000	106,000	101,000	1,000
B. Anticipated Allocations	480,000	20,000	0	0	0	1,504,000
C. Authorized this Year	480,000	116,000	111,000	106,000	101,000	1,505,000
D. Estimated Expenditures	(384,000)	(5,000)	(5,000)	(5,000)	(100,000)	(1,500,000)
E. Estimated Carry-over	96,000	111,000	106,000	101,000	1,000	5,000

MHF Burner Upgrades

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

Project Purpose:
This project will improve the operational flexibility of existing multiple hearth furnaces (MHFs) by repairing the auxiliary fuel delivery piping, by modifying or replacing the auxiliary fuel burners, adding a VFD to the center shaft, upsizing the Induced Draft Fan, and optimizing the furnace control system.

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 downstream 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 one additional fuel source. The incinerators are set up to operate entirely on landfill gas or entirely on natural gas. There is no current method to concurrently fire both fuels. If the volume or quality of the landfill gas supply were to decline, the gas fuel system could be modified to allow fortification of the landfill gas with natural gas. This project will coordinate closely with the Plant Operations Department to determine the best way to co-fire landfill gas and natural gas. This includes replacement of 1 to 4 of the top hearth burners (8 MMBtu/hr) with smaller low NOx/High mix burners.

Modernizing the control system will economize fuel consumption and realize some cost savings. A consultant will investigate the existing furnaces and make additional recommendations for modifications. Features that enhance operability, ease maintenance, or improve safety will be considered. The project will span multiple years because at any given time the solids handling process requires a furnace. The project will also require close coordination with appropriate regulatory agencies.

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2009	06/01/2010	$0
Design	06/01/2010	07/01/2012	$350,000
Construction	07/01/2012	06/17/2014	$1,500,000
		Total:	**$1,850,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	200,000	100,000	100,000	0	0
B. Anticipated Allocations	250,000	0	100,000	0	1,500,000	0
C. Authorized this Year	250,000	200,000	200,000	100,000	1,500,000	0
D. Estimated Expenditures	(50,000)	(100,000)	(100,000)	(100,000)	(1,500,000)	0
E. Estimated Carry-over	200,000	100,000	100,000	0	0	0

Instrumentation and Control - PLC System Upgrades, Phase 2

Project Manager, Department/Division:
Bill McEachen/Plant 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 in the treatment plant and additional units in the pumping stations. Over the years several PLC models have become obsolete and have been discontinued. The original "chassis mount" PLCs used in the Solids Conditioning Building have been replaced by this project. The 984 Series CPUs and 800 Series I/O are now obsolete.

Programming software for the newer PLCs no longer runs efficiently on the older programming units. The original PLC communication network has also been discontinued and has now been replaced.

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

- Providing Programmable Device Support (PDS) hardware and software necessary to maintain the PLC application software. The PDS system allows PLC programs to be stored on a server and maintains version control so that all changes made to the PLCs are logged and a current backup is always available.
- Replacing older programming computers with newer models capable of running the current programming software efficiently.
- Investigation of existing and new equipment to ensure that the District remains in the mainstream of process control technology.
- Upgrading older PLC models as they become out of date to be compatible with the newer models to increase performance and reliability. The next PLCs to be replaced are the oldest of the 984 controllers.
- Installing a newer PLC communication network to the older PLCs to allow communication between PLCs and programming from a central location.
- Providing funding for District personnel to coordinate, perform, and oversee PLC system upgrades.

Project Location:
Treatment Plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2006	07/01/2009	$134,000
Construction	07/01/2009	06/17/2012	$187,000
		Total:	**$321,000**

Estimated expenditures this FY are: **$80,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Instr & Control - PLC System Upgrades - ph 2 / 2
Project Number/Filename: 6169 / ic_upgrades
Project Manager/% Expansion: McEachen / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	105,000	80,000	0	0	0
B. Anticipated Allocations	321,000	0	0	0	0	0
C. Authorized this Year	321,000	105,000	80,000	0	0	0
D. Estimated Expenditures	(216,000)	(25,000)	(80,000)	0	0	0
E. Estimated Carry-over	105,000	80,000	0	0	0	0

Outfall Inspection and Renovation

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

Project Purpose:
This project will inspect both the land and submarine portions of the treatment plant outfall as allowed by the current NPDES Permit No. CA0037648, and will make repairs as needed.

Project History:
The treatment plant outfall was built in 1958 in soils that are known to shift and settle significantly over time. In 2003, as part of the Outfall Improvements - Phase 5 Project, the outfall was bypassed to inspect its condition, and make repairs. Every joint was tested to a specified threshold with failed joints resulting in the installation of over 300 mechanical seals. The submarine portion of the outfall was not evaluated at that time.

This project will allow inspection of both the land and submarine portions of the outfall as allowed by the current NPDES permit, and make any additional repairs.

Project Description:
It has been over five years since the last outfall inspection, and it is time to re-evaluate its condition as allowed by the current NPDES permit. The current plan is to retest the land portion of the outfall in a similar fashion to the work in 2003, and install new seals as necessary. The submarine portion may need additional ballast, remote operated vehicle (ROV) inspection, and protection from boat anchors in Suisun Bay. The work is currently scheduled for 2011-12 following completion of the Wet Weather Bypass Improvements Project. This project could be delayed until FY 2012/13 due to numerous permitting issues and completion of the bypass improvement project.

Project Location:
District Outfall

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$100,000
Construction	01/01/2011	06/17/2013	$985,000
		Total:	**$1,085,000**

Estimated expenditures this FY are: **$685,000**
Anticipated Allocations this FY are: **$685,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Outfall Improvements, Phase 6 / 2
Project Number/Filename: 7290 / Outfall_insp
Project Manager/% Expansion: Lawson / 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	100,000	685,000	300,000	0	0	0
C. Authorized this Year	100,000	685,000	300,000	0	0	0
D. Estimated Expenditures	(100,000)	(685,000)	(300,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Perimeter Fencing Renovations

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
Improve treatment plant security and reduce loss or damage to District property.

Project History:
The District has over 20,000 feet of fencing, which is mostly chain-link that was installed in the 1970s. In addition, there are double-swing and single-swing gates.

Portions of the perimeter fencing have been repaired or replaced over the years, such as the main plant entrance gate, a portion replaced by Flood Control, and around the south side of the plant bordering Highway 4. However, the entire perimeter requires evaluation to ensure that plant security is maintained. Deficient fencing will be repaired or replaced as needed.

Project Description:
The project will evaluate the security and condition of the perimeter fencing of the Treatment Plant and will renovate as needed. This work may be bid in combination with another project in or near the same location(s).

Project Location:
Perimeter of Treatment Plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2009	07/01/2011	$19,000
Construction	07/01/2011	06/30/2012	$150,000
		Total:	**$169,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Perimeter Fencing / 2
Project Number/Filename: 7282 / perimeter_fencing
Project Manager/% Expansion: Lawson / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	19,000	0	150,000	0	0	0
C. Authorized this Year	19,000	0	150,000	0	0	0
D. Estimated Expenditures	(19,000)	0	(150,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Primary Structures Demolition Project

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

Project Purpose:
This project will increase safety around the abandoned primary sedimentation tanks and allow for future expansion of the primary sedimentation tanks and related facilities.

Project History:
The original primary sedimentation tanks, constructed in 1948 and 1957, have been out of service and abandoned for decades. Due to the potential for falling into the tanks, they pose a safety hazard to District employees.

The lime storage silos, located on the east side of the HOB, were constructed in 1974 to store lime used in the primary sedimentation process. They have not been used in over 20 years and are no longer needed. In the future, the silos would have to be maintained in order to keep them safe.

The abandoned sedimentation tanks and silos will interfere with the addition of future primary sedimentation tanks and odor control facilities that are part of the Primary Treatment Expansion Project (DP 7264).

Project Description:
This project will demolish the abandoned primary sedimentation tanks and backfill the area. It will also demolish the lime storage silos, building, and associated piping systems. Additional obsolete facilities may be included in this project based on further evaluations.

Project Location:
Abandoned primary sedimentation tanks

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	10/01/2007	04/01/2011	$104,000
Construction	04/01/2011	06/30/2017	$1,250,000
		Total:	**$1,354,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Primary Structures Demo / 2
Project Number/Filename: 7255 / pri_demol
Project Manager/% Expansion: Shima / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	56,000	51,000	46,000	41,000	36,000
B. Anticipated Allocations	130,000	0	0	0	0	0
C. Authorized this Year	130,000	56,000	51,000	46,000	41,000	36,000
D. Estimated Expenditures	(74,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
E. Estimated Carry-over	56,000	51,000	46,000	41,000	36,000	31,000

Primary Treatment Renovation

Project Manager, Department/Division:
Gary E. Rathunde, Engineering/Capital Projects

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

Project History:
Most of the piping and components in the Primary Treatment area were installed as part of the 5A project, more than 30 years ago. Some of the piping and process components have been observed to be corroding, requiring more maintenance, or otherwise nearing the end of their respective service life.

Project Description:
This project will renovate or replace the water and air supply pipelines at the primary sedimentation tanks. Included in the renovation will be a new baffle system to be evaluated for performance. This project will also design and construct recommended improvements to the scum and grit systems from the Scum, Grease and Grit Handling Project.

Project Location:
Primary Treatment area

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2011	$750,000
Construction	07/01/2011	06/30/2014	$5,790,000
		Total:	**$6,540,000**

Estimated expenditures this FY are: **$750,000**
Anticipated Allocations this FY are: **$1,000,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	100,000	350,000	110,000	0	0
B. Anticipated Allocations	150,000	1,000,000	4,000,000	1,390,000	0	0
C. Authorized this Year	150,000	1,100,000	4,350,000	1,500,000	0	0
D. Estimated Expenditures	(50,000)	(750,000)	(4,240,000)	(1,500,000)	0	0
E. Estimated Carry-over	100,000	350,000	110,000	0	0	0

SCB Mechanical Room

Project Manager, Department/Division:
Gary E. Rathunde, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to design and construct improvements to the Solids Conditioning Building HVAC system to replace worn out system components.

Project History:
The mechanical room located on the first floor of the Solids Conditioning Building contains pumps, a chiller, steam and water piping, and an air-handling unit used to provide conditioned air to the MCC Room on the second floor and to various areas within the Furnace Control Room on the third floor. The chiller, pumps, and some piping were replaced during the Solids Conditioning Building Ventilations Improvements, Phase 2 (DP 7227) to provide chilled water for new air handling units serving the centrifuge and cake pump areas. However, the original air-handling unit that was installed during the treatment plant expansion in the mid 1970s is still in service.

During the design phase of this project five other SCB exhaust fans were found to be at the end of their useful life. The project is currently in its construction phase.

Project Description:
This project will replace the aging air-handling unit along with its control system and associated steam and water piping. In addition, five roof exhaust fans will be replaced.

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	02/01/2009	07/01/2009	$4,900
Design	07/01/2009	12/01/2009	$59,700
Construction	12/01/2009	06/30/2012	$394,400
		Total:	**$459,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: SCB Mechanical Room / 2
Project Number/Filename: 7277 / scb_mech_rm
Project Manager/% Expansion: Rathunde / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	22,000	141,000	5,000	0	0
B. Anticipated Allocations	25,000	220,000	214,000	0	0	0
C. Authorized this Year	25,000	242,000	355,000	5,000	0	0
D. Estimated Expenditures	(3,000)	(101,000)	(350,000)	(5,000)	0	0
E. Estimated Carry-over	22,000	141,000	5,000	0	0	0

Secondary Process Improvements

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
Improve and/or renovation 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:
This project will 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 also consider potential regulations that could affect the Secondary Process, and will attempt not to 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 Location:
Secondary Treatment Process

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	02/26/2010	01/01/2011	$0
Design	01/01/2011	07/01/2014	$46,000
Construction	07/01/2014	06/30/2017	$1,350,000
		Total:	**$1,396,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	24,000	24,000	24,000	24,000	24,000
B. Anticipated Allocations	50,000	5,000	5,000	5,000	5,000	100,000
C. Authorized this Year	50,000	29,000	29,000	29,000	29,000	124,000
D. Estimated Expenditures	(26,000)	(5,000)	(5,000)	(5,000)	(5,000)	(100,000)
E. Estimated Carry-over	24,000	24,000	24,000	24,000	24,000	24,000

Seismic Upgrades for the Pump & Blower Building

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
Seismic improvements will be made to 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:
This project will make seismic improvements to the Pump & Blower Building. In FY 2010-11, predesigns of the Pump and Blower Building and Headquarters Office Buildings will be completed. Based on the results, the priority and timing of several seismic upgrade projects may be modified.

Project Location:
Pump & Blower Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2010	07/01/2011	$0
Design	07/01/2011	01/01/2012	$150,000
Construction	01/01/2012	06/30/2014	$2,005,000
		Total:	**$2,155,000**

Estimated expenditures this FY are: **$1,000,000**
Anticipated Allocations this FY are: **$205,000**

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	(140,000)	(935,000)	5,000	0	0
B. Anticipated Allocations	10,000	205,000	1,940,000	0	0	0
C. Authorized this Year	10,000	65,000	1,005,000	5,000	0	0
D. Estimated Expenditures	(150,000)	(1,000,000)	(1,000,000)	(5,000)	0	0
E. Estimated Carry-over	(140,000)	(935,000)	5,000	0	0	0

Seismic Upgrade for POB

Project Manager, Department/Division:
Gary Rathunde, Engineering/Capital Projects

Project Purpose:
Seismic improvements will be made to the Plant Operations Building (POB).

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 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 Emergency Operations Center. As such, the MPR will receive additional strengthening to provide continuous service after a design seismic event.

In FY 2010-11, predesigns of the Pump and Blower Building and Headquarters Office Buildings will be completed. Based on the results, the priority and timing of several seismic upgrade projects may be modified, including the POB.

Project Location:
Plant Operation Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2011	$215,000
Construction	07/01/2011	06/30/2017	$1,025,000
		Total:	**$1,240,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	(40,000)	(45,000)	180,000	1,175,000	1,025,000
B. Anticipated Allocations	10,000	0	230,000	1,000,000	0	0
C. Authorized this Year	10,000	(40,000)	185,000	1,180,000	1,175,000	1,025,000
D. Estimated Expenditures	(50,000)	(5,000)	(5,000)	(5,000)	(150,000)	(1,000,000)
E. Estimated Carry-over	(40,000)	(45,000)	180,000	1,175,000	1,025,000	25,000

Seismic Upgrades for SCB

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

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

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 SCB in line with current seismic design standards.

Project Description:
This project will make seismic improvements to the SCB. In FY 2010-11, predesigns of the Pump and Blower Building and Headquarters Office Buildings will be completed. Based on the results, the priority and timing of several seismic upgrade projects may be modified, including the SCB.

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2011	$1,255,000
Construction	07/01/2011	06/30/2015	$3,800,000
		Total:	**$5,055,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$200,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: SCB Seismic Upgrade / 2
Project Number/Filename: pTP31 / seismic_SCB_upg
Project Manager/% Expansion: Shima / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	50,000	200,000	800,000	800,000	0
B. Anticipated Allocations	55,000	200,000	800,000	2,000,000	2,000,000	0
C. Authorized this Year	55,000	250,000	1,000,000	2,800,000	2,800,000	0
D. Estimated Expenditures	(5,000)	(50,000)	(200,000)	(2,000,000)	(2,800,000)	0
E. Estimated Carry-over	50,000	200,000	800,000	800,000	0	0

Standby Power Facility Improvements

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

Project Purpose:
The purpose of this project is to replace existing stationary diesel engine generators at the treatment plant to comply with more stringent air regulations, limiting the particulate emissions from diesel engines while providing standby power reliability.

Project History:
The California Air Resource Board has adopted new regulations that severely limit the operating hours of uncontrolled stationary diesel engines over 50 horsepower in size. Under this project, the existing diesel engine driven generators in the Standby Power Facility were replaced. The project has been constructed and minor finishing issues are being addressed.

Project Description:
This project replaced the treatment plant standby power diesel engine generators as required to meet the new regulations and provide enough run time to meet District operational requirements. The new engine generators generate at 12kV, which simplifies the standby power system by eliminating the 4160V/12kV transformer. The facility building was modified to accept the new engine generators and also brought up to the current seismic performance standards. Additionally, a permanent connection point was constructed for connecting trailer-mounted generators allowing greater flexibility to provide reliable power. Changing to power generation at 12kv will improve the reliability of the plant standby power system because it eliminates issues related to cross current compensation, kilovolt-ampere buildup and relay trips related to the old transformer. Feeder cables were also replaced to improve system reliability.

Project Location:
Standby Power Facility Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2005	07/01/2006	$563,900
Construction	07/01/2006	06/30/2012	$4,285,100
		Total:	**$4,849,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Standby Power Facility Improvements / 2
Project Number/Filename: 7248 / standbyPower
Project Manager/% Expansion: Mizutani / 100

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	1,545,000	5,000	0	0	0
B. Anticipated Allocations	4,849,000	0	0	0	0	0
C. Authorized this Year	4,849,000	1,545,000	5,000	0	0	0
D. Estimated Expenditures	(3,304,000)	(1,540,000)	(5,000)	0	0	0
E. Estimated Carry-over	1,545,000	5,000	0	0	0	0

Switchgear Refurbishment, Phase 2

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
This project will refurbish electrical switchgear, especially 480v circuit breakers, 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 require replacement. Circuit breakers have been sent out for Class 1 recondition and trip unit replacement on an as-needed basis. In the first phase of this project, the oldest circuit breakers (GE) at Substation 40 were refurbished.

Project Description:
This second phase of the project will determine when and how to refurbish the remaining 480v circuit breakers (approx 50, Westinghouse/Cutler-Hammer). Funding for refurbishment and purchase of replacement breakers will be provided under this project.

Project Location:
Treatment Plant substations

Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	01/01/2010	07/01/2013	$164,800
Construction	07/01/2013	06/30/2015	$1,000,000
		Total:	**$1,164,800**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$550,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Switchgear Replacement - ph 2 / 2
Project Number/Filename: 7292 / switch_2
Project Manager/% Expansion: Lawson / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	85,000	35,000	535,000	1,000,000	500,000
B. Anticipated Allocations	100,000	0	550,000	515,000	0	0
C. Authorized this Year	100,000	85,000	585,000	1,050,000	1,000,000	500,000
D. Estimated Expenditures	(15,000)	(50,000)	(50,000)	(50,000)	(500,000)	(500,000)
E. Estimated Carry-over	85,000	35,000	535,000	1,000,000	500,000	0

Treatment Plant Elevator Modernization

Project Manager, Department/Division:
Munawar Husain, Engineering/Capital Projects

Project Purpose:
To modernize the two elevators in the Solids Conditioning Building and to replace the door sensor on the Headquarters Office Building elevator.

Project History:
The existing elevators on the treatment plant site were installed in 1975. The District's elevator maintenance company, National Elevator, is frequently called out for unscheduled maintenance. For example, the Solids Conditioning Building (SBC) passenger elevator had 16 unscheduled call-outs in 2009, whereas in 2004 it only had 2 unscheduled call-outs. This is in addition to the regular monthly maintenance visits. These elevators are critical for operation and maintenance activities within the building.

In December 2009, Edgett-Williams Consulting Group was hired to assess the condition of the SCB freight and passenger elevators. Major findings were:

- The equipment is obsolete and the original manufacturer is out of business
- No original equipment spare parts/technical support is available
- Existing equipment runs on DC current which is no longer utilized in elevators
- Existing equipment is out of compliance with current electrical/fire codes

Project Description:
The project was bid and awarded in 2010. Construction will be completed in 2011 to modernize the two elevators in the Solids Conditioning Building and to replace the door sensor on the Headquarters Office Building elevator.

Project Location:
Solids Conditioning Building and Headquarters Office Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2009	07/01/2010	$27,500
Construction	07/01/2010	06/30/2012	$650,000
		Total:	**$677,500**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Elevators Modernization / 2
Project Number/Filename: 7281 / tp_elevators_repl
Project Manager/% Expansion: Husain / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	22,000	200,000	0	0	0
B. Anticipated Allocations	50,000	628,000	0	0	0	0
C. Authorized this Year	50,000	650,000	200,000	0	0	0
D. Estimated Expenditures	(28,000)	(450,000)	(200,000)	0	0	0
E. Estimated Carry-over	22,000	200,000	0	0	0	0

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.

USEPA released new regulations and the District can meet the standards. Given the metal pitting and fatigue in the scrubber system, this project is a fairly high priority.

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

Project Location:
Solids Conditioning Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2010	06/01/2010	$0
Design	06/01/2010	07/01/2013	$205,000
Construction	07/01/2013	06/30/2015	$3,710,000
		Total:	**$3,915,000**

Estimated expenditures this FY are: **$200,000**
Anticipated Allocations this FY are: **$300,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Wet and Dry Scrubber Replacement / 2
Project Number/Filename: pTP17 / wet_scrub_repl
Project Manager/% Expansion: Hodges / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	20,000	120,000	(1,880,000)	10,000	0
B. Anticipated Allocations	25,000	300,000	0	3,590,000	0	0
C. Authorized this Year	25,000	320,000	120,000	1,710,000	10,000	0
D. Estimated Expenditures	(5,000)	(200,000)	(2,000,000)	(1,700,000)	(10,000)	0
E. Estimated Carry-over	20,000	120,000	(1,880,000)	10,000	0	0

Wet Weather Bypass Improvements Project

Project Manager, Department/Division:
Gary E. Rathunde, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to 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. Improvements specifically recommended from those previous investigations included a new headworks and expanded disinfection facilities. These improvements have already been or are being implemented. An area of focus that has not been addressed is the wet weather bypass system.

Computer modeling predicted that storms for a 20-year system event would produce a peak flow of approximately 310 mgd. With the expansion of the UV Disinfection Facilities, the peak wet weather flow capacity is approximately 130 mgd. Therefore, the emergency wet weather bypass system needs to have sufficient capacity to convey the remaining 180 mgd during these storm events. The present hydraulic capacity of the District's bypass facilities to Pacheco Creek is limited to approximately 50 mgd during 20-25 year storm events. This project is currently in its construction phase.

Project Description:
This project will design and construct necessary improvements to the wet weather discharge system. The project will include design and construction of a gravity overflow structure to be located near the northeastern side of Basin B and a new box culvert under a Flood Control District access road to discharge directly to Walnut Creek. In addition, the culvert between the two on-site bypass channels, which direct flow to Basin B, will be replaced with larger box culverts to increase capacity. Furthermore, a narrow section of the northern most on-site bypass channel just upstream of Basin B will be widened to improve flow. The proposed improvements require a permit from the Army Corps of Engineers and wetland mitigations. These wet weather improvements may be built over two years if that permit is delayed.

A future phase of this project will evaluate and design/construct modifications to raise the levees around Basin C to match the height of the levees around Basin B to maximize storage capacity of the holding basins.

Project Location:
Basin B and Basin C

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	09/01/2004	09/01/2005	$2,000
Design	09/01/2005	07/01/2006	$431,400
Construction	07/01/2006	06/17/2012	$2,384,600
		Total:	**$2,818,000**

Estimated expenditures this FY are: **$5,000**
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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	2,055,000	5,000	0	0	0
B. Anticipated Allocations	2,818,000	0	0	0	0	0
C. Authorized this Year	2,818,000	2,055,000	5,000	0	0	0
D. Estimated Expenditures	(763,000)	(2,050,000)	(5,000)	0	0	0
E. Estimated Carry-over	2,055,000	5,000	0	0	0	0

Concrete Renovation

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
This project will 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:
This project will 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, that were identified and any additional ones that are identified.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2012	$10,000
Construction	07/01/2012	06/30/2018	$300,000
		Total:	**$310,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Concrete Renovation / 3
Project Number/Filename: pTP30 / Concrete_renov
Project Manager/% Expansion: Lawson / 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	50,000	50,000	50,000	50,000
C. Authorized this Year	5,000	5,000	50,000	50,000	50,000	50,000
D. Estimated Expenditures	(5,000)	(5,000)	(50,000)	(50,000)	(50,000)	(50,000)
E. Estimated Carry-over	0	0	0	0	0	0

Plant Energy Optimization

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

Project Purpose:
Evaluate energy optimization projects 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:
This project will 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 replacing Dissolved Air Flotation (DAF) recirculation pumps with micro-bubble pumps. As other energy efficiency proposals are made they will be included in this evaluation project.

For implementation, staff will determine the most cost effective approach.

Project Location:
Treatment Plant

Project Schedule and Cost:

	Start Date	*Completion*	*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	50,000	25,000	0	0
B. Anticipated Allocations	50,000	50,000	0	0	0	0
C. Authorized this Year	50,000	75,000	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	50,000	25,000	0	0	0

Pavement Renovation

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
This project will renovate pavement throughout the treatment plant.

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:
This project will renovate asphalt pavement as identified and will be completed in multiple phases based on the condition assessment and changing condition of the pavement over time.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2015	$25,000
Construction	07/01/2015	06/30/2020	$250,000
		Total:	**$275,000**

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: Lawson / 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	5,000	5,000	5,000	50,000
C. Authorized this Year	5,000	5,000	5,000	5,000	5,000	50,000
D. Estimated Expenditures	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(50,000)
E. Estimated Carry-over	0	0	0	0	0	0

Piping Renovations, Phase 5

Project Manager, Department/Division:
Munawar Husain, 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 30 years. Some of these pipes are leaking due to corrosion. Failure of such piping will adversely affect the treatment processes.

The first four phases of this program had renovated or replaced various piping systems. This included the service air line from the compressor to the air driers, the main service air header, piping between the grit pumps and classifiers, RAS pump station suction header piping, scum piping to reduce blockages, centrate and ash conveyance system piping in the Solids Conditioning Building, blow down piping on auxiliary boilers, piping at various hypochlorite facilities, and fuel oil piping. This project is currently in its construction phase.

Project Description:
This project will replace the aging aeration air supply headers and down comers at the aeration tanks along with other plant piping showing signs of corrosion, such as the water supply and drain lines on the aeration condensers and 3WHP pipelines in the West Gallery.

Project Location:
Throughout the treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	02/01/2009	12/01/2010	$13,000
Design	12/01/2010	03/01/2011	$91,400
Construction	03/01/2011	06/17/2012	$2,501,600
		Total:	**$2,606,000**

Estimated expenditures this FY are: **$300,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Piping Renovations - ph 5 / 3
Project Number/Filename: 7276 / PipeRen5
Project Manager/% Expansion: Husain / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	90,000	1,750,000	300,000	0	0
B. Anticipated Allocations	100,000	1,856,000	650,000	0	0	0
C. Authorized this Year	100,000	1,946,000	2,400,000	300,000	0	0
D. Estimated Expenditures	(10,000)	(196,000)	(2,100,000)	(300,000)	0	0
E. Estimated Carry-over	90,000	1,750,000	300,000	0	0	0

Piping Renovations, Phase 6

Project Manager, Department/Division:
Gary E. Rathunde, 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 30 years. Some of these pipes are leaking due to corrosion. Failure of such piping will adversely affect the treatment processes.

