Manager's Report

Sweetwater Authority

Fiscal Year 2009-10



Reserve Budget

Operating Budget

Capital Investment Budget



Budget Summary

Reserve Budget

Operating Budget

Capital Investment Budget

Deferred Capital Investment Budget

Notes to Operating Budget

General Manager's Report Budget Year 2009-10

The attached 2009-10 Proposed Budget has been reviewed by the Finance and Personnel Committee. The budget allocates funds for operating expenses, capital improvements and additions, engineering studies and repayment of debt. All projected amounts shown for revenues, expenses and reserves for the 2008-09 fiscal year are based on ten months actual and two months budget as of April 30, 2009.

Water Resources

The budget proposes to utilize local water, and the purchase of imported water, both untreated and treated. The inventory of water stored in the Authority's two reservoirs as of June 30, 2009, is projected to be 24,730 acre-feet, which is 46.3 percent of capacity. Included in the total storage is 8,273 acre-feet of San Diego County Authority (SDCWA) account water. The Authority's emergency storage policy is to maintain a four-month supply of treatable water plus minimum pool for a total 11,450 acre-feet. The budget provides for the purchase of imported untreated water from the SDCWA for ten and one-half months. The budget anticipates total water production of 23,000 acre-feet for the year, representing no change for 2009-10. While conservation is expected to continue, this quantity was projected for the purpose of budgeting slightly higher purchased water costs. Water sales for the year 2009-10 are projected to be 22,130 acre-feet as compared to the FY 2008-09 budget amount of 22,420 acre-feet. During the 2009-10 year, it is anticipated that 14,800 acre-feet of imported water will be purchased from SDCWA. The remaining 8,200 acre-feet will be supplied from the wells, the Desalination Facility, and local surface water. The estimated cost of the water purchased from the SDCWA aqueduct system is \$8,733,200.

Revenues and Water Rates

The rolling average unbilled water loss is 4.6 percent, the majority of which is due to meter inaccuracy because of age and unrecognized main leaks. This unbilled water loss figure is below the national average of 10 percent. During fiscal year 2009-10, residential meters are scheduled for a 15-year change-out. The total amount of water anticipated to be delivered to the customers is 22,130 acre-feet. Per capita water use dropped from 142 gallons per person per day in fiscal year 1989-90 to 114 gallons per person per day for 1993-94. It is expected to be 112 gallons per person per day during 2008-09. This usage reduction indicates not only a long-term lifestyle change among customers of Sweetwater Authority, but also includes permanent reductions in water sales from conservation improvements to customer water systems (toilets, shower heads, etc.). In response to the state-wide drought condition, there is a probability that our revenues will be impacted by continued conservation efforts. The 2009-10 budget includes a proposed 17.8 percent overall revenue increase effective September 1, 2009.

General Manager's Report Budget Year 2009-10

Personnel

At the beginning of the 2008-09 budget year, there were 146 authorized positions. In the 2008-09 budget year, the following employees left Sweetwater Authority: Reservoir Operations Specialist (Parker retirement), Information System Network Analyst (Beaty retirement), Customer Service Representative (Grawey resignation), Customer Service Representative (Garcia resignation), and Administrative Services Director (Woodrum retirement). Currently, there are 145 authorized positions. 141 of these positions are filled and funded in the 2009-10 operating budget.

Operations

The proposed operating expenses for 2009-10, before debt service for the 1994 and 2005 Bonds, are \$37,385,500, which represent 66 percent of the total 2009-10 budget of \$56,487,700 (new capital projects are \$16,278,500 and one time reimbursements are 1,923,000 for a net capital investment budget of \$14,355,500) including 2008-09 capital carryovers. The operating expenses reflect an increase of \$4,935,000 over the projected operating expenditures for the year 2008-09. This year's cost increases include: water purchases (\$2,776,400); salaries (\$586,800); and benefits (\$403,000); Washington lobbyist and a water rate study (\$127,300); SCADA materials & supplies (\$308,100); and habitat management program (\$425,200).

Capital and Other Payments

New capital projects and other payments, as well as unexpended balances from the 2008-09 Budget for those projects that were incomplete at year-end are being funded by current revenues, and transfer of funds from the Perdue Conventional Upgrade reserve, Undesignated reserve, and Power Rate Stabilization reserve. Capital projects and purchases, engineering studies, and major maintenance projects total \$14,355,500. This includes any projects and studies commenced or authorized in the 2008-09 Budget, but incomplete as of June 30, 2009. The significant 2009-10 Capital projects are:

- Perdue Plant Upgrades
- Pipeline Replacements (all materials)
- Air & Water Quality Monitoring SR125
- Valve Replacement
- Authority-wide Asset Work Management System
- Study of the San Diego Formation Aquifer by the U.S.G.S.
- Reynolds Desalination Phase II

General Manager's Report Budget Year 2009-10

Reserves

The June 30, 2009 Reserve balance is \$41,396,108. To reduce the need for many carryover projects in future budget years, management and staff will continue to review the budget process of all capital projects for time of completion and their impact on current funding. Under the provisions established as a condition of the 2005 Revenue Bond issue, net revenue must not be less than 125 percent of debt service on the bonds. Net revenue for 2009-10 is projected to be 198 percent of debt service.

The 2005 Bond indenture requires maintenance and operating account of \$3,115,500 and a bond reserve of \$4,657,649. The special reserves established by the Governing Board include \$182,200 in a maintenance account for the Vista Del Lago catch basin; \$2,891,700 in an Administration and Operations Center Office sinking fund reserve; \$1,393,520 in a Source of Water Supply reserve; \$197,363 in a power rate stabilization reserve; \$4,614,817 in a Perdue Conventional Plant Upgrade; \$9,985,244 in a Grant Funding Reserve; \$220,100 in a defined benefit 401(a) account; and \$6,725,315 in an Undesignated Reserve fund.

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Operating Summary

	Operatii	ng Summary			
			2008-09		2009-10
	2008-09	2008-09	Final Budget	2009-10	Budget
	Final	Projection as	VS	Proposed	VS
	Budget	of 04/30/2009	2008-09	Budget	2008-09
			Projection		Projection
Revenues	41,325,400	41,308,200	(17,200)	46,759,800	5,451,600
			,		
Administration & General	5,826,431	5,590,300	(236,131)	5,859,300	269,000
Information Systems	1,172,400	1,064,900	(107,500)	1,155,500	90,600
Administrative Services	4,903,300	4,466,900	(436,400)	5,060,300	593,400
Customer Service	1,577,400	1,639,500	62,100	1,924,400	284,900
Water Quality	4,441,300	4,416,400	(24,900)	5,112,400	696,000
Engineering	10,540,300	10,709,100	168,800	13,269,100	2,560,000
Distribution	3,899,669	3,687,200	(212,469)	3,862,200	175,000
Watershed Management	1,135,600	876,200	(259,400)	1,142,300	266,100
Operating Expenses	33,496,400	32,450,500	(1,045,900)	37,385,500	4,935,000
Net Operating Surplus	7,829,000	8,857,700	1,028,700	9,374,300	516,600
Debt Service	4,747,700	4,747,700	_	4,746,700	(1,000)
Doct convice	165%	187%		198%	(1,000)
Available for Capital Investments	3,081,300	4,110,000	1,028,700	4,627,600	517,600
	270017000	171107000	1,1000,100	1,000	311/333
Purchased Water	6,934,100	7,206,200	272,100	9,111,200	1,905,000
SDCWA Charges	1,635,000	1,631,400	(3,600)	2,000,700	369,300
MWD/CWA (Credits)	(1,158,900)	(917,800)	241,100	(378,000)	539,800
Purchased Water - URDS Pumpback	47,200	45,500	(1,700)	7,800	(37,700)
Water Purchase	7,457,400	7,965,300	507,900	10,741,700	2,776,400
water ruichase	7,437,400	7,703,300	307,700	10,741,700	2,770,400
Power	1,493,400	1,451,100	(42,300)	1,394,900	(56,200)
Chemicals	787,500	734,500	(53,000)	576,200	(158,300)
Fuel	255,400	216,900	(38,500)	255,400	38,500
Power, Chemicals & Fuel	2,536,300	2,402,500	(133,800)	2,226,500	(176,000)
Tottory orioninatio a Tuoi	2/000/000	2/102/000	(100,000)	2/220/000	(170,000)
Administration	1,172,900	1,171,600	(1,300)	1,297,800	126,200
Information Systems	740,700	729,300	(11,400)	764,400	35,100
Administrative Services	860,300	863,700	3,400	886,600	22,900
Customer Service	1,266,400	1,298,000	31,600	1,473,200	175,200
Water Quality	2,373,200	2,299,300	(73,900)	2,435,600	136,300
Engineering	1,426,400	1,509,700	83,300	1,622,000	112,300
Distribution	2,191,300	2,118,300	(73,000)		167,400
Watershed Management	630,300	608,900	(21,400)	420,300	(188,600)
Salaries	10,661,500	10,598,800	(62,700)	11,185,600	586,800
	, , , , , , , ,	,,	, , , , , ,	,,	,
CalPERS	2,482,300	2,468,500	(13,800)	2,531,000	62,500
CalPERS 1% Employee Share	(109,400)	(104,200)	5,200	(114,300)	(10,100)
Payroll Taxes	828,200	824,100	(4,100)	861,000	36,900
PARS 401A	320,600	336,800	16,200	298,500	(38,300)
Workers Compensation Insurance	404,000	336,000	(68,000)	300,000	(36,000)
	404,000		•		(142,200)
Retiree Health & Other Benefits		283,300	(4,500)	141,100	(142,200)
Retiree Health & Other Benefits Health, Vision, Dental & Life Insurance	287,800	283,300 2,179,900	(4,500) (207,400)	141,100 2,710,100	
Health, Vision, Dental & Life Insurance	287,800 2,387,300	2,179,900	(207,400)	2,710,100	530,200
	287,800				

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Capital Summary

	2008	3-09	2009-10		Deferred
	Budget	Carryover	Budget Request	Recommended	Projects
Administration & General	118,795	-	600,000	600,000	-
Information Systems	251,500	-	206,700	186,700	20,000
Administrative Services	141,800	-	81,000	81,000	-
Customer Service	139,000	-	172,500	172,500	-
Water Quality	1,291,500	663,500	1,134,200	1,012,000	122,200
Engineering	2,466,500	-	3,873,500	1,528,000	2,345,500
Distribution	2,377,200	-	2,581,500	1,953,600	627,900
Grant/Shared Projects	737,355	623,000	1,409,000	1,409,000	-
Reserve Funded Projects	4,454,000	-	7,412,700	7,412,700	-
Capital Investment	11,977,650	1,286,500	17,471,100	14,355,500	3,115,600
2009-10 Net Operating Budget aft 2008-09 Projected Operating Bu 2008-09 Original Operating Bud	dget		4,110,000 (3,081,300)	4,627,600	
			(3,081,300)		
2008-09 Net Projected Operat		<u>}</u>		1,028,700	
Total from Operating Budge	t			5,656,300	
Transfer from (to) Reserves				6,896,700	
Perdue Conventional Upgrade					
Power Rate Stabilization				61,000 455,000	
Undesignated Reserves					
Total Transfer from Reserves Add 2008-09 Carryover Funds					
Total Available for Capital Investments					
FY 2009-10 Balanced Budget	Camenta			14,355,500	
1 2007 To Balancea Badget					
* Includes a proposed 17.8% rev	venue increase effec	tive Sentember	2009		
The 17.8% revenue increase re				convice plue a 10	70/ rovonuo

The 17.8% revenue increase represents a 7.1% revenue increase to cover the debt service plus a 10.7% revenue increase to fund Capital Investment Budget

Sweetwater Authority Reserve Budget Fiscal Year 2009-10

	Budgeted	Reserve	Adjusted	2009-10 Reserve	Budgeted
	2008-09	Adjustment	2008-09	Budget Transfer	2009-10
	Reserves	Increase	Reserves	(From) To	Reserves
	June 30, 2009	(Decrease)	June 30, 2009	Reserves	June 30, 2010
Bond Required Reserves					
Maintenance and Operating Account	2,789,100	326,400	3,115,500		3,115,500
1994/2005 Bond Reserve Account	4,657,649		4,657,649		4,657,649
Special Reserves (Per Board Action)					
Vista Del Lago	179,500	2,700	182,200		182,200
Administration and Operations Center Office	2,571,700		2,571,700	320,000	2,891,700
Source of Water Supply	1,393,520		1,393,520		1,393,520
Power Rate Stabilization	480,363	(222,000)	258,363	(61,000)	197,363
Perdue Conventional Upgrade	10,387,741	1,123,776	11,511,517	(6,896,700)	4,614,817
Grant Funding	9,642,582	342,662	9,985,244		9,985,244
PARS Retiree Defined Benefit 401(a) Fund	70,500	149,600	220,100		220,100
Undesignated Reserves	7,542,815	(42,500)	7,500,315	(775,000)	6,725,315
Total Reserves	\$ 39,715,470	\$ 1,680,638	\$ 41,396,108	\$ (7,412,700)	\$ 33,983,408
Recap of Reserve Transfer:					
Robert A. Perdue Water Treatment Plant Improvements –					
Filter and Raw Water Pump Station Upgrades	Perdue Convent	ional Upgrade		\$ (6,196,700)	
Robert A. Perdue Water Treatment Plant Improvements -					
Dissolved Air Flotation (DAF) Treatment System	Perdue Convent	ional Upgrade		\$ (700,000)	
Improvements to Provide Access and Utilities to					
Sweetwater Reservoir and Thompson Property	Undesignated Reserves		(455,000)		
Emergency Diesel Generator at Steeplechase Hydro					
Booster Station	Power Rate Stabilization		(61,000)		
Annual Funding Sinking Fund	Administration and Operations Center Office		320,000		
Annual Funding Sinking Fund	Undesignated Reserves		(320,000)		
				\$ (7,412,700)	

Sweetwater Authority Reserves Budget Year 2009-10

Required Reserves (Per Indenture of Trust 1994 and 2005 Water Revenue Bonds) Maintenance and Operating Account

Represents a sum equal to the amount required by the Authority for the payment of budgeted maintenance and operating costs for one month. Monies in this account shall be used to pay the maintenance and operations costs as they become due and payable, as per Bond Indenture of Trust Section 5.03 (1).

1994/2005 Bond Reserve Account

At June 30, 2003 the following paragraph applied to the 1994 Water Revenue Bond. The First Supplemental Indenture, which authorized the issuance of the 1994 Bonds, created a "Series 1994 Bond Reserve Account" into which is deposited an amount equal to the "Series 1994 Reserve Amount" (an amount equal to the lesser of the amount of the greatest debt service in a Bond year or the amount permitted to be held by the arbitrage bond regulations).

On July 1, 2002, the Authority issued a \$30,000,000 Water Revenue Bond, and a Second Supplemental Indenture of Trust was created. The Second Supplemental incorporated the conditions that exist in the First Supplemental and merge the Series 1994 Bond Reserve Account into one account called the 2002 Bond Reserve Account.

On June 30, 2005, the Authority issued a \$37,775,000 Water Revenue Bond, and a Third Supplemental Indenture of Trust was created. The Third Supplemental incorporated the conditions that exist in the First and Second Supplemental Indenture of Trusts and merged the Series 2002 Bond Reserve Account into one account called the 1994/2005 Bond Reserve Account.

Special Reserves (Per Board Action)

Vista Del Lago

This reserve was established in the early 1980's, and includes an original payment of \$80,000 from the developer of the Vista Del Lago subdivision near Sweetwater Reservoir. Charges to the reserve include the operation, maintenance, and rehabilitation of a catch basin/interceptor tank and pump station built by the developer as a condition of the subdivision for the purpose of preventing "first flush" and low flow runoff from entering Sweetwater Reservoir.

Administration and Operations Center Office

The Board of Directors approved the creation of a 15-year sinking fund reserve for purchasing property and constructing a new office building and Operations Center for Administrative and Operations staff. The funding for this reserve will be \$320,000 per year plus interest for a period of fifteen years. The Board of Directors approved the suspension of the funding for the fiscal year 2001-02 through 2004-05.

Sweetwater Authority Reserves Budget Year 2009-10

In order to minimize the impact of a year rate increase for fiscal year 2006-07, the Board approved to use \$677,100 of the Administration and Operations Center Office reserve to balance the fiscal year budget. In addition, the Board authorized use of this reserve to manage the Authority's cash flow requirements during fiscal year 2006-07.

For fiscal year 2008-09 the Board authorized to allocate the annual \$320,000 to the Undesignated Reserve instead of the Administration and Operations Center Office Reserve at the Special Meeting conducted on June 13, 2008.

Source of Water Supply

On September 26, 1996, the United States Department of the Interior's Bureau of Reclamation entered into an agreement with Sweetwater Authority to provide federal participation in the Authority's Water Reclamation Project, Phase I. The Board has set aside these monies to establish a fund for future source of water supply projects.

Power Rate Stabilization

The Governing Board approved the creation of this reserve to offset the projected high cost of electricity as a result of the deregulation of electricity in San Diego County. All future rebates from San Diego Gas and Electric (SDG&E) will be applied toward this reserve. In February 2003, the Governing Board rescinded the 1.9 percent water rate increase, and excess funds after disbursement commitments were credited back to the customers. As part of a legal settlement with Williams, the Authority will receive \$420,012 plus reimbursement for legal fees. Payment were made in three installments starting in 2002 and ended in 2004.

Perdue Conventional Upgrade (formerly Perdue Plant Upgrade 2002 Bond Set-Aside)

Commencing with budget year 2007-08, the balance of the Perdue Plant Upgrade (2002 Bond Set-Aside) of \$25,119,300 was split into two reserves. The two newly established reserves and the respective beginning balances are the Perdue Plant Upgrade and the Grant Funding. The funds in these reserves are not governed by our existing bond indenture as confirmed by a written opinion from our bond council, Orrick, Herrington & Sutcliff, LLP dated April 12, 2007.

The Perdue Conventional Upgrade is established to fund the future costs as they relate to the ongoing conventional upgrades and plant maintenance as required by the most recent statutory requirements and regulations.

Grant Funding (formerly Perdue Plant Upgrade 2002 Bond Set-Aside)

Commencing with budget year 2007-08, the balance of the Perdue Plant Upgrade (2002 Bond Set-Aside) \$25,119,300 was split into two reserves. The two newly established reserves and the respective beginning balances are the Perdue Plant Upgrade and the Grant Funding. The funds in these reserves are not governed by our existing bond

Sweetwater Authority Reserves Budget Year 2009-10

covenant as confirmed by a written opinion from our bond council, Orrick, Herrington & Sutcliff, LLP dated April 12, 2007.

The Grant Funding is established to float capital investment expenditures on various projects that are awarded Federal, State and Local grant funding (HUD, BOR (Title XVI), Prop 50, and LISA). All of the future reimbursements pertaining to the respective grant agreements will replenish the Grant Funding reserve when they are received by the Authority. Once all of the grant projects are completed, the balance of this reserve will be transferred to the Perdue Conventional Upgrade reserve.

PARS Retiree Defined Benefit 401(a) Fund

The Authority adopted a tax-qualified governmental defined benefit 401(a) plan for the benefit of its eligible employees to provide supplemental retirement benefits in addition to the benefits employees will receive from the Public Employee Retirement System. The benefit shall be paid in a lump sum amount on the date of an employee's termination from employment. The lump sum represents the number of personal time off (PTO) and frozen sick leave hours accrual accumulated by the employee at the termination of employment, multiplied by the employee's final pay. The June 30, 2009 projected accrued liability of excess PTO and frozen sick leave for all employees to be added is \$1,845,000, of which \$421,400 is for employees of the age 55 or older. Those employees who have not indicated any request for early retirement represent 49 percent (\$201,300); the \$220,100 is set aside for all other employees over the age of 55.

Undesignated Reserves

The Board initially funded the Undesignated Reserves with the Cal-Trans settlement received in fiscal year 2008 and the defunct Retiree Health Care Fund Reserve for the budget year 2008-09. The Retiree Health Care Fund was replaced with the establishment of an irrevocable trust with CalPERS' California Employers' Retiree Benefit Trust in May 2009.

