COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

SPECIAL MEETING OF THE BOARD OF DIRECTORS

Tuesday, June 8, 2010 – 6:00 p.m.

AGENDA

1) ROLL CALL

2) PUBLIC COMMENT

Members of the public may address the Board of Directors on the items on the agenda for this special meeting. The Chair requests that each person addressing the Board complete and submit a speaker slip, and limit their comments to three (3) minutes.

3) CLOSED SESSION

A. Conference with Labor Negotiators
Pursuant to California Government Code §54957.6
Agency Designated Representatives: General Manager
Employee Organization: Teamsters Union, Local 856

B. Conference with Legal Counsel
Pursuant to California Government Code Section §54956.9(b)
Anticipated Litigation - Significant Exposure to Litigation: One Case

4) RECONVENE TO OPEN SESSION

Public report of closed session action.

5) ADJOURNMENT

Accessible Public Meetings *- Upon request, the Coastside County Water District will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, telephone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service at least two (2) days before the meeting. Requests should be sent to: Coastside County Water District, Attn: Alternative Agenda Request, 766 Main Street, Half Moon Bay, CA 94019.*

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MEETING OF THE BOARD OF DIRECTORS

Tuesday, June 8, 2010– 7:00 p.m.

AGENDA

Accessible Public Meetings **-** Upon request, the Coastside County Water District will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, telephone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service at least two (2) days before the meeting. Requests should be sent to: Coastside County Water District, Attn: Alternative Agenda Request, 766 Main Street, Half Moon Bay, CA 94019.

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the CCWD District Office, located at 766 Main Street, Half Moon Bay, CA at the same time that the public records are distributed or made available to the legislative body.

This agenda and accompanying materials can be viewed on Coastside County Water District's website located at: www.coastsidewater.org.

The Board of the Coastside County Water District reserves the right to take action on any item included on this agenda.

1) ROLL CALL

2) PLEDGE OF ALLEGIANCE

3) PUBLIC COMMENTS

At this time members of the public may address the Board of Directors on issues not listed on the agenda which are within the purview of the Coastside County Water District. Comments on matters that are listed on the agenda may be made at the time the Board is considering each item. Each speaker is allowed a maximum of three (3) minutes and must complete and submit a speaker slip. The President of the Board will recognize each speaker, at which time the speaker should proceed to the podium, give their name and address and provide their comments to the Board.

4) CONSENT CALENDAR

The following matters before the Board of Directors are recommended for action as stated by the General Manager.

All matters listed hereunder constitute a Consent Calendar, are considered as routine by the Board of Directors, and will be acted upon by a single vote of the Board. There will be no separate discussion of these items unless a member of the Board so requests, in which event the matter shall be removed from the Consent Calendar and considered as a separate item.

A. Requesting the Board to review disbursements for the month ending May 31, 2010 – Claims: $528,240.36; Payroll: $72,521.60 for a total of $600,761.96 (attachment)
B. Acceptance of Financial Reports (attachment)
C. Minutes of the May 11, 2010 Board of Directors Meeting (attachment)
D. Monthly Water Transfer Report (attachment)
E. Installed Water Connection Capacity and Water Meters Report (attachment)
F. Total CCWD Production Report (attachment)
G. CCWD Monthly Sales by Category Report (attachment)
H. May 2010 Leak Report (attachment)
I. Rainfall Reports (attachment)
J. San Francisco Public Utilities Commission Hydrological Conditions Report for May 2010 (attachment)

5) MEETINGS ATTENDED / DIRECTOR COMMENTS

- BAWSCA Board of Directors Meeting of May 20, 2010 **-** *Director Coverdell*
- Other meetings attended by Board members

6) GENERAL BUSINESS

A. Kennedy Jenks – Draft Preliminary Design Report for Denniston Water Treatment Plan Pretreatment and Washwater System Improvement Project (attachment)
B. Kennedy Jenks – Proposal for Final Design of Denniston Water Treatment Plant Pretreatment & Washwater System Improvement Project (attachment)
C. Draft Fiscal Year 2010-2011 Revenue and Expense Budget and Capital Improvement Program (attachment)
D. Advisory Stage of Water Shortage and Drought Contingency Plan (attachment)

7) GENERAL MANAGER'S REPORT INCLUDING MONTHLY INFORMATIONAL REPORTS (attachment)

- San Mateo County Local Coastal Program Update Process
- Water Reclamation Update
- San Mateo Local Agency Formation Commission (LAFCo) - Special District Member Ballot
- CCWD Consumer Confidence Report

A. Operations Report (attachment)

8) DIRECTOR AGENDA ITEMS – REQUESTS FOR FUTURE BOARD MEETINGS

9) ADJOURNMENT

Check Number	Vendor No	Vendor Name	Check Date	Void Amount	Check Amount
14662	ALL04	ALLIED WASTE SERVICES #925	05/14/2010	0.00	271.98
14663	ALV01	ALVES PETROLEUM, INC.	05/14/2010	0.00	1,838.45
14664	ATT01	AT&T MOBILTY	05/14/2010	0.00	50.98
14665	BAY01	BAY AREA AIR QUALITY MGMT DIST	05/14/2010	0.00	4,280.00
14666	BFI02	BFI OF CALIFORNIA, INC.	05/14/2010	0.00	46.00
14667	CAL08	CALCON SYSTEMS, INC.	05/14/2010	0.00	33,366.56
14668	COA 15	COASTSIDE NET, INC	05/14/2010	0.00	59.95
14669	CRO02	CROSNO CONSTRUCTION, INC	05/14/2010	0.00	42,948.00
14670	FEL01	ROBERT FELDMAN	05/14/2010	0.00	562.19
14671	HAL07	HALF MOON BAY POSTMASTER	05/14/2010	0.00	5,000.00
14672	HAR03	HARTFORD LIFE INSURANCE CO.	05/14/2010	0.00	1,894.00
14673	KAI01	KAISER FOUNDATION HEALTH	05/14/2010	0.00	9,054.00
14674	PAC01	PACIFIC GAS & ELECTRIC CO.	05/14/2010	0.00	8,806.48
14675	PAC02	PACIFICA CREDIT UNION	05/14/2010	0.00	750.00
14676	PUB01	PUB. EMP. RETIRE SYSTEM	05/14/2010	0.00	17,503.41
14677	SAN03	SAN FRANCISCO WATER DEPT.	05/14/2010	0.00	121,861.25
14678	STA03	CA DPH DRINKING WATER PROGRAM	05/14/2010	0.00	55.00
14679	TUF01	TUFF SHED, INC.	05/14/2010	0.00	2,134.64
14680	VAL01	VALIC	05/14/2010	0.00	1,320.00
14681	WIN01	RAYMOND WINCH	05/14/2010	0.00	94.46
14682	ADP01	ADP, INC.	05/26/2010	0.00	522.15
14683	AME09	AMERICAN WATER WORKS ASSOC.	05/26/2010	0.00	285.80
14684	AND01	ANDREINI BROS. INC.	05/26/2010	0.00	5,378.65
14685	ASS01	HEALTH BENEFITS AUTHORITY (HBA	05/26/2010	0.00	18,875.68
14686	ASS05	ACWA HEALTH BENEFITS AUTHORITY	05/26/2010	0.00	60.18
14687	ATT02	AT&T	05/26/2010	0.00	1,281.34
14688	ATT03	AT&T LONG DISTANCE	05/26/2010	0.00	45.72
14689	AZT01	AZTEC GARDENS, INC.	05/26/2010	0.00	190.00
14690	BAR03	BARTLE WELLS ASSOCIATES	05/26/2010	0.00	3,010.00
14691	BAS01	BASIC CHEMICAL SOLUTION, LLC	05/26/2010	0.00	4,405.74
14692	BAY07	BAY AREA WATER SUPPLY &	05/26/2010	0.00	806.50
14693	BAY10	BAY ALARM COMPANY	05/26/2010	0.00	885.60
14694	BEN06	BENNETT MARINE UTILITY, LLC	05/26/2010	0.00	12,600.00
14695	BIG01	BIG CREEK LUMBER	05/26/2010	0.00	131.89
14696	BOR01	BORGES & MAHONEY, INC.	05/26/2010	0.00	650.37
14697	BRE01	CATHLEEN BRENNAN	05/26/2010	0.00	125.58
14698	CAL07	CALIFORNIA TANK LINES, INC	05/26/2010	0.00	524.92
14699	CAL08	CALCON SYSTEMS, INC.	05/26/2010	0.00	2,681.72
14700	CAL10	UNIVERSITY ENTERPRISES, INC	05/26/2010	0.00	50.00
14701	CAL28	CALIF REGIONAL WATER QUALITY B	05/26/2010	0.00	24,000.00
14702	CAR02	CAROLYN STANFIELD	05/26/2010	0.00	485.00
14703	COA19	COASTSIDE COUNTY WATER DIST.	05/26/2010	0.00	59.82
14704	COM01	COMMUNICATION LEASING SERVICES	05/26/2010	0.00	2,253.65
14705	CSG01	CSG SYSTEMS, INC	05/26/2010	0.00	2,155.78
14706	EKI01	EKI INC.	05/26/2010	0.00	18,021.36
14707	EMP01	EMPLOYMENT DEV. DEPT.	05/26/2010	0.00	1,492.54
14708	FIR06	FIRST NATIONAL BANK	05/26/2010	0.00	1,229.70
14709	FRI01	FRISCH ENGINEERING, INC	05/26/2010	0.00	2,415.00
14710	GRA01	GRANDFLOW, INC.	05/26/2010	0.00	297.54
14711	GRA03	GRAINGER, INC.	05/26/2010	0.00	353.23
14712	GRE01	GREG JONES	05/26/2010	0.00	13,365.00
14713	HAL01	HMB BLDG. & GARDEN INC.	05/26/2010	0.00	430.52
14714	HAL04	HALF MOON BAY REVIEW	05/26/2010	0.00	250.00
14715	HAL24	H.M.B.AUTO PARTS	05/26/2010	0.00	1.66
14716	HAN01	HANSONBRIDGETT. LLP	05/26/2010	0.00	8,055.90
14717	HAR03	HARTFORD LIFE INSURANCE CO.	05/26/2010	0.00	1,894.00
14718	IED01	IEDA, INC.	05/26/2010	0.00	1,000.00
14719	IRO01	IRON MOUNTAIN	05/26/2010	0.00	284.80
14720	IRV01	IRVINE CONSULTING SERVICES, IN	05/26/2010	0.00	3,905.00
14721	IRV02	IRVINE CONSULTING SERVICES, IN	05/26/2010	0.00	758.13
14722	JAC02	JACK HENRY & ASSOCIATES, INC.	05/26/2010	0.00	1,950.00
14723	JAC03	LYNN JACKSON	05/26/2010	0.00	150.00

Check Number	Vendor No	Vendor Name		Check Date	Void Amount	Check Amount
14724	JAM01	JAMES FORD, INC.		05/26/2010	0.00	837.39
14725	KEN03	KENNEDY/JENKS CONSULTANTS		05/26/2010	0.00	19,701.54
14726	KGW01	KG WALTERS CONSTRUCTION CO, IN		05/26/2010	0.00	51,835.32
14727	LOM01	GLENNA LOMBARDI		05/26/2010	0.00	99.00
14728	MET06	METLIFE SBC		05/26/2010	0.00	1,367.09
14729	MIS01	MISSION UNIFORM SERVICES INC.		05/26/2010	0.00	122.90
14730	NAT02	NATIONAL METER & AUTOMATION		05/26/2010	0.00	5,376.35
14731	NOL01	GAIL NOLAN		05/26/2010	0.00	150.00
14732	OCE04	OCEAN SHORE CO.		05/26/2010	0.00	1,191.89
14733	OFF01	OFFICE DEPOT		05/26/2010	0.00	1,186.39
14734	ONT01	ONTRAC		05/26/2010	0.00	900.24
14735	PAC02	PACIFICA CREDIT UNION		05/26/2010	0.00	750.00
14736	PIT04	PITNEY BOWES		05/26/2010	0.00	231.00
14737	PUB01	PUB. EMP. RETIRE SYSTEM		05/26/2010	0.00	17,674.40
14738	RIC02	RICOH AMERICAS CORP		05/26/2010	0.00	788.15
14739	ROB01	ROBERTS & BRUNE CO.		05/26/2010	0.00	5,336.41
14740	ROG01	ROGUE WEB WORKS, LLC		05/26/2010	0.00	450.00
14741	ROM02	ROMEO PACKING COMPANY		05/26/2010	0.00	327.75
14742	SAN05	SAN MATEO CTY PUBLIC HEALTH LA		05/26/2010	0.00	612.00
14743	SER03	SERVICE PRESS		05/26/2010	0.00	1,586.45
14744	STA03	CA DPH DRINKING WATER PROGRAM		05/26/2010	0.00	70.00
14745	STE02	JIM STEELE		05/26/2010	0.00	15,450.00
14746	STR02	STRAWFLOWER ELECTRONICS		05/26/2010	0.00	30.00
14747	TEA02	TEAMSTERS LOCAL UNION #856		05/26/2010	0.00	755.00
14748	TET01	JAMES TETER		05/26/2010	0.00	6,436.86
14749	TJC01	TJC AND ASSOCIATES, INC		05/26/2010	0.00	546.00
14750	TUR04	SUSAN TURGEON		05/26/2010	0.00	128.56
14751	TYC01	TYCO VALVES & CONTROLS, LP		05/26/2010	0.00	1,219.13
14752	UB*00767	ROBERT SAMUELS	**VOID**	05/26/2010	240.00	0.00
14753	UB*00768	HALF MOON BAY JOE'S	**VOID**	05/26/2010	55.50	0.00
14754	UB*00769	AMY HUMBLE		05/26/2010	0.00	346.87
14755	UB*00770	MARY/STEVEN HOVERSON		05/26/2010	0.00	59.83
14756	UB*00771	WOODY CLIFFORD	**VOID**	05/26/2010	75.34	0.00
14757	UB*00772	RYAN SHANNON	**VOID**	05/26/2010	48.08	0.00
14758	UB*00773	CHRIS/ANDREA WILLITS		05/26/2010	0.00	6.51
14759	UB*00774	TOM EATON		05/26/2010	0.00	49.98
14760	UB*00775	JAMES COTE		05/26/2010	0.00	14.64
14761	UB*00776	KELLY RAINWATER		05/26/2010	0.00	36.97
14762	UB*00777	ROSA ESCALANTE		05/26/2010	0.00	42.12
14763	UB*00778	LETICIA BARAJAS		05/26/2010	0.00	43.32
14764	UB*00779	LARRY/ROBERT WRIGHT		05/26/2010	0.00	56.15
14765	UB*00780	BALDINI REALTY ESTATE INC		05/26/2010	0.00	75.00
14766	UNL01	UNLIMITED TOOL/EQUIPMENT REPAI		05/26/2010	0.00	199.62
14767	VAL01	VALIC		05/26/2010	0.00	1,320.00
14768	VER02	VERIZON WIRELESS		05/26/2010	0.00	427.30
14769	WES11	WEST COAST AGGREGATES, INC.		05/26/2010	0.00	919.41
14770	WHE01	VIRGINIA WHELEN		05/26/2010	0.00	195.00
14771	WHE03	JOANNE WHELEN		05/26/2010	0.00	70.00
				Report Total:	**418.92**	**528,240.36**

COASTSIDE COUNTY WATER DISTRICT - PERIOD BUDGET ANALYSIS
31-May-10

ACCOUNT	DESCRIPTION	CURRENT ACTUAL	CURRENT BUDGET	B/(W) VARIANCE	B/(W) % VAR	YTD ACTUAL	YTD BUDGET	B/(W) VARIANCE	B/(W) % VAR
REVENUE									
1-0-4120-00	Water Revenue -All Areas	363,833	677,260	(313,427)	(46.3%)	4,912,439	5,378,325	(465,886)	(8.7%)
1-0-4170-00	Water Taken From Hydrants	813	2,083	(1,270)	(61.0%)	12,856	22,917	(10,061)	(43.9%)
1-0-4180-00	Late Notice -10% Penalty	3,428	4,167	(738)	(17.7%)	44,413	45,833	(1,420)	(3.1%)
1-0-4230-00	Service Connections	147	667	(520)	(78.0%)	4,328	457,333	(453,005)	(99.1%)
1-0-4235-00	CSP Connection T & S Fees	0	0	0	0.0%	101,065	0	101,065	0.0%
1-0-4920-00	Interest Earned	0	0	0	0.0%	23,455	65,549	(42,094)	(64.2%)
1-0-4925-00	Interest Revenue T&S Fees	0	0	0	0.0%	0	0	0	0.0%
1-0-4927-00	Inerest Revenue Bond Funds	0	0	0	0.0%	0	0	0	0.0%
1-0-4930-00	Tax Apportionments/Cnty Checks	29,250	50,000	(20,750)	0.0%	624,187	300,000	324,187	108.1%
1-0-4950-00	Miscellaneous Income	2,576	3,083	(507)	(16.5%)	83,258	33,917	49,341	145.5%
1-0-4955-00	Cell Site Lease Income	9,324	6,850	2,474	36.1%	98,745	75,350	23,395	31.0%
1-0-4960-00	CSP Assm. Dist. Processing Fee	0	0	0	0.0%	0	0	0	0.0%
1-0-4965-00	ERAF REFUND -County Taxes	0	0	0	0.0%	305,752	100,000	205,752	205.8%
1-0-4970-00	Wavecrest Reserve Conn. Fees	0	0	0	0.0%	0	0	0	0.0%
	REVENUE TOTALS	**409,371**	**744,110**	**(334,739.38)**	**(45.0%)**	**6,210,498**	**6,479,224**	**(268,726)**	**(4.1%)**
EXPENSES									
1-1-5130-00	Water Purchased	121,861	143,732	21,871	15.2%	1,359,883	1,445,752	85,869	5.9%
1-1-5230-00	Pump Exp, Nunes T P	1,793	1,583	(210)	(13.2%)	17,902	17,417	(486)	(2.8%)
1-1-5231-00	Pump Exp, CSP Pump Station	522	250	(272)	(109.0%)	239,380	206,321	(33,059)	(16.0%)
1-1-5232-00	Pump Exp, Trans. & Dist.	898	2,139	1,241	58.0%	11,002	19,331	8,329	43.1%
1-1-5233-00	Pump Exp, Pilarcitos Can.	3,455	120	(3,335)	(2779.0%)	18,189	9,896	(8,293)	(83.8%)
1-1-5234-00	Pump Exp. Denniston Proj.	1,456	9,822	8,366	85.2%	10,497	43,745	33,248	76.0%
1-1-5235-00	Denniston T.P. Operations	2,113	5,585	3,472	0.0%	7,878	24,637	16,759	68.0%
1-1-5236-00	Denniston T.P. Maintenance	1,446	2,111	665	31.5%	22,223	40,888	18,665	45.6%
1-1-5240-00	Nunes T P Operations	3,136	5,960	2,825	47.4%	67,889	59,193	(8,696)	(14.7%)
1-1-5241-00	Nunes T P Maintenance	574	3,165	2,591	81.9%	50,555	34,827	(15,728)	(45.2%)
1-1-5242-00	CSP Pump Station Operations	781	708	(73)	(10.3%)	7,485	7,788	303	3.9%
1-1-5243-00	CSP Pump Station Maintenance	13,819	12,500	(1,319)	(10.6%)	49,669	66,191	16,522	25.0%
1-1-5250-00	Laboratory Services	1,528	6,250	4,722	75.6%	52,489	68,750	16,261	23.7%
1-1-5318-00	Studies/Surveys/Consulting	20,714	1,879	(18,835)	(1002.6%)	66,017	20,665	(45,352)	(219.5%)
1-1-5321-00	Water Conservation	3,778	5,054	1,277	25.3%	56,497	55,596	(901)	(1.6%)
1-1-5322-00	Community Outreach	6,711	2,392	(4,320)	(180.6%)	21,869	26,308	4,439	16.9%
1-1-5411-00	Salaries & Wages -Field	70,542	69,821	(721)	(1.0%)	827,894	837,853	9,959	1.2%
1-1-5412-00	Maintenance -General	12,935	15,708	2,773	17.7%	128,423	173,788	45,365	26.1%

Revised: 6/1/2010 3:22 PM

ACCOUNT	DESCRIPTION	CURRENT ACTUAL	CURRENT BUDGET	B/(W) VARIANCE	B/(W) % VAR	YTD ACTUAL	YTD BUDGET	B/(W) VARIANCE	B/(W) % VAR
1-1-5414-00	Motor Vehicle Expense	3,156	3,958	803	20.3%	41,869	43,542	1,673	3.8%
1-1-5415-00	Maintenance -Well Fields	1,519	1,250	(269)	(21.5%)	5,341	13,750	8,409	61.2%
1-1-5610-00	Salaries/Wages-Administration	47,286	49,739	2,453	4.9%	561,178	596,868	35,690	6.0%
1-1-5620-00	Office Supplies & Expense	7,465	10,929	3,464	31.7%	108,085	120,221	12,136	10.1%
1-1-5621-00	Computer Services	7,228	3,988	(3,241)	(81.3%)	65,895	57,663	(8,232)	(14.3%)
1-1-5625-00	Meetings / Training / Seminars	1,592	1,667	75	4.5%	21,485	18,333	(3,152)	(17.2%)
1-1-5630-00	Insurance	32,952	31,319	(1,633)	(5.2%)	459,832	469,511	9,679	2.1%
1-1-5640-00	Employees Retirement Plan	34,097	34,442	346	1.0%	390,426	413,308	22,881	5.5%
1-1-5645-00	SIP 401K Plan	0	1,667	1,667	100.0%	0	18,333	18,333	100.0%
1-1-5681-00	Legal	8,056	4,333	(3,723)	(85.9%)	53,455	47,667	(5,789)	(12.1%)
1-1-5682-00	Engineering	480	1,250	770	61.6%	10,610	13,750	3,140	22.8%
1-1-5683-00	Financial Services	0	2,583	2,583	100.0%	19,863	28,417	8,554	30.1%
1-1-5684-00	Payroll Tax Expense	10,520	8,627	(1,893)	(21.9%)	101,948	103,519	1,572	1.5%
1-1-5687-00	Membership, Dues, Subscript.	175	1,735	1,560	89.9%	41,462	52,080	10,618	20.4%
1-1-5688-00	Election Expenses	0	0	0	0.0%	24,358	15,000	(9,358)	0.0%
1-1-5689-00	Labor Relations	1,000	1,000	0	0.0%	11,000	11,000	0	0.0%
1-1-5700-00	San Mateo County Fees	0	0	0	0.0%	7,531	10,800	3,269	30.3%
1-1-5705-00	State Fees	28,280	0	(28,280)	0.0%	41,988	10,500	(31,488)	(299.9%)
1-1-5711-00	Debt Srvc/Existing Bonds 1998A	0	0	0	0.0%	273,130	270,845	(2,285)	(0.8%)
1-1-5712-00	Debt Srvc/Existing Bonds 2006B	0	0	0	0.0%	489,296	486,401	(2,895)	(0.6%)
1-1-5713-00	Contribution to CIP & Reserves	43,121	43,121	0	0.0%	474,336	474,336	0	0.0%
1-1-5745-00	CSP Connect. Reserve Contribu.	0	0	0	0.0%	101,065	0	(101,065)	0.0%
1-1-5746-00	Wavecrest CSP Connt. Reserve	0	0	0	0.0%	0	0	0	0.0%
	EXPENSE TOTALS	**494,988**	**490,387**	**(4,602)**	**(0.9%)**	**6,319,897**	**6,434,788**	**114,892**	**1.8%**
	NET INCOME	**(85,618)**	**253,723**	**(339,341)**		**(109,399)**	**44,435**	**-153,834**	

Revised: 6/1/2010 3:22 PM

COASTSIDE COUNTY WATER DISTRICT

INVESTMENT REPORT

May 31, 2010

		Restricted	*Restricted*	*Restricted for CSP CIP Projects*		
	CASH FLOW & OPERATING RESERVE	**EMERGENCY RESERVES**	**CAPITAL EXPENDITURES**	**DISTRICT CSP CONTRIBUTION**	**CSP T&S FEES**	**TOTAL**
DISTRICT BALANCES						
CASH IN FIRST NATIONAL BANK						
OPERATING ACCOUNT			$201,568.23			$201,568.23
CSP T&S ACCOUNT					$124,128.70	$124,128.70
TOTAL FIRST NATIONAL BANK	$0.00	$0.00	$201,568.23	$0.00	$124,128.70	$325,696.93
CASH WITH L.A.I.F	$297,900.00	$1,740,663.00	$606,844.31	$0.00	$20,897.20	$2,666,304.51
UNION BANK - Project Fund Balance			$1,445,146.39			$1,445,146.39
						$0.00
CASH ON HAND	$1,930.00					$1,930.00
TOTAL DISTRICT CASH BALANCES	$299,830.00	$1,740,663.00	$2,253,558.93	$0.00	$145,025.90	$4,439,077.83
ASSESSMENT DISTRICT BALANCES						
CASH IN FIRST NATIONAL BANK						
REDEMPTION ACCOUNT		$ 87,517.17				
RESERVE ACCOUNT (Closed Account 8-4-04)		$ -				
TOTAL ASSESSMENT DISTRICT CASH		$ 87,517.17				

This report is in conformity with CCWD's Investment Policy and there are sufficient funds to meet CCWD's expenditure requirements for the next three months.

COASTSIDE COUNTY WATER DISTRICT
APPROVED CAPITAL IMPROVEMENT PROJECTS
FISCAL YEAR 2009-2010

1-May-10

		Approved CIP Budget FY 09/10	Actual To Date FY 09/10	Projected Year-End FY 09/10	Projected vs. Budget Variance	Project Status/ Comments
PIPELINE PROJECTS						
05-01	Main Street/Hwy 92 Widening Project	$ 20,000		$ -	$ 20,000	Project completed.
WATER TREATMENT PLANTS						
99-05	Denniston Intake Maintenance	$ 80,000	$ 81,395	$ 76,232	$ 3,768	Denniston dredging project completed
09	Denniston WTP - Intake Construction	$ 100,000	$ 4,888	$ 25,000	$ 75,000	Completed design for intake modifications. Evaluating required permitting. Possible in-house project.
10-04	Nunes - Floc Drive Repair	$ 50,000	$ 40,569	$ 45,000	$ 5,000	Drives received and installed. Complete for FY10. Project to be complete in FY12
07-01	Nunes Filter Media Replacement	$ 50,000	$ 46,589	$ 50,000	$ -	Completed
FACILITIES & MAINTENANCE						
09-06	District Space Planning	$ 25,000			$ 25,000	No plans to pursue this effort this year.
09-07	AMR Program	$ 400,000	$ 5,908		$ 400,000	Need to present business case to facilities committee and Board
08-08	PRV Valves Replacement Project	$ 20,000	$ 20,639	$ 20,639	$ (639)	On-going program
99-01	Meter Change Program	$ 18,000	$ 40,983	$ 39,900	$ (21,900)	On-going program
09-09	Fire Hydrant Replacement	$ 40,000	$ 10,289	$ 20,000	$ 20,000	Varience due to this project gets dones when there is extra time.
09-11	Pilarcitos Culvert Repair	$ 200,000	$ 113,068	$ 113,068	$ 86,932	Completed
EQUIPMENT PURCHASE & REPLACEMENT						
99-02	Vehicle Replacement	$ 28,000		$ -	$ 28,000	No vehicles replaced in FY10
99-03	Computer System	$ 5,000	$ 2,386	$ 5,000	$ -	
99-04	Office Equipment/Furniture	$ 3,000	$ 655	$ 3,000	$ -	
06-03	SCADA/Telemetry/electrical controls	$ 250,000	$ 76,938	$ 200,000	$ 50,000	90% design documents complete. Target going to bid by end of March.
PUMP STATIONS / TANKS / WELLS						
08-14	Alves Tank Recoating (Interior/Exterior)	$ 300,000	$ 1,577	$ -	$ 300,000	Flow/pressure testing shows that shutting down tank will require installation of temporary pump station. Have decided to coat exterior in FY11, delay interior to FY15.
10-06	Cahill Tank Ladder Replacement	$ 15,000		$ -	$ 15,000	To be completed in FY11

COASTSIDE COUNTY WATER DISTRICT
APPROVED CAPITAL IMPROVEMENT PROJECTS
FISCAL YEAR 2009-2010

1-May-10

		Approved CIP Budget FY 09/10	Actual To Date FY 09/10	Projected Year-End FY 09/10	Projected vs. Budget Variance	Project Status/ Comments
10-01	Crystal Springs Check Valve Repair/Replacement	$ 100,000	$ 53,457	$ 65,000	$ 35,000	Valve installed. To bid for vault lid in June 2010. To be completed in FY11
09-12	Crystal Springs Re-roof and Paint	$ 50,000	$ 17,413	$ 50,000	$ -	Roof completed in FY 10. Painting to be completed in FY11
09-13	Crystal Springs Soft Starts 1 & 3	$ 25,000	$ 69,291	$ 35,924	$ (10,924)	Completed
10-08	EG Tank #1 Pump Station Pump Replacement	$ 23,000		$ 23,000	$ -	Completed
10-07	EG Tank #1 Security Fence	$ 20,000		$ 20,000	$ -	FY11
10-05	Hazen's Tank Fence Upgrade	$ 10,000		$ 10,000	$ -	FY11
08-15	Miramar Tank Interior Recoating/Mixing	$ 230,000	$ 281,046	$ 300,000	$ (70,000)	Completed
09-18	New Pilarcitos Well	$ 25,000		$ 10,000	$ 15,000	Retained Balance Hydrologics to recommend siting of new well.
09-19	Pilarcitos Canyon Blending Station	$ 100,000	$ 13,499	$ 100,000	$ -	Design complete. Will go to bid in June, complete in FY11
06-05	Well Rehabilitation	$ 40,000	$ 12,380	$ 12,380	$ 27,620	Decided to defer further rehab until FY11
					$ -	
NUNES/ DENNISTON WTP PRIORITY (SHORT-TERM) IMPROVEMENTS					$ -	
08-24	Nunes / Denniston Short Term WTP Modifications	$ 600,000	$ 170,076	$ 300,000	$ 300,000	We have awarded contracts totalling about $1.4 million for this project. Contractor's schedule will limit cash flow in current FY.
					$ -	
DENNISTON WTP (LONG-TERM) IMPROVEMENTS (MEMBRANE FILTRATION)						
08-22	Denniston Pre/Post Treatment Design	$ 350,000	$ 61,779	$ 200,000	$ 150,000	KJ completed design work at a cost of $100K. We will bring final design contract to Board in June 2010.
NUNES WTP (LONG-TERM) IMPROVEMENTS (UV DISINFEC						
08-27	Modify Filters for Rate of Flow Control	$ 10,000			$ 10,000	Evaluating the need for this project.
					$ -	
WATER SUPPLY DEVELOPMENT						
09-21	Reclamation Project Planning	$ 100,000	$ 35,323	$ 50,000	$ 50,000	Timing of expenditures difficult to estimate due to slow progress in reaching agreement with SAM for recycling.

COASTSIDE COUNTY WATER DISTRICT
APPROVED CAPITAL IMPROVEMENT PROJECTS
FISCAL YEAR 2009-2010

1-May-10

		Approved CIP Budget FY 09/10	Actual To Date FY 09/10	Projected Year-End FY 09/10	Projected vs. Budget Variance	Project Status/ Comments
09-22	Water Supply Alternatives Evaluation	$ 50,000	$ 18,148	$ 50,000	$ -	Propose dedicating this budget to Water Supply Master Plan effort and Urban Water Management Plan. Will bring proposal to Board in April.
	TOTALS	**$ 3,337,000**	**$ 1,178,297**	**$ 1,824,143**	**$ 1,512,857**	

FY 08/09 CIP Projects - *paid in FY 09/10*

Office Equipment - Furniture	$ 7,566	$ 7,566
Denniston Storage Tank Modification Project	$ 74	$ 54,569
Nunes (was Denniston) Cl2/ph Analyzer	$ 7,421	$ 7,421
Skylights	$ 11,688	$ 11,286
El Granada Pipeline P3	$ 20,403	$ 14,990
	$ 47,153	$ 95,833

NON-BUDGETED ITEMS (CAPITAL EXPENDITURES) FOR CURRENT FISCAL YEAR 09/10

Nunes - Generator Radiator	$ 17,774	$ 17,500
Installation of Base Stations (3) & Replacment at Dist. Office	$ 10,506	$ 9,529
Denniston Filter Media	$ 76,595	$ 50,000
Nunes Filter Drain System	$ 1,398	
Denniston Water Supply Development	$ 11,710	
Avenue Cabrillo - Pipeline Replacement	$ 3,025	
	$ 121,008	$ 77,029
TOTALS	**$ 1,346,458**	**$ 1,997,005**

Legal Cost Tracking Report
12 Months At-A-Glance

Acct. No.5681
Patrick Miyaki - HansonBridgett, LLP
Legal

Month	Admin (General Legal Fees)	Recycle Water Analysis	Transfer Program	CIP	Water Conservation	Personnel	Lawsuits	Infrastructure Project Review (Reimbursable)	TOTAL
Jun-09	7,454	2,002	182	52					9,690
Jul-09	15,556	3,250	1,222	364				234	20,626
Aug-09	4,661	2,574	312	312				1,084	8,943
Sep-09	4,389		130	130				1,872	6,521
Oct-09	4,196		234	1,300					5,730
Nov-09	6,156		234	598				676	7,664
Dec-09	4,940		598	26				910	6,474
Jan-10	3,406	234	2,132					52	5,824
Feb-10	5,334	754	78		2,663				8,829
Mar-10	7,316	79		4,210	236				11,840
Apr-10	7,219	262		3,563	236			131	11,411
May-10	8,056								8,056
TOTAL	**78,682**	**9,155**	**5,122**	**10,555**	**3,134**	**0**	**0**	**4,959**	**111,607**

Engineer Cost Tracking Report
12 Months At-A-Glance

Acct. No. 5682
JAMES TETER
Engineer

Month	Admin & Retainer	Phase 3 EG Pipeline	CIP	Short Term WTP Imprv.	Studies & Projects	TOTAL	Reimburseable from Projects
Jun-09	480	322	2,496		7,420	**10,718**	7,420
Jul-09	1,379			6,010	2,490	**9,879**	2,490
Aug-09	1,642			5,459	1,660	**8,761**	1,660
Sep-09	1,507			4,946	4,111	**10,564**	4,111
Oct-09	480				2,140	**2,620**	2,140
Nov-09	1,347			701	1,841	**3,889**	1,841
Dec-09						**0**	
Jan-10	646		3,025	1,743	664	**6,078**	664
Feb-10	1,137			3,320	1,909	**6,366**	1,909
Mar-10	1,144		1,577	581		**3,302**	
Apr-10	848			1,411	332	**2,591**	332
May-10	480		4,048	1,909		**6,437**	
TOTAL	**11,090**	**322**	**11,145**	**26,080**	**22,568**	**71,205**	**22,568**

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THE SPECIAL MEETING OF THE BOARD OF DIRECTORS

Tuesday, May 11, 2010 – 6:00 p.m.