The first five phases of this program had renovated or replaced various piping systems. This included the service air line from the compressor to the air driers, the main service air header, piping between the grit pumps and classifiers, RAS pump station suction header piping, scum piping to reduce blockages, centrate and ash conveyance system piping in the Solids Conditioning Building, blow down piping on auxiliary boilers, piping at various hypochlorite facilities, and fuel oil piping.

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. This work includes:

- Replace sections of the scrubber water piping at the seal tank on wet scrubber #2
- Replace a section of the centrate pipe at the foam suppression tank
- Replace flow meter in the discharge piping of aeration blower #2
- Replace a section of the scrubber drain piping in the SCB plenum
- Replace leaking connections at the cake pump feed pipelines
- Pilot test installation of a primary baffle in one tank

One area requiring extensive pipe and valve replacement work is at pre-aeration and primary tanks. Piping at this location, such as the diffusers, utility station air and water lines, and the spray water piping system contain components that were installed during plant upgrades in the 1960s. Much of this renovation work was to be part of the 4th and 5th Piping Renovations Projects, but was delayed until aeration tank air plenum box and aeration tank air supply piping repair work was completed during the 2009 and 2010 construction seasons.

The Primary Treatment Renovation Project (DP 7285) will evaluate necessary improvements to the primary treatment process and the recommendations will be included in a construction project presently scheduled for the summer of 2012.

However, some deteriorating piping in that area, such as the air headers and aeration air diffusers in pre-aeration tanks, primary tank distribution channels, and primary tank effluent channels is being considered for inclusion in the Treatment Plant Piping Renovations, Phase 6.

Project Location:
Throughout the treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	02/26/2010	07/01/2012	$140,000
Construction	07/01/2012	06/30/2013	$1,005,000
		Total:	**$1,145,000**

Estimated expenditures this FY are: **$1,000,000**
Anticipated Allocations this FY are: **$320,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Piping Renovations - ph 6 / 3
Project Number/Filename: 7288 / PipeRen6
Project Manager/% Expansion: Rathunde / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	20,000	(75,000)	(755,000)	0	0
B. Anticipated Allocations	60,000	5,000	320,000	760,000	0	0
C. Authorized this Year	60,000	25,000	245,000	5,000	0	0
D. Estimated Expenditures	(40,000)	(100,000)	(1,000,000)	(5,000)	0	0
E. Estimated Carry-over	20,000	(75,000)	(755,000)	0	0	0

Treatment Plant Asset Management Plan

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
To create a capital project forecasting and to provide management with information to make funding decisions.

Project History:
Staff previously estimated that about $6M per year in capital improvements (2001 dollars) is necessary to maintain the reliability of the treatment plant through gradual renewal and replacement of aging equipment and facilities. These expenditures are in addition to those required for capacity and regulatory-driven improvements.

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. It is critical to understand the scope and cost of projects necessary to maintain the treatment plant assets for proper budgeting and responsible rate setting.

Project Description:
Asset Management is an integrated set of processes to minimize the life-cycle costs of owning, operating and maintaining assets, while continuously delivering established levels of service at an acceptable level of risk.

The District has implemented portions of asset management at various levels and typically as stand-alone practices.

The District has a good inventory of its assets, except for the piping infrastructure within the plant. The Mainsaver® database has been updated to include the service life, install date, replacement cost (as of 2009), and other useful information. An import tool has been developed to assist with inputting this data. The following conditions assessments have been completed to-date: asphalt pavement, concrete structures, electrical switchgear, and protective coatings.

Future phases of the Treatment Plant Asset Management Project should include:

- Condition assessment of: mechanical, electrical, instrumentation
- Evaluation of consequence and redundancy to develop a Business Risk Exposure (BRE) score for each system

Completion of these will allow for a more accurate reinvestment rate and development of a formal procedure for prioritizing projects.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	12/01/2005	07/01/2007	$99,100
Design	07/01/2007	06/30/2015	$756,900
Construction	-	-	$0
		Total:	**$856,000**

Estimated expenditures this FY are: **$10,000**
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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	320,000	310,000	300,000	200,000	100,000
B. Anticipated Allocations	856,000	0	0	0	0	0
C. Authorized this Year	856,000	320,000	310,000	300,000	200,000	100,000
D. Estimated Expenditures	(536,000)	(10,000)	(10,000)	(100,000)	(100,000)	(100,000)
E. Estimated Carry-over	320,000	310,000	300,000	200,000	100,000	0

Cathodic Protection Systems Replacement

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

Project Purpose:
A master plan for treatment plant cathodic protection was prepared in 2006/07 and updated in 2010/11. Based on the master plan, adequate cathodic protection on all underground and other facilities throughout the treatment plant will be provided by replacing existing expended facilities and installing new systems where required.

Project History:
To extend the useful life of the District treatment plant facilities, structures and pipelines, cathodic protection systems need to be monitored and maintained. A comprehensive cathodic protection survey of the treatment plant was performed and identified facilities that needed replacement and improvements over the next five-year period. The report also identified existing facilities requiring further investigations. The current project will prioritize and implement urgent work recommended by the master plan.

Project Description:
Cathodic protection facilities are surveyed, inspected and monitored and based on the finding projects are prioritized. Based on the recommendations from the recently updated master plan, the 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 Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2006	02/01/2007	$209,000
Construction	02/01/2007	06/17/2016	$380,000
		Total:	**$589,000**

Estimated expenditures this FY are: **$50,000**
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: Hodges / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	88,000	75,000	25,000	20,000	15,000
B. Anticipated Allocations	272,000	317,000	0	0	0	0
C. Authorized this Year	272,000	405,000	75,000	25,000	20,000	15,000
D. Estimated Expenditures	(184,000)	(330,000)	(50,000)	(5,000)	(5,000)	(5,000)
E. Estimated Carry-over	88,000	75,000	25,000	20,000	15,000	10,000

Treatment Plant Protective Coatings, Phase 4

Project Manager, Department/Division:
Gary E. Rathunde, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to 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, such as that in the late 1970s. Much of the process infrastructure is almost 30 years old; and except as discussed below, has received limited coating or repainting over the lifetime of the treatment plant.

The first three phases of this project applied protective coatings to structures, vessels, piping and equipment throughout the plant with deteriorating coatings and in need of surface rehabilitation. This work included the submerged steel components in the secondary clarifiers, the concrete surface of the denitrification channel, the sludge blending tanks, electrical MCC enclosures, water system air gap tanks, switchgear and transformers at Substations 33, 34, 40, 52, 73, and 81, and all non-fiberglass piping and equipment at the Solids Conditioning Building's odor control unit.

Project Description:
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 due to aging or functional obsolescence. This Phase 4 project will contribute to the efforts of the Treatment Plant Asset Management Plan project by providing a detailed evaluation of the entire plant coating system to identify the critical infrastructure to be cleaned and coated.

A plant-wide coating system evaluation was completed in 2009 by KTA-Tator that recommended and prioritized coating projects. The most critical coating renovations recommended in the evaluation, and those identified by plant staff include, renovating the Headwork's bar screen support steel, the pipe rack supports in the basement of the SCB, the piping and structural supports in the basement of the Pump and Blower Building, the structural steel and piping at the clear well, the carbide lime silos, the crane on top of sludge storage tanks, and the fuel oil storage tanks. The remaining recommendations will be addressed in future phases of the long-term protective coating program.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$13,000
Design	07/01/2006	07/01/2007	$92,000
Construction	07/01/2007	06/30/2013	$730,000
		Total:	**$835,000**

Estimated expenditures this FY are: **$725,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Protective Coatings - ph 4 / 3
Project Number/Filename: 7247 / TP_Coat4
Project Manager/% Expansion: Rathunde / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	(20,000)	730,000	5,000	0	0
B. Anticipated Allocations	55,000	780,000	0	0	0	0
C. Authorized this Year	55,000	760,000	730,000	5,000	0	0
D. Estimated Expenditures	(75,000)	(30,000)	(725,000)	(5,000)	0	0
E. Estimated Carry-over	(20,000)	730,000	5,000	0	0	0

Treatment Plant Electrical/Instrumentation Replacement Program

Project Manager, Department/Division:
Ba T. Than, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to 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. The electrical system has numerous components, including 12,000-volt switchgear at the 10 high-voltage substations and 30 oil-filled transformers that are well maintained using preventative techniques, such as thermo scan, to identify potential problems and correct them prior to failure. The maintenance inspections have indicated areas subject to premature failures, which could cripple the electrical system. The instrumentation system consists of thousands of field devices and the PLC control system. The PLC system replacement work is included in other ongoing projects.

Project Description:
The Treatment Plant Asset Management Plan project (DP 7269) 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. This project will 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.

Property Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2010	06/17/2013	$30,000
		Total:	**$30,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	20,000	15,000	0	0	0
B. Anticipated Allocations	20,000	0	10,000	0	0	0
C. Authorized this Year	20,000	20,000	25,000	0	0	0
D. Estimated Expenditures	0	(5,000)	(25,000)	0	0	0
E. Estimated Carry-over	20,000	15,000	0	0	0	0

Treatment Plant Equipment Replacement Program

Project Manager, Department/Division:
Ba T. Than, Engineering/Capital Projects

Project Purpose:
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.

Project History:
The initial work on this project, then known as the "Major Equipment Replacement Study," assembled a list of current treatment plant equipment; verified equipment name, number, and size; acquired their design records; and estimated equipment life and replacement cost. Equipment maintenance costs are now being tracked in the District's Computerized Maintenance Management System (CMMS). Several major pieces of equipment are reaching the end of their expected service life and require either replacement or a total reconditioning to extend their useful life. Furthermore, the Treatment Plant Asset Management Plan project (DP 7269) is also 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. Appropriate upgrading will also be included.

Project Description:
Specific examples of equipment upon which this project will focus include:

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

Examples of equipment replaced to date include: Carbine lime recirculating pump, polymer feed pump, carbine lime feed pump, waste heat boiler soot ash rotary air lock and grit classifier assemblies.

Project Location:
Entire treatment plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$535,000
Construction	07/01/2007	06/17/2018	$700,000
		Total:	**$1,235,000**

Estimated expenditures this FY are: **$100,000**
Anticipated Allocations this FY are: **$85,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	615,000	515,000	500,000	400,000	300,000
B. Anticipated Allocations	1,150,000	0	85,000	0	0	0
C. Authorized this Year	1,150,000	615,000	600,000	500,000	400,000	300,000
D. Estimated Expenditures	(535,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)
E. Estimated Carry-over	615,000	515,000	500,000	400,000	300,000	200,000

Treatment Plant Facilities Renovations

Project Manager, Department/Division:
Ba T. Than, 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, such as the warehouse and mechanical maintenance building, 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 (DP 7269) 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*	*Total Cost*
Planning	07/01/2004	07/01/2007	$10,000
Design	07/01/2007	07/01/2011	$156,000
Construction	07/01/2011	06/17/2015	$0
		Total:	**$166,000**

Estimated expenditures this FY are: **$12,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: TP Facilities Renovations / 3
Project Number/Filename: 7268 / TP_FacilRenov
Project Manager/% Expansion: Than / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	(26,000)	36,000	24,000	12,000	0
B. Anticipated Allocations	92,000	74,000	0	0	0	0
C. Authorized this Year	92,000	48,000	36,000	24,000	12,000	0
D. Estimated Expenditures	(118,000)	(12,000)	(12,000)	(12,000)	(12,000)	0
E. Estimated Carry-over	(26,000)	36,000	24,000	12,000	0	0

Primary Treatment Expansion

Project Manager, Department/Division:
Dana Lawson, Engineering/Capital Projects

Project Purpose:
This project will evaluate improvements to increase operational flexibility, redundancy, and to increase capacity for wet weather flows through the Primary process.

Project History:
The Plant Capacity Analysis completed in September 1999 found that the stand-alone capacity of the existing primary sedimentation tanks was approximately 50 MGD, while the secondary process was approximately 68 MGD. When working together under operational conditions, the combined processes can accommodate at least the 53.8 MGD Average Dry Weather Flow (ADWF) allowed by the District's current NPDES effluent discharge limit.

Although adequate for dry weather flows, the current number of primary sedimentation tanks and pumps hampers the District's ability to manage wet weather flows or to take these facilities off-line for maintenance. The need for improvements to the primary sedimentation tanks was identified in the District's 2002 Effluent Discharge Limit Increase Project Final Environmental Impact Report. Record wet weather flows in the winter of 2005/2006 also showed the need for increased efficiency or additional capacity. In 2006, a consultant was hired to make recommendations for future facilities. Preliminary reports indicate that an expansion would add two more primary sedimentation tanks, add new and modify the existing grit facilities and add new odor control facilities.

This project has begun to develop a preliminary design concept for the addition of two primary sedimentation tanks and evaluate upgrades to the existing tanks and systems. Addition of the tanks would increase the wet weather capacity to approximately 270 MGD (62.5 MGD dry weather capacity with one tank out of service). The new tanks would provide additional operational flexibility and would reduce the amount of raw wastewater bypassed to the holding basins during large wet weather events. With the diminished need for bypassing flows, the associated potential for odor complaints during large wet weather events would be reduced.

Project Description:
Predesign work for the additional tanks was started in 2007 and then put on-hold. However, work began again in July 2010 and the predesign will be completed by end of FY 2011-12. Design and construction of the new primary sedimentation tanks will be under a new project that is not currently scheduled with the 10-year Capital Improvement Plan.

Project Location:
Primary Sedimentation process area

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	03/30/2006	10/31/2008	$0
Design	10/31/2008	06/17/2011	$430,000
Construction	06/17/2011	06/17/2012	$0
		Total:	**$430,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Primary Treatment Expansion / 4
Project Number/Filename: 7264 / primaryExp
Project Manager/% Expansion: Lawson / 100

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	75,000	5,000	0	0	0
B. Anticipated Allocations	400,000	30,000	0	0	0	0
C. Authorized this Year	400,000	105,000	5,000	0	0	0
D. Estimated Expenditures	(325,000)	(100,000)	(5,000)	0	0	0
E. Estimated Carry-over	75,000	5,000	0	0	0	0

TABLE OF CONTENTS

COLLECTION SYSTEM PROGRAM

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. The numbered tabs for the project groupings are as follows:

Tab Number	Subprogram
1	Renovation
2	Regulatory Compliance/Planning/Safety
3	Expansion
4	Pumping Stations

OVERVIEW

The Collection System Program at $12.8 M comprises 50 percent of the total estimated capital expenditures for FY 2011-12. The major points of emphasis for the Collection System Program 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;
- The Pumping Station Inventory Update (July 2007), which identified necessary capacity and reliability improvements;
- Collection system facility plans, which identify capacity limitations in the 6 through 10-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.

Renovation

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 2011-12 Capital Budget, approximately $7.8 M or 61 percent of the Collection System Program will be spent in this subprogram. The largest renovation projects focus on multiple sites in Walnut Creek, Orinda, and Lafayette.

The FY 2001-02 CIB initiated a District-wide TV inspection program to help identify and prioritize renovation needs. In FY 2011-12, the TV inspection program will continue with expenditures estimated at $0.5M and 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 situations:

- Capacity-related overflows occur.
- There is a structural failure in a pipe.
- The District's Collection System Operations Department (CSO) maintenance records indicate a persistent and continuous problem.

Regulatory Compliance/Planning/Safety

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.

Approximately $368,000 in FY 2011-12, or approximately three percent of the Collection System program will be spent on projects in this subprogram.

Expansion

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. In FY 2011-12, construction will start on trunk sewer improvements along Pleasant Hill Road in Lafayette. The subprogram includes other capacity-related projects for a total cost of $3.4 M or 27 percent of the Collection System Program.

Pumping Stations

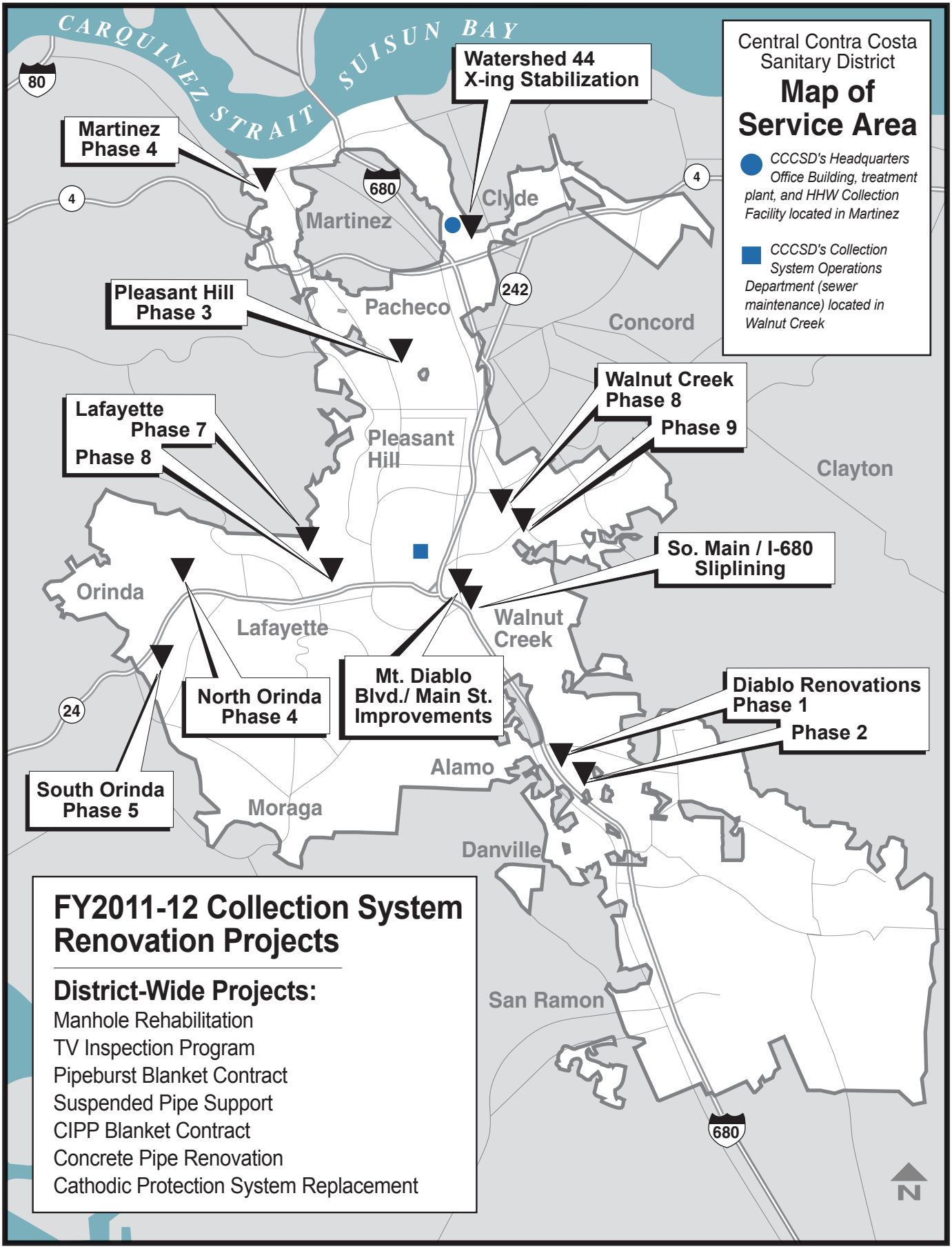
In FY 2011-12, the goal of the Pumping Stations subprogram focuses on reliability, safety and operational improvements of pumping stations. The San Ramon Pumping Station Upgrades project will provide capacity needed to handle increased flow from the Dougherty Valley, and the San Ramon Bypass Pump Replacement project will ensure pumping capacity during catastrophic failure. Approximately $1.3 M or 10 percent of the Collection System program will be spent in this subprogram during FY 2011-12.

Table CS-1: Collection System Subprogram/Project List

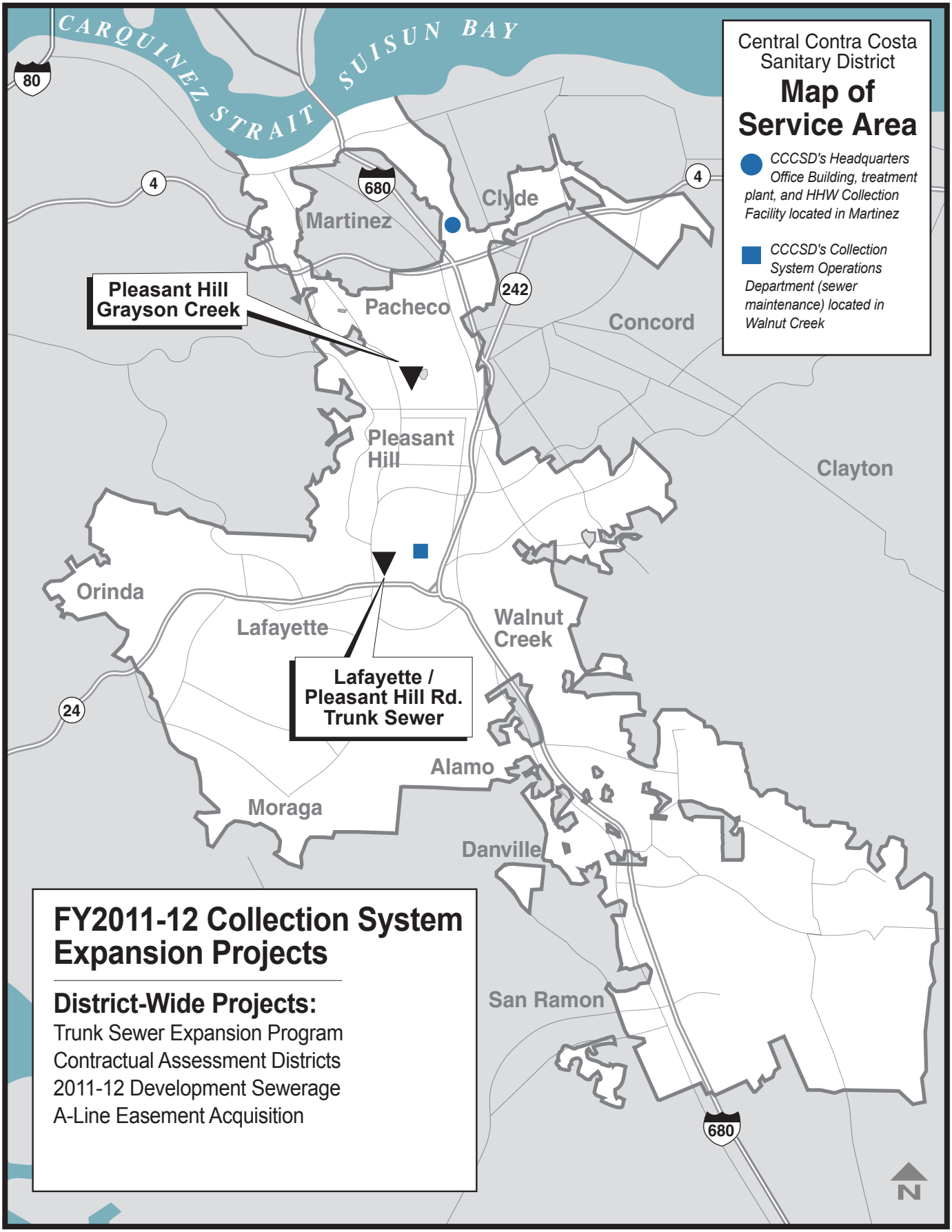
Subprogram / Project No. / Project Title		Project Manager	Estimated Total Project Expenditures	Anticipated Allocations To 06/30/11	Estimated Expenditures To 06/30/11	Anticipated Allocations FY 2011-12	Estimated Expenditures FY 2011-12
1Renovation							
none	Concrete Pipe Renovation	Antkowiak	10,000	0	0	5,000	1,000
5987	Cathodic Protection System Replacement	Antkowiak	296,000	296,000	295,000	0	1,000
5953	Diablo Renovations - ph 1	Antkowiak	2,345,000	2,345,000	2,344,000	0	1,000
5976	Diablo Renovations - ph 2	Antkowiak	2,360,000	60,000	60,000	300,000	300,000
5990	Lafayette Sewer Renovation - ph 7	Godsey	2,113,600	423,600	313,600	1,690,000	1,790,000
pCS27	Lafayette Sewer Renovation - ph 8	Antkowiak	2,052,000	1,000	1,000	250,000	250,000
5947	Manhole Rehab	Hodges	130,000	59,000	59,000	21,000	21,000
pCS26	Martinez Sewer Renovations Phase 4	Antkowiak	2,001,000	0	0	1,000	1,000
5973	North Orinda Sewer Renovations - ph 4	Antkowiak	2,150,000	50,000	50,000	300,000	300,000
5991	Pleasant Hill Sewer Renovations - ph 3	Antkowiak	2,143,300	160,000	133,300	0	10,000
pCS16	Collection System Renovation Program	Antkowiak	33,623,000	0	0	3,000	3,000
5989	South Orinda Sewer Renovations - ph 5	Rozul	2,167,800	2,167,800	367,800	0	1,800,000
pCS03	South Main/I-680 Trunk Line Sliplining	Antkowiak	405,000	5,000	5,000	350,000	350,000
5992	Walnut Creek Sewer Renovations - ph 8	Antkowiak	2,149,700	349,700	349,700	1,800,000	1,800,000
pCS25	Walnut Creek Sewer Renovations - ph 9	Antkowiak	2,103,000	11,000	3,000	292,000	300,000
none	Collection System Urgent Projects	Antkowiak	43,000	2,000	2,000	1,000	1,000
5982	Pipeburst Blanket Contract	Antkowiak	52,000	52,000	50,000	0	1,000
5999	CIPP Blanket Contract	Antkowiak	26,000	26,000	25,000	0	1,000
5955	Suspended Pipe Support	Antkowiak	26,000	25,000	25,000	1,000	1,000
pCS06	Mount Diablo Blvd Main Improvements	Godsey	1,714,000	0	0	214,000	213,000
5948	TV Inspection Program - ph 2	Antkowiak	5,000,000	500,000	500,000	500,000	500,000
pCS99	Watershed 44 Creek Xing Stabilization	Antkowiak	158,000	159,000	37,000	0	120,000
	Subprogram Total		63,068,400	6,692,100	4,620,400	5,728,000	7,765,000
2Reg. Compliance/Planning/Safety							
5997	CNWS Facility Plan	Chesler	100,000	100,000	40,000	0	55,000
5915	Collection System Modeling Upgrade	Chesler	580,000	580,000	567,000	0	13,000
5965	Collection System Planning	Chesler	988,000	910,000	808,000	78,000	180,000
5983	Ferrous Pipe Corrosion Control	Chesler	31,000	26,000	26,000	5,000	5,000
5993	Forcemain Assessment	Chesler	45,000	30,000	30,000	15,000	10,000
5962	Manhole Remote Level Monitoring	Wenslawski	510,000	150,000	110,000	100,000	100,000
6001	Martinez Facilities Plan	Foss	25,000	25,000	20,000	0	5,000
	Subprogram Total		2,279,000	1,821,000	1,601,000	198,000	368,000
3Expansion							
6484	2011-12 Development Sewerage	Miyamoto-Mills	500,000	0	0	500,000	500,000
5967	A-Line Easement Acquisition - ph 2	Gronlund	1,564,000	1,564,000	1,563,000	0	1,000
pCS34	Contractual Assessment Districts	Miyamoto-Mills	5,000,000	0	0	500,000	500,000
none	Trunk Sewer Expansion Program	Rozul	10,000	2,000	2,000	1,000	1,000
5994	Laf-P Hill Rd Trunk Sewer, Laf TR 15-100	Rozul	2,411,000	235,000	511,000	2,176,000	1,900,000
pCS22	Pleasant Hill Grayson Creek	Rozul	3,100,000	0	0	500,000	500,000
	Subprogram Total		12,585,000	1,801,000	2,076,000	3,677,000	3,402,000