Sweetwater Authority Budget Year 2009-10 Operating Budget

			Page #
Revenue	\$	46,759,800	11
Administration	\$	5,859,300	12
Information Systems	<u> </u>	1,155,500	13
Administrative Services	Ψ	1,133,300	13
Human Resources		3,395,600	14
Safety		702,900	14
Training		188,000	14
Security		94,300	15
Communications		448,400	15
Conservation		231,100	15
Total Administrative Services	\$	5,060,300	15
Customer Service	\$	1,924,400	16
Water Quality	_	1,721,100	
General Plant		1,575,300	17
Sweetwater Reservoir		87,100	17
Loveland Reservoir		146,500	18
URDS I Vista Del Lago		58,000	18
URDS II		53,800	18
Desalination Plant		1,126,600	18
Perdue Plant		1,554,700	19
NC Wells & Chloramination		228,600	19
Reservoir and Dams		281,800	19
Total Water Quality	\$	5,112,400	19
Engineering			
General Engineering		2,236,200	20
Water Resources		11,027,000	21
Desalination Plant		5,900	21
Total Engineering	\$	13,269,100	21
Distribution	\$	3,862,200	22
Watershed Management			
General		92,600	23
Habitat		961,900	23
JWA - NCCP		87,800	23
Total Environmental and Government Services	\$	1,142,300	23
Total Operating Expenses	\$	37,385,500	
Net Operating Surplus	\$	9,374,300	

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Revenue

			,		
		2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget	
4110	Water Sales-Residential	28,102,500	27,351,400	32,030,900	
4120	Water Sales-Commercial	7,357,900	7,157,800	8,357,400	
4130	Water Sales-Industrial	563,700	547,300	727,200	
4140	Water Sales-Miscellaneous	124,000	84,100	218,700	
4150	Water Sales-Private Fire Prot	350,400	345,600	407,400	
4170	Water Sales-Public Authorities	2,752,300	3,162,000	3,770,300	
4180	Water Sales-Irrigation	37,500	35,400	44,600	
	Water Sales	39,288,300	38,683,600	45,556,500	(1)
4211	Reconnection Fees	168,000	191,900	216,000	(2)
4221	Capacity Fees	100,000	319,000		(3)
4233	Repair Revenue	73,200	58,600	72,000	
4235	Tank/Tower Lease	443,100	443,900	457,600	
4237	Property Rental	-	4,000	4,800	
4239	Miscellaneous Fees	12,000	14,700	12,000	
4242	Sweetwater Res Fishing Program	16,800	19,700	14,900	
4920	Non-Oper/Interest	1,200,000	1,410,000	402,000	(4)
4990	Non-Oper/Other	24,000	122,700	24,000	
4992	Non-Oper/One Time Revenues	-	40,100	-	
	Revenue	41,325,400	41,308,200	46,759,800	

- (1) Includes a 7.1% revenue increase effective September 2009 to cover the debt service ratio plus a 10.7% to cover the proposed Capital Investment Budget for a total of 17.8% revenue increase
- (2) Projected increase in delinquent accounts
- (3) Unknown due to economic downturn
- (4) Market decline due to economic downturn

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Administration

		1	
	2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget
5520 Uncollectible Accts	12,000	4,200	12,000
5610 Salaries	1,172,900	1,171,600	1,297,800 (1)
5621 Office Supplies	24,000	24,100	22,800
5622 Travel & Meetings	11,600	8,300	13,300
5623 Subscription Publication	1,200	2,300	2,300
5624 Dues & Memberships	47,500	38,600	53,100 (2)
5625 Postage	123,600	102,600	19,200 (3)
5627 Directors	184,800	149,400	184,800
5628 Delivery Services	13,200	11,800	14,400
5631 General Legal	210,000	221,400	248,400
5633 Auditing	40,000	49,000	50,000
5634 Janitorial	31,200	31,200	31,200
5635 Telephone	68,400	59,300	62,400
5636 Utilities	46,800	49,800	54,000
5641 CalPERS	2,482,300	2,468,500	2,531,000
5642 Payroll Taxes	828,200	824,100	861,000
5643 PARS 401A	320,600	336,800	298,500
5645 Retiree Health & Other Benefits	287,800	283,300	141,100
5646 Taxable Payroll Reimbursements	-	13,100	61,200
5649 CalPERS 1% Employee Share	(109,400)	(104,200)	(114,300)
5650 Consulting Services	56,000	23,700	151,000 (4)
5660 Rents & Leases	42,000	41,200	41,200
5676 Office Equipment Maintenance	11,500	12,800	8,700
5695 Building & Grounds Maintenance	163,800	133,900	94,200 (5)
5720 Taxes	10,800	11,100	21,600
5740 Expense Credits	(615,000)	(742,000)	(675,000)
5743 Fiscal &Trustee Agents	8,000	7,300	5,000
5940 Bank & Financial Fees	73,200	57,100	68,400
5999 Expense Contingency	300,000	300,000	300,000
Administration & General	5,847,000	5,590,300	5,859,300

- (1) Director of Environmental & Governmental Services transferred to Administration
- (2) Increases for ACWA, AWWA, AWWA Research Foundation, and Water Education Foundation
- (3) Move water bill postage to Customer Service section
- (4) Washington DC lobbyist, Water Rate Study, R. Alexander, & GASB 45
- (5) Fiscal year 2008-09 installed carpet and fiscal year 2009-10 repair of the Administration roof

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Information Systems

	miormation bystems					
		2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget		
5610	Salaries	740,700	729,300	764,400		
5620	Computer Supplies	21,500	21,000	20,500		
5621	Office Supplies	3,600	2,300	3,000		
5622	Travel & Meetings	28,200	16,600	25,000		
5623	Subscriptions & Publications	600	100	600		
5624	Dues & Memberships	800	300	800		
5626	Printing	10,000	500	1,000		
5635	Telephone	26,000	32,000	31,100		
5636	Utilities	10,000	8,300	10,000		
5650	Consulting	35,000	1,500	15,000		
5676	IS Equipment Company-wide	269,000	253,000	284,100		
	Information Systems	1,145,400	1,064,900	1,155,500		

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Administrative Services

		2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget	
5610	Salaries	296,400	295,200	297,600	
5621	Office Supplies	1,200	1,400	1,200	
5622	Travel & Meetings	6,300	5,300	3,600	
5623	Subcriptions & Publications	1,800	700	1,200	
5626	Printing	1,500	1,500	1,200	
5628	Delivery Services	300	1,300	300	
5629	Miscellaneous Expenses	84,600	71,500	67,200	(1)
5637	Workers Compensation Insurance	404,000	336,000	300,000	(2)
5644	Health, Vision, Dental & Life Insurance	2,387,300	2,179,900	2,710,100	(3)
5647	Wellness	16,400	11,000	13,200	
	Human Resources	3,199,800	2,903,800	3,395,600	
5414	Safety Incentive Program	30,000	23,100	27,100	
5610	Salaries	88,400	91,800	72,800	(4)
5621	Office Supplies	800	300	600	
5622	Travel & Meetings	9,000	8,800	7,200	
5623	Subscript Publicate	3,200	2,100	2,900	
5624	Dues & Memberships	300	400	500	
5626	Printing	1,000	400	800	
5629	Miscellaneous	1,000	100	1,000	
5630	Gen/Prop Liability Insurance	555,300	529,700	542,300	
5632	Temporary Help	800	800	-	
5639	Injuries/Damages	-	5,700	-	
5650	Consulting Services	5,000	2,900	10,000	
5661	Equipment Rental	1,000	1,700	1,000	
5665	Ergonomic Program	8,000	2,500	8,000	
5730	Respiratory Program	12,000	6,600	11,000	
5731	Small Tools & Equipment	5,500	4,200	5,000	
5733	Safety Shoes Program	12,300	12,500	12,700	
	Safety	733,600	693,600	702,900	
5414	Incentive Program	2,000	1,300	1,700	
5610	Salaries	142,100	133,500	120,800	(4)
5621	Office Supplies	1,000	800	600	
5622	Company-wide Training	70,000	43,800	60,000	
5624	Dues & Memberships	1,000	600	1,000	
5626	Printing	1,000	500	700	
	Miscellaneous	2,000	500	2,000	
5661	Equipment Rental	800	600	1,200	
	Training	219,900	181,600	188,000	

- (1) Tuition reimbursements are projected to be lower(2) Workers Compensation costs are lower due to a reduction in work related injuries
- (3) Health \$2,343K, Vision \$29K, Dental \$283K, and Life Insurance \$55K
- (4) Reallocation of staff time to Conservation

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Administrative Services

		2008-09 Final	2008-09 Projection as	2009-10 Proposed
		Budget	of 04/30/2009	Budget
5610	Salaries	64,600	55,500	25,800
5622	Travel & Meetings	1,600	200	400
5623	Subscript Publicate	100	100	100
5624	Dues & Memberships	1,900	2,300	1,500
5626	Printing	3,000	1,600	3,000
5629	Miscellaneous	10,000	12,600	10,000
5650	Consulting Services	4,000	2,000	4,000
5674	Equipment Maintenance	25,000	18,800	22,000
5696	Security Services	22,000	19,400	24,400
5697	Emergency Response Exercises	5,000	300	2,100
5731	Small Tools & Equipment	1,000	-	1,000
	Security	138,200	112,800	94,300
5610	Salaries	243,000	242,900	252,000
5620	Office Supplies	24,000	23,100	24,000
5621	Event Fees & Materials	5,800	5,000	3,600
5622	Travel & Meetings	6,000	7,000	1,500
5623	Media & Publications	10,000	6,200	6,700
5624	Dues & Memberships	3,100	2,800	2,400
5625	Mailing Fees	70,000	57,400	55,000
5626	Printing	55,000	46,800	60,000
5628	Audio Visual	7,000	500	5,200
5629	Education Program	26,000	24,500	21,400
5635	On-Hold	1,200	1,500	1,200
5636	Web Site	1,000	1,000	-
5638	Public Information	11,000	15,800	11,000
5650	Consulting	5,500	2,200	4,400
	Communications	468,600	436,700	448,400
5512	Salaries	25,800	44,800	117,600
5514	Material-Supplies	-	-	500
	Travel & Meetings	3,000	2,100	1,000
5625	Postage	2,000	500	3,000
5629	Miscellaneous	300	300	300
5638	Public Information & Garden	74,000	82,600	75,000
5640	Conservation Incentives	33,100	8,100	33,100 (
5650	Audit Consultant	5,000	-	-
5731	Small Tools	-	_	600
5,51	Conservation	143,200	138,400	231,100
	Administrative Services	4,903,300	4,466,900	5,060,300

- (1) Increase staff time in Conservation areas thereby reduces staff time in security
- (2) Toilet rebates were lower than anticipated in fiscal year 2008-09; fiscal year 2009-10 includes landscape audits and other incentives

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 **Customer Service**

		2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget
5427	Salaries Field	636,900	682,100	780,800 (1)
5428	Materials & Supplies Field	108,000	100,900	121,200
5512	Salaries Office	629,500	615,900	692,400 (2)
5514	Materials & Supplies Office	66,000	62,100	144,000
5520	Uncollectible Accts	132,000	162,000	180,000 (3)
5622	Travel & Meetings	5,000	5,900	6,000
5632	Temporary Help	-	10,600	-
5521	Cash Over/Short	-	100	-
5522	Courtesy Adjustment	ı	(100)	-
	Customer Service	1,577,400	1,639,500	1,924,400

- Cross Connection specialist was transferred from Water Quality
 All authorized positions are filled with regular employees
 Projected economic downturn as a percent of residential water sales

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Water Quality

		2008-09	2008-09	2009-10	
		Final	Projection as	Proposed	
		Budget	of 04/30/2009	Budget	
5123	Materials & Supplies Source of Supply	4,800	2,900	4,800	
5145	Materials & Supplies SCADA	34,800	6,900	315,000	(1)
5221	Salaries Pump Maintenance	200	200	-	
5222	Materials & Supplies Pump Maintenance	15,600	2,600	15,600	
5313	Materials & Supplies Operating	25,200	27,400	25,200	
5314	Salaries Cross Connection	95,900	35,900	-	
5316	Salaries Administrative	555,700	587,300	656,400	(2)
5323	Materials & Supplies Maintenance	6,000	2,800	19,200	
5341	Salaries Laboratory	184,100	192,100	202,800	
5342	Materials & Supplies Laboratory	145,200	128,800	150,000	(3)
5343	Materials & Supplies Cross Connection	4,800	6,700	-	
5360	Equipment Rental	1,200	200	8,400	
5621	Office Supplies	25,600	12,700	15,600	
5622	Travel & Meetings	20,400	18,400	4,800	
5623	Subscription & Publication	1,200	800	1,200	
5624	Dues & Memberships	6,000	1,400	2,400	
5632	Temporary Help	3,600	6,000	19,200	
5634	Janitorial	13,200	17,500	20,400	
5636	Utilities	3,600	3,400	3,600	
5650	Consulting	45,600	7,600	45,600	(4)
5654	Regulatory Permit Fees	39,600	40,100	40,000	
5674	Hazardous Waste Removal	20,400	8,200	20,400	
5676	Office Equipment Services	1,200	200	1,200	
5692	Salaries Building & Grounds	-	-	1,100	
5731	Small Tools & Equipment	2,400	3,100	2,400	
	General Plant	1,256,300	1,113,200	1,575,300	
5111	Salaries Operating	40,800	35,900	34,900	(5)
5113	Materials & Supplies Operating	1,200	400	1,200	
5121	Salaries Maintenance	33,100	28,000	25,700	(5)
5123	Materials & Supplies Maintenance	16,800	27,100	18,000	(6)
5341	Salaries Laboratory	2,600	6,100	6,100	
5342	Materials & Supplies Laboratory	1,200	200	1,200	
5360	Equipment Rental	1,200	200	=	
5632	Temporary Help	2,400	-	-	
	Sweetwater Reservoir	99,300	97,900	87,100	
5111	Salaries Operating	62,800	57,700	59,500	
5113	Materials & Supplies Operating	2,400	600	1,200	
5121	Salaries Maintenance	62,300	59,100	70,200	(5)

- (1) Implement SCADA Plan recommendations (consultant, hardware and software)
- (2) Staff transferred from Environment & Governmental Services
- (3) Comply with Unregulated Contaminant Monitoring Rule every three years
- (4) Miscellaneous studies and O&M Manual
- (5) Reallocation of staff time to other Water Quality areas
- (6) Reallocation of major maintenance within the department

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Water Quality

	water	Quality		
		2000.00	2008-09	2000 10
		2008-09 Final	Projection as	2009-10 Proposed
		Budget	of 04/30/2009	Budget
5123	Materials & Supplies Maintenance	13,200	12,900	15,600
0120	Loveland Reservoir	140,700	130,300	146,500
	Lovelatiu Reset voii	140,700	130,300	140,500
5111	Salaries Operating	1,400	2,100	2 600
	Materials & Supplies Operating	1,400	2,100	2,600 1,200
5113		16,900	13,200	13,400
	Materials & Supplies Maintenance	30,000	14,700	30,000
	Runoff Power	9,600	6,600	9,600
	Equipment Rental	1,200	1,300	7,000
		200	500	-
	Salaries Vista Del Lago			1 200
	Materials & Supplies Tank Maintenance	1,200	200	1,200
5632	+	2,400	2,100	-
	URDS I Vista Del Lago	64,100	40,900	58,000
E111	Salarias Operating	0.100	11 400	0.400
	Salaries Operating	9,100	11,400	9,400
	Materials & Supplies Operating	15,600	100	20,400
	Salaries Maintenance	13,800	14,200	13,800
	Materials & Supplies Maintenance	3,600	1,000	1,200
	Purchased Water - URDS Pumpback	47,200	45,500	7,800 (1)
	Pump Power Production	1,200	1,300	1,200
5632	. , ,	-	- 70 500	-
	URDS II	90,500	73,500	53,800
F122	A MAID Describe Alone One dito	(000,000)	(/ 20 100)	(100,000)
-	MWD Desalination Credits	(900,000)	(628,100)	(180,000) (2)
	Plant Power	156,000	128,200	160,800
	Wells Power	120,000	123,300	120,000
	Salaries Operating	90,100	111,800	272,300 (3)
-	Materials & Supplies Operating	2,400	36,400	2,400
5321		62,300	54,600	51,500
	Materials & Supplies Maintenance	99,600	88,100	99,600
	Water Treatment Chemicals	99,600	85,100	105,600
	Salaries Laboratory	3,800	3,600	2,700
	Materials & Supplies Laboratory	30,000	24,200	30,000
5350		399,600	388,000	400,000
5355		5,500	7,100	3,200
	Materials & Supplies Monitor/Mitigation	-	-	30,000
5360	· ·	2,400	2,600	2,400
	Janitorial	3,600	4,600	4,800
	Regulatory Permit Fees	2,100	2,300	2,100
	Hazardous Waste Removal	4,800	800	3,600
5692	Salaries Building & Grounds	2,200	3,500	6,000
5694	Materials & Supplies Building & Grounds	15,600	5,400	9,600
	D	4 000	1 000	
5695		4,800	1,800	
5695	Plant Maintenance Desalination Plant	204,400	443,300	1,126,600

- (1) URDS II in bypass mode which requires less pump-back water(2) The cost of producing desalination water is closer to the cost of imported water
- (3) Projected need to increase staff time due to membrane replacements

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Water Quality

		<i>J</i>	1		_
		2008-09 Final	2008-09 Projection as	2009-10 Proposed	
		Budget	of 04/30/2009	Budget	
5121	Salaries Maintenance	-	-	1,600	
	Materials & Supplies	4,800	900	-	
	Pump Power Production	168,900	181,400	49,000	(1)
	Salaries Operating	582,300	498,400	395,400	(2)
	Materials & Supplies Operating	15,600	23,500	24,000	
	Salaries Maintenance	351,600	352,500	390,600	
5323	Materials & Supplies Maintenance	121,600	121,500	85,200	
5330	Water Treatment Chemical	662,700	624,100	445,400	(3)
5350	Plant Power	75,300	104,000	73,500	
5360	Equipment Rental	4,800	2,400	4,800	
5694	Materials & Supplies Building & Grounds	51,900	28,200	64,800	(4)
5695	Services Building & Grounds	20,400	15,900	20,400	
	Perdue Plant	2,059,900	1,952,800	1,554,700	
5231	Pump Power Production	150,000	137,900	150,000	
5311	Salaries Operating	2,600	8,700	5,200	
5313	Materials & Supplies Operating	3,600	1,000	2,400	
5321	Salaries Chemical Pump	7,800	10,200	6,200	
5323	Materials & Supplies Maintenance	4,800	8,400	4,800	
5330	Treatment Chemicals	25,200	25,300	25,200	
5331	Power	40,800	35,000	34,800	
	National City Wells	234,800	226,500	228,600	
5111	Salaries Operating	86,000	93,600	84,300	
5113	Materials & Supplies Operating	2,400	1,600	2,400	
5121	Salaries Maintenance	100,100	111,600	120,700	
5123	Materials & Supplies Maintenance	30,000	38,400	30,000	
5360	Equipment Rental	2,400	1,500	-	
5632	Temporary Help	25,200	6,200	-	
5636	Utilities	3,600	2,600	2,400	
5654	Regulatory Permit Fees	41,600	82,500	42,000	
	Reservoir & Dams	291,300	338,000	281,800	
	Water Quality	4,441,300	4,416,400	5,112,400	

- (1) Taking more water directly from SDCWA pipeline 3(2) Reallocation of staff time to other areas
- (3) Taking less untreated water due to a planned plant shutdown in connection with the Robert A. Perdue plant filter upgrade
- (4) Commissary building stabilization

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Engineering

	5				
		2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget	
5113	Hydrological Monitoring	79,200	33,000	64,800	
	Salaries Dam Surveillance	10,300	10,800	11,800	
5123	Materials & Supplies Dam Surveillance	1,000	400	500	
5144	Salaries SCADA	15,100	5,500	2,400	
5145	Materials & Services SCADA	9,000	5,500	9,000	
5211	Salaries Pump Production	199,000	246,600	171,300	(1)
5212	Materials & Supplies Pumping Production	4,000	3,400	4,500	
5221	Salaries Pump Maintenance	167,400	137,300	228,700	(1)
5226	Materials & Supplies Pump Maintenance	96,800	83,800	69,300	
5232	Pump/Power	372,000	345,400	396,000	
5413	Salaries Operating	905,600	979,300	1,077,600	(2)
5414	Salaries Employee Committee	4,000	3,400	2,600	
5421	Salaries Tank Maintenance	5,200	2,100	7,900	
5422	Materials & Supplies Tank Maintenance	7,600	300	7,600	
5423	Salaries Cathodic Protection	4,000	3,500	-	
5424	Tank Landscaping	74,100	71,100	70,000	
5429	Hydrant Maintenance	2,400	1,500	1,200	
5430	Pipleline Maintenace	3,000	-	12,000	
5431	Salaries Asphalt Inspection	17,400	14,700	15,700	
5622	Travel & Meetings	25,900	18,000	20,000	
5623	Subscription Publication	1,200	1,200	1,100	
5624	Dues & Memberships	1,500	2,000	1,900	
5632	Temporary Help	1,200	600	1,200	
5636	Utilities	5,400	5,000	5,400	
5650	Consulting	70,000	53,700	20,000	
5651	Supplies	21,100	22,400	18,500	
5652	Gen Engrg/Block Map Reproduce	-	-	10,000	
5661	Office Equipment Rental	1,000	-	1,000	
5676	Office Equipment Maintenance	2,000	1,400	1,200	
5731	Small Tools & Equipment	2,900	1,600	3,000	
	General Engineering	2,109,300	2,053,500	2,236,200	
	Purchased Water	6,934,100	7,206,200	9,111,200	(3)
	SDCWA Readiness To Serve	37,200	36,200	174,300	(4)
	SDCWA Infrastructure Access Charge	907,200	907,800	996,000	(5)
5134	SDCWA Customer Service Charge	258,000	255,200	282,000	(6)

- (1) Redirect staff time to pump maintenance
- (2) Projected need to increase staff time due to less capital projects
- (3) Wholesale water costs from SDCWA are anticipated to increase by 17% effective September 2009
- (4) Fixed charge based on ten year average water deliveries from MWD anticipated to increase by 60% effective July 2009
- (5) Fixed charge based on meter equivalents anticipated to increase by 19% effective January 2010; this is a pass-through rate
- (6) Fixed charge based on three year average water deliveries from SDCWA anticipated to increase by 25% effective January 2010; this is a pass-through rate

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Engineering

		2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget
5135	SDCWA Emergency Storage Charge	432,600	432,200	548,400 (1)
5137	SDCWA Parking Fees	(258,900)	(289,700)	(198,000)
5355	Salaries Monitoring/Mitigation	2,400	1,500	2,600
5356	Materials & Supplies Monitoring/Mitigatio	1,900	-	1,900
5413	Salaries Water Resource	91,000	103,000	100,200
5624	Dues & Memberships	500	-	400
5650	Consulting	8,000	-	8,000
	Water Resources	8,414,000	8,652,400	11,027,000
5211	Salaries Wells Pump Maintenance	2,600	500	-
5212	Materials & Supplies Wells Pump Mainter	5,900	2,700	5,900
	Desalination	8,500	3,200	5,900
	Engineering	10,531,800	10,709,100	13,269,100

⁽¹⁾ Fixed charge based on three year average water deliveries from SDCWA anticipated to increase by 65% effective January 2010; this is a pass-through rate

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10 Distribution

		T T		
	2008-09 Final	2008-09 Projection as	2009-10 Proposed	
	Budget	of 04/30/2009	Budget	
5403 Salaries Operating	60,100	67,700	63,600	bigcap
5404 Material & Supplies Operating	1,200	200	700	
5414 Salaries Employee Committee	1,200	1,700	1,700	
5423 Salaries Maintenance	1,038,200	935,100	1,216,800	(1)
5424 Material & Supplies Maintenance	760,100	815,900	754,600	
5425 Salaries Water Service	193,000	220,800	121,500	(1)
5426 Material & Supplies Water Service	61,900	46,000	55,700	\square
5429 Salaries Hydrant	39,700	53,500	48,700	Ц
5431 Materials & Supplies Hydrant	30,000	32,900	29,600	\square
5441 Salaries Field Support	530,400	529,900	547,400	
5621 Office Supplies	1,000	500	900	
5622 Travel & Meetings	13,100	6,300	10,700	Ш
5623 Subscript Publicate	1,200	1,100	1,200	
5624 Dues & Memberships	2,300	2,000	1,600	
5628 Copying	200	-	<u> </u>	
5629 Miscellaneous (Temporary)	2,000	400	1,000	L
5632 Temp Help	126,100	63,600	36,000	(2)
5634 Janitorial	20,100	20,100	21,600	L
5636 Utilities	39,500	34,500	35,900	L
5671 Salaries Vehicle Maintenance	202,000	207,200	187,700	L
5672 Material & Supplies Vehicle Maint	153,900	125,900	139,400	
5674 Hazardous Waste Removal	4,800	5,000	4,800	
5676 Outside Services Office Equipment	13,100	4,200	9,700	L
5678 Maintenance Communication Eqmt	15,100	14,400	16,100	
5693 Salaries Maintenance Building & Grounds	3,000	1,600	-	
5694 Maintenance Building & Grounds	51,600	56,200	59,000	L
5731 Small Tools & Equipment	10,000	9,900	9,800	
5732 Gasoline & Oil	255,400	216,900	255,400	
5733 Material & Supplies Miscellaneous	125,000	106,600	124,200	
5735 Equipment Rental	1,500	600	1,500	
5403 Salaries Annual Flushing Program	61,200	24,400	16,700	
5429 Salaries Hydrant Damaged	3,500	11,000	21,800	(3)
5431 Materials & Supplies Hydrant Damaged	7,200	5,700	7,100	
5403 Salaries Valve Exercising Program	36,300	48,200	42,600	
5403 Salaries Street Resurfacing	6,400	5,600	7,600	L
5403 Salaries Flushing-Water Quality	16,300	11,600	9,600	
Distribution	3,887,600	3,687,200	3,862,200	