1) CLOSED SESSION

A. Conference with Legal Counsel
Pursuant to California Government Code Section §54956.9(b)
Anticipated Litigation - Significant Exposure to Litigation: One Case

The Closed Session convened at approximately 6:00 p.m., with Directors Coverdell, Larimer, Donovan, Vice-President Feldman, President Mickelsen, General Manager Dickson and Patrick Miyaki, Legal Counsel in attendance.

2) RECONVENE TO OPEN SESSION – The Closed Session concluded at approximately 7:05 p.m., immediately prior to commencement of the special meeting, at which time President Mickelsen announced that no action had been taken during the closed session.

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THE SPECIAL MEETING OF THE BOARD OF DIRECTORS

Tuesday, May 11, 2010

1) ROLL CALL: President Mickelsen called the special meeting to order at 7:13 p.m. Present at roll call: Vice President Bob Feldman, and Directors Ken Coverdell, Jim Larimer and Jerry Donovan.

Also present were: David Dickson, General Manager; Patrick Miyaki, Legal Counsel; Joe Guistino, Superintendent of Operations; Cathleen Brennan, Public Outreach/Program Development/Water Resources Analyst; JoAnne Whelen, Administrative Assistant/Recording Secretary, and Gina Brazil, Office Manager.

2) PUBLIC COMMENT: There were no public comments.

3) SCHEDULE A PUBLIC HEARING ON PROPOSED RATE INCREASE AND AUTHORIZE ISSUANCE OF A NOTICE OF PUBLIC HEARING AND PROPOSED RATE INCREASE

President Mickelsen announced that this agenda item would be addressed under agenda item 7A during the regular meeting of the Board of Directors.

4) ADJOURN: The special meeting was adjourned at 7:14 p.m., at which time the regular May 11, 2010 Board of Directors meeting commenced.

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THES REGULAR MEETING OF THE BOARD OF DIRECTORS

Tuesday, May 11, 2010

1) ROLL CALL: President Mickelsen called the meeting to order at 7:15 p.m. Present at roll call: Vice-President Feldman, and Directors Ken Coverdell, Jim Larimer and Jerry Donovan.

Also present were: David Dickson, General Manager; Patrick Miyaki, Legal Counsel; Joe Guistino, Superintendent of Operations; Cathleen Brennan, Public Outreach/Program Development/Water Resources Analyst; JoAnne Whelen, Administrative Assistant/Recording Secretary, and Gina Brazil, Office Manager.

2) PLEDGE OF ALLEGIANCE

3) PUBLIC ANNOUNCEMENTS – There were no comments from members of the public.

President Mickelsen announced, on behalf of Erin Tormey, with the Coastside Farmer's Market, that there will be a pharmaceutical disposal site available on Saturday, May 22, 2010 at the Farmer's Market event, located at Shoreline Station in Half Moon Bay and encouraged coastside residents to take advantage of this opportunity to properly dispose of their expired and unnecessary prescription and over-the-counter medications.

4) CONSENT CALENDAR

- **A.** Requesting the Board to review disbursements for the month Ending April 30, 2010 – Claims: $491,352.73; Payroll: $106,016.56 for a total of $597,369.29
- **B.** Acceptance of Financial Reports
- **C.** Minutes of the April 13, 2010 Board of Directors Meeting
- **D.** Minutes of April 29, 2010 Special Board Budget Workshop

E. Installed Water Connection Capacity and Water Meters Report
F. Total CCWD Production Report
G. CCWD Monthly Sales by Category Report
H. April 2010 Leak Report
I. Rainfall Reports
J. San Francisco Public Utilities Commission Hydrological Conditions Report for April 2010
K Notice of Completion - Acceptance of Nunes Filter # 3 and #4 Media Replacement Project
L. Notice of Completion - Acceptance of Denniston Filter Failure Project

President Mickelsen reported that he had reviewed the monthly financial claims, and found all to be in order.

Mr. Dickson informed the Board that an error had been made on the District's Monthly Sales by Category Report. Mr. Guistino advised that it had been related to a transcription error; corrected copies of the report were distributed to the Board.

ON MOTION BY Vice-President Feldman and seconded by President Mickelsen, the Board voted as follows, by roll call vote, to accept the Consent Calendar in its entirety:

Director Coverdell	**Aye**
Vice-President Feldman	**Aye**
Director Larimer	**Aye**
Director Donovan	**Aye**
President Mickelsen	**Aye**

5) PUBLIC HEARING – Coastside County Water District Ordinance 2010-01 – Indoor Water Use Efficiency Ordinance

President Mickelsen opened the Public Hearing at 7:17 p.m. Noting that there were no members of the public in attendance, he directed the Board's attention to the presentation by Cathleen Brennan, District Water Resource Analyst, on the proposed Ordinance. Ms. Brennan reminded the Board that she had provided a power point presentation at the April 13, 2010 Board meeting, and would take this opportunity to review highlights of the Ordinance, which included the background, description, enforcement, effective date, economic impact, and fiscal impact. She informed the Board that the District had not received any comments on the Ordinance from members of the public. Ms. Brennan also addressed a

few questions from the Board. Upon completion of Ms. Brennan's presentation, President Mickelsen closed the Public Hearing at 7:28 p.m.

ON MOTION BY Director Larimer and seconded by Vice-President Feldman, the Board voted as follows, by roll call vote, to adopt Ordinance 2010-01 An Ordinance of Coastside County Water District Establishing Water Conservation Regulations:

Director Coverdell	**Aye**
Vice-President Feldman	**Aye**
Director Larimer	**Aye**
Director Donovan	**Aye**
President Mickelsen	**Aye**

6) MEETINGS ATTENDED / DIRECTOR COMMENTS

Vice-President Feldman informed the Board that he had attended the April 26, 2010 Sewer Authority Mid-Coastside (SAM) Board of Director's meeting, and that upon presentation of a Resolution commending Jack Foley, SAM's Manager, he spoke on behalf of the Coastside County Water District, acknowledging Mr. Foley for his many accomplishments as the SAM Manager for the past seven years.

Vice-President Feldman also reported on his attendance at the recent Association of California Water Agencies (ACWA) Spring Conference in Monterey. He provided some of the history and background of the agency and reported on several of the sessions that he attended, including the proposed water bond issue, desalination, retirement plan options, regional opportunities for collaboration, and Delta governance. He also shared a copy of the April issue of National Geographic magazine, entitled "*Water, Our Thirsty World*".

7) GENERAL BUSINESS

A. Draft Fiscal Year 2010-2011 Revenue and Expense Budget and Capital Improvement Program

Mr. Dickson presented the draft fiscal year 2010-2011 Revenue and Expense Budget and Capital Improvement Program once again, noting that the Board and members of the Finance and Facilities Committees have had opportunities to thoroughly review these documents on several

occasions, including the public budget work session conducted on April 29, 2010. He highlighted the few key aspects of the budget which had been previously examined at the budget workshop. He recommended that the Board schedule a public hearing on the proposed rate increase for June 29, 2010 and authorize issuance of a notice of public hearing and proposed rate increase.

Vice-President Feldman requested that the amount of the proposed fourteen percent (14%) be specifically stated on the notice of the proposed rate increase and brief discussion among the Board members ensued.

ON MOTION BY Director Donovan and seconded by Director Coverdell, the Board voted as follows, by roll call vote, to schedule a public hearing on the proposed rate increase for June 29, 2010 and to authorize the issuance of a notice of public hearing and proposed rate increase, to specify an increase of up to a 14% in the District's water rates:

Director Coverdell	**Aye**
Vice-President Feldman	**Aye**
Director Larimer	**Aye**
Director Donovan	**Aye**
President Mickelsen	**Aye**

8) GENERAL MANAGER'S REPORT INCLUDING MONTHLY INFORMATIONAL REPORTS

Mr. Dickson provided an update on the progress of the San Mateo County Board of Supervisor's May 11, 2010 public hearing on the Local Coastal Program.

Mr. Dickson stated that there was no progress to report with regard to developing a recycled water agreement between the District and the Sewer Authority Mid-Coastside (SAM), and that the District is still waiting for SAM to respond to the principles of the agreement that the CCWD Board approved on February 9, 2010.

A. Water Shortage and Drought Contingency Plan Update

Ms. Brennan reviewed precipitation records and referenced the San Francisco Public Utilities Commission Hydrological Conditions Report for April 2010.

B. Operations Report

Mr. Guistino reviewed the monthly highlights of his report, including an update on the cleaning and maintenance of the Crystal Springs Tunnel. He also informed the Board that the Denniston Water Treatment Plant was back in service and running very well and briefly discussed plans and potential options for the design of the proposed Bridgepoint Pipeline Project. He also provided updates on the Miramar Tank recoating project and the newly installed meter and fire valve located at the Canada Cove community.

9) DIRECTOR AGENDA ITEMS – REQUESTS FOR FUTURE BOARD MEETINGS

10) ADJOURNMENT

The meeting was adjourned at 8:11 p.m. The next regular meeting of the Coastside County Water District's Board of Directors is scheduled for Tuesday, June 8, 2010.

Respectfully submitted

_____

David R. Dickson, General Manager
Secretary of the Board

_____

Chris R. Mickelsen, President
Board of Directors

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **David Dickson, General Manager**

Agenda: **June 8, 2010**

Report Date: June 2, 2010

Subject: **Monthly Water Transfer Report**

Recommendation:

None. For Board information purposes only.

Background:

At the December 10, 2002 Board meeting and November 18, 2003 Special Board meeting, the Board made several changes to the District's water transfer policy. One of the changes directed the General Manager to approve routine water transfer applications that met the District's criteria as embodied in Resolution 2002-17 and Resolution 2003-19. The General Manager was also directed to report the number of water transfers approved each month as part of the monthly Board packet information.

Since the previous Board meeting in January 2010, one transfer application was approved for partial capacity, .5—5/8" (10 gpm), non-priority water service connection. A spreadsheet reporting the transfer for the month of June 2010 follows this report as well as the approval from Patrick Miyaki and the confirmation letter from Glenna Lombardi.

APPROVED TRANSFERS FOR THE CALENDAR YEAR 2010

DONATING APN	RECIPIENT APN	PROPERTY OWNERS	# OF CONNECTIONS		DATE
037-320-270	048-053-020	Corado-McComas LP to Boggs	.5--5/8"	non-priority	Jun-10

Memorandum

VIA ELECTRONIC MAIL

TO: Glenna Lombardi

FROM: Patrick T. Miyaki

DATE: June 1, 2010

RE: **Application to Transfer Uninstalled Non-Priority Water Service Connection**

Glenna, I reviewed the Application to transfer an uninstalled non-priority water service connection [.5 - 5/8-inch, (10 gpm)] from Corado McComas, L.P. to John and Sarah Boggs (APN 048-053-020). The Application is generally in order and satisfies the requirements of the District's General Regulations Regarding Water Service, Section U, Transfer of Uninstalled Water Service Connection Rights.

Please do not hesitate to contact me if you have any questions or want to discuss this matter in more detail.

cc: David Dickson

June 2, 2010

Corado, Inc./Corado-McComas L.P.
1717 N. Bayshore Drive #1432
Miami, Florida 33132

John and Sarah Boggs
P.O. Box 338
80 Mirada Road
Half Moon Bay, CA 94019

Dear Property Owners:

RE: Request to Transfer Partial Capacity Uninstalled Non-Priority Crystal Springs Project Water Service Connection

Dear Property Owners:

We are pleased to confirm that the Coastside County Water District has **approved** your request to transfer .5---5/8" (10 gpm) partial capacity non-priority Crystal Springs Project water service connection. The result of this transfer is as follows:

- **APN 037-320-270** continues to have the remaining rights to 7.5---5/8" (20 gpm) uninstalled, non-priority water service connections from the Coastside County Water District; and

- **APN 048-053-020, 80 Mirada Road,** now has a .5---5/8" (10 gpm) partial capacity non-priority water service connection assigned to it from the Crystal Springs Project. (***Note: APN 048-053-020 is developed residential property and has had a one---5/8" (20 gpm) PRE-Crystal Springs Project water connection serving it since 1976. With approval of this transfer, the property will be upgraded to a one---3/4" (30 gpm) water service connection.)***

Please be advised that the City Council of the City of Half Moon Bay has taken the position that the transfer of a water service connection meets the definition of "development" so as to require a coastal development permit from the City. Applicants are advised to investigate this issue further with the Half Moon Bay Planning Department if applicable. The Coastside County Water District, in approving this application, does not make any representations or warranties with respect to further permits or approvals required by other governmental agencies, including the City of Half Moon Bay.

Sincerely,

Glenna Lombardi

Cc: David Dickson, General Manager

COASTSIDE COUNTY WATER DISTRICT

Installed Water Connection Capacity & Water Meters

2010

Installed Water Connection Capacity	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Total
HMB Non-Priority													
0.5" capacity increase													
5/8" meter	1												**1**
3/4" meter													**0**
2" meter													
HMB Priority													
5/8" meter													**0**
3/4" meter													**0**
1" meter													**0**
1 1/2" meter													
2" meter													
County Non-Priority													
5/8" meter					1								**1**
3/4" meter													**0**
1" meter													**0**
County Priority													
5/8" meter					1								**1**
3/4" meter													**0**
1" meter													**0**
Monthly Total	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**

5/8" meter = 1 connection
3/4" meter = 1.5 connections
1" meter = 2.5 connections
2" meter = 8 connections

Installed Water Meters	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Totals
HMB Non-Priority	**1**												**1**
HMB Priority													**0**
County Non-Priority					1								**1**
County Priority					1								**1**
Monthly Total	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**

2010 Water Service Installations

2010 Water Service Installations

APN	Name	Install Address	City/Community	Meter Size	Type	Date Installed	Notes
056-161-100	Cameron Jeffs	311 Church Street	HMB	5/8"	Non-Priority	6-Jan-10	1" DC also installed
047-112-230	Jerry Lane	225 Navarra Ave	EG	1"	fire	11-Feb-10	fire only
056-104-090	Brian and Lisa Lewis	221 Garcia	HMB	1 1/2"	fire	18-Feb-10	fire only
047-042-060	Peter & Jennifer Iacopi	121 Presideo Ave.	EG	5/8"	Priority	03-May-10	failed well
047-135-070	Burt Hamrol	398 San Carlos	EG	5/8"	Non-Priority	11-May-10	1" fire also

added capacity

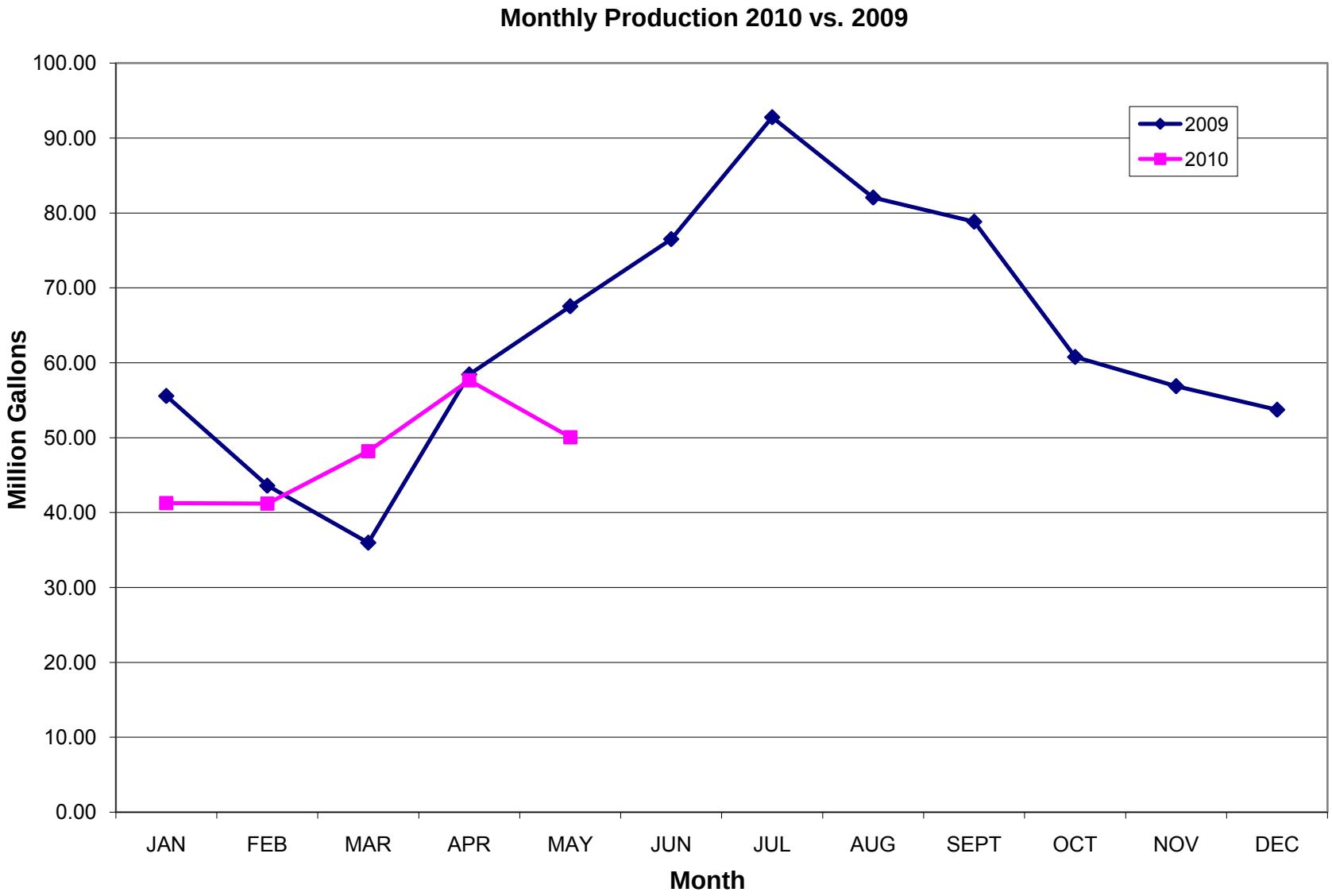
TOTAL CCWD PRODUCTION (MG) ALL SOURCES-2010

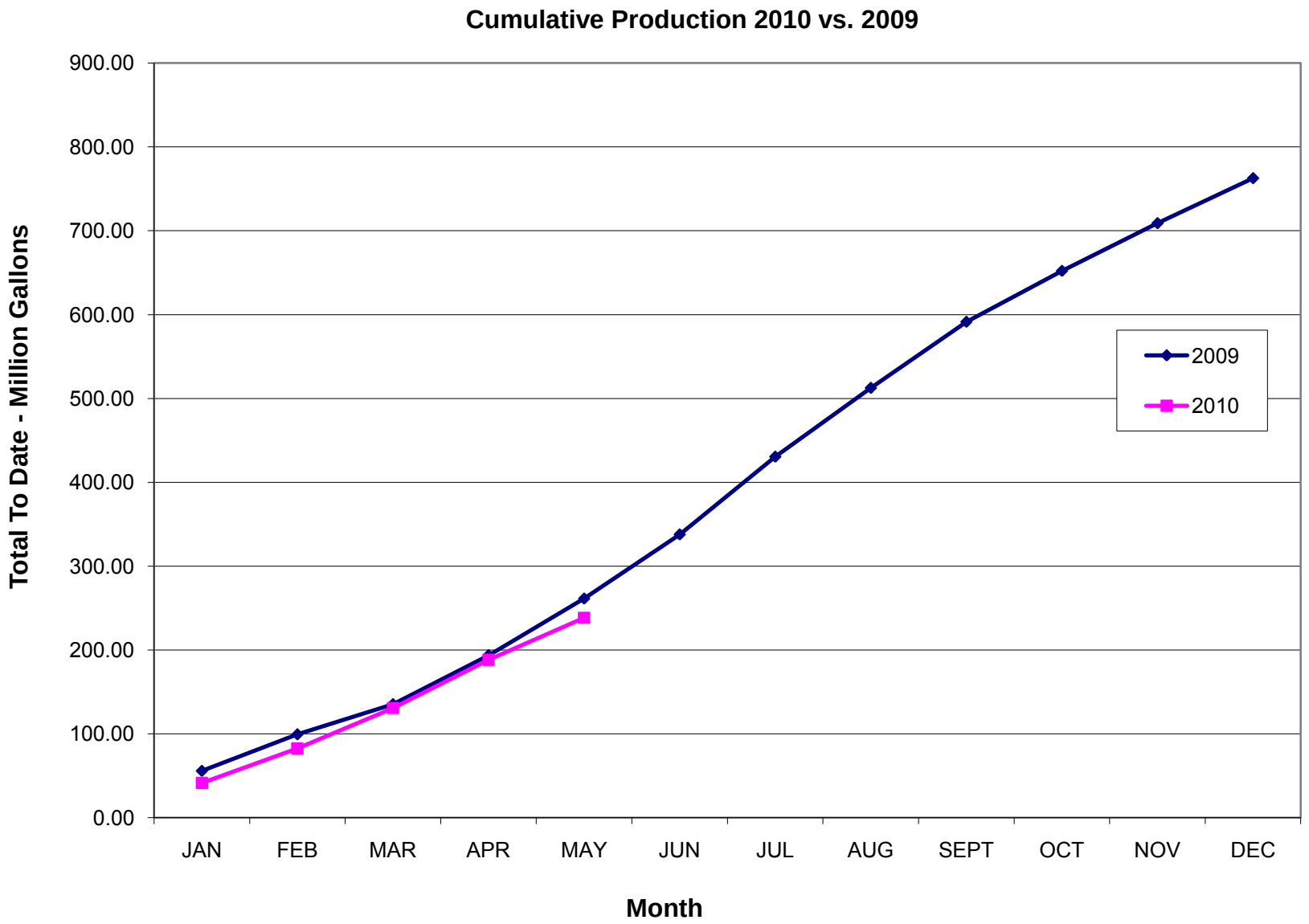
	PILARCITOS WELLS	PILARCITOS LAKE	DENNISTONWELLS	DENNISTON RESERVOIR	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	UNMETERED WATER	TREATED TOTAL
JAN	9.51	6.60	0.00	0.00	25.35	41.46	0.19	41.27
FEB	9.93	30.99	0.00	0.00	0.00	40.92	-0.29	41.21
MAR	11.65	37.69	0.00	0.00	0.00	49.34	1.16	48.18
APR	0.00	52.741	1.92	3.45	0.18	58.29	0.64	57.65
MAY	0.00	46.00	1.47	3.15	0.31	50.93	0.90	50.04
JUN								
JUL								
AUG								
SEPT								
OCT								
NOV								
DEC								
TOTAL	31.09	174.02	3.39	6.60	25.84	240.94	2.599	**238.34**
% TOTAL	12.9%	72.2%	1.4%	2.7%	10.7%	100.0%	1.08%	98.9%

12 Month Running Treated Total **737.82**

TOTAL CCWD PRODUCTION (MG) ALL SOURCES-2009

	PILARCITOS WELLS	PILARCITOS LAKE	DENNISTONWELLS	DENNISTON RESERVOIR	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	UNMETERED WATER	TREATED TOTAL
JAN	1.56	0.00	0.00	0.78	52.21	54.55	-0.96	55.51
FEB	4.19	5.11	0.00	0.00	33.52	42.82	-0.76	43.58
MAR	1.12	35.08	0.00	0.00	0.00	36.20	0.24	35.96
APR	0.00	58.566	0.30	0.76	0.00	59.63	1.23	58.40
MAY	0.00	49.27	2.43	12.46	3.77	67.93	0.45	67.48
JUN	0.00	57.09	2.38	11.07	5.84	76.38	-0.10	76.48
JUL	0.00	1.78	0.00	1.27	90.10	93.15	0.42	92.73
AUG	0.00	0.00	0.00	0.00	82.30	82.30	0.33	81.97
SEPT	0.00	0.00	0.00	0.00	78.74	78.74	-0.07	78.81
OCT	0.00	0.00	0.00	0.00	60.48	60.48	-0.26	60.74
NOV	5.14	0.00	0.69	2.85	48.00	56.68	-0.15	56.83
DEC	7.93	0.00	0.6	3.07	40.13	51.73	-0.185	51.92
TOTAL	19.94	206.90	6.40	32.26	495.09	760.59	0.190	**760.40**
% TOTAL	2.6%	27.2%	0.8%	4.2%	65.1%	100.0%	0.02%	100.0%


Monthly Production 2010 vs. 2009
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Million Gallons
2009
2010
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEPT
OCT
NOV
DEC
Month


Cumulative Production 2010 vs. 2009
Total To Date - Million Gallons
900.00
800.00
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEPT
OCT
NOV
DEC
Month
2009
2010

Coastside County Water District Monthly Sales By Category (MG)
2010

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	MG to Date
RESIDENTIAL	20.466	32.739	17.123	32.307	21.012								123.65
COMMERCIAL	5.336	1.055	5.677	1.046	5.353								18.47
RESTAURANT	2.192	0.239	2.512	0.206	2.651								7.80
HOTELS/MOTELS	2.699	1.872	2.512	1.444	3.186								11.71
SCHOOLS	0.347	0.233	0.367	0.352	0.548								1.85
MULTI DWELL	2.431	1.722	2.215	2.008	1.656								10.03
BEACHES/PARKS	0.436	0.004	0.599	0.022	0.669								1.73
FLORAL	5.243	6.738	7.648	8.280	8.995								36.90
RECREATIONAL	0.025	0.228	0.018	0.181	0.026								0.48
MARINE	0.975	0.000	0.779	0.000	0.743								2.50
IRRIGATION	0.120	0.653	0.046	0.652	0.070								1.54
Portable Meters	0.000	1.429	0.000	2.639	0.000								4.07
TOTAL - MG	40.27	46.91	39.50	49.14	44.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.72

Running 12 Month Total 692.10

Coastside County Water District Monthly Sales By Category (MG)
2009

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	MG to Date
RESIDENTIAL	23.097	35.336	18.88	37.224	23.718	48.096	29.420	55.001	29.038	48.765	22.031	34.135	404.74
COMMERCIAL	5.456	0.952	4.953	1.188	5.552	1.217	6.815	1.275	6.710	1.512	5.317	1.047	41.99
RESTAURANT	2.623	0.123	2.585	0.12	2.872	0.126	3.196	0.337	3.279	0.313	2.527	0.272	18.37
HOTELS/MOTELS	3.755	0.085	3.39	0.088	3.928	0.115	4.721	2.061	4.029	1.735	3.473	1.291	28.67
SCHOOLS	0.737	0.034	0.509	0.043	1.615	0.12	2.884	1.989	1.966	1.490	1.079	0.525	12.99
MULTI DWELL	1.863	1.331	2.533	1.277	2.441	1.435	2.872	3.378	3.531	2.424	2.055	2.254	27.39
BEACHES/PARKS	0.405	0.017	0.305	0.052	0.818	0.101	1.049	0.146	1.180	0.074	0.563	0.014	4.72
FLORAL	9.622	0.242	11.549	0.241	16.427	0.158	13.865	7.366	9.049	7.344	8.228	5.018	89.11
RECREATIONAL	0	0.17	0.046	0.221	0.055	0.203	0.070	0.260	0.080	0.194	0.026	0.203	1.53
MARINE	1.006	0	0.812	0	0.802	0	0.966	0.000	1.233	0.000	1.184	0.000	6.00
IRRIGATION	2.042	1.247	1.076	1.213	0.728	2.418	17.384	15.809	11.340	8.194	3.227	3.234	67.91
PORTABLE METERS	0	0.371	0	0.193	0	0.362	0.000	1.739	0.000	1.676	0.000	1.563	
MG	50.61	39.91	46.64	41.86	58.96	54.35	83.24	89.36	71.44	73.72	49.71	49.56	709.34

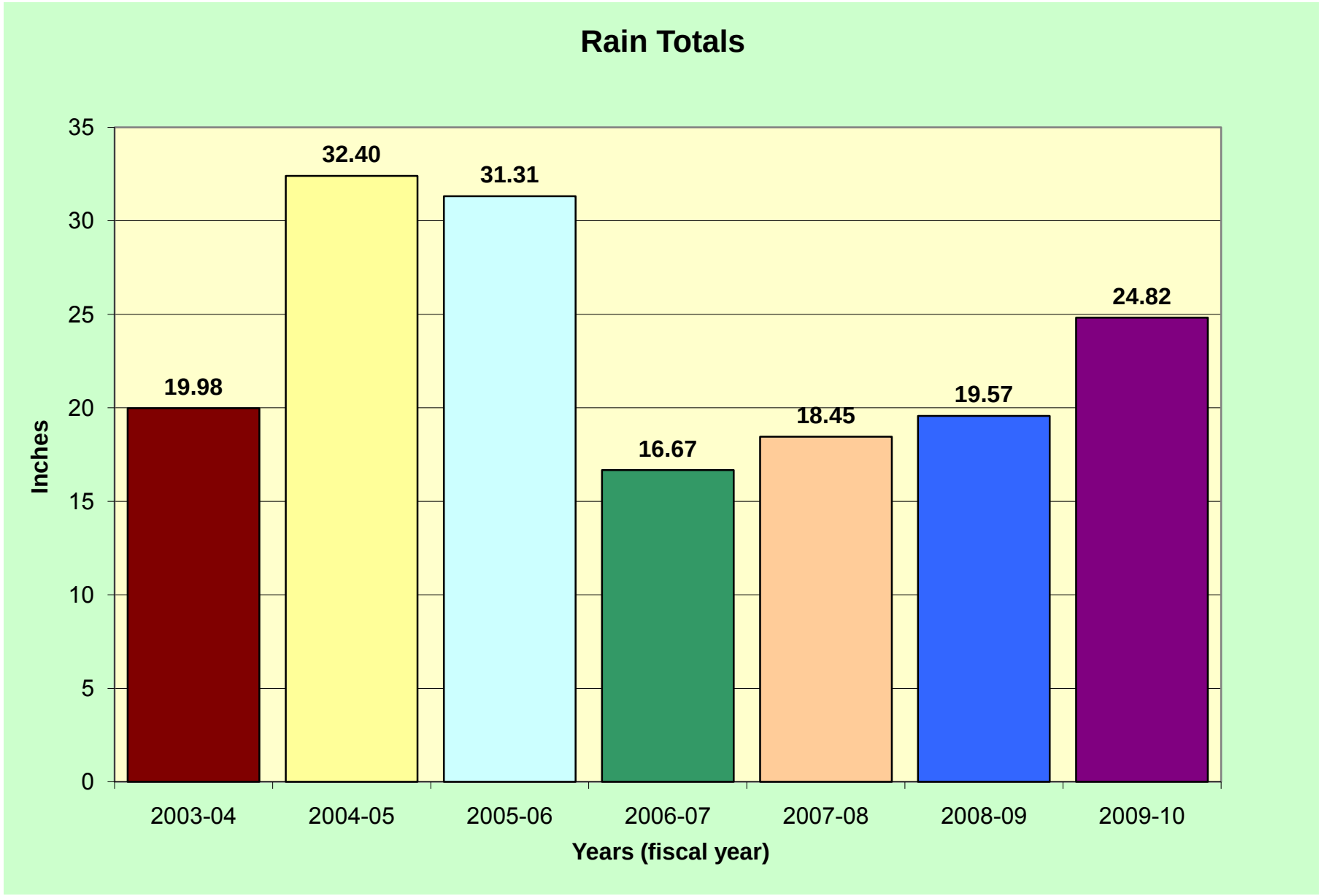
Coastside County Water District
Monthly Leak Report
May 2010