4Pumping Stations

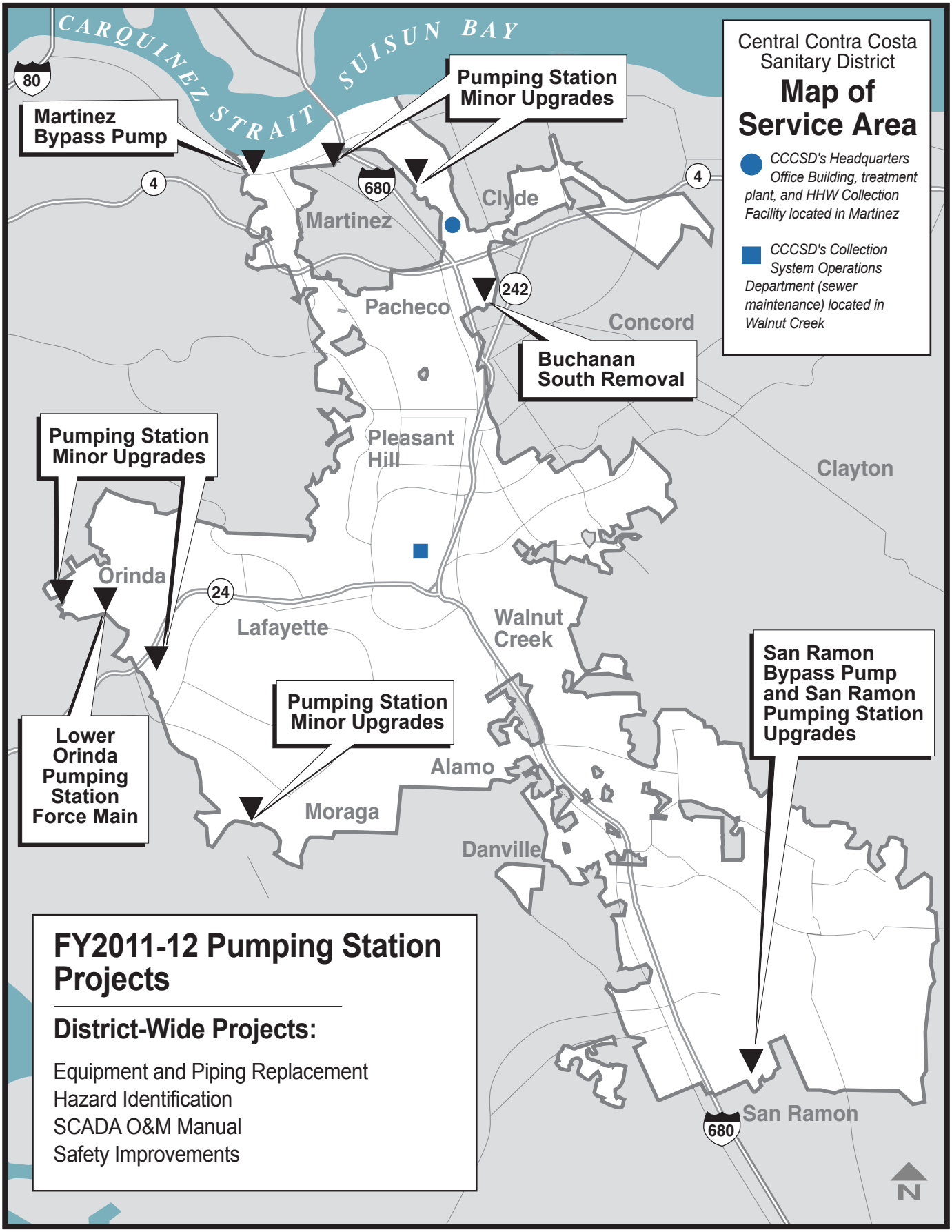
Subprogram / Project No. / Project Title		Project Manager	Estimated Total Project Expenditures	Anticipated Allocations To 06/30/11	Estimated Expenditures To 06/30/11	Anticipated Allocations FY 2011-12	Estimated Expenditures FY 2011-12
pCS11	Buchanan South Removal	Miyamoto-Mills	1,050,000	25,000	25,000	25,000	25,000
pCS24	Lower Orinda PS Force Main	Antkowiak	1,621,000	0	0	120,000	120,000
pCS10	Martinez Bypass Pump	Antkowiak	235,000	175,000	175,000	60,000	60,000
pCS31	Pump Station Hazard Identification	Antkowiak	20,000	5,000	5,000	15,000	15,000
5941	PS Equip & Piping Repl	Rhoads	770,000	375,000	375,000	70,000	70,000
pCS18	Pump Station Safety Improvements	Rhoads	600,000	0	0	60,000	60,000
pCS13	PS SCADA O&M Manual	Rhoads	20,000	0	0	20,000	20,000
pCS19	Pumping Station Minor Upgrades	Mestetsky	137,000	0	0	86,000	86,000
pCS33	San Ramon Pump Station Upgrades	Antkowiak	579,000	30,000	30,000	549,000	549,000
5995	San Ramon Bypass Pump	Antkowiak	351,000	50,000	50,000	301,000	300,000
	Subprogram Total		5,383,000	660,000	660,000	1,306,000	1,305,000
	Program Total		83,315,400	10,974,100	8,957,400	10,909,000	12,840,000


CARQUINEZ STRAIT
SUISUN BAY
80
Martinez Phase 4
Watershed 44 X-ing Stabilization
680
4
Martinez
Clyde
Pleasant Hill Phase 3
Pacheco
242
Concord
Walnut Creek Phase 8
Phase 9
Lafayette Phase 7
Phase 8
Pleasant Hill
Clayton
So. Main / I-680 Sliplining
Orinda
Lafayette
Walnut Creek
Mt. Diablo Blvd./ Main St. Improvements
North Orinda Phase 4
Diablo Renovations Phase 1
Phase 2
24
Alamo
South Orinda Phase 5
Moraga
Danville
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
FY2011-12 Collection System Renovation Projects
District-Wide Projects:
Manhole Rehabilitation
TV Inspection Program
Pipeburst Blanket Contract
Suspended Pipe Support
CIPP Blanket Contract
Concrete Pipe Renovation
Cathodic Protection System Replacement

0022A-03/11


CARQUINEZ STRAIT
SUISUN BAY
80
4
680
Martinez
Clyde
4
Pleasant Hill
Grayson Creek
Pacheco
242
Concord
Pleasant
Hill
Clayton
Orinda
Lafayette
Walnut
Creek
Lafayette /
Pleasant Hill Rd.
Trunk Sewer
24
Alamo
Moraga
Danville
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
FY2011-12 Collection System
Expansion Projects
District-Wide Projects:
Trunk Sewer Expansion Program
Contractual Assessment Districts
2011-12 Development Sewerage
A-Line Easement Acquisition

0022B-03/11


CARQUINEZ STRAIT
SUISUN BAY
80
Martinez Bypass Pump
Pumping Station Minor Upgrades
4
680
Martinez
Clyde
4
242
Pacheco
Concord
Buchanan South Removal
Pumping Station Minor Upgrades
Pleasant Hill
Clayton
Orinda
24
Lafayette
Walnut Creek
San Ramon Bypass Pump and San Ramon Pumping Station Upgrades
Lower Orinda Pumping Station Force Main
Pumping Station Minor Upgrades
Alamo
Moraga
Danville
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
FY2011-12 Pumping Station Projects
District-Wide Projects:
Equipment and Piping Replacement
Hazard Identification
SCADA O&M Manual
Safety Improvements

0022C-03/11

Cathodic Protection Systems Replacement

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

Project Purpose:
This project will complete 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. As part of this project, a master plan was updated and includes recommendations for required maintenance, replacement and/or addition of new cathodic protection for facilities requiring such protection. The master plan will include cathodic protection implementation and monitoring recommendations.

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 will be updated in 2011.

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*	*Total Cost*
Planning	-	-	$0
Design	07/01/2006	02/01/2007	$296,000
Construction	02/01/2007	06/17/2012	$0
		Total:	**$296,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Cathodic Protection System Replacement / 1
Project Number/Filename: 5987 / CS_cathodic
Project Manager/% Expansion: Antkowiak / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	151,000	1,000	0	0	0
B. Anticipated Allocations	296,000	0	0	0	0	0
C. Authorized this Year	296,000	151,000	1,000	0	0	0
D. Estimated Expenditures	(145,000)	(150,000)	(1,000)	0	0	0
E. Estimated Carry-over	151,000	1,000	0	0	0	0

Collection System Renovation Program

Project Manager, Department/Division:
Andrew Antkowiak, 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 2011-12, the renovation program will construct the Walnut Creek Sewer Renovations, Phase 8 project in Walnut Creek, the South Orinda Sewer Renovations, Phase 5 project in Orinda, and the Lafayette Sewer Renovations, Phase 7 project in Lafayette. In addition, design will begin or continue on North Orinda Phase 4, Walnut Creek Phase 9, Lafayette Phase 8, Diablo Phase 2, Pleasant Hill Phase 2, the South Main Sliplining project in Walnut Creek, Mount Diablo Boulevard

Main Sewer Improvements in Walnut Creek and Watershed 44 Stabilization across the Walnut Creek Channel.

Blanket contracts for pipe bursting and cured-in-place lining will be bid and construction started this fiscal year. The blankets 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

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2011	06/30/2021	$33,623,000
		Total:	**$33,623,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	3,000	100,000	100,000	10,000	10,000	100,000
C. Authorized this Year	3,000	100,000	100,000	10,000	10,000	100,000
D. Estimated Expenditures	(3,000)	(100,000)	(100,000)	(10,000)	(10,000)	(100,000)
E. Estimated Carry-over	0	0	0	0	0	0

Diablo Sewer Renovations, Phase 1

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

Project Description:
The Diablo Sewer Renovations, Phase 1 project will replace/renovate approximately 12,000 feet of 6-inch and 8-inch sewers in the public right of way and easements. The project is scheduled to start construction in FY 2010-11. Sites are located in the Diablo and Danville area.

Project History:
Diablo sewers are some of the oldest and least accessible sewers in the collection system. They are shallow in depth and generally in poor condition.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	06/01/2008	10/01/2008	$0
Design	10/01/2008	05/01/2010	$594,000
Construction	05/01/2010	08/30/2011	$1,751,000
		Total:	**$2,345,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Diablo Renovations - ph 1 / 1
Project Number/Filename: 5953 / csr_diablo1
Project Manager/% Expansion: Antkowiak / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	(224,000)	1,000	0	0	0
B. Anticipated Allocations	370,000	1,975,000	0	0	0	0
C. Authorized this Year	370,000	1,751,000	1,000	0	0	0
D. Estimated Expenditures	(594,000)	(1,750,000)	(1,000)	0	0	0
E. Estimated Carry-over	(224,000)	1,000	0	0	0	0

Diablo Sewer Renovations, Phase 2

Project Manager, Department/Division:
Michael Penny, 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 diverting flow into an existing line that is 16-ft deep.

Project Description:
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 2012-13.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	08/01/2009	06/01/2009	$0
Design	06/01/2009	06/01/2012	$60,000
Construction	06/01/2012	06/17/2013	$2,300,000
		Total:	**$2,360,000**

Estimated expenditures this FY are: **$300,000**
Anticipated Allocations this FY are: **$300,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	10,000	50,000	300,000	2,000,000	0	0
C. Authorized this Year	10,000	50,000	300,000	2,000,000	0	0
D. Estimated Expenditures	(10,000)	(50,000)	(300,000)	(2,000,000)	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Lafayette Sewer Renovations, Phase 7

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

Project Purpose:
The Lafayette Sewer Renovations, Phase 7 project will replace/rehabilitate approximately 13,000 feet of 6 and 8-inch sewer pipe at several different sites throughout the City of Lafayette and neighboring areas. The design of this project started in FY 2009-10 and construction is scheduled for FY 2011-12.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2009	06/01/2011	$313,600
Construction	06/01/2011	07/15/2012	$1,800,000
		Total:	**$2,113,600**

Estimated expenditures this FY are: **$1,790,000**
Anticipated Allocations this FY are: **$1,690,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Lafayette Sewer Renovation - ph 7 / 1
Project Number/Filename: 5990 / csr_laf7
Project Manager/% Expansion: Godsey / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	206,000	110,000	10,000	0	0
B. Anticipated Allocations	270,000	154,000	1,690,000	0	0	0
C. Authorized this Year	270,000	360,000	1,800,000	10,000	0	0
D. Estimated Expenditures	(64,000)	(250,000)	(1,790,000)	(10,000)	0	0
E. Estimated Carry-over	206,000	110,000	10,000	0	0	0

Lafayette Sewer Renovations, Phase 8

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

Project Purpose:
The Lafayette Sewer Renovations, Phase 8 project will replace/rehabilitate approximately 10,000 feet of 6 and 8-inch sewer pipe at several different sites throughout the City of Lafayette and neighboring areas. The design of this project will start in FY 2011-12 with construction scheduled for FY 2012-13.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	06/01/2011	$251,000
Construction	06/01/2012	07/01/2013	$1,801,000
		Total:	**$2,052,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Lafayette Sewer Renovation - ph 8 / 1
Project Number/Filename: pCS27 / csr_laf8
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	1,000	250,000	1,800,000	1,000	0	0
C. Authorized this Year	1,000	250,000	1,800,000	1,000	0	0
D. Estimated Expenditures	(1,000)	(250,000)	(1,800,000)	(1,000)	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Manhole Rehabilitation Project

Project Manager:
Nathan Hodges, Engineering/Capital Projects

Project Description:
The District has approximately 30,000 active manhole structures throughout the service area. Some of these manholes are in various stages of degradation from corrosion, root intrusion, excessive infiltration, structural failure, etc.

This project will evaluate and prepare recommendations and specifications for demonstration of the various repair products available in the marketplace. The demonstration projects may be included in upcoming renovation projects.

Project Location:
Throughout the service area

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	01/01/2009	07/01/2009	$64,000
Construction	07/01/2009	06/17/2014	$66,000
		Total:	**$130,000**

Estimated expenditures this FY are: **$21,000**
Anticipated Allocations this FY are: **$21,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Manhole Rehab / 1
Project Number/Filename: 5947 / csr_manhole_rehab
Project Manager/% Expansion: Hodges / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	2,000	(2,000)	0	0	0
B. Anticipated Allocations	10,000	17,000	32,000	21,000	30,000	20,000
C. Authorized this Year	10,000	19,000	30,000	21,000	30,000	20,000
D. Estimated Expenditures	(8,000)	(21,000)	(30,000)	(21,000)	(30,000)	(20,000)
E. Estimated Carry-over	2,000	(2,000)	0	0	0	0

Martinez Sewer Renovations, Phase 4

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

Project Description:
The Martinez Sewer Renovations, Phase 4 project will replace or rehabilitate approximately 10,000 feet of 6 and 8-inch sewer pipe located in the public right of way and easements. Design will start in FY 2011-12 with major construction in FY 2013-14.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2011	07/01/2012	$201,000
Design	07/01/2012	07/01/2013	$0
Construction	07/01/2013	06/30/2014	$1,800,000
		Total:	**$2,001,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Martinez Sewer Renovations Phase 4 / 1
Project Number/Filename: pCS26 / csr_Martinez4
Project Manager/% Expansion: Antkowiak / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	1,000	200,000	1,800,000	0	0	0
C. Authorized this Year	1,000	200,000	1,800,000	0	0	0
D. Estimated Expenditures	(1,000)	(200,000)	(1,800,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Mount Diablo Boulevard/Main Street Improvements

Project Manager, Department/Division:
Tom Godsey, Engineering/Capital Projects

Project Purpose:
The Mount Diablo Boulevard/Main Street Improvements project will consist of renovating approximately 4,000 feet of 6 and 8-inch sewers and upsizing the pipes as needed in the Walnut Creek downtown area. These pipelines were identified in the Downtown Walnut Creek Facilities Plan completed by District staff. The design of the project is scheduled to start in FY 2011-12 with construction in FY 2012-13.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2011	07/01/2012	$0
Design	07/01/2012	04/01/2013	$177,400
Construction	04/01/2013	07/17/2013	$1,536,600
		Total:	**$1,714,000**

Estimated expenditures this FY are: **$213,000**
Anticipated Allocations this FY are: **$214,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Mount Diablo Blvd Main Improvements / 1
Project Number/Filename: pCS06 / trunk_MtDiabloBlvd
Project Manager/% Expansion: Godsey / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	1,000	1,000	0	0	0
B. Anticipated Allocations	214,000	1,500,000	0	0	0	0
C. Authorized this Year	214,000	1,501,000	1,000	0	0	0
D. Estimated Expenditures	(213,000)	(1,500,000)	(1,000)	0	0	0
E. Estimated Carry-over	1,000	1,000	0	0	0	0

North Orinda Sewer Renovations, Phase 4

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

Project Purpose:
The North Orinda Sewer Renovations, Phase 4 project will replace/rehabilitate approximately 10,000 feet of 6 and 8-inch sewers at several different sites throughout the city of Orinda. The design started in FY 2010-11 with construction scheduled for FY 2012-13.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	08/01/2010	07/01/2012	$350,000
Construction	07/01/2012	07/15/2013	$1,800,000
		Total:	**$2,150,000**

Estimated expenditures this FY are: **$300,000**
Anticipated Allocations this FY are: **$300,000**

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: Antkowiak / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	0	0	1,000	0	0
B. Anticipated Allocations	50,000	300,000	1,800,000	0	0	0
C. Authorized this Year	50,000	300,000	1,800,000	1,000	0	0
D. Estimated Expenditures	(50,000)	(300,000)	(1,799,000)	(1,000)	0	0
E. Estimated Carry-over	0	0	1,000	0	0	0

Pleasant Hill Sewer Renovations, Phase 2

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

Project Description:
The Pleasant Hill Sewer Renovations, Phase 2 project will replace/rehabilitate approximately 10,000 feet of 6 and 8-inch sewer pipe in the public right of way and easements throughout the city Pleasant Hill. Design of this project will start in FY 2010-11 with construction scheduled in FY 2013-14.

This project will be coordinated with the Grayson Creek trunk sewer project, which is in the Expansion subprogram.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	12/01/2008	05/01/2010	$0
Design	05/01/2010	07/01/2013	$343,300
Construction	07/01/2013	06/30/2014	$1,800,000
		Total:	**$2,143,300**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pleasant Hill Sewer Renovations - ph 3 / 1
Project Number/Filename: 5991 / csr_ph2
Project Manager/% Expansion: Antkowiak / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	39,000	28,000	27,000	17,000	0
B. Anticipated Allocations	160,000	0	0	0	183,000	1,800,000
C. Authorized this Year	160,000	39,000	28,000	27,000	200,000	1,800,000
D. Estimated Expenditures	(121,000)	(11,000)	(1,000)	(10,000)	(200,000)	(1,800,000)
E. Estimated Carry-over	39,000	28,000	27,000	17,000	0	0

South Orinda Sewer Renovations, Phase 5

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

Project Description:
The South Orinda Sewer Renovations, Phase 5 project will replace/rehabilitate approximately 12,000 feet of 6-inch through 8-inch sewer pipe at several different sites in Orinda and neighboring areas. The work will be performed in both the public right of way and easements. The design of the project started in FY 2010-11 with construction in FY 2011-12.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	05/01/2009	03/01/2011	$317,800
Construction	03/01/2011	11/01/2011	$1,850,000
		Total:	**$2,167,800**

Estimated expenditures this FY are: **$1,800,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: South Orinda Sewer Renovations - ph 5 / 1
Project Number/Filename: 5989 / csr_so_orinda5
Project Manager/% Expansion: Rozul / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	250,000	442,000	1,800,000	0	0
B. Anticipated Allocations	260,000	300,000	1,608,000	0	0	0
C. Authorized this Year	260,000	550,000	2,050,000	1,800,000	0	0
D. Estimated Expenditures	(10,000)	(108,000)	(250,000)	(1,800,000)	0	0
E. Estimated Carry-over	250,000	442,000	1,800,000	0	0	0

South Main/I-680 Trunk Line Sliplining

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

Project Description:
This project will renovate existing deteriorated corrugated metal pipelines located in South Main between Rudgear Road and the I680 overpass in Walnut Creek. This is a large diameter sliplining project scheduled for construction in FY 2011-12.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2010	06/30/2011	$0
Design	06/30/2011	12/03/2011	$55,000
Construction	12/03/2011	06/17/2013	$350,000
		Total:	**$405,000**

Estimated expenditures this FY are: **$350,000**
Anticipated Allocations this FY are: **$350,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: South Main/I-680 Trunk Line Sliplining / 1
Project Number/Filename: pCS03 / csr_SouthMainSlip
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	350,000	50,000	0	0	0
C. Authorized this Year	5,000	350,000	50,000	0	0	0
D. Estimated Expenditures	(5,000)	(350,000)	(50,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Walnut Creek Renovations, Phase 8

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

Project Purpose:
The Walnut Creek Sewer Renovations, Phase 8 project will replace/rehabilitate approximately 10,000 feet of 6 through 8-inch sewer pipe at several different sites throughout the city of Walnut Creek, unincorporated county and other neighboring areas. The project is scheduled to start construction in FY 2011-12.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2008	07/01/2011	$449,700
Construction	07/01/2011	06/30/2012	$1,700,000
		Total:	**$2,149,700**

Estimated expenditures this FY are: **$1,800,000**
Anticipated Allocations this FY are: **$1,800,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Walnut Creek Sewer Renovations - ph 8 / 1
Project Number/Filename: 5992 / csr_wc8
Project Manager/% Expansion: Antkowiak / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	190,000	150,000	0	0	0
B. Anticipated Allocations	200,000	0	150,000	1,800,000	0	0
C. Authorized this Year	200,000	190,000	300,000	1,800,000	0	0
D. Estimated Expenditures	(10,000)	(40,000)	(300,000)	(1,800,000)	0	0
E. Estimated Carry-over	190,000	150,000	0	0	0	0

Walnut Creek Renovations, Phase 9

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

Project Purpose:
The Walnut Creek Sewer Renovations, Phase 9 project will replace/rehabilitate approximately 10,000 feet of 6-inch through 12-inch sewer pipe at several different sites throughout the City of Walnut Creek, unincorporated County and other neighboring areas. Several spot repairs may be included in the project. The project is scheduled for construction in FY 2012-13.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2009	01/01/2011	$0
Design	01/01/2011	07/01/2012	$303,000
Construction	07/01/2012	07/15/2013	$1,800,000
		Total:	**$2,103,000**

Estimated expenditures this FY are: **$300,000**
Anticipated Allocations this FY are: **$292,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Walnut Creek Sewer Renovations - ph 9 / 1
Project Number/Filename: pCS25 / csr_wc9
Project Manager/% Expansion: Antkowiak / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	8,000	8,000	0	1,000	0
B. Anticipated Allocations	10,000	1,000	292,000	1,800,000	0	0
C. Authorized this Year	10,000	9,000	300,000	1,800,000	1,000	0
D. Estimated Expenditures	(2,000)	(1,000)	(300,000)	(1,799,000)	(1,000)	0
E. Estimated Carry-over	8,000	8,000	0	1,000	0	0

Collection System Urgent Projects Program

Project Manager, Department/Division:
Andrew Antkowiak, 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*	*Total Cost*
Planning	-	-	$0
Design	07/01/2009	05/01/2010	$43,000
Construction	05/01/2010	06/17/2013	$0
		Total:	**$43,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Collection System Urgent Projects / 1
Project Number/Filename: none / csu_
Project Manager/% Expansion: Antkowiak / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	1,000	1,000	1,000	40,000	0	0
C. Authorized this Year	1,000	1,000	1,000	40,000	0	0
D. Estimated Expenditures	(1,000)	(1,000)	(1,000)	(40,000)	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Blanket Contract for Pipebursting

Project Manager:
Andrew Antkowiak, 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 pipebursting work.

Project Location:
Throughout the service area.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	08/01/2010	$0
Construction	08/01/2010	08/31/2012	$52,000
		Total:	**$52,000**

Estimated expenditures this FY are: **$1,000**
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: Antkowiak / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	2,000	1,000	0	0	0
B. Anticipated Allocations	52,000	0	0	0	0	0
C. Authorized this Year	52,000	2,000	1,000	0	0	0
D. Estimated Expenditures	(50,000)	(1,000)	(1,000)	0	0	0
E. Estimated Carry-over	2,000	1,000	0	0	0	0

Blanket Contract for CIPP

Project Manager:
Andrew Antkowiak, 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*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	08/14/2010	$0
Construction	08/14/2010	06/30/2012	$26,000
		Total:	**$26,000**

Estimated expenditures this FY are: **$1,000**
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: Antkowiak / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	1,000	0	0	0	0
B. Anticipated Allocations	26,000	0	0	0	0	0
C. Authorized this Year	26,000	1,000	0	0	0	0
D. Estimated Expenditures	(25,000)	(1,000)	0	0	0	0
E. Estimated Carry-over	1,000	0	0	0	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 will inspect and evaluate the 40 to 50 pipes suspended from bridges and will make any repairs and modifications necessary to the support systems as needed. If needed, the project is scheduled for construction in FY 2011-12. 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*	*Total Cost*
Planning	07/01/2010	05/01/2011	$0
Design	05/01/2011	05/01/2012	$0
Construction	05/01/2012	06/30/2012	$26,000
		Total:	**$26,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Suspended Pipe Support / 1
Project Number/Filename: 5955 / suspended_pipe_support
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	25,000	1,000	0	0	0	0
C. Authorized this Year	25,000	1,000	0	0	0	0
D. Estimated Expenditures	(25,000)	(1,000)	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Concrete Pipe Renovation

Project Manager, Department/Division:
Andrew Antkowiak, 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*	*Total Cost*
Planning	-	-	$0
Design	-	-	$10,000
Construction	07/01/2011	06/17/2021	$0
		Total:	**$10,000**

Estimated expenditures this FY are: **$1,000**
Anticipated Allocations this FY are: **$5,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Concrete Pipe Renovation / 1
Project Number/Filename: none / con_co
Project Manager/% Expansion: Antkowiak / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	4,000	3,000	2,000	1,000	0
B. Anticipated Allocations	5,000	0	0	0	0	1,000
C. Authorized this Year	5,000	4,000	3,000	2,000	1,000	1,000
D. Estimated Expenditures	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
E. Estimated Carry-over	4,000	3,000	2,000	1,000	0	0

TV Inspection Program, Phase 2

Project Manager, Department/Division:
Tom Godsey, Engineering/Capital Projects

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. The inspection data will be used to organize and prioritize sewer renovation projects as well as add to the District's data regarding pipe type performance.