- Reallocation of staff time within Distribution department
 All authorized positions are filled with regular employees
 Projected need to increase staff time for fire hydrant maintenance

Sweetwater Authority Forecast Report as of April 30, 2009 Fiscal Year 2009-10

Watershed Management Formerly Environmental and Governmental Services

	Water street Management 1 officing Li				
		2008-09 Final Budget	2008-09 Projection as of 04/30/2009	2009-10 Proposed Budget	
5111	Salaries	202,200	187,700	5,200	(1)
5113	Materials & Services	14,400	17,000	18,000	(.,
	Salaries Administrative	-	-	64,200	(2)
5621	Office Supplies	3,600	1,700	2,400	(-)
5622	Travel & Meetings	8,300	5,400	2,000	
5623	Subscriptions & Publications	1,200	600	300	
5624	Dues & Memberships	1,200	700	500	
5650	Consulting	58,800	16,000	-	
5676	Equipment Maintenance	-	500	-	
	General	289,700	229,600	92,600	
5111	Salaries	122,600	126,800	215,400	(2)
5113	Materials & Services	5,600	3,000	5,200	
5121	Salaries	109,700	109,500	115,700	
5123	Materials & Services	218,400	62,600	104,400	(3)
5355	Salaries Monitoring & Mitigation	1,200	1,000	-	
5632	Temporary Help	107,000	76,300	96,000	
5650	Consulting	-	-	425,200	(4)
	Habitat	564,500	379,200	961,900	
5111	Salaries	24,600	12,900	-	
5650	Consulting	57,600	62,200	-	(5)
	Grants	82,200	75,100	-	
5111	Salaries	63,600	78,400	-	
	Watershed	63,600	78,400	-	
	Salaries	71,400	62,500	19,800	
	Materials & Services	29,200	21,300	2,000	
5650	Consulting	-	-	66,000	(6)
	JWA NCCP	100,600	83,800	87,800	
5111	Salaries	35,000	30,100	-	
	Intergovernmental Relations	35,000	30,100	-	
	Watershed Management	1,135,600	876,200	1,142,300	

- (1) Director of Environmental and Governmental Services moved to Administration
- (2) Reallocation of salaries from Water Quality
- (3) Giant reed herbicide treatment and removal; Vernal Pool maintenance
- (4) Habitat Management Program
- (5) Washington DC lobbyist moved to Administration
- (6) TAIC Inc. and ADHA contract costs for NCCP

Sweetwater Authority Budget Year 2009-10 Capital Investment Projects

			Page #
Capital Contingency		600,000	
Authority-wide Asset - Work Management System Phase IV		149,700	26
Business Network Security Enhancements		37,000	28
Information Systems	\$	186,700	
Access Management- Operations Access Control		20,000	29
Access Management- Perdue Access Control		16,000	30
Website External Re-Design		45,000	31
Administrative Services	\$	81,000	
Purchase of Replacement Meters		172 500	22
Customer Service	\$	172,500 172,500	33
	Ψ	172,000	
Air & Water Quality Monitoring SR 125		446,400	34
Replacement Reverse Osmosis Membranes for the Reynolds Desalination Facility		517,600	36
Replace URDS Pond Outlet Gates at Alacena and Hansen's Ponds		30,000	38
Replace R.A. Perdue's Water Treatment Plant air compressor piping and controls		13,500	39
Add Additional 1000 Gallon Propane Storage at Reynolds Desalination Plant		2,000	40
Purchase Spare Parts Storage Cabinets at Water Quality Remote Sites		2,500	41
Water Quality	\$	1,012,000	
Trench Paving for Pipeline Replacements - Distribution			
Easement, Vista to Adrienne Dr., C.V.		49,600	42
Tidelands Ave., 200 feet NO W. 19th St. to 123' S, N.C.		17,000	42
Palomar St., Hilltop Dr. to Judson Way, C.V.		72,200	42
Oneida St., Judson Way to Monserate Ave., C.V.		78,200	42
Hilltop Dr., Oxford to Quintard St., CV		189,600	42
Total Trench Paving for Pipeline Replacements - Distribution	\$	406,600	42
Disalina Daulasananta Fasinasaina			
Pipeline Replacements - Engineering Hilltop Dr., Shasta to I St., CV		440.200	42
Total Pipeline Replacements - Engineering	\$	440,200	43
Total Fipeline Replacements - Engineering	Ф	440,200	
Stairway Replacement Design at Loveland Dam		65,000	45
National City Well Improvements – 2.5 MGD Iron and Manganese Removal Treatment System		150,000	47
Coating Repairs to O.D. Arnold Tanks		201,000	49
Design Pipeline Replacement Program		145,200	51
Cathodic Protection Feasibility Study for Transmission Mains - Phase 3		75,000	53
Replace Air Conditioning Units		45,000	55
Engineering	\$	1,528,000	
Pipeline Replacements Program			
Easement, Vista to Adrienne Dr., C.V.		178,800	56
Tidelands Ave., 200 feet NO W. 19th St. to 123' S, N.C.		97,700	56
Palomar St., Hilltop Dr. to Judson Way, C.V.		230,600	56
Oneida St., Judson Way to Monserate Ave., C.V.		224,900	56
Hilltop Dr., Oxford to Quintard St., CV		684,000	56
Total Pipeline Replacement Program	\$	1,416,000	56
Vehicle Replacment		195,000	59
Valve Replacement		239,100	63
Phase II: Compliance Issues Pertaining to the Fleet Rule for Public Agencies and Utilities		68,000	65
Field Laptop Computers and Software/ License		20,000	66
Trench Compaction Roller and Trailer		15,500	68
Distribution	\$	1,953,600	

Sweetwater Authority Budget Year 2009-10 Capital Investment Projects

	_	Page #
BOR Richard A. Reynolds Desalination Facility Phase II Expansion	1,771,000	69
Research and Development Project for the Zero Discharge Solar Distillation Loops	121,000	72
Study of the San Diego Formation Aquifer by the U.S. Geological Survey	1,290,000	74
Broadway Improvements - C Street To D Street	150,000	78
Grant Projects	\$ 3,332,000	
BOR Richard A. Reynolds Desalination Facility Phase II Expansion	(437,000)	69
Research and Development Project for the Zero Discharge Solar Distillation Loops	(121,000)	72
LISA Study of the San Diego Formation Aquifer by the U.S. Geological Survey	(1,290,000)	74
Broadway Improvements - C Street To D Street	(75,000)	78
Grant Reserve Funding	\$ (1,923,000)	
Grant Projects (net of reimbursements)	\$ 1,409,000	
Robert A. Perdue Water Treatment Plant Improvements – Filter and Raw Water Pump Station Upgrades	6,196,700	79
Robert A. Perdue Water Treatment Plant Improvements - Dissolved Air Flotation (DAF) Treatment System	700,000	82
Improvements to Provide Access and Utilities to Sweetwater Reservoir and Thompson Property	455,000	84
Emergency Diesel Generator at Steeplechase Hydro Booster Station	61,000	86
Reserve Projects	\$ 7,412,700	
Total Capital Investments	\$ 14,355,500	

Subject of Study

AUTHORITY-WIDE ASSET / WORK MANAGEMENT SYSTEM – PHASE IV

Recommendation

Provide funding for Phase IV of the Maximo asset management system implementation.

Estimated Cost (Multi Year Project, 2004-15)

\$149,700

Discussion

We are currently in the process of implementing Phase III of the Maximo asset management system software, using TRM Inc. for consulting services. This project adds the pumping and storage assets (tanks, pump stations, etc.) to the system.

Phase IV of this project will encompass the design and input of the warehouse and purchasing systems. This will allow the Maximo users to requisition and to charge materials to work orders directly through the Maximo system.

Additional software is required for Phase IV, along with some hardware for the warehouse staff.

In addition, there are some system modifications requested or required by system users since the implementation of the Phase I project. We will continue to use TRM Inc. for consultant services.

Total Project Cost		\$ 997,200
Spent FY 2003-04		3,000
Spent FY 2004-05		1,000
Spent FY 2005-06		166,000
Spent FY 2006-07		128,000
Spent FY 2007-08		95,000
Spent FY 2008-09		137,500
Proposed 2009-10 Budget Detail:		
Warehouse	\$58,000	
Purchasing	56,700	
Hardware	10,000	
Additional Support for Previous Implementations	25,000	
Proposed 2009-10 Budget		149,700
Proposed 2010-11 Budget - Fleet		70,000
Proposed 2011-12 Budget - Laboratory Information Management		100,000
Proposed 2012-13 Budget - Buildings		50,000
Proposed 2013-14 Budget - Meters		50,000
Proposed 2014-15 Budget - Information Technology		50,000

Subject of Study

BUSINESS NETWORK SECURITY ENHANCEMENTS

Recommendation

- 1. Add enhanced web traffic defenses
- 2. Replace/upgrade networking equipment at Operations, Water Quality, and Desalination facility.

Estimated Cost

\$37,000

Discussion

- 1. The current threat picture on the internet is vastly different today that it was when we deployed our current defense strategy in 2004. This device is an expansion of our current web-filtering software to include much newer threats against our network. Fortunately, it allows us to leverage the investment in our existing web-filtering software, and transfer the current licensing over to the new system.
- 2. To address concerns brought to light our Information System Assessment, it has been necessary to re-architect the layout of our entire network. This equipment will allow us to complete the process of separating the servers, printers, and workstations onto separate networks at each site, greatly enhancing the security of our network. The existing home-office grade network switching equipment at our three of our four sites has been in use for at least 5 years and will not support the necessary configuration options. The equipment at the fourth site (Water Quality) has already been reconfigured, and will not be replaced by this project.

1	Web Filtering	\$ 10,000
2	Switch Upgrades	27,000
		37,000

Subject of Study

ACCESS MANAGEMENT- OPERATIONS ACCESS CONTROL

Recommendation

Install one additional Hirsch Model 8 Controller and three access control card readers at the Operations Center warehouse and meter shop.

Estimated Cost

\$20,000

Discussion

The installation of card access control on the two warehouse doors and the meter shop door will allow a better management of key control by assisting building managers and employee supervisors from attempting to recover or account for lost keys. The ability to customize employee access through software applications, rather than borrowing keys from other employees will eliminate the need for future key accountability. The implementation of adding two additional doors would require the addition of a second model 8 controller. The existing model 8 controller has reached it maximum device input.

The additional readers would complement the existing access readers, shadow the recommendations that are described in the "Guide lines for the Physical Security of Water Utilities" and move Sweetwater Authority forward on key management.

Labor, hardware, wiring, conduit, and programming	\$19,500
Contingency	500
	\$ 20,000

Subject of Study

ACCESS MANAGEMENT- PERDUE ACCESS CONTROL

Recommendation

Install one additional Hirsch Model 8 Controller and two access control card readers at Perdue Plant.

Estimated Cost

\$16,000

Discussion

The maintenance leadworker office (previously cross connection) door and the lunch room exterior door are used several times a day for entry/exit to the main building by contractors, and other visiting personnel, bypassing the controlled access points that are already in place on multiple entry/exit doors. Administrative procedures were implemented in 2007 to try and stop the entry of non- employee personnel and better secure the building. The implementation of adding two additional doors would require the addition of a second model 8 controller. The existing model 8 controller has reached it maximum device input.

The additional readers would complement the existing access readers, shadow the recommendations that are described in the "Guide lines for the Physical Security of Water Utilities" and move Sweetwater Authority forward on key management.

Labor, hardware, wiring, conduit, and programming	\$ 15 <i>,</i> 500
Contingency	500
	\$ 16,000

Subject of Study

WEBSITE EXTERNAL RE-DESIGN

Recommendation

To hire a web consultant to design and produce a Content-Management System (CMS) based website, and training. (All web maintenance; hosting and editing will continue to be handled in-house.)

Estimated Cost

\$45,000

Discussion

Sweetwater's external website is a vital tool to reach our customers, employees, governing board and other visitors. Especially in these times of water supply restrictions and drought, communicating with our public is more critical than ever. Also, in order to develop more advanced web tools for current and future customers, major infrastructure updates and new web technologies are needed to support these features.

The current website has served the agency for approximately ten years. Web technology has rapidly changed since Sweetwater Authority's website was first established. An updated look and improved functionality will make it easier for our customers and others to access and navigate in the site. The most widely-used and most adaptable web structure used today is a data-base driven solution called the CMS. The CMS-based web solution is a database-driven web solution widely used today, and is well-suited to meet the needs of a public agency. There are many advantages of the CMS solution, such as consistency of appearance, better content sharing between authors, adaptive "repurposing" (can be displayed in a variety of media), can interact with other programs, publish and expire dates, better distribution and workflow management. Also, in a CMS environment, future design changes can be made very easily by applying new style formats. A training component built into the consultant service contract will ensure that staff from various areas of the agency can contribute content for publishing, and staff responsible to maintaining and publishing content in-house will be equipped to manage the site. Communications will work closely with the IS group to coordinate and manage the project.

Communications is proposing this initial major redesign phase to bring the existing site up to current standards; then in subsequent years, to phase in additional upgrades to facilitate customer online tools, and other features, plus an Intranet upgrade.

Consulting/Evaluation	\$ 7,000
Project Management	4,000
Design	6,500
Design Production	2,000
Dynamic Programming	14,000
HTML Programming	1,200
Content Migration	2,800
Quality Assurance	2,500
Training/documentation	5,000
	\$ 45,000

Subject of Study

PURCHASE OF REPLACEMENT METERS

Recommendation

This project is the Authority's ongoing program of replacing defective and aged meters.

Estimated Cost

\$ 172,500

Discussion of Purchase

In order to maintain a consistent budget amount each year and smooth out the staff and labor time required for the change outs, the total number of meters exchanged for age annually is derived by dividing the total number of meters by fifteen years. This data set is then reviewed using the first-in first-out concept.

Meter	Number	Cost per	Total
Size	to order	meter	
5/8"	2,020	\$ 47.50	\$96,000
1"	230	103.71	23,900
1 ½"	65	272.66	17,700
2"	90	388.23	34,900
	2,405		172,500

Subject of Study

AIR & WATER QUALITY MONITORING SR125

Recommendation

Funding is recommended for the continuation of the project

Estimated Cost (Multi Year Project 1998-2011)

\$446,400

Discussion

In 1998, the United States Geological Survey (USGS), in cooperation with the Sweetwater Authority, began a study to assess the overall health of the Sweetwater watershed with respect to chemical contamination. The purpose of the study is to assess the chemical impact on the water quality in two drinking water reservoirs resulting from land use changes and urbanization in the watershed. Three environmental media – air, water, and bed sediments – were sampled on a regular schedule and analyzed for chemical contaminants including volatile organic compounds, polynuclear aromatic hydrocarbons, polychlorinated biphenyls, pesticides, and major and trace elements. This study has established baseline conditions for the target compounds in terms of detection frequency and concentration levels in each media, and continued to monitor these chemicals for changes over time.

In addition to the increasing urbanization pressures within the watershed, one land use activity that has a potential for affecting the water quality in Sweetwater Reservoir is the construction and operation of State Route 125 (SR-125). As part of San Diego's future Regional Transportation Plan, an elevated 4-lane highway (SR-125), with plans to expand it to 8-lanes, has been constructed approximately 400 meters upwind of the western end of the reservoir. The Sweetwater Authority is concerned that the emissions from the construction and operation of SR-125 will adversely affect the quality of water they provide to their customers and may lead to additional water treatment. Baseline studies began in Fiscal Year 1997-1998 and have been partially funded by USGS. SR-125 is now in operation and we are in the final phase of the study that will be completed in 2011.

USGS has applied for federal matching funds of \$50,000 for 2009 – 2010. This amount is included in the USGS cost sharing.

The next phase of the study in FY 2009-10 will include the following elements:

- Data analysis and review
- Report generation

Discussion of Carryover

The work by USGS will continue to 2011 concluding with a final report and determination of the impacts to Sweetwater Reservoir's water quality.

Total Project Cost		\$2,958,737
Spent FY 1997-98		-
Spent FY 1998-99		129,338
Spent FY 1999-00		197,506
Spent FY 2000-01		221,954
Spent FY 2001-02		251,349
Spent FY 2002-03		70,784
Spent FY 2003-04		55,862
Spent FY 2004-05		496,434
Spent FY 2005-06		234,228
Spent FY 2006-07		217,339
Spent FY 2007-08		204,240
Spent FY 2008-09		183,303
Proposed 2009-10 Budget Detail:		
USGS	\$290,500	
Carryover	145,900	
Misc. Charges	10,000	
		446,400
Proposed 2010-11		250,000

Subject of Study

REPLACEMENT REVERSE OSMOSIS MEMBRANES FOR THE REYNOLDS DESALINATION FACILITY

Recommendation

Carry-over funding to replace all membranes within the reverse osmosis treatment process at the Reynolds Desalination Facility.

Estimated Cost (Multi Year Project 2008-2010)

\$517,600

Discussion

Depending on the quality of the untreated water, reverse osmosis membranes like those used at the Richard A. Reynolds Desalination Facility have a useful life of five to seven years. With use and with each cleaning, the membranes degrade in performance, allowing more minerals (e.g., salt) to pass thorough the membrane surface, eventually reaching a point when they can no longer efficiently remove the minerals to an acceptable level.

The Reverse Osmosis membrane elements used at the Reynolds facility were first installed in the summer of 1999 and have been used almost continuously since that time. The membranes have been cleaned five times and performance has degraded to such a point that staff estimates that the membranes will withstand one more cleaning process that is scheduled for June 2008. Because the effectiveness of the membranes after the next cleaning cannot be accurately pre-determined, budgeting for replacement membranes is requested in FY 2008-2009 to ensure that funding is available if the membranes do need replacement.

Discussion of Carry Over

Staff was able to clean the membrane sufficiently that replacement of the membranes was not necessary in 2008-2009. However, replacement is likely in 2009-2010.

Total Project Cost		\$517,600
Spent FY 2008-09		-
Proposed 2009-10 Budget Detail:		
Purchase 630 Elements	\$517,600	
Proposed 2009-10 Budget		\$517,600

Subject of Study

REPLACE URDS POND OUTLET GATES AT ALACENA AND HANSEN'S PONDS

Recommendation

Purchase two 18 x 18-inch slide gates to replace heavily corroded pond outlet gates at Alacena and Hansen's ponds.

Estimated Cost

\$30,000

Discussion

The Alacena and Hansen pond outlet gates originally installed in 1990 are constructed of aluminum and control the storage or release of diverted runoff. They are beginning to fail due to corrosion. This project will provide for the planned replacement of the two remaining URDS Phase I pond outlet gates. The existing motorized actuators are still functional and will be re-installed on new gates constructed of aluminum and improved with corrosion resistant epoxy coating.

2 - Replacment Aluminum gate assemblies	\$18,750
Service labor, equipment & mobile crane	9,000
Contingency	2,250
	\$30,000

Subject of Study

REPLACE R.A. PERDUE'S WATER TREATMENT PLANT AIR COMPRESSOR PIPING AND CONTROLS

Recommendation

The original 1960 plant air system has control and accessories that need replacing to facilitate maintenance and optimization of air system

Estimated Cost

\$13,500

Discussion

The original 1960 plant air system has electric and pneumatic control equipment and air receivers (tanks) that should be replaced with current design equipment. The original system was designed and constructed to produce "instrument air" for the plant's filter control system. The filters were converted to electronic control in the 1980's, eliminating the need for the extra equipment and air-receiver tank. This project removes the unnecessary hardware and updates the control functions. The control wiring and electrical controls will be replaced along with the pneumatic controls for start, stop, alternation and alarm functions. The existing compressor pumps and motors will be retained as they have been maintained and are still supported by the manufacturer. A local Air Compressor service company will perform the modifications and replacement work. Cost will be offset by using Authority plant maintenance personnel to perform the demolition of the existing piping and control equipment.

Estimated Contract Labor	\$ 8,100
Materials, equipment	5,400
	\$ 13,500

Subject of Study

ADD ADDITIONAL 1000 GALLON PROPANE STORAGE AT REYNOLDS DESALINATION PLANT

Recommendation

Acquire a 1,000 gallon propane tank including fencing and gas piping to provide additional propane storage for use with the 75 KW emergency generator.

Estimated Cost

\$2,000

Discussion

The existing 500 gallon propane tank at the Reynolds Desal plant when full will operate the emergency generator for approximately three days before running out. With routine maintenance and test-run operation, the tank is not always completely full, diminishing the run time. A 1,000 gallon reserve tank can be installed and configured to provide a week's supply of propane. The tank will be installed to the west of the Paradise Creek drainage channel, which will require additional chain link fencing for security. The tank will be leased from our supplier for a nominal one-dollar-per-year basis. The cost of the project is for pipe and fittings to plumb the propane to the generator and for the security fencing.

1,000 gallon tank, propane piping, fittings and installation	\$ 1,000
Chain link fencing (50 l.f. 6-ft. w/3-strand barb)	999
	\$ 1,999

Subject of Study

PURCHASE SPARE PARTS STORAGE CABINETS AT WATER QUALITY REMOTE SITES

Recommendation

Purchase two parts storage cabinets to secure storage of small spare parts and equipment at RAR Desalination Plant and N.C. Wells.

Estimated Cost

\$2,500

Discussion

Spare parts for the chemical feed pumps, instrumentation equipment, small fittings and other critical equipment require better storage at the remote treatment sites. Plant maintenance staff that perform routine and corrective maintenance to the equipment at Richard A. Reynolds Desalination facility and the National City Wells often have difficulty locating the spare parts and fittings for their work. This project will provide secure cabinets with bins to provide better organization and labeling of the parts.

Storage Cabinets(two)	\$ 2,000
Contingency	500
	\$ 2,500

Subject of Study

PIPELINE REPLACEMENT PROGRAM – TRENCH PAVEMENT (DISTRIBUTION)

Recommendation

Provide funds to install trench paving for 1,050 linear feet of 8-inch, 2,953 linear feet of 12-inch, and 3,045 linear feet of 16-inch water mains to be installed by the Distribution Department.