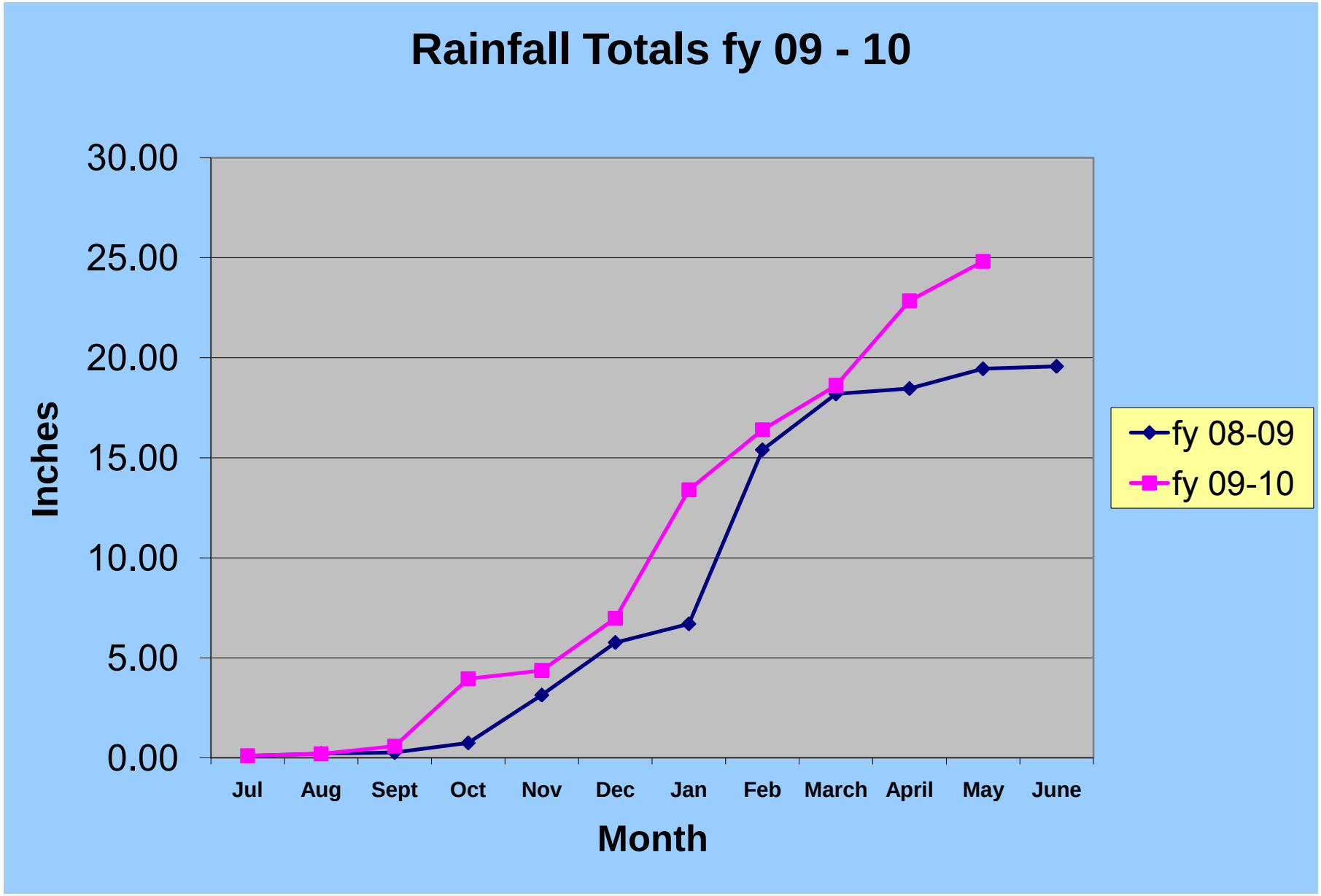
Date	Location	City	Pipe Type/Size	Repair Material	Estimated Water Loss (gallons)	Repair Material Costs	Manpower and Equipment Costs	Estimated Cost of Repair (dollars)
02-May-10	420 Poplar	HMB	3/4" black plastic service	1 - 3/4 angle stop / 1 - 3/4 copxcop / 10' 3/4 copper / 2 tons rock	2,100	$140.31	$1,400	$1,540
05-May-10	825 3rd Ave.	HMB	3/4" black plastic service	10' - 3/4 copper / 1 - 3/4 angle stop / 2 - 90 deg comp fittings / 1/2 ton rock	2,100	$130.85	$1,075.00	$1,206
12-May-10	443 Poplar	HMB	3/4" black plastic service	1 - 3/4 angle stop / 1 - 3/4 check / 1 - comp nut / 15' - 3/4 copper / 1 - B9 box / 3 ton rock	600	$211.86	$1,400	$1,612
14-May-10	25 Santa Rosa St	Miramar	3/4" blue plastic service	1 - 3/4 angle stop / 1 - 3/4 comp nut / 25' - 3/4 copper / 2 ton rock	2,100	$194.00	$1,725	$1,919
26-May-10	994 Francisco St	EG	3/4" plastic service	1 - 3/4 angle stop / 50' - 3/4 copper / 1 - 3/4 check / 1 - 3/4 90 / 3 ton rock	4,100	$342.59	$1,725	$2,068
				TOTAL	**4,800.00**	**1,019.61**	**3,875.00**	**8,344.61**

Coastside County Water District
766 Main Street
July 2009 - June 2010

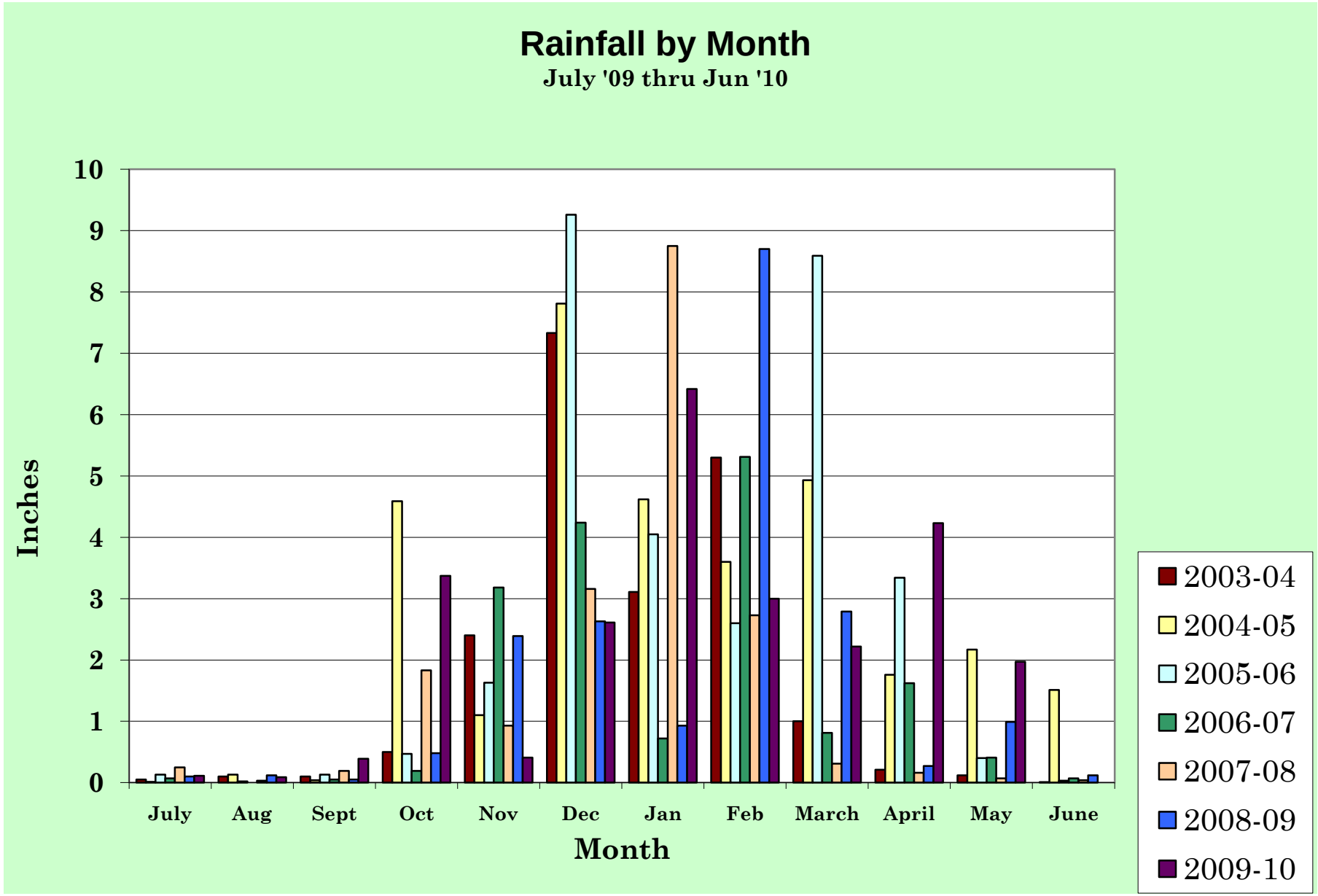
District Office
Rainfall in Inches

	2009						2010					
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
1	0	0.01	0	0	0.01	0	0.01	0	0.01	0.68	0	
2	0	0	0	0	0	0	0.01	0	0.42	0.37	0	
3	0	0.02	0	0	0	0	0	0	0.42	0.24	0	
4	0	0	0	0	0	0	0	0.27	0.01	0.15	0	
5	0	0.01	0.01	0	0	0	0	0	0	0.07	0	
6	0	0.04	0.01	0	0.15	0.27	0	0.08	0	0	0	
7	0	0	0.01	0	0.01	0.24	0	0.01	0	0	0	
8	0	0	0	0	0	0	0	0.09	0.13	0	0	
9	0	0	0	0	0	0	0	0.4	0.02	0	0.15	
10	0	0	0	0	0	0.09	0	0.01	0.02	0	0.07	
11	0	0.01	0	0	0	0.25	0	0	0	1.18	0	
12	0	0	0	0	0	0.53	0.42	0.04	0.81	0.29	0	
13	0	0	0.32	3.21	0	0.21	0.01	0.01	0.01	0.01	0	
14	0	0	0	0.01	0.04	0	0.01	0.01	0	0	0	
15	0	0	0.01	0	0	0	0	0.01	0	0	0	
16	0.01	0	0	0	0.01	0.11	0.18	0	0	0	0	
17	0	0	0	0.01	0.03	0.01	0.37	0.01	0	0	0.18	
18	0	0	0	0	0.01	0	0.85	0.02	0	0	0.03	
19	0	0	0.01	0.09	0	0	1.34	0.02	0	0	0.03	
20	0	0	0	0.01	0.07	0	1.47	0.04	0	0.81	0.01	
21	0	0	0	0	0.01	0.12	0.48	0.27	0	0	0	
22	0.01	0	0	0.01	0	0.01	0.36	0.01	0	0	0	
23	0.02	0	0	0.01	0	0	0.26	0.57	0.01	0	0	
24	0.01	0	0	0	0	0	0.01	0.18	0.13	0	0.01	
25	0.01	0	0	0.01	0	0	0.19	0	0.02	0	0.29	
26	0	0	0	0.01	0	0.59	0.04	0.59	0	0	0.22	
27	0.01	0	0.01	0	0.07	0	0	0.36	0	0.23	0.92	
28	0.01	0	0.01	0	0	0	0	0	0	0.2	0	
29	0.01	0	0	0	0	0.16	0.39		0.08	0	0	
30	0.01	0	0	0	0	0.02	0.01		0.11	0	0	
31	0.01	0		0		0	0.01		0.02		0.06	
Mon.Total	0.11	0.09	0.39	3.37	0.41	2.61	6.42	3.00	2.22	4.23	1.97	0.00
Year Total	0.11	0.20	0.59	3.96	4.37	6.98	13.40	16.40	18.62	22.85	24.82	24.82


Rain Totals
35
30
25
20
15
10
5
0
Inches
19.98
32.40
31.31
16.67
18.45
19.57
24.82
2003-04
2004-05
2005-06
2006-07
2007-08
2008-09
2009-10
Years (fiscal year)


Rainfall Totals fy 09 - 10
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Inches
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
March
April
May
June
Month
fy 08-09
fy 09-10

Coastside County Water District



MONTHLY CLIMATOLOGICAL SUMMARY for MAY. 2010

NAME: Office CITY: Half Moon Bay STATE: CA ELEV: 80 LAT: 37 38' 00" LONG: 122 25'59"

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	52.5	61.3	1:00p	42.8	4:30a	12.5	0.0	0.00	3.5	26.0	8:00p	ESE
2	53.9	63.0	5:30p	43.2	5:30a	11.1	0.0	0.00	1.7	14.0	10:00a	E
3	55.4	63.5	3:00p	45.0	5:00a	9.6	0.0	0.00	1.6	11.0	1:30p	SSW
4	56.5	65.0	4:00p	50.0	6:30a	8.5	0.0	0.00	2.6	14.0	6:00p	SW
5	53.4	60.0	3:00p	45.5	12:00m	11.6	0.0	0.00	3.5	17.0	9:00a	WSW
6	54.2	67.3	6:00p	42.1	5:00a	10.8	0.0	0.00	1.7	16.0	1:30p	ENE
7	54.4	69.0	6:00p	42.6	3:00a	10.6	0.0	0.00	1.9	12.0	12:30p	SSW
8	57.9	64.4	11:30a	52.6	5:00a	7.1	0.0	0.00	2.1	12.0	4:30p	SW
9	59.1	66.6	12:00p	54.4	5:30a	5.9	0.0	0.15	2.9	13.0	3:00p	SW
10	57.3	67.3	10:30a	50.2	11:30p	7.7	0.0	0.07	3.2	17.0	1:00p	SSW
11	53.3	70.7	6:00p	43.0	5:30a	11.7	0.0	0.00	1.9	15.0	5:00p	NNW
12	56.9	65.4	2:00p	47.3	1:00a	8.1	0.0	0.00	1.8	12.0	4:30p	SSW
13	57.6	67.5	12:30p	52.9	9:30p	7.5	0.0	0.00	1.5	12.0	5:30p	SSW
14	56.5	65.4	3:00p	52.1	9:00p	8.5	0.0	0.00	1.1	9.0	12:30p	WSW
15	55.0	65.5	1:30p	50.7	6:30a	10.0	0.0	0.00	0.9	11.0	3:30p	W
16	56.1	64.7	12:30p	50.1	5:30a	8.9	0.0	0.00	0.9	11.0	1:00p	SSW
17	58.8	67.5	3:30p	53.7	4:00a	6.3	0.1	0.18	2.1	14.0	12:30p	SE
18	59.5	68.6	12:00p	50.2	12:00m	5.8	0.4	0.03	1.0	12.0	3:00p	SW
19	58.9	72.6	1:30p	46.5	5:00a	7.1	1.0	0.03	0.7	9.0	9:30p	SSW
20	54.9	71.5	6:00p	45.2	5:30a	10.1	0.0	0.01	2.8	20.0	3:30p	NNW
21	56.7	79.6	6:00p	49.5	12:00m	8.3	0.1	0.00	2.9	16.0	2:00a	SW
22	53.6	71.7	6:00p	46.2	6:00a	11.4	0.0	0.00	3.1	15.0	4:30p	SW
23	53.4	77.2	6:00p	41.5	5:30a	11.8	0.2	0.00	2.7	22.0	3:30p	NE
24	59.4	84.0	6:00p	50.9	12:00m	6.2	0.6	0.01	2.2	14.0	3:30p	S
25	58.9	67.7	10:00a	50.5	12:30a	6.1	0.0	0.29	1.8	14.0	5:00p	SE
26	59.9	69.6	4:00p	51.4	12:00m	5.4	0.3	0.22	1.0	10.0	1:00p	SSW
27	59.6	85.0	6:00p	50.2	1:00a	6.2	0.8	0.92	2.8	17.0	12:30p	S
28	57.3	78.7	6:00p	49.6	5:00a	7.9	0.2	0.00	2.0	15.0	1:30p	SSW
29	58.0	78.5	6:00p	47.5	4:30a	7.3	0.3	0.00	1.5	14.0	6:00p	SW
30	57.9	84.1	6:00p	46.4	4:00a	7.5	0.4	0.00	1.7	12.0	4:30p	SSW
31	61.2	71.6	1:00p	52.6	2:30a	4.5	0.7	0.06	1.1	11.0	10:30a	SSW
	56.7	85.0	27	41.5	23	261.8	5.0	1.97	2.0	26.0	1	SSW

Max >= 90.0: 0
Max <= 32.0: 0
Min <= 32.0: 0
Min <= 0.0: 0
Max Rain: 0.92 ON 5/27/10
Days of Rain: 9 (>.01 in) 5 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

In cooperation with the National Weather Service, Regional Climate Centers, and National Climatic Data Center

Half Moon Bay, CA (04-3714-04, HMBC1)

Download this B-91 as pdf | Open online B-91 for: Jan 2010

Online B-91 for May 2010

		TEMPERATURE			PRECIPITATION					WEATHER						RIVER STAG
		24 HRS			24 HRS			AT OBS	◉ None ◉ Observed ◉ Estimated	Check box for all types occurring each day						
lock	Day	Max	Min	At obs	Rain	Accum.	Snow	Depth	Time of occurrence	F	IP	G	T	H	DW	Gage Readin
🔒	1	60	38	58	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	2	61	39	59	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	3	62	40	60	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	4	61	48	60	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	5	60	45	57	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	6	63	36	62	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	7	63	37	60	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	8	63	50	62	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	9	63	51	60	0.04	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	10	61	50	57	0.04	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	11	60	39	59	0.01	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	12	59	44	57	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	13	58	50	56	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	14	58	50	56	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	15	57	49	54	T	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	16	59	49	57	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	17	60	50	58	0.05	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	18	62	52	58	0.20	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	19	63	42	60	0.01	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	20	62	40	59	0.02	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	21	62	50	62	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	22	62	45	58	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	23	59	37	57	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	24	64	49	62	0.02	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	25	62	45	57	0.30	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	26	61	51	57	0.22	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	27	63	44	61	1.14	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	28	63	44	60	0.01	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	29	65	42	63	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	30	65	42	61	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
🔒	31	62	48	59	0.00	1			12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11	☐	☐	☐	☐	☐	☐	
sum/avg		61.4	45.0	58.9	2.06		0.0		Sum: rain & snowfall. All others are averages.							

Rows with a 🔒 lock are for viewing purposes only and will not be saved. To save a row, ensure it is 🔓 unlocked before clicking **save**.

Save

End of Month Closeout

Close out May 2010 31 observations entered.

San Francisco Public Utilities Commission
Hydrological Conditions Report
For May 2010

J. Chester, B. McGurk, A. Mazurkiewicz, & M. Tsang, June 2, 2010

The upper picture highlights a full San Antonio reservoir in March , 2006, and currently San Antonio Reservoir is again near 100% capacity (J. Chester). The lower picture depicts releases from O'Shaughnessy Dam during the month of May for ecological studies downstream from the reservoir (B. McGurk).

Current Tuolumne System and Local Bay Area storage conditions are summarized in Table 1.

Table 1
Current Storage
As of June 1, 2010

Reservoir	Current Storage		Maximum Storage		Available Capacity		Percent of Maximum Storage
	Acre-Feet	Millions of Gallons	Acre-Feet	Millions of Gallons	Acre-Feet	Millions of Gallons	
Tuolumne System							
Hetch Hetchy [1/]	206,000		360,360		154,360		57.2%
Cherry [2/]	224,554		273,340		48,786		82.2%
Lake Eleanor [3/]	24,193		27,100		2,907		89.3%
Water Bank	570,000		570,000		0		full
Tuolumne Storage	1,024,747		1,230,800		206,053		83.3%
Local Bay Area Storage							
Calaveras [4/]	49,086	15,995	96,824	31,550	47,738	15,555	50.7%
San Antonio	50,095	16,324	50,496	16,454	401	131	99.2%
Crystal Springs	55,106	17,956	58,377	19,022	3,271	1,066	94.4%
San Andreas	17,344	5,652	18,996	6,190	1,652	538	91.3%
Pilarcitos	2,895	943	2,995	976	100	32	96.7%
Total Local Storage	174,526	56,870	227,688	74,192	53,162	17,322	76.7%
Total System	1,199,273		1,458,488		259,215		82.2%

[1/] Maximum Hetch Hetchy Reservoir storage with drum gates activated.
[2/] Maximum Cherry Reservoir storage with all flash-boards in.
[3/] Maximum Lake Eleanor storage with all flash-boards in.
[4/] Available capacity does not take into account current DSOD storage restrictions.

Hetch Hetchy System Precipitation Index [5/]

Current Month: Spring conditions remained relatively wet through May. Monthly precipitation was above normal with two main precipitation events. The May six-station precipitation index is 2.41 inches, or 171.5% of the average index for the month. The precipitation gauge at Hetch Hetchy received 3.16 inches of precipitation.

Cumulative Precipitation to Date: The accumulated six-station precipitation index for water year 2010 is 39.2 inches, which is 110.2% of the average annual water year total, or 115.9% of the season-to-date precipitation. While weather conditions have been cool, overcast, and generally wet, the water year lacked significantly large storm events. Instead, precipitation this winter and into the spring has been relatively consistent. The water-year cumulative precipitation for the Hetch Hetchy gauge is shown in Figure 1 in red, and is above the median line.

[5/]The precipitation index is computed using six Sierra precipitation stations and is an indicator of the wetness of the basin for the water year to date. The index is computed as the average of the six stations and is expressed in inches and in percent.

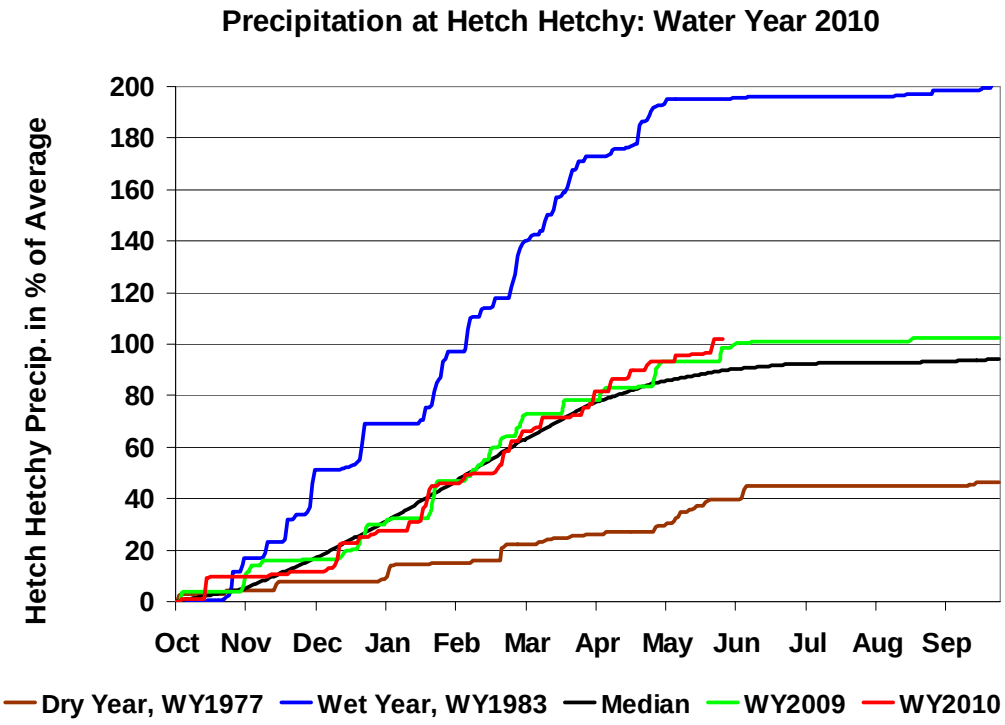


Figure 1: Water year 2010 cumulative precipitation received at Hetch Hetchy Reservoir through the end-of-month May. Precipitation curves for wet, dry, median, and WY 2009 years for the station at Hetch Hetchy are included for comparison purposes.

Tuolumne Basin Unimpaired Inflow

Unimpaired inflow to SFPUC reservoirs and the Tuolumne River at La Grange as of May 31st is summarized below in Table 2. Due to the relatively cool weather in May, the May inflows to all reservoirs lagged below normal conditions. The April and May combined inflows accounted for about 40% of the total projected April thru July inflows (Figure 3). Typically 65% of the April thru July runoff has occurred by June 1st.

Table 2
Unimpaired Inflow
Acre-Feet

	May 2010				October 1, 2009 through May 31, 2010			
	Observed Flow	Median[6]	Average[6]	Percent of Average	Observed Flow	Median[6]	Average[6]	Percent of Average
Inflow to Hetch Hetchy Reservoir	147,721	219,386	221,863	66.6%	350,400	446,227	443,256	79.1%
Inflow to Cherry Reservoir and Lake Eleanor	110,196	123,301	124,140	88.8%	295,818	328,099	332,777	88.9%
Tuolumne River at La Grange	391,978	545,088	451,040	86.9%	712,498	799,899	884,725	80.5%
Water Available to the City	147,737	202,803	214,418	68.9%	280,411	463,292	541,293	51.8%

[6] Hydrologic Record: 1919 – 2005.

Hetch Hetchy System Operations

Due to the January and February SJPL shutdown, slightly below-normal monthly inflow for the past few months, cool temperatures and low SJPL demands, Hetch Hetchy storage was relatively high in early May. Draft from Hetch Hetchy Reservoir in May totaled 208,984 acre-feet of water. These included draft made to support minimum streamflow releases and SJPL deliveries, reservoir management through powerdraft to increase available storage capacity, as well as high daily release to support ecological research. This research work will continue during June to evaluate the ecological and geomorphic effects of different flow magnitudes. With delayed snowmelt inflows in May, Hetch Hetchy storage was below 60% of capacity on June 1.

A total of 58,977 acre-feet of power draft was made at Cherry Reservoir to increase available storage to capture spring snowmelt runoff. Power draft made from Cherry Reservoir in May supported the City's Municipal load, District Class 1, other loads or accounts, and sales. Pumping from Eleanor to Cherry ceased in mid-April, and no water was transferred from Eleanor to Cherry in May.

Local System Operations

The Sunol Valley Water Treatment Plant average production rate for the month was 56 MGD. The Harry Tracy Treatment Plant rate averaged 31 MGD.

Local System Water Delivery

Water delivery rates for the month averaged 221 MGD. This is a 21% increase over Aprils' average rate of 183 MGD. The increased delivery rate signals the beginning of higher summer water consumption.

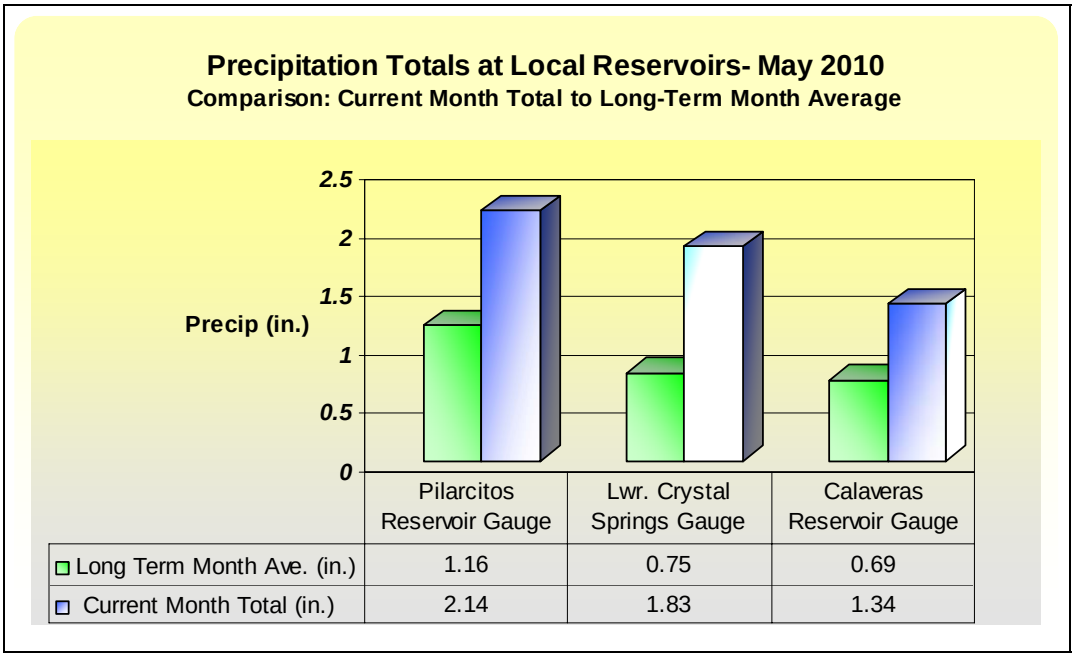


Figure 2. Precipitation comparison at three local reservoirs – May 2010.

Local Precipitation

Late May rains boosted precipitation totals across the East Bay and Peninsula watersheds. Over twice as much rain was measured compared to the long-term average for the month (Figure 2)

Despite above average rainfall in April and May, the *year-to-date* precipitation total across the East Bay and Peninsula watersheds was 107% of the normal year-to-date accumulation. Rainfall totals are presented in Table 3.

Table 3
Precipitation Totals At Three Local Area Reservoirs For May 2010

Reservoir	Month Total (inches)	Percentage of Normal for the Month	Year To Date [7] (inches)	Percentage of Normal for the Year-to-Date [7]
Pilarcitos	2.14	184 %	39.45	101 %
Lower Crystal Springs	1.83	244 %	27.82	103 %
Calaveras	1.34	194 %	25.44	117 %

[7] Since July 1 2009

Snowmelt and Water Supply

The cool weather patterns experienced over the past two months are atypical of a spring season in the Sierra Nevada. Typically the spring months have periods of temperatures into the mid 60's during late May with night time low temperatures remaining above freezing. Throughout April and May, night time temperatures dropped below freezing which significantly cooled the mountain snowpack and delayed snowmelt. This weather pattern has limited the amount of snowmelt runoff which occurred so far this season. The snowmelt runoff which has occurred this season has been from the 130%-of-normal low-elevation snow.

As of June 1st, minimum temperatures have begun to remain above freezing and the snowpack is reaching isothermal conditions. The current mountain snowpack is closer to mid-April conditions than to a June 1st snowpack. This indicates that once the warm temperatures and bright June sun occur consistently, significant snowmelt will begin and inflows to the Up Country reservoirs will be above average.

The weather forecast over the next 5 days is calling for a warming trend, with temperatures reaching the high 90's in the Central Valley and the mid-60's in the high country. Peak inflows to all the reservoirs are likely to occur around June 8. The reservoirs are being managed to capture this inflow, to maintain reasonable release rates below the reservoirs, and to support ecological studies. The current long-term seasonal climate forecast for the next three months is calling for equal chance of above- or below-normal precipitation conditions and above-normal temperatures. This forecast is based on the evolving La Niña signal in the atmospheric and oceanic conditions and projections for La Niña conditions to occur during the upcoming year. While the ENSO signal does have significant regional impacts on climatic conditions, it does not have a direct correlation to Tuolumne River hydrologic conditions.