Project Description:
The TV Inspection Program is a large scale, multi-year effort to CCTV inspect the entire CCCSD collection system. A publicly-bid CCTV inspection contract utilizing digital imaging and database software is awarded for each year. The contractor's 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. The initial emphasis of Phase 2 will be placed on sewers in Lafayette, Orinda and Walnut Creek. Phase 2 is a 10 year program that started in FY 2010-11.

Project Location:
The entire collection system

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2010	06/17/2020	$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: TV Inspection Program - ph 2 / 1
Project Number/Filename: 5948 / TVI_2
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	500,000	500,000	500,000	500,000	500,000	500,000
C. Authorized this Year	500,000	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	0	0	0	0	0	0

Watershed 44 Creek Crossing Stabilization

Project Manager, Department/Division:
Andrew Antkowiak, 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 2010-11 with major construction, if needed, in FY 2011-12.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	01/01/2010	07/01/2010	$0
Design	07/01/2010	07/01/2011	$37,000
Construction	07/01/2011	05/30/2013	$121,000
		Total:	**$158,000**

Estimated expenditures this FY are: **$120,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	127,000	122,000	2,000	0	0
B. Anticipated Allocations	159,000	0	0	(1,000)	0	0
C. Authorized this Year	159,000	127,000	122,000	1,000	0	0
D. Estimated Expenditures	(32,000)	(5,000)	(120,000)	(1,000)	0	0
E. Estimated Carry-over	127,000	122,000	2,000	0	0	0

Concord Naval Weapons Station Facilities Plan

Project Manager, Department/Division:
Gail Chesler, PhD, Engineering/Environmental Services

Project Purpose:
This project will be used to identify sewer system capacity deficiencies, and wastewater facilities necessary to serve the extensive development being planned at the Concord Naval Weapons Station (CNWS) site as part of the Concord Community Reuse Project (CCRP). This analysis is required to ensure that projects are identified for timely inclusion in the Capital Plan and that the CCRP's appropriate contribution to the cost of such facilities can be determined.

Project History:
When the CNWS was an active military facility, tens of thousands of gallons per day of wastewater collected by its private collection system flowed into CCCSD facilities in North Concord, passing through three pumping stations and several miles of sewer, before reaching the treatment plant for cleaning and disposal. For several years since the Federal government identified its intent to close most of the CNWS and transfer control of the property to the City of Concord, the City has been conducting an extensive planning process for reuse of the CNWS as a new community on the northeast side of Concord. Current plans call for 28,900 people, 12,300 housing units and more than 8.5 million square feet of commercial, institutional, and other community facilities. Through that planning process, CCCSD has been identified as the agency that would provide wastewater and recycled water services to the project. A preferred development option has been chosen and staff has begun planning the pipe network that will convey an estimated 2.7 million gallons per day (mgd) ADWF of sewage from the project area to the treatment plant and convey recycled water from the Treatment Plant back to the project.

Project Description:
Preliminary evaluations are being made to determine the most appropriate off-site network solutions to the sewerage needs of the new community. Consideration will be given to the quantity of wastewater likely to flow directly into CCCSD's North Concord facilities versus the flow expected to be conveyed through City of Concord sewers and their connection to CCCSD facilities near the former Concord Pumping Station. Planning level cost estimates will be presented for recommended improvements and a division of financial responsibilities will be suggested. On-site planning and development of sewerage will be done by the City of Concord and its project developer(s), with CCCSD staff reviewing to assure compliance with our requirements and specifications.

A separate project is included in the District's Capital Improvement Plan for consideration of the recycled water aspects of this project.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2010	10/30/2012	$100,000
		Total:	**$100,000**

Estimated expenditures this FY are: **$55,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: CNWS Facility Plan / 2
Project Number/Filename: 5997 / CNWS_fac
Project Manager/% Expansion: Chesler / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	60,000	5,000	0	0	0
B. Anticipated Allocations	100,000	0	0	0	0	0
C. Authorized this Year	100,000	60,000	5,000	0	0	0
D. Estimated Expenditures	(40,000)	(55,000)	(5,000)	0	0	0
E. Estimated Carry-over	60,000	5,000	0	0	0	0

Collection System Modeling Upgrade

Project Manager, Department/Division:
Gail Chesler, PhD, Engineering/Environmental Services

Project Purpose:
Complete the implementation of ArcSNAP (the District's Sewer Network Analysis Program). Training will be provided for rotating staff or assistant engineers.

Project History:
At the completion of the 1985-86 Collection System Master Plan, the District obtained and continued to use the hydraulic modeling software used by the consultant. Over the years, it was used frequently to assess impacts from large developments and to predict flows in sewers and pumping stations during design.

In 2004, the District completed the revision of the software that performs these functions. A completed version of the ArcSNAP model has been used productively since early 2004. Hydraulic grade line functionality was added in FY 2004-05, and additional user training provided. In FY 2005-06, in FY 2007-08, and again in FY 2009-10, the data was updated by electronically extracting the pipe network and parcel data from in-house Geomedia and HTE databases. The HTE data was not updated in the FY 2009-10 iteration and will have been included in FY 2010-11. The Geomedia database contains the pipe and node locations and HTE provides flow and consumption information. These are the primary sources of raw data used by ArcSNAP to predict and route flows.

Project Description:
An on-going task in this project is incorporation of data from the District's Flow Monitoring Program within the ArcSNAP's flow analysis. The hydraulic model has been exercised to confirm that flows were accurately predicted. In addition, analysis of these results is incorporated in an allied project, the Collection System Master Plan Update.

This project has implemented a new version of the large set of sequentially-linked HTE queries that has been recoded using revised file and field identifiers. During FY 2011-12, the data will again be reloaded. A new process using native-mode SHP files was implemented in FY 2010-11; a process for accomplishing this reload every four months will be initiated. An ongoing problem related to the greater need for slope information will be addressed.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	01/01/2003	02/01/2003	$181,000
Design	02/01/2003	09/01/2004	$327,000
Construction	09/01/2004	06/17/2013	$72,000
		Total:	**$580,000**

Estimated expenditures this FY are: **$13,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Collection System Modeling Upgrade / 2
Project Number/Filename: 5915 / cs_model
Project Manager/% Expansion: Chesler / 20

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	7,000	13,000	0	0	0
B. Anticipated Allocations	561,000	19,000	0	0	0	0
C. Authorized this Year	561,000	26,000	13,000	0	0	0
D. Estimated Expenditures	(554,000)	(13,000)	(13,000)	0	0	0
E. Estimated Carry-over	7,000	13,000	0	0	0	0

Collection System Planning

Project Manager, Department/Division:
Gail Chesler, PhD, 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 five 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*	*Total Cost*
Planning	07/01/2006	06/17/2009	$988,000
Design	-	-	$0
Construction	06/17/2009	06/17/2012	$0
		Total:	**$988,000**

Estimated expenditures this FY are: **$180,000**
Anticipated Allocations this FY are: **$78,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Collection System Planning / 2
Project Number/Filename: 5965 / CS_plng
Project Manager/% Expansion: Chesler / 20

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	112,000	102,000	0	0	0
B. Anticipated Allocations	730,000	180,000	78,000	0	0	0
C. Authorized this Year	730,000	292,000	180,000	0	0	0
D. Estimated Expenditures	(618,000)	(190,000)	(180,000)	0	0	0
E. Estimated Carry-over	112,000	102,000	0	0	0	0

Ferrous Pipe Corrosion Control

Project Manager, Department/Division:
Gail Chesler, PhD, Engineering/Environmental Services

Project Purpose:
Corrosion is a significant issue for collection systems maintenance, and this project has focused on the District's ferrous pipes.

Project History:
A great deal of work has already been done to assess corrosion issues with regard to pumping stations. In FY 2009-10, this project examined reports collected with the ongoing CCTV examination of the entire District gravity network.

Those reports represented 75% of the District's pipelines.

Project Description:
There are two remaining tasks for this project. First, when the CCTV of the entire system is complete, the records for the final 25% of the pipeline will be queried to determine if additional findings of corrosion appear. Second, if any pipe is located from these records for which external corrosion is indicated, field work to perform an external examination may be attempted.

Project Location:
Throughout the District

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	03/01/2009	09/01/2009	$31,000
Design	-	-	$0
Construction	09/01/2009	10/02/2011	$0
		Total:	**$31,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Ferrous Pipe Corrosion Control / 2
Project Number/Filename: 5983 / ferrousPipes
Project Manager/% Expansion: Chesler / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	14,000	5,000	0	0	0
B. Anticipated Allocations	15,000	11,000	0	5,000	0	0
C. Authorized this Year	15,000	25,000	5,000	5,000	0	0
D. Estimated Expenditures	(1,000)	(20,000)	(5,000)	(5,000)	0	0
E. Estimated Carry-over	14,000	5,000	0	0	0	0

Force Main Assessment

Project Manager, Department/Division:
Gail Chesler, PhD, Engineering/Environmental Services

Project Purpose:
The District owns and operates approximately 18 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. Spin-off projects to fix whatever issues are found will be initiated.

Project History:
In some prior collection system projects, force main condition assessments are reported to have been conducted. Examples are the Moraga Pumping Station and Orinda Crossroads Pumping Station. These are likely more than 10 years old, and whatever records could be located have been reported in the initial document (2010).

Project Description:
In the current project, the physical inventory of force mains has been completed. In FY 2010-11, field methods were evaluated that could be used to conduct assessments of the force mains found to be of greatest interest or greatest risk. The available methods are expensive, so an initial phase of CCTV was conducted. Poor results were achieved because of the amount of debris that kept CCTV from working.

Investigations using CCTV after the storms of winter will be conducted to confirm or deny the flushing of debris from Moraga and Orinda Crossroads PSs. It is possible that a better CCTV sled (with big tires) might make it possible to examine the force mains. The project will be pursued until a satisfactory method of examining the force mains has been found.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$45,000
Design	-	-	$0
Construction	07/01/2009	06/30/2013	$0
		Total:	**$45,000**

Estimated expenditures this FY are: **$10,000**
Anticipated Allocations this FY are: **$15,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	(5,000)	0	5,000	0	0
B. Anticipated Allocations	15,000	15,000	15,000	0	0	0
C. Authorized this Year	15,000	10,000	15,000	5,000	0	0
D. Estimated Expenditures	(20,000)	(10,000)	(10,000)	(5,000)	0	0
E. Estimated Carry-over	(5,000)	0	5,000	0	0	0

Manhole Remote Level Monitoring

Project Manager, Department/Division:
Bill Echols, Collection System Operations Department

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*	*Total Cost*
Planning	07/01/2009	10/01/2009	$0
Design	10/01/2009	07/01/2010	$10,000
Construction	07/01/2010	06/30/2015	$500,000
		Total:	**$510,000**

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

Project Fiscal Year Allocation/Expenditure Table:

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

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	40,000	40,000	40,000	40,000	40,000
B. Anticipated Allocations	50,000	100,000	100,000	100,000	100,000	60,000
C. Authorized this Year	50,000	140,000	140,000	140,000	140,000	100,000
D. Estimated Expenditures	(10,000)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)
E. Estimated Carry-over	40,000	40,000	40,000	40,000	40,000	0

Martinez Facilities Plan

Project Manager, Department/Division:
Richard Foss, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to analyze the sewers upstream of the Martinez Pump Station to locate any capacity deficiencies or problematic pipe that is in need of replacement.

Project History:
One of the tasks the Planning Department undertakes is to periodically produce facility plans for the various cities within the District's service area. The last time Martinez has had a facilities plan produced was in 1989 and thus it is in need of an update.

Project Description:
The goal of this project is to develop a plan with a prioritized list of pipes to be renovated/upsized while simultaneously maximizing the benefit of the District and the public. Among other things to be considered, this project will investigate moving pipes on parcels into the public easement and deepening/steepening existing alignments.

Project Location:
The location of the project encompasses the sewer shed upstream of the Martinez Pump Station.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	02/01/2011	12/01/2011	$25,000
Design	-	-	$0
Construction	12/01/2011	12/30/2011	$0
		Total:	**$25,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Martinez Facilities Plan / 2
Project Number/Filename: 6001 / Mtz_Fac_Plan
Project Manager/% Expansion: Foss / 0

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

2011-12 Development Sewerage

Project Manager, Department/Division:
Jarred Miyamoto-Mills, 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. Occasionally, a new manhole is installed, an existing main sewer is renovated, or an easement is obtained under this project when the Development Services Section manages the work.

Project History:
The District, since its formation in 1946, has required 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 Specification for Design and Construction. Prior to 1991-92, the cost of this staff effort was not capitalized. However, since 1992-93, this work has been funded from the Sewer Construction Fund, since it results directly in District capital assets (completed main sewers, easements and permanent records).

Project Description:
Several District staff activities are directly involved when developer-contributed sewer projects are designed and constructed. These activities are:

- Development Review by the Planning Section;
- Plan Review, Easement Acquisition/Documentation, Permitting and Main Line Inspection by the Development Services Section;
- Mapping and preparation of Record Drawings by the Engineering Support Group; and
- Television Inspection by the Collection System Operations Department staff.

A District project is established to properly account for the cost of these activities.

Project Location:
Wherever development occurs

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$45,000
Design	-	-	$140,000
Construction	07/01/2011	06/30/2012	$315,000
		Total:	**$500,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: 2011-12 Development Sewerage / 3
Project Number/Filename: 6484 / 11-12DEVPR
Project Manager/% Expansion: Miyamoto-Mills / 0

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

A-Line Easement Acquisition, Phase 2

Project Manager, Department/Division:
Stephanie Gronlund, Engineering/Environmental Services

Project Purpose:
This project will secure property rights for existing and future segments of the A-Line Relief Interceptor, Walnut Creek Bypass, existing A-Line and Main Trunk No. 1, and the San Ramon Valley Trunk Sewer. A majority of the proposed easement alignment is within the Ironhorse Trail, formerly known as the Southern Pacific Railroad corridor, and the Walnut Creek channel.

Project History:
Easement Amendments within Iron Horse Corridor:
Right of way was acquired for the A-Line Relief Interceptor and San Ramon Trunk Sewer along the Southern Pacific Railroad corridor in 1985 from Contra Costa County. At that time the exact locations of existing sewers along this alignment were not known and the alignments of the future A-Line Relief Interceptor and San Ramon Trunk Sewer were not determined. The easement documents were written so that the property descriptions could be modified when the exact location of existing sewers and sufficient engineering had been done to determine the future alignments. The pre-design was completed in 2003, and on November 6, 2008, the District, Contra Costa County and Contra Costa County Redevelopment Agreement entered into a Memorandum of Understanding (MOU) detailing the process for recording the amended grants of easements. The current project work includes physically locating the existing sewers along the Southern Pacific Railroad corridor and creating new legal descriptions for the amended grants of easements. The field survey and mapping work are nearly complete, and easement amendments will be recorded per the MOU process.

Easement Purchase Agreement - Walnut Creek Channel:
The future A-Line Relief Interceptor for Phases 2B and 2C will be located within the Walnut Creek Channel, which is owned by Contra Costa County Flood Control District (Flood Control). Although pre-design is done and alignment is set, construction work is not scheduled within the next ten years. Since this is a long-term project, County staff has requested District not to pursue easements at this time, since their staffing levels and resources are limited; instead, the District will purse an easement purchase agreement with Flood Control, which is less onerous for County staff to administer, and will grant the District the right of first refusal in the event another utility company desires to encroach upon the future alignment.

Project Description:
This project will complete the amended grants of easements for the Southern Pacific Railroad corridor purchased form the County in 1985, and will reserve the alignment for the future relief interceptor within the Walnut Creek Channel.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2006	12/31/2008	$1,564,000
Construction	12/31/2008	06/30/2012	$0
		Total:	**$1,564,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: A-Line Easement Acquisition - ph 2 / 3
Project Number/Filename: 5967 / A-Line_ease_acq2
Project Manager/% Expansion: Gronlund / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	477,000	1,000	0	0	0
B. Anticipated Allocations	1,540,000	24,000	0	0	0	0
C. Authorized this Year	1,540,000	501,000	1,000	0	0	0
D. Estimated Expenditures	(1,063,000)	(500,000)	(1,000)	0	0	0
E. Estimated Carry-over	477,000	1,000	0	0	0	0

Contractual Assessment Districts

Project Manager, Department/Division:
Curtis Swanson, 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. Each property owner's share of the cost of a sewer extension project can be spread over time instead of a lump sum payment being made by the owner at the time of construction. CADs are applicable to small groups of properties. A minimum of five properties are required to initiate the formation of a CAD.

The District offered CADs to finance sewer main extensions from 1997 to 2004. During this seven-year period, the District financed 23 CADs at a cost of $3,630,000. The participants of each CAD are repaying the District over a ten-year term at interest rates ranging from 5.5% to 7.5%. By mid-2010, $2,510,000 had been repaid and the outstanding principal was $1,120,000.

In 2004, District's budget constraints and the availability of homeowner credit alternatives led the Board to discontinue forming new CADs. In 2010, renewed interest in a CAD program led the District to reestablish it on a case-by-case basis, with the Board directing use of the District's Sewer Construction Fund reserves for financing CADs. Staff has also investigated the use of loans to fund some of the potential CADs or refinancing of the outstanding principal owed on past CADs to use as funds for financing future CADs. Given the varying level of interest in CADs, whether to use District reserves or loans also will be evaluated on a case-by-case basis. The first CAD of the new program was formed on Sunnybrook Road in Alamo.

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 two neighborhoods in Orinda and Lafayette

Project Schedule and Cost:

	Start Date	*Completion*	*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: pCS34 / CAD
Project Manager/% Expansion: Miyamoto-Mills / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	500,000	500,000	500,000	500,000	500,000	500,000
C. Authorized this Year	500,000	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	0	0	0	0	0	0

Trunk Sewer Capacity Program

Project Manager, Department/Division:
Alex Rozul, 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, particularly in Martinez, Lafayette, Walnut Creek, Pleasant Hill, and Orinda have been completed. At many locations where overflows had been routine during wet weather, wastewater and infiltration/inflow is conveyed without overflow even during severe storms.

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:
Project work is projected to take place in Lafayette and Pleasant Hill during fiscal year 2011-12, as described on the following page on which the specific projects are described.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2009	06/17/2010	$0
Construction	06/17/2010	06/17/2019	$10,000
		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: Trunk Sewer Expansion Program / 3
Project Number/Filename: none / trunk
Project Manager/% Expansion: Rozul / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
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

Lafayette - Pleasant Hill Road Trunk Sewer

Project Manager, Department/Division:
Alex Rozul, 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 are 10-inch and 12-inch pipe that extend along Pleasant Hill Road from Springhill Road, through easements across Acalanes High School, then through additional neighborhood easements and streets to an 18-inch sewer north of the Highway 24 sewer crossing.

The recommended project involves diverting the sewage away from the 10-inch sewer across Acalanes High School, into a new 15-inch sewer along Pleasant Hill Road from Springhill Road to Stanley Boulevard. The remaining deficient sewers would be upsized within their current alignments and connect to the 18-inch sewer crossing under Highway 24.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	04/01/2010	05/01/2011	$201,000
Construction	05/01/2011	06/30/2012	$2,210,000
		Total:	**$2,411,000**

Estimated expenditures this FY are: **$1,900,000**
Anticipated Allocations this FY are: **$2,176,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Laf-P Hill Rd Trunk Sewer, Laf TR 15-100 / 3
Project Number/Filename: 5994 / trunk_Laf_phrd
Project Manager/% Expansion: Rozul / 15

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	14,000	(276,000)	0	0	0
B. Anticipated Allocations	25,000	210,000	2,176,000	0	0	0
C. Authorized this Year	25,000	224,000	1,900,000	0	0	0
D. Estimated Expenditures	(11,000)	(500,000)	(1,900,000)	0	0	0
E. Estimated Carry-over	14,000	(276,000)	0	0	0	0

Pleasant Hill – Grayson Creek Trunk Sewer

Project Manager, Department/Division:
Alex Rozul, 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.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2011	04/01/2013	$500,000
Construction	04/01/2013	12/31/2013	$2,600,000
		Total:	**$3,100,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Pleasant Hill Grayson Creek / 3
Project Number/Filename: pCS22 / trunk_Ph_graysoncrk
Project Manager/% Expansion: Rozul / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	500,000	0	0	0
B. Anticipated Allocations	500,000	2,600,000	0	0	0	0
C. Authorized this Year	500,000	2,600,000	500,000	0	0	0
D. Estimated Expenditures	(500,000)	(2,100,000)	(500,000)	0	0	0
E. Estimated Carry-over	0	500,000	0	0	0	0

Buchanan Airfield Pumping Station Replacement

Project Manager, Department/Division:
Jarred Miyamoto-Mills, 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 CO2eq per year.

The Buchanan South Pumping Station once served several properties in the vicinity of the airport, however, all but one of these properties are now served by City of Concord sewers and the pumping station serves only a single customer, the Crowne Plaza Hotel. The location of the station is difficult to access for operations and above-ground equipment is vulnerable to damage from vehicle traffic.

The Buchanan North Pumping Station serves a number of businesses on and adjacent to the airport. It discharges to a gravity sewer that crosses the airfield at about the midpoint of the main runway. According to airport management, it is possible that runway refurbishment will damage or disrupt this line in the future.

Staff prepared a technical and economic feasibility study of alternatives available for replacement of the two pumping stations. Among the alternatives studied were: 1) replacement of the two stations in-kind with new facilities meeting the District's current pumping station criteria; and 2) abandonment and removal of one or both stations and replacement with new gravity sewers. The study concluded that replacement of both stations with new gravity sewers is the most favorable alternative from both the technical and cost perspectives.

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*	*Total Cost*
Planning	02/01/2011	03/01/2011	$0
Design	03/01/2011	07/01/2012	$75,000
Construction	07/01/2012	12/31/2013	$975,000
		Total:	**$1,050,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Buchanan South Removal / 4
Project Number/Filename: pCS11 / Buchanan_south_removal
Project Manager/% Expansion: Miyamoto-Mills / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	0	0	(500,000)	0	0
B. Anticipated Allocations	25,000	25,000	0	1,000,000	0	0
C. Authorized this Year	25,000	25,000	0	500,000	0	0
D. Estimated Expenditures	(25,000)	(25,000)	(500,000)	(500,000)	0	0
E. Estimated Carry-over	0	0	(500,000)	0	0	0

Lower Orinda PS Main

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

Project Purpose:
This project will improve the reliability and maintainability of the pumping stations and associated force mains.

Project Description:
The Lower Orinda Pump Station is located in an EBMUD watershed. The existing force mains are quite old and need to be evaluated. This project will evaluate the condition of the existing force mains, implement any needed rehabilitation and may install a third force main for reliability.

Project Location:
Vicinity of the Lower Orinda Pumping Station.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2011	07/01/2012	$120,000
Construction	07/01/2012	07/30/2013	$1,501,000
		Total:	**$1,621,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Lower Orinda PS Force Main / 4
Project Number/Filename: pCS24 / LowerFM
Project Manager/% Expansion: Antkowiak / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	1,000	0	0	0
B. Anticipated Allocations	120,000	1,501,000	0	0	0	0
C. Authorized this Year	120,000	1,501,000	1,000	0	0	0
D. Estimated Expenditures	(120,000)	(1,500,000)	(1,000)	0	0	0
E. Estimated Carry-over	0	1,000	0	0	0	0

Martinez Bypass Pump

Project Manager, Department/Division:
Andrew Antkowiak, 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.

Project Description:
An emergency bypass pump will be purchased and stationed at the Martinez Pumping Station. The bypass pump will be designed to allow for its use at other pumping stations in the Martinez, Concord, and Clyde area.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	04/01/2010	12/01/2009	$0
Design	12/01/2009	07/01/2010	$35,000
Construction	07/01/2010	07/30/2011	$200,000
		Total:	**$235,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Martinez Bypass Pump / 4
Project Number/Filename: pCS10 / Mtz_BypassPump
Project Manager/% Expansion: Antkowiak / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	25,000	150,000	60,000	0	0	0
C. Authorized this Year	25,000	150,000	60,000	0	0	0
D. Estimated Expenditures	(25,000)	(150,000)	(60,000)	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

Pumping Stations Hazard Identification and Remediation

Project Manager, Department/Division:
Sasha Mestetsky, 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. 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. District staff may need to perform urgent, and sometimes unscheduled, work to maintain operation of the facility. This may hinder their 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:
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*	*Total Cost*
Planning	12/01/2010	07/01/2011	$0
Design	07/01/2011	08/01/2011	$20,000
Construction	08/01/2011	06/30/2012	$0
		Total:	**$20,000**

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

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

	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	15,000	0	0	0	0
C. Authorized this Year	5,000	15,000	0	0	0	0
D. Estimated Expenditures	(5,000)	(15,000)	0	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, electrical and instrumentation equipment, and other support 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 History:
In the summer of 1997, a header at the Maltby Pumping Station failed due to external corrosion. Bypass pumping was required to maintain system flow, and the repair was made under an emergency declaration. Bypass pumping capability was added during the repairs. Similar repairs and modifications were made on a planned basis at a sister station, Fairview. In 2005-06, the main pumps at the Concord Industrial Pumping Station were replaced because the pumps were badly worn.

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, such as “pump-around” pumps and reliability test 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 the regulating community, such as the outgrowth of the Sewer System Management Plan (SSMP), potential federal CMOM regulations, or as promulgated by the BAAQMD or the California Air Resources Board

Project Location:
All pumping stations

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2007	06/30/2017	$770,000
		Total:	**$770,000**

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

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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	300,000	75,000	70,000	65,000	65,000	65,000
C. Authorized this Year	300,000	75,000	70,000	65,000	65,000	65,000
D. Estimated Expenditures	(300,000)	(75,000)	(70,000)	(65,000)	(65,000)	(65,000)
E. Estimated Carry-over	0	0	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 that are 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*	*Total Cost*
Planning	-	-	$0
Design	07/01/2011	07/01/2012	$0
Construction	07/01/2012	06/30/2021	$600,000
		Total:	**$600,000**

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: pCS18 / PS_SafetyImprvs
Project Manager/% Expansion: Rhoads / 0

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

Pumping Station SCADA O&M Manual

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

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*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2011	06/17/2012	$20,000
		Total:	**$20,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: PS SCADA O&M Manual / 4
Project Number/Filename: pCS13 / PS_SCADAMan
Project Manager/% Expansion: Rhoads / 0

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

Pumping Station Minor Upgrades

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

Project Purpose:
The purpose of this project is to replace or modify components at various pumping stations in order to prevent sewage overflows, reduce maintenance and increase operating efficiency.

Project History:
Engineering staff meet regularly with pump station operation staff to identify and evaluate operational issues which affect the efficiency and reliability of District pumping stations. Last year upgrades were constructed at the Concord Industrial Pumping Station, the Clyde Pumping Station and the Martinez Pumping Station. This year upgrades are planned for the Fairview, Maltby, Flush Kleen, Orinda Crossroads and Moraga pumping stations.