Estimated Cost

\$406,600

Discussion

The 2009-10 fiscal year budget requests include projects for Metallic Main Replacements. The installation of the new water mains will be performed by the Distribution Department. However, the pipeline trench paving is normally performed by a private contractor through the Engineering Inspection staff. This project reflects the funding needed for the trench paving.

Faceure and Mista to Admission Dr. CM	φ	40.600
Easement, Vista to Adrienne Dr., CV	>	49,600
Tidelands Ave., 200 feet n/o W. 19th St. to 123 feet S, NC		17,000
Palomar St., Hilltop Dr. to Judson Way, C.V.		72,200
Oneida St., Judson Way to Monserate Ave., C.V.		78,200
Hilltop Dr., Oxford to Quintard St., CV		189,600
		406,600

Subject of Study

PIPELINE REPLACEMENT PROGRAM – ALL MATERIALS (ENGINEERING)

Recommendation

Provide funds to install 890 linear feet of 8-inch PVC.

Estimated Cost

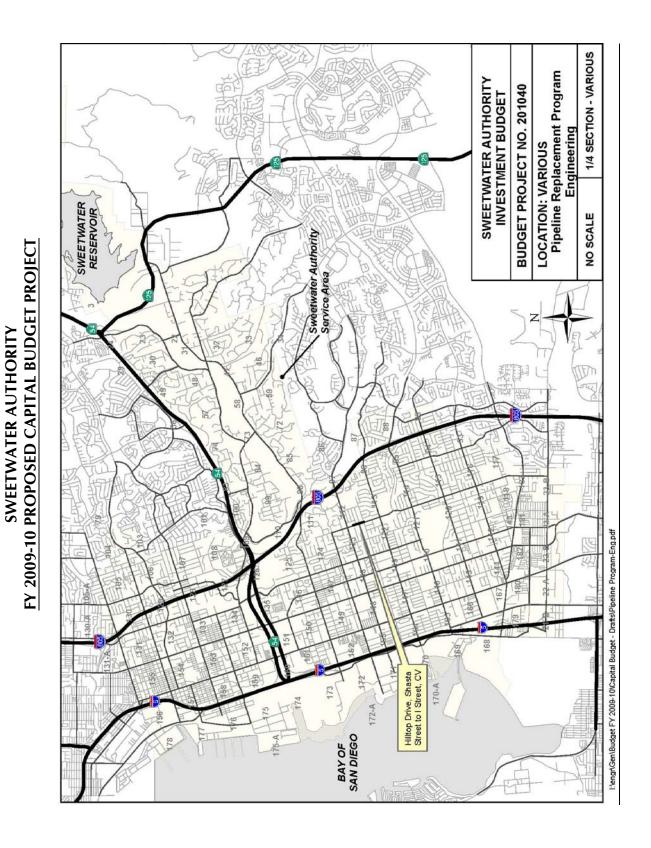
\$440,200

Discussion

This project is part of the Governing Board approved 2007 Water Facilities Master Plan Update. The Pipeline Replacement Program was originally adopted by the Governing Board in 1988. The program at that time was focused on replacement of cast-iron pipelines, upsizing existing pipelines in order to improve flow and pressure, upgrading pump stations, and constructing new storage tanks. Staff recommended that a minimum of \$3 million (adjusted over time due to inflation, or approximately \$4.2 million for 2009-10) be funded annually to expedite the Replacement Program with cast-iron pipelines having priority. The cast-iron replacements are nearing completion, so steel pipelines are the next higher priority. Having a proactive replacement program is recommended rather than waiting for multiple failures that, in turn, may result in requiring very large expenditures similar to that being experienced by the City of San Diego.

The funding requests for the recommended Pipeline Replacement Program have been separated into two departments. The projects to be constructed by the Authority will be in the Distribution budget, and those to be constructed by a private contractor will be in the Engineering budget. Also, the pipeline trench paving required for the work performed by Distribution, is normally handled by a private contractor through Engineering's Inspection staff. Funding for this paving work is requested separately in the Engineering budget.

1/4 Sec.	Location	Description	Funding Request
123	Hilltop Dr., Shasta to I St., CV	890 lf 8-inch	\$440,200



Subject of Study

STAIRWAY REPLACEMENT DESIGN AT LOVELAND DAM

Recommendation

Proceed with design and preparation of bid documents for the replacement of the stairway from the dam parapet to the Howell-Bunger Valve House (Valve House).

Estimated Cost (Multi Year Project 2009-2011)

\$65,000

Discussion

Staff identified a cracked concrete section on the access stairway to the Valve House, located at the base of Loveland Dam. Due to safety concerns, staff requested that GEI Consultants (GEI) evaluate the stair section. Based on their analysis, GEI concluded that the stair section had failed at that location, requiring an analysis of the best approach to repair. GEI conducted an evaluation of the entire stairway which concluded that additional sections can be expected to fail, and recommended replacement of the entire stairway. This report also evaluated alternative materials, associated construction costs, and replacement recommendation.

Staff has installed a temporary safety system, so that access to the Valve House may be permitted. Operation of the valve during this time period will be possible, remotely, via the SCADA system.

Because of the high cost associated with replacement of the entire stairway, staff directed GEI to evaluate alternative methods to repair and re-support the existing stairway. Preliminary results indicate that because of the difficulty in constructing new supports under the stairway and the reluctance to rely on the existing 60-year-old support system, this alternative would neither provide significant cost savings nor a comparable design life to the replacement alternative. Based on these results, staff is proposing to budget for the replacement alternative using a multi-year approach to implement the project.

Discussion of Carryover

Because of the timing to complete the design, and the fact that construction should occur between May and November, it was proposed to complete the final design during the 2009-10 fiscal year, and then submit the construction as part of the 2010-11 fiscal year budget process. Completion of this work is needed as there are several projects related to the required maintenance of the bunger valve. Therefore, a new stairway is needed in order to gain safe access to the Valve House with large and heavy materials and equipment.

Total Project Cost		\$890,000
Spent FY 2008-09		25,000
Proposed 2009-10 Budget Detail:		
Stairway Design Services	\$65,000	
Proposed 2009-10 Budget		65,000
Proposed 2010-11 Budget		800,000

Subject of Study

NATIONAL CITY WELL IMPROVEMENTS – 2.5 MGD IRON AND MANGANESE REMOVAL TREATMENT SYSTEM

Recommendation

Provide funding for environmental, design, and construction of an iron and manganese removal treatment system for the National City Wells.

Estimated Cost (Multi Year Project 2010-2012)

\$150,000

Discussion

The source water for the National City Wells is the San Diego Formation groundwater which contains varying amounts of iron and manganese. Iron and manganese present in the groundwater causes colored water issues in the distribution system, and has been, along with the Desal Facility, a likely contributor to colored water problems in National City. To aid in the reduction of colored water complaints from Authority customers, this project will install a system that is capable of removing the iron and manganese in the groundwater. This will, in time, reduce the number of colored water episodes in the distribution system.

The treatment system would be a package, pressure filtration system, to remove the iron and manganese in the groundwater. It would consist of pressurized filter vessels (and interconnecting piping, valves, etc.) that would be installed on an outdoor concrete slab, similar to the iron and manganese removal system proposed for the Reynolds Desal Facility.

The filters would be required to be backwashed, and the backwash water would be stored in steel tanks. The tanks would allow the iron and manganese to settle to the bottom. The clarified water at the top of the tanks would then be pumped back to the beginning of the treatment system, thereby improving its efficiency.

Total Project Cost		\$3,000,000
Proposed 2009-10 Budget Detail		
Consultant Design	\$150,000	
Proposed 2009-10 Budget		150,000
Proposed 2010-11 Budget		150,000
Proposed 2011-12 Budget		2,700,000

Subject of Study

COATING REPAIRS TO O.D. ARNOLD TANKS

Recommendation

Interior tank coating repairs for two O.D. Arnold Tanks.

Estimated Cost (Multi Year Project 2010-2011)

\$201,000

Discussion

There are two tanks at the O.D. Arnold Tank site – 2.5 million gallon (mg) and 0.15 mg – both requiring interior tank coating and structural repairs. Inspection of the newer, 2.5 mg O.D. Arnold water storage tank found potential coating failures on the inside of the tank. The coatings were installed 12 years ago, when the tank was constructed. The coating failure is premature, but must be repaired to preserve the life of the tank. Prior to taking this tank out of service, the older or original 0.15 mg O.D. Arnold tank (built in 1958) must be used in order to maintain water service and pressure to the area served by these tanks. This smaller tank is normally not used, as it exists only for emergency purposes. However, repairs are necessary prior to placing into temporary service. Because of the timing to complete the repairs to the existing 0.15 mg tank, it is proposed to complete the repairs during the 2009-10 fiscal year, and then submit the recoating of the 2.5 mg tank as part of the 2010-11 fiscal year budget process.

This tank site is designed for a new second tank, at which time the older tank would be demolished.

Total Project Cost		\$446,000
Proposed 2009-10 Budget Detail		
Rehabilitate old O.D. Arnold Tank:		
Replace Roof Support System and Sheeting,	\$40,000	
including Center Column and Roof Vent		
Replace Interior Ladder	5,000	
Re-sheet Floor (637 square feet)	51,000	
Replace Interior Coating	65,000	
Recoat Exterior	20,000	
Engineering and Inspection	20,000	
Proposed 2009-10 Budget		201,000
Proposed 2010-11 Budget		245,000

Subject of Study

DESIGN PIPELINE REPLACEMENT PROGRAM

Recommendation

Provide funds to design water mains to be installed during both the 2010 and 2011 fiscal years. Design will be for metallic main and master plan improvements.

Estimated Cost

\$145,200

Discussion

Complete design in order to proceed with pipeline replacements to be constructed in 2009-2010 and 2010-2011 fiscal years. Having pipeline replacements designed in advance will allow the Authority to keep a level workload for the Inspection and Distribution departments, and saves approximately three months of delays that would be created if these pipeline replacements were not designed in advance. A list of replacements is shown below.

Engineering Design	\$ 80,200
Survey	40,000
Pothole	25,000
	\$ 145,200

			Length	Length Diameter	
Rank	1/4 Sec.	Rank 14 Sec. Replacement Location	(feet)	(feet) (inches)	Cost
1	33	33 Acacia Ave., Fallbrook Court to 1,250 feet north, BO	1250	8	\$14,500
2	105	105 Easement, North of 8 th St., 600 feet east of Euclid Ave., NC	096	12	11,000
3	128	128 16 th St., Grove St. to Euclid Ave., NC	880	24	10,000
4	176	176 Bay Marina Dr., Haffley to Harrison Ave., NC	730	12	8,500
2	164	164 K St., Colorado Ave. to Broadway, CV	1754	8	20,200
9	115	115 Hilltop Dr., Barrett Ave. to Naples St., CV	650	12	7,500
/	183	183 Hilltop Dr., Quintard to Main St., CV	4450	12	51,000
8	114	114 Donahue St., Hilltop Dr. to Cuyamaca St., CV	1300	12	15,000
6		133 22 nd St., Palm to N Ave., NC	029	12	7,500
					145,200

Subject of Study

CATHODIC PROTECTION FEASIBILITY STUDY FOR TRANSMISSION MAINS - PHASE 3

Recommendation

Provide additional funding to complete Phase 3 of the Cathodic Protection Feasibility Study.

Estimated Cost (Multi Year Project 2008 -2011)

\$75,000

Discussion

The Fiscal Year 2009-10 budget includes funding for Phase 3 of the Pipeline Cathodic Protection (CP) Feasibility Study. The purpose of the study is to evaluate if existing steel water mains can be protected from external corrosion by installing a CP system. CP is a technology by which corrosion on metallic mains can be minimized, thereby extending the useful life of the mains. The Authority currently has CP systems on 16 of its steel transmission mains.

This multi-phased project is to evaluate 15 existing transmission mains which do not have CP. Staff has been working with V&A Consulting Engineers, Inc., (previously DeC Consultants, Inc.) to analyze the feasibility of protecting these mains. Phase 1 of the study included preliminary investigations to categorize the 15 mains into groups where CP is either known to be feasible, would be difficult to achieve and is not recommended, or it is unknown if CP is achievable, and additional field investigations are required. The results of the Phase 1 work indicated two mains where CP is feasible, one main where CP is not achievable, and 12 mains where field investigation is required.

Phase 2 included further investigation of the 12 mains where it was not known if CP was feasible. Field testing is being conducted which includes excavation and electrical continuity testing to determine if installation of a CP system is feasible. Because the investigations are difficult to scope, the budget available for the Phase 2 work was sufficient to evaluate six of the 12 mains.

The Phase 3 study includes budget to evaluate the remaining six mains for the feasibility of installing CP system. Once the investigations are completed, estimates of probable cost for implementing CP, if feasible, will be developed. Based on the results of the investigations, staff will request budget for installation of CP systems in future fiscal years.

Discussion of Carryover

Because of the time required to complete the field investigation, evaluate the results, and make recommendations for implementation of CP, it is proposed to complete this project over multiple years. The feasibility study which includes specific recommendations for the implementation of CP, will be completed in FY 2009-10. Design and installation of the CP system will be included as part of the FY 2010-11 budget process.

Total Project Cost		\$ 370,000
Spent FY2007-08		19,000
Spent FY2008-09		26,000
Proposed 2009-10 Budget Detail:		
Consultant Services	\$ 70,000	
Inspection	5,000	
Proposed 2009-10 Budget		\$ 75,000
Proposed 2010-11 Budget		\$ 250,000

Subject of Study

REPLACE AIR CONDITIONING UNITS

Recommendation

Remove and replace air conditioning units at the Administration building

Estimated Cost

\$45,000

Discussion

The air conditioning systems for the Administration building show visual signs of wear. The aluminum fins that surround the condenser units are very brittle and corroded. In addition to the visual signs, system failures are becoming more prevalent. The Administration system requires replacement of five three-ton package units. All units currently have a ten-year seer rating. For the units to meet the uniform mechanical code, they must have a minimum rating of 13 seer. The installation of new 13 seer units with variable speed motors will be much more cost effective than the present system. It is recommended to replace the existing units with new, cost effective, code-compliant, air conditioning units.

Summary of Cost Estimate

Replace five air conditioning units at Administration Building \$45,000

Subject of Study

PIPELINE REPLACEMENT PROGRAM – ALL MATERIALS (DISTRIBUTION)

Recommendation

Provide funds to install 1,050 linear feet of 8-inch PVC, 2,953 linear feet of 12-inch PVC, and 3,045 linear feet of 16-inch PVC.

Estimated Cost

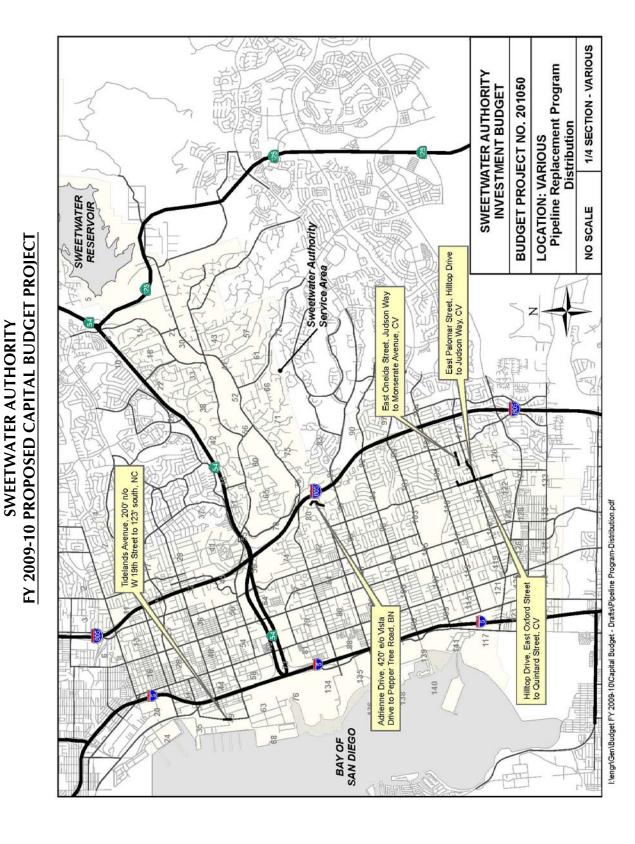
\$1,416,000

Discussion

This project is part of the Governing Board approved 2007 Water Facilities Master Plan Update. The Pipeline Replacement Program was originally adopted by the Governing Board in 1988. The program at that time was focused on replacement of cast-iron pipelines, upsizing existing pipelines in order to improve flow and pressure, upgrading pump stations, and constructing new storage tanks. Staff recommended that a minimum of \$3 million (adjusted over time due to inflation, or approximately \$4.2 million for 2009-10) be funded annually to expedite the Replacement Program with cast-iron pipelines having priority. The cast-iron replacements are nearing completion, so steel pipelines are the next higher priority. Having a proactive replacement program is recommended rather than waiting for multiple failures that, in turn, may result in requiring very large expenditures similar to that being experienced by the City of San Diego.

The funding requests for the recommended Pipeline Replacement Program have been separated into two departments. The projects to be constructed by the Authority will be in the Distribution budget, and those to be constructed by a private contractor will be in the Engineering budget. Also, the pipeline trench paving required for the work performed by Distribution, is normally handled by a private contractor through Engineering's Inspection staff. Funding for this paving work is requested separately in the Engineering budget.

RANK	ANK OPERATION METALLIC CONSTRUCTION 2009-10	Length	Diameter	Length Diameter Estimated Cost
_	Easement, Vista Dr. to Adrienne Dr., CV	1050	8	\$ 178,800
2	Tidelands Ave. 200' North of W. 19th St. to 123 feet South, NC	300	12	97,700
3	Palomar St., Hilltop Dr. to Judson Way, CV	1600	12	230,600
4	Oneida St., Jusdon Way to Monserate Ave., CV	1053	12	224,900
2	Hilltop Dr., Oxford St. to Quintard St., CV	3045	16	684,000
		7048		\$ 1,416,000



Subject of Study

VEHICLE REPLACEMENT

Recommendation

Replace vehicles recommended that meet or exceed vehicle replacement criteria

Estimated Cost

\$195,000

Discussion

During the Budget Year 1997-1998 the Board of Directors approved the Vehicle Replacement Program. The program consists of evaluating the Authority's automobiles, light trucks, medium trucks, and heavy trucks by using data collected from the Ron Turley Associates (RTA) system for each vehicle. Vehicle evaluation is conducted when the RTA system flags a vehicle "Alert" based on the following criteria.

- 1. If the age of the unit is 10 years or older
- 2. If the total life miles is 100,000 or greater
- 3. If the cost ratio is 50 percent or greater (total repair cost/original price).

Vehicle evaluations were conducted for the 2009-2010 Budget Year on all vehicles in the replacement program, and nineteen vehicles were flagged "Alert" for evaluation. Of the nineteen vehicles evaluated, six are recommended for replacement at a cost of approximately \$195,000, as shown on the attachment.

Proposed Vehicle Replacement Chart for 2009-10 Budget

Priority	Category	Year Vehicle I.D.	Make	Used by Department/Personnel	Total Miles	Miles last Years 12 months (age)	Years (age)	Cost Ratio	Cost Estimated Vehicle Ratio Replacement Cost
1	Light Truck	6066	F250 Utility Truck	Customer Service, Meter reading/ repair and customer service	112,719	17,687	10	10 63.54%	\$35,000
2	Light Truck	6166	F350 Utility Truck	Engineering, Pump Operator	101,554	9,893	10	10 48.89%	\$35,000
3	SUV	8166	Explorer	Engineering, Chief System Operator	111,388	12,311	10	10 35.66%	\$30,000
4	Light Truck	2066	F250 Utility Truck	Engineering, Pump Operator	105,701	9,646	10	10 41.77%	\$35,000
2	SUV	7066	Explorer	Distribution, Director of Operations	117,433	10,370	10	36.02%	\$30,000
9	Mini Van	9864	Mini Van	Admin. Service, Safety	110,098	19,797	11	11 35.20%	\$30,000
									\$195,000

FY 2009-10 PROPOSED CAPITAL BUDGET PROJECT **SWEETWATER AUTHORITY**

Vehicles to be Re-evaluate Budget Year 2010-2011

Priority	Category	Year/ Vehicle I.D.	Make	Used by Department/Personnel	Total Miles	Miles last 12 months	Years (age)	Cost Ratio	Estimated Vehicle Replacement Cost
1	Light Truck	9135	F350 Flat Bed Truck	Distribution, Welding truck	35,901	1,016	18	54.21%	\$35,000
2	Medium Truck	9231	F700 Flatbed Truck with lift gate	Distribution, Delivery truck	17,686	436	17	33.27%	\$50,000
3	Medium Truck	9337	F700 Flatbed Truck	Distribution, RO Maintenance crew	26,253	1,550	16	40.44%	\$50,000
4	Heavy Truck	9557	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul spoil	68,864	1,501	13	37.30%	\$80,000
2	Heavy Truck	9647	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul spoil	76,994	3,767	12	42.34%	\$80,000
9	Heavy Truck	9714	GMC T6500	Distribution, Crew truck field support	31,808	3,476	11	22.17%	\$100,000
7	Light Truck	233	F250 Utility Truck	Customer Service, Meter reading/ repair and customer service	71,103	11,360	2	64.08%	\$35,000
8	SUV	323	Explorer	Water Quality, Director of Water Quality	104,666	8,141	9	21.33%	\$28,000
6	Light Truck	9850	F250 Pickup 4x4	Water Quality, Maintenance support	87,036	9,185	11	39.55%	\$30,000
	Light Truck	6296	F150 Super Cab Pick-up Truck	Finance, Pick-up supplies, deliver materials					
10				throughout the organization and tows water trailers to special events.	91,961	5,974	13	39.71%	\$30,000
11	Utility Truck	9086	F250 Utility Truck	Customer Service, Meter reading/ repair and customer service	84,787	14,436	11	30.71%	\$35,000
12	Sedan	9822	Taurus Wagon	Engineering, Director of Engineering	86,095	8,162	11	29.27%	\$30,000
13	Sedan	0996	Taurus Wagon	Admin. Services, Security	87,710	19,761	13	27.67%	\$30,000
-	1	11-J-11-E-11	- It J 1 1	11	70021		N	J 66' 1 77 1	

Based on the annualized cost assessment the following vehicles meet or exceed one of the criteria's for replacement (100k miles, 10 yrs. or older or exceed 50% cost ratio) and are flagged "alert" for evaluation. In addition to the annualized cost assessment method, each vehicle is inspected to determine probable condition of the vehicle during 2009-2010 Budget Year and other factors such as exterior condition, and task factor. This information is then used to determine the priority for vehicle replacement.