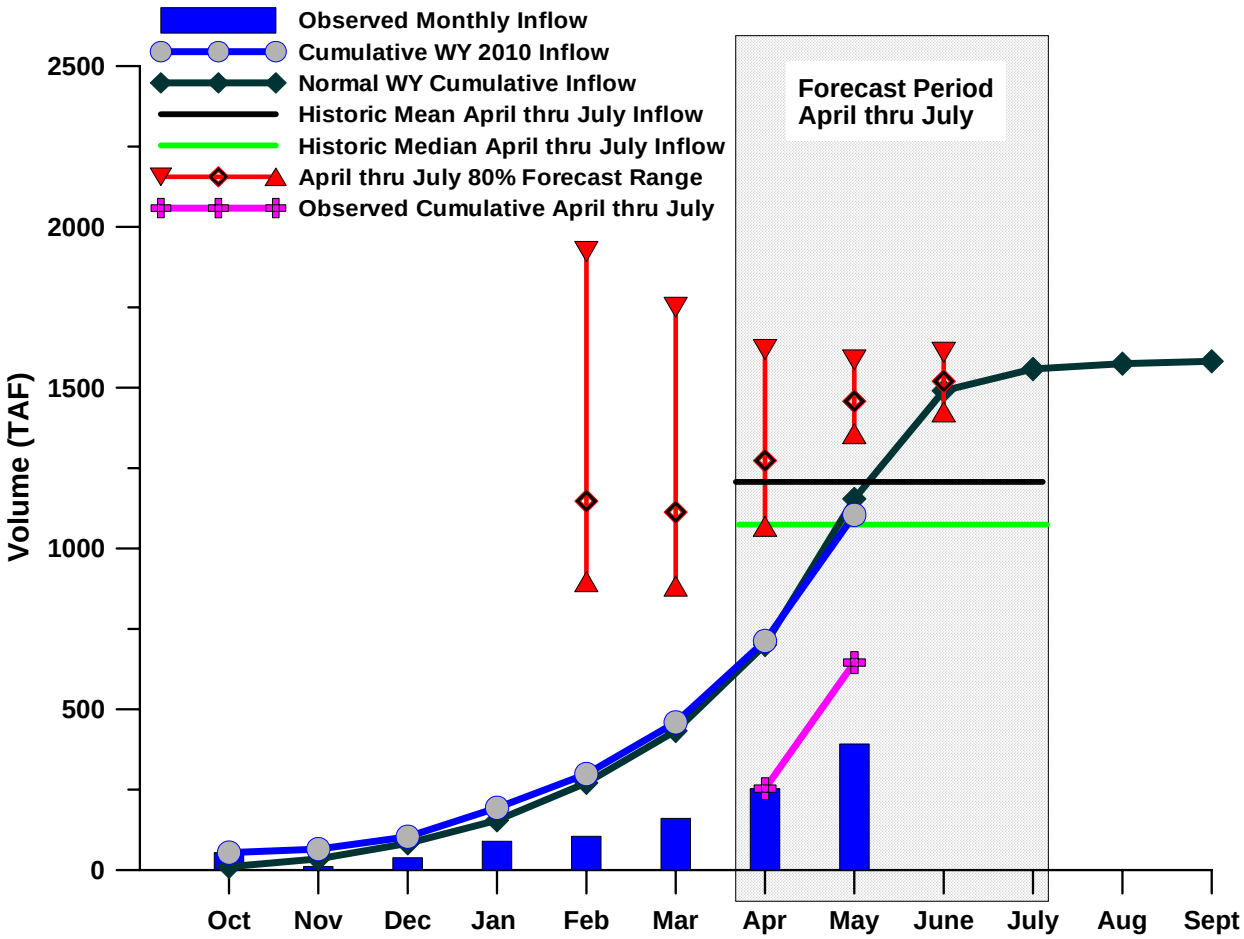


Figure 3: Water Year conditions for the Tuolumne River at La Grange and for the 80% water supply forecast range (triangles represent the 90% and 10% forecasts, open diamonds represent the median forecast).

Using the season's measured snow course and precipitation data, the volumetric forecast procedure was executed. The forecast indicates that the median amount of runoff that may occur this year is about 141% of the long-term median (Figure 3). The median forecast of April-to-July runoff is about 1,520 TAF, compared to the long-term median runoff for the April-thru-July period of 1,080 TAF. For natural flow at La Grange, there is an 80 percent chance that the April-to-July natural runoff will be between 1,425 TAF and 1,610 TAF.

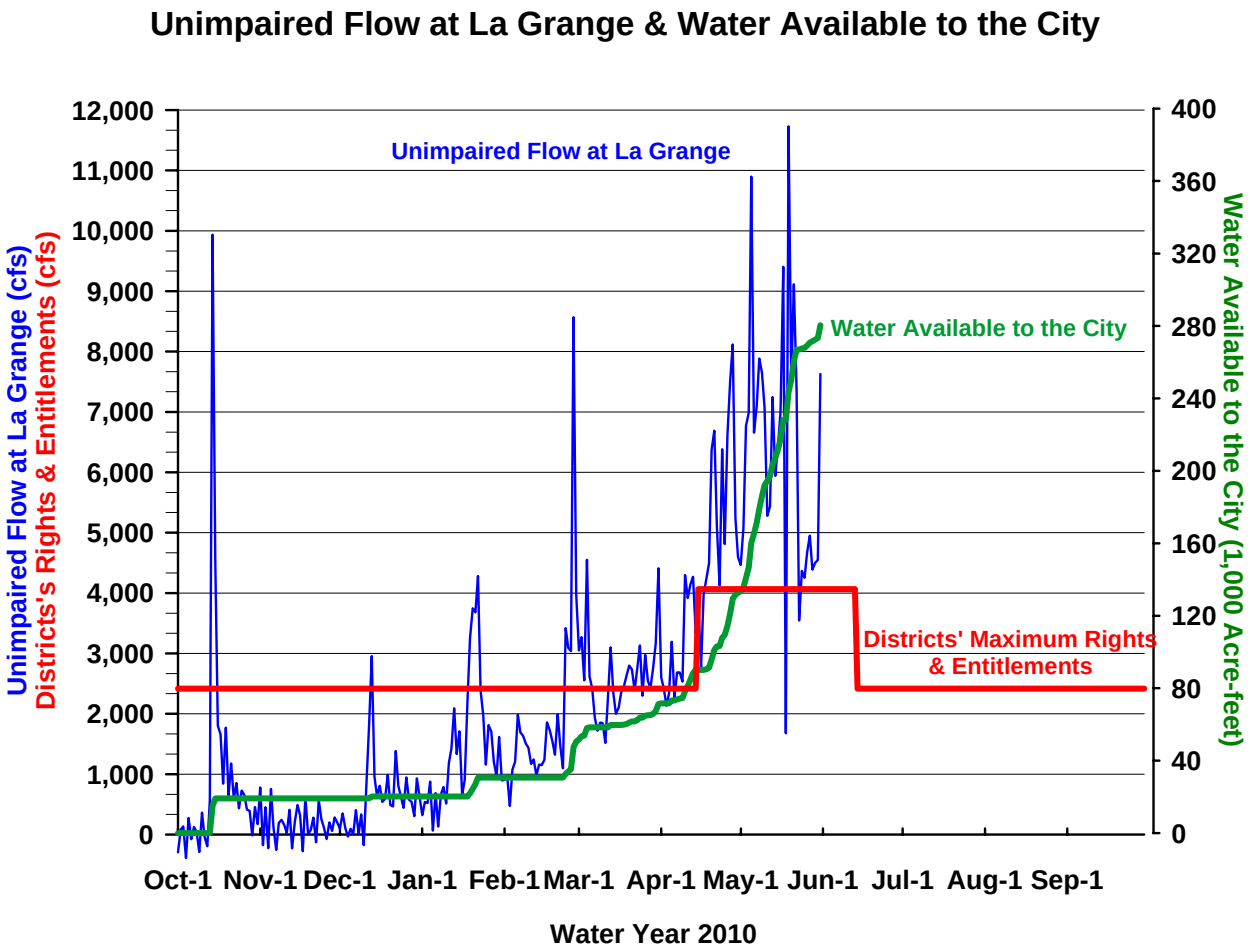


Figure 4: Calculated unimpaired flow at La Grange and the allocation of flows between the Districts and the City. Water available to the City for the period from October 1st, 2009 through May 31st, 2010 was 280,411 acre-feet.

cc	HHWP Records	Dufour, Alexis	Jue, Tyrone	Patterson, Mike
	Briggs, David	Gibson, Bill	Kehoe, Paula	Ramirez, Tim
	Cameron, David	Griffin, Dave	Levin, Ellen	Ritchie, Steve
	Carlin, Michael	Hale, Barbara	Mazurkiewicz, Adam	Rydstrom, Todd
	Chester, John	Hannaford, Margaret	McGurk, Bruce	Samii, Camron
	DeGraca, Andrew	Harrington, Ed	Meier, Steve	Sandkulla, Nicole
	Dhakal, Amod	Jensen, Art	Nelson, Kent	Tsang, Michael

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **David Dickson, General Manager**

Agenda: **June 8, 2010**

Report Date: June 4, 2010

Subject: **Kennedy/Jenks Draft Preliminary Design Report for Denniston Water Treatment Plant Pretreatment & Washwater System Improvement Project**

Recommendation:
None. Report presented for information and discussion only.

Background:
Beginning in 2008, Kennedy/Jenks has been assisting the District with evaluating and designing improvements to the Denniston Water Treatment Plant (DWTP) which will enable the plant to treat higher turbidity water from Denniston Creek. The Department of Public Health currently prohibits operation of the plant at raw water turbidities greater than 20 NTU (nephelometric turbidity units), so it must be shut down during and after rain events that increase turbidity in the creek. This problem has been exacerbated by the loss of the storage capacity in Denniston reservoir, which allowed solids in the raw water to settle before reaching our intake.

Kennedy/Jenks evaluated several pretreatment processes that could be incorporated into the existing DWTP facilities to permit treating more of its available source water. Discussions of the processes evaluated and the recommended project are included in the Denniston Creek WTP Pretreatment Alternatives Feasibility Report (K/J 0868026.00) dated March 2, 2009. Staff presented and discussed this report with the Board at the April 14, 2009 meeting. At that meeting, the Board authorized execution of a contract with Kennedy/Jenks to perform a preliminary (30%) design of the DWTP improvements at a cost of $96,500.

Kennedy/Jenks has completed the preliminary design and submitted a report dated March 16, 2010 (attached). The report includes an updated project cost estimate of $3.9 million, including engineering. Staff discussed the report and cost estimate with the Facilities Committee on March 24, 2009.

Kennedy/Jenks Consultants

303 Second Street, Suite 300 South
San Francisco, California 94107
415-243-2150
FAX: 415-896-0999

Denniston Creek Water Treatment Plant Improvements

Preliminary Design Draft Report

16 March 2010

Prepared for

Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019

K/J Project No. 0868026*01

Table of Contents

Table of Contents (cont'd)

List of Tables

List of Figures

List of Appendices

Executive Summary

The recommended Denniston Creek Water Treatment Plant (DCWTP) improvements include:

1) two 10-feet diameter contact clarifier (CC) pretreatment units,

2) two 35-feet diameter waste washwater clarifier-thickener units, and

3) three sludge drying beds.

The Basis of Design for the recommended improvements is summarized in Section 3.2 and on, and a hydraulic profile of the new and existing water treatment units at the DCWTP is shown on, Sheet G-3. A process flow diagram of the new and existing treatment processes, including the waste washwater and solids handling system improvements is shown on Sheet G-4. The locations of the recommended improvements at the DCWTP site are shown on Sheet C-1. Plan and Section views of the new CC pretreatment units are shown on Sheet M-2. The new pretreatment units, and the new waste washwater and solids handling system improvements and the associated instrumentation and control valves are shown on Process and Instrumentation Diagram (P&ID) Sheets I-2 and I-3, respectively.

Each CC pretreatment unit would be a 10-feet diameter pressure vessel rated for 100 pounds per square inch (psi) service. Ancillary pretreatment system components will include three regenerative turbine air supply blowers, and a 16-feet diameter 30-feet tall bolted-steel CC washwater (CCWW) supply tank. The CCWW supply tank will be tall enough to permit using its top 10-feet of storage capacity to wash the CCs without having to use pumps to provide the pressure required to wash the CC media.

The spent filter backwash water manifold will be modified to permit discharging the waste filter backwash water through a new California Department of Public Health-compliant air gap into a stand pipe. The stand pipe will permit discharging both the CC waste washwater and spent filter backwash water via a new waste washwater (WW) pipeline to the new washwater clarifier-thickener basins (WWR Basins). The bottom of the new WWR Basins will be located at an elevation that permits discharging the accumulated sludge solids by gravity to any of the three sludge drying beds. A sludge collection unit for the second washwater clarifier-thickener can be included as an additive (or deductive) bid item in the design documents.

The sludge drying beds will be installed at an elevation that permits discharging “filtrate” water from any of the three sludge drying beds’ underdrain collection systems and supernatant collection unit to the existing WWR Pond No. 1 via a new pipeline. The existing wash water drain (WWD) pipeline will serve as part of a backup WW system that will discharge WW to WWR Pond No. 1 if both of the new WWR Basins are out of service.

The estimate of probable construction cost for the recommended improvements is about $3,240,000. Based on the geotechnical report included in Appendix B, the soils at the DCWTP will require removing at least 2 or 3 feet of material from the bottom and 1 foot from the side slope in WWR Pond No. 2 to reach soil that has suitable bearing capacity. The geotechnical engineering report recommends that a geo-membrane material be placed between the existing soil and the engineered fill used to create the area for the new WWR Basins and sludge drying

beds. The geotechnical report also indicates that 2 feet of the soil material on the northeast side of the existing Filter Building should be removed and replaced with engineered fill to provide a suitable bearing capacity for the two CC pretreatment units and their associated CCWW Supply Tank. The estimated cost of the recommended site work to remove and replace unsuitable soil material that could cause liquefaction and/or significant settlement during a strong earthquake is about 16 percent of the estimated project cost, or about $524,000, including sales tax, contractor markups, and cost escalation to mid-point of construction.

Section 1: Introduction

This section provides a general description of the Denniston Creek Water Treatment Plant (DCWTP) Improvements Project (Project). More detailed information on subjects introduced in this section is contained in subsequent sections and appendices of this Preliminary Design Report (PDR).

1.1 Background

The Coastside County Water District (District) owns and operates two surface water treatment plants, the DCWTP and the Nuñes Water Treatment Plant (NWTP), that supply potable water to the District's customers. The NWTP treats local surface water and surface water purchased from the San Francisco Public Utilities Commission (SFPUC). The DCWTP was designed to treat up to 1,000 gallons per minute (gpm) of local surface water from the Denniston Creek watershed and groundwater from an area northeast of Half Moon Bay, California. The DCWTP reportedly produced more than 250 million gallons (MG) annually in the past, but the District currently limits the DCWTP flow rate to less than 700 gpm and as a result produces less water than it reported in the past. District staff has indicated that the net actual DCWTP treated water production may have been less than reported due to frequent filter backwashes and failure to account for filtered water used to backwash the filters while treating high turbidity raw water.

The source water turbidity can be too high for the existing DCWTP direct filtration treatment process and the washwater handling system at the DCWTP to treat efficiently during winter-time high flow events in Denniston Creek, when the local surface water supply should permit operating the DCWTP at its design capacity. District staff indicates that it is not able to treat the local, available Denniston Creek water when raw water turbidity is greater than 15 NTU, and hence, must purchase water from the SFPUC and treat this water at its NWTP to meet demands during high turbidity events when water is flowing in Denniston Creek. The District currently pays the SFPUC approximately $1,500 per MG of raw water and treats the raw water at its NWTP. Discussions with District staff indicate that the SFPUC has informed the District that its cost of raw water will increase by a factor of 3 in the next five to six years due to the cost of SFPUC's on-going improvements projects to its Hetch Hetchy water system. The District recognizes that the Denniston Creek water supply is a valuable resource that could provide more local water for the District thereby permitting the District to increase its use of District-owned source water to reduce its long-term operating cost.

Kennedy/Jenks evaluated several pretreatment processes that could be incorporated into the existing DCWTP facilities to permit treating more of its available source water supply from the District's Denniston Creek Reservoir. Discussions of the pretreatment processes evaluated and the recommended project is included in the Denniston Creek WTP Pretreatment Alternatives Feasibility Report (K/J 0868026.00) dated 2 March 2009.

Kennedy/Jenks also evaluated alternatives to improve the DCWTP's washwater recovery (WWR) and solids handling facilities. Improvements to the existing spent washwater handling system at the DCWTP is needed to permit treating a larger volume of source water with higher turbidity and to provide the ability to handle and dry sludge solids on site. A summary of the

evaluation and description of the recommended alternative is provided in WWR System Improvements Letter Report (K/J 0868026.01) dated 29 June 2009.

1.2 Project Objectives

The purpose of the DCWTP Improvements Project is to increase the volume of local surface water from the Denniston Creek watershed that DCWTP can treat while maintaining compliance with current and foreseeable future water quality/water treatment regulations. The objectives for the DCWTP improvements include:

- Restore DCWTP production capacity to at least 250 million gallons (MG) per year.
- Permit treating Denniston Creek source water when the source water turbidity is as high as 50 NTU.
- Permit recycling all the spent washwater and eliminate the need to discharge spent washwater to Denniston Creek.
- Provide the ability to handle and dry sludge solids on site at the DCWTP.

1.3 Authorization

The PDR was authorized by the District under its Agreement for Professional Services dated 14 April 2009.

1.4 Codes and Standards

The latest editions of the applicable codes and standards, as amended by San Mateo County Amendments and Ordinances and/or Coastside County Water District standards associated with the codes and standards, will be used in the Project design:

1.5 Survey Datum and Site Control

A topographic survey of the DCWTP site, including the 1.5 MG filtered water/treated water tank located on the hillside above the DCWTP treatment facilities, was conducted by Sandis, Inc. on 4 March 2010. The elevations cited in the PRD are based on the site survey prepared by Sandis, Inc., and differ slightly from the elevations shown on the original DCWTP design drawings. The elevations cited in the prior Feasibility Studies were based on the design drawings. Hence, some of the elevations included in the PDR differ slightly from the elevations used in the prior studies due to the more recent survey information.

1.6 Geotechnical Information

A Geotechnical investigation of the soils at the DCWTP site was performed by Cleary Consultants on 3 February 2010. A copy of the Geotechnical Investigation Report is included in Appendix A.

Based on information in the draft geotechnical report regarding a “foul smelling odor” in soil encountered at 14.5 feet depth at the boring made near the northwest corner of Pond No. 2. Discussions with the geotechnical engineer indicate that the cost to have a laboratory analyze the soil sample to determine whether this material can be disposed of in a Class 2 or a Class 3 landfill will be about $1,500. The sample could be tested during the design phase, or the design documents could indicate that if this material is exposed during construction that the District (or the Contractor) will collect a sample and have it analyzed.

The District should continue monitoring the groundwater levels in the two observation wells located near the northwest and southeast corners of WWR Pond No. 2 at the locations shown on Sheet C-1 at a monthly frequency to determine whether the groundwater table will require dewatering during construction and/or could interfere with sludge dewatering.

Section 2: Pretreatment System

This section addresses the preliminary design issues associated with the pretreatment process.

2.1 Summary of Recommended Facilities

The recommended pretreatment process to meet the District's goals is granular media contact clarifiers (CCs) with the CC media installed in pressure vessels. The pretreatment system would include two vertical CC pressure vessels. Each CC vessel would have capacity to include at least 48-inches depth of buoyant or non-buoyant media. The two new pretreatment process units would be followed by final filtration using the three existing granular media pressure filters.

Based on prior pilot studies and operational evaluations of CCs treating high turbidity source water and the current California Department of Public Health (DPH) California Surface Water Treatment Alternative Filtration Technology Demonstration Report, dated June 2001, a combination of contact clarification-filtration (CC-F) should be eligible for 2.5-log *Giardia* removal credit and 2-log virus removal credit as long as the filtered water turbidity is less than 0.2 nephelometric turbidity units (NTU) in at least 95 percent of the filtered water samples collected during each month. It should be noted that all of the existing contact clarifier-filter systems are in open treatment units, so the DPH may require a demonstration that the same combination of pretreatment and filter processes installed in pressure vessels provide the same filtered water performance before allowing the pressure CC-F system to receive the same *Giardia* and virus removal credits. Specific test criteria and operational data that will be required to demonstrate equivalent performance should be discussed with the District's DPH District Engineer as part of the project planning process.

The CCs would have an air wash system that includes air blowers to supply air for both the air wash and combined air-water wash steps.

2.2 Preliminary Design Criteria

The Pretreatment Alternatives Feasibility Report recommended installing two 10-feet diameter CC pressure vessel units. The pressure vessels would be 12-feet tall. Each of the two 10-feet diameter CCs would have 78.5 square feet of clarification cross sectional area, which would provide pretreatment capacity for flow rates as high as 785 gpm with one vessel in service and the other vessel off line, and 1,560 gpm when both vessels are in service. The previously recommended two 10-feet diameter pressure vessel alternative would permit operating the DCWTP at its current operating capacity (1 MGD) while one vessel is off line for a CC wash.

Alternatively, two 8-feet diameter CCs could be installed to reduce the volume of wash water required. Each of the larger 10-feet diameter CCs requires about 55 percent more wash water per CC wash than an 8-feet diameter CC would require. Additionally, the air wash air supply for the larger 10-feet diameter CCs would also be about 55 percent greater than air wash air required for the 8-feet diameter CCs. However, since the 8-feet diameter CCs have a cross-sectional area of about 50 square feet, the maximum plant flow rate would be limited to 500 gpm when one CC is being washed. Two 8-feet diameter CCs would provide pretreatment

capacity for a flow rate as high as 1,000 gpm when both vessels are in service, but the flow rate would have to be limited to 500 gpm when one of the two vessels if off line.

If the District elects to add a fourth pressure filter in the available space at the DCWTP to increase treatment capacity from 1,000 to 1,400 gpm in the future, two 10-feet diameter CCs would provide the required pretreatment capacity. Alternatively, installation of a third 8-foot diameter CC would be necessary to provide the required pretreatment capacity.

An updated CC manufacturer's budgetary equipment cost estimate for two 10-feet diameter CCs and its associated CC wash water and air wash supply system is $400,000. The same manufacturer's budgetary cost for two 8-feet diameter CCs and their associated wash water and air wash systems indicates that the equipment costs (without including sales tax, installation, contractor's markups) is $365,000. The current cost (2010 dollars) to add one 10-feet diameter CC (in the future) is $160,000 and to add two 8-feet diameter CCs (also in the future) is $250,000, respectively, without including the adjustment factors to add sales tax, for Contractor markups and a planning level contingency used in the other cost estimates. If the same cost adjustments are included for sales tax, installation, contractor mark-ups, and a conceptual level cost estimate contingency, the estimated cost difference between adding one 10-feet diameter unit and two 8-feet diameter units in the future is about $200,000.

The main advantage associated with installing two 10-feet diameter CC is that one CC would provide sufficient pretreatment capacity to operate the DCWTP at its current maximum treatment capacity. The major disadvantage of the larger 10-feet diameter CC units is that the CC wash water (CCWW) system and air wash system would have to be larger to provide about 55 percent more CCWW and air wash air than the smaller 8-feet diameter CCs require. The initial cost of the smaller 8 feet diameter CCs and the associated equipment is only $35,000 less than the initial cost (without including sales tax, Contractor markups, and planning level contingency) of two 10-feet diameter CC and the same associated equipment. Therefore, we recommend that the pretreatment improvements include two 10-feet diameter CCs rather than two 8-feet diameter CCs, since,

1) the two larger CCs would provide an additional 55 percent pretreatment capacity and the larger CCs would permit operating the DCWTP at its current maximum operating capacity with one CC off line, and

2) the initial cost of two 10-feet diameter CCs and the associated CCWW supply system and air wash system components is less than 10 percent higher than the cost of two 8-feet diameter CCs.

The CC pretreatment system design criteria is summarized in Table 1 below.

Table 1: Pressure Contact Clarifier Design Criteria

Item	Units	Design Value
Process Units	number	2
Capacity per Unit	gpm	785
Diameter	ft	10
Surface Area	sf	78.5
Surface Loading Rate (max)	gpm/sf	10.0
Surface Loading Rate (avg)	gpm/sf	3.0
Clarifier Media Depth	inches	48
Wash Rate		
Water	gpm/sf	10
Air	SCFM/sf	6 - 8
Waste Washwater Volume		
Waste Volume per Wash	gallons	8,000
Washes per Clarifier per Day (Max)	number	6
Total Waste Washwater Volume	gallons	96,000
Airwash Blowers	number	3 (2 + 1 Standby)
Airwash Blower Capacity per Unit	SCFM	300
Airwash Blower Motor	HP	15

2.3 Contact Clarifier Washes

Each of the two CCs will require periodic washes to remove accumulated solids captured in the 48-inch deep bed of granular (upflow) media to restore the CC's capacity to remove coagulated material from the water. It should be noted that CCs are "washed", rather than "backwashed", using the same coagulated raw water that is being treated, rather than using clarified water to remove the accumulated solids from the media. The CCWW flows up through the CC media in the same direction that the coagulated raw water flows when it is being treated. (Hence, the CC media is cleaned by being "washed" rather than "backwashed".) The primary difference between normal CC operation and a CC wash is that air is introduced below the media to agitate the CC media to shear the accumulated solids from the media surface. The CCWW flow rate should provide a CC loading rate between 10 and 12 gpm/ft^2. The CC washes include both an air only media agitation step and a combined air and water media "wash" step. The third (last) CC wash step is a water only "rinse" that completes flushing the solids sheared from the media. This step is functionally similar to a filter-to-waste step. The solids that are sheared from the CC media that are present in the waste CCWW will discharge to the new washwater handling system for treatment prior to returning the clarified water to the head of the water treatment process.

The CCs require a supply of low pressure air (at about 8 to 10 psi). Two low pressure air supply blowers (two lead and one standby unit), each with 15 HP motors, would be installed in the existing Filter Building to provide a reliable supply of air for the CC air wash and the combined air and water CC wash steps. A stainless steel air wash supply pipeline and manifold would connect the two air supply blowers to the two CCs.

The air only and combined air and water wash steps will require reducing the CC vessel's operating pressure from about 100 psi to atmospheric pressure. The coagulated raw water would be delivered to each CC via two separate pathways. During normal pretreatment operation, the coagulated water will be delivered to each CC pretreatment vessel through a flow meter and flow rate control valve. When the headloss through the CC media increases to between 3 and 4 feet, the CC will be removed from service to wash the media. At the start and during the CC wash sequence, the CCI flow isolation valve will close and raw coagulated water will be delivered from the CCWW Supply Tank to the CC being washed as shown on Sheet I-2 of the Preliminary Design Drawings. The CCWW Tank and Pump Station will supply clarified water to the CC at about 10 psi. The lower CC operating pressure during a CC wash is required to permit operating the air wash blowers and discharging the waste air from the top of the CC vessel during both the air only agitation step and also during the combined air and water wash step.

The flow rate through a CC during both the combined air and water wash and the water only rinse steps should provide a media loading rate of at least 8 gallons per minute per square foot (gpm/ft^2) and preferably 10 gpm/ft^2. The corresponding CC wash water supply flow rate should be between 630 and 785 gpm during both the combined air-water wash and the water only rinse steps. Discussions with District staff indicate that the DCWTP flow rate can be as low as 300 gpm. District staff also indicates that the DCWTP filter performance is adversely impacted by minor changes in the filtration rate.

Although the particles remaining in the clarified water produced by the CC pretreatment process should be more filterable than the particles produced by the existing coagulation and flocculation pretreatment process at the DCWTP, we recommend that the pretreatment system improvements include a separate CCWW supply system. A separate CCWW supply system would permit minimizing changes in the clarified water flow rate during each CC wash, thereby maintaining optimal filter operating conditions and avoiding changes in the flow rate that can adversely impact filter performance. In addition, it should be noted that since coagulated raw water is normally used to wash a CC and the DCWTP flow rate can be as low as 300 gpm, the coagulated water flow rate could be too low to provide the recommended CC media wash flow rate. Also, using coagulated water for a CC wash would divert most or all of the coagulated water during each CC wash, thereby resulting in significant changes in the clarified water flow rate to the existing filters during each CC wash. Therefore, a supplemental source of CCWW should be included as part of the pretreatment system improvements so that the clarified water flow rate will remain relatively constant during each CC wash.

2.3.1 CC Washwater Supply Alternatives

Three alternative CCWW supply strategies were evaluated. Each alternative includes a CCWW Supply Tank that would be filled using a small portion of the raw coagulated water or the clarified water. Since District staff indicates that changes in the filtration rate can have a measurable, adverse impact on filter performance, the CCWW supply would be transferred to the CCWW Tank at a relatively low, 75 gpm, flow rate during a 110 minute period (or during a longer period at a lower flow rate when the CC wash frequency is lower than 6 times per day) to minimize flow rate changes that could impact on the filters' performance. The raw water pumps' control strategy could be modified to increase the raw water flow rate during the period(s) while some of the raw water or the clarified water is being transferred to the CCWW Tank to further

minimize changes in the clarified water flow rate. The CCWW Tank could be filled during a longer period at a lower fill rate to further reduce changes in the clarified water flow rate if the minimum duration between CC washes permits.

The first CCWW supply alternative would include installing a 10,000 gallon capacity CCWW Supply Tank at an elevation that permits storing and using clarified water to supply CCWW to each CC by gravity. The bottom of the CCWW Supply Tank should be located at least 10 feet above the top of the CC vessels to provide adequate head for CC washes. The hillside east of the DCWTP treatment equipment site is relatively steep and installing a tank with its floor located at an elevation high enough to supply the CCWW would require preparing a level area that is about 20 feet in diameter. The estimated additional cost to create a level area on the hillside above the DCWTP facilities where a CCWW Tank should be installed would be at least as costly as the third alternative discussed below. It should be noted that although this tank would not be expected to require more than annual inspection, access to the tank would be significantly more difficult than at an at-grade location. Due to the steep slope of the hillside where the tank would have to be installed and both difficulty constructing a tank on the hillside and also providing safe access, this alternative does not appear to be suitable for further consideration.

The second CCWW supply alternative would be to install a 10,000 gallon wash water supply tank at the same elevation as the CCs. The CCWW supply would have to be pumped to the CC being washed. This alternative would require installing two CCWW supply pumps with capacity to supply at least 800 gpm at about 30 feet of dynamic head. The two pumps would provide lead and standby service and would be installed adjacent to the 10,000 gallon WW Supply Tank. The estimated cost to install two 800 gpm capacity pumps on a concrete slab, and the associated valves and accessories, pump motor starters and controls is about $135,000.

The third alternative would be to install a 30-feet tall CCWW Tank, with about 40,000 gallons capacity, adjacent to the two CCs. The top 6 to 8 feet of water stored in this tank would provide adequate pressure for CC washes without requiring that CCWW pumps be included to provide the required CCWW supply pressure. The estimated additional cost to install a 30-feet tall tank rather than a 10-feet tall tank, including the tank pad, piping, valves and accessories, is about $75,000.

Based on the estimated additional cost of these three alternatives, it appears that constructing a 30-feet tall CCWW Tank to wash CC media is the best alternative.

2.4 Site Layout

Based on the available space on the north side of the Filter Building and the Geotechnical Report for the DCWTP site, it is recommended that the two pressure CCs be installed closer to the Filter Building than was shown in the Pretreatment Alternatives Feasibility Report. Sheet M-2 of the Preliminary Design Drawings shows the proposed layout for the pretreatment units. The proposed DCWTP site plan showing the new pretreatment units and their associated CCWW Storage Tank are shown on Sheet C-1.

2.5 Contact Clarifier Hydraulics

The treated water (TW) tank on the hillside to the east of the Filter Building is at an elevation approximately 170 feet above the DCWTP Filter Building. The Denniston Creek (source water) Pump Station (DCPS) is located about 1,900 feet from the DCWTP and is about 60 feet lower than the DCWTP site. Based on the two existing raw water pump's capacity and information provided by District staff, the existing raw water pumps should have capacity to handle the 10 feet of maximum additional headloss through the new CC units. A hydraulic profile is shown on Sheet G-3 of the Preliminary Design Drawings.

Section 3: Washwater Recovery and Solids Handling System

The recommended contact clarification pretreatment process described in Section 2, in conjunction with the existing pressure filters at the DCWTP, is expected to generate about the same amount of WW per day as that currently produced when the three pressure filters are treating source water with turbidity between 1 and 15 NTU. The amount of solids captured by the CC and filters will increase when the source water turbidity is between 15 and 50 NTU since the higher turbidity raw water will contain more solids that have to be removed by the treatment processes. The coagulant and coagulant aid polymer dosages are expected to be higher when raw water turbidity is higher than 15 NTU, thereby further increasing the amount of solids that have to be removed from the waste washwater and dried prior to off site disposal.

Based on discussions with District staff, the existing washwater recovery (WWR) system is already stressed when the raw water turbidity is greater than 15 NTU, partially because the filter backwash frequency (and the amount of waste washwater generated during each 24 hour period) has to be increased to maintain filter performance. The existing spent washwater system cannot handle the filter backwash volume and its associated solids when raw water turbidity exceeds 15 NTU. Most of the solids settle and accumulate at the bottom of the two existing washwater recovery ponds (WWR ponds). District staff indicates that the accumulated solids impact the recycle water turbidity, especially shortly after the filters are backwashed. In addition, the DCWTP currently does not include sludge solids drying facilities, so the wet solids must be hauled to the NWTP for drying.

The District's DCWTP improvements goal includes identifying cost-effective improvements to the existing spent washwater handling system that will enable the District to:

1. Restore DCWTP production capacity to at least 250 million gallons (MG) per year,
2. Permit treating higher turbidity source water from Denniston Creek,
3. Permit recycling all the spent washwater and eliminate the need to discharge spent washwater to Denniston Creek, and
4. Provide the ability to handle and dry sludge solids on site.

The recommended DCWTP washwater and solids handling system improvements include two new WWR Basins and three sludge drying beds. These improvements should enable District staff to comply with federal and State current and new drinking water quality regulations and guidelines. A description of the applicable regulations and guidelines and the WWR System improvements are summarized in the Washwater System Improvements Feasibility Report included in Appendix B.