Project Description:

At the Fairview and Maltby Pumping Stations existing dry wells are deteriorating. This project will evaluate their structural integrity and develop repair methodology at both pump stations

At the Moraga and Orinda Cross Roads Pumping Stations the fuel piping systems will be evaluated and replaced as needed to comply with regulatory requirement of secondary containment. Also at the Moraga Pumping Station there are problems with rags clogging pumps and other miscellaneous improvements.

At the Flush Kleen Pumping Station, much of the equipment piping and valves are original and in need of replacement. A condition assessment will be completed and a new emergency standby generator will be installed.

Project Location:
Martinez, Orinda and Moraga

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$137,000
Design	-	-	$0
Construction	07/01/2011	06/30/2013	$0
		Total:	**$137,000**

Estimated expenditures this FY are: **$86,000**
Anticipated Allocations this FY are: **$86,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	86,000	51,000	0	0	0	0
C. Authorized this Year	86,000	51,000	0	0	0	0
D. Estimated Expenditures	(86,000)	(51,000)	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

San Ramon Pumping Station Upgrades

Project Manager, Department/Division:
Tom Godsey, 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 2011/12.

Project Description:
Replace existing smaller dry weather pumps with larger pumps sized for the projected flows.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	05/01/2011	09/01/2011	$30,000
Construction	09/01/2011	06/30/2012	$549,000
		Total:	**$579,000**

Estimated expenditures this FY are: **$549,000**
Anticipated Allocations this FY are: **$549,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: San Ramon Pump Station Upgrades / 4
Project Number/Filename: pCS33 / SR PS upgrades
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	30,000	549,000	0	0	0	0
C. Authorized this Year	30,000	549,000	0	0	0	0
D. Estimated Expenditures	(30,000)	(549,000)	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

San Ramon Bypass Pump Replacement

Project Manager, Department/Division:
Tom Godsey, Engineering/Capital Projects

Project Purpose:
The purpose of this project is to provide emergency bypass pumps to allow for pumping 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 pumping system available to allow the pump station to be bypassed during an emergency.

Project Description:

- Emergency bypass pumps will be purchased and connection piping modified to accept these pumps.
- The pump station structure, wet well, controls and other systems will be modified to allow installation of the new pumps.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2011	$50,000
Construction	07/01/2011	07/30/2012	$301,000
		Total:	**$351,000**

Estimated expenditures this FY are: **$300,000**
Anticipated Allocations this FY are: **$301,000**

Project Fiscal Year Allocation/Expenditure Table:

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

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	0	1,000	0	0	0
B. Anticipated Allocations	50,000	301,000	0	0	0	0
C. Authorized this Year	50,000	301,000	1,000	0	0	0
D. Estimated Expenditures	(50,000)	(300,000)	(1,000)	0	0	0
E. Estimated Carry-over	0	1,000	0	0	0	0

TABLE OF CONTENTS

GENERAL IMPROVEMENTS PROGRAM

This section includes detailed information for the 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 data sheets. These data sheets are found at the appropriately numbered subprogram tab and are arranged in the same order in which they appear in Table GI-1. The numbered tabs represent the following:

TAB NO.	SUBPROGRAM
1	Vehicles and Equipment
2	Information Systems
3	Projects

OVERVIEW

The General Improvements Program at $5.4 M comprises 21 percent of the total estimated capital expenditures for FY 2011-12. The General Improvements Program is primarily concerned with the property, administrative buildings, and equipment needs of the District. The Vehicles and Equipment subprogram comprises the items budgeted and purchased under the annual District Equipment Budget. The Capital Improvement Budget includes an allowance for the equipment budget. Specific equipment items are approved through the annual budget process.

The 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 last five years of the ten-year Capital Improvement Plan.

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

In FY 2011-12, significant funds will be spent for the new facility and yard improvements at CSOD. The Capital Improvement Budget also includes siesmic upgrades to the HOB, followed by painting and replacement of worn carpeting and furniture.

Table GI-1: General Improvements Subprogram/Project List

Subprogram / Project No. / Project Title		Project Manager	Estimated Total Project Expenditures	Anticipated Allocations To 06/30/11	Estimated Expenditures To 06/30/11	Anticipated Allocations FY 2011-12	Estimated Expenditures FY 2011-12
1Vehicles & Equipment							
9999	Cap Proj Clearing	Vassallo	10,000	4,000	3,000	1,000	1,000
8512	Vehicles & Equipment Acquisition - 2012	Vassallo	891,000	0	0	891,000	891,000
	Subprogram Total		901,000	4,000	3,000	892,000	892,000
2Management Information Systems							
8227	GDI - Treatment Plant	Pilecki	500,000	500,000	243,100	0	100,000
pGI01	GDI-SMMS Replacement	Pilecki	400,000	200,000	200,000	200,000	190,000
8195	Information Technology Development	Greenawalt	5,052,000	3,817,000	3,450,000	600,000	602,000
	Subprogram Total		5,952,000	4,517,000	3,893,100	800,000	892,000
3Projects							
8230	Capital Legal Services - 2010 to 2018	Leavitt	560,000	210,000	70,000	0	70,000
8217	Capital Improvement Plan and Budget	Millier	1,138,000	663,000	588,000	104,000	110,000
pGI06	CSOD Facilities Improvements	Rozul	500,000	0	0	100,000	50,000
8208	CSOD Facility Improvements	Rozul	13,654,000	13,933,000	11,629,000	-279,000	2,025,000
8223	District Property Safety Improvements	Deutsch	124,000	75,000	29,000	0	15,000
8228	District Easements	Gronlund	432,500	250,000	232,500	100,000	100,000
8207	General Security Access	Deutsch	93,000	93,000	63,000	0	15,000
8219	HOB Improvements	Musgraves	1,138,000	884,000	739,000	254,000	399,000
8225	Imhoff Triangle Development	Musgraves	234,000	201,000	54,000	33,000	170,000
8210	Kiewit Parcel Development	Musgraves	257,000	266,000	167,000	0	30,000
8229	Martinez Easements	Hernandez	185,000	130,000	120,000	55,000	65,000
8221	POD Office Imprvs	Musgraves	394,000	374,000	224,000	0	20,000
8224	Rental Property Improvements	Musgraves	107,000	137,000	68,000	0	29,000
8226	Seismic Improvements for HOB	Hodges	2,523,000	680,000	513,000	1,843,000	510,000
8231	Rental Property Seismic Improvements	Hodges	640,000	340,000	340,000	50,000	50,000
	Subprogram Total		21,979,500	18,236,000	14,836,500	2,260,000	3,658,000
	Program Total		28,832,500	22,757,000	18,732,600	3,952,000	5,442,000

Capital Clearing Account

Project Manager, Department/Division:
Thea Vassallo, Administrative/Finance and Accounting

Project Purpose:
To provide Accounting with a mechanism within the Capital Improvement Budget to record transactions for projects that are currently not available.

Project Description:
This is 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*	*Total Cost*
Planning	07/01/2008	07/01/2009	$0
Design	-	-	$0
Construction	07/01/2009	06/17/2019	$10,000
		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: Cap Proj Clearing / 1
Project Number/Filename: 9999 / cap_proj_clearing
Project Manager/% Expansion: Vassallo / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	1,000	1,000	1,000	1,000	1,000
B. Anticipated Allocations	2,000	1,000	1,000	1,000	1,000	1,000
C. Authorized this Year	2,000	2,000	2,000	2,000	2,000	2,000
D. Estimated Expenditures	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
E. Estimated Carry-over	1,000	1,000	1,000	1,000	1,000	1,000

Vehicles and Equipment Acquisition – 2011-12

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 2011-12 capital project for purchase of vehicles and equipment.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2011	06/30/2012	$891,000
		Total:	**$891,000**

Estimated expenditures this FY are: **$891,000**
Anticipated Allocations this FY are: **$891,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Vehicles & Equipment Acquisition - 2012 / 1
Project Number/Filename: 8512 / veh_equip12
Project Manager/% Expansion: Vassallo / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	891,000	0	0	0	0	0
C. Authorized this Year	891,000	0	0	0	0	0
D. Estimated Expenditures	(891,000)	0	0	0	0	0
E. Estimated Carry-over	0	0	0	0	0	0

GDI – Treatment Plant

Project Manager, Department/Division:
Tad Pilecki, Engineering/Capital Projects

Project Purpose:
To 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. This tool will provide easier access to varied data sets, reducing geographic data redundancy and conflicts, and by improving data accuracy. This will improve productivity, reduce costs, and improve internal and external customer service.

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 treatment plant GDI concept has been developed that will link most of these existing and proposed datasets and allow user access through a common GDI like interface. A pilot treatment plant GDI has been completed, and is currently being used by staff.

Project Description:
The GDI – Treatment Plant project will implement a geographically based asset management tool for the treatment plant. The GDI – Treatment Plant will be modeled on the collection system GDI; mirroring the graphic interface and functionality but accessing and delivering treatment plant related data sets.

The District currently maintains a multitude of treatment plant work group databases that have a locational component, that is, they can be mapped. There are a number of data sets related to the Treatment Plant that are distinct work group databases, are geographically oriented, and are not currently integrated or linked. These data sets include Mainsaver, DARS, LIMS, PIMS, PCS, and TP orthophotography.

These databases are not currently integrated or linked in such a way that users can efficiently share data or have knowledge of the information that is available. As a result, individual users are maintaining duplicate datasets which contain various levels of accuracy and completeness. The accuracy and availability of data have a direct impact on the efficiency and effectiveness of the District and its ability to serve its customers. Implementation tasks and schedule will be based on linking and/or creating the easiest data sets first balanced by consideration of biggest ROI. Integration of additional treatment plant data sets is expected to occur in subsequent phases.

Project Location:
Treatment Plant

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2008	09/01/2008	$0
Design	09/01/2008	07/01/2009	$325,000
Construction	07/01/2009	06/17/2015	$175,000
		Total:	**$500,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: GDI - Treatment Plant / 2
Project Number/Filename: 8227 / GDI_tp
Project Manager/% Expansion: Pilecki / 0

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	75,000	7,000	257,000	157,000	57,000
B. Anticipated Allocations	100,000	100,000	300,000	0	0	0
C. Authorized this Year	100,000	175,000	307,000	257,000	157,000	57,000
D. Estimated Expenditures	(25,000)	(168,000)	(50,000)	(100,000)	(100,000)	(28,000)
E. Estimated Carry-over	75,000	7,000	257,000	157,000	57,000	29,000

GDI/SMMS Replacement

Project Manager, Department/Division:
Tad Pilecki, Engineering/Capital Projects

Project Purpose:
To improve the effectiveness of the collection system operations and maintenance by updating and integrating the District's GDI software, replacing the existing Accela asset management tool, providing field crews with data/map hardware tools, integrating the District's hydraulic analysis tools, and implementing a GPS capability. This will improve productivity, reduce costs, provide better data for management decisions, and improve internal and external customer service.

Project History:
A number of different collection system-related, computer-based management information systems have substantially improved the ability of District staff to manage the collection system. These systems include the collection system digital mapping system (GDI), the CSO asset management system (Accela), the collection system hydraulic analysis program (ArcSNAP), and the pilot implementation of a GPS system for utility locating.

Each one of these systems has programming that duplicates the functionality found in the other systems. Each one of these systems has a different user interface that users must learn, and many District staff must become proficient with several of the different interfaces to do their jobs. Often data output from one system must be integrated with data from another system even though it is a different incompatible data type, forcing the user to convert the data and integrate it at a higher cost. In several instances duplicate data is updated into and stored in the other systems.

The disparate software programs that these systems operate on have kept staff from further improving operations by integrating these systems. Several of these software programs have reached the end of their useful life and must be replaced due to improvements in the hardware platform and operating system environment that the programs operate on. The software manufacturers "time-out" these various versions of their programs and cease to support the software, forcing users to upgrade.

Different staff must become proficient on each of the individual operating systems, database programs, underlying mapping system programs, District-specific custom consultant-written programs and interfaces, etc. The alternative to consolidating these systems is to spend significant sums upgrading the different systems individually as required.

Project Description:
The project involves initially conducting a very detailed analysis of existing systems and functionality, resulting in an initial list of user requirements. Research will be simultaneously conducted to determine what enhancements can be made to add value to the existing systems and procedures, then researching existing asset management,

mapping, and data analysis programs to determine the optimal platform. Once the most flexible and technologically up-to-date program/platform is determined, 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. As this effort will be providing a cross departmental system, current users of all the relevant systems will be involved from the beginning.

Project Location:
District-wide

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2010	07/01/2011	$0
Construction	07/01/2011	06/30/2014	$400,000
		Total:	**$400,000**

Estimated expenditures this FY are: **$190,000**
Anticipated Allocations this FY are: **$200,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: GDI-SMMS Replacement / 2
Project Number/Filename: pGI01 / GDI-SMMS_repl
Project Manager/% Expansion: Pilecki / 0

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
A. Current Carry-over	0	0	10,000	5,000	0	0
B. Anticipated Allocations	200,000	200,000	0	0	0	0
C. Authorized this Year	200,000	200,000	10,000	5,000	0	0
D. Estimated Expenditures	(200,000)	(190,000)	(5,000)	(5,000)	0	0
E. Estimated Carry-over	0	10,000	5,000	0	0	0

Information Technology Development

Project Manager, Department/Division:
Mark Greenawalt, Administration / Information Technology Administrator

Project Purpose:
An Information Technology Development Plan has been developed by Information Technology staff to centralize efforts and funding in the development of computer and telecommunication technology within the District.

Project History:
Input for the development plan was gathered through information technology survey results, management project lists, and Information Technology staff, along with management and staff focus groups. The original master plan, created in 2001, contained over 50 various projects and policies that were determined by District staff. Each year, information on technology projects are gathered and updated from District staff by the Information Technology Administrator, and reviewed by District Management and the Board of Directors for approval.

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.

The Information Technology Development project will provide funding for the development of 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
- Remote and wireless access
- Telecommunications improvements
- Information Technology customer service and support
- Cost savings, power conservation & green alternatives

Project Location:
District wide

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2004	06/30/2014	$5,052,000
		Total:	**$5,052,000**

Estimated expenditures this FY are: **$602,000**
Anticipated Allocations this FY are: **$600,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Information Technology Development / 2
Project Number/Filename: 8195 / INF_Tech
Project Manager/% Expansion: Greenawalt / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	367,000	367,000	365,000	365,000	0
B. Anticipated Allocations	3,157,000	660,000	600,000	500,000	135,000	0
C. Authorized this Year	3,157,000	1,027,000	967,000	865,000	500,000	0
D. Estimated Expenditures	(2,790,000)	(660,000)	(602,000)	(500,000)	(500,000)	0
E. Estimated Carry-over	367,000	367,000	365,000	365,000	0	0

Central Contra Costa Sanitary District

INFORMATION TECHNOLOGY DEVELOPMENT

CAPITAL IMPROVEMENT BUDGET PLAN
2011 – 2012

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The proposed Information Technology Development Capital Improvement Budget Plan will be presented for review at the Capital Projects Committee Meeting on Thursday, March 31, 2011.

This report is divided into three sections beginning with Section I, the proposed 2011-2012 fiscal year budget and projects. Section II reviews the budget, status and accomplishments of fiscal year 2010-2011 as well as outstanding projects from previous years, followed by Section III summarizing potential future projects. The presentations will focus on the proposed 2011-2012 requested budget.

The Information Technology (IT) Master Plan was developed by Information Technology (formerly Management Information Systems) staff in 2000 to centralize efforts in the development of computer and telecommunication technology within the District. Input for the Master Plan was gathered through survey results, management project lists, and IT staff, along with management and staff focus groups. The Information Technology Master Plan contains projects and policies that have been applied over time to develop the District's standards, practices and policies with information technology. The Information Technology Development CIB was created to provide funding for these projects.

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
- Remote and wireless access
- Telecommunications improvements
- Information Technology customer service and support
- Cost savings, power conservation & green alternatives

2011-2012 IT DEVELOPMENT CIB PLAN

- Proposed Budget Summary – (In thousands)

Project Description	Estimated Cost	Estimated Completion
PC Replacement	$100	April 2012
Engineering Support Upgrades	$77	June 2012
Source Control Software Update	$25	Aug 2011
Telephone & Voicemail System Upgrade *In addition to $250k allocation from 2010-2011 CIB budget)	$75	July 2011
CSO building - IT Upgrades	$25	July 2011
Records Management Upgrades	$40	Nov 2011
Human Resources Document Management	$10	Sept 2011
Server Replication & Redundancy	$100	June 2012
Sungard (HTE) One Solution Software Implementation	$100	June 2012
Miscellaneous / Contingency • Conf Rm display system - Aug 2011 • Virtual Desktop pilot - June 2012 • iPad pilot - TBD • Comm Srvs updates - Oct 2011 • Misc software & hardware	$50	On-going
Proposed Budget	**$ 602**	

2011-2012 IT DEVELOPMENT CIB PLAN
- Proposed Projects Summary -

- PC Replacement
  - Four year plus life cycle replacement of desktop PCs, laptops, LCD monitors, desktop and network printers.

- Engineering Support Upgrades
  - (2) CAD workstations, (1) Survey workstation
  - Migrate Engineering Support servers to VMWare virtual server
  - (1) Network color printer

- Source Control Software Update
  - Develop web browser application for user access to database
  - Expand reporting and improve online forms

- HOB & CSO - Voice over IP (VoIP) Telephone & Voicemail System Upgrade
  - Additional funds for installation of new telephone and voice mail system in Martinez and Walnut Creek sites.

- CSO Building - IT Upgrades
  - Network switches, cabling & termination, network center accessories

- Records Management Upgrades
  - Board Room audio recording replacement
  - Versatile Records Management imaging software
  - Bar code scanners for records management

- Human Resources Document Management
  - Laserfiche workstation, software and scanner

- Server Replication & Redundancy
  - Improve District network replication and redundancy using virtual server and data duplication technology between HOB and CSO facilities.

- Sungard (HTE) One Solution Software Implementation
  - Implementation of District's financials, land management and utility billing applications. Although software upgrade may be included with yearly maintenance fees, there are additional costs for review, conferences, site visits, training, webinars, consultation, project management, reporting, data conversion and migration of all the integrated applications prior to implementation.

- Miscellaneous / Contingency
  - Right of Way - HOB1 Conf Room large screen
  - Virtual Desktop - pilot project
  - iPad - pilot project
  - Communication Services upgrades - Mac & plotter replacements

2010-2011 IT DEVELOPMENT CIB PLAN
- Outstanding Budget Summary -
(In thousands)

Project Description	**Estimated Expenditures**	**Estimated Completion**
PC Replacement	$100	April 2011
Permits Backlog • Revision 4 - scanning & indexing	$18	Aug 2011
Laboratory Information Management System Replacement • Review, testing, reporting & staff overtime	$82	Sept 2011
HOB Telephone & Voicemail System Upgrade	$200	May 2011
CSO - Telephone System Upgrade	$50	July 2011
Email Upgrade - Exchange/Outlook	$100	April 2011
IBM AS400 Server Replacement	$60	Dec 2011
Inventory Scanning software	$15	Delayed - TBD
IT Consultant Review	$30	Jan 2012
Miscellaneous / Contingency	$22	On-going
Estimated Outstanding Expenditures	**$ 677**	

2010-2011 IT DEVELOPMENT CIB PLAN
- Outstanding Projects Summary -

- PC Replacement
  - Four year plus life cycle replacement of desktop PCs and laptops. Also for acquiring new LCD monitors, printers, network printers and accessories.

- Permits Backlog & Scanner
  - Scanning and indexing of backlog

- Laboratory Information Management System Replacement
  - Installation of new LabWorks LIMS system which will provide necessary electronic reporting and a supported software system.

- HOB - Voice/IP Telephone & Voicemail System Upgrade
  - Installation of new telephone and voice mail system in Martinez site.

- CSO - Voice/IP Telephone Upgrade
  - Installation of new telephone & voice mail system in Walnut Creek site.

- Email Upgrade - Exchange/Outlook
  - Migration from GroupWise to Microsoft Exchange email system using Outlook.
  - Archive email system implemented will contain both GroupWise and Outlook archive.

- IBM AS400 Server Replacement
  - Replace IBM mini-computer system with new rack mounted unit for providing Sungard Financials and Utilities applications.

- Inventory Scanning
  - Software and scanners for Material Services inventory control.

- IT Consultant
  - Review and provide direction of District's IT technology, software, hardware and practices.

- Miscellaneous / Contingency -
  - Funding for miscellaneous hardware, software and services as required.

2010-2011 IT DEVELOPMENT CIB PLAN
- Completed Projects & Expenditures -
(In thousands)

Project Description	Expenditures
Network Upgrade • Central network switch replacement	$57
Permits Backlog - • Revisions 2 & 3 - scanning & indexing services	$32
Laboratory Information Management System • Implementation, software, project management, staff OT	$100
Email Archive System • Email archive, spam & migration tool bundle	$14
Engineering Support Upgrades • Workstations & software	$37
Backup System Improvements • Backup software & disk drives	$14
SAN Storage Addition • Additional disk drive space for centralized network storage	$49
Software Upgrades • Microsoft server, database & Office user licenses	$51
IT Server Replacement • Domain controller server replacement	$6
Server Virtualization • Server memory & consultant fees	$8
Emergency Operations Center (EOC) Updates • EOC laptops, printers & wireless router	$15
Presentation Systems • HOB2 Conf Room & POD Training Room	$20
Contingency & Project Management • CSO relocation network • CSO Engineering trailer network • WinInstall push software • UPS replacements • Sungard catalog • Versatile software upgrade & label software • CSO printer & disk drive storage	$28
Total Expenditures	**$ 431**

INFORMATION TECHNOLOGY DEVELOPMENT CIB BUDGET SUMMARY
- Estimated IT Development CIB Balance -
(In thousands)

Expenditures

Proposed 2011-2012 Project Estimated Expenditures (New)	$ 602
Budgeted 2010-2011 Projects Estimated Expenditures (Outstanding)	$ 677
Total Estimated Expenditures (thru June 30, 2012)	***$ 1,279***

Allocations

Remaining Allocated Balance	(February 2011 Estimate)	$ 346
Allocated Funds for 2010-2011*	(March 2011 CIB Allocation)	$ 331

*Note: $660k was approved last year for the 2010-2011 IT Development CIB. However, only $331k was distributed for use in March 2011 to balance the CIB budget to cover the outstanding projects ($677).

A budget reduction or savings of $329k was achieved through reduced costs of hardware, software and services, selecting new or enhanced technology solutions that were less expensive, and through the cancellation after review of several proposed projects.

Requested Allocation for 2011-2012	(New 2011-2012 Proposed CIB)	$ 602
Total Allocation CIB Budget	***(thru June 30, 2012)***	***$ 1,279***

FUTURE IT DIRECTIONS

E-COMMERCE

The development of the District's website (www.centralsan.org) to provide 24-hour customer service such as online forms, information and reporting from source control and building permits system. Online services increase staff efficiency, provides customer satisfaction, and streamlines workflow to reduce costs. In past years, the District has added services for online job applications, bidding, and vendor information.

WIRELESS TECHNOLOGY

The District has implemented secured wireless technology to expand mobile or remote access to the District's network and applications. Currently, a wireless local area network (WiFi) is in place at the Household Hazardous Waste Facility for transmitting visitor information through handheld devices. In addition, wireless broadband aircards provide Internet connection for laptops used by field personnel, such as Pumping Station Operators, to access the District's network through a secured encrypted VPN (Virtual Private Network).

In recent years, the District's firewall and network access control (NAC) have been updated to tighten network security. The District's Internet services were updated to a 10 mega-bits per second (mbps) fiber optics service to improve remote access speed and reliability. The fiber optic connection may be upgraded to higher speeds without requiring additional construction or downtime.

The District will review and evaluate the use of iPad or tablet technology as a mobile device for accessing information in the field. As the technology develops, this solution may develop applications that will provide lightweight, mobile and trouble free services to field staff.

DOCUMENT MANAGEMENT & IMAGING SYSTEM ENHANCEMENTS

Review enhancement modules available for Laserfiche document imaging and management system. With the enhancements of the District's web site and the document management system, public records are now accessible from the Secretary of the District's office. Additional modules may be implemented such as Agenda Manager for on-line agenda creations, Quick Field for automated data entry to the imaging system through defined forms such as work orders, and Workflow Suite to automate the paperwork process, approval through electronic signatures and tracking.

DISASTER RECOVERY

The District's computer and telecommunication disaster recovery plans and system redundancy techniques are reviewed in the event of a major disaster or major system failure. Currently, in the event of a disaster, Sungard Public Sector disaster recovery services will provide Internet access to our financial, permit and land management information.

Other disaster recovery services are being developed for specialized systems, such as GIS (Geographical Information System) standalone laptops to maintain a scaled down version of GDI for the field staff. The GDI laptops will provide EOC access to information in the event of an emergency. In addition, the GDI server has been mirrored with a secondary server to reduce the possibility of downtime during a hardware failure.

Radio tabletop sets and wall mounted LCD televisions with satellite TV and Internet service have been installed in the District's Emergency Operation Center (EOC) located in the Multi Purpose Room. Last year, computer laptops with a wireless local area network and wireless printers were added for use in the EOC. In addition, a standalone GDI laptop is stored and available for EOC use.

VIRTUAL SERVER AND DESKTOP

This past year, IT Staff have applied virtual server technology to most all of the IT servers. Virtual server technology groups together several physical network servers, storing and running the software and data files from centralized data storage such as our SAN, and runs many applications together by sharing and managing resources.

Virtual server improves system redundancy in the event of failed server within the group; all applications within the virtual server will continue to run without interruption. Once repair is complete, the server may be placed back into the group without interruption. Also, backup procedures for the centralized network storage, where the server configuration and data are stored, has been streamlined to improve system recovery.

In 2011-2012, a proposed IT project is to implement the Engineering Support servers on to virtual server platform. In following years, the Plant Control System (PCS) and SCADA for Pumping Stations should follow implementing virtual server to improve redundancy and disaster recovery.

In addtion, a pilot program for 2011-2012 is to test virtual desktop use at the District. Virtual desktop gives users the ability to logon to any PC on the District's network and be provided the same desktop and software regardless of the PC. This requires less PC resources and therefore will increase the life cycle and reduce cost of PC hardware. All the PCs applications and setup are pulled from the virtual server system and the user's login profile.

Capital Legal Services

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

Project Purpose:
To streamline the processing of legal bills.

Project History:
In the past, legal expenses were charged to individual capital projects. This 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 from Treatment Plant, Collection System, General Improvements, and Recycled Water Program projects. This change has relieved the Engineering Department's project managers from having to code the legal bill with project account numbers each month. This process also reduces the amount of time all parties must spend processing the legal bill.

Projects for which the District will receive reimbursement still have legal expense charges coded directly to those projects. Examples of such projects are HHW and any future Caltrans-related projects.

Engineering Department Operations and Maintenance legal expenses are charged to Environmental Services Division accounts, since this division generates most of these expenses.