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Vehicles Flagged for Replacement for 2009-10 Budget

Category	Year / Vehicle I.D.	Existing Make	Used by Department/Personnel	Replacement Vehicle Make, Type	Estimated Vehicle Replacement Cost
Light Truck	9135	F350 Flatbed	Distribution, Welding truck	F350 Flatbed	\$35,000
Medium Truck	9231	F700 Flatbed Truck w/ lift gate	Distribution, Delivery truck	TBD	\$50,000
Medium Truck	9337	F700 Flatbed Truck	Distribution, RO Maintenance crew	TBD	\$50,000
Heavy Truck	9557	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul	F800 5-Yard Dump Truck	\$80,000
Heavy Truck	9647	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul	F800 5-Yard Dump Truck	\$80,000
Heavy Truck	9714	GMC T6500	Distribution, Crew truck field support	Heavy Utility Truck	\$100,000
Light Truck	6296	F150 Super Cab Pick-up Truck	Finance, Pick-up supplies, deliver materials F250 Flatbed Truck w/ Lift Gate	F250 Flatbed Truck w/ Lift Gate	\$30,000
Sedan	0996	Taurus Wagon	Admin. Services, Security	F250 or comparable Chevrolet Short bed	\$28,000
Light Truck	9850	F250 Pickup 4x4	Water Quality, Maintenance support	F250 or comparable Chevrolet Long bed	\$25,000
Sedan	9822	Taurus Wagon	Engineering, Director of Engineering	TBD	\$28,000
Utility Truck	9086	F250 Utility Truck	Customer Service, Meter reading/ repair	F250 HD or comparable Utility Truck	\$35,000
Mini Van	9864	Mini Van	Admin. Service, Safety	TBD	\$28,000
SUV	9902	Explorer	Distribution, Director of Operations	TBD	\$28,000
Light Truck	2066	F250 Utility Truck	Engineering, Pump Operator	F250 HD or comparable Utility Truck	\$35,000
Light Truck	6066	F250 Utility Truck	Customer Service, Meter reading/ repair	F250 HD or comparable Utility Truck	\$28,000
SUV	9918	Explorer	Engineering, Chief System Operator	Escape or equal Hybrid 4 door SUV	\$32,000
Light Truck	9919	F350 Utility Truck	Engineering, Pump Operator	F350 HD or comparable Utility Truck	\$35,000
Light Truck	0233	F250 Utility Truck	Customer Service, Meter reading/ repair	F250 HD or comparable Utility Truck	\$28,000
SUV	0323	Explorer	Water Quality, Director of Water Quality	Escape or equal Hybrid 4 door SUV	\$28,000
Note: Alternative Firel	Vehicles Hybrid	A Vobicher Compressed Notice Color	Note. Alternative Fiel Vakislas - Hubrid Vakislas - Commesced Natural Cas (CNC) vakislas will be nurshased if available for the time of vakislas	in increase in the second of t	\$786,000

Subject of Study

VALVE REPLACEMENT

Recommendation

Provide funds to replace approximately (30) valves that have been identified for replacement or are predicted to fail in the course of normal operation.

Estimated Cost

\$239,100

Discussion

The Sweetwater Authority water distribution system is made up of 393 miles of pipeline, ranging in size from four-inch pipe, to forty-two-inch pipe. One of the main components of the distribution system are the 5,549 valves that are used to isolate sections of the system in order to accommodate construction, maintenance activities, and repairs due to pipeline failure. Reliable valve operation is needed to isolate sections of pipelines, thereby reducing areas of water outages and disruption of water service to our customers.

In order to provide system reliability, our Valve Operation Program requires that all distribution valves be operated at least once every three years and transmission valves be operated at least once a year to determine the condition of the valves, in order to provide preventative maintenance and/or the replacement of valves that have failed.

The most common cause of valve failure is due to exterior and/or interior corrosion of the valve body and stem components. The main reason for this type of valve failure is that valves installed prior to 1977 were installed without an exterior protective plastic wrap, allowing corrosion to occur more rapidly then if it were properly coated, causing valve malfunctions and valve failure.

Vendor payments	\$ 74,100
Salaries/Overhead	126,000
Inventory/Equipment	39,000
	\$ 239,100

Subject of Study

Phase II: Compliance issues pertaining to the Fleet Rule for Public Agencies and Utilities

Recommendation

Retrofit six Sweetwater Authority vehicles with a gross weight greater than 14,000 pounds. in order to comply with the Fleet Rule for Public Agencies and Utilities.

Estimated Cost

\$68,000

Discussion

In order to comply with California Code of Regulations Title 13, Fleet Rule for Public Agencies and Utilities, Sweetwater Authority is required to retrofit, repower or retire all diesel vehicles that weigh 14,000 pounds or greater. Currently Sweetwater Authority has 16 vehicles that require action, nine of which have already been properly retrofitted or replaced. This is the final phase of this fleet compliance requirement for Sweetwater Authority.

Vehicle	Age of		Compliance		
#	Vehicle	Make / Model	Schedule	Cost to F	Retrofit
0128	8	*Sterling LT9500 10yd Dump	Dec. 31, 2010	\$ 1	5,000
0452	5	F450 2.5 yd. Dump	Dec. 31, 2010		9,000
0229	7	Sterling SC8000 Crew Truck	Dec. 31, 2010		9,000
0334	6	*Sterling LT9500 10yd Dump	Dec. 31, 2010	1	5,000
0675	3	*Sterling Vac-Truck	Dec. 31, 2010	2	0,000
				\$ 6	8,000

^{*}Vehicles require active systems

Subject of Study

FIELD LAPTOP COMPUTERS AND SOFTWARE/LICENSE

Recommendation

Purchase two laptop computers with software for Field Crew Supervisors and Engineering Inspectors

Estimated Cost

\$20,000

Discussion

The Distribution Department is requesting the purchase of two additional laptop computers, including software and licenses to be used in the field, by the Field Crew Supervisors and Engineering Inspectors.

The Distribution department presently has three field laptop computers in service and are utilized by the Valve Crew, Fire Hydrant Crew and the Utility Location Crew in conjunction with iwater/inframap software and Maximo (Asset Management Software). Field crews have been using iwater software since 2007, allowing field crews to easily perform paperless inspections on assets such as valves and fire hydrants and seamlessly integrate this information into Maximo and spatially into the GIS for system mapping. The Authority began using Maximo software the summer of 2008 to eliminate the need for writing paper maintenance work orders and to provide better asset monitoring; short and long term planning for preventative and condition based maintenance activities in the distribution system.

In addition to the iwater/inframap software described, Microsoft Office License and Microsoft Operating System Licenses are needed to support the other general uses for these lap top computers.

	Qty	Each	Total
Toughbook Laptop	2	\$ 4,613	\$ 9,225
iWater/infraMap Software	2	2,952	5,904
Microsoft Office Lic.	2	369	738
Microsoft Operating System	2	554	1,107
Tax			1,485
10% Contingency			1,846
			\$ 20,305

Subject of Study

TRENCH COMPACTION ROLLER AND TRAILER

Recommendation

Purchase one Trench Compaction Roller and Trailer

Estimated Cost

\$15,500

Discussion

Sweetwater Authority's Construction and Construction Service Crew perform the task of water main replacements and other infrastructure installations and replacements. One of the critical aspects of the construction process is meeting the trench compaction requirements by the City of National City, the City of Chula Vista and San Diego County. In order to meet these standards, it is necessary to utilize specific equipment designed to perform this task. A compaction wheel and/or vibrating plate attachment are currently utilized to obtain the necessary compaction of 90% in the majority of construction excavations at a depth greater than 12 inches. Obtaining the required 95% compaction on the final 12 inches of trench material prior to paving cannot be achieved efficiently by the above compaction equipment. The previous process was to compact this final 12 inches of material by using a fully loaded dump truck to wheel roll and compact the trench. This was a slow process and in some situations would cause tire and wheel damage to the vehicle. The Construction Crew has been renting a walk behind compaction roller that is designed for this phase of the compaction process with great success. The cost to rent this equipment is \$250 per day and the average number of days in a year where it would be utilized is approximately forty. This equates to \$ 10,000 per year. Purchasing this piece of equipment would be much more cost effective as it would pay for itself in less than two years.

Trench Compaction Roller and Trailer	\$ 13,097
Tax	1,015
10% Contingency	1,411
Total	\$ 15,523

Subject of Study

RICHARD A. REYNOLDS DESALINATION FACILITY PHASE II EXPANSION

Recommendation

Provide funding to continue environmental monitoring, and secure a brine discharge permit from the Regional Water Quality Control Board (RWQCB) for the expansion of the Richard A. Reynolds Desalination Facility (Desal Facility). This includes continued quarterly monitoring of the Sweetwater River estuary by Nautilus Environmental (Nautilus). Nautilus would also continue to support the effort to secure a brine discharge permit from RWQCB. Also, funding is requested to finish the installation of an iron and manganese removal system for the existing plant production.

Estimated Cost (Multi Year Project 2008-2012)

\$1,771,000

Discussion

Sweetwater River estuary as a baseline for future environmental impacts from the additional brine discharge.

Source water for the Desal Facility, current and proposed, is groundwater that contains varying amounts of iron and manganese. Because a portion of this groundwater bypasses the reverse osmosis (RO) treatment process, and is then delivered to Authority customers, iron and manganese present in the water causes colored water issues in the distribution system. To aid in the reduction of colored water complaints from our customers, this project will install a treatment system that is capable of removing the iron and manganese in the blend water, thereby potentially reducing the number of colored water episodes in the distribution system. The treatment system was designed and partially constructed in FY 2008-09; however, final construction will not be completed until October 2009. Therefore, this budget request is for a carryover of \$400,000 to complete the treatment system construction.

The updated timeline for critical aspects of this project, based on conditions made by the state, are as follows:

Item	Completion Date
Submitted full application	September 2006
Sign Letter of Commitment	October 2009
Submit final plans and environmental documents (EIR)	January 2010
Sign Funding Agreement	July 2010
Complete construction	June 2012

Discussion of Carryover

This project is a continuation to complete the Richard A. Reynolds Desalination Facility Phase 2 Expansion. Also, it is desired in order to maintain the current work order number for accounting purposes and to minimize record searches upon an audit by any agency providing the grants.

Total Project Cost		\$ 18,024,500
Spent FY 2007-08		1,412,000
Estimated FY 2008-09		280,000
Proposed 2009-10 Budget Detail:		
Reynolds Plant Expansion:		
Brine discharge permit with RWQCB	\$ 20,000	
Environmental monitoring	70,000	
Well Property Acquisition	300,000	
Installation of Iron and Manganese Removal System:		
Construction	1,026,500	
Engineering and Inspection	25,100	
Enterprise Automation	176,000	
Timberline	68,600	
CH2M HILL Construction Management	34,800	
Contingency	50,000	
Proposed 2009-10 Budget		1,771,000
Proposed 2010-11 Budget		7,000,000
Proposed 2011-12 Budget		7,561,500
Grant Funding:		
FY 2007-08		353,000
FY 2008-09		70,000
FY 2009-10		437,000
FY 2010-11		5,140,000
FY 2011-12		7,500,000
		13,500,000

Subject of Study

RESEARCH AND DEVELOPMENT PROJECT FOR THE ZERO DISCHARGE SOLAR DISTILLATION LOOPS

Recommendation

Provide funding for a Research and Development Project for the Zero Discharge Solar Distillation Loops.

Estimated Cost (Multi Year Project 2008-2011)

\$121,000

Discussion

The United States Geological Survey (USGS) desired the Authority to participate with them in a research and development project for a Zero Discharge Solar Distillation Loops (SDL). Subsequently, the Authority submitted and received a Proposition 50 grant from the California Department of Water Resources (DWR) for the project. USGS is providing in-kind matching funds and conducting the research and development project. The Authority is providing a small section of property at the Reynolds Desal Facility to allow USGS to build the SDL, as well as provide brine discharge.

The objective of the project is to complete a research program to demonstrate that SDL that can provide a low-energy alternative for desalination of saline water, using natural thermal variations. The concept is based on generation of water vapor in the SDL during the day to later condense and generate distilled water. The result is a low-energy process for desalination of brackish water for purification and brine management.

A formal agreement with DWR was fully executed in October 2007. The DWR grant Sweetwater obtained is for \$481,500. The Authority has entered into an agreement with USGS, whereby USGS will provide matching services for the project. No funding is required by the Authority. Staff will lend support by conducting the administrative work, allowing use of a portion of the Desal Facility property and a portion of the brine discharge, as well as assisting in the installation of the equipment to conduct the research. The study is expected to be completed by October 2010.

Discussion of Carryover

A formal agreement with DWR was fully executed in October 2007. The DWR grant Sweetwater obtained is for \$481,500. The Authority has entered into an agreement with USGS, whereby USGS will provide matching services for the project. No funding is required by the Authority. Staff will lend support by conducting the administrative work, allowing use of a portion of the Desal Facility property and a portion of the brine discharge, as well as assisting in the installation of the equipment to conduct the research. The study is expected to be completed by October 2010.

Total Project Cost		\$481,500
Actual FY 2007-08		48,430
Estimated FY 2008-09		190,000
Proposed FY 2009-10 Budget Detail:		
Continue Research and Development Project	\$121,000	
Proposed FY 2009-10 Budget		121,000
Proposed FY 2010-11 Budget		122,070
Grant Funding:		
FY 2007-08		48,430
FY 2008-09		190,000
FY 2009-10		121,000
FY 2010-11		122,070
		481,500
NOTE: No funding is required by the Authority.		

Subject of Study

STUDY OF THE SAN DIEGO FORMATION AQUIFER BY THE U.S. GEOLOGICAL SURVEY

Recommendation

Provide funding for continual groundwater studies by the U.S. Geological Survey (USGS) to further understand the San Diego Formation (SDF) in the National City and Chula Vista areas.

Estimated Cost (Multi Year 2003-2012)

\$1,290,000

Discussion

The proposed USGS study will build upon the already completed USGS studies that have evaluated several wells associated with the Desal Facility and the National City Well field. This previous work also involved construction of three multi-depth monitoring wells.

The two primary objectives of the study are to: (1) develop an integrated, comprehensive understanding of the geology and hydrology of the SDF; and (2) further understand how to expand use of the formation for extraction and in-lieu conjunctive use.

The completed studies provided information regarding depth-dependent flow rate, and water quality data collection (mostly from existing desalination production wells in Chula Vista). The information included expanded depth-dependent flow rate and water quality sampling (including National City Wells Nos. 2 and 3), development of a Geographical Information System (GIS), and presentation of data on a website, in literature review, through analysis of satellite imaging data, on aquifer tests, groundwater computer models, and preparation of a report of the completed three multi-depth monitoring wells in the SDF.

The next phase of the study in FY 2009-10 will include the following elements:

• Land-deformation measurement and analysis (\$40,000). A Global Positioning System (GPS) survey will define the land-surface altitude at each monitoring multi-depth well so that we can accurately determine the direction of ground water flow. Additional InSAR satellite data will be purchased and analyzed to determine

historical changes in land-surface altitude, in particular, any land subsidence that may have resulted from ground water pumpage.

- Analysis of geochemical data (\$65,000). Analysis of geochemical data provides the
 most important method of tracking the movement of ground water flow. Most of the
 geochemical data are obtained from surface water and ground water samples.
 Previous analysis of geochemical data will be extended to identify possible
 groundwater flow paths. Reactive geochemical modeling will be used to test these
 hypotheses.
- Improvements to the geologic framework model (\$50,000). The geologic framework model will be enhanced with more detailed geology to match the complex layering found on surficial geologic maps, and in the five multi-depth monitoring wells. This geologic framework model is important because it integrates disseparate information and defines where geologic formations are, and therefore, where groundwater is likely to flow.
- **Groundwater flow model (\$75,000).** The groundwater flow model will continue to be improved with additional pumpage and water-level data. A regional flow model calibrated to historical conditions will be the best way to determine the likely future effects of ground water pumpage.
- Development of an optimal water-management model (\$40,000). An optimization model is a rigorous, quantitative way to test ideas and plans for changes in water management. This type of mathematical model maximizes an objective, such as pumpage, subject to constraints, land subsidence, and seawater intrusion. The optimization model uses information from the groundwater flow model, but also can include economic information, such as the cost of producing desalinated water.
- Develop a groundwater budget (\$50,000). In order to make a credible groundwater flow model, a credible groundwater budget is needed. All significant recharge and discharge needs to be measured or estimated, including areal recharge, stream recharge, recharge from agricultural return flow, evapotranspiration, pumpage, and inflow and outflow across model boundaries. Virtually none of these values have been estimated previously. In this study, the approach of iteratively improving estimates and models will be used to be both efficient and effective.
- Maintenance of the project website and GIS support (\$50,000). The project website [http://ca.water.usgs.gov/sandiego] provides data and published reports to both the Authority and the general public. The website is being designed as a one-stop-shop for information produced by the hydrogeology project, and likely will become even more useful as a way to manage pumpage and possibly reservoir operations. GIS are used to support data analysis, models, and report production.
- **Production of reports describing our findings (\$130,000).** Publishing our findings in USGS reports or peer-reviewed journal articles is important to allow others to critique our work, to provide our findings to other scientists throughout the world,

and to honor the requirement of USGS to provide "Earth Science in the Public Interest." A USGS Professional Paper will be the primary report to summarize, integrate, and archive the work to date.

• 2 - Multi-depth monitoring well (\$790,000). USGS does not pay for any portion of the monitoring well. The two multi-depth monitoring wells will be drilled to a depth of 1,500 feet below ground surface. The location of the wells will be determined at a later date.

The total cost of these work elements is \$1,390,000. USGS will contribute \$100,000 as part of the cooperative studies agreement. Also, USGS will contribute free-of-charge the part-time service of a retired senior USGS geologist, and a high-school student trainee. Total cost to the Authority is \$1,290,000.

Finally, San Diego County Water Authority (SDCWA) has granted funding under a Local Investigation Studies Assistance (LISA) grant. The Authority applied jointly with Otay Water District. The amount of grant funding is \$3 million. The \$1,290,000 detailed above will be paid by the SDCWA LISA Grant.

Discussion of Carryover

This project is a continuation to complete the SDF Groundwater analyses. Also, it is desired to maintain the current work order number for accounting purposes and to minimize record searches upon an audit by any agency providing the grants.

Total Project Cost		\$4,771,187
Spent FY 2002-03		72,000
Spent FY 2003-04		295,650
Spent FY 2004-05		95,800
Spent FY 2005-06		305,800
Spent FY 2006-07		208,650
Spent FY 2007-08		611,287
Spent FY 2008-09		392,000
Proposed 2009-10 Budget Detail:		
Land-deformation measurement and analysis	\$40,000	
Analysis of geochemical data	65,000	
Improvements to the geologic framework model	50,000	
Develop groundwater modeling	75,000	
Develop an optimal water management model	40,000	
Develop a groundwater budget	50,000	
Maintenance of website and journal articles	50,000	
Production of reports describing findings	130,000	
Multi-depth monitoring well	790,000	
Proposed 2009-10 Budget		1,290,000
Proposed 2010-11 Budget		750,000
Proposed 2011-12 Budget		750,000
Grant/Other Funding		
FY 2004-05		-
FY 2005-06		83,750
FY 2006-07		26,315
FY 2007-08		350,000
FY 2008-09		392,000
FY 2009-10		1,290,000
FY 2010-11		-
FY 2011-12		-
		2,142,065

Subject of Study

BROADWAY IMPROVEMENTS – C STREET TO D STREET

Recommendation

Provide funds to eliminate water facility conflicts due to proposed City of Chula Vista (City) curb, gutter, sidewalk, and storm drain improvements on Broadway, between C Street and D Street

Estimated Cost

\$150,000

Discussion

The City will be constructing improvements along Broadway, between C and D StreetS. These improvements include street reconstruction and new storm drain piping and manholes. This work involves the relocation of 2 water services, an offset fitting in a 16-inch water main at the north end of the project and cutting and capping a portion of a 12-inch main at D Street to accommodate the City's work. It is unknown whether the Authority's Distribution Department or time and material contractor, Cass Construction will perform the work on this project.

Total Project Cost		\$ 150,000
Proposed 2009-10 Budget Detail:		
Construction	\$ 142,500	
Specialty Inspection	5,000	
Engineering & Inspection	2,500	
Proposed 2009-10 Budget		\$ 150,000

Subject of Study

ROBERT A. PERDUE WATER TREATMENT PLANT IMPROVEMENTS – FILTER AND RAW WATER PUMP STATION UPGRADES

Recommendation

Provide funds to construct the necessary improvements at the Robert A. Perdue Water Treatment Plant (Perdue Plant) for upgrades to the filters and raw water pump station.

Estimated Cost (Multi Year Project 2008-2010)

\$6,196,700

Discussion

The Fiscal Year 2008-09 budget includes a project to construct improvements to the chemical systems at the Perdue Plant. Construction of the chemical improvements will be substantially complete by the end of FY 2008-2009. The improvements include a new tank farm structure and installation of new chemical tanks and piping; demolition and removal of existing ferric and ammonia tanks, chemical feed lines, chlorine evaporators, chlorinators, scales, and piping; installation of new chlorine dioxide piping and chlorination equipment; and installation of Supervisory Control and Data Acquisition system (SCADA) equipment that will operate the new chemical system. The majority of the work will be completed in FY 2008-09, however a portion of the funding approved in

FY 2008-09 will be carried over to FY 2009-10 to finish the project.

On October 8, 2008, the Governing Board approved staff's recommendation to have

J.R. Filanc Construction Company, Inc. (Filanc) and Authority consultants proceed with upgrades to the Perdue Plant filters, and improvements to the raw water pump station, for an amount not-to-exceed \$4,795,863. In addition, while preparing to implement repairs to the raw water pump station pump cans under Filanc's current contract for the chemical system improvements, it was determined that the condition of the pump cans requires additional repair above what was originally anticipated. Therefore, additional funding is required to implement the repairs.

The Summary of Cost Estimate shown below reflects A) completion of the Perdue Plant chemical system improvements, B) the final negotiated costs with Filanc and

various consultants that were presented to the Governing Board as an information item on February 25, 2009, and C) the estimated cost to implement the required repairs on two of the five raw water pump station pump cans.

Construction of the Perdue Plant chemical improvements will be substantially complete by the end of FY 2008-09. However, final completion including operational testing, record drawings, operations and maintenance manuals, and project closeout will be completed in FY 2009-10.

The upgrades to the Raw Water Pump Station include installation of variable speed drives for energy cost savings, replacement of valves, upgrades to chemical piping and tanks, and stabilization of the adjacent slopes. Filter upgrades were originally planned for FY 2011-12; however, due to deteriorating filter performance, and given the favorable construction climate, staff determined it would be beneficial to accelerate these upgrades to FY 2009-10. The planned improvements to the four existing filters will include removal and replacement of the existing filter media and under drain system, and epoxy coating of the exposed concrete. The existing hydraulic filter agitation system will also be replaced with an air scour system for improved cleaning of the filters.