The California Cryptosporidium Action Plan (CAP) includes a 2 NTU recycled water turbidity limit and also limits the recycle water return rate to 10 percent or less of the plant flow rate. The Filter Backwash Recycling Rule (FBRR) requires that filter backwash water, which is defined in the Rule to include: spent filter backwash water, sedimentation basin sludge (contact clarifier washwater in this case), and filtrate from a dewatering process; be blended with the raw water

at a location ahead of the first treatment step, or that a report be submitted to the primacy agency (DPH) explaining how returning the recycled water at another location does not impair the treatment process' performance. The primary objective of both the CAP and FBRR includes minimizing the risk of reintroducing pathogenic microorganisms, including *Giardia* cysts and *Cryptosporidium* oocysts into the water being treated. The pathogens that are removed from the raw water are typically present in significantly higher concentrations in spent washwater streams than they are in the source water supply. The objective of the CAP and FBRR is to reduce the risk that pathogens previously removed from the water will be returned to challenge the water treatment facilities a second time.

In addition, if the washwater produced by the water treatment processes is discharged off site (to Denniston Creek), it must be disposed of in a manner that complies with requirements regarding off-site disposal of spent washwater from water treatment plants (WTPs) imposed by the San Francisco Bay RWQCB, which has jurisdiction for the DCWTP. The DCWTP has discharged spent filter backwash water from the two existing WWR ponds at the DCWTP site in the past. Any water discharged from either of the two WWR ponds now must be disposed of in accordance with the District's NPDES permit. Therefore, the spent washwater must either be treated and returned to the head of the treatment process in accordance with the FBRR and CAP, or discharged in compliance with the District's NPDES permit.

Based on discussions with District staff, the washwater and solids handling system improvements will be designed to permit recycling all of the spent washwater, in accordance with the CAP and FBRR criteria, thereby eliminating the need to discharge water off site. The WWR system improvements will be designed to produce recycled water that complies with both the 2 NTU turbidity goal and 10 percent flow rate limit in the CAP, and the reclaimed washwater will be recycled to the head of the DCWTP in compliance with the FBRR. Discussions with District staff indicate that the preliminary design report (PDR) should include the waste washwater and its associated recycle water improvements as well as the solids handling system improvements. The improvements to monitor an off-site waste washwater discharge will not be included as part of the current DCWTP improvements project.

3.1 Summary of Recommended Facilities

The recommended improvements include two new circular concrete WWR basins that normally will be operated in series (without a sludge scraper mechanism in either unit). The two new basins will be installed on the southeast side of the area occupied by the existing WWR Pond No. 2. The second WWR basin's design would permit including a sludge scraper mechanism as an additive bid item, or adding a sludge scraper mechanism at a later date if the cost of the scraper mechanism is not within the District's current budget. Three new sludge drying beds with a total area of approximately 4,000 square feet will be constructed along the northwest side of the area above WWR Pond No. 2.

The first WWR basin would receive both spent CC wash water and spent filter backwash water. The second WWR basin would provide the ability to clarify the spent wash water and concurrently thicken the settling/settled sludge solids. A sludge scraper could be installed in the second WWR basins to aid in thickening the sludge solids and moving the settled solids to the central sludge withdrawal hopper. The clarified spent wash water would normally be recycled to

the head of the DCWTP treatment process, or delivered to WWR Pond No. 1 for further polishing and/or storage prior to recycling, if the clarified water turbidity is greater than 2 NTU.

The thickened sludge solids would be transferred periodically from the new WWR basins to the new sludge drying beds. Each of the three sludge drying beds would have approximately 1,300 square feet of area to store and dry the wet sludge solids. The estimated area required to dry the anticipated amount of dry solids is about 2,850 square feet. The recommended sludge drying bed area would provide about 30 percent more area than is needed to permit processing more sludge solids, which may be needed if the average turbidity is higher than 7.25 NTU or if the annual DCWTP production is greater than 250 MG.

Each of the new sludge drying beds will be similar to the drying beds constructed at the District's NWTP in 1992. The beds would include a perforated pipeline underdrain collection system with 6 inches of coarse sand media and 12 inches of gravel above perforated water collection pipelines located. The collection pipes would be laid in 4 inch deep troughs that would be filed with gravel to enhance draining water from the wet solids. A decant structure at each drying bed would capture the supernatant to facilitate drying the solids.

The first WWR basin would be operated in a fill and drawdown mode to permit buffering the highly variable WW flow rates during filter backwashes once each day as well as more frequent and shorter duration CC washes (up to 6 times for each CC per day). The water in the first WWR basin would be transferred to the second WWR basin at a constant flow rate using a transfer pump with a variable speed drive. This flow rate would be set daily based on the total volume of spent washwater generated during the prior day plus or minus the change in the WWR Basin No. 1 volume during the past 24 hours to facilitate optimizing both clarification and sludge thickening in the second WWR basin. As noted above, a sludge scraper could be installed in the second WWR basin to enhance sludge thickening and removal. The sludge scraper unit could be included in the design as an additive bid item to allow the District to include it as part of the DCWTP improvements project if the District's budget permits.

3.2 Preliminary Design Criteria

Preliminary design criteria for the WWR system and sludge drying beds are summarized in the table below.

Table 2: Washwater Recovery and Solids Handling System Preliminary Design Criteria

Item	Units	Design Value
WASHWATER RECOVERY SYSTEM		
Process Units	number	2
Dimensions (Dia. x SWD)	ft x ft	36 x 12.5
Operational Volume	gallons	87,000
Sludge Storage Capacity (@ 1% Solids)	pounds	540
Decant Water Transfer Pump		
Capacity	gpm	100
Motor	HP	1

Item	Units	Design Value
SLUDGE DRYING BEDS		
Process Units	number	3
Approximate Dimensions per Unit	ft x ft	32 x 40
Area (Total)	sf	4000
Sludge Depth (Max)	inches	24
Solids Concentration (Wet/Dry)	%	2 / 50
Annual Sludge Production (Dry Solids)	pounds [A]	43,000
Solids Loading (Avg)	lb/sf	15

Note [A]: As dry solids.

3.3 Site Layout

The proposed area for the two new WWR basins and the three new sludge drying beds is in the area currently occupied by the existing WWR Pond No. 2 . WWR Pond No. 2 would be removed from service, over excavated to remove poor quality material, and filled with engineered material. The new level area would permit constructing the sludge drying beds along the northwest (Creek) side of this area and constructing the two WWR basins on the southeast side of this area. The new area would be set at a finish grade elevation of about 152.0, based on the recent survey of the DCWTP and water storage tank sites conducted by Sandis, Inc. It should be noted that the site elevations shown on the original DCWTP design drawings and the elevations determined by Sandis as noted in their site survey differ by approximately 2.6 feet. The DCWTP improvements project design drawings will be based on the recently completed site survey. The sludge drying beds' surface would be set at elevation 149.0. This elevation would permit the WW collected in the sludge drying beds' underdrains to gravity flow into the existing WWR Pond No. 1 above its maximum operating level at elevation 145.0. Access into the new WWR basin and sludge drying bed area would be provided along the west and south perimeter of the existing WWR Pond No. 2. The new sludge drying beds and access road would use about 65 feet of the northwest side of WWR Pond No. 2 area and the two new WWR basins would be installed as shown on the DCWTP Site Plan, Sheet C-1. The new WWR and solids handling facilities are within the existing DCWTP site perimeter fence line.

3.3.1 Evaluation of Which Existing WWR Pond Area to Use

In response to District staff questions, the DCWTP Washwater System Improvements Feasibility Study included an evaluation of which of the existing WWR Pond No. 1 or WWR Pond No.2 would be the better location to provide an area suitable to construct the two proposed WWR basins and three sludge drying beds. Our evaluation indicates that existing WWR Pond No. 2 should be filled to provide the required area for the following reasons:

- Using the area above Pond No. 2 will make it easier to continue operating DCWTP operations during construction.

- Construction in the area above and around Pond No. 2 to over excavate and place engineered fill will have fewer utility interferences and provides a contiguous area for the Contractor's storage and work.

- The distance for the new WW pipeline from the CCs and filters to the two ponds is about the same.

The most significant of these considerations is separating the contractor's staging and work to a continuous area on the south side of the site, and separating the construction area from the DCWTP operations by filling Pond No. 2. This location will likely optimize use of the limited available space and minimize potential conflicts with DCWTP operations during construction.

From a cost standpoint, filling Pond No. 2 is also more advantageous than filling Pond No. 1 because the existing wash water pump and controls can be maintained as-is in Pond No.1 and there would also be fewer utility interferences to address.

3.4 WWR System Hydraulics and Site Issues

Spent CCWW and filter backwash water (waste washwater, WW) will flow by gravity to the first WWR Basin. The existing waste filter backwash water conveyance system includes a spent backwash water sump located at the northeast corner inside the Filter Building that connects to the ponds via a 12-inch diameter waste washwater (drain, D) pipeline. There are two manholes along the D pipeline between the sump and the ponds. The existing D pipeline also serves the sludge blow-down system at the "Coagulation Tank". The sludge blow-down system also imposes hydraulic constraints due to nine at-grade sludge collection openings located northeast of the Filter Building. Three at-grade openings are located below the existing Coagulant Tank to facilitate sludge blow-down from the tank, and six additional at-grade openings are located to the east of these three openings to permit discharging sludge from two future Coagulation Tanks. Based on the original design drawings these nine at-grade openings are located at elevation 154.4 feet, or at approximately 157 feet based on the recent site survey.

If the existing D pipeline is used to convey spent filter backwash water and waste CC washwater, the two new WWR basins will have to be constructed at an elevation that keeps the HGL in the D pipeline below the nine at-grade openings and the top of the two manholes. Based on the original design drawings adjusted to the recent site survey elevations, the maximum water surface in the new WWR basins would need to be below elevation 152.5 if the existing D pipeline is used to convey waste washwater to the new WWR Basins, and the base of the WWR basins would be set at about elevation 140.5.

3.4.1 WWR Basins Alternative 1A - Site and Hydraulic Issues

Based on the elevation of the existing D pipeline and its associated hydraulic constraints, the bottom of the new WWR Basins would have to be set near the current Pond No. 2 bottom if the existing D pipeline is used to deliver the WW to the new WWR basins. If the bottom of the new WWR basins and the associated pipelines and valves are installed at or below the bottom elevation of Pond No. 2, a 10 feet deep vault would have to be constructed to provide access to the WWR basins' transfer pump and the WWR basins' control valves for operation and maintenance tasks. In addition, if the proposed area and elevations for the new sludge drying beds is unchanged, a pump station would be required to convey sludge from the WWR basins to the sludge drying beds, and the sludge transfer pump station would also be located in the vault.

Alternatively, about 50 feet of the existing berm on the west side of Pond No. 2 could be removed to reduce the grade elevation to about 140.5 feet to create the level area needed for the three new sludge drying beds. The portions of the berm located on the south side of the DCWTP access road would be re-graded to have the same slope that exists from the access road down into the Pond. Access to this lower area would be provided by re-grading the road along the south side of WWR Pond No. 2 to create a access road with no steeper than a 9 percent grade down to the lower elevation. Modifying the existing berm and access road would require relocating portions of the site perimeter fence line and also portions of the sanitary sewer that is located beneath the access road and berm on the west side of Pond No. 2. It should also be noted that the two existing gravel storage structures located on the southeast corner of the level portion of the DCWTP site would have to be demolished to permit vehicular access to the lower sludge drying bed area. Due to the hydraulic and site constraints associated with using the existing D pipeline to convey WW to the WWR Basins, and the lower elevation that the sludge drying beds would have to occupy to accommodate using the existing D pipeline, it appears that this WWR Basin configuration would not be suitable.

3.4.2 WWR Basins Alternative 1B - Site and Hydraulic Issues

A second alternative (variation on Alternative 1A), would be to modify the existing Wash Water Recovery Structure located between the two ponds to include a new WW pump station that would permit pumping the WW to the first WWR basin located at a higher elevation. This alternative would require adding two new WW pumps and controls to permit using the existing D pipeline and setting the two new WWR Basins at a higher elevation than the hydraulic constraints mentioned in Alternative 1A permit. The sludge drying beds would located in the same area and at the same elevation originally proposed, and an additional pump station would be required to transfer sludge from the first WWR basin to the sludge drying beds. Based on the operational complexity and risks associated with this alternative, this alternative does not appear to be as suitable as the next alternatives described for this project.

3.4.3 WWR Basins Alternative 2A – Site and Hydraulic Issues

A third WWR basin and sludge drying bed configuration (Alternative 2A) would use the available waste CCWW and filter backwash water pressure and a new WW pipeline to set the WWR Basins and sludge drying beds at the elevations identified above in Section 3.3 and also in the Draft WWR System Improvements Feasibility Report. This alternative would require installing a spent CCWW and filter backwash water “head tank” into which the CCs’ and filters’ WW would discharge. The WW “head tank” would include a 10 to 12 foot tall section of 24-inch diameter pipe with about 10 feet of the pipe located above grade. The currently blind flanged end of the spent filter backwash water pipeline located near the southwest corner inside the Filter Building would be connected to a DPH-compliant air gap-protected discharge pipe end located above the “head tank”. The CC waste washwater discharge pipeline could be connected directly to the head tank. The WW head tank would be connected via a new 16-inch diameter WW pipeline to the new WWR basins. This alternative WW handling system would permit setting the top of the WWR basins high enough to permit the bottom of the WWR basins to be at elevation 152 feet.

The existing D pipeline would remain connected to WWR Pond No. 1 in this alternative and would serve as a backup WW discharge system.

3.4.4 WWR Basins Alternative 2B – Site and Hydraulic Issues

The fourth WWR Basin and Sludge Drying Bed configuration (Alternative 2B) would set the WWR Basins' elevations slightly lower than the elevations indicated above. This alternative would require removing less of the existing berm on the west side of Pond No. 2, and also require less re-grading of the existing road to provide access to the base of the WWR Basins and the sludge drying beds. Setting the bottom of the WWR Basins slightly lower would also permit reducing the height of the "head tank" by the same elevation. The final design will set the new WWR basins and sludge drying beds at as low an elevation as practical.

Our recommended Washwater Recovery and Solids Handling System improvements is the fourth alternative, described in Section 3.4.4, that would place the bottom of the two new WWR Basins the lowest elevation that permits discharging the settled solids from the basins to the sludge drying beds and also permits discharging the sludge beds' underdrain water to the existing WWR Pond No. 1.

Section 4: Discipline Design Criteria

The new facilities will be designed in accordance with the following codes and standards, as modified by the San Mateo County Amendments and Ordinances to the codes and standards listed herein..

4.1 Codes and Standards

The latest editions of the following codes and standards will be used in the Project design:

- California Building Code, 2010
- California Fire Code, 2010
- California Mechanical Code, 2010
- California Plumbing Code, 2010
- California Energy Code, 2010
- California Electrical Code, 2010
- Cal OSHA
- San Mateo County Amendments and Ordinances associated with the codes listed above
- Coastside County Water District Standards
- American Water Works Association (AWWA) Standards
- Hydraulic Institute Standards (HIS)
- American Concrete Institute (ACI)
- American Institute of Steel Construction
- American Iron and Steel Institute

Section 5: Final Design Schedule

The final design to prepare biddable design documents is expected to require about 9 months to complete. This schedule will include a project kickoff workshop, and design submittal review workshops after both the 50 percent and 90 percent designs have been reviewed by District staff.

The time required to prepare the 50 percent design is 12 weeks. A 50 percent design review workshop with District staff will be scheduled two weeks after the design documents are delivered to the District.

The 90 percent design phase will start within one week after the 50 percent design review workshop. The 90 percent design phase will require 12 weeks to complete. A 90 percent design review workshop with District staff will be scheduled two weeks after the design documents are delivered to the District.

The final design phase will start within one week after the 90 percent design review workshop. Final design documents will require six week to complete.

The final design documents should be ready by the middle of October 2010, if notice to proceed is received in early April 2010.

Section 6: Opinion of Probable Construction Cost

Our Engineers Estimate of Probable Construction Cost for the recommended DCWTP pretreatment and waste washwater and sludge handling system improvements is about $3,240,000. This estimated cost includes 9.25 percent sales tax on materials, a 20% conceptual level construction estimate contingency, and 10% allowance for the Contractor's general conditions, mobilization, bonds, overhead and profit, plus an additional 10% for contractor profit, and a 3% cost escalation to account for bids based on mid-point of construction. A detailed engineer's estimate of probable construction cost is included below in Table 3.

The estimated cost includes approximately $524,000 for site soil improvements based on the recommendations included in the draft geotechnical engineering report.

Table 3: Engineer's Estimate of Probable Cost

ENGINEER'S ESTIMATE OF PROBABLE COST — **KENNEDY/JENKS CONSULTANTS**

Project: Denniston Creek WTP Improvements Project

Building, Area: Pretreatment System and Washwater and Solids Handling Facilities

Prepared By: ANK & CMT
Date Prepared: 3/15/2010
K/J Proj. No. 0868026.01
Current at ENR
Escalated to ENR

Estimate Type: ☐ Conceptual ☐ Preliminary (w/o plans) ☒ Design Development @ 10 % Complete ☐ Construction ☐ Change Order

Spec. No.	Item No.	Description	Qty	Units	Materials $/Unit	Materials Total	Installation $/Unit	Installation Total	Sub-contractor $/Unit	Sub-contractor Total	Total
DIVISION 1 - GENERAL REQUIREMENTS											
		General Conditions and Mobilization (@ 10%)	1	LS	103,000	103,000	103,000	103,000			206,000
DIVISION 2 - SITE WORK											
		Contact Clarifier and CCWW Supply Tank									
		Excavation	170	CY			9	1,530			1,530
		Stabilizing Fabric	130	SY	2.25	293	2.25	293			585
		Aggregate Base and Compaction	290	TON	15	4,350	6	1,740			6,090
		SWW Collection Stand Pipe									
		Excavation	10	CY			9	90			90
		Aggregate Base and Compaction	2	TON	15	30	6	12			42
		WWR Facilities									
		Demo (E) Pile Walls (Includes Disposal)	1	LS			7,500	7,500			7,500
		Demo (E) WWR Structure in Pond No. 2 (Includes Disposal)	1	LS			7,500	7,500			7,500
		Excavation at (E) WWR Pond No. 2	3,100	CY			9	27,900			27,900
		Solids Disposal	3,100	CY			8	24,800			24,800
		Dewatering	1	LS					30,000	30,000	30,000
		Stabilizing Fabric	420	SY	2.25	945	2.25	945			1,890
		Crushed Rock	195	CY	45	8,775	8	1,560			10,335
		Aggregate Base Fill and Compaction	10,490	TON	15	157,350	6	62,940			220,290
		Grading	1	LS			5,000	5,000			5,000
		Retaining Wall Drainage	215	LF	20	4,300	20	4,300			8,600
		Sludge Drying Beds									
		Drainage Mat	5,100	SF	0.25	1,275	0.75	3,825			5,100
		Coarse Sand	75	CY	12	900	10	750			1,650
		Gravel	150	CY	34	5,100	10	1,500			6,600
DIVISION 3 - CONCRETE											
		Contact Clarifier									
		Contact Clarifier Concrete Pad	25	CY	250	6,250	250	6,250			12,500
		Blower Sound Enclosure Wall	10	CY	600	6,000	400	4,000			10,000
		CC Washwater Supply									
		CCWW Supply Tank Foundation	29	CY	250	7,250	250	7,250			14,500
		SWW Collection Stand Pipe									
		Concrete Base	2	CY	250	500	250	500			1,000
		WWR & Solids Handling Facilities									
		WWR Basin Foundations	145	CY	250	36,250	250	36,250			72,500
		WWR Basin Walls	151	CY	600	90,600	400	60,400			151,000
		WWR Basin Walkway	24	CY	1,100	26,400	700	16,800			43,200
		WWR Basin Decant Water PS Pad	1	CY	250	250	250	250			500
		Sludge Drying Beds									
		Retaining Wall Foundation	54	CY	250	13,500	250	13,500			27,000
		Retaining Wall and Dividers	82	CY	600	49,200	400	32,800			82,000
		Access Ramps	14	CY	250	3,500	250	3,500			7,000
		Inlet Structures	3	CY	250	750	250	750			1,500
		Decant Outlet Structures	3	EA	2,500	7,500	1,500	4,500			12,000
DIVISION 5 - METALS											
		Stairway	18	RISER	500	9,000	500	9,000			18,000
		Guardrails	275	LF	85	23,375	40	11,000			34,375

ENGINEER'S ESTIMATE OF PROBABLE COST

KENNEDY/JENKS CONSULTANTS

Project: Denniston Creek WTP Improvements Project

Prepared By: ANK & CMT
Date Prepared: 3/15/2010
K/J Proj. No. 0868026.01

Building, Area: Pretreatment System and Washwater and Solids Handling Facilities

Current at ENR
Escalated to ENR

Estimate Type: ☐ Conceptual ☐ Construction
☐ Preliminary (w/o plans) ☐ Change Order
☒ Design Development @ 10 % Complete

Spec. No.	Item No.	Description	Qty	Units	Materials $/Unit	Materials Total	Installation $/Unit	Installation Total	Sub-contractor $/Unit	Sub-contractor Total	Total
DIVISION 9 - FINISHES											
		Protective Coatings	1	LS	35,000	35,000	35,000	35,000			70,000
DIVISION 11 - EQUIPMENT											
		WWR Basin Decant Water Transfer Pump	1	EA	6,000	6,000	1,500	1,500			7,500
		Pressure Contact Clarifiers (Including Blowers and Motorized BFVs)	2	EA	199,000	398,000	29,850	59,700			457,700
		Contact Clarifier Washwater Supply Tank	1	EA	28,000	28,000	21,000	21,000			49,000
DIVISION 15 - MECHANICAL											
		Contact Clarifier									
		12" RW	10	LF	90	900	90	900			1,800
		12" CW	30	LF	90	2,700	90	2,700			5,400
		8" RW	30	LF	60	1,800	60	1,800			3,600
		8" CW	20	LF	60	1,200	60	1,200			2,400
		8" CCWW	80	LF	60	4,800	60	4,800			9,600
		8" SWW	130	LF	60	7,800	60	7,800			15,600
		8" Motor Operated BFV	3	EA	4,500	13,500	900	2,700			16,200
		8" Check Valve	2	EA	2,000	4,000	400	800			4,800
		6" RW	25	LF	45	1,125	45	1,125			2,250
		6" AA	70	LF	105	7,350	105	7,350			14,700
		6" Check Valve	2	EA	1,000	2,000	300	600			2,600
		4" DR	50	LF	20	1,000	20	1,000			2,000
		SWW Collection Stand Pipe									
		Stand Pipe	1	LS	8,000	8,000	8,000	8,000			16,000
		WWR & Solids Handling Facilities									
		16" SWW	140	LF	120	16,800	120	16,800			33,600
		16" Plug Valve	1	EA	10,350	10,350	3,105	3,105			13,455
		6" SWW	50	LF	45	2,250	45	2,250			4,500
		6" DW	20	LF	45	900	45	900			1,800
		6" RWW	120	LF	45	5,400	45	5,400			10,800
		6" SL	200	LF	45	9,000	45	9,000			18,000
		6" Motor Operated Plug Valve	2	EA	5,000	10,000	1,000	2,000			12,000
		6" Manual Plug Valve	6	EA	2,300	13,800	690	4,140			17,940
		WWR Basin Decant Pump Fittings & Accessories	1	LS	5,000	5,000	1,500	1,500			6,500
		Sludge Drying Beds									
		6" DR	250	LF	45	11,250	45	11,250			22,500
		6" Underdrain	330	LF	30	9,900	30	9,900			19,800
		6" Manual Plug Valve	3	EA	2,300	6,900	460	1,380			8,280
		Misc. Fittings and Accessories	1	LS	10,000	10,000	10,000	10,000			20,000
DIVISION 16 - ELECTRICAL											
		Electrical	1	LS	60,000	60,000	70,000	70,000			130,000
DIVISION 17 - INSTRUMENTATION											
		Instrumentation and Controls	1	LS	75,000	75,000	125,000	125,000			200,000
		Subtotals				1,336,368		892,535		30,000	2,258,902
		Taxes	@	9.25%		123,614					123,614
		Subtotals				1,459,981		892,535		30,000	2,382,516
		Contractor OH&P	@	10.0%		145,998		89,253		3,000	238,252
		Subtotals				1,605,980		981,788		33,000	2,620,768
		Estimate Contingency	@	20%		321,196		196,358		6,600	524,154
		Estimated Bid Cost				1,927,176		1,178,146		39,600	3,144,921
		Escalate to Midpoint of Construction	@	3%		57,815		35,344		1,188	94,348
		Esimate Project Cost				1,984,991		1,213,490		40,788	3,239,269
		Engineering (Design), Legal, Project Administration, and Engineering Support during Construction	@	20%		385,435		235,629		7,920	628,984
		Total Estimate				2,370,426		1,449,119		48,708	3,868,253

Section 7: Design Drawings

The PRD includes eight drawings. A list of the proposed final design drawings and specifications is provided below in Section 7.2.

7.1 Preliminary Design Drawings

The following preliminary design drawings are included in Appendix C. These drawings portray the design concepts developed for the Denniston Creek WTP Improvements Project.

No.	Title
G-1	Title Sheet, Drawing List, Location and Vicinity Maps
G-3	Basis of Design and Hydraulic Profile
G-4	Process Flow Schematic Diagram of Treatment Facilities
C-1	Site Plan
M-2	Pretreatment Units – Plan and Section
I-1	Instrumentation Legend
I-2	Pretreatment Process System P&ID
I-4	Washwater Recovery System P&ID

7.2 Final Design Drawings and Specifications Lists

7.2.1 Preliminary Drawing List

The following is a list of the proposed design drawing for the DCWTP Improvements Project.

1. Sheet G-1: Cover Sheet with Drawing List & Location Maps,
2. Sheet G-2: Piping Symbols, Legend, & Abbreviations,
3. Sheet G-3: Basis of Design & Hydraulic Profile,
4. Sheet G-4: Schematic Diagram of Treatment Facilities,
5. Sheet C-1: Overall Site Plan,
6. Sheet C-2: Grading and Drainage Plan & Details,
7. Sheet C-3: Sections and Details
8. Sheet C-4: Sludge Drying Beds Plan, Sections, and Details
9. Sheet C-5: Piping and Utilities Plan,

10. Sheet C-6: Piping Profiles, Typical Sections and Details,
11. Sheet S-1: Structural General Notes, Special Inspection and Testing Schedule,
12. Sheet S-2: Structural Reinforced Concrete Notes and Standard Details,
13. Sheet S-3: Pretreatment Units' Concrete Support Pad Plan, Section and Details,
14. Sheet S-4: Washwater Recovery Tanks – Foundation Plan
15. Sheet S-5: Washwater Recovery Tanks – Upper Plan
16. Sheet S-6: Washwater Recovery Tanks – Sections
17. Sheet S-7: Washwater Recovery Tanks – Details,
18. Sheet S-8: Sludge Drying Bed Structures – Plans, Sections and Details,
19. Sheet M-1: Demolition and Miscellaneous Details,
20. Sheet M-2: Pretreatment Pressure Contact Clarifier Units' Plan, Sections and Details,
21. Sheet M-3: Washwater Recovery Tanks – Plan
22. Sheet M-4: Washwater Recovery Tanks – Sections
23. Sheet M-5: Filter Building – Air Wash Blower Equipment Plan and Sections
24. Sheet M-6: Pipe Supports, Miscellaneous Piping and Mechanical Details
25. Sheet I-1: Instrumentation Legend,
26. Sheet I-2: Pretreatment Process System P&ID,
27. Sheet I-3: Chemical Feed System Modifications P&ID,
28. Sheet I-4: Washwater Recovery System P&ID,
29. Sheet I-5: Miscellaneous Details and Panels,
30. Sheet E-1: Electrical Abbreviations and Symbols,
31. Sheet E-2: Electrical Site Plan and Single Line Diagram,
32. Sheet E-3: Washwater Recovery System Power and Signal Plans,
33. Sheet E-4: Pretreatment Power and Signal Plan,
34. Sheet E-5: Filter Building Plan,
35. Sheet E-6: Elementary Diagrams, Schedules and Details,

7.2.2 Preliminary Specification List

The following is a list of the proposed technical specification sections for the DCWTP Improvements Project.

1. General and Special Conditions (Division 0),
2. Section 01010: Summary of Work and Contract Considerations
3. Section 01040: Coordination and Project Requirements,
4. Section 01140: Environmental Protection
5. Section 01190: Seismic Requirements
6. Section 01300: Submittals
7. Section 01311: CPM Schedule
8. Section 01500: Construction Facilities and Temporary Controls
9. Section 01650: Facility Startup
10. Section 01700: Contract Closeout
11. Section 02050: Demolition,
12. Section 02200: Site Preparation,
13. Section 02301: Earthwork,
14. Section 02370: Slope Protection,
15. Section 02630: Drainage
16. Section 02830: Chain Link Fencing
17. Section 03200: Reinforcing Steel,
18. Section 03300: Cast-In-Place Concrete,
19. Section 03350: Concrete Finishes,
20. Section 05100: Structural Metal Fabrications,
21. Section 05500: Metal Fabrications,
22. Section 05734: Aluminum Component Railing System
23. Section 06700: Fiberglass,
24. Section 09960: Protective Coatings,
25. Section 10400: Identifying Devices,
26. Section 11001: General Equipment and Mechanical Requirements,
27. Section 11002: Electric Motor Drives,
28. Section 11003: Disinfection,
29. Section 11212: Recycle Water Pumps,
30. Section 11375: Centrifugal Blowers,

31. Section 13235: Pretreatment Pressure Contact Clarifier System Equipment,
32. Section 15050: Piping, Valves and Accessories,
33. Section 16000: Electrical Work,
34. Section 17010: Instrumentation and Controls, General Requirements,
35. Section 17110: Analytical Instruments,
36. Section 17120: Flow Measurement,
37. Section 17140: Level Measurement,
38. Section 17150: Pressure Measurement,
39. Section 17331: PLC and Control Descriptions,
40. Section 17510: Control Panels.

References

40 CFR Parts 141 and 142; Drinking Water; National Primary Drinking Water Regulations: Filtration, Disinfection Turbidity, Giardia lamblia, Viruses, Legionella and Heterotrophic Bacteria ("Surface Water Treatment Rule"), Vol. 54, FR 27486, June 29, 1989, Final Rule.

40 CFR Parts 141 and 142; Drinking Water; National Primary Drinking Water Regulations: Total Coliforms, Vol. 54, FR 27544, June 29, 1989, Final Rule.

40 CFR Parts 141 and 142; Drinking Water Regulations Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper, Vol. 56 FR 26460, June 7, 1991, Final Rule.

40 CFR Part 141; National Primary Drinking Water Regulations: Monitoring Requirements for Public Drinking Water Supplies; Vol. 61, FR 24354, May 14, 1996, Final Rule.

40 CFR Parts 9, 141, and 142; National Primary Drinking Water Regulations: (Stage 1) Disinfectants and Disinfection Byproducts Rule; Vol. 63, No. 241, FR 69389, Final Rule, December 16, 1998.

40 CFR Parts 9, 141, and 142; National Primary Drinking Water Regulations: Interim Enhanced Surface Water Treatment Rule; Vol. 63, No. 241, FR 69477, Final Rule, December 16, 1998.

40 CFR Parts 9, 141, and 142; National Primary Drinking Water Regulations: Filter Backwash Recycling Rule; Vol. 66, No. 111, FR 31086, Final Rule, June 8, 2001.

40 CFR Parts 9, 141, and 142; National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts Rule; , Final Rule, Vol. 71, No. 2, FR 387, January 4, 2006.

40 CFR Parts 9, 141, and 142; National Primary Drinking Water Regulations: Long Term 2 Enhanced Surface Water Treatment Rule; Vol. 71, No. 3, FR 654, Final Rule, January 5, 2006.

22 CCR 64400 - 64501. Domestic Water Quality and Monitoring

22 CCR 64650 - 64700. Surface Water Filtration and Disinfection Treatment.

California Health and Safety Code (§ 4010 - 4039.6), Division 5, Part 1, Chapter 7, California Safe Drinking Water Act

"Surface Water Treatment Staff Guidance Manual", Office of Drinking Water, Department of Health Services, 15 May 1991

California Surface Water Treatment Alternative Filtration Technology Demonstration Report, June 2001, edited by R.H. Sakaji and published by the California Department of Public Health.

Alternative Filtration Technology Summary Table, September 2008, published by the California Department of Public Health.

"Cryptosporidium Action Plan", April 1995. California Department of Health Services.

Denniston Water Treatment Plant UF/MF Membrane Filtration Pilot Study Report, prepared by Kennedy/Jenks Consultants for Coastside County Water District, December 2000.

Denniston Creek Water Treatment Plant Upgrade Technical Memorandum, prepared by Kennedy/Jenks Consultants for Coastside County Water District, January 2001.

Denniston Reservoir Restoration Project Draft Initial Findings Report, prepared by TRC Essex, December 2006.

Denniston Creek Water Treatment Plant Pretreatment Alternatives Feasibility Report, prepared by Kennedy/Jenks Consultants, March 2009

Denniston Creek Water Treatment Plant Improvements Project Filter Backwash (WWR) System Improvements Feasibility Study – Draft Letter Report, prepared by Kennedy/Jenks Consultants, June 2009

Removal of Soluble Manganese From Water by Oxide-Coated Filter Media, 1990. Knocke, William R., Occiano, Suzanne, and Hungate, Robert, published by AwwaRF, March.