Project Location:
Not applicable

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$560,000
Design	-	-	$0
Construction	07/01/2010	06/30/2018	$0
		Total:	**$560,000**

Estimated expenditures this FY are: **$70,000**
Anticipated Allocations this FY are: **$0**

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	140,000	70,000	0	140,000	70,000
B. Anticipated Allocations	210,000	0	0	210,000	0	0
C. Authorized this Year	210,000	140,000	70,000	210,000	140,000	70,000
D. Estimated Expenditures	(70,000)	(70,000)	(70,000)	(70,000)	(70,000)	(70,000)
E. Estimated Carry-over	140,000	70,000	0	140,000	70,000	0

Capital Improvement Budget and Plan

Project Manager, Department/Division:
Earlene Millier, Engineering/Environmental Services

Project Purpose:
This project provides for the capitalization of a portion of the staff time necessary for the data gathering and production of the CIB and CIP.

Project History:
Custom software is used to maintain a database to hold capital project budget information and produce the annual budget and plan. 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 printing of the actual CIB/CIP documents.

Opportunities to streamline the process will be identified and implemented, as well as new ways sought to present the information through the year to increase its clarity and usefulness to staff and management.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2006	06/30/2015	$1,138,000
Design	06/30/2015	01/30/2016	$0
Construction	01/30/2016	06/30/2016	$0
		Total:	**$1,138,000**

Estimated expenditures this FY are: **$110,000**
Anticipated Allocations this FY are: **$104,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Capital Improvement Budget and Plan / 3
Project Number/Filename: 8217 / CIB_CIP
Project Manager/% Expansion: Millier / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	65,000	75,000	69,000	59,000	49,000
B. Anticipated Allocations	543,000	120,000	104,000	100,000	100,000	100,000
C. Authorized this Year	543,000	185,000	179,000	169,000	159,000	149,000
D. Estimated Expenditures	(478,000)	(110,000)	(110,000)	(110,000)	(110,000)	(110,000)
E. Estimated Carry-over	65,000	75,000	69,000	59,000	49,000	39,000

CSOD Facility Improvements

Project Manager, Department/Division:
Alex Rozul, Engineering/Capital Projects

Project Purpose:
The purpose of the project is to provide capital improvements to 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.

Project Location:
1250 Springbrook Road, Walnut Creek.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	01/01/2012	01/01/2021	$500,000
		Total:	**$500,000**

Estimated expenditures this FY are: **$50,000**
Anticipated Allocations this FY are: **$100,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: CSOD Facilities Improvements / 3
Project Number/Filename: pGI06 / 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	50,000	0	50,000	0	50,000
B. Anticipated Allocations	100,000	0	100,000	0	100,000	0
C. Authorized this Year	100,000	50,000	100,000	50,000	100,000	50,000
D. Estimated Expenditures	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
E. Estimated Carry-over	50,000	0	50,000	0	50,000	0

CSOD Administration, Crew, and Warehouse Facility Improvements

Project Manager, Department/Division:
Paul Seitz, Engineering/Capital Projects

Project Purpose:
The project will make improvements to the Collection Systems Operations Department (CSOD) corporation yard structures to accommodate current and future needs.

Project History:
The CSOD administration and crew building was originally constructed as the District's headquarters office building and was not designed for its current use as a collection systems operations building. The administration and crew building, warehouse, and corporation yard facilities have reached an age and condition where significant rehabilitation, upgrading, and replacement are needed. In addition, CSOD staffing has increased to meet District growth and increasing regulatory demands and additional space is needed. Overall, the existing CSO facilities do not meet the current and future needs of the District.

In 2006, the District completed a comprehensive evaluation of alternatives to address deficiencies. The best alternative was found to be construction of a new administration, crew, and warehouse building at the location of the existing warehouse. A supplementary project was completed during fiscal year 2006-07 that expanded the crew vehicle parking area under the freeway overpass adjacent to the CSOD yard and replaced the failing retaining wall. The old Ducca house was also removed at that time.

Project Description:
The District approved the mitigated negative declaration in December 2007. The project consists of design and construction of a new CSO administration, crew, and warehouse building. The project also includes site improvements such as new paving and landscaping. The District has obtained the necessary permits from the City of Walnut Creek, and has addressed City requirements. To facilitate construction, CSO staff has been relocated to the Martinez campus for the duration. The project is expected to be completed in Fall 2011.

Project Location:
CSOD Facility, Walnut Creek

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	01/01/2004	02/01/2007	$1,541,000
Design	02/01/2007	07/01/2009	$763,000
Construction	07/01/2009	04/30/2012	$11,350,000
		Total:	**$13,654,000**

Estimated expenditures this FY are: **$2,025,000**
Anticipated Allocations this FY are: **($279,000)**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: CSOD Facility Improvements / 3
Project Number/Filename: 8208 / csoFacImprv
Project Manager/% Expansion: Rozul / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	9,624,000	2,304,000	0	0	0
B. Anticipated Allocations	13,933,000	0	(279,000)	0	0	0
C. Authorized this Year	13,933,000	9,624,000	2,025,000	0	0	0
D. Estimated Expenditures	(4,309,000)	(7,320,000)	(2,025,000)	0	0	0
E. Estimated Carry-over	9,624,000	2,304,000	0	0	0	0

District Property Safety Improvements

Project Manager, Department/Division:
Shari Deutsch, Administrative Department

Project Purpose:
To implement projects necessary to meet worker health and safety requirements.

Project History:
Each year a number of urgent safety improvements are made to District facilities and equipment. These improvements are generally 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. Studies of workstation ergonomics may require the purchase of furniture and/or equipment to address identified issues.

Ultimately, the Annex building will be used to house the Pumping Stations Operations group.

Project Location:
Improvements could be made on any of the District-owned properties or easements including the treatment plant, CSO office and yard, pumping stations or buffer properties. The specific locations will be determined throughout the course of the project.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2007	06/17/2013	$124,000
		Total:	**$124,000**

Estimated expenditures this FY are: **$15,000**
Anticipated Allocations this FY are: **$0**

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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	61,000	46,000	31,000	0	0
B. Anticipated Allocations	75,000	0	0	49,000	0	0
C. Authorized this Year	75,000	61,000	46,000	80,000	0	0
D. Estimated Expenditures	(14,000)	(15,000)	(15,000)	(80,000)	0	0
E. Estimated Carry-over	61,000	46,000	31,000	0	0	0

District Easement Acquisition

Project Manager and Department/Division:
Stephanie Gronlund, 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 are:

- 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
- Outfall Easement Upgrade Project
- 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 Location:
District-wide.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$432,500
Construction	01/01/2010	06/17/2013	$0
		Total:	**$432,500**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: District Easements / 3
Project Number/Filename: 8228 / distr_easements
Project Manager/% Expansion: Gronlund / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	18,000	18,000	18,000	0	0
B. Anticipated Allocations	150,000	100,000	100,000	82,000	0	0
C. Authorized this Year	150,000	118,000	118,000	100,000	0	0
D. Estimated Expenditures	(132,000)	(100,000)	(100,000)	(100,000)	0	0
E. Estimated Carry-over	18,000	18,000	18,000	0	0	0

General Security Access

Project Manager, Department/Division:
Shari Deutsch, Administrative Department

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 will improve the security of the public and District personnel and property. This project could include, but would not be limited to, installing alarm systems at critical sites on District property, adding gates in the perimeter security fencing to allow more efficient access for District personnel and equipment, upgrading security cameras, improving general area lighting, fencing and signage. This project focuses on non-Treatment Plant (including Collection System Operation facilities) security improvements. Treatment Plant security projects are budgeted under the Treatment Plant Program to clarify billing for reimbursement by the City of Concord.

Project Location:
District properties.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2007	06/17/2013	$93,000
		Total:	**$93,000**

Estimated expenditures this FY are: **$15,000**
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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	45,000	30,000	15,000	0	0
B. Anticipated Allocations	93,000	0	0	0	0	0
C. Authorized this Year	93,000	45,000	30,000	15,000	0	0
D. Estimated Expenditures	(48,000)	(15,000)	(15,000)	(15,000)	0	0
E. Estimated Carry-over	45,000	30,000	15,000	0	0	0

HOB Improvements

Project Manager, Department/Division:
Randy Musgraves, Administrative Department

Project Purpose:
This project will renovate portions 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. This multi-year project will provide an allowance to renovate and upgrade the interior and exterior of the HOB offices. Anticipated projects include conditioning and painting the exterior, renovating interior wall finishes and ceilings, replacing flooring and carpeting, upgrading electrical and lighting systems, reconfiguring offices and workstations, and upgrading kitchens and lunch areas. Changes are needed to bring the building's interior and exterior into compliance with the Americans with Disabilities Act (ADA) requirements. In addition, structural improvements may be required to accommodate interior office changes or comply with seismic building codes.

Project Description:
Under this project, 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.

Project Location:
Headquarters Office Building.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2006	10/01/2006	$50,000
Design	10/01/2006	03/01/2007	$52,600
Construction	03/01/2007	06/17/2012	$1,035,400
		Total:	**$1,138,000**

Estimated expenditures this FY are: **$399,000**
Anticipated Allocations this FY are: **$254,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: HOB Improvements / 3
Project Number/Filename: 8219 / HOB_imprvs
Project Manager/% Expansion: Musgraves / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	261,000	145,000	0	0	0
B. Anticipated Allocations	855,000	29,000	254,000	0	0	0
C. Authorized this Year	855,000	290,000	399,000	0	0	0
D. Estimated Expenditures	(594,000)	(145,000)	(399,000)	0	0	0
E. Estimated Carry-over	261,000	145,000	0	0	0	0

Imhoff Triangle Development

Project Manager, Department/Division:
Randy Musgraves/Administrative Department

Project Purpose:
The purpose of this project is to develop the Ditrict'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*	*Total Cost*
Planning	-	-	$44,000
Design	-	-	$0
Construction	12/15/2007	06/17/2013	$190,000
		Total:	**$234,000**

Estimated expenditures this FY are: **$170,000**
Anticipated Allocations this FY are: **$33,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Imhoff Triangle Development / 3
Project Number/Filename: 8225 / Imhoff_tri
Project Manager/% Expansion: Musgraves / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	137,000	147,000	10,000	0	0
B. Anticipated Allocations	181,000	20,000	33,000	0	0	0
C. Authorized this Year	181,000	157,000	180,000	10,000	0	0
D. Estimated Expenditures	(44,000)	(10,000)	(170,000)	(10,000)	0	0
E. Estimated Carry-over	137,000	147,000	10,000	0	0	0

Kiewit Clean Fill Operation

Project Manager, Department/Division:
Randy Musgraves, Administrative Department

Project Purpose:
This project will bring clean fill to the Kiewit parcel and will raise the elevation approximately five feet.

Project History:
The Kiewit property was purchased by CCCSD from the Kiewit Construction Group in 1981. It lies to the east of the CCCSD treatment plant site. The site is an approximately 33-acre, polygon shaped piece of land bounded by Imhoff Drive on the north, Highway 4 on the south, the Walnut Creek Flood Control Channel on the east and Grayson Creek on the west. The site has been used as a buffer zone for the treatment plant.

Project Description:
As available sites for disposal of clean fill within central Contra Costa County have diminished, the District has an opportunity to use the Kiewit property as a source of revenue by leasing it as a clean fill site. County Quarry was contracted with to oversee the leasing agreement and operate the clean fill site for an anticipated net revenue to the District of $1,000,000 over five years. During the operation, staff, and possibly the District's environmental consultants, will be required to review, analyze and/or validate County Quarry's data for permits, hazardous materials testing, grading, drainage and compaction.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	09/01/2004	07/01/2005	$176,000
Construction	07/01/2005	06/17/2013	$81,000
		Total:	**$257,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Kiewit Parcel Development / 3
Project Number/Filename: 8210 / Kiewit
Project Manager/% Expansion: Musgraves / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	129,000	99,000	69,000	0	0
B. Anticipated Allocations	266,000	0	0	(9,000)	0	0
C. Authorized this Year	266,000	129,000	99,000	60,000	0	0
D. Estimated Expenditures	(137,000)	(30,000)	(30,000)	(60,000)	0	0
E. Estimated Carry-over	129,000	99,000	69,000	0	0	0

Martinez Easement Acquisition

Project Manager and Department/Division:
Ricardo Hernandez, Engineering/Environmental Services

Project Purpose:
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 History:
CCCSD became responsible for the City of Martinez sewers pursuant to an Annexation Agreement dated September 13, 1967. Under this agreement, the City agreed to the annexation and to transfer ownership and responsibility for existing sewer facilities to CCCSD. One of the conditions is that the City would convey adequate easements, fee title or other property rights for the sewers and other facilities that were transferred to CCCSD. Also the agreement further stated that in the event that it later appeared that the City did not possess all such necessary easements, the District will acquire the same and that all costs for acquisition will be paid for by the City of Martinez. District staff is currently researching the property rights available and preliminary findings are that the 125 needed easements may be significantly reduced.

Project Description:
Easements that may be acquired through this project are:
- Locations where easements need to be purchased for existing sewers
- Sewers that need upgraded easement rights or access rights

Project Location:
City of Martinez

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	08/20/2009	12/01/2000	$140,000
Design	12/01/2000	12/01/2009	$45,000
Construction	12/01/2009	06/17/2012	$0
		Total:	**$185,000**

Estimated expenditures this FY are: **$65,000**
Anticipated Allocations this FY are: **$55,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Martinez Easements / 3
Project Number/Filename: 8229 / mtz_easements
Project Manager/% Expansion: Hernandez / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	20,000	10,000	0	0	0
B. Anticipated Allocations	65,000	65,000	55,000	0	0	0
C. Authorized this Year	65,000	85,000	65,000	0	0	0
D. Estimated Expenditures	(45,000)	(75,000)	(65,000)	0	0	0
E. Estimated Carry-over	20,000	10,000	0	0	0	0

POD Office Improvements Project

Project Manager, Department/Division:
Randy Musgraves, Administrative Department

Project Purpose:
The project purpose is to make improvements to the interior and exterior of the Plant Operations Department (POD) Administration offices.

Project History:
The POD Administration building and offices are 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, and to incorporate new office technologies.

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 conditioning and painting of the exterior, renovation of interior wall finishes and ceilings, replacement of the flooring and carpeting, upgrading of electrical and lighting systems, reconfigurations of offices and workstations, and upgrading of kitchens and lunch areas. Exterior improvements that may be undertaken include replacement of sidewalks, retaining walls, light fixtures, and landscaping. When specific projects are identified, separate project budgets, including labor, equipment, and materials for small office renovations, will be established in the Capital Improvement Budget.

Project Location:
The location of the improvements will be the POD Administration and POD Maintenance and Reliability Center.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	10/01/2006	11/01/2006	$265,000
Construction	11/01/2006	06/17/2013	$129,000
		Total:	**$394,000**

Estimated expenditures this FY are: **$20,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: POD Office Imprvs / 3
Project Number/Filename: 8221 / POD_imprvs
Project Manager/% Expansion: Musgraves / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	181,000	150,000	130,000	0	0
B. Anticipated Allocations	310,000	64,000	0	20,000	0	0
C. Authorized this Year	310,000	245,000	150,000	150,000	0	0
D. Estimated Expenditures	(129,000)	(95,000)	(20,000)	(150,000)	0	0
E. Estimated Carry-over	181,000	150,000	130,000	0	0	0

Rental Property Improvements

Project Manager, Department/Division:
Randy Musgraves/Administrative Department

Project Purpose:
The purpose of this project is to protect and enhance the District's rental property through additions, improvements, betterments, replacements, and extraordinary repairs.

Project History:
The District has owned the property at 4849 Imhoff Place since November 1999. The property was leased to Contra Costa County for the Animal Services operation for many years, and is currently 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 District has owned the property at 4737 Imhoff Place since May 1991. This property is currently rented to several commercial tenants. Both properties serve as a buffer zone between the treatment plant and nearby residential and commercial 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 Location:
Improvements could be made on any of the District-owned rental properties including 4737 Imhoff Place and 4849 Imhoff Place.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	-	-	$0
Construction	07/01/2007	06/17/2013	$107,000
		Total:	**$107,000**

Estimated expenditures this FY are: **$29,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Rental Property Improvements / 3
Project Number/Filename: 8224 / RentalProp
Project Manager/% Expansion: Musgraves / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	76,000	69,000	40,000	0	0
B. Anticipated Allocations	137,000	0	0	(30,000)	0	0
C. Authorized this Year	137,000	76,000	69,000	10,000	0	0
D. Estimated Expenditures	(61,000)	(7,000)	(29,000)	(10,000)	0	0
E. Estimated Carry-over	76,000	69,000	40,000	0	0	0

Seismic Improvements for HOB

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

Project Purpose:
Seismic improvements will be made to the Headquarters Office Building (HOB).

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.

HOB is a relatively lightweight and flexible structure. In terms of seismic performance this is helpful in dissipating seismic energy, but can be detrimental in that large displacements can lead to failure of the structural system. The HOB utilizes a steel moment frame system to resist earthquake forces. Steel moment frames constructed before the Northridge earthquake are likely to weaken during an earthquake and be unable to carry the forces they were designed to resist. These steel moment frame problems in combination with the building's flexibility are the primary reasons for the HOB's seismic vulnerability.

CPS' analysis of HOB included 2007 CBC and FEMA 351 calculations. These calculations show issues with the building columns and the steel moment frames. Additional analysis was also done based upon ASCE 41, a standard used for analysis of existing buildings. This analysis also shows issues with the columns. 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. The flexibility of the building and the wood floors are unique to a steel moment frame structure. 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:
The HOB will be seismically retrofitted to provide up to an enhanced life safety level of structural performance.

Project Location:
Headquarters Office Building

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/16/2008	03/01/2012	$258,000
Construction	03/01/2012	12/31/2012	$2,265,000
		Total:	**$2,523,000**

Estimated expenditures this FY are: **$510,000**
Anticipated Allocations this FY are: **$1,843,000**

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

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
A. Current Carry-over	0	(49,000)	17,000	167,000	1,500,000	0
B. Anticipated Allocations	25,000	250,000	405,000	1,843,000	0	0
C. Authorized this Year	25,000	201,000	422,000	2,010,000	1,500,000	0
D. Estimated Expenditures	(74,000)	(184,000)	(255,000)	(510,000)	(1,500,000)	0
E. Estimated Carry-over	(49,000)	17,000	167,000	1,500,000	0	0

Seismic Improvements for Rental Property

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

Project Purpose:
The purpose of the project is to improve the seismic performance of the District's rental property buildings.

Project History:
It is estimated that the District's warehouse building at 4737 Imhoff Place was constructed in the early 1970's. No existing drawings of the building, which is a tilt-up concrete structure, have been found. Seismic evaluation of this structure revealed that there could be significant damage to the walls and roof-wall connections, and a risk to occupants of the building. A report by Complete Project Solutions Inc. submitted in October of 2008 identified serious structural deficiencies when analyzed using the 2007 California Building Code. There have been considerable advances in designing structures to resist earthquake forces since the building was constructed. There is also new information about seismic events along nearby earthquake faults including the Concord Fault.

Project Description:
The warehouse building will be seismically retrofitted to provide basic life safety for building occupants. Work will include structural building modifications to bring the building up to current seismic codes. In addition, other modifications may be required (such as ADA or other improvements) as determined during the plan check procedure (to be performed by Contra Costa County).

Project Location:
District-owned rental structures located at 4737 and 4849 Imhoff Place, Martinez

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	02/01/2010	03/01/2010	$0
Design	03/01/2010	09/01/2010	$20,000
Construction	09/01/2010	06/30/2013	$620,000
		Total:	**$640,000**

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

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Rental Property Seismic Improvements / 3
Project Number/Filename: 8231 / Seismic_rentalProp
Project Manager/% Expansion: Hodges / 0

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	20,000	320,000	50,000	250,000	0	0
C. Authorized this Year	20,000	320,000	50,000	250,000	0	0
D. Estimated Expenditures	(20,000)	(320,000)	(50,000)	(250,000)	0	0
E. Estimated Carry-over	0	0	0	0	0	0

TABLE OF CONTENTS

RECYCLED WATER PROGRAM

This section includes detailed information for the 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 approximately 200 million gallons per year of recycled water to about 33 customers located within the Zone One 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 Recycled Water Program, at $550,000, represents 2.1 percent of the total estimated capital expenditures for FY 2011-12. The major emphasis of the Recycled Water Program for the next fiscal year will be pursuing development of a large industrial re-use project. The District will also continue efforts to add new cost-effective customers in the District's Zone One 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		Project Manager	Estimated Total Project Expenditures	Anticipated Allocations To 06/30/11	Estimated Expenditures To 06/30/11	Anticipated Allocations FY 2011-12	Estimated Expenditures FY 2011-12
1Urban Landscaping							
pRW02	Concord Landscape Project	Berger	60,000	0	0	60,000	20,000
pRW01	Refinery Recycled Water Project	Berger	500,000	0	0	100,000	100,000
7259	Recycled Water Planning	Berger	1,252,000	671,000	661,000	35,000	55,000
7194	Zone 1 Recycled Water - ph 1C	Berger	1,348,000	1,348,000	1,038,000	0	310,000
7279	Concord Naval Weapons REW	Berger	250,000	230,000	155,000	20,000	60,000
7261	REW - Cathodic Prot Sys Repl	Antkowiak	40,000	25,000	15,000	0	5,000
	Subprogram Total		3,450,000	2,274,000	1,869,000	215,000	550,000
	Program Total		3,450,000	2,274,000	1,869,000	215,000	550,000

Concord Landscape Project

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
Develop and implement a project to provide recycled water to landscape irrigation customers in the Diamond/Meridian Park Blvd area of Concord.

Project History:
This project would provide up to 190 acre-feet per year (AFY) of recycled water for landscape irrigation at businesses and landscape medians in the Diamond/Meridian Park Blvd area of Concord. This area is part of the Zone One Project area and is included in the 1995 Zone One Project Agreement with the Contra Costa Water District.

Project Description:
The project would consist of construction of about 2.5 miles of new recycled water distribution piping and about 34 customer connections. The total estimated project cost is $4.2 million. CCCSD is pursuing outside funding assistance from federal and state sources to make this project cost-effective. At this time, budget is only included for planning activities and to pursue funding assistance. Should funding assistance become available, the Board would be asked if they wished to construct the project, and, if so, the Board would need to authorize the funds necessary for construction.

Project Location:
Concord, Zone One Project area

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$60,000
Design	07/01/2011	09/01/2011	$0
Construction	09/01/2011	06/30/2014	$0
		Total:	**$60,000**

Estimated expenditures this FY are: **$20,000**
Anticipated Allocations this FY are: **$60,000**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Concord Landscape Project / 1
Project Number/Filename: pRW02 / Concord_LS
Project Manager/% Expansion: Berger / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	40,000	20,000	0	0	0
B. Anticipated Allocations	60,000	0	0	0	0	0
C. Authorized this Year	60,000	40,000	20,000	0	0	0
D. Estimated Expenditures	(20,000)	(20,000)	(20,000)	0	0	0
E. Estimated Carry-over	40,000	20,000	0	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 currently use a combined total of approximately 22,500 acre feet per year (AFY) of Delta water for cooling towers and boiler feedwater applications. CCCSD discharges a total over 40,000 AFY of secondary effluent to Suisun Bay that could be recycled and used at the refineries to replace Delta water. Some of the infrastructure required for this project, including the storage tanks and distribution pipelines to the refineries, already exists. Implementation of the project would require construction of new filtration facilities at CCCSD's treatment plant and ammonia removal (nitrification) facilities to meet refinery water quality requirements. The project could be cost-effective compared to other water supply alternatives if outside funding assistance could be obtained.

Project Description:
This project would provide up to 22,500 acre feet per year of ammonia free (nitrified) recycled water to the Shell and Tesoro refineries for use in cooling towers and boiler feedwater. The proposed project would require construction of new recycled water treatment facilities at CCCSD's wastewater treatment plant in Martinez, including ammonia removal, filtration, and disinfection facilities. The total estimated project cost is $100 million. The existing distribution pipelines owned by the Contra Costa Water District would be used if available to distribute recycled water into the refineries, which would reduce the estimated cost of the project. CCCSD is currently seeking outside funding assistance and project partners to make the project cost-effective compared to other water supply alternatives. At this time, budget is only included for project planning activities and to pursue funding assistance and project partners.

Project Location:
Treatment Plant, Martinez

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2011	07/01/2014	$500,000
Design	-	-	$0
Construction	07/01/2014	06/17/2016	$0
		Total:	**$500,000**

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: pRW01 / refinery ReW
Project Manager/% Expansion: Berger / 0

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
A. Current Carry-over	0	0	0	0	0	0
B. Anticipated Allocations	100,000	100,000	100,000	100,000	100,000	0
C. Authorized this Year	100,000	100,000	100,000	100,000	100,000	0
D. Estimated Expenditures	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	0
E. Estimated Carry-over	0	0	0	0	0	0

Recycled Water Planning

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
To develop and implement a comprehensive long-term Recycled Water Program that provides recycled water for landscape irrigation, industrial reuse, and other feasible applications.

Project History:
The District has worked with the Contra Costa Water District (CCWD) and the East Bay Municipal Utility District (EBMUD) on various recycled water feasibility studies over the years. In 2000, the District's Recycled Water Master Plan was completed. It identified potential recycled water customers and demands for irrigation and industrial uses throughout the District. Costs and benefits were developed for various recycled water projects.

Recent planning efforts have focused on developing an industrial recycled water project; evaluating the use of recycled water at potential new power plants in the area; and evaluating the use of satellite treatment facilities to provide recycled water to landscape irrigation customers in areas remote to the District's recycled water filtration plant in Martinez.

Project Description:
This project provides funds for planning studies related to the development of the District's recycled water program. The Recycled Water Planning Project will also address implementation issues such as funding, state and federal regulations, public education, and gaining political support from federal, state, and local agencies. Documents to comply with State Water Resources Control Board (SWRCB) requirements for salt and nutrient management plans will be prepared as part of this project.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$1,252,000
Design	-	-	$0
Construction	01/01/2008	06/17/2017	$0
		Total:	**$1,252,000**

Estimated expenditures this FY are: **$55,000**
Anticipated Allocations this FY are: **$35,000**

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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	(190,000)	10,000	(10,000)	(10,000)	(10,000)
B. Anticipated Allocations	326,000	345,000	35,000	105,000	105,000	105,000
C. Authorized this Year	326,000	155,000	45,000	95,000	95,000	95,000
D. Estimated Expenditures	(516,000)	(145,000)	(55,000)	(105,000)	(105,000)	(105,000)
E. Estimated Carry-over	(190,000)	10,000	(10,000)	(10,000)	(10,000)	(10,000)

Zone 1 Recycled Water

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
To 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 October 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. The District currently operates about 11 miles of recycled water distribution pipelines and supplies about 200 million gallons per year to over thirty recycled water customer sites. 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*	*Total Cost*
Planning	06/01/2007	07/01/2007	$572,000
Design	-	-	$6,600
Construction	07/01/2007	06/17/2012	$769,400
		Total:	**$1,348,000**

Estimated expenditures this FY are: **$310,000**
Anticipated Allocations this FY are: **$0**

Project Fiscal Year Allocation/Expenditure Table:

Project Title/Subprogram: Zone 1 Recycled Water - ph 1C / 1
Project Number/Filename: 7194 / rew_02zone1
Project Manager/% Expansion: Berger / 0

	Prior to 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	341,000	310,000	0	0	0
B. Anticipated Allocations	1,039,000	309,000	0	0	0	0
C. Authorized this Year	1,039,000	650,000	310,000	0	0	0
D. Estimated Expenditures	(698,000)	(340,000)	(310,000)	0	0	0
E. Estimated Carry-over	341,000	310,000	0	0	0	0

Concord Naval Weapons Station Recycled Water Planning

Project Manager, Department/Division:
Don Berger, Engineering/Environmental Services

Project Purpose:
To 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 (CCRP).