The original scope of repairs to the raw water pump station pump cans was to repair exterior and interior corrosion at the bottom of the cans, and redirect drainage on the pump deck to avoid future corrosion at the interface of the pump can and the concrete deck. After removing one of the five pumps from its can, severe pitting in the interior steel shell of the can was observed. This pitting has been attributed to pump cavitation due to inadequate hydraulic conditions. To improve hydraulics and minimize cavitation, the pump is proposed to be reconfigured with the can. In addition, the pump can will be shortened by 12 inches to eliminate corrosion at the steel-to-concrete interface to regrade the slab. Due to the long lead time to modify the pumps, two of the five existing pumps and cans are proposed to be repaired and reconfigured in FY 2009-10.

Discussion of Carryover

The 2007-08 and 2008-09 fiscal year budgets included a project to proceed with the design, and commence construction for improving the chemical system at the Perdue Plant. Existing and pending federal drinking water regulations have made these improvements to the Perdue Plant necessary. The chemical system project included a new chemical storage tank farm that will expand the storage capacity of the Perdue Plant, as well as new chemical feed pumps and new chemical feed injectors. Included in the project will be improvements to the existing chlorine

dioxide system, which will be modified to a more permanent configuration. The improvements to the filters and raw water pump station will complete the phased work related to the chemicals, filters, and raw water pump station.

Total Project Cost			\$ 10,850,700
Spent FY 2007-08			650,000
Spent FY 2008-09			4,004,000
Proposed 2009-10 Budget Detail:			
Chemical Systems Improvements	\$	500,000	
Filters and Raw Water Pumps Station Upgrades			
J.R. Filanc Construction Co. Inc.	3	3,433,804	
MWH Americas, Inc.		60,000	
Enterprise Automation, Inc.		682,540	
Timberline Engineering		184,844	
SWA Engineering and Inspection		150,000	
Treated Water Purchases*		705,600	
Contingency		179,912	
Reconfigure 2 Raw Water Pumps, Station pumps,			
and repair pump cans		300,000	
Proposed 2009-10 Budget			\$ 6,196,700

^{*}Treated Water Purchases includes the San Diego County Water Authority treatment charge of \$215 per acre foot for 3,282 acre feet of projected January through March 2010 Perdue Plant production.

Subject of Study

ROBERT A. PERDUE WATER TREATMENT PLANT IMPROVEMENTS - DISSOLVED AIR FLOTATION (DAF) TREATMENT SYSTEM

Recommendation

Provide funds to design the necessary improvements at the Robert A. Perdue Water Treatment Plant (Perdue Plant) for the DAF treatment system.

Estimated Cost (Multi Year Project 2010-2011)

\$700,000

Discussion

The existing treatment process at the Perdue Plant consists of conventional treatment using flocculation, sedimentation, filtration, and disinfection. Improvements are proposed to modify the existing sedimentation process with a DAF treatment system. This request is for funding for an engineering consultant to complete the design of this system. Implementation of the DAF system is the next in a series of improvements at the Perdue Plant, which is included in the Perdue Plant Capital Improvement Program.

Designed and constructed in 1986, the existing sedimentation process has become incapable of producing high quality water that current or more adequately designed solids removal systems are capable of producing. The under-sized basins reduce the plant's ability to produce water at the desired 30 million gallons per day plant capacity. The DAF process will remove particles at a higher and more efficient rate than the existing sedimentation process. The existing sedimentation equipment would need to be removed from the existing basins, and the DAF equipment would then be installed (i.e., retrofitted) so new structures would be required.

The selected consultant will be required to prepare a Design Report (PDR) detailing the rationale for selection of the DAF system most appropriate for retrofit in the existing sedimentation basin. The PDR will include a list of drawings and specifications anticipated for the completion of the final construction documents. The consultant will then complete the plans and specifications as outlined in the PDR for competitive bidding of construction documents.

Total Project Cost		\$ 4,150,000
Proposed 2009-10 Budget Detail:		
Consultant Design	\$ 700,000	
Proposed 2009-10 Budget		\$ 700,000
Proposed 2010-11 Budget		3,450,000

Subject of Study

Improvements to Provide Access and Utilities to Sweetwater Reservoir and Thompson Property

Recommendation

Provide funds to construct a new access road to the south side of Sweetwater Reservoir and Thompson Property, and provide new water line for Thompson property and fishing parking lot landscape irrigation.

Estimated Cost (Multi Year Project 2008-2010)

\$455,000

Discussion

The 2008 fiscal year budget included a project to construct a new access road to enter the south side of Sweetwater Reservoir by both staff and the public for the fishing program. A new access road is required, as the existing access roads are insufficient, or were removed due to the new SR 125 roadway. As part of the eminent domain process, Caltrans has chosen to provide to SWA compensation only for this work, in lieu of having this road built as part of the SR 125 roadway project. In February 2008, the Authority received \$5.2 million as settlement for the property taken by Caltrans, as well as this access road which are held in the Authority's Undesignated Reserve fund.

A new water line is also required to serve provide irrigation for the fishing program landscaping. Otay Water District is presently servicing this area, since no Authority facilities are in this location. The project does require environmental processing, as well as design development. In addition, due to the deteriorated condition of the Thompson Property, the demolition of the existing structure in this project.

Discussion of Carryover

Construction of the permanent fishing access road was originally indented to take place in FY 2008-09. However, this has been delayed because San Diego County has been involved in determining the best location of the road through what will eventually become the County's future Summit Park property. The County has identified Caltrans property as the best location for the road. Currently, Sweetwater, Caltrans, and the County have reached agreement on the location of the road and

Sweetwater has produced a preliminary design for Caltrans review. Final permitting, land acquisition, environmental, and construction of the fishing access road are proposed to be completed during the 2009-10 fiscal year.

Total Project Cost		\$ 505,000
Spent FY 2007-08		20,000
Spent FY 2008-09		30,000
Proposed 2009-10 Budget Detail:		
Construction	\$ 400,000	
Environmental/Permitting	35,000	
Inspection	20,000	
Proposed 2009-10 Budget		\$ 455,000

Subject of Study

EMERGENCY DIESEL GENERATOR AT STEEPLECHASE HYDRO BOOSTER STATION

Recommendation

Purchase a new emergency diesel generator for the Steeplechase Hydro Booster Station.

Estimated Cost

\$61,000

Discussion

The existing emergency diesel generator at the Steeplechase Booster Station was installed in 1974 to serve homes in the surrounding area. The generator is now 35 years old, and parts are no longer manufactured for it. Currently, replacement parts are found on the internet from vendors that salvage parts from nonfunctioning generators. In the near future, parts for this generator will no longer be available from these sources; therefore, a new generator is needed.

Budget for the purchase of the generator is proposed to come from Power Rate Stabilization Fund, the 2002 legal settlement with SDG&E, related to over-charging the Authority for electricity. As part of that settlement, the Authority received \$620,108, plus legal fees and the Board approved the creation of a Power Rate Stabilization Fund to retain the proceeds from the settlement, to be used to fund purchases such as this.

Total Project Cost		\$ 61,000
Proposed 2009-10 Budget Detail:		
Emergency Diesel Generator	\$ 61,000	
Proposed 2009-10 Budget		\$ 61,000

Sweetwater Authority Budget Year 2009-10 Deferred Capital Investment

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Perdue Conference Room A/V Improvements	7,500	88
Audio/Visual Improvements - Reynolds Desalination Facility Meeting Room	12,500	89
Information Systems	\$ 20,000	
	00.000	
Flame Atomic Absorption Spectrophotometer (FAA)	30,000	90
Gas Chromatograph / Electron Capture Detector (GC/ECD) w/Auto sampler	65,000	91
Compact Skid Steer Loader With Brush Mower	13,700	92
Replace RAP Water Treatment Plant Fire Alarm Panel	10,000	94
Hand Held Global Positioning System (GPS) Unit	3,500	95
Water Quality	\$ 122,200	
12th St. C Ave. to D Ave. NC.	43,000	96
12th St. B Ave. to C Ave. NC.	43,000	96
Haffley Ave., W. 19th St. to Bay Marina, N.C.	87,700	96
Total Trench Paving for Pipeline Replacements - Distribution	\$ 173,700	96
Starr Tank to Acacia St., BO	307,700	97
E. 8th St., D to Highland Ave., NC	286,100	97
Easement, Vista Coronado to Lynwood Tank, BO	215,200	97
Industrial Blvd., Main St. to Louret Ave., CV	537,800	97
Total Pipeline Replacements - Engineering	\$ 1,346,800	97
Coating Repairs to National City Wells and O.D. Arnold Tanks	245,000	49
Sweetwater Dam South Spillway Improvement Design	100,000	100
Plaza Boulevard Improvements, Highland to Euclid Avenue, National City	249,000	102
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Engineering	\$ 2,324,500	
12th St. C Ave. to D Ave. NC.	53,300	105
12th St. B Ave. to C Ave. NC.	55,200	105
Haffley Ave., W. 19th St. to Bay Marina, N.C.	261,100	105
Total Pipeline Replacements - Distribution	\$ 369,600	105
Vehicle Replacements	155,000	108
Tool Box/Work Bench	2,900	112
Vehicle/Equipment Paint and Detail	20,000	113
Watermain/Easement Isolation Project	54,400	114
Replace Air Conditioning Units	21,000	116
Field Laptop Computers and Software/ License	20,000	117
Paint the Walls on the first Floor of the Main Building at Operations	4,600	119
Paint the Offices and Reception Area in the Warehouse Building at the Operations Center	1,400	120
Distribution	\$ 648,900	
Total Deferred Capital Investments	\$ 3,115,600	
	-	

Subject of Study

PERDUE CONFERENCE ROOM AUDIO/VISUAL (A/V) IMPROVEMENTS

Recommendation

Update control system and connectivity in conference room

Estimated Cost

\$7,500

Discussion

The A/V system at the Perdue Treatment plant is difficult to use and maintain. It is the only remaining conference room A/V system that has not been retrofitted with the new universal controls that we have installed at the Operations Center Lunch Room and the Board Conference Room at the Admin Building. The new system will provide a consistent user interface across all of our Conference rooms.

Conference Room Presentation Upgrades	\$	7,500
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Subject of Study

Audio/Visual Improvements – Reynolds Desalination Facility Meeting Room – Phase 2

Recommendation

Install additional projection systems and additional inputs at Reynolds Desalination Facility Meeting Room for use as an emergency operations center (EOC).

Estimated Cost

\$12,500

Discussion

The meeting room at the Richard A. Reynolds Desalination Facility is the designated EOC. During the 2003 and 2007 wildfires, the room was used for three days as the EOC for those emergencies. Based on those experiences, it is beneficial to upgrade the audio/visual equipment. Last year's capital budget requests included the upgrade of the Audio Visual system in the meeting room. The project was completed on time and budget.

The system was originally designed with three projectors and screens to allow the display of multiple streams of information into the room during its use as an EOC. The #2 and #3 screens were removed from the original capital request due to budget constraints, but the system was built and programmed assuming that the screens would be added in a subsequent years budget. This project would complete the improvements to the room by adding the remaining two projectors and screens, and adding an input for an additional computer was omitted during the initial design.

Audio / Visual Improvements	\$	12,500
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Subject of Study

FLAME ATOMIC ABSORPTION SPECTROPHOTOMETER (FAA)

Recommendation

The recommendation is to purchase a FAA for the Water Quality Laboratory in fiscal year 2009-10.

Estimated Cost

\$30,000

Discussion

The current Flame Atomic Absorption (AA) Spectrophotometer (Perkin Elmer Model 380) is approximately 30 years old. The instrument key pad is worn out and there have been accuracy problems when measuring iron and manganese, especially at levels below 0.1 mg/L.

The Flame AA is obsolete and is no longer supported by the manufacturer. If this instrument were to break down, we would lose our ability to perform in-house measurements for iron and manganese.

The Water Quality Laboratory performs approximately twenty-five iron and manganese determinations each month. The annual cost of sending out the iron and manganese analyses to a commercial laboratory would be approximately \$ 7,500 per year. It is estimated a new FAA would pay for itself in approximately four years.

Base Cost	\$24,100
Tax(7.75%)	1,900
Contingency (10%)	2,600
Shipping (estimated)	1,400
Total	\$30,000

Subject of Study

GAS CHROMATOGRAPH / ELECTRON CAPTURE DETECTOR (GC/ECD) W/AUTO SAMPLER

Recommendation

The recommendation is to purchase a GC/ECD w/Auto sampler for the Water Quality Laboratory in FY 2009 – 2010.

Estimated Cost

\$65,000

Discussion

The GC/ECD/Auto sampler is used to determine trihalomethanes (THMs) on a monthly basis in order to comply with the Stage 2 Disinfection/Disinfection Byproducts Rule.

The current system (Varian Star 3400cx) is approximately 13 years old. Replacement parts are becoming obsolete and the operating software is not supported. The auto sampler does not function properly and is currently being repaired. Varian no longer offers service contracts on this GC/ECD/Auto sampler system.

If the instrument were to require service, the cost of a single service call could easily exceed \$ 3,000. The annual cost of sending the monthly THM samples to a commercial testing laboratory would be approximately \$ 10,000 per year. It is estimated a new GC/ECD/Auto sampler system would pay for itself in approximately six years.

Base Cost	53,700
Tax(7.75%)	4,200
Contingency (10%)	5,700
Shipping (estimated)	1,400
Total	65,000

Subject of Study

COMPACT SKID STEER LOADER WITH BRUSH MOWER

Recommendation

Provide a funding match of \$13,700 for the purchase of a new compact skid steer loader with brush mower for use at Sweetwater Reservoir and Loveland Reservoir by Habitat Management and Reservoir Operations staff.

Estimated Cost

\$13,700

Discussion

The Harris Fire of October 2007 burned over 300 acres at the Sweetwater Reservoir. Staff assessed the resulting fire damage and applied for funding through the Federal Emergency Management Agency (FEMA) Public Assistance Grant Program. The grant program for disasters in California is administered by the state Office of Emergency Services (OES). Of several awards to Sweetwater Authority, FEMA provided funding to replace 7,800 LF of barbed wire fencing and associated signage that was destroyed by the fire. The fencing, supported by wood and metal posts, was relic of historic grazing activities on the property. Staff has considered replacement of this burned fencing and determined that it is no longer needed since grazing no longer occurs on the property and the adjoining lands are permanent open space and a designated National Wildlife Refuge. In accordance with FEMA grant guidelines, staff submitted an Alternate Project request to OES in January 2009. If approved by FEMA, Sweetwater Authority will be eligible for \$32,292 in funding for the purchase of a Compact Skid Steer Loader with Brush Mower attachment. Approval of this budget project will provide a funding match of \$13,700, the additional amount needed to purchase the equipment.

The Compact Skid Steer Loader with Brush Mower will provide an immediate and direct benefit to our reservoir land management programs. It will be a useful piece of equipment to perform vegetation maintenance in the following areas: (1) firebreak and fuel management areas; (2) managed reservoir bottom; and (3) the Urban Runoff Diversion System. Additionally, the adaptability of this equipment through use of attachments (post hole auger, bucket, and backhoe) supports other work within many areas of the Sweetwater Reservoir and Loveland Reservoir

properties, including fence repair/construction, habitat enhancement, irrigation installation, and trenching.

Equipment Cost (incl tax)	\$ 46,582
FEMA Alternate Project Funding	(32,922)
Total	\$ 13,660

Subject of Study

REPLACE RAP WATER TREATMENT PLANT FIRE ALARM PANEL

Recommendation

Replace the existing local fire alarm panel with a current version that provides better test and maintenance functions.

Estimated Cost

\$10,000

Discussion

The fire alarm panel for Perdue Water Treatment Plant was installed in 1985. It is now obsolete and does not provide adequate safety and test features required for periodic maintenance testing. The panels' re-set and silence functions require a qualified electrical worker to operate. The proposed replacement panel will allow for these functions to be performed by authorized staff without opening the electrical cover and being exposed to high voltage.

Replace Perdue Fire Panel	\$ 6,848
Relocate Desal Smoke Detectors	2,160
Contingency	992
	10,000

Subject of Study

HAND HELD GLOBAL POSITIONING SYSTEM (GPS) UNIT

Recommendation

Purchase a hand held GPS Unit to improve efficiency of data collection and utility of spatial habitat and reservoir land management data.

Estimated Cost

\$3,500

Discussion

GPS and Geographic Information Systems (GIS) have become regular tools for variety applications where spatial data is necessary. Sweetwater staff includes several trained professionals who have become accustomed to use such equipment and software. Among applications in Water Quality staff, GPS and GIS have been used to record and archive species location data, map habitats and wildfire burn areas, mark water quality sampling points, and pinpoint reservoir land features, such as property markers, signs, and fence lines. The result has been an ever expanding database of information that can be easily and accurately mapped and analyzed, and proven very useful to our land managers and decision makers.

The subject device is needed both to keep up with technology and improve efficiency of data collection and data compilation. Our current hand held GPS devise is a recreational grade GPS and was purchased several years ago. As a recreational grade receiver, its accuracy is reliable to 10 meters (approximately 30 feet) and can be used for collecting point locations only. Corresponding data must be recorded separately on paper or a Palm Pilot device and merged through a lengthy and cumbersome spread sheet and spread sheet conversion process before data can be used in the GIS software. The requested GPS device is a submeter unit (accurate to approximately 3 feet) and would seamlessly provide both functions of recording point location and point feature attributes for immediate use in GIS data analysis and mapping application. In addition, polygon or feature boundary positions can also be recorded versus just point locations from the current recreational device.

Subject of Study

PIPELINE REPLACEMENT PROGRAM – TRENCH PAVEMENT (DISTRIBUTION)

Recommendation

Provide funds to install trench paving for 500 linear feet of 8-inch and 1,660 linear feet of 12-inch water mains to be installed by the Distribution Department.

Estimated Cost

\$173,700

Discussion

The 2009-10 fiscal year budget requests include projects for Metallic Main Replacements. The installation of the new water mains will be performed by the Distribution Department. However, the pipeline trench paving is normally performed by a private contractor through the Engineering Inspection staff. This project reflects the funding needed for the trench paving.

12TH St. C Ave. to D Ave. NC.	\$ 43,000
12TH St. B Ave. to C Ave. NC.	43,000
Haffley Ave., W. 19th St. to Bay Marina, NC.	87,700
	173,700

Subject of Study

PIPELINE REPLACEMENT PROGRAM – ALL MATERIALS (ENGINEERING)

Recommendation

Provide funds to install 2,080 linear feet of 8-inch PVC, 1,300 linear feet of 12-inch PVC, and 1,300 linear feet of 16-inch PVC.

Estimated Cost

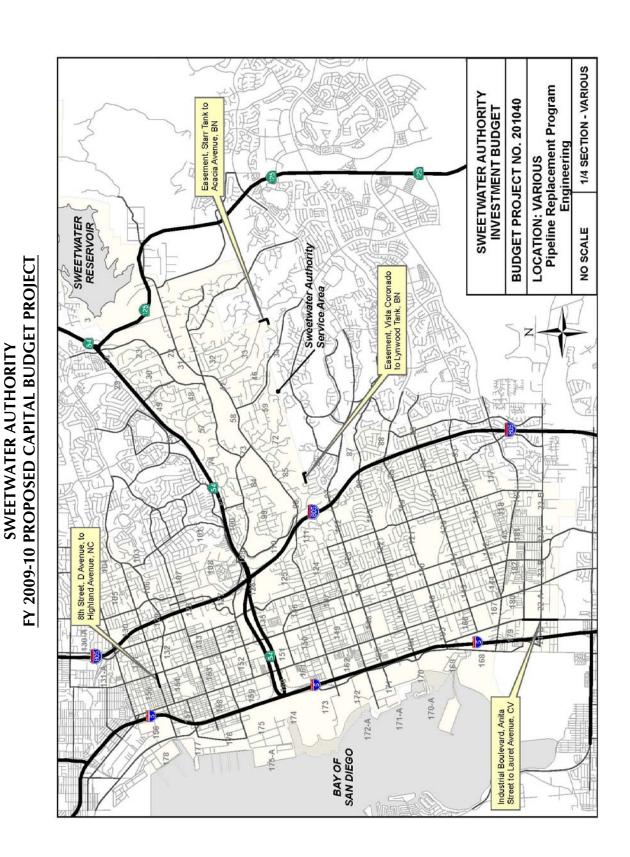
\$1,346,800

Discussion

This project is part of the Governing Board approved 2007 Water Facilities Master Plan Update. The Pipeline Replacement Program was originally adopted by the Governing Board in 1988. The program at that time was focused on replacement of cast-iron pipelines, upsizing existing pipelines in order to improve flow and pressure, upgrading pump stations, and constructing new storage tanks. Staff recommended that a minimum of \$3 million (adjusted over time due to inflation, or approximately \$4.2 million for 2009-10) be funded annually to expedite the Replacement Program with cast-iron pipelines having priority. The cast-iron replacements are nearing completion, so steel pipelines are the next higher priority. Having a proactive replacement program is recommended rather than waiting for multiple failures that, in turn, may result in requiring very large expenditures similar to that being experienced by the City of San Diego.

The funding requests for the recommended Pipeline Replacement Program have been separated into two departments. The projects to be constructed by the Authority will be in the Distribution budget, and those to be constructed by a private contractor will be in the Engineering budget. Also, the pipeline trench paving required for the work performed by Distribution, is normally handled by a private contractor through Engineering's Inspection staff. Funding for this paving work is requested separately in the Engineering budget.

RANK	NK ENGINEERING METALLIC CONSTRUCTION 2009-10	Length	Diameter	Length Diameter Estimated Cost
-	Starr Tank to Acacia St., BO	1,300	12	307,700
2	E. 8th St., D to Highland Ave., NC	1,300	12	286,100
3	Easement, Vista Coronado to LynWood Tank, BO	750	8	215,200
4	Industrial Blvd., Main St.\ to Louret Ave., CV	1,300	16	537,800
		4,650		\$ 1,346,800



Subject of Study

SWEETWATER DAM SOUTH SPILLWAY IMPROVEMENTS DESIGN

Recommendation

Complete the design of repairs to the Sweetwater Dam South Spillway

Estimated Cost (Multi Year Project 2008-2011)

\$100,000

Discussion

The 2009 budget includes an item to assess the frequency of the Probable Maximum Flood (PMF) at the Sweetwater Reservoir, and perform preliminary design on repairs to the Sweetwater Dam South Spillway (Spillway). In 2003, GEI Consultants (GEI) performed an initial analysis to assess the Spillway's ability to pass the PMF. The previous PMF study was conducted in 1981 by the) Division of Safety of Dams (DSOD). Since that time, the National Oceanic and Atmospheric Administration (NOAA) has updated its criteria for calculating the PMF. Therefore, it was required that the Spillway analysis be conducted using the updated NOAA Hydrometeorological Report (HMR 58). The analysis calculated a new PMF flow of 118,800 cubic feet per second (cfs), with the dam parapet overtopped by 5.5 feet for 12 hours, and the South Dike being overtopped by 3.3 feet. The previous PMF calculated was 71,624 cfs, with the dam parapet overtopped by 0.6 feet for two hours, and no overtopping of the South Dike. This is a significant increase. The 2008 fiscal year budget included a project to conduct a final study evaluating the spillway structures at Sweetwater Dam and their ability to pass water during storm events. This evaluation is based on new standards established by DSOD. This study concluded that there was no practical way to increase the spillway capacity by modifying the south spillway.