The Practice of Effective Iron and Manganese Control in Water Treatment Plants, Knocke, W.R., technical presentation slides. (no date)

Order No. R2-2003-0062 Self-Monitoring Program for Region Wide General National Pollution Discharge Elimination System (NPDES) Permit for Discharges from Surface Water Treatment Facilities for Potable Supply (General Permit) NPDES Permit No. CAG382001, prepared by California Regional Water Quality Control Board San Francisco Bay Region, 18 June 2003

General Permit for Surface Water Treatment Facilities - Notice of Intent for Denniston WTP, prepared by Coastside County Water District, 30 September 2009

Short-Term Improvements to Denniston Creek and Nunes Water Treatment Plants Report, prepared by Camp Dresser McKee Inc., March 2006

Geotechnical Engineering Report on Dennistion Creek Water Treatment Plant, prepared by Clary Consultants, Inc., March 2010.

Appendix A: Geotechnical Report of DCWTP Site

Appendix B: Washwater System Improvements Feasibility

Kennedy/Jenks Consultants (K/J) prepared a Filter Backwash (WWR) System Improvements Feasibility Letter Report on improvements to the existing spent washwater and solids handling systems at the Coastside County Water District (District) Denniston Creek Water Treatment Plant (DCWTP). Our final letter report was prepared in accordance with Task 1 – Conduct a Feasibility Study of Washwater and Solids Handling Improvements of our scope of services dated 31 March 2009, and is included herein as part of the PDR . The letter report should be considered to serve as an addendum to our Denniston Creek WTP Pretreatment Alternatives Feasibility Report (Pretreatment Improvements Report) dated 2 March 2009 (K/J 0868026).

B.1 Executive Summary

- The objective of this study is to evaluate two alternative methods of modifying the existing DCWTP washwater and solids handling system to permit treating the washwater that will be generated when it treats higher turbidity source water from Denniston Creek and to improve the ability to handle, process, and dry sludge solids on site.

- The WWR system improvements will be designed to produce recycled water that complies with both the 2 NTU turbidity goal and permit operating within the 10 percent flow rate limit in accordance with the California Cryptosporidium Action Plan (CAP), and the reclaimed washwater will be recycled to the head of the DCWTP in compliance with the Filter Backwash Recycling Rule (FBRR).

- The maximum daily combined amount of spent washwater from the proposed contact clarifier washes and existing filter backwashes is estimated to be between 100,000 and 144,000 gallons. The maximum flow rate that the spent washwater would have to be reclaimed and returned to the head of the DCWTP during each day would be between 70 and 100 gpm, which is between 7 and 10 percent of the maximum DCWTP flow rate.

- The amount of “dry (waste) solids” generated is estimated to be about 43,000 pounds per year, and the required sludge drying bed area is estimated to be about 2,850 square feet. Under the peak loading condition(s), the maximum estimated solids production would be about 1,105 pounds of “dry” solids per day.

- Two spent washwater treatment system improvement alternatives were evaluated:

    - One alternative involved the installation of two new WWR basins and three new sludge drying beds in the area currently occupied by WWR Pond No. 2. The existing WWR Pond No. 1 would remain as it currently is and would provide storage capacity for the recycle water during periods when the DCWTP is off line or is operating at a low flow rate.

    - The second alternative involved replacing portions of the two existing WWR ponds with sludge drying beds, installing a third new sludge drying bed in the area between the southeast side of the existing Filter Building and the water storage tank access road,

lining the remaining portions of the existing WWR ponds with gunite and installing a sludge collection sump and portable sludge pump in each pond.

- The recommended project includes installing two new concrete WWR basins in series on the southeast side of the existing WWR Pond No. 2 and constructing new sludge drying beds with a total area of approximately 4,200 square feet along the northwest side of the existing WWR Pond No. 2 and in the area near the Filter Building. The estimate of probable cost to construct the recommended washwater and solids handling system improvements is $1,077,000, which includes a 25% construction estimate contingency. The estimated cost with a 20% allowance for engineering design, and engineering support through construction is $1,292,000.

B.2 Introduction and Background

The District owns and operates two surface water treatment plants, the DCWTP and the Nuñes Water Treatment Plant (NWTP), that supply potable water to the District's customers. The DCWTP can treat up to 1,000 gallons per minute (gpm) of local surface water from the Denniston Creek watershed and groundwater from an area northeast of Half Moon Bay, California. Kennedy/Jenks evaluated alternative pretreatment processes that could be incorporated into the existing DCWTP facilities to permit treating more of its available source water supply from Denniston Creek. The findings from this evaluation are presented in the Denniston Creek WTP Pretreatment Alternatives Feasibility Report dated 2 March 2009. The recommended pretreatment process will permit treating source water with turbidity between 15 nephelometric turbidity units (NTU) and as high as 50 NTU.

When treating source water with turbidity between 15 and 50 NTU, the recommended contact clarification pretreatment process, in conjunction with the existing pressure filters at the DCWTP, is expected to generate about the same amount of waste washwater produced per day as that currently produced when the three existing pressure filters are treating source water with turbidity between 10 and 15 NTU. However, the amount of solids produced will increase as more solids would enter the WTP and would be captured by the treatment processes. The DCWTP presently does not have solid drying facilities. Based on discussions with District staff, settled solids currently accumulate at the bottom of the two existing washwater recovery ponds (WWR ponds), and the accumulated solids impact the turbidity of the recycled washwater.

The District's goal is to identify cost-effective improvements and additions to the existing spent washwater handling system that will enable the District to:

1. Restore DCWTP production capacity to at least 250 million gallons (MG) per year,
2. Permit treating higher turbidity source water from Denniston Creek,
3. Permit recycling all the spent washwater and eliminate the need to discharge spent washwater to Denniston Creek, and
4. Provide the ability to handle and dry sludge solids on site.

The District asked Kennedy/Jenks to evaluate two alternative methods of modifying the existing DCWTP washwater and solids handling system to permit treating the washwater that will be generated when it treats higher turbidity source water from Denniston Creek.

B.3 Regulatory Requirements and Recycle Water Quality Goals

This section provides a brief review of both current and new drinking water quality regulations and guidelines, and also the District's recycled water quality goals. The DCWTP must comply with existing rules and guidelines established under the federal and State Safe Drinking Water Acts, including the:

- Surface Water Treatment Rule (SWTR),
- Total Coliform Rule (TCR),
- California Cryptosporidium Action Plan (CAP),
- Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 D/DBPR),
- Interim Enhanced Surface Water Treatment Rule (IESWTR),
- Filter Backwash Recycling Rule (FBRR),
- Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 D/DBPR),
- Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), and
- Groundwater Rule.

The California CAP provides quantitative limits on the water treatment processes' performance, including recycled water turbidity limits and the rate that recycled water can be returned and blended with the raw water to 10 percent or less of the plant flow rate. The primary objective of both the CAP and FBRR includes minimizing the risk of reintroduction of pathogenic microorganisms, including *Giardia* cysts and *Cryptosporidium* oocysts into the water being treated. The pathogens that are removed from the water are present in significantly higher concentrations in spent washwater streams than they are in typical source water supplies. The objective of the CAP and FBRR is to reduce the risk of returning these pathogens to challenge the treatment facilities a second time. The FBRR requires that filter backwash water, which is defined in the Rule to include: spent filter backwash water, sedimentation basin sludge (contact clarifier washwater in this case), and filtrate from a dewatering process; be blended with the raw water at a location ahead of the first treatment step, or that a report be submitted to the primacy agency (California Department of Public Health (DPH)) explaining how returning the recycled water at another location does not impair the treatment process' performance.

In addition, any waste washwater produced by the water treatment processes that is discharged off site (to Denniston Creek) must be disposed of in a manner that complies with requirements regarding off-site disposal of spent washwater from water treatment plants (WTPs) imposed by the San Francisco Bay RWQCB that has jurisdiction for the DCWTP. The DCWTP has discharged spent filter backwash water from the two existing WWR ponds located at the DCWTP site in the past. Any water discharged from either of the two WWR ponds now must be disposed of in accordance with the District's NPDES permit. The recycled spent washwater must either be treated and returned to the head of the treatment process in accordance with the FBRR and CAP, or discharged in compliance with the District's NPDES permit.

Based on discussions with District staff, the washwater and solids handling system improvements will be designed to permit recycling all of the spent washwater, thereby eliminating the need to discharge water off site. The WWR system improvements will be

designed to produce recycled water that complies with both the 2 NTU turbidity goal and 10 percent flow rate limit in the CAP, and the reclaimed washwater will be recycled to the head of the DCWTP in compliance with the FBRR.

B.4 Experience Handling Washwater and Solids while Treating High-Turbidity Water

Recent discussions with staff at the Metropolitan Water District of Southern California (MWDSC), Los Angeles Department of Water and Power, and Castaic Lake Water Agency (CLWA) indicate that treating high turbidity source water can stress and/or overload washwater and solids handling facilities. This is particularly true for washwater and solids handling facilities that were designed to process the washwater volume and solids load associated with a normally low turbidity (less than 15 NTU) raw water supply. These three water suppliers operate WTPs with conventional filtration, direct filtration, and contact clarification-filtration treatment processes, respectively. Each of these three agencies operates one or more WTPs that treat the same source water supply, California State Water Project (SWP) water from Castaic Lake. This source water typically has turbidity below 5 NTU more than 97 percent of the time, but its turbidity has been above 15 NTU and as high as 100 NTU at times.

The Castaic Lake water was between 15 and 50 NTU for most of a 60 day period between 10 January and 11 March 2005 that included 3 weeks with an average turbidity of 40 NTU. The collective operating experience of these three water suppliers treating high turbidity source water, with turbidity characteristics similar to the source water that the District intends to treat at its upgraded DCWTP, indicates that the volume of spent filter backwash water and pretreatment system washwater, as well as the greater amount of solids that is generated while treating high turbidity source water, will overwhelm washwater and solids handling facilities designed primarily to handle low turbidity source water. Each of these three agencies had to shut down its WTP for one to two weeks and, in some instances, had challenges producing filtered water that met regulatory standards at times due to recycled water turbidity during this period. Each of these WTPs had operational challenges after its washwater and solids handling system was overwhelmed by the quantity of waste washwater that had to be treated. The MWDSC is currently installing mechanical dewatering units to permit handling higher solids loads at several of its WTPs due to this experience. An on-going upgrade of CLWA's Rio Vista WTP includes additional facilities and other improvements to permit handling higher volumes of spent washwater and to increase the capacity to thicken sludge solids for dewatering on sludge drying beds.

Based on these three agencies' experiences, the District should include significant improvements to its existing washwater handling and solids dewatering system as part of its planned DCWTP improvements project to permit managing the additional amounts of both washwater and solids that will be generated when operating at flow rates as high as 1,000 gpm while treating raw water with turbidity between 15 and 50 NTU.

B.5 Existing Washwater Handling Facilities

The existing washwater handling facilities at the Denniston Creek WTP include two earthen basins (WWR ponds), each with an approximate operating capacity of 300,000 gallons based on a maximum operating depth of 8 feet. The ponds receive spent backwash water from three

existing filters. Discussions with District staff indicate that the three existing filters are typically backwashed once each day, generating between 30,000 and 50,000 gallons of spent backwash water per day. District staff also indicated that when having treated Denniston Creek source water with turbidity above 15 NTU, the filters were backwashed more frequently, and as much as 130,000 gallons of spent backwash water was produced per day.

Normally (when source water turbidity is less than 15 NTU) the storage capacity in each of the two existing WWR ponds at the DCWTP permits backwashing all three pressure filters once per day for between 8 and 10 days before a WWR pond has to be removed from service. The District staff also indicated that the solids in the spent backwash water settle rapidly, permitting DCWTP staff to begin recycling the clarified water from the WWR pond to the head of the DCWTP's water treatment process about 1 day after the WWR pond has been removed from service. District staff did indicate that the settled spent backwash water typically has turbidity between 4 and 6 NTU after 1 day of settling and that the settled washwater tends to have turbidity between 2 and 3 NTU throughout the 6 to 8 day recycle period.

The DCWTP currently does not have sludge drying facilities. Settled solids accumulate in the WWR ponds, and the accumulated solids increase the turbidity of the return washwater. The WWR ponds are taken off-line and dewatered periodically to remove accumulated solids. The solids are then transferred to the NWTP for drying. Removal of the accumulated solids from the bottom of the existing WWR ponds is a very difficult, labor-intensive and time-consuming process. A vactor truck is brought in periodically to remove the solids. However, certain areas of the WWR ponds are not reachable with the vactor truck hose, and it is difficult to move the sludge within the basin to a accessible location for removal since the WWR ponds are earthen basins.

B.6 Spent Clarifier Washwater and Filter Backwash Water Volumes

Each contact clarifier (CC) wash typically includes a combined air and water wash step and a water (only) rinse step. A typical CC wash will produce between 80 and 100 gallons of spent washwater per square foot of contact clarifier bed area. Based on pilot plant studies and operational experience at water treatment plants with a contact clarifier pretreatment process treating source water with turbidity between 20 and 100 NTU for an extended period of time, we anticipate that each of the two proposed 10-foot-diameter pressure contact clarifier vessels will need to be washed (using coagulated source water) at between 4 and 6 hour intervals when the source water turbidity is on the high side of between 15 and 50 NTU. Therefore, the maximum amount of spent washwater generated by the two CCs is estimated to be between 50,000 and 94,000 gallons per day.

Since the two CCs are expected to produce clarified water with turbidity that is less than 2 NTU, we also anticipate that the three existing pressure filters should be capable of operating for at least 24 hours between backwashes. Based on backwash operation data provided by the District, we anticipate that the maximum amount of filter backwash water produced during each day will be about 50,000 gallons. Therefore, the maximum daily combined amount of spent washwater is estimated to be between 100,000 and 144,000 gallons. The maximum flow rate that the spent washwater would have to be reclaimed and recycled during each day would be between 70 and 100 gpm, which is between 7 and 10 percent of the maximum DCWTP flow rate.

If clarifier/thickeners are installed to treat the spent washwater, the surface loading rate should be 0.1 gpm/ft^2, or less, to produced clarified water with turbidity below 2 NTU without additional treatment. Based on the maximum volume of washwater generated in a day of 144,000 gallons, the required surface area for a clarifier/thickener should be about 1,000 square feet.

It should be noted that the FBRR does not classify filter-to-waste (FTW) water as a "filter backwash water". Prior discussions with several DPH District Engineers have permitted recycling the FTW water back to the head of the water treatment processes without additional treatment. The FTW recycle water is also not included in the CAP calculation of the 10 percent recycle flow rate limitation. In addition, the FTW water typically has very low turbidity and the FTW fraction in a recycle flow stream can be ignored in determining the coagulant feed rate based on coagulant dosage and the combined source water and recycle water flow rate.

B.7 Annual Sludge Solids Production and Sludge Drying Bed Capacity

The amount of dry sludge solids that will be generated each year is estimated to be about 43,000 pounds. The amount of solids produced is estimated from the amount of solids in the raw water (measured as turbidity) and the amount of coagulant and polymer added to condition the raw water. The average source water turbidity was estimated to be about 7.25 NTU, based on the available 2000 to 2009 turbidity data. The typical ratio of suspended solids ((SS) the particles that are measured as "turbidity" that must be removed from the water) to turbidity is 1.5 mg/L of SS for each 1 NTU. Therefore, the average suspended solids load in the raw water is expected to be about 10.8 mg/L.

The amount of aluminum hydroxide solids (the solids that bind with the particles and polymer to produce floc) that is produced when aluminum sulfate (alum) coagulant reacts with hydroxide ions in the water to form $Al(OH)_3$+6 H_2O solids is about 0.44 mg for each 1.0 mg of alum (including its 14+ waters of hydration) added as a coagulant. In 2006 to 2009, the average alum dose at the DCWTP was 15.3 mg/L. The average amount of aluminum hydroxide solids produced from alum addition is estimated to be 6.7 mg/L.

Most of the polymer added to the water will be bound up in the floc (100 percent of the polymer added to the water typically ends up in the sludge), resulting in 1.0 mg of polymer solids in the sludge for each 1.0 mg of polymer added to treat the water. The average polymer dose was 3.0 mg/L, based on 2006 to 2009 chemical dose data, and the average amount of solids produced from polymer addition is estimated to be 3.0 mg/L. Discussions with District staff indicate that the current polymer dosage is about 1.0 mg/L.

Based on the District's source water quality data and chemical dose data, the average solids production is estimated to be about 20 mg/L of solids or 167 pounds of dry solids for each 1 MG treated. Assuming that the pretreatment and washwater and solids handling system improvements permits producing 250 MG per year at the DCWTP, the amount of "dry (waste) solids" generated is estimated to be about 43,000 pounds per year. Based on a typical sludge drying bed capacity of about 15 pounds per square foot per year (to dry the solids to about 50 percent moisture content) for coastal areas in California, the required sludge drying bed area is estimated to be about 2,850 square feet.

In addition to determining the annual average solids loading, the peak solids loading should be evaluated for the sizing of the washwater and solids handling facilities. Based on the most challenging anticipated operating conditions at the DCWTP, with a 1,000 gpm flow rate while treating source water with turbidity at 50 NTU, and using 25 mg/L of alum and 4 mg/L of polymer to condition the water for contact clarification-filtration, the maximum estimated solids production would be about 1,105 pounds of "dry" solids per day. Assuming an "initial" sludge solids concentration of 1 percent for solids accumulated at the bottom of a clarifier/thickener, the amount of washwater solids during a 24 hour period would occupy a volume of 1,770 cubic feet.

B.8 Evaluation of Washwater System Improvement Alternatives

Two spent washwater treatment system improvement alternatives were developed for evaluation. The two alternatives are described in the subsections below, and schematic diagrams of these two alternatives are presented on Figures 1 and 2. Alternative 1 includes evaluation of three locations where the new WWR basins could be located, two alternative WWR basin configurations, and two operational modes. Alternative 2 includes only one location and one WWR basin and sludge drying bed configuration.

B.8.1 Alternative 1

This alternative would include two WWR basins that would receive both spent CC washwater and spent filter backwash water. The two WWR basins would provide the ability to clarify the spent washwater and concurrently thicken the settling/settled sludge solids. Sludge scrapers could be installed in the WWR basins to aid the thickening of the sludge solids. The design and operating intent of the two WWR basins would be to serve as the primary clarification location where the majority of the solids would be removed from the spent washwater. The clarified spent washwater would either be directly recycled to the head of the DCWTP treatment process or delivered to one of the existing WWR ponds for further polishing and/or storage prior to recycling.

Three new sludge drying beds would be constructed, and the thickened sludge solids from the new WWR basins would be transferred to the new sludge drying beds. The sludge drying beds would have a combined area of about 4,200 square feet, each bed with approximately 1,400 square feet of area to store and dry wet solids. As discussed above, the estimated area required to dry the anticipated amount of dry solids is about 2,850 square feet. The recommended sludge drying bed area would provide about 50 percent more area than is needed to permit processing/drying more sludge solids, which may be needed if the average turbidity is higher than 7.25 NTU or if the annual DCWTP production is greater than 250 MG.

Each of the new sludge drying beds will be similar to the drying beds constructed at the District's NWTP in 1992. The beds would include a perforated pipeline underdrain collection system with 6 inches of coarse sand media and 12 inches of gravel above the 4 inches of gravel around the perforated pipes to enhance gravity drainage of water from the wet solids. A decant structure at each drying bed would capture the supernatant to facilitate the drying of the solids.

B.8.1.1.1 Location of New Facilities

The available level area within the DCWTP boundary fence-line include the southwest side of the existing Filter Building, between the building and the water storage tank access road, and the area currently used to park a front loader and to store granular material, between the water storage tank access road and the southwest corner of WWR Pond Number (No.) 2. Neither of these areas is adequate to permit constructing either of the two WWR basin configurations. The new WWR basins would have to be constructed in the areas outside the DCWTP treatment facilities' boundary fence line or within the existing WWR pond area. Figure 3 shows three possible locations for the new WWR basins.

The first area is located on the hillside area on the southeast side of the DCWTP site outside the existing security fence line. This hillside location for two new WWR basins is shown on Figure 3 and is identified as "Location 1". This area is very steep and heavily vegetated. Based on the 1971 DCWTP design drawing G-6A, the horizontal and vertical distances between the toe of the hillside on the south side of the level area at the DCWTP site and the top of the hillside where the 1.5 MG tank is located is about 290 feet and about 170 feet, respectively. This is equivalent to a slope with a 1 foot rise on a 1.7 foot run. The minimum recommended slope (without a geotechnical study) that should be considered for a stable slope is a 1 on 2 grade. In addition, the location of both the original filtered water and new filtered water pipelines between the DCWTP Filter Building and the 1.5 million gallon (MG) tank may make it difficult to excavate the southern-most portions of the hillside needed to create the necessary space (approximately 40 feet by 80 feet) needed to install the two WWR basins. The first location would also require constructing new storm water conveyance channels, as well as replacing and relocating portions of the existing fence. Therefore, the first hillside location does not appear to be suitable for modifications to permit installing the two new WWR basins and was eliminated from further consideration.

The second area is also located outside of the DCWTP site fence line on the south side of the level area and is also steep and heavily vegetated. The second hillside location for two new WWR basins is shown on Figure 3 and is identified as "Location 2". This area would also likely require extensive earthwork. It would also require relocating portions of the existing perimeter fence line to enclose the new WWR basins. Re-grading the hillside area to permit constructing two new WWR basins in this area is expected to be relatively costly. Based on the difficultly making this area suitable to construct the two WWR basins, the second hillside location also does not appear to be suitable for installing the two new WWR basins and was also eliminated from further consideration.

The third proposed area for the new WWR basins would be where the existing WWR Pond No. 2 is currently located. This area is also the proposed area for the new sludge drying beds. The area is within the existing site perimeter fence line. WWR Pond No. 2 would be removed from service and filled with engineered material. The level area would permit constructing sludge drying beds along the northwest (Creek) side of this new level area and constructing the two WWR basins on the southeast side. Creating the new area would require over excavating the existing WWR pond's side slopes and bottom and placing engineered fill material to create an area with a finish grade elevation at about elevation 149.0. The surface of the sludge drying beds would be set at elevation 146.5. This elevation was set to permit the water collected in the underdrain systems of the sludge drying beds to gravity flow into the existing WWR Pond No. 1 above the maximum operating level in the pond at elevation 143.0. The new sludge drying beds

and an access road would use about 65 feet of the northwest side of what currently is the existing WWR Pond No. 2, as shown on Figure 3, and the area where the two WWR basins would be installed is identified on Figure 3 as “Location 3”.

The 45 feet by 80 feet area on the southeast side of WWR Pond No. 2 would be suitable for installing either the two square WWR basins or the two circular WWR basins described below. Although the spent washwater pipelines from the two new CCs and three existing filters to this area would be longer than the pipelines to the first two locations and would have to cross the existing sewer and storm drain pipelines, the grading required to prepare this area should be significantly less than would be required to re-grade the two hillside areas.

If Alternative 1 is selected, the site geotechnical investigation will need to include soil testing and the topographic survey of the appropriate areas indicated in Figure 3.

B.8.1.1.2 Washwater Recovery Basin Configurations

Two alternative WWR basin configurations (options 1A and 1B) were evaluated: one alternative (option 1A) would include two square WWR basins (32-feet by 32-feet inside lengths) with a common wall between the two adjoining basins, and the other alternative (option 1B) would have two circular WWR basins (36-feet diameter). Both basins’ designs would have sloped circular (conical shaped) bottoms and a sidewall height of about 13 to 14 feet. The operational volumes in these two alternative basin configurations are nearly identical. However, the circular basins require less structural reinforced concrete for construction and the sludge scraper equipment in a circular basin does not require inclusion of corner sweeps on sludge collector arms to sweep corners in square basins.

B.8.1.1.3 Operational Configurations

The two new WWR basins could be set up to operate in series or in parallel. If the two WWR basins operate in series, the first WWR basin would operate in a fill and withdraw/drawdown mode and the second WWR basin would operate with a relatively constant flow rate through it. If the two WWR basins operate in parallel, each WWR basin would alternate between a fill, settle, and withdraw operational sequence of steps.

Series Operation Mode

If the two WWR basins are operated in series, the first basin should be operated in a fill and drawdown mode to permit receiving high flow rates during filter backwashes once each day as well as more frequent and shorter duration CC washes (up to 6 times for each CC per day). The water in the first WWR basin would be transferred to the second WWR basin at a constant flow rate using a transfer pump with a variable speed drive. This flow rate would be set daily based on the total volume of spent washwater generated the prior day plus or minus the change in the WWR Basin No. 1 volume during the past 24 hours to facilitate optimizing both clarification and sludge thickening in the second WWR basin. A sludge scraper could be installed in the second basin to enhance sludge thickening and removal. Operational experience at San Juan Water District with similar clarifier-thickener units indicates that a clarifier-thickener unit can consistently produce both clarified water with turbidity below 2 NTU and concurrently produce thickened sludge with a solids concentration of about 2 percent solids when a suitable non-ionic polymer is added to the spent washwater.

Advantages

1. The varying and particularly high inflow flow rate(s) to WWR Basin No. 1 during CC washes and filter backwashes will not interfere with setting and operating at a steady state (optimal) flow rate through WWR Basin No. 2.

2. A steady-state flow rate through the second WWR basin should permit producing clarified water with less than 2 NTU turbidity and thickened sludge with a solids content of at least 1-½ percent.

3. The sludge drying beds would be consolidated to a single area and adjacent to each other, which would permit overflow into an adjacent drying bed when one drying bed is full.

Disadvantages

1. This will require including an intermediate pump station (with a variable speed drive on the pump) to maintain a constant flow rate through WWR Basin No. 2. The low flow rate and relatively low total dynamic head (TDH) would limit pump motor size to only about 1 HP, so this would not have a significant capital or operating cost.

2. One of the two existing WWR basins would no longer be available for operational flexibility. Plant operations would be disrupted during the period required to remove the existing WWR Pond No. 2 from service until at least one of the two new WWR basins is operational.

Parallel Operation Mode

If the two new WWR basins are operated in parallel, one basin would be filled during a 12 to 24 hour period, then removed from service for a 6 to 12 hour period to permit the clearer water and washwater solids to separate, at the end of this period the clarified water would be transferred to the existing WWR Pond No. 1 for further clarification and/or storage. This system would need to include a small “roughing filter” (in a 4-feet diameter vertical pressure vessel, similar to the two proposed pressure contact clarifier units) to ensure that the recycled water turbidity is less than 2 NTU.

Advantages

1. Operating the two WWR basins in a fill, hold, settle, and drawdown/decant operational mode permits incorporating both clarification and sludge thickening in each WWR basin.

2. This configuration permits using the available head in a full WWR basin to transfer the solids from the WWR basin to the solids dewatering system (i.e. drying beds).

Disadvantages

1. The time required for settle solids from the washwater will probably not be adequate to achieve a 2 NTU turbidity level all of the time.

2. Settled water must be removed using a telescoping valve or floating removal unit.

3. There is only one equipment manufacturer that currently furnishes both the floating decant units and a sludge scraper mechanism.

4. A roughing filter should be included as part of this alternative to ensure that the turbidity of the recycled water is less than 2 NTU in accordance with the CAP turbidity goal.

B.8.2 Alternative 2

This alternative involves modifying the existing WWR ponds for installation of sludge drying beds on the northeast side of both ponds. A third drying bed would be installed in the level area between the southwest side of the Filter Building and the water storage tank access road. The remaining space in each of the two existing WWR ponds would be modified by installing a solids collection sump, modifying the floor in each pond to provide a sloped surface to the solids collection sump and installing a gunite surface on the sloped walls and the floor of the two ponds. The gunited surfaces would permit District staff to use hoses to flush the accumulated solids from the sloped sides and floor to the new solids collection sump. A new sludge transfer system would be installed in each of the modified WWR ponds that includes a portable submersible pump to transfer the sludge solids from the sump to new sludge drying beds.

The new sludge drying beds installed in the WWR ponds would occupy a 30-foot wide area along the northeast side of each of the two ponds. Each of these two drying beds would provide approximately 1,500 square feet of area to store and dry wet solids, and the third sludge drying bed would provide 1,000 square feet, for a total drying bed area of 4,000 square feet. The combined drying bed area would provide about 40 percent more drying area than the estimated area (2,850 square feet) required to dry the anticipated amount of dry solids produced annually. Each of the new sludge drying beds will be similar to the drying beds constructed at the District's NWTP in 1992.

Installation of drying beds in portions of the existing WWR ponds would reduce the pond volumes by 35- to 40-percent to between 180,000 and 190,000 gallons. The ponds would be operated in parallel. Under conditions of maximum washwater generation, one pond would be filling for a 30 to 40 hour period, and then it would be removed from service for recycling of the spent washwater.

Based on information provided by District staff, the settled/clarified spent filter backwash water typically is between 2 and 6 NTU. Since District staff prefers that the washwater system improvements be capable of producing recycle water that complies with the CAP 2 NTU goal, this alternative would also include a 4-foot diameter pressure contact clarifier to polish the recycle water prior to delivering it to the point where it mixes with the raw water supplied to the DCWTP.

Advantages

1. The modifications to the existing WWR ponds should reduce the labor currently required to remove solids from each pond.

2. The roughing filter would reduce the recycle water turbidity to less than 2 NTU in accordance with the CAP goal.

Disadvantages

1. Sludge removal from the WWR ponds will still require at least a 1-day effort for hosing the solids in the pond towards the solids collection sump.

2. This alternative reduces the available area on the plant site for storage of materials and equipment and for parking of vehicles.

3. The sludge drying beds in this alternative are spread out. Overflow from a sludge drying bed would be returned to the WWR ponds rather than flowing into the next available sludge drying bed until the drying bed is taken offline.

B.9 Alternatives' Estimated Cost

An estimate of probable construction costs for the two washwater and solids handling system improvements alternatives and variations of the two alternatives are summarized in the Table 1 below.

Table 4: Construction Cost Comparison of Washwater and Solids Handling System Improvements Alternatives [A]

	Alternative 1[B]			Alternative 2	
	Square Basins w/ Sludge Scraper	Circular Basins		w/ Recycled Water Treatment	w/o Recycled Water Treatment
Category		**with Sludge Scraper**	**w/o Sludge Scraper**		
Total Including Taxes (9.25%), Contractor OH&P (20%) and Conceptual Design Level Contingency (25%)	$1,340,000	$1,328,000	$1,077,000	$1,327,500	$965,000
Engineering, Environmental and Construction Services (20%)	$268,000	$265,000	$215,000	$265,500	$193,000
Total Conceptual Project Cost	**$1,608,000**	**$1,593,000**	**$1,292,000**	**$1,593,000**	**$1,158,000**

Notes: [A] It should be noted that the tax rate used in these cost estimates is 1 percent higher than it was when the Pretreatment Alternatives Feasibility Report was submitted to the District in March 2009, due the increase in state sales tax.

[B] The costs of the three Alternative 1 WWR Basin configurations are based on operation of the two WWR basins in series. The additional cost for the recycle water treatment unit including taxes, contractor OH&P and contingency would be about $362,500 plus an additional $72,500 for engineering, environmental and construction services if these three alternatives with the two WWR basins operate in parallel. Each of these three alternatives would be about $435,000 more costly than the series operational mode alternative.

The estimate cost of Alternative 1 could be reduce by about $300,000, from $1,593,000 to about $1,292,000, if the sludge scraper mechanism for the second WWR basin is not included. Based on discussions with District staff and information provided by engineers that designed the North Bay Regional Water Treatment Plant (NBRWTP), the washwater tank at the NBRWTP does not include a sludge scraper and mechanism to aid in solids thickening. The washwater discharge pipeline into the WWR basin at the NBRWTP creates a circular rotating flow in the WWR basin that provides a combination of centripetal force and coreolis effect to move the particles and solids to the center of the basin. A similar design could be incorporated in the two WWR basins if the lower cost of this configuration is preferred.

B.10 Recommended Project

The recommended washwater and solids handling system improvements include:

1. Installing two new circular concrete WWR basins, to be operated in series and without a sludge scraper mechanism, on the southeast side of the existing WWR Pond No. 2. The second WWR basin design would permit adding a sludge scraper mechanism at a later date.

2. Construct new sludge drying beds with a total area of approximately 4,200 square feet along the northwest side of the existing WWR Pond No. 2.

The estimate of probable cost to construct the recommended washwater and solids handling system improvements is $1,077,000, which includes a 25% construction estimate contingency. The estimated cost with a 20% allowance for engineering design, and engineering support through construction is $1,292,000.

Portions of the recommended washwater and solids handling system improvements should be constructed in phases and during periods when the amount of water in Denniston Creek that is available for treatment is minimal. The construction of the new washwater and solids handling facilities is expected to require at least 4 months. Construction of the new facilities would impact the current washwater handling operations at DCWTP and would require rental of tanks to provide temporary spent washwater storage or shutting down the DCWTP during construction. The additional cost for a 4-month rental of two 21,000 gallon tanks is $10,000. There would also be an additional cost for piping, appurtenances and maintenance of the two tanks.