Project History:
The planned redevelopment of the Concord Naval Weapons Station (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 (Clustered Villages concept) consisting of a mixture of commercial, residential, institutional, and recreational uses interspersed between parks and open space. In January 2010, the Concord Community Reuse Project (CCRP) Final Environmental Impact Report (EIR) was completed; it includes recycled water demand scenarios of up to 2,749 AFY for landscape irrigation. Recycled water projects are more cost-effective when the piping and distribution facilities can be planned and installed with other infrastructure required as part of a new community, and therefore, the CNWS site is an ideal location for implementing a recycled water project.

Project Description:

A Recycled Water Facilities Plan will be completed to identify conceptual recycled water infrastructure necessary to serve the irrigation demands identified in the EIR. As CNWS development plans proceed forward, this analysis 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 CCRP's appropriate contribution to the cost of such infrastructure can be ascertained.

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	07/01/2010	07/01/2012	$250,000
Design	07/01/2012	07/01/2015	$0
Construction	07/01/2015	06/30/2019	$0
		Total:	**$250,000**

Estimated expenditures this FY are: **$60,000**
Anticipated Allocations this FY are: **$20,000**

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	75,000	35,000	30,000	25,000	20,000
B. Anticipated Allocations	230,000	20,000	0	0	0	0
C. Authorized this Year	230,000	95,000	35,000	30,000	25,000	20,000
D. Estimated Expenditures	(155,000)	(60,000)	(5,000)	(5,000)	(5,000)	(5,000)
E. Estimated Carry-over	75,000	35,000	30,000	25,000	20,000	15,000

Cathodic Protection System Replacement - ReW

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

Project Purpose:
A master plan for treatment plant, reclaimed water and collection systems cathodic protection was prepared in 2006/07. Based on the master plan, adequate cathodic protection on all reclaimed 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 reclaimed water facilities, structures and pipelines, cathodic protection systems need to be monitored and maintained. Recently a cathodic protection survey of the reclaimed water system was performed and identified facilities that needed replacement and improvements over the next five-year period. The report also identified existing facilities requiring further investigations. The current project will implement high priority recommendations from the master plan. Other less urgent improvements will be scheduled for renovation in the future years.

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. It is anticipated that some systems may require refurbishment in the near future.

Project Location:
Throughout the recycled water distribution system

Project Schedule and Cost:

	Start Date	*Completion*	*Total Cost*
Planning	-	-	$0
Design	07/01/2006	02/01/2007	$40,000
Construction	02/01/2007	06/01/2020	$0
		Total:	**$40,000**

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

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 7/01/10	2010-11	2011-12	2012-13	2013-14	2014-15
A. Current Carry-over	0	15,000	10,000	5,000	0	4,000
B. Anticipated Allocations	25,000	0	0	0	9,000	1,000
C. Authorized this Year	25,000	15,000	10,000	5,000	9,000	5,000
D. Estimated Expenditures	(10,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
E. Estimated Carry-over	15,000	10,000	5,000	0	4,000	0

CENTRAL CONTRA COSTA SANITARY DISTRICT
2011 CAPITAL IMPROVEMENT PLAN
TEN YEARS ENDING JUNE 30, 2021

TABLE OF CONTENTS

List of Tables

2011 CAPITAL IMPROVEMENT PLAN
TEN YEARS ENDING JUNE 30, 2021

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 Fiscal Year (FY) 2011-12 through FY 2020-21. The plan includes projected expenditures totaling $345,133,000 (2011 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 2011-12 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 Treatment Plant Program will require $146.5 million (2011 dollars), comprising 43 percent of the District's capital improvements over the next ten years. 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. At $172 million (2011 dollars), the Collection System Program comprises 50 percent of the District's capital improvements over the next ten years. Several capital projects have been used to identify and prioritize the collection system projects. The Collection System Renovation Project has been used for many years to collect and prioritize collection system renovation of line segments and spot repairs referred to engineering by Collection System Operations or more recently, through the District-wide TV Inspection Program, initiated in FY 2002-03. 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 facilities at the Collection System Operations Corporation Yard, the Headquarters Office Building and other District properties, information system and data management upgrades (computer hardware and software) and other miscellaneous equipment, including vehicles. The General Improvements Program will require $21.5 million (2011 dollars); representing six percent of the District's anticipated capital expenditures over the next ten years. This program includes completion of the new Collection System Operations Administration and Warehouse Facility as well as a program to make seismic upgrades to general use District buildings.

Recycled Water

The District's Recycled Water Program includes projects which will require $5.5 million (2011 dollars), comprising two percent of the District's capital improvements over the next ten years. 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. The District will be working on a recycled water master planning study for the proposed Concord Naval Weapons Station redevelopment to identify the infrastructure needed to supply recycled water to this new community. The District will also continue to investigate opportunities for industrial water recycling. District staff will continue to pursue financial partners for the Concord Landscape project and the Refinery Recycled Water project, although these are not currently budgeted except for small expenditures to cover planning activities.

Table 1 - Ten-Year Program Expansion-Upgrade/Replacement

Program/Subprogram	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
Treatment Plant											
Reg. Compliance/Planning/Safety	740,000	350,000	770,000	220,000	3,365,000	9,615,000	17,615,000	23,865,000	23,615,000	1,150,000	81,305,000
One-Time Renovation	4,100,000	8,145,000	7,620,000	6,757,000	4,397,000	1,860,000	880,000	80,000	80,000	0	33,919,000
Recurring Renovation	2,237,000	342,000	452,000	510,000	3,465,000	3,475,000	3,150,000	4,750,000	5,000,000	5,450,000	28,831,000
Expansion	5,000	0	0	0	0	0	100,000	840,000	1,000,000	500,000	2,445,000
Subtotal	**7,082,000**	**8,837,000**	**8,842,000**	**7,487,000**	**11,227,000**	**14,950,000**	**21,745,000**	**29,535,000**	**29,695,000**	**7,100,000**	**146,500,000**
Collection System											
Renovation	7,765,000	10,941,000	12,625,000	11,311,000	9,563,000	10,201,000	13,181,000	12,501,000	14,402,000	17,630,000	120,120,000
Reg. Compliance/Planning/Safety	368,000	110,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	170,000	2,538,000
Expansion	3,402,000	3,517,000	2,874,000	3,354,000	4,231,000	4,531,000	2,481,000	4,631,000	3,780,000	1,830,000	34,631,000
Pumping Stations	1,305,000	2,577,000	2,075,000	1,806,000	2,625,000	975,000	1,226,000	1,250,000	250,000	250,000	14,339,000
Subtotal	**12,840,000**	**17,145,000**	**17,844,000**	**16,741,000**	**16,689,000**	**15,977,000**	**17,158,000**	**18,652,000**	**18,702,000**	**19,880,000**	**171,628,000**
General Improvements											
Vehicles & Equipment	892,000	501,000	501,000	501,000	501,000	501,000	501,000	500,000	500,000	500,000	5,398,000
Management Information Systems	892,000	605,000	533,000	528,000	500,000	500,000	500,000	500,000	500,000	500,000	5,559,000
Projects	3,658,000	2,500,000	505,000	505,000	535,000	550,000	855,000	480,000	480,000	480,000	10,548,000
Subtotal	**5,442,000**	**3,606,000**	**1,539,000**	**1,534,000**	**1,536,000**	**1,551,000**	**1,856,000**	**1,480,000**	**1,480,000**	**1,480,000**	**21,505,000**
Recycled Water											
Urban Landscaping	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,500,000
Subtotal	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**5,500,000**
Total	**25,914,000**	**30,138,000**	**28,775,000**	**26,312,000**	**30,002,000**	**33,028,000**	**41,309,000**	**50,217,000**	**50,427,000**	**29,010,000**	**345,133,000**

Potential Future Projects Not Included in 2011 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 2011 Capital Improvement Plan

Description	Time frame	Estimated total project cost	Estimated probability
Treatment Plant Other Projects			
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
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.	3-10 yrs	$100 million	Medium
Concord Landscape Recycled Water Project - Construct recycled water distribution facilities to supply the Diamond Boulevard commercial area of Concord. Money for planning activities only is budgeted.	2-5 yrs	$5 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

(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

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 must be repaid with interest by 2012-13.

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.

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 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 2011-12 is projected to be 0.5 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.

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, $30 million in debt was issued to fund some large, needed one-time projects. In addition, current debt was refinanced to take advantage of the favorable bond interest rates. 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
(Rev. 2-28-11)

CENTRAL CONTRA COSTA SANITARY DISTRICT
TEN-YEAR CAPITAL IMPROVEMENT PLAN

		($$ thousands)									
SEWER CONSTRUCTION FUND	FY	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
INCOME											
INTEREST ON INVESTMENTS		265	364	448	662	977	1,258	1,539	1,788	1,826	2,145
FACILITIES CAPACITY FEE		4,372	4,969	5,579	5,756	5,949	6,069	6,177	6,320	6,508	6,748
PUMPED ZONE FEE		562	717	707	705	715	716	740	523	148	145
AD VALOREM TAXES		6,882	7,734	6,822	6,979	10,688	9,383	9,840	10,482	10,930	11,413
SEWER SERVICE CHARGES		6,534	8,351	11,315	14,312	10,406	14,478	18,772	21,702	24,309	11,955
REIMBURSEMENTS FROM OTHERS:											
CITY OF CONCORD		2,549	2,979	3,124	2,608	3,884	5,236	7,718	10,650	11,050	2,955
ALHAMBRA VALLEY		481	486	493	503	518	534	550	566	583	601
BOND PROCEEDS											
DEVELOPER FEES AND CHARGES, MISC		600	619	637	656	676	696	717	739	761	784
Subtotal		22,245	26,219	29,125	32,181	33,813	38,370	46,053	52,7870	56,115	36,746
EXPENDITURES											
TREATMENT PLANT PROGRAM		7,082	8,840	9,597	7,771	12,092	16,585	24,846	34,759	35,996	8,865
COLLECTION SYSTEM PROGRAM		12,840	18,068	18,217	17,537	18,005	18,589	19,714	22,063	22,786	23,407
GENERAL IMPROVEMENTS PROGRAM		5,442	3,480	1,684	1,969	1,624	1,673	1,723	1,774	1,736	1,883
RECYCLED WATER PROGRAM		550	556	564	575	592	10	28	647	67	687
Subtotal		25,914	30,944	30,062	27,852	32,313	37,457	46,911	59,243	61,185	34,842
NET INCREASE (DECREASE)		(3,669)	(4,725)	(937)	4,329	1,500	913	(858)	(6,473)	(5,070)	1,904

Table 5 - Assumptions Used to Calculate Cash Flow Tables

DRAFT

Recommended Scenario presented in March 3, 2011 Board Financial Planning Workshop

Fiscal Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Interest %	0.50%	0.75%	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	5.00%
Inflation %	0.0%	1.0%	1.5%	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
# of New Connections	800	900	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ad Valorem Tax Escalation*	0.0%	0.0%	1.0%	1.0%	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Total Sewer Service Charge (SSC)	$ 341	$ 371	$ 401	$ 432	$ 463	$ 494	$ 525	$ 556	$ 587	$ 592
SSC Capital Component	$ 39	$ 49	$ 66	$ 83	$ 60	$ 83	$ 107	$ 123	$ 137	$ 67
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 Capital.

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. Projects include Alternative Energy Study. Future Regulatory Project anticipates significant future regulations and may fund expansion of the aeration tanks for nitrification. The CIP estimate for Regulatory Compliance and Safety projects is $13 million or 17 percent of the Treatment Plant Program budget over the next ten years.

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), Wet & Dry Scrubber Replacement, Cogeneration Replacement, and Centrifuge & Cake Pump Upgrades. The CIP estimates that one-time renovations will cost approximately $34 million or 43 percent of the total ten-year program budget.

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 Protective Coating Renovation, Equipment Replacement, Piping Renovations and Replacement, Electrical and Instrumentation Replacement, Cathodic Protection System Replacement, and the development of an Asset Management Plan. Projects in these areas will cost approximately $29 million or about 37 percent of the treatment plant program budget over the next ten years.

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. Projects in the Expansion Program are approximately $2.4 million or about 3 percent of the Treatment Plant Program budget.

Summary

The Treatment Plant Program of the 2011 Capital Improvement Plan will require approximately $78 million over the next ten years, which represents 28 percent of the total CIP budget. The projects proposed in the CIP are required to meet regulatory mandates, reliability needs, safety concerns, and capacity needs.

Regulatory Compliance and Safety:			
Project Title	**Year**	**Location**	**Description**
Standby Effluent Pump Refurbishment – Ph 2	2014	Pump & Blower Building	The effluent pumps have been in operation for many years. As they reach the end of their service life wear components will require replacement. Also, with new energy efficiency regulations motor replacement or other efficiency related work may be required.
Co-Gen Replacement	2017	Solids Conditioning Building	Greenhouse gas (GHG) regulations are expected to have a significant impact on District operations. This project includes evaluation and replacement of the District's existing cogeneration unit. A new unit is expected to generate more power than the current unit and provide GHG credits to keep the District under the GHG cap.
TP Hazard Identification and Remediation	2012 -19	Entire Treatment Plant	This project will remediate hazardous materials within the treatment plant. The purpose is to minimize exposure of District employees to hazardous materials during the course of their work.
Future Regulatory Project	2014	Entire Treatment Plant	There are a number of potential regulatory changes that may be implemented within the next ten years. These include nitrification, GHG, and solid waste. Nitrification would require an expansion of the aeration tanks. GHG regulations may require modifications to the treatment process. This project anticipates regulatory changes that will require significant capital expenditures in the next ten years.

One-Time Renovation:			
Project Title	**Year**	**Location**	**Description**
Electric Blower Renovation	2015	Pump and Blower Building	This project will design and construct electric blowers for the grit chambers and optimize use of existing steam blowers and electric blowers, adding nitrification to the process, and/or adding nutrient removal to the process.
Primary Structures Demolition	2016	Primary Sedimentation Tanks	This project will design and demolish the abandoned primaries and abandoned lime storage tower for the future primary expansion and to mitigate safety hazards.
Furnace Burner	2014	Solids Conditioning Building	This project will improve operational flexibility of the multiple hearth furnaces by adding auxiliary fuel delivery, piping and burners, and add the ability to co-fire natural and landfill gases for the furnaces.
Switchgear Replacement	2014	Throughout the Treatment Plant	This project will refurbish older circuit breakers and replace trip units to enhance the reliability of the treatment plant electrical distribution system.
Secondary Process Improvements	2015	Aeration Basins and Clarifiers	This project will replace and modify existing piping and components of the secondary process to extend the life of the system and add flexibility to the selector channel.
Primary Treatment Renovation	2013	Primary Sedimentation Tanks	This project will renovate the four primary sedimentation tanks and supporting systems. The electrical, mechanical, and structural elements of this area are all in need of rehabilitation.
Centrifuge & Cake Pumps Upgrades	2015	Solids Conditioning Building	This project will review and implement modifications to improve the reliability and performance of the sludge dewatering system.
SCB Seismic Upgrades	2014	Solids Conditioning Building	This project will 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.
POB Seismic Upgrades	2015	Plant Operations Building	This project will 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.

One-Time Renovation (Continued):			
Project Title	**Year**	**Location**	**Description**
Wet & Dry Scrubber Replacement	2013	Solids Conditioning Building	This project will replace the wet and dry scrubbers on each of the furnaces because they are at the end of their useful lives.
Pump & Blower Building Seismic Upgrade	2012 & 2013	Pump & Blower Building	This project will 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.
Laboratory Seismic Upgrade	2016	Laboratory	This project will 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.
Warehouse Seismic Upgrade	2017	Warehouse/Mechanic Shop	This project will 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.
Primary Effluent Pumps Refurbishment – Ph 2	2017	Pump & Blower Building	The primary effluent pumps have operated for many years. As they reach the end of their service life wear components will require replacement. Also, with new energy efficiency regulations motor replacement or other efficiency related work may be cost-effective for the District.
Instrumentation & Control – PLC System Upgrades (Long Term)	2013 thru 2020	Throughout the Treatment Plant	This project will identify deficiencies in the electrical, control and instrumentation systems in the treatment plant and rectify the issues.

Recurring Renovation:			
Project Title	**Year**	**Location**	**Description**
Electrical Cable Replacement – LT	2016	Entire Treatment Plant	The objective of this project is to improve the reliability of the plant's electrical distribution system. The Treatment Plant Asset Management Plan Project (DP 7269) is documenting the condition of District facilities and equipment and will be used to recommend cable replacement.
Treatment Plant Protective Coating Renovation	2016	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 Facilities Renovation Program – LT	2016	Entire Treatment Plant	This project provides the long-term funding for replacement of plant structures, roadways, and other similar components of plant facilities as they deteriorate.
Piping Renovation and Replacement - LT	2013	Entire Treatment Plant	This project will improve the reliability of treatment plant piping systems above and below ground by inspection, renovation, and replacement where required. The Treatment Plan Asset Management Project (DP 7269) is documenting recent renewal and replacement projects as well as nondestructive testing of existing piping systems and will ultimately be used to provide recommendations for additional renewal and replacement needs of other major piping systems.
TP Cathodic Protection System Replacement – LT	2016	Entire Treatment Plant	The plant's cathodic protection system is a critical component to ensure the longevity of the treatment plant infrastructure. This project provides the long-term maintenance and replacement of the cathodic protection system.
TP Equipment Replacement - LT	2017	Entire Treatment Plant	Much of the treatment plant's equipment was installed over 30 years ago. This project will 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.

Expansion:			
Project Title	**Year**	**Location**	**Description**
Bar Screen for Third Wet Well	2019	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

#Project	Title	Start Year	Manager	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
Treatment Plant														
1 - Reg. Compliance/Planning/Safety														
8213	Treatment Plant Security Upgrade	03/05	Deutsch	5,000	0	0	0	0	0	0	0	0	0	5,000
7260	Solids Handling Improvements	10/06	Rathund	5,000	0	0	0	0	0	0	0	0	0	5,000
7256	Alternative Energy & Greenhouse Gas	07/07	LaBella	50,000	0	0	0	0	0	0	0	0	0	50,000
7287	TP Master Plan Update	07/09	Chesler	300,000	115,000	0	0	0	0	0	0	0	0	415,000
7283	Fire Protection System	09/09	Mizutani	175,000	0	0	0	0	0	0	0	0	0	175,000
7284	TP Hazard Identification & Remediation	10/09	Lawson	5,000	75,000	75,000	75,000	100,000	100,000	100,000	250,000	0	0	780,000
pTP22	Incinerator Emissions Compliance	07/11	Mizutani	75,000	5,000	0	0	0	0	0	0	0	0	80,000
pTP07	Treatment Plant Planning	07/11	Chesler	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
none	TP Safety Improvements Program	07/11	Than	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0	45,000
pTP21	Co-Gen Replacement	07/11	Mizutani	5,000	25,000	25,000	25,000	150,000	4,400,000	2,400,000	0	0	0	7,030,000
pTP12	Standby Effluent Pumps Refurb - ph	07/11	Mizutani	10,000	10,000	550,000	0	0	0	0	0	0	0	570,000
pTP20	Nitrification	01/12	Chesler	5,000	5,000	5,000	5,000	3,000,000	5,000,000	15,000,000	23,500,000	23,500,000	1,000,000	71,020,000
none	Treatment Plant Security Upgrade -	07/12	Deutsch	0	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	80,000
none	Primary Treatment Covers	07/20	Hodges	0	0	0	0	0	0	0	0	0	25,000	25,000
none	Future Regulatory Projects	07/20	Than	0	0	0	0	0	0	0	0	0	25,000	25,000
2 - One-Time Renovation														
7241	Wet Weather Bypass Improvements	09/04	Shima	5,000	0	0	0	0	0	0	0	0	0	5,000
7248	Standby Power Facility	07/05	Mizutani	5,000	0	0	0	0	0	0	0	0	0	5,000
6169	Instr & Control - PLC System	07/06	McEachen	80,000	0	0	0	0	0	0	0	0	0	80,000
7272	Electric Blower Renovation	01/07	Shima	5,000	5,000	100,000	1,500,000	5,000	0	0	0	0	0	1,615,000
7255	Primary Structures Demo	10/07	Shima	5,000	5,000	5,000	5,000	1,250,000	5,000	0	0	0	0	1,275,000
7277	SCB Mechanical Room	02/09	Rathund	5,000	0	0	0	0	0	0	0	0	0	5,000
7281	TP Elevators Modernization	07/09	Husain	200,000	0	0	0	0	0	0	0	0	0	200,000
pTP15	Furnace Burner	07/09	Shima	100,000	100,000	1,500,000	0	0	0	0	0	0	0	1,700,000
7282	Perimeter Fencing	07/09	Lawson	150,000	0	0	0	0	0	0	0	0	0	150,000
7292	Switchgear Replacement - ph 2	01/10	Lawson	50,000	50,000	500,000	500,000	0	0	0	0	0	0	1,100,000
7294	Secondary Process Improvements	02/10	Lawson	5,000	5,000	5,000	100,000	500,000	750,000	0	0	0	0	1,365,000
pTP17	Wet and Dry Scrubber Replacement	07/10	Hodges	200,000	2,000,000	1,700,000	10,000	0	0	0	0	0	0	3,910,000
7286	Centrifuge & Cake Pump Upgrades	07/10	Rathund	25,000	25,000	180,000	1,562,000	1,400,000	0	0	0	0	0	3,192,000
7285	Primary Treatment Renovation	07/10	Rathund	750,000	4,240,000	1,500,000	0	0	0	0	0	0	0	6,490,000
pTP31	SCB Seismic Upgrade	07/10	Shima	50,000	200,000	2,000,000	2,800,000	0	0	0	0	0	0	5,050,000
7289	POB Seismic Upgrade	07/10	Penny	5,000	5,000	5,000	150,000	1,000,000	25,000	0	0	0	0	1,190,000
7295	Auxiliary Boiler Burner Upgrade	07/10	Mizutani	750,000	100,000	0	0	0	0	0	0	0	0	850,000
7291	Pump & Blower Bldg Seismic Upgrade	07/10	Hodges	1,000,000	1,000,000	5,000	0	0	0	0	0	0	0	2,005,000
7290	Outfall Improvements, Phase 6	01/11	Lawson	685,000	300,000	0	0	0	0	0	0	0	0	985,000

Ten-year Program Estimated Expenditures

#Project	Title	Start Year	Manager	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
pTP03	Plant Cyber Security	07/11	Lawson	25,000	25,000	25,000	25,000	0	0	0	0	0	0	100,000
none	Instr & Control - PLC System	07/12	McEachen	0	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	0	640,000
none	Primary Effl Pumps Refurb - ph 2	07/12	Mizutani	0	5,000	5,000	5,000	5,000	100,000	800,000	0	0	0	920,000
pTP19	Laboratory Seismic Upgrade	07/12	Hodges	0	0	5,000	10,000	77,000	100,000	0	0	0	0	192,000
pTP18	Warehouse Seismic Upgrade	07/12	Hodges	0	0	5,000	10,000	80,000	800,000	0	0	0	0	895,000
3 - Recurring Renovation														
7268	TP Facilities Renovations	07/04	Than	12,000	12,000	12,000	0	0	0	0	0	0	0	36,000
7269	TP Asset Management	12/05	Lawson	10,000	100,000	100,000	100,000	0	0	0	0	0	0	310,000
7254	TP Cathodic Prot Sys Repl	07/06	Hodges	50,000	5,000	5,000	5,000	10,000	0	0	0	0	0	75,000
7247	TP Protective Coatings - ph 4	07/06	Rathund	725,000	5,000	0	0	0	0	0	0	0	0	730,000
7265	TP Equipment Replacement	07/07	Than	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	600,000
7276	Piping Renovations - ph 5	02/09	Husain	300,000	0	0	0	0	0	0	0	0	0	300,000
7288	Piping Renovations - ph 6	02/10	Rathund	1,000,000	5,000	0	0	0	0	0	0	0	0	1,005,000
pTP29	Pavement Renovation	07/10	Lawson	5,000	5,000	5,000	5,000	50,000	50,000	50,000	50,000	50,000	0	270,000
pTP30	Concrete Renovation	07/10	Lawson	5,000	50,000	50,000	50,000	50,000	50,000	50,000	0	0	0	305,000
pTP06	Plant Electrical and Instrumentation	07/10	Than	5,000	25,000	0	0	0	0	0	0	0	0	30,000
pTP32	Plant Energy Optimization	07/11	Hodges	25,000	25,000	25,000	25,000	0	0	0	0	0	0	100,000
none	Electrical Cable Replacement - Long	07/12	Than	0	5,000	50,000	50,000	250,000	250,000	250,000	500,000	500,000	500,000	2,355,000
pTP16	Coating Renovation	07/12	Rathund	0	5,000	25,000	50,000	500,000	1,000,000	450,000	750,000	500,000	500,000	3,780,000
none	TP Facilities Renov Pgm - LT	07/13	Than	0	0	75,000	75,000	500,000	500,000	500,000	500,000	500,000	600,000	3,250,000
none	Piping Renov and Repl - LT	07/13	Than	0	0	5,000	50,000	2,000,000	1,500,000	1,500,000	2,000,000	2,000,000	2,000,000	11,055,000
none	TP Protective Coating - LT	07/15	Than	0	0	0	0	5,000	5,000	50,000	250,000	500,000	800,000	1,610,000
none	TP Cathodic Prot Sys Repl - LT	01/17	Antkowiak	0	0	0	0	0	20,000	200,000	200,000	200,000	0	620,000
none	TP Equipment Replacement - LT	01/18	Than	0	0	0	0	0	0	100,000	500,000	750,000	800,000	2,150,000
pTP26	TP Electric Cable Repl	07/20	Than	0	0	0	0	0	0	0	0	0	250,000	250,000
4 - Expansion														
7264	Primary Treatment Expansion	03/06	Lawson	5,000	0	0	0	0	0	0	0	0	0	5,000
none	Bar Screen for Third Wetwell	07/17	Than	0	0	0	0	0	0	100,000	840,000	1,000,000	0	1,940,000
none	Aeration Basin Expansion	07/20	Hodges	0	0	0	0	0	0	0	0	0	250,000	250,000
none	Secondary Clarifier Expansion	07/20	Hodges	0	0	0	0	0	0	0	0	0	250,000	250,000
		Program Total:		7,082,000	8,837,000	8,842,000	7,487,000	11,227,000	14,950,000	21,745,000	29,535,000	29,695,000	7,100,000	146,500,000
		Report Total:		7,082,000	8,837,000	8,842,000	7,487,000	11,227,000	14,950,000	21,745,000	29,535,000	29,695,000	7,100,000	146,500,0

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 and Urgent

The renovation program goal is to address recurring renovation needs and is budgeted at $120 million for the next ten years or 70 percent of the collection system CIP. 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 $4.5 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 soil types, ages, materials, and other 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. This subprogram is budgeted at $2.5 million over the next ten years or nearly two percent of the collection system CIP.