DSOD is not requiring owners of dams to make immediate improvements based on these new criteria for determining PMF. Therefore, staff is proposing to move forward with the final design and preparation of bidding documents for the repairs to the Spillway to remove and replace deteriorating concrete, replace the wooded access walk to (which has been closed due to safety concerns), and replace the wooden spillway weir with a concrete weir structure. Prior to initiating final design activities, staff will review with DSOD preliminary design of the repairs. This is needed in order to proceed with final design and construction of the repairs.

Discussion of Carryover

Because of the timing to complete the design, and the fact that construction should occur between May and November, it was proposed to complete the final design during the 2009-10 fiscal year, and then submit the construction as part of the 2010-11 fiscal year budget process. This work is needed because the Spillway has been deteriorating for a number of years, and is in need of repairs.

Total Project Cost		\$1,820,000
Spent FY 2007-08		110,000
Spent FY 2008-09		110,000
Proposed 2009-10 Budget Detail:		
Spillway Repair Design Services	\$100,000	
Proposed 2009-10 Budget		100,000
Proposed 2010-11 Budget		1,500,000

Subject of Study

PLAZA BOULEVARD IMPROVEMENTS, HIGHLAND TO EUCLID AVENUE, NATIONAL CITY

Recommendation

Provide funds to eliminate water facility conflicts due to proposed City of National City (City) curb, gutter, and sidewalk improvements on Plaza Boulevard, between Highland and Euclid Avenue

Estimated Cost

\$249,000

Discussion

The City will be constructing improvements along Plaza Boulevard, between Highland and Euclid Avenue. These improvements include street widening that requires existing sidewalks to be relocated. The City will also be grinding and overlaying the street. It is Authority policy to work with the City to relocate water utilities to accommodate their proposed work. This work involves the relocation of 34 water meters and 11 fire hydrants. Sixteen of the water services originally installed in the 1970s are plastic, and it is the Authority's policy to replace plastic services with copper when they are encountered as part of a street improvement, in order to eliminate the risk of leaks from plastic laterals. It is also intended to utilize the Authority's time and material contractor, Cass Construction, due to the scope of work and timing to meet the City's schedule.

Construction	\$ 212,000
Speciality Inspection	10,000
Engineering and Inspection	27,000
	249,000

1/4 SEC. 106, 129, & 132 Highland Avenue to Euclid Avenue LOCATION: Plaza Boulevard, NC Plaza Boulevard Widening Project SWEETWATER AUTHORITY INVESTMENT BUDGET **BUDGET PROJECT NO. 201040** EUCLID AVENUE SCALE 1"=800" FY 2009-10 PROPOSED CAPITAL BUDGET PROJECT IMPROVEMENT AREA **SWEETWATER AUTHORITY** AVENUE PALM IMPROVEMENT AREA PLAZA BLVD. HIGHLAND AVENUE 8TH STREET ATH STREET

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Subject of Study

PAVEMENT MAINTENANCE

Recommendation

Perform maintenance and repairs of asphalt pavement at various sites in accordance with the 1994 Pavement Repair Master Plan and current maintenance requirements.

Estimated Cost

\$60,000

Discussion

The 1994 Pavement Repair Master Plan developed a program for pavement repairs and maintenance, including priority and costs. Implementing this program will extend the life of the pavement, and save the Authority costly reconstruction work. Maintenance work will be performed at the McMillin Tank, Bonita Highlands Tank, Claire Vista Tank, and O.D. Arnold Tank Sites. Small areas of pavement will be removed and replaced at each site. A sand seal will be applied over the entire paved area.

Construction	\$47,500
Design	5,000
Inspection	7,500
	60,000

Subject of Study

PIPELINE REPLACEMENT PROGRAM – ALL MATERIALS (DISTRIBUTION)

Recommendation

Provide funds to install 500 linear feet of 8-inch PVC and 1,660 linear feet of 12-inch PVC.

Estimated Cost

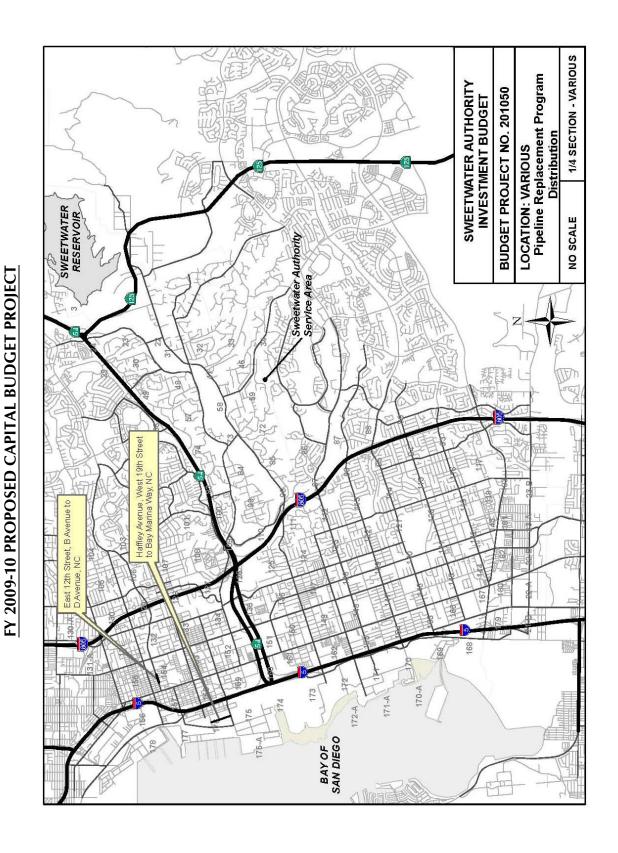
\$369,600

Discussion

This project is part of the Governing Board approved 2007 Water Facilities Master Plan Update. The Pipeline Replacement Program was originally adopted by the Governing Board in 1988. The program at that time was focused on replacement of cast-iron pipelines, upsizing existing pipelines in order to improve flow and pressure, upgrading pump stations, and constructing new storage tanks. Staff recommended that a minimum of \$3 million (adjusted over time due to inflation, or approximately \$4.2 million for 2009-10) be funded annually to expedite the Replacement Program with cast-iron pipelines having priority. The cast-iron replacements are nearing completion, so steel pipelines are the next higher priority. Having a proactive replacement program is recommended rather than waiting for multiple failures that, in turn, may result in requiring very large expenditures similar to that being experienced by the City of San Diego.

The funding requests for the recommended Pipeline Replacement Program have been separated into two departments. The projects to be constructed by the Authority will be in the Distribution budget, and those to be constructed by a private contractor will be in the Engineering budget. Also, the pipeline trench paving required for the work performed by Distribution, is normally handled by a private contractor through Engineering's Inspection staff. Funding for this paving work is requested separately in the Engineering budget.

RANK	OPERATION METALLIC CONSTRUCTION 2009-10	Length	Diameter	Length Diameter Estimated Cost
1	12th St., C Ave. to D Ave., NC	275	8	53,300
2	12th St., B Ave. to C Ave., NC	225	8	55,200
3	Haffley Ave., W. 19th St. to Bay Marina, N.C.	1660	12	261,100
		2160		\$ 369,600



SWEETWATER AUTHORITY

Subject of Study

VEHICLE REPLACEMENT

Recommendation

Replace vehicles recommended that meet or exceed vehicle replacement criteria

Estimated Cost

\$155,000

Discussion

During the Budget Year 1997-1998 the Board of Directors approved the Vehicle Replacement Program. The program consists of evaluating the Authority's automobiles, light trucks, medium trucks, and heavy trucks by using data collected from the Ron Turley Associates (RTA) system for each vehicle. Vehicle evaluation is conducted when the RTA system flags a vehicle "Alert" based on the following criteria.

- 1. If the age of the unit is 10 years or older
- 2. If the total life miles is 100,000 or greater
- 3. If the cost ratio is 50 percent or greater (total repair cost/original price).

Vehicle evaluations were conducted for the 2009-2010 Budget Year on all vehicles in the replacement program, and nineteen vehicles were flagged "Alert" for evaluation. Of the nineteen vehicles evaluated, six are recommended for replacement at a cost of approximately \$195,000, as shown on the attachment.

Proposed Vehicle Replacement Chart for 2009-10 Budget

Priority	Category	Year Vehicle I.D.	Make	Used by Department/Personnel	Total Miles	Miles last Years 12 months (age)	Years (age)	Cost Ratio	Miles last Years Cost Estimated Vehicle 12 months (age) Ratio Replacement Cost
7	Light Truck	9850	F250 Pickup 4x4	Water Quality, Maintenance support	82,036	9,185	11	11 39.55%	\$30,000
8	Light Truck	6296	F150 Super Cab Pick-up Truck	Finance, Pick-up supplies, deliver materials throughout the organization and tows water trailers to special events.	91,961	5,974	13	13 39.71%	\$30,000
6	Utility Truck	9086	F250 Utility Truck	Customer Service, Meter reading/ repair and customer service	84,787	14,436	11	11 30.71%	\$35,000
10	Sedan	9822	Taurus Wagon	Engineering, Director of Engineering	86,095	8,162	11	11 29.27%	\$30,000
11	Sedan	0996	9660 Taurus Wagon	Admin. Services, Security	87,710	19,761 13 27.67%	13	27.67%	\$30,000

FY 2009-10 PROPOSED CAPITAL BUDGET PROJECT **SWEETWATER AUTHORITY**

Vehicles to be Re-evaluate Budget Year 2010-2011

Priority	Category	Year/ Vehicle I.D.	Make	Used by Department/Personnel	Total Miles	Miles last 12 months	Years (age)	Cost Ratio	Estimated Vehicle Replacement Cost
1	Light Truck	9135	F350 Flat Bed Truck	Distribution, Welding truck	35,901	1,016	18	54.21%	\$35,000
2	Medium Truck	9231	F700 Flatbed Truck with lift gate	Distribution, Delivery truck	17,686	436	17	33.27%	\$50,000
3	Medium Truck	9337	F700 Flatbed Truck	Distribution, RO Maintenance crew	26,253	1,550	16	40.44%	\$50,000
4	Heavy Truck	9557	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul spoil	68,864	1,501	13	37.30%	\$80,000
5	Heavy Truck	9647	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul spoil	76,994	3,767	12	42.34%	\$80,000
9	Heavy Truck	9714	GMC T6500	Distribution, Crew truck field support	31,808	3,476	11	22.17%	\$100,000
7	Light Truck	233	F250 Utility Truck	Customer Service, Meter reading/ repair and customer service	71,103	11,360	7	64.08%	\$35,000
8	SUV	323	Explorer	Water Quality, Director of Water Quality	104,666	8,141	9	21.33%	\$28,000
6	Light Truck	9850	F250 Pickup 4x4	Water Quality, Maintenance support	82,036	9,185	11	39.55%	\$30,000
	Light Truck	696	F150 Super Cab Pick-up Truck	Finance, Pick-up supplies, deliver materials					
10				throughout the organization and tows	91,961	5,974	13	39.71%	\$30,000
				water trailers to special events.					
11	Utility Truck	9086	F250 Utility Truck	Customer Service, Meter reading/ repair and customer service	84,787	14,436	11	30.71%	\$35,000
12	Sedan	9822	Taurus Wagon	Engineering, Director of Engineering	86,095	8,162	11	29.27%	\$30,000
13	Sedan	0996	Taurus Wagon	Admin. Services, Security	87,710	19,761	13	27.67%	\$30,000
Docod on	the sample of sections	Hot oft the foll	Donal on the number of transfer of the following we wishing an accordance for the	s automing of the energy construct the miles of a class on a consequent to a construction and any floresad follows for arrelinetine. In	1007 60000000000000000000000000000000000	ban (0:10# 1000	See fless	t "#1010" bo	or origination In

Based on the annualized cost assessment the following vehicles meet or exceed one of the criteria's for replacement (100k miles, 10 yrs. or older or exceed 50% cost ratio) and are flagged "alert" for evaluation. In addition to the annualized cost assessment method, each vehicle is inspected to determine probable condition of the vehicle during 2009-2010 Budget Year and other factors such as exterior condition, and task factor. This information is then used to determine the priority for vehicle replacement.

Vehicles Flagged for Replacement for 2009-10 Budget

Category	Year / Vehicle I.D.	Existing Make	Used by Department/Personnel	Replacement Vehicle Make, Type	Estimated Vehicle Replacement Cost
Light Truck	9135	F350 Flatbed	Distribution, Welding truck	F350 Flatbed	\$35,000
Medium Truck	9231	F700 Flatbed Truck w/ lift gate	Distribution, Delivery truck	TBD	\$50,000
Medium Truck	9337	F700 Flatbed Truck	Distribution, RO Maintenance crew	TBD	\$50,000
Heavy Truck	9557	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul	F800 5-Yard Dump Truck	\$80,000
Heavy Truck	9647	F800 5-Yard Dump Truck	Distribution, Deliver materials and haul	F800 5-Yard Dump Truck	\$80,000
Heavy Truck	9714	GMC T6500	Distribution, Crew truck field support	Heavy Utility Truck	\$100,000
Light Truck	696	F150 Super Cab Pick-up Truck	Finance, Pick-up supplies, deliver materials F250 Flatbed Truck w/ Lift Gate	F250 Flatbed Truck w/ Lift Gate	\$30,000
Sedan	0996	Taurus Wagon	Admin. Services, Security	F250 or comparable Chevrolet Short bed	\$28,000
Light Truck	9850	F250 Pickup 4x4	Water Quality, Maintenance support	F250 or comparable Chevrolet Long bed	\$25,000
Sedan	9822	Taurus Wagon	Engineering, Director of Engineering	TBD	\$28,000
Utility Truck	9086	F250 Utility Truck	Customer Service, Meter reading/ repair	F250 HD or comparable Utility Truck	\$35,000
Mini Van	9864	Mini Van	Admin. Service, Safety	TBD	\$28,000
SUV	9905	Explorer	Distribution, Director of Operations	TBD	\$28,000
Light Truck	2066	F250 Utility Truck	Engineering, Pump Operator	F250 HD or comparable Utility Truck	\$35,000
Light Truck	6066	F250 Utility Truck	Customer Service, Meter reading/ repair	F250 HD or comparable Utility Truck	\$28,000
SUV	9918	Explorer	Engineering, Chief System Operator	Escape or equal Hybrid 4 door SUV	\$35,000
Light Truck	9919	F350 Utility Truck	Engineering, Pump Operator	F350 HD or comparable Utility Truck	\$35,000
Light Truck	0233	F250 Utility Truck	Customer Service, Meter reading/ repair	F250 HD or comparable Utility Truck	\$28,000
SUV	0323	Explorer	Water Quality, Director of Water Quality	Escape or equal Hybrid 4 door SUV	\$28,000
Note: Alternative Fuel	Vehicles, Hybri	d Vehicles, Compressed Natural Gas (CNG	Note: Alternative Fuel Vehicles, Hybrid Vehicles, Compressed Natural Gas (CNG) vehicles will be purchased if available for the type of vehicle specified	vehicle specified.	\$786,000

Subject of Study

TOOL BOXES

Recommendation

Purchase two (2) new tool boxes for garage

Estimated Cost

\$2,900

Discussion

The proposed portable tool boxes are a clear top design tool box with storage under a work bench top. This design allows the mechanics the mobility to bring their diagnostic instrumentation, tools, parts and work station with them to the vehicle they are working on, greatly reducing the need to travel back and forth from the work area to the stationary work station. These lower profile tool boxes will also give the mechanics the ability to load their tools into the fleet maintenance truck, which is equipped with lift gate, to assist staff in the field. The new tool boxes will improve the storage needs of the garage while at the same time improving the efficiency and productivity of the mechanics.

Tool Boxes (2) @ \$1204.00 ea	\$ 2,408
Contingency	446
	2,900

Subject of Study

VEHICLE / EQUIPMENT PAINT AND DETAIL

Recommendation

Paint and repair selected vehicles / equipment

Estimated Cost

\$20,000

Discussion

Currently ten Sweetwater Authority vehicles are in need of paint and/or body work. Environmental factors and daily wear have caused corrosion (rust) in various areas of the vehicles. These units are a priority for detailed scratch removal, body repair and paint.

Summary of Cost Estimate

Vehicle/Equipment Paint and Detail \$ 20,000

Subject of Study

WATER MAIN EASEMENT ISOLATION PROJECT

Recommendation

Provide funds to install (7) new valves to isolate water mains within easements that have been identified as potential high risk of property damage if main was to leak.

Estimated Cost

\$54,400

Discussion

In 2008, The Engineering Department performed a detailed assessment of 197 easements of which Engineering and Operations staff identified 12 easements that did not have isolation valves that could be used in case of an emergency. Due to the difficult access to most of these easements timely repairs would not be possible, greatly increasing the time of the water outage. Without these isolation valves potential main breaks within these easements would require Sweetwater Authority to utilize other valves outside of the affected area, increasing areas of water outage and disruption of water service to our customers.

Vendor payments	\$12,500
Salaries/Overhead	33,500
Inventory/Equipment	8,400
	\$ 54,400

	1/4 SECTION EASEMENT # LOCATION	EASEMENT #	LOCATION	City	MAIN	PRIORITY	PRIORITY New Valves Required
_	123	3-SW-154	3-SW-154 End of Elm Ave to Vance St	C	4" AC-1950	-	_
2	94	3-SW-337	3-SW-337 East Emerson St to Melrose Ave, CV	CV	CV 6" AC-1959 & 6"WS-1959	3	1
3	130-A	3-SW-554	3-SW-554 Beta St to Gamma St, @ I-805, NC	NC	6" AC-1973	4	2
4	103	5-SW-126	5-SW-126 Manchester St to Ethel Pl cul de sac, NC	NC	6" AC-1958	2	1
2	112	3-SW-246	3-SW-246 Georgina St toward East "I" St, CV	C	6" AC-1950	9	
9	121	3-SW-276	3-SW-276 Hilltop Dr @ El Capitan Dr, CV	CV	12" WS-1955	8	2
/	139	3-SW-335	3-SW-335 End of Glover Pl to 4th Ave, CV	CV	6" AC-1959	10	1
							6

Easements Flagged for Replacement for 2010-11 Budget

	1/4 SECTION	1/4 SECTION EASEMENT # LOCATION	LOCATION	City	MAIN	PRIORITY	PRIORITY New Valves Required
_	117	3-SW-379	3-SW-379 Quintard St to Quail Dr, CV	C	8" AC-1962	12	1
2	30	3-SW-616	3-SW-616 Via Del Alazon to Sylvia, Bonita	CV	6" AC-1978	13	1
3	22	3-SW-617	3-SW-617 Between Central Ave & Sunny View Dr.	BO	8" AC-1977	14	1
4	146	3-SW-411	3-SW-411 Arizona St, btwn 5th Ave & Broadway, CV CV	CV	6" AC-1965	15	1
2	87	3-SW-420	3-SW-420 East "J" St to Berland Way, IlWest of Floyd A CV	/CV	6" AC-1964	16	1
							2

Subject of Study

REPLACE (3) AIR CONDITIONING UNITS

Recommendation

Remove and replace (3) air conditioning units at 744 F Street.

Estimated Cost

\$21,000

Discussion

The air conditioning system for the Distribution building was installed in 1995 and is showing visual signs of wear. The aluminum fins that surround the condenser units are very brittle and corroded. In addition to the visual signs, system failures are becoming more prevalent. The system consists of three 5-ton split units with a 10-seer rating. To bring the units up to meet the uniform mechanical code, they must have a minimum rating of 13 seer. The installation of new 13 seer units with variable speed motors will be much more cost effective than the present system. Recommend to replace the three existing units with new cost effective, code compliant air conditioning units.

Replace (3) 5-Ton Split System AC Units	\$ 17,259
Tax	1,338
10% Contingency	1,860
Total	20,457

Subject of Study

FIELD LAPTOP COMPUTERS AND SOFT WARE/LICENSE

Recommendation

Purchase two laptop computers with software for Field Crew Supervisors

Estimated Cost

\$20,000

Discussion

The Distribution Department is requesting the purchase of four additional laptop computers, including software and licenses to be used in the field, by the field crew supervisors and engineering inspector for the following; Leak Maintenance Crew, Construction Crew, Construction Service Crew and Engineering Inspection Group.

The Department presently has three field laptop computers in service and are utilized by the Valve Crew, Fire Hydrant Crew and the Utility Location Crew in conjunction with iwater/inframap software and Maximo (Asset Management Software). Field crews have been using iwater software since 2007, allowing field crews to easily perform paperless inspections on assets such as valves and fire hydrants and seamlessly integrate this information into Maximo and spatially into the GIS for system mapping. We began using Maximo software the summer of 2008 to eliminate the need for writing paper maintenance work orders and to provide better asset monitoring; short and long term planning for preventative and condition based maintenance activities in the distribution system.

In addition to the iwater/inframap software described, Microsoft Office License and Microsoft Operating System Licenses are needed to support the other general uses for these lap top computers.

	Qty	Each	Total
Toughbook Laptop	2	\$4,613	\$ 9,225
iWater/infraMap Software	2	2,952	5,904
Microsoft Office Lic.	2	369	738
Microsoft Operating System	2	554	1,107
Tax			1,485
10% Contingency			1,846
			\$ 20,305

Subject of Study

PAINT THE WALLS ON THE FIRST FLOOR OF THE MAIN BUILDING AT OPERATIONS

Recommendation

Hire a contractor to paint the walls on the first floor of the Operations building at 744 F Street

Estimated Cost

\$4,600

Discussion

The walls on the first floor of the Operations main building have become dirty, faded and worn from normal use. Painting the walls will restore the luster and give the first floor a new clean appearance.

Paint wall on Operations first floor	\$3,850.00
Tax	298.37
10% Contingency	414.83
	\$4,563.20

Subject of Study

PAINT THE OFFICES AND RECEPTION AREA IN THE WAREHOUSE BUILDING AT THE OPERATIONS CENTER

Recommendation

Hire a contractor to paint the walls in the two offices, kitchen area, rear entrance and reception area of the warehouse at the Operations building at 744 F Street.