B.11 References

Pilot Test Results Report, High Rate Water Treatment Process with Ozone, prepared for Castaic Lake Water Agency, May 1990. (K/J/C 894615)

Pilot Plant Report, High-Rate Water Treatment prepared for Humboldt Bay Municipal Water District, September 1994. (K/J 930510.00)

Personal communication with Rick Terrano at Paradise Irrigation District.

Personal communication with Brad Coffey at Metropolitan Water District of Southern California.

Personal communication with Donald Christie at Los Angeles Department of Water and Power.

Personal communication with Paul Rowley at Castaic Lake Water Agency.

Personal communication with Gil Hernandez at North Bay Regional Water Treatment Plant.

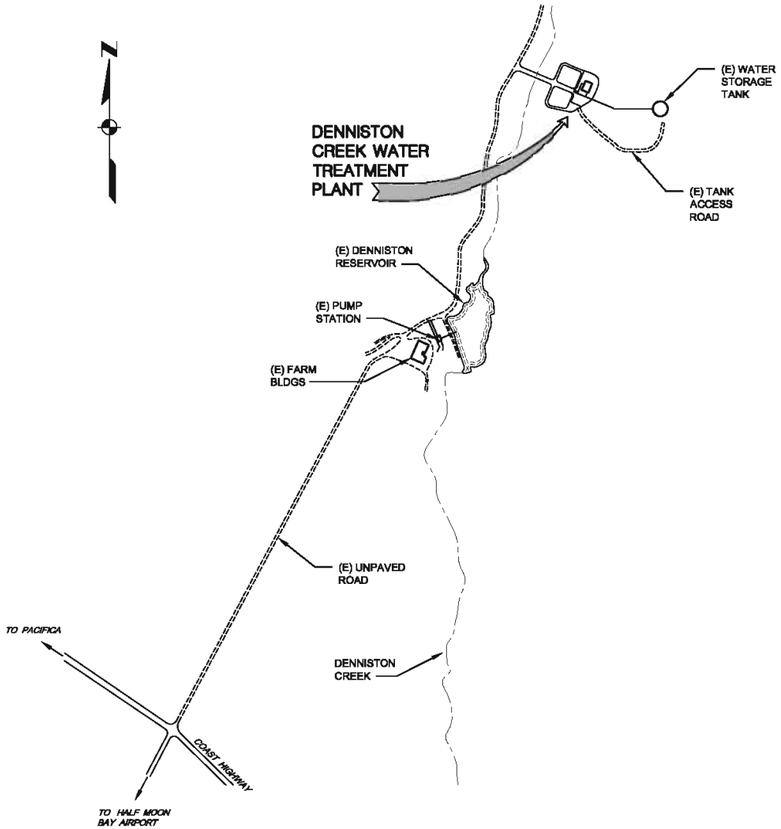
Personal communication with Bill Taplin at Montgomery Watson Harza.

Appendix C – Preliminary Design Drawings

COASTSIDE COUNTY WATER DISTRICT

DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENTS

PRELIMINARY DESIGN REPORT



LOCATION MAP
SCALE: 1" = 400'

DRAWING LIST

GENERAL

G-1	TITLE SHEET, DRAWING LIST, LOCATION AND VICINITY MAPS
G-3	BASIS OF DESIGN AND HYDRAULIC PROFILE
G-4	SCHEMATIC DIAGRAM OF TREATMENT FACILITIES

CIVIL

C-1	SITE PLAN

MECHANICAL

M-2	PRETREATMENT UNITS - PLAN AND SECTION

INSTRUMENTATION

I-1	INSTRUMENTATION LEGEND
I-2	PRETREATMENT PROCESS SYSTEM P&ID
I-4	WASHWATER RECOVERY SYSTEM P&ID

VICINITY MAP
SCALE: 1" = 4 MILES

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

AILEEN KONDO 3/17/2010 2:34 PM
N:\2008\08688026.01 Denniston Creek WTP WW and PDR\08688026g01.dwg

USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS ©.

NO.	REVISION	DATE	BY

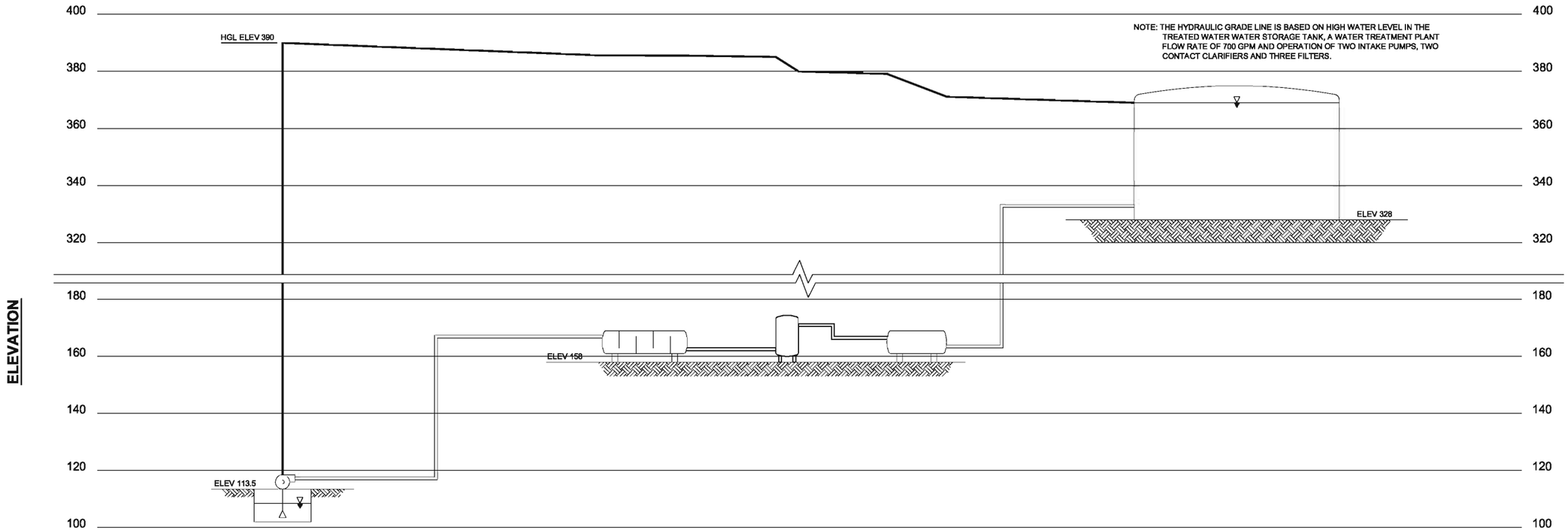
SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

DESIGNED	CMT
DRAWN	ROO
CHECKED	TKR

COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA
DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT
Kennedy/Jenks Consultants
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

TITLE SHEET, DRAWING LIST, LOCATION AND VICINITY MAPS

FILE NAME	08688026g01
JOB NO.	08688026.01
DATE	MAR. 2010
SHEET	G-1 OF



HYDRAULIC PROFILE

SCALE: VERTICAL: 1" = 20'
HORIZONTAL: NONE

DESIGN BASIS

DESCRIPTION	UNITS	EXISTING	NEW
PLANT FLOW RATES			
MAXIMUM DAY	GPM	1,000	
AVERAGE DAY	GPM	500	
MINIMUM DAY	GPM	250	
COAGULATION TANKS			
PROCESS UNITS	NUMBER	1	
TANK CAPACITY	GALLONS	11,300	
DETENTION TIME (MIN)	MINUTES	11.3	
PRESSURE CONTACT CLARIFIERS			
PROCESS UNITS	NUMBER	-	2
CAPACITY PER UNIT	GPM	-	785
DIMENSION (DIA.)	FT	-	10
SURFACE AREA	SF	-	78.5
SURFACE LOADING RATE (MAX)	GPM/SF	-	6.4
CLARIFIER MEDIA DEPTH	IN	-	48

DESCRIPTION	UNITS	EXISTING	NEW
WASH RATE			
WATER	GPM/SF	-	10
AIR	SCFM/SF	-	7.5
WASTE WASHWATER VOLUME			
WASTE VOLUME PER WASH	GALLONS	-	8,000
WASHES PER CLARIFIER PER DAY (MAX)	NUMBER	-	8
TOTAL WASHTE WASHWATER VOLUME	GALLONS	-	98,000
AIRWASH BLOWERS			
PROCESS UNITS	NUMBER	-	3
AIRWASH BLOWER CAPACITY	SCFM	-	590
AIRWASH BLOWER MOTOR	HP	-	15
CONTACT CLARIFIER WASHWATER SUPPLY			
STORAGE TANK			
PROCESS UNITS	NUMBER	-	1
CAPACITY	GALLONS	-	10,000
DIMENSIONS (DIA. X H)	FT X FT	-	16 X 30

DESCRIPTION	UNITS	EXISITING	NEW
FILTERS			
PROCESS UNITS	NUMBER	3	
CAPACITY PER UNIT	GPM	480	
DIMENSION (DIA. X L)	FT X FT	8 X 20	
SURFACE AREA	SF	180	
SURFACE LOADING RATE (MAX)	GPM/SF	3	
FILTER MEDIA DEPTH	IN	30	
WASH RATE	GPM/SF	12	
WASHWATER RECOVERY SYSTEM			
PROCESS UNITS	NUMBER		2
DIMENSIONS (DIA. X SWD)	FT X FT		35 X 11
OPERATIONAL VOLUME	GALLONS		79,000
SLUDGE STORAGE CAPACITY (@ 1% SOLIDS)	POUNDS		500

DESCRIPTION	UNITS	EXISITING	NEW
SLUDGE DRYING BEDS			
PROCESS UNITS	NUMBER	-	3
APPROXIMATE DIEMENSIONS PER UNIT (L X W)	FT X FT	-	32 X 40
AREA (TOTAL)	SF	-	4,000
SLUDGE DEPTH (MAX)	INCHES	-	24
SOLIDS CONCENTRATION (WET/DRY)	%	-	2 / 50
ANNUAL SLUDGE PRODUCTION	POUNDS	-	43,000
SOLIDS LOADING (AVG)	LB/SF	-	15

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

NO.	REVISION	DATE	BY

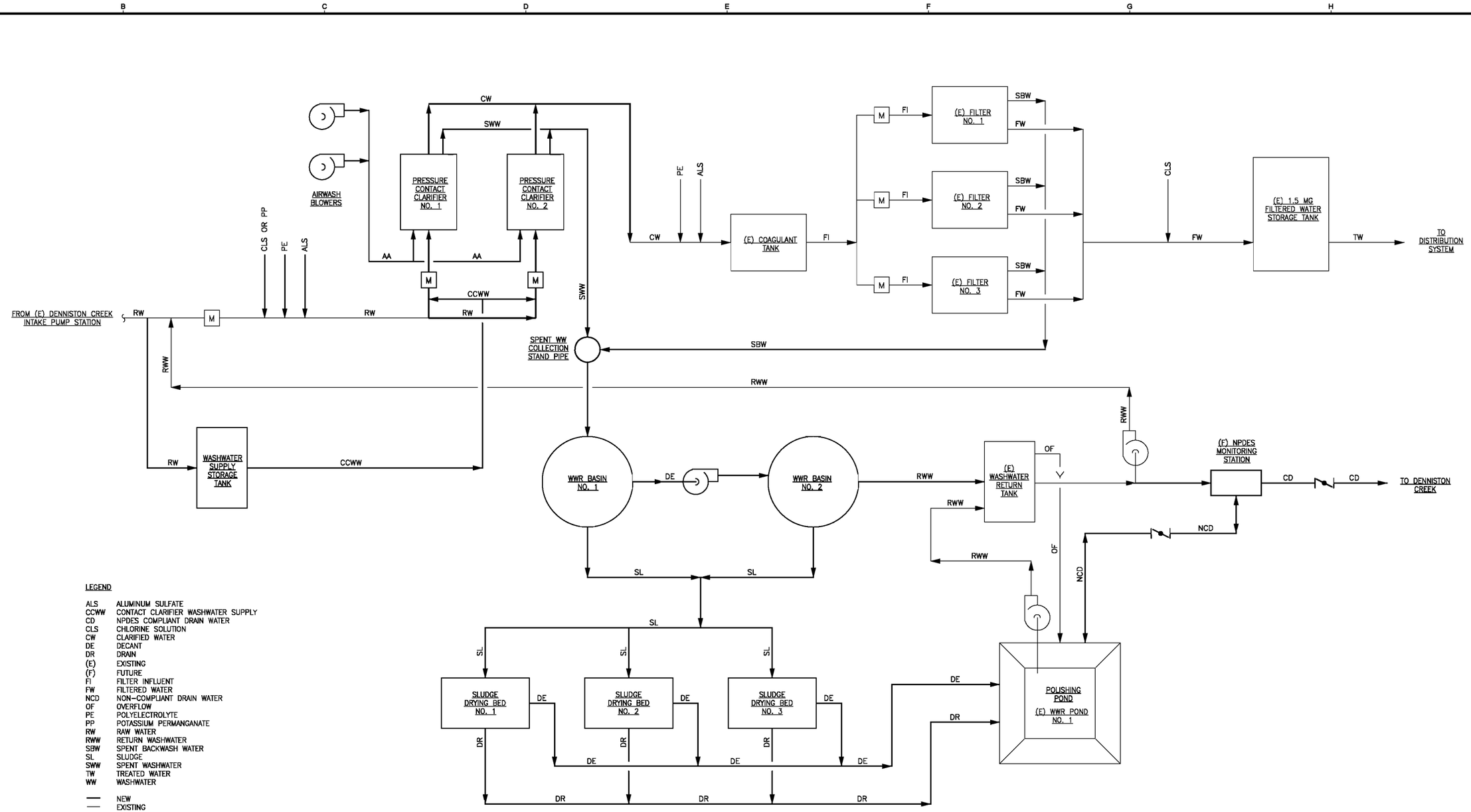
SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

DESIGNED ANK
DRAWN ANK
CHECKED CMT

COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA
DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT
Kennedy/Jenks Consultants
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

BASIS OF DESIGN AND HYDRAULIC PROFILE

FILE NAME
JOB NO. 0686026.01
DATE MAR. 2010
SHEET G-3 OF



LEGEND

ALS	ALUMINUM SULFATE
CCWW	CONTACT CLARIFIER WASHWATER SUPPLY
CD	NPDES COMPLIANT DRAIN WATER
CLS	CHLORINE SOLUTION
CW	CLARIFIED WATER
DE	DECANT
DR	DRAIN
(E)	EXISTING
(F)	FUTURE
FI	FILTER INFLUENT
FW	FILTERED WATER
NCD	NON-COMPLIANT DRAIN WATER
OF	OVERFLOW
PE	POLYELECTROLYTE
PP	POTASSIUM PERMANGANATE
RW	RAW WATER
RWW	RETURN WASHWATER
SBW	SPENT BACKWASH WATER
SL	SLUDGE
SWW	SPENT WASHWATER
TW	TREATED WATER
WW	WASHWATER

—— NEW
—— EXISTING

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

NO.	REVISION	DATE	BY

SCALES
0 —— 1"
0 —— 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

DESIGNED ANK
DRAWN ANK
CHECKED CMT

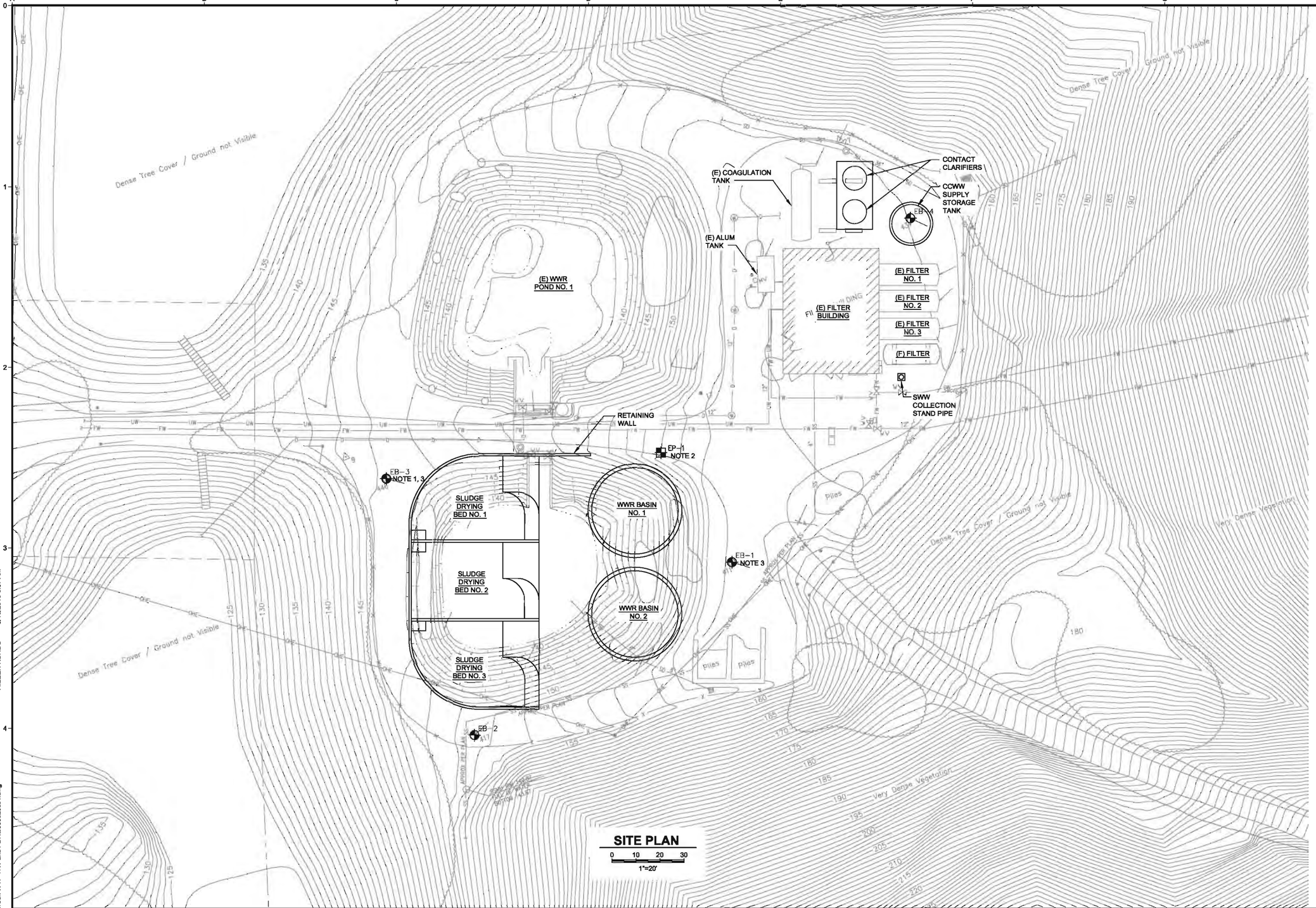
COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA

DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT

Kennedy/Jenks Consultants
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

PROCESS FLOW SCHEMATIC

FILE NAME
JOB NO. 0868026.01
DATE MAR. 2010
SHEET G-4 OF



APPROXIMATE LOCATION OF EXPLORATORY PIT

APPROIXIMATE LOCATION OF EXPLORATORY BORING

NOTES:

1. SOIL SAMPLE AT 14.5'BGS HAD A CREENISH APPEARNCE AND FOUL SMELLING ODOR.
2. SEDIMENT LAYER FOR ≈ 2'-3' DEPTH.
3. OBSERVATION WELL.

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

NO.	REVISION	DATE	BY

SCALES

0 ——— 1"

0 ——— 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

DESIGNED	ANK
DRAWN	ANK
CHECKED	CMT

COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA

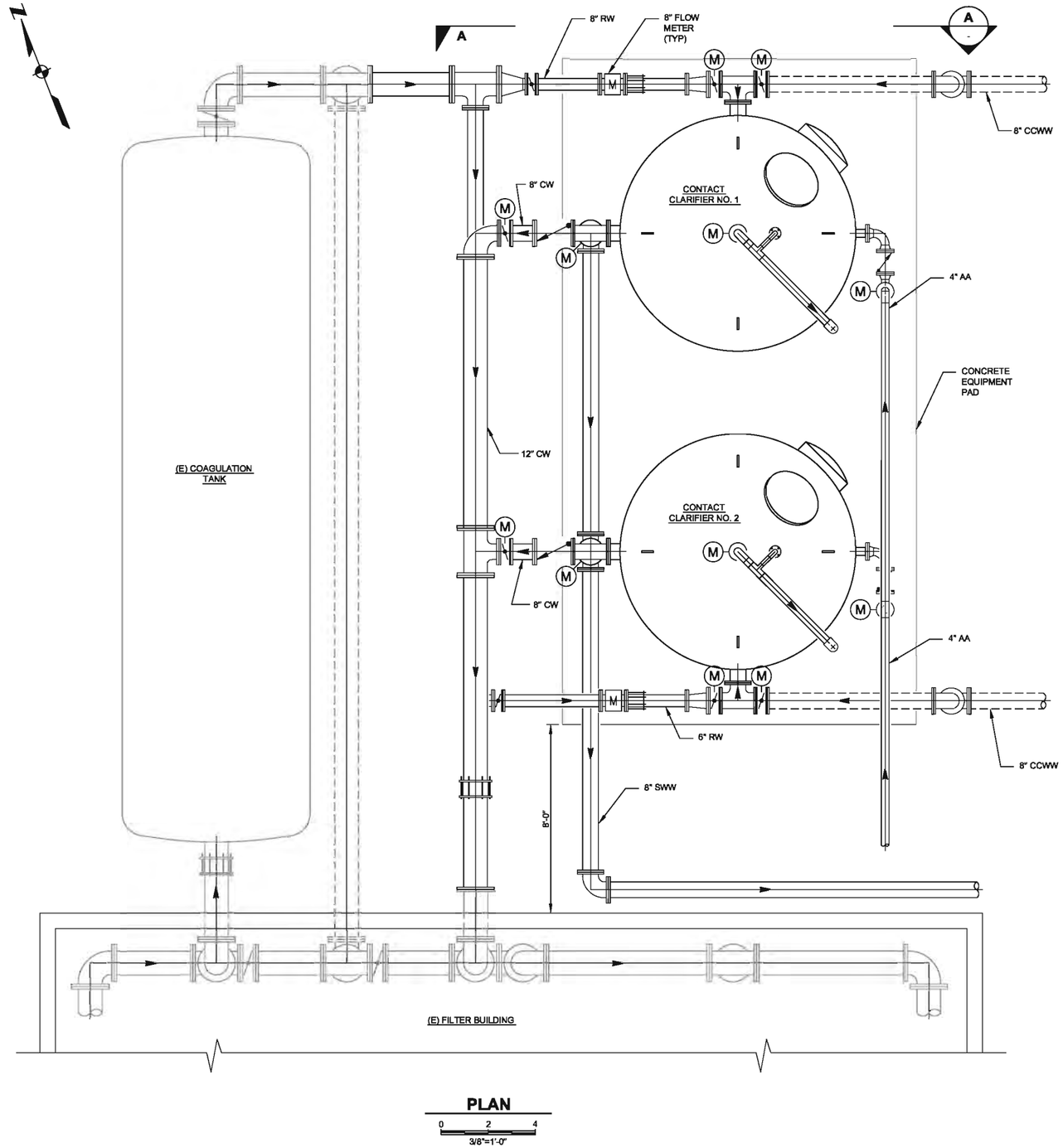
DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT

Kennedy/Jenks Consultants
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

SITE PLAN

FILE NAME	
JOB NO.	0868026.01
DATE	MAR. 2010
SHEET	C-1

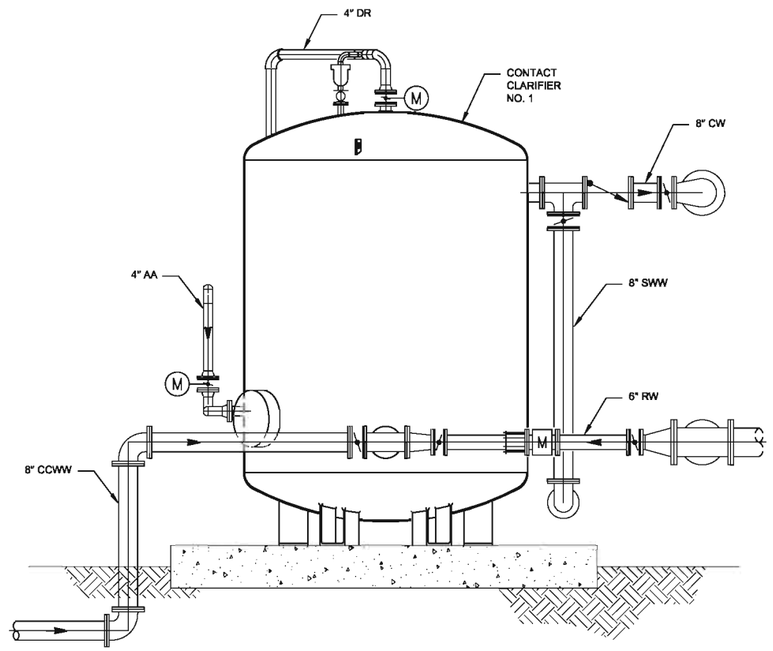
N:\2008\0868026.01 Denniston Creek WTP WW and PDR\0868026d01.dwg 3/16/2010 9:37 AM AILEEN KONDO



PLAN

0 2 4

3/8"=1'-0"



SECTION A

0 2 4

3/8"=1'-0"

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

N:\2008\0868026.01 Denniston Creek WTP WW and PDR\0868026dm02.dwg AILEEN KONIDO 3/15/2010 3:35 PM

USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS ©.

NO.	REVISION	DATE	BY

SCALES

0 1"

0 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

DESIGNED ANK

DRAWN ANK

CHECKED CMT

COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA

DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT

Kennedy/Jenks Consultants ©
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

PRETREATMENT UNITS PLAN AND SECTION

FILE NAME

JOB NO. 0868026.01

DATE MAR. 2010

SHEET M-2 OF

INSTRUMENT SYMBOL IDENTIFIERS

J-1: IDENTIFICATION LETTERS (SEE TABLE BELOW)
J-2: LOOP NUMBER
J-3: VENDOR DESIGNATOR (NOTE 3)
J-4: FUNCTION BLOCK (SEE TABLE BELOW)
J-5: PANEL NUMBER
J-6: HANDSWITCH DESIGNATOR (SEE BELOW)

	FIRST LETTER		SUCCEEDING LETTERS		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	USER'S CHOICE			CONTROL	CLOSED
D	DENSITY	DIFFERENTIAL	DAMPER		
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			
G	USER'S CHOICE		GLASS, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOISTURE	MOMENTARY			MIDDLE, INTERMEDIATE
N	USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE, RESTRICTION		OPEN
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		
S	SPEED, FREQUENCY	SAFETY	SWITCH		
T	TEMPERATURE			TRANSMIT	
U	MULTI VARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, OR LOUVER	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE, PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z	POSITION, DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

GENERAL INSTRUMENT OR FUNCTION SYMBOLS	FIELD MOUNTED	PRIMARY LOCATION ACCESSIBLE TO OPERATOR	AUXILIARY LOCATION ACCESSIBLE TO OPERATOR	NORMALLY INACCESSIBLE OR BEHIND THE PANEL
DISCRETE INSTRUMENTS				
SHARED DISPLAY, SHARED CONTROL				
COMPUTER FUNCTION				
PROGRAMMABLE LOGIC CONTROL				

J-4 FUNCTION BLOCK DESIGNATORS

- SUMMING
- DIFFERENCE
- INTEGRAL
- DERIVATIVE
- MULTIPLYING
- DIVIDING
- CONVERT:
- ROOT EXTRACTION
- SQUARE ROOT
- EXPONENTIAL
- HIGH SELECTING
- LOW SELECTING
- BIAS
- NONLINEAR OR UNSPECIFIED FUNCTION

* E - VOLTAGE
I - CURRENT
P - PNEUMATIC
A - ANALOG
B - BINARY
H - HYDRAULIC
O - ELECTROMAGNETIC, SONIC
R - RESISTANCE (ELECT)
D - DIGITAL

J-6 HANDSWITCH DESIGNATORS

HOA	HAND-OFF-AUTO	LR	LOCAL-REMOTE
HOR	HAND-OFF-REMOTE	OC	OPEN-CLOSE
F-R	FORWARD-REVERSE	OCA	OPEN-CLOSE-AUTO
1-0	ON-OFF	A/M	AUTO-MANUAL

INSTRUMENT SERVICES

- AS — INSTRUMENT AIR SUPPLY (NOTE 4)
- ES — 120 VAC ELECTRICAL SERVICE (DIFFERENT VOLTAGES ARE SPECIFICALLY NOTED)

PLC INPUT/OUTPUT

- DISCRETE INPUT
- ANALOG INPUT
- DISCRETE OUTPUT
- ANALOG OUTPUT

FLOW PRIMARY ELEMENTS

- ORIFICE PLATE
- SINGLE PORT PITOT TUBE OR PITOT-VENTURI TUBE
- VENTURI TUBE
- AVERAGING PITOT TUBE
- FLUME
- WEIR
- TURBINE OR PROPELLER-TYPE PRIMARY ELEMENT
- THERMAL MASS FLOWMETER
- POSITIVE DISPLACEMENT TYPE FLOW TOTALIZING INDICATOR
- VORTEX SENSOR
- TARGET TYPE SENSOR
- FLOW NOZZLE
- MAGNETIC FLOWMETER
- SONIC FLOWMETER
- ROTAMETER
- ROTAMETER WITH INTEGRAL VALVE

LINES

- MAIN PROCESS
- SECONDARY PROCESS
- I-2/A — REFERENCES LEAVING SHEET; LINE CONTINUATION; TO DRAWING REFERENCE
- A/I-3 — REFERENCES ENTERING SHEET; FROM DRAWING REFERENCE; LINE CONTINUATION
- 24" BW — PIPE SYSTEM; PIPE SIZE IN INCHES
- ELECTRICAL SIGNAL
- SOFTWARE OR DATALINK
- PNEUMATIC
- HYDRAULIC
- CAPILLARY TUBE
- ELECTROMAGNETIC OR SONIC (GUIDED)

MECHANICAL — OR — CONNECTED
NOT CONNECTED
ELECTRICAL

VALVES

- GATE VALVE
- GLOBE VALVE
- PLUG VALVE
- CHECK VALVE
- PINCH VALVE
- DIAPHRAGM VALVE
- BUTTERFLY VALVE
- BALL VALVE
- NEEDLE VALVE
- PLUG (COCK)
- PRESSURE REDUCING REGULATING VALVE, SELF-CONTAINED
- BACK PRESSURE REGULATING VALVE, SELF-CONTAINED
- PRESSURE REDUCING REGULATOR WITH EXTERNAL PRESSURE TAP
- 3-WAY VALVE
- 4-WAY VALVE
- ANGLE VALVE
- PRESSURE RELIEF VALVE
- * FC = FAIL CLOSED; FO = FAIL OPEN; LC = LOCKED CLOSED; LO = LOCKED OPEN
- CLOSED DURING NORMAL OPERATION
- SHADING INDICATES PORT TO BE CLOSED DURING NORMAL OPERATION. DOT INDICATES PORT TO BE CLOSED DURING ALTERNATE OPERATION.

VALVE OPERATORS

- DIAPHRAGM
- DIAPHRAGM PRESSURE BALANCED
- MOTOR
- CYLINDER OPERATOR
- S — SOLENOID
- SV — SOLENOID VALVE

TYPICAL CONNECTION

- IN-LINE DEVICE
- DIRECT CONNECTION TO PROCESS
- TEMPERATURE ELEMENT WITH WELL
- RADIATION OR SONIC SENSING
- FILLED SYSTEM, DIAPHRAGM SEAL CONNECTION

MISCELLANEOUS

- FLANGE
- UNION
- Y STRAINER
- FLOW STRAIGHTENING VANE
- TEE
- SCREWED CAP
- WELDED CAP
- BLIND FLANGE
- REDUCER
- HB — HOSE BIBB CONNECTION
- EXPANSION JOINT
- FLEXIBLE COUPLING
- FLANGED COUPLING ADAPTER
- SLUICE GATE OR SLIDE GATE
- DRAIN
- DIAPHRAGM SEAL
- RUPTURE DISK, PRESSURE
- RUPTURE DISK, VACUUM
- PURGE
- THERMOMETER WELL
- CALIBRATION CYLINDER
- PULSATION DAMPER
- AIR RELIEF VALVE
- AIR RELEASE
- LEVEL PROBE
- CHEMICAL DIFFUSER
- STATIC MIXER
- EDUCTOR/INJECTOR
- INTERLOCK. NUMBER IS THE CROSS REFERENCE TO A SPECIFIC ELEMENTARY DIAGRAM OR TO A SPECIFIC CONTROL STRATEGY DESCRIBED IN THE SPECS
- * AV - AIR VALVE; F - FILTER; T - TRAP; FH - FIRE HYDRANT
- WATER LINE
- GRAVITY FLOW

EQUIPMENT

- MIXER
- VERTICAL TURBINE PUMP
- SUBMERSIBLE PUMP
- PUMP BLOWER
- PUMP
- METERING PUMP
- PUMP PROGRESSIVE CAVITY
- ROTARY PUMP
- PERISTALTIC PUMP

NOTES:

1. THIS IS A GENERALIZED LEGEND SHEET.
2. SEE ALSO ISA S5.1, S5.3 AND S7.3.
3. INSTRUMENTS MARKED WITH AN ASTERISK ARE FURNISHED WITH THE EQUIPMENT.
4. REFER TO ISA RP7.7 FOR INSTRUMENT AIR QUALITY STANDARDS.