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. Implementation of the full set of recommendations has a projected cost of $35 million (2011 dollars) over the ten years or 20 percent of the collection system CIP. Large capacity projects that are planned over the next ten years include trunk sewer improvements in Lafayette along Pleasant Hill Road, 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. Expenditures of $15 million are budgeted for pumping stations and force mains over the next ten years, approximately nine percent of the total collection system CIP.

At $172 million (2011 dollars), the Collection System Program represents approximately 62 percent of the anticipated capital funding needs of the District over the next ten years.

Renovation:			
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
Concrete Pipe Renovation	ongoing	Throughout the collection system	Identify, evaluate and schedule remediation for concrete pipes
Collection System Urgent Projects	2013	Throughout the collection system	Urgent projects are included in this category of projects.
Mount Diablo Boulevard Main Improvements	2013	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, and complete the necessary sewer improvements.
Walnut Creek Civic Center Main Improvements	2014	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, and complete the necessary sewer improvements.
North Main Trunk improvements	2015	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, and complete the necessary sewer improvements.
Locust Street Improvements	2015	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, and complete the necessary sewer improvements.

Renovation (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 39-inch Old Main Trunk No. 1.
TV Inspection Program	ongoing	Throughout the collection system	The work completed under this project provides the data needed to prioritize the renovation program projects.

Regulatory Compliance/Planning/Safety:			
Project Title	**Year**	**Location**	**Description**
Manhole Remote Level Monitoring	ongoing	Throughout the collection system	This project will include the 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	This project will identify, evaluate, and schedule short and long-term sewer improvement 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.

Expansion:			
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.
Trunk Sewer Capacity 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.
Pleasant Hill Grayson Creek	2013	This 12 and 15 inch trunk sewer is a continuation of the Pleasant Hill Road Trunk sewer from the intersection of Pleasant Hill Road and Mercury Way to the Pleasant Hill Relief Interceptor in Taylor Boulevard	Approximately 5,600 feet of 18 and 24-inch trunk sewer to provide capacity relief to the existing trunk. The new line will be constructed in streets and will tie into the Pleasant Hill Relief Interceptor in Ardith Drive
Pleasant Hill Road Corridor	2014	In Pleasant Hill Road between Mercury Way and near Virginia Hills Drive	Approximately 2,800 feet of the existing trunk sewer with an 18-inch line
Lancaster Road, Walnut Creek, TR 13-600	2015	In Lancaster Road and Meadow Road	Approximately 5,100 feet of the existing trunk sewer with 15 and 18-inch lines
Moraga Way, Orinda TR10-200/300	2016	In El Camino Moraga, Del Rey School, Moraga Way, Orinda	Approximately 3,400 feet of 12 to 15-inch sewers
San Ramon Schedule C, Interceptor – Phase 2	2017	San Ramon, between Norris Canyon Drive and St. James Court	Approximately 2 miles of 36-inch gravity sewer

Expansion (Continued):			
Project Title	**Year**	**Location**	**Description**
Walnut Blvd, Walnut Creek, TR 29-200 - phase1	2019	In Walnut Boulevard from Homestead Avenue to Norlyn Drive	Approximately 7,000 feet of the existing trunk sewer with 18 to 22-inch sewers
Martinez Alhambra Avenue Trunks	2019	In Alhambra Avenue from Highway 4 to C Street	Approximately 5,700 feet of the existing trunk sewer with 18 and 21-inch lines
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 RCP

Pumping Stations:		
Project Title	**Year**	**Description**
Lower Orinda Pumping Station Force Mains	2013	The Lower Orinda Pump Station is located in an EBMUD watershed. The existing force mains are quite old and need to be evaluated. This project will evaluate the condition of the existing force mains, implement any needed rehabilitation and may install a third force main for reliability.
Fairview-Maltby PS Upgrades	2013	This project will evaluate operational issues, identified by pump station operators, and recommend upgrades and other miscellaneous improvements at Fairview and Maltby Pumping stations.
Orinda Crossroads Pumping Station Force Mains	2014	The Orinda Crossroads Pumping Station is located in an EBMUD watershed. The existing force mains are quite old and need to be evaluated. This project will evaluate the condition of the existing force mains and implement any needed rehabilitation.
Moraga Pumping Station Force Mains	2015	The existing force mains are old and will have been evaluated in a study. The existing force mains are quite old and need to be evaluated. This project will evaluate the condition of the existing force mains and implement any needed rehabilitation.

Pumping Stations (Continued):		
Project Title	**Year**	**Description**
Concord Industrial Pumping Station Replacement	2016	This project will evaluate the flows from the North Concord service area and additional flows that may come from the development of the Concord Naval Weapons Center. This information will be utilized to situate a new station in the same or different location. Elimination of the Clyde and Bates Avenue Pumping Stations will also be evaluated.
Clyde Parallel Force Main	2017	Staff will evaluate the potential to eliminate this 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 Clyde Pumping Station.
Moraga Diesel Replacement	2018	The 1000 Hp Waukesha engine at the Moraga Pumping Station is about 50 years old and may be nearing the end of its useful live. Replacement parts are getting more difficult to find. This project will evaluate the condition of the existing engine and make recommendations for rehabilitation and/or replacement.
Orinda Crossroads Diesel Replacement	2019	The 1000 Hp Waukesha engine at the Orinda Crossroads Pumping Station is about 50 years old and may be nearing the end of its useful live. Replacement parts are getting more difficult to find. This project will evaluate the condition of the existing engine and make recommendations for rehabilitation and/or replacement.

Ten-year Program Estimated Expenditures

#Project	Title	Start Year	Manager	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
Collection System														
1 - Renovation														
5987	Cathodic Protection System	07/06	Antkowiak	1,000	0	0	0	0	0	0	0	0	0	1,000
5953	Diablo Renovations - ph 1	06/08	Antkowiak	1,000	0	0	0	0	0	0	0	0	0	1,000
5992	Walnut Creek Sewer Renovations - ph	07/08	Antkowiak	1,800,000	0	0	0	0	0	0	0	0	0	1,800,000
5991	Pleasant Hill Sewer Renovations - ph	12/08	Antkowiak	10,000	200,000	1,800,000	0	0	0	0	0	0	0	2,010,000
5947	Manhole Rehab	01/09	Hodges	21,000	30,000	20,000	0	0	0	0	0	0	0	71,000
5989	South Orinda Sewer Renovations - ph 5	05/09	Rozul	1,800,000	0	0	0	0	0	0	0	0	0	1,800,000
none	Collection System Urgent Projects	07/09	Antkowiak	1,000	40,000	0	0	0	0	0	0	0	0	41,000
pCS25	Walnut Creek Sewer Renovations - ph	07/09	Antkowiak	300,000	1,799,000	1,000	0	0	0	0	0	0	0	2,100,000
5990	Lafayette Sewer Renovation - ph 7	07/09	Godsey	1,790,000	10,000	0	0	0	0	0	0	0	0	1,800,000
5976	Diablo Renovations - ph 2	08/09	Antkowiak	300,000	2,000,000	0	0	0	0	0	0	0	0	2,300,000
pCS99	Watershed 44 Creek Xing Stabilization	01/10	Antkowiak	120,000	1,000	0	0	0	0	0	0	0	0	121,000
pCS03	South Main/I-680 Trunk Line Sliplining	07/10	Antkowiak	350,000	50,000	0	0	0	0	0	0	0	0	400,000
5948	TV Inspection Program - ph 2	07/10	Antkowiak	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	0	4,500,000
pCS27	Lafayette Sewer Renovation - ph 8	07/10	Antkowiak	250,000	1,800,000	1,000	0	0	0	0	0	0	0	2,051,000
5982	Pipeburst Blanket Contract	07/10	Antkowiak	1,000	1,000	0	0	0	0	0	0	0	0	2,000
5955	Suspended Pipe Support	07/10	Antkowiak	1,000	0	0	0	0	0	0	0	0	0	1,000
5999	CIPP Blanket Contract	07/10	Antkowiak	1,000	0	0	0	0	0	0	0	0	0	1,000
5973	North Orinda Sewer Renovations - ph 4	08/10	Antkowiak	300,000	1,799,000	1,000	0	0	0	0	0	0	0	2,100,000
pCS06	Mount Diablo Blvd Main	07/11	Godsey	213,000	1,500,000	1,000	0	0	0	0	0	0	0	1,714,000
none	Concrete Pipe Renovation	07/11	Antkowiak	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	10,000
pCS26	Martinez Sewer Renovations Phase 4	07/11	Antkowiak	1,000	200,000	1,800,000	0	0	0	0	0	0	0	2,001,000
pCS16	Collection System Renovation Program	07/11	Antkowiak	3,000	100,000	100,000	10,000	10,000	100,000	3,300,000	5,200,000	11,300,000	13,500,000	33,623,000
pCS37	North Orinda Sewer Renovations - ph 5	07/12	Antkowiak	0	250,000	1,800,000	0	0	0	0	0	0	0	2,050,000
pCS35	Walnut Creek Sewer Renovations - ph	07/12	Antkowiak	0	200,000	1,800,000	0	0	0	0	0	0	0	2,000,000
none	Walnut Creek Civic Center Main	07/12	Godsey	0	200,000	1,250,000	0	0	0	0	0	0	0	1,450,000
pCS32	Pleasant Hill Sewer Renovations - ph	07/12	Antkowiak	0	10,000	250,000	1,800,000	0	0	0	0	0	0	2,060,000
pCS36	Lafayette Sewer Renovations - ph 9	07/12	Antkowiak	0	250,000	1,800,000	0	0	0	0	0	0	0	2,050,000
none	Locust Street Improvements	07/13	Godsey	0	0	450,000	2,600,000	1,000	0	0	0	0	0	3,051,000
none	North Main Trunk Improvements	07/13	Godsey	0	0	300,000	1,700,000	1,000	0	0	0	0	0	2,001,000
none	North Orinda Sewer Renovations - ph 6	07/13	Antkowiak	0	0	250,000	1,800,000	0	0	0	0	0	0	2,050,000
none	Walnut Creek Sewer Renovations - ph	07/13	Antkowiak	0	0	250,000	1,800,000	0	0	0	0	0	0	2,050,000
pCS05	Cathodic Protection System	07/13	Antkowiak	0	0	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	900,000
none	Collection System Urgent Projects - LT	07/13	Antkowiak	0	0	50,000	50,000	50,000	100,000	100,000	100,000	100,000	100,000	650,000
none	Lafayette Sewer Renovations - ph 10	07/14	Antkowiak	0	0	0	250,000	2,000,000	0	0	0	0	0	2,250,000
none	North Orinda Sewer Renovations - ph 7	07/14	Antkowiak	0	0	0	200,000	1,900,000	0	0	0	0	0	2,100,000

Ten-year Program Estimated Expenditures

#Project	Title	Start Year	Manager	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
none	Pleasant Hill Sewer Renovations - ph	07/14	Antkowiak	0	0	0	250,000	2,000,000	0	0	0	0	0	2,250,000
none	Walnut Creek Sewer Renovations - ph	07/14	Antkowiak	0	0	0	250,000	2,000,000	0	0	0	0	0	2,250,000
none	Lafayette Sewer Renovations - ph 11	07/15	Antkowiak	0	0	0	0	250,000	2,100,000	0	0	0	0	2,350,000
none	South Orinda Sewer Renovations - ph 6	07/15	Antkowiak	0	0	0	0	250,000	2,100,000	0	0	0	0	2,350,000
none	Walnut Creek Sewer Renovations - ph	07/15	Antkowiak	0	0	0	0	250,000	2,100,000	0	0	0	0	2,350,000
none	Diablo Renovations - ph 3	07/15	Antkowiak	0	0	0	0	250,000	2,100,000	0	0	0	0	2,350,000
none	South Orinda Sewer Renovations - ph 7	07/16	Antkowiak	0	0	0	0	0	250,000	2,100,000	0	0	0	2,350,000
none	Walnut Creek Sewer Renovations - ph	07/16	Antkowiak	0	0	0	0	0	250,000	2,100,000	0	0	0	2,350,000
none	Lafayette Sewer Renovations - ph 12	07/16	Antkowiak	0	0	0	0	0	250,000	2,100,000	0	0	0	2,350,000
none	Martinez Sewer Renovations - ph 5	07/16	Antkowiak	0	0	0	0	0	250,000	2,100,000	0	0	0	2,350,000
none	Walnut Creek Sewer Renovations - ph	07/17	Antkowiak	0	0	0	0	0	0	280,000	2,100,000	0	0	2,380,000
none	South Orinda Sewer Renovations - ph 8	07/17	Antkowiak	0	0	0	0	0	0	250,000	2,100,000	0	0	2,350,000
none	Lafayette Sewer Renovations - ph 13	07/17	Antkowiak	0	0	0	0	0	0	250,000	2,100,000	0	0	2,350,000
none	Walnut Creek Sewer Renovations - ph	07/18	Antkowiak	0	0	0	0	0	0	0	300,000	2,100,000	0	2,400,000
none	Walnut Creek Sewer Renovations - ph	07/19	Antkowiak	0	0	0	0	0	0	0	0	300,000	2,100,000	2,400,000
none	A-Line Relief-39 Inch Rehab	08/19	Antkowiak	0	0	0	0	0	0	0	0	1,000	1,829,000	1,830,000
2 - Reg. Compliance/Planning/Safety														
5915	Collection System Modeling Upgrade	01/03	Chesler	13,000	0	0	0	0	0	0	0	0	0	13,000
5965	Collection System Planning	07/06	Chesler	180,000	0	0	0	0	0	0	0	0	0	180,000
5983	Ferrous Pipe Corrosion Control	03/09	Chesler	5,000	0	0	0	0	0	0	0	0	0	5,000
5962	Manhole Remote Level Monitoring	07/09	Wenslaw	100,000	100,000	100,000	100,000	0	0	0	0	0	0	400,000
5993	Forcemain Assessment	07/09	Chesler	10,000	5,000	0	0	0	0	0	0	0	0	15,000
5997	CNWS Facility Plan	07/10	Chesler	55,000	5,000	0	0	0	0	0	0	0	0	60,000
6001	Martinez Facilities Plan	02/11	Foss	5,000	0	0	0	0	0	0	0	0	0	5,000
none	CS Planning - Long Term	07/13	Chesler	0	0	170,000	170,000	170,000	170,000	170,000	170,000	170,000	170,000	1,360,000
none	Manhole Remote Level Monitoring - LT	07/15	Rhoads	0	0	0	0	100,000	100,000	100,000	100,000	100,000	0	500,000
3 - Expansion														
5967	A-Line Easement Acquisition - ph 2	07/06	Gronlund	1,000	0	0	0	0	0	0	0	0	0	1,000
none	Trunk Sewer Expansion Program	07/09	Rozul	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0	0	8,000
5994	Laf-P Hill Rd Trunk Sewer, Laf TR 15-	04/10	Rozul	1,900,000	0	0	0	0	0	0	0	0	0	1,900,000
pCS34	Contractual Assessment Districts	07/11	Miyamot	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,000,000
6484	2011-12 Development Sewerage	07/11	Miyamot	500,000	0	0	0	0	0	0	0	0	0	500,000
pCS22	Pleasant Hill Grayson Creek	07/11	Rozul	500,000	2,100,000	500,000	0	0	0	0	0	0	0	3,100,000
pCS17	Development Sewerage - Capital Plan	07/12	Miyamot	0	681,000	681,000	1,180,000	1,180,000	1,180,000	1,180,000	1,180,000	1,180,000	1,180,000	9,622,000
none	Pleasant Hill Road Corridor	07/12	Rozul	0	235,000	965,000	0	0	0	0	0	0	0	1,200,000
pCS08	Lancaster Rd WC, Tr 13-600	07/13	Rozul	0	0	227,000	1,173,000	0	0	0	0	0	0	1,400,000
pCS20	Moraga Way Orinda, Tr 10-200/300	07/14	Rozul	0	0	0	500,000	2,100,000	0	0	0	0	0	2,600,000

Ten-year Program Estimated Expenditures

#Project	Title	Start Year	Manager	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
pCS09	San Ramon Sched C Interceptor - ph	07/15	Mestetsky	0	0	0	0	450,000	2,850,000	0	0	0	0	3,300,000
none	Martinez Alhambra Avenue Trunks	07/17	Rozul	0	0	0	0	0	0	600,000	1,250,000	2,050,000	50,000	3,950,000
none	Walnut Creek-Walnut Blvd Corridor-	07/17	Rozul	0	0	0	0	0	0	200,000	1,700,000	0	0	1,900,000
none	A-Line-Phase 2B	07/19	Rozul	0	0	0	0	0	0	0	0	50,000	100,000	150,000
4 - Pumping Stations														
5941	PS Equip & Piping Repl	07/07	Rhoads	70,000	65,000	65,000	65,000	65,000	65,000	0	0	0	0	395,000
pCS10	Martinez Bypass Pump	04/10	Antkowiak	60,000	0	0	0	0	0	0	0	0	0	60,000
5995	San Ramon Bypass Pump	07/10	Antkowiak	300,000	1,000	0	0	0	0	0	0	0	0	301,000
pCS31	Pump Station Hazard Identification	12/10	Antkowiak	15,000	0	0	0	0	0	0	0	0	0	15,000
pCS11	Buchanan South Removal	02/11	Miyamot	25,000	500,000	500,000	0	0	0	0	0	0	0	1,025,000
pCS33	San Ramon Pump Station Upgrades	05/11	Antkowiak	549,000	0	0	0	0	0	0	0	0	0	549,000
pCS13	PS SCADA O&M Manual	07/11	Rhoads	20,000	0	0	0	0	0	0	0	0	0	20,000
pCS18	Pump Station Safety Improvements	07/11	Rhoads	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	600,000
pCS24	Lower Orinda PS Force Main	07/11	Antkowiak	120,000	1,500,000	1,000	0	0	0	0	0	0	0	1,621,000
pCS19	Pumping Station Minor Upgrades	07/11	Mestetsky	86,000	51,000	0	0	0	0	0	0	0	0	137,000
none	Orinda Crossroads PS Force Main	07/12	Antkowiak	0	400,000	1,199,000	1,000	0	0	0	0	0	0	1,600,000
none	Moraga Pumping Station Force Main	07/13	Antkowiak	0	0	250,000	1,400,000	0	0	0	0	0	0	1,650,000
none	Concord Industrial Pumping Station	07/14	Antkowiak	0	0	0	280,000	2,400,000	0	0	0	0	0	2,680,000
none	Clyde Parallel Force Main	07/15	Antkowiak	0	0	0	0	100,000	700,000	0	0	0	0	800,000
none	Moraga Diesel Repl	07/16	Antkowiak	0	0	0	0	0	150,000	1,000,000	0	0	0	1,150,000
none	Orinda Crossroads Diesel Repl	07/17	Antkowiak	0	0	0	0	0	0	100,000	1,000,000	0	0	1,100,000
none	Buchanan North PS Upgrades	07/17	Antkowiak	0	0	0	0	0	0	1,000	75,000	75,000	75,000	226,000
none	PS Equip & Piping Repl - LT	01/18	Rhoads	0	0	0	0	0	0	65,000	65,000	65,000	65,000	260,000
none	Bates Blvd PS Upgrades	07/18	Antkowiak	0	0	0	0	0	0	0	50,000	50,000	50,000	150,000
		Program Total:		12,840,000	17,145,000	17,844,000	16,741,000	16,689,000	15,977,000	17,158,000	18,652,000	18,702,000	19,880,000	171,628,000
		Report Total:		12,840,000	17,145,000	17,844,000	16,741,000	16,689,000	15,977,000	17,158,000	18,652,000	18,702,000	19,880,000	171,628,000

GENERAL IMPROVEMENTS PROGRAM

This General Improvements Program is dedicated to funding purchase of 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. At $20 million, the General Improvements Program represents about seven percent of the total 2011 ten-year Capital Improvement Plan.

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, renovation and improvements of the CSO Vehicle Maintenance Building, 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 PROGRAM PROJECTS IN THE 2011 CAPITAL IMPROVEMENT PLAN

Project Title	Year	
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.

Ten-year Program Estimated Expenditures

#Project	Title	Start Year	Manager	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
General Improvements														
1 - Vehicles & Equipment														
9999	Cap Proj Clearing	07/08	Vassallo	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0	0	0	7,000
8512	Vehicles & Equipment Acquisition -	07/11	Vassallo	891,000	0	0	0	0	0	0	0	0	0	891,000
pGI03	Vehicles and Equipment Acquisition -	07/12	Vassallo	0	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	4,500,000
2 - Management Information Systems														
8195	Information Technology Development	07/04	Greenaw	602,000	500,000	500,000	0	0	0	0	0	0	0	1,602,000
8227	GDI - Treatment Plant	07/08	Pilecki	100,000	100,000	28,450	28,450	0	0	0	0	0	0	256,900
pGI01	GDI-SMMS Replacement	07/10	Pilecki	190,000	5,000	5,000	0	0	0	0	0	0	0	200,000
none	Information Technology Development	07/14	Greenaw	0	0	0	500,000	500,000	500,000	500,000	500,000	500,000	500,000	3,500,000
3 - Projects														
8208	CSOD Facility Improvements	01/04	Rozul	2,025,000	0	0	0	0	0	0	0	0	0	2,025,000
8210	Kiewit Parcel Development	09/04	Musgrav	30,000	60,000	0	0	0	0	0	0	0	0	90,000
8217	Capital Improvement Plan and Budget	07/06	Millier	110,000	110,000	110,000	110,000	110,000	0	0	0	0	0	550,000
8219	HOB Improvements	07/06	Musgrav	399,000	0	0	0	0	0	0	0	0	0	399,000
8221	POD Office Imprvs	10/06	Musgrav	20,000	150,000	0	0	0	0	0	0	0	0	170,000
8207	General Security Access	07/07	Deutsch	15,000	15,000	0	0	0	0	0	0	0	0	30,000
8223	District Property Safety Improvements	07/07	Deutsch	15,000	80,000	0	0	0	0	0	0	0	0	95,000
8224	Rental Property Improvements	07/07	Musgrav	29,000	10,000	0	0	0	0	0	0	0	0	39,000
8225	Imhoff Triangle Development	12/07	Musgrav	170,000	10,000	0	0	0	0	0	0	0	0	180,000
8226	Seismic Improvements for HOB	07/08	Hodges	510,000	1,500,000	0	0	0	0	0	0	0	0	2,010,000
8229	Martinez Easements	08/09	Hernand	65,000	0	0	0	0	0	0	0	0	0	65,000
8228	District Easements	01/10	Gronlund	100,000	100,000	0	0	0	0	0	0	0	0	200,000
8231	Rental Property Seismic	02/10	Hodges	50,000	250,000	0	0	0	0	0	0	0	0	300,000
8230	Capital Legal Services - 2010 to 2018	07/10	Leavitt	70,000	70,000	70,000	70,000	70,000	70,000	70,000	0	0	0	490,000
pGI06	CSOD Facilities Improvements	01/12	Rozul	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	500,000
pGI04	HOB Improvements - LT	07/12	Musgrav	0	95,000	95,000	95,000	95,000	95,000	95,000	95,000	95,000	95,000	855,000
pGI05	POD Office Improvements - LT	07/13	Musgrav	0	0	75,000	75,000	75,000	50,000	50,000	50,000	50,000	50,000	475,000
none	District Easements - LT	01/14	Gronlund	0	0	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	600,000
none	Kiewit, DP Safety, Gen Sec, Rental,	01/14	Musgrav	0	0	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	240,000
none	CSO Vehicle Maint Bldg	07/15	Berger	0	0	0	0	30,000	70,000	375,000	0	0	0	475,000
none	Capital Improvement Plan and Budget	01/17	Millier	0	0	0	0	0	110,000	110,000	110,000	110,000	110,000	550,000
none	Capital Legal Services - LT	07/18	Leavitt	0	0	0	0	0	0	0	70,000	70,000	70,000	210,000
		Program Total:		5,442,000	3,606,000	1,539,450	1,534,450	1,536,000	1,551,000	1,856,000	1,480,000	1,480,000	1,480,000	21,504,900
		Report Total:		5,442,000	3,606,000	1,539,450	1,534,450	1,536,000	1,551,000	1,856,000	1,480,000	1,480,000	1,480,000	21,504,900

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 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. Budget is also provided for planning work associated with providing recycled water to the proposed development at the Concord Naval Weapons Station site. Funding for construction of the Concord Landscape Project or for implementation of a large-scale industrial reuse project is not included. However, budget is included for planning work associated with these two projects and for continuing efforts to obtain outside funding assistance.

At $5.5 million, the Recycled Water Program represents about 2 percent of the Capital Improvement Plan expenditures over the next ten years.

RECYCLED WATER PROGRAM PROJECTS IN THE 2011 CAPITAL IMPROVEMENT PLAN

Project Title	Year	
Recycled Water – Pleasant Hill – Phase 1C	2013	This project is a continuation of Pleasant Hill Phase 1B and consists of connecting the remaining Zone 1 recycled water customers identified in the project agreement with CCWD and the District's 2001 Zone 1 Implementation Plan.
Recycled Water Treatment Facilities Improvements	2016	This project would investigate and implement improvements to the District's Recycled Water Treatment Facilities.

Ten-year Program Estimated Expenditures

#Project	Title	Start Year	Manager	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Totals
Recycled Water														
1 - Urban Landscaping														
7261	REW - Cathodic Prot Sys Repl	07/06	Antkowiak	5,000	5,000	5,000	5,000	5,000	0	0	0	0	0	25,000
7194	Zone 1 Recycled Water - ph 1C	06/07	Berger	310,000	0	0	0	0	0	0	0	0	0	310,000
7259	Recycled Water Planning	01/08	Berger	55,000	105,000	105,000	105,000	63,000	158,000	0	0	0	0	591,000
7279	Concord Naval Weapons REW	07/10	Berger	60,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0	0	95,000
pRW02	Concord Landscape Project	07/11	Berger	20,000	20,000	20,000	0	0	0	0	0	0	0	60,000
pRW01	Refinery Recycled Water Project	07/11	Berger	100,000	100,000	100,000	100,000	100,000	0	0	0	0	0	500,000
none	Zone 1 Recycled Water - ph 1C - LT	07/12	Berger	0	315,000	315,000	335,000	335,000	340,000	340,000	240,000	340,000	355,000	2,915,000
none	Recycled Water Treatment Facilities	07/15	Than	0	0	0	0	42,000	42,000	60,000	160,000	0	0	304,000
none	RW - Cathodic Prot Sys Repl LT	01/17	Antkowiak	0	0	0	0	0	5,000	5,000	5,000	5,000	5,000	25,000
none	Recycled Water Planning - phase 1B	07/17	Berger	0	0	0	0	0	0	140,000	140,000	205,000	190,000	675,000
		Program Total:		550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,500,000
		Report Total:		550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	550,000	5,500,000