Estimated Cost

\$1,400

Discussion

The walls in the warehouse offices, kitchen and reception area and rear entrance have become faded and worn from normal use. Painting the walls will restore the luster and give these areas in the warehouse a new clean appearance.

Paint walls in warehouse	\$1,175.00
Tax	91.06
10% Contingency	126.60
	\$1,392.66

REVENUE

Account 4110 - 4180 - Water Sales

The estimated water sales of 21,133 acre-feet of water for fiscal year 2009-10 include sales to residential, commercial, industrial, irrigation and other consumers. Water sales have been projected on the basis of the prior twelve month period.

Account 4211 - Reconnection Fees

Included in this account are all receipts for: preparation and/or delivery of Final Notices/Door Hangers; a handling fee for an account that remains unpaid the morning of scheduled turn-off per past-due notice; after hours service calls; illegal connection fee; and damage to locking devices.

Account 4221 – Capacity Fees

This represents special fees paid by developers in conjunction with new development within the Authority's service area to maintain existing and fund future infrastructure.

Account 4233 - Repair Revenue

Includes receipts to compensate the Authority for the cost of repair of facilities that have been damaged by a member of the public. Labor, material, equipment and overhead costs are recovered by such charges for repair.

Account 4235 – Tank/Tower Lease

This represents the amount paid by various communications companies for the annual lease of our tanks and tower for their cellular transmission use.

Account 4237 - Property Rental

This represents the annual rent received from the National City School District for use of the Authority's property as a parking lot.

Account 4239 – Miscellaneous Fees

Includes revenues such as the annual payment by upstream users above Loveland Reservoir for water diversion privileges and other miscellaneous revenues not included in the operating revenue accounts shown above. Also includes fees charged for Engineering "Water Availability" letters for boundary adjustments, property conversions and subdivision and parcel maps, and other fees, such as customer return check charges.

Account 4242 – Sweetwater Fishing Program

This represents fees paid by fishermen and visitors to the Authority's Sweetwater Reservoir to support its shoreline fishing program.

Account 4920 – Non-Operating Interest

Interest earned from depositing or investing reserve balances and other funds that are temporarily surplus to the operation of the Authority. The budget is based on an average balance available for investment of \$41,000,000 at an assumed average weighted yield between 1.0% and .5%.

Account 4990 - Other

This account represents small non-operating revenue items such as retired meters sold for scrap.

MAINTENANCE AND OPERATING EXPENSES

Account 5111 – Salaries Operating

Includes the full-time caretakers salaries at the two major source of supply reservoirs of the Authority, Sweetwater Reservoir and Loveland Reservoir, plus a provision for operation of spillway and release valves during winter rainy season, as required.

Account 5113 – Hydrological Monitoring or Material & Supplies Operating

Includes materials used in the operation of source of supply reservoirs, such as "no trespassing" signs, weir boards, notebooks, wire, chain and miscellaneous small parts.

Account 5121 – Salaries Maintenance

These accounts reflect the salaries of personnel engaged in maintenance activities at Sweetwater and Loveland Reservoirs, such as treating the reservoir for algae control, maintenance of the urban runoff protection system (URDS), pressure reducing station, valves, winches, spillway boards, log booms, fences, etc., associated with the source of supply.

Account 5122 - Salaries Dam Surveillance

These accounts reflect the salaries of personnel engaged in maintenance activities at Sweetwater and Loveland Reservoirs Dams.

Account 5123 - Materials & Services Maintenance or Dam Surveillance

This includes materials and services used for maintenance activities at Sweetwater and Loveland Reservoir, including road grading, pressure reducing station valve maintenance, fencing materials, etc.

Account 5130 - Purchased Water

Imported water purchased from San Diego County Water Authority or Otay Water District.

Account 5131 - San Diego County Water Authority Readiness to Serve Charge

This is a charge from Metropolitan Water District to recover costs associated with standby and peak conveyance capacity and system emergency storage capacity. The San Diego County Water Authority Board has directed that this charge be passed through proportionally to member agencies on the basis of each agency's ten-year rolling average of firm demands which include water transfers and exchanges conveyed through system capacity.

Account 5132 - San Diego County Water Authority Infrastructure Access Charge (IAC) On June 11, 1998, the Infrastructure Access Charge (IAC) was adopted by CWA's Board of Directors as an additional source of fixed revenue to provide better coverage of CWA's projected fixed expenditures. The IAC is levied on all retail water meters within CWA's service area. The San Diego County Water Authority established for 2009 an IAC of \$2.02 per month per meter equivalent to insure fixed minimum revenue of 25% of its estimated average annual fixed operating expenditures. The meter equivalent of Sweetwater Authority's 32,980 meters at December 31, 2008 is 42,673.

Account 5133 - Metropolitan Water District Desalination Credits

On December 19, 1996, the Metropolitan Water District, the San Diego County Water Authority, and Sweetwater Authority signed a joint participation agreement for recovery, treatment and utilization of brackish groundwater. Metropolitan Water District's maximum financial incentive rate of \$250 per acre-foot is for purchase of any recovered groundwater that is produced by Sweetwater Authority's desalination plant, but not beyond the allowable yield of Phase I of this project. Due to the rising cost of imported water, the cost to recover brackish groundwater is starting to fall below the maximum financial incentive rate. The projected financial incentive rate to 2009-10 is lowered to \$50 per acre-foot.

Account 5134 – San Diego County Water Authority Customer Service Charge

This charge is set by San Diego County Water Authority to recover costs that are necessary to support the functioning of the San Diego County Water Authority in developing policies and implementing programs that benefit the San Diego region. This cost is allocated among the member agencies based on each agency's three-year rolling average of all water deliveries.

Account 5135 - San Diego County Water Authority Emergency Storage Charge

This charge is set by San Diego County Water Authority to recover costs associated with the Emergency Storage Program. This cost is allocated among the member agencies based on each agency's three-year rolling average of all non-agricultural water deliveries.

Account 5144 – Salaries Supervisory Control and Data Acquisition (SCADA)

Includes the labor to monitor the data collection phase and maintenance activities of the SCADA System.

Account 5145 - Material & Supplies SCADA

Includes material and services associated with the data collection phase and the maintenance activities of the SCADA System.

Account 5211 – Salaries Pump Production or Well Pump Maintenance

Includes the majority of the salaries of the pump operators when performing operational duties in connection with the production and distribution pumping facilities.

Account 5212 and 5216 – Materials & Supplies Pump Production or Well Pump Maintenance

Includes miscellaneous materials used in conjunction with operational pumping activities, e.g., charts, pens, ink, diesel fuel for generators and other related items.

Account 5221 – Salaries Pump Maintenance

Includes a portion of the salaries for repair and maintenance of pumps, valves and controls at pump stations.

Account 5222 and 5226 - Materials & Supplies Pump Maintenance

Includes materials and supplies associated with system distribution pumps and pump motor repairs, including painting, electrical and mechanical work, valve service and repairs, repairs to recording devices, flow meter servicing, driveway and fence repairs, maintenance of large pumps at Sweetwater Reservoir, the runoff protection system, and other items of maintenance as required.

Account 5231 and 5232 – Plant Power, Pump Power Production, Runoff Power, or Wells Power

These accounts include charges at current rates for electrical energy required for the pumping of water supplies from Sweetwater Reservoir and the runoff protection system, the power required to run the distribution booster pumps and National City Wells, and the various desalination pumps and wells.

Account 5311 – Salaries Operating

Salaries of personnel involved in the operation of Perdue Treatment Plant and the Reynolds Desalination Facility.

Account 5313 – Materials & Supplies Operating

This includes materials and supplies required during the operation of the water treatment plant, such as recorder charts and ink, report forms, cleaning supplies, etc.

Account 5314 – Salaries Cross Connection

Salary charges for Water Quality personnel involved in the Authority's cross-connection control program. The cross-connection control program was transferred to the Customer Service section in fiscal year 2008-09.

Account 5316 – Salaries Administrative

This account includes the salaries of the Director of Water Quality, the Water Quality Secretary/Watershed Technician, and the Water Quality Clerk.

Account 5321 – Salaries Chemical Pump or Maintenance

Salary charges for repair and maintenance activities at the Perdue Treatment Plant and the Reynolds Groundwater Desalination Facility.

Account 5323 – Materials & Supplies Maintenance

This account includes parts, materials and outside services required for the maintenance and repair of the water treatment plant and the desalination facility. Includes funds to provide coal and sand media for water filters and clearwell reservoir repairs.

Account 5330 – Treatment Chemicals

All chemicals used in the treatment of water at the water treatment plant, the desalination facility, and the National City Wells and the Chloramination Facility. Also includes chemicals used in the transmission and distribution system to disinfect lines after main break repairs, etc., and copper sulfate for treatment of algae in reservoirs.

Account 5331 –Power

Includes the electrical energy required to run the National City Chloramination Facility.

Account 5341 – Salaries Laboratory

Includes the salaries of personnel involved in laboratory operations at the Perdue Treatment Plant and the Reynolds Groundwater Desalination Facility, including sampling, testing and analysis of physical, chemical and bacteriological samples.

Account 5342 - Materials & Supplies Laboratory

Includes outside testing and miscellaneous materials required in the operation of the laboratory and desalination plant, such as trays, beakers, water sample bottles, distilled water service, etc.

Account 5343 - Materials Cross Connection

This includes materials and surplus required for the maintenance of the Authority's cross connection section and repairs to the various devices. The cross-connection control program was transferred to the Customer Service section in fiscal year 2008-09.

Account 5350 - Plant Power or Power

Includes the electrical energy required to run the water treatment plant at Sweetwater Reservoir (including wash-water pumps and aeration compressor) and the desalination facility.

Account 5355 – Salaries Monitoring & Mitigation

Includes labor to assess any changes to the environment and/or sensitive species associated with the Reynolds Desalination Plant operations.

Account 5356 – Materials & Supplies Monitoring/Mitigation

Includes materials and services used by staff to support the monitoring and mitigation program at the Reynolds Desalination Facility.

Account 5360 - Equipment Rental

Provides for a minimal amount of equipment rentals, such as cranes, cement mixers, etc.

Account 5403 – Salaries Annual Flushing Program, Flushing-Water Quality, Operating, Street Resurfacing, or Valve Exercising Program

Includes labor to locate and mark Authority facilities (valves, lines, etc.), perform system flushing functions, exercise system valves, and raise valve gate caps in the streets after the cities have resurfaced the streets.

Account 5404 – Materials & Supplies Operating

Includes miscellaneous materials and services required for.

Account 5406 – Material & Supplies Field

Includes a minor amount of materials needed to support meter turn-ons and turn-offs, investigation of customer inquiries, hanging of delinquent tags, the work of the daily supplement listing which includes pulling of meters, pest control, and uniform rentals.

Account 5413 – Salaries Administrative or Water Resources

Includes time of engineering personnel when working on general Authority activities, such as mapping, updating records, dam surveillance, fire hydrant flow tests, general supervision, planning, etc.

Account 5414 – Safety Incentive Program or Salaries Employees Committee

This represents the dollar value of the time spent when non-middle management and management employees attend meetings relating to Memorandum of Understanding issues or the salary costs of personnel in the Finance and Customer Service, Water Quality, Engineering, and Distribution and Maintenance Departments when attending safety meetings and seminars.

Account 5421 – Salaries Tank Maintenance

Labor of Authority personnel engaged in landscape maintenance functions at the Authority's water storage facilities.

Account 5422 - Materials & Supplies Tank Maintenance

This account provides for all general maintenance materials and service work on water tank storage facilities, including painting, interior cleaning and coating, and repairs.

Account 5423 – Cathodic Protection or Salaries Maintenance

Includes the labor from the Engineering Department for inspection at various sites or for personnel involved in the maintenance of water mains. Also includes the cost of two stand-by personnel on call after hours on a daily basis and the cost of meals for employees working overtime.

Account 5424 – Materials & Supplies Maintenance or Tank Landscaping

Includes the cost of materials and outside services used in the maintenance of water mains, such as pipe, valves, backfill material and paving or for all general landscape maintenance at the Authority's water storage facilities and the Administration Building.

Account 5425 – Salaries Water Service

Salary cost of personnel engaged in the field repair and maintenance of meter and new meter service installations.

Account 5426 – Materials & Supplies Water Service

Includes materials and supplies necessary to support the activities in Account 5425.

Account 5427 - Salaries Field

Salaries of personnel involved in the yearly meter change-out program, meter resets from daily supplement and delinquent lists, maintenance of the meter shop, the repair of meters, and the reading of the Authority's approximately 33,646 meters in service.

Account 5428 – Meter Maintenance Material

Includes miscellaneous materials required for operating the meter shop and the installation of meters.

Account 5429 – Salaries Damaged Hydrants, Hydrant Maintenance, or Hydrants

Salary cost of personnel engaged in the field repair and maintenance of hydrants and new hydrant installations.

Account 5430 – Pipeline Maintenance

Includes labor and services to conduct video investigation of the interior of the existing 16-inch steel water main in Broadway, Chula Vista.

Account 5431 – Materials & Supplies Damaged Hydrant or Materials & Supplies Hydrants

The cost of fire hydrants to replace obsolete or damaged hydrants and related materials needed to repair the existing hydrant installations.

Account 5432 – Salaries Vista Del Lago

Includes the cost of labor, material, services, power, etc., to maintain the storm drain catch basin built by the developer in the Vista Del Lago subdivision for the protection of Sweetwater Reservoir water quality. This account is fully funded from interest earnings on monies paid to the Authority by the developer.

Account 5441 – Salaries Field Support

Includes the salaries for the supervision of personnel engaged in the operation and maintenance of the transmission and distribution water system.

Account 5512 – Salaries Office

Includes the salary of the Receptionist, and Customer Service office personnel involved in customer contact and the utility billing function.

Account 5514 – Materials & Supplies Office

Includes all supplies and forms used in the Authority's billing function and the services of an off-site billing company, which includes printing, stuffing and mailing costs. Excludes postage.

Account 5520 - Uncollectible Accounts

Provides for estimated uncollectible accounts for Fiscal Year 2009-10. This number results, for the most part, from consumers who have moved out of the area without paying their water bill. These accounts are either turned over to a collection agency, or a levy will be placed on the property, and any collections received from the agency are credited back to this account.

Account 5610 - Administrative and General Salaries

Includes the salaries of management and administrative support functions.

Account 5620 - Computer Supplies or Office Supplies

This account provides for the purchase of computer supplies, software, tapes, telephone data lease lines, small equipment, etc., for the Authority's network, and supplies for the separate word processing systems. Excludes billing forms (see Account 5514).

Account 5621 – Displays & Signs or Office Supplies

This includes the purchase of all office supplies for the administrative office.

Account 5622 – Travel, Meetings, Training or Seminars

Includes the cost of travel and expenses for staff personnel attendance at various water related meetings, (e.g. ACWA, AWWA, CAPPO, WAA, Council of Water Utilities, etc.) conferences and seminars held in California. Also includes a provision for attendance at NWRA conferences held in Western states, specific water quality technology conferences, reimbursement of limited business related mileage to Authority personnel using their own vehicles, and the cost of computer and other training classes as appropriate.

Account 5623 - Subscriptions and Publications

Provides for magazines, manuals and reference books on topics such as water quality, safety, management, engineering, financial, etc.

Account 5624 - Dues and Memberships

Provides for the following memberships: ACWA, AWWA, Water Agencies Association, American Public Works Association, San Diego County Water Works Group, Superintendents Association, NWRA Municipal Caucus, Water Education Foundation, AWWA Research Foundation, Chamber of Commerce of Chula Vista and National City, Southern California Water Committee, Bonita Business and Professional Association and other memberships.

Account 5625 - Postage

Includes postage meter usage for general Authority mailing needs.

Account 5626 - Printing

Provides for the printing of special reports.

Account 5627 - Directors

Provides for an average of ten paid meetings per Director per month plus amounts for authorized Director's seminars, travel and related expenses.

Account 5628 - Delivery Service

Includes the cost of delivery services both external and internal.

Account 5629 - Miscellaneous Expenses and Services

Includes the cost of miscellaneous items of a general nature.

Account 5630 and 5637 – General Property Liability and Workers' Compensation Insurance

The estimated insurance premium on the Authority's operation, including fire insurance, liability insurance (general and Sweetwater dam failure), automobile coverage, contractors' equipment and workers' compensation insurance.

Account 5631 - General Legal

Provides for the attendance of legal counsel at Authority Board meetings, and other general legal services including preparation of resolutions, contracts, conflict of interest procedures, attendance at committee meetings and negotiations, etc. Also includes a modest provision for services of a Special Counsel on water rights and real property matters, other than State Route 125.

Account 5632 - Temporary Help

Includes cost of temporary help during extended personal time off periods and temporary vacancies caused by employee resignations.

Account 5633 - Auditing

Includes a provision for the Annual Audit and preparation of the State Controller's annual report.

Account 5634 - Janitorial Services

Includes an outside janitorial service contract and all janitorial materials and supplies purchased by the Authority for all four Sweetwater locations.

Account 5635 - Telephone

This includes the cost of all service charges, including cellular telephone use, maintenance charges, message units, long distance calls and special signal channels for telemetering equipment.

Account 5636 - Utilities

Includes the cost of all general electrical lighting, power, gas heating, and sewer service including the business office, shop, filter plant, desalination facility, and pump stations. Does not include the cost of pumping and treatment plant power in accounts 5231, 5232, 5331, and 5350.

Account 5639 – Injuries/Damages

Includes payments for minor injuries and damages not covered by the Authority's insurance policies. A provision is made for small damage claims approved by the Governing Board or designated staff member.

Account 5650 – Consulting

Provides for various consulting services.

Account 5651 and 5652 – Office Supplies or Block Map Reproduce

Provides for the purchase of the engineering and drafting supplies and services, reproduction of the Authority's block maps, a continuation of a comprehensive program to scan customer service records, and electronic contour mapping data from the City of Chula Vista.

Account 5654 – Regulatory Permit Fees or State Water Fee

The Department of Health Services has developed a comprehensive Safe Drinking Water Plan for California. The fee for the State's service is based on the number of service hours billed to the Authority.

Account 5665 – Ergonomic Programs

Provides for the purchase of ergonomic hardware and services when needed.

Account 5641 - CalPERS

The pension rate representing the employer and employee portion.

Account 5642 - Payroll Taxes

Payroll taxes consist of 6.20% (FICA) of gross wages and 1.45% (Medicare) of gross wages per employee for a combined total of 7.65%. The employee also contributes the same 7.65%.

Account 5644 - Health Vision Dental Life Insurance and Short Term Disability

Provides for the cost of health, life, disability, dental and eye care premiums. The portion of dependents' premium paid by employees is credited to this account. Funds have been provided for dental, eye care and life insurance coverage for Directors.

Account 5645 and 5647 - Other Benefits and Wellness

Includes a provision for actual unemployment insurance billings from the State. Also includes the Authority's contribution to the Defined Contribution 401(a) plan, cashing out of any unused personal time off floaters at the fiscal year end, and matching of a 457 deferred compensation plan

Account 5649 - CalPERS 1% Employee Share

Represents the employees' one percent share of the pension expense.

Account 5671 – Salaries Vehicle Maintenance

Provides for the salaries of the mechanic and mechanic's helpers for maintaining the Authority's fleet and vehicles. Includes repairs, lubrication and preventive maintenance.

Account 5672 – Materials & Supplies Vehicle Maintenance

Materials and outside services necessary to maintain the Authority's vehicles and equipment, such as tune-up parts, brakes, tires, repainting, tire repairs, radiator repairs, transmission work, wheel balancing, etc.

Account 5674 - Hazardous Waste Material Removal

Includes the service to remove hazardous waste material from the Operations Center, the Robert A. Perdue Water Treatment Plant, and the Richard A. Reynolds Desalination Facility.

Account 5676 - Office Equipment Maintenance

Includes maintenance of hardware and software information systems, including PC's and printers; telephone, email and network systems; presentation systems; and hardware and software licensing and maintenance fees.

Account 5678 – Maintenance General Plant

Funds the monthly maintenance contract for the two-way radios and the purchase of parts necessary to keep radios operating properly.

Account 5692 and 5693 – Salaries Buildings & Grounds Maintenance

Includes the salary costs of personnel used to perform the maintenance at the Administrative Office, Operations Center, Robert A. Perdue Water Treatment Plant, and Richard A. Reynolds Groundwater Desalination Facility.

Account 5694 – Materials & Supplies Buildings & Grounds

Provides for maintenance at the Administrative Office, Operations Center, Robert A. Perdue Water Treatment Plant, and Richard A. Reynolds Groundwater Desalination Facility for such items as painting, minor repairs, heating and air conditioning repairs, etc. Includes road and parking area maintenance at the filter plant, shop and office. Also includes the landscape and pool maintenance at the Administrative Office, and trash pickup at all four Authority locations.

Account 5696 – Security Service

Provides for a security service to patrol and monitor the Authority's various sites.

Account 5730 – Respiratory Program

Includes the cost for annual respirator physicals, which are required by Cal-OSHA, and cartridge filters, respirator face piece replacements, and repair.

Account 5731 - Small Tools & Equipment

Provides for the purchase of miscellaneous new tools and replacement of small tools. Small tools include such things such as shovels, hammers, wrenches, drill bits, digging bars and other tools having a value of less than \$1,000. Tools constructed by Authority staff for special uses are also charged to this account.

Account 5732 - Gasoline & Oil

Provides for purchase of gasoline for the Authority's vehicles and construction equipment. Also includes diesel fuel, propane fuel, grease and motor oil.

Account 5733 - Miscellaneous Materials & Supplies or Safety Shoe Program

Includes miscellaneous materials and supplies not chargeable to other accounts, such as welding supplies, dry cell batteries, lumber, gloves, paint, paint brushes, film, first-aid supplies, nuts/bolts, uniforms, rags, safety equipment and signs, keys/locks, tape, pipe wrap, insecticides, San Diego County landfill dumping charges, safety shoes, and other items too small in unit value to be carried on the Authority's inventory records. Also includes underground utility notification service charges.

Account 5735 - Equipment Rental

Provides for renting equipment for general purpose use when existing equipment is not operable.

Account 5740 – Expense Credits

This account assigns operating overhead computed at 80% of labor dollar charges to capital projects in an effort to more properly reflect real costs associated with those projects. Also includes the allocation to capital projects of heavy-duty equipment, mileage and bulk material (sand, gravel, etc.) charges.

Account 5743 – Fiscal & Trustee Agents

This represents the annual administrative fee by Union Bank's Trust Department to act as Trustee for the 1994, 2002, and 2005 bond indenture.

Account 5940 - Bank & Financial Fees

Administrative fees charged by the Authority's bank, investment advisors, arbitrage consultants, and trust administrators.