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

NO.	REVISION	DATE	BY

SCALES
0 — 1"
0 — 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER — TONY L RAKIM — No. 7021 — Exp. 12/31/11 — CONTROL SYSTEMS — STATE OF CALIFORNIA

DESIGNED	JL
DRAWN	JL
CHECKED	CMT/TIW

COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA
DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT

Kennedy/Jenks Consultants
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

INSTRUMENTATION LEGEND

FILE NAME	
JOB NO.	0868026.01
DATE	MAR. 2010
SHEET	I-1
OF	

N:\2008\08868026.01 Denniston Creek WTP WW and PDR\0868026901.dwg
AILEEN KONDO 3/16/2010 3:16 PM

SCADA

PLC

OUTSIDE AIR

OUTSIDE AIR

OUTSIDE AIR

6" AA

6" AA

6" AA

6" AA

6" AA

6" AA

6" AA

6" AA

M

O/C

FIT

FE

LIT

LE

PIT

PDIT

AIT

AE

TU

8" RW

8" CWW

8" CW

12" CW

TO (E) COAGULANT TANK

CONTACT CLARIFIER #1

8" SWW

8" AA

6" CW

CONTACT CLARIFIER #2

(E) POLYELECTROLYTE

(E) ALUMINUM SULFATE

(E) POTASSIUM PERMANGANATE

FROM (E) DENNISTON CREEK PUMP STATION

EXISTING

NEW

12" RW

100 PSI

10 PSI

C.C. WSHWATER SUPPLY TANK

8" RW

6" CWW

6" SWW

TO WWR SYSTEM

I-3

LEGEND

NEW

EXISTING

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

N:\2008\08680026.01 Denniston Creek WTP WW and PDR\08680026022.dwg 3/16/2010 3:18 PM AILEEN KONDO

USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS ©.

NO.	REVISION	DATE	BY

SCALES

0 1"

0 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER TONY L. WATKIN No. 7021 Exp. 12/31/11 CONTROL SYSTEM STATE OF CALIFORNIA

DESIGNED	ANK
DRAWN	ANK/JL
CHECKED	CMT/TIW

COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA

DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT

Kennedy/Jenks Consultants
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

PROCESS & INSTRUMENTATION DIAGRAM PRETREATMENT PROCESS SYSTEM

FILE NAME	
JOB NO.	0868026.01
DATE	MAR. 2010
SHEET	I-2
OF	

SCADA

PLC

FROM (E) FILTERS

8" SWW

AIR GAP

FROM PRESSURE CONTACT CLARIFIERS

I-2

8" SWW

SPENT WW STAND PIPE

6" DW

WWR BASIN #1

6" BYPASS

8" SL

SPENT WW PUMP STATION

FIT

FE

6" DW

6" DW

WWR BASIN #2

8" SL

8" RWW

(E) WASHWATER RETURN TANK

(E) WWR POND #1

FIT

FE

TO (E) RAW WATER PIPELINE

TO SLUDGE DRYING BED #1

TO SLUDGE DRYING BED #2

TO SLUDGE DRYING BED #3

NOT FOR CONSTRUCTION
PRELIMINARY DESIGN REPORT

N:\2010\10868026.01 Denniston Creek WTP WW and PDR\0868026I04.dwg 3/16/2010 3:18 PM ALEEN KONDO

USE OF DOCUMENTS

THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF KENNEDY/JENKS CONSULTANTS ©.

NO.	REVISION	DATE	BY

SCALES

0 1"

0 25mm

IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER TONY L WATKIN No. 7021 Exp. 12/31/11 CONTROL SYSTEMS STATE OF CALIFORNIA

DESIGNED ANK

DRAWN ANK/JL

CHECKED CMT/TIW

COASTSIDE COUNTY WATER DISTRICT
HALF MOON BAY, CALIFORNIA

DENNISTON CREEK WATER TREATMENT PLANT IMPROVEMENT PROJECT

Kennedy/Jenks Consultants
303 SECOND STREET, SUITE 300 SOUTH, SAN FRANCISCO, CA 94107

PROCESS & INSTRUMENTATION DIAGRAM WASHWATER RECOVERY SYSTEM

FILE NAME

JOB NO. 0868026.01

DATE MAR. 2010

SHEET I-4 OF

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **David Dickson, General Manager**

Agenda: **June 8, 2010**

Report Date: June 4, 2010

Subject: **Kennedy/Jenks Proposal for Final Design of Denniston Water Treatment Plant Pretreatment & Washwater System Improvement Project**

Recommendation:
Authorize execution of a contract with Kennedy/Jenks for final design of Pretreatment and Washwater System Improvements at Denniston Water Treatment Plant for an estimated cost of $437,120.

Background:
Following submittal of their Denniston Water Treatment Plant Pretreatment and Washwater System Improvements Preliminary Design Report (March 16, 2010), Kennedy Jenks and District staff have worked together to refine the scope of the final design effort. The attached proposal details the scope, including final design of the improvements covered in the Preliminary Design Report as well as integration of the Denniston Short-Term Improvements (STI) design documents into the current project. District Engineer Jim Teter completed the Denniston STI design in 2009, and staff felt it would be advantageous to combine these with the pretreatment improvements into a single construction project.

The estimated cost of the final design is $437,120. The design should be completed by the end of February 2011, allowing us to solicit bids, award the contract, and begin construction by Summer 2011. The Denniston plant could then return to operation by Fall 2012.

Based on the Preliminary Design Report cost estimate, the total cost of the pretreatment and washwater improvements, including engineering, would be about $3.9 million, including engineering. Inclusion of the short-term improvements will add about $1 million to this cost. The proposed Fiscal Year 2010-2011 CIP includes $5.15 million for Denniston improvements.

Fiscal Impact:
Cost of $473,120. The proposed CIP includes funding for this project.

Kennedy/Jenks Consultants

Engineers & Scientists

303 Second Street, Suite 300 South
San Francisco, California 94107
415-243-2150
FAX: 415-896-0999

4 June 2010

Mr. David Dickson
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, California 94018

Subject: Proposal for Professional Engineering Services
Final Design of Pretreatment and Washwater System Improvements
Denniston Creek Water Treatment Plant
K/J B10680052

Dear Mr. Dickson:

Thank you for your request for design assistance for improvements to the Denniston Creek Water Treatment Plant (DCWTP). In accordance with your request, Kennedy/Jenks Consultants is pleased to submit this proposal to Coastside County Water District (District) to provide professional engineering design services for a new pretreatment system and waste filter backwash water and solids handling system improvements to the existing DCWTP facilities.

Project Background and Understanding

The District's DCWTP is a 1,000 gallon per minute (1.44 million gallon per day (MGD)) capacity water treatment plant (WTP) that treats surface water from Denniston Creek and groundwater from the District's wells. The DCWTP was designed about 38 years ago with a direct filtration treatment process that includes coagulation, flocculation, and filtration. Based on information provided by District staff, and described in the Denniston Creek Water Treatment Plant - Pretreatment Alternatives Feasibility Report, K/J 08680026*01 dated 16 March 2010, the existing filters cannot be operated when the source water turbidity exceeds about 15 Nephelometric turbidity units (NTU).

Kennedy/Jenks understands that the District would like to add pretreatment units to permit reducing the turbidity in the source water ahead of the filters and also modify its existing spent filter backwash water and solids handling system to provide the ability to handle the additional washwater and solids that will be generated while treating higher turbidity source water. The

filter backwash water and solids handling system improvements described in the Denniston Creek Water Treatment Plant Improvements - Preliminary Design Draft Report (PDR) (K/J 0868026.01) dated 16 March 2010 will permit DCWTP operations staff to treat the higher turbidity water and process the additional washwater and solids.

Kennedy/Jenks understands that the District's DCWTP Pretreatment and Filter Backwash Water and Solids Handling Improvement Project include:

- Design new pretreatment units that can reduce the raw water turbidity from between 15 and 50 NTU to less than 2 to 5 NTU at flows up to the plant capacity of 1,000 gallons per minute to permit treating more of the District's local source water supply, especially during the winter when more water is available and the Denniston Creek water turbidity tends to be highest.
- Design new washwater (WW) and solids handling system to handle the additional washwater and solids that will be generated during clarifier washes and filter backwashes while treating higher turbidity source water.
- These improvements will also improve operations and flexibility while treating source water with turbidity below 15 NTU.

Kennedy/Jenks prepared conceptual design criteria for two new contact clarifiers (CCs) in pressure vessels and the new WW and solids handling systems at the DCWTP as part of the DCWTP Improvements PDR (K/J 0868026.01) dated 16 March 2010. The scope of services for the final design of the pretreatment units and improvements to the existing filter backwash water and solids handling system will be based on that previous work.

A geotechnical investigation and report describing the areas at the DCWTP site where the new CCs, WW and solids handling systems will be installed and a topographic survey of the DCWTP site was completed as part of the PDR.

Scope of Services

Kennedy/Jenks proposes the following Scope of Services for the requested engineering services for design of the DCWTP Pretreatment Process and Spent Filter Backwash Water and Solids Handling System Improvement Project.

Task 1 – Project Management and Quality Control

Subtask 1.1 – Project Management

Kennedy/Jenks will provide project management focused on control of project costs, maintaining the project schedule requirements, identifying and addressing key issues, and delivering quality design documents. Project management will include directing the work of the Kennedy/Jenks team so that the work is accomplished on-time and within budget. This process

will include internal review of work progress, assessing against hours and dollars spent compared to the work accomplished. Communications with District will include periodic telephone calls to discuss current activities and any needs for additional input or information. A project file will be maintained including copies of correspondence, reports, minutes of meetings, and memoranda.

Subtask 1.2 – Quality Assurance/Quality Control (QA/QC)

Quality assurance and quality control (QA/QC) are integrated into our project management system from project inception, through execution to final document submission. We use experienced senior staff, familiar with, but not directly involved in the project work, to provide QA/QC review of work products and project deliverables. Kennedy/Jenks uses a multiple-step process to maintain effective QA/QC on all our projects. The following is a brief outline of our QA/QC Plan:

- **Policy and Procedures** - The policy of our firm is that quality control is a continuous process and is everyone's responsibility. The Project Manger has final responsibility for QC. We have established quality control procedures used by project managers and teams for specific types of projects. The project specific quality control review procedures are described in the internal Project Memorandum for the project. Those procedures include:
- **Concept and Criteria Review (C&CR)** - At an early stage of the 50 percent design, we will conduct an internal C&CR. The C&CR is an important quality control tool that gives the team an early opportunity to review the project concepts with experienced design and construction staff.
- **Technical Advisor Reviews** - The QA/QC reviewer and technical advisors will be involved on an ongoing basis and provide detailed reviews of work products. Each of the project submittals will be reviewed for engineering decisions, correctness of calculations, and constructability, as well as for content, clarity and presentation.

The Project Manager will sign each submittal confirming that a QC review was conducted.

Kennedy/Jenks' Project Manager and Project Engineer will participate in three project workshops with District staff during the course of the pretreatment units and spent filter backwash water and solids handling system improvement final design project. These three workshops are envisioned to include:

- Project kick-off and site visit workshop (Task 3.1)
- 50 Percent Design Review Workshop (Task 3.2)
- 90 Percent Design Review Workshop (Task 3.3)

Kennedy/Jenks will prepare workshop agenda and submit workshop minutes to District for review within four business days following each workshop.

Task 2 – Final Design – Drawings and Specifications

This task will include preparing design drawings and specifications for bidding the recommended pretreatment, and washwater and solids handling improvements described in the Preliminary Design Draft Report (K/J 0868026.01) dated 16 March 2010.

The design project kickoff workshop agenda (Task 3.1) will include discussions to confirm or modify the recommended pretreatment process improvements described in the PDR and include information and comments provided by District staff at the Draft PDR review workshop conducted on Tuesday, 11 May 2010. The washwater system will be designed based on the WW system description in the Draft PDR and the new sludge drying beds at the DCWTP will be designed similar to the existing sludge drying beds at the District's Nuñes WTP.

Subtask 2.1 – Prepare 50 Percent Design Drawings

The 50 percent design phase submittal is anticipated to include four General, four Civil, five Structural, five Process-Mechanical, and six Process and Instrumentation drawings prepared by Kennedy/Jenks. Additional drawings by Kennedy/Jenks to incorporate the District's design drawings prepared by others for the Short Term Improvements (STI) design drawings will be included. This submittal may also include specification sections describing the major treatment process equipment and the site civil work.

We will submit five copies of the 50 percent design drawings and specification sections to the District for review.

Subtask 2.2 – Prepare 90 Percent Design Drawings and Specifications

The 90 percent design phase submittal is anticipated to include four General, six Civil, 10 Structural, eight Process-Mechanical, and six Process and Instrumentation, eight Electrical drawings, and all of the technical specifications prepared by Kennedy/Jenks. Additional drawings and technical specifications by Kennedy/Jenks to incorporate the District's design drawings prepared by others for the STI improvements will be also be included. We will review the District's General Condition Specification Sections and identify supplemental Special Conditions from Kennedy/Jenks' General Conditions that complement the District's General Conditions. We will also prepare the Division 1 Specification Sections identified in the attached list of design drawings and specification sections.

We will submit five copies of the 90 percent design drawings and specification sections to the District for review.

Subtask 2.3 – Prepare Final Design Drawings and Specifications

Based on the 90 percent review workshop we will prepare the final design documents, which is anticipated will include the same four General, six Civil, 10 Structural, eight Process-Mechanical, and six Process and Instrumentation, eight Electrical drawings, and all of the

technical specifications prepared by Kennedy/Jenks in a final biddable format. Additional drawings and technical specifications prepared by Kennedy/Jenks to incorporate the STI improvement drawings and specifications prepared by others will be included to provide a single set of drawings, specifications and bid documents.

Kennedy/Jenks will provide to the District 25 sets of drawings, specifications and bid documents (one-half size drawings and specifications) for the DCWTP Improvements project. Based on the current set of STI Project design drawings that are for the DCWTP portion of the STI project and Kennedy/Jenks' list of design drawings, we anticipate that there will be approximately 70 design drawings and that the project bid documents and technical specifications will be between 1-½-inch and 2-inch thick. Kennedy/Jenks assumes that distribution of bid documents and addenda to prospective contractors will be performed by the District including packaging and mailing costs. If additional copies of plans, specifications and bid documents are needed and requested by the District during the bid period, Kennedy/Jenks will provide a quotation for the added cost of printing and delivery of the additional bid sets for reimbursement by the District.

Subtask 2.4 – Additional Site Investigations

Our proposed budget includes $7,000 if any additional geotechnical or survey support is required to prepare final design of the pretreatment units and spent filter backwash water and solids handling systems.

Subtask 2.5 – Design Raw Water Pump Station Improvements

Based on information shared by District staff during the PDR Review Workshop, the existing Raw Water Pump Station does not provide either reliable capacity or the DPH-recommended redundancy. We have included a Raw Water Pump Station improvements design subtask that includes one structural design drawing, one mechanical design drawing, one P&ID design drawing, two electrical design drawings, one pump specification section, and its associated pump control description.

Task 3 – Project Workshops and Meeting

Meet with District staff to kickoff the final design project, and also to review both the 50 percent and 90 percent design submittals and discuss District review comments.

Subtask 3.1 – Project Kickoff Workshop and Site Visit

Kennedy/Jenks will meet with District staff to discuss and confirm the recommended design criteria for the new pretreatment units and spent filter backwash water and solids handling system improvements described in the Preliminary Design Report. In addition, Kennedy/Jenks will review the final design process that will include regular communications with District staff, design submittal reviews, preparation of workshop minutes, documentation of design decisions, and monthly progress reports.

Subtask 3.2 – 50 Percent Design Review Workshop

Kennedy/Jenks will meet with District staff to discuss our 50 percent design submittal, at a time convenient to District staff scheduled approximately 2 weeks after the 50 percent design submittal is submitted to the District.

Subtask 3.3 – 90 Percent Design Review Workshop

Kennedy/Jenks will meet with District staff to discuss our 90 percent design submittal, at a time convenient to District staff scheduled approximately two weeks after the 90 percent design submittal is submitted to the District.

Task 4 – Prepare Estimate of Probable Construction Cost and CEQA Support

Subtask 4.1 – Prepare Opinion of Probable Project Cost at 50 Percent Design

Kennedy/Jenks will develop a 50 percent design level, opinion of probable project construction cost for the pretreatment units and the spent filter backwash water and solids handling system improvements.

Subtask 4.2 – Prepare Opinion of Probable Project Cost at 90 Percent Design

Kennedy/Jenks will revise the 50 percent design level, opinion of probable project construction cost for the pretreatment units and the spent filter backwash water and solids handling system improvements as part of the 90 percent design submittal.

Subtask 4.3 – Prepare Final Opinion of Probable Project Cost

Kennedy/Jenks will revise the 90 percent design level, opinion of probable project construction cost for the pretreatment units and the spent filter backwash water and solids handling system improvements as part of the final design submittal.

Subtask 4.4 – CEQA Environmental Compliance Engineering Support

Kennedy/Jenks understands that District will evaluate and prepare appropriate environmental documentation for the project pursuant to the CEQA and other regulatory permitting requirements. Our final design work scope includes eight hours of engineering support to the District's CEQA services consultant for this project.

Task 5 – Bid Services

Kennedy/Jenks will provide engineering support during the DCWTP Improvements project bid phase that includes:

1. preparing 25 sets of project bid documents (one-half size drawings and specifications),
2. preparing up to two sets of addenda based on questions and comments submitted by potential bidders,
3. participating in a project site pre-bid walk with District staff and potential bidders, and
4. assisting the District in review of the submitted bid documents.

Task 6 – Review and Integrate STI Improvements

Subtask 6.1 – Review and Identify STI Project Design Documents

Kennedy/Jenks will identify the STI design documents that apply to the DCWTP that should be revised and/or finalized to permit incorporating these design documents into a single DCWTP Improvements project bid set.

Subtask 6.1A – Electrical and Control System Design Review

This subtask includes conducting a design review of the current DCWTP STI project's electrical and instrumentation systems design drawings and the associated specification sections. We will provide review comments to the District that can be sent to the District's STI project electrical and instrumentation design consultant, Frisch Engineering, to permit completing and coordinating the existing design documents into the DCWTP Improvements project design package.

Subtask 6.1B – Mechanical and Process and Instrumentation Design Review

This subtask includes conducting a design review of the current DCWTP STI project's mechanical and process and instrumentation design drawings and the associated specification sections. We will provide review comments to the District that can be sent to the District's STI project design consultant, James Teter, to permit completing and coordinating the existing design documents into the DCWTP Improvements project design package.

Subtask 6.1C – Architectural and Structural Design Review

This subtask includes conducting a design review of the current DCWTP STI project's structural design drawings and the associated specification sections. Our review will also include a building code review of the modifications to the existing DCWTP Filter Building shown on these drawings. We will provide review comments to the District that can be sent to the District's STI project design consultant, James Teter, to permit completing and coordinating the existing design documents into the DCWTP Improvements project design package.

Subtask 6.2 – Prepare Chemical System Control Strategies

Our initial review of the STI project design documents indicate that the current set of specifications do not include control strategies for the six new chemical storage and feed systems. Based on our design experience for other water treatment plant designs, the bid documents should include control strategies for all plant processes and systems. Our final design scope and fee for the pre-treatment and washwater and solids handling system improvements includes developing control strategies for these new systems. We anticipate that similar control strategies for the six new or modified chemical storage and feed systems should also be included in the DCWTP Improvements project, and propose to provide this task as part of our design services.

Subtask 6.3 – Integrate STI Design into Final DCWTP Improvements Design Bid Document Package

Based on our initial cursory review of the STI design documents, we have identified several tasks that will need to be done to complete the DCWTP Improvements project that were not part of our original proposed project scope described above in Tasks 1 through 5. These additional tasks include conducting a building code review of the modifications to the DCWTP Building shown on the STI drawings to determine whether these drawings comply with CalOSHA, fire and building code criteria.

In addition, the STI design drawings appear to have been prepared using different AutoCADD standards and details than Kennedy/Jenks uses currently. Also, some symbols and abbreviations that are used on the STI project drawings differ from the symbols and abbreviations that are used on Kennedy/Jenks drawings. We will need to coordinate the bid documents so that the Contract has clear direction regarding which symbols and abbreviations apply to the different portions of the DCWTP Improvements project.

Subtask 6.4 – Additional Design Services to Complete STI Design

Based on our initial cursory review of the STI design documents, we anticipate that up to three additional design drawings will be needed to integrate the modifications to the existing chemical storage and feed systems and to incorporate the new chemical system into the final set of design drawings. Since there is a level of uncertainty with this additional task, we are proposing an additional fee to incorporate three currently undefined design drawings to complete the task of incorporating the STI design into the DCWTP Improvements defined in the PDR. We will not start this task until authorized by the District to do so.

For example, if the caustic soda storage tank shown in the STI project drawings requires adding a fire sprinkler system to the existing DCWTP Building, this additional design component is anticipated to require adding two design drawings plus adding information to the project technical specifications at an estimated additional design cost of about $6,500. It may be

necessary to also include a design drawing showing a section through the existing building that shows the building height and roof framing.

Task 7 – Prepare Water and Solids Balance for Recommended Improvements

At the District's request, we will prepare both a water balance and a solids balance for the recommended improvements as part of our final design services.

Task 8 – State Revolving Fund Application Preparation, Raw Water Pump Station Improvements, and Water Balance Analysis Tasks (Optional Task)

This task includes two subtasks, preparing the DPH's SRF Pre-application in 2010 and the full SRF application in 2011, and an optional task to add one new raw water pump to provide a reliable 1,000 gpm capacity raw water supply capacity.

Subtask 8.1 – Prepare DPH Universal SRF Pre-Application

Kennedy/Jenks will prepare a California Department of Public Health (DPH) Universal Pre-application for a Safe Drinking Water State Revolving Fund (SDWSRF) loan to fund the design and construction of the Project. We will use the DPH on-line Universal Pre-application Database to complete the application to a "pending" status. The pre-application will be submitted to the District for review. Kennedy/Jenks will incorporate District comments into the on-line pre-application so that the District can complete the pre-application process by logging into the DPH on-line database and clicking the "Submit PreApp" button.

Kennedy/Jenks will prepare the following material for District staff to review:

1. Problem description (District needs to upgrade 40 year old water treatment facilities to permit treating its local source water supply during winter periods when more water is available and the source water turbidity currently limits ability to use this local resource), 500 words or less
2. Project description (primarily improving existing chemical storage and feed systems, and adding both pre-treatment and also wash water and solids handling systems to permit treating higher turbidity source water), 500 words or less
3. Schedule for final plans and specs, and anticipated start of construction.
4. Total project cost estimate: we assume that the District will want to apply for engineering design, bid, permitting, environmental, and construction costs, which represents the total project cost.

The information and other material needed from the District for this task includes:

1. District's account code and water system ID number.

2. Information on project funds available from sources in addition to SRF funds that District will have to fund this project.
3. Information on the annual median household income (MHI) for the District's service area based on 2000 census data. We will compare this information with the State of California annual MHI. We will calculate the percent of the District's MHI to State of California's MHI. If this ratio is less than 80%, the District will qualify as a disadvantaged community; and if it is less than 60%, the District will qualify as a severely disadvantaged community.
4. Environmental documents for project.
5. Cost estimate for STI portion of project and design cost for STI portion of project.

The District will also need to complete the following tasks:

1. Review draft pre-application and provide comments.
2. Submit final pre-application on-line.

Subtask 8.1.1 - SRF Pre-Application Schedule

Based on discussions with DPH staff we anticipate that the next pre-application period will be open between the middle of July and the end of August 2010. Kennedy/Jenks will complete and submit the draft pre-application to the District within two weeks of the opening of the 2010 pre-application process and will incorporate District comments into the final pre-application within one week of receiving the District's comments.

Subtask 8.2 – Prepare SDW SRF Full Application

When the District is invited by DPH to apply for SDWSRF funding, Kennedy/Jenks will coordinate preparation of the SDWSRF Full Application. This task includes the following:

1. Conduct a conference call with the District to review full-application data needs, assignment of responsibilities for data collection and SDWSRF application preparation schedule.
2. Prepare and maintain a SDWSRF information request tracking spreadsheet throughout this task to keep the SRF application task team updated on the status of each portion of the application. This tool, combined with periodic conference call status briefings, will assure that the required supporting documents are collected in a timely manner.
3. Prepare the Goldenrod Statement of Intent and required enclosures including Notice of Completeness for plans, specifications and environmental documents for the District's approval and signature, and submittal to DPH for processing.
4. Complete the Full Application and Applicant's Checklist. This will include completing the Engineering Report, Environmental Clearance Schedule, and Technical, Managerial, and Financial (TMF) Assessment, as well as collection of the Audited Financial Reports

for three years. District assistance is needed to collect the information and supporting documents as summarized below.

5. Reproduce and submit the Full Application and required attachment documents and reports to the District (three hard copies in a three-ring binder and a pdf copy) and DPH for processing.

The assistance required from the District for this task includes the following:

1. Provide documents as needed to support submittal of the Full Application. Much of the information required should exist within the District's records. The following is a list of information that we will need the District's assistance in collecting:
    1) DUNS Number
    2) Board Resolution to submit application and designate authorized person
    3) Draft Board Resolution to enter into funding agreement
    4) Proof of ownership of water system (i.e. deeds)
    5) Organizational chart and names, titles and duties of key officers
    6) Legal authority
    7) Litigation disclosure
    8) Ownership of major water supply facilities
    9) Water rights description
    10) Service area description and information and map
    11) Water demands (average and peak seasonal and diurnal)
    12) Water system permits
    13) List of other funding sources
    14) Five-year water system budget projection
    15) Financial and rate structure information
    16) Source capacity assessment and evaluation (i.e. Urban Water Management Plan)
2. Sign documents

The engineering support that K/J will provide includes:

1. Engineering support for District's CEQA consultant that is preparing the project environmental documents for the project that will be reviewed by State staff for approval to qualify for SRF support. This engineering support is included in Task 4, above.

2. The Denniston Creek Water Treatment Plant Improvements Preliminary Design Report (PDR; K/J 0868026.01) will be used as the basis of the required SRF Engineering Report technical information (technical alternatives evaluated, selected project alternative, conceptual design information, and detailed project costs). Kennedy/Jenks will prepare information on estimated useful life of project components, and obtain supplemental information from the District on water demand and peak flow demand impacts for this project.
3. Plans and specifications prepared according to state guidelines and reviewed by State staff for approval to qualify for SRF financing.

Subtask 8.2.1 - SRF Full-Application Schedule

We will schedule the SRF Full-Application task conference call within one week of receiving a notice to proceed with the Task 7.2 scope of work. The Goldenrod Statement of Intent and enclosures will be submitted to the District within two weeks of the conference call, and Kennedy/Jenks's portions of the SRF Full-Application will be submitted within six weeks of the conference call.

Tasks not Included in Kennedy/Jenks Scope of Services

1. Kennedy/Jenks will sign and stamp the drawings that we prepare, and assume that the District's STI project consultants, Frisch Engineering and James Teter, and his sub-consultant, will stamp and sign the design drawings that they prepare.

2. The STI design includes cutting a new opening in an existing concrete masonry unit (CMU) wall inside the DCWTP Filter Building. Our scope of services do not include conducting a seismic evaluation of the existing Filter Building, and therefore, Kennedy/Jenks cannot be responsible for possible structural impacts that the new opening in the existing structural wall. We assume that the STI project's structural engineer will be responsible for this design component.

3. We do not anticipate that the District will need us to respond to review comments that may be provided by local building officials, and assume that any building official's comments are submitted to the District that require a response that either Frisch Engineering or James Teter will prepare the response, since virtually all of the work that will impact the building is included in the STI project.

Kennedy/Jenks' Project Design Team

Kennedy/Jenks proposes the following key project team members for the DCWTP Pretreatment and spent filter backwash water and solids handling system Improvement Project. These key team members bring relevant experience and expertise in water treatment design and operational support.

Principal-In-Charge – Joel Faller, P.E. – As Principal-In-Charge, Joel will be responsible for contractual matters, mobilization of our resources for the project and for maintaining our high quality design standards. Joel has 28 years of experience in project management and engineering, with expertise in planning, design, and construction of surface water supply, treatment, storage, and distribution facilities. Joel's experience includes planning, process evaluation, pilot testing, plant design, construction support, and an overall understanding of and experience in water treatment plant design.

Project Manager/Engineer – Craig Thompson, P.E. – Craig will serve as the Project Manager/Engineer for the project design and be the primary point of contact with the District. Craig is a senior water treatment process engineer with over 23 years of civil engineering experience with major involvement in 25 water treatment facilities with capacities that range between 2 and 320 MGD. He is experienced in regulatory compliance evaluation and training, water treatment plant facilities planning, award-winning process designs, construction inspection, start-up training and assistance, process optimization studies, and design, construction and operation of pilot plants.

Lead Design and Assistant Project Engineer – Aileen Kondo, P.E. – Aileen will serve as the Assistant Project Engineer and be the secondary point of contact with the District. Aileen has four years of experience in engineering and project management of municipal projects.

SRF Loan Support Task – Sean Maguire, P.E. – Sean will serve as the SRF Loan Support Task Leader – Sean is a registered engineer with over seven years of experience in the planning, design, and construction management of municipal water treatment and distribution systems. Sean has recently provided technical assistance and coordination for preparation of two CDPH SDWSRF funding applications including: 1) City of Hughson, Well No. 8 Project $3 million grant for design and construction of wellhead improvements and arsenic treatment facilities, and 2) Golden State Water Company, Meter Retrofit Project for $9 million in grant and loan funding.

QA/QC – Doug Henderson, P.E. Doug will serve as our primary quality assurance/quality control (QA/QC) reviewer. Doug is a senior principal process/water quality engineer with over 35 years of environmental engineering experience in municipal water treatment, water quality, and compliance with regulatory requirements.

Basis of Compensation

We propose that compensation for our services be on a time and expense reimbursement basis in accordance with our standard Schedule of Charges, enclosed. Payments shall be made monthly based on invoices, which describe services and list actual costs and expenses.

A summary of the Fee proposal by task is provided below. We will notify you prior to expenditure of 80% of the fee proposal if the need for a fee increase is anticipated.

Task	**Fee Proposal**
1 – Project Management and QA/QC	$ 33,120
2.1 – Prepare 50% Design Drawings	$100,000
2.2 – Prepare 90% Design Drawings and Specifications	$150,000
2.3 – Prepare Final Design Drawings and Specifications	$ 43,920
2.4 – Additional Site Investigations	$ 7,000
2.5 – Raw Water Pump Station Improvements	$ 24,290
3 – Three Project Workshops	$ 8,260
4.1 – 4.3 – Prepare Estimate of Probable Cost	$ 5,820
4.4 – CEQA Compliance Engineering Support	$ 1,500
Subtotal	**$373,910**
5. - Bid Services	$ 14,600
6.1–6.3 – Review and Integrate STI Design Documents	$ 51,400
7 – Prepare Water and Solids Balance for Project	$ 1,700
8.1–8.2 – SRF Loan Application Tasks	$ 31,510
Subtotal	**$ 99,210**
Total	**$473,120**

This fee estimate is based on the revised Scope of Services and our previously identified Schedule of Charges, dated January 1, 2009, enclosed.

Schedule

Kennedy/Jenks proposes to complete the Scope of Services previously described according to the following schedule:

Notice to Proceed	Mid-June 2010
Final Design Project Kickoff Workshop	(29 June 2010) 2 weeks after Notice To Proceed
50 Percent Design Submittal	(7 Sept 2010) 12 weeks after Notice to Proceed
50 Percent Design Review Workshop	(21 Sept 2010) 2 weeks after 50% submittal delivery
90 Percent Design Submittal	(28 Dec 2010) 14 weeks after 50 Percent Design Review Workshop
90 Percent Design Review Workshop	(11 Jan 2011) 2 weeks of 90% submittal delivery
Final Design Submittal	(22 Feb 2011) 6 weeks after 90 Percent Design Review Workshop

Terms and Conditions

This proposal is based on current projections of staff availability and costs and, therefore, is valid for 90 days following the date of this letter. This proposal also assumes that we will contract with the District under similar terms that were previously negotiated for the DCWTP Pretreatment and Spent Backwash Water Improvements Project.

If this proposal meets with your approval, please sign where noted below and return a copy to our office to serve as our authorization.

Thank you for considering us for this work. We look forward to working with you on this next project phase.

Very truly yours,

KENNEDY/JENKS CONSULTANTS, INC.

Craig M. Thompson, PE, Principal
Project Manager/Engineer

Joel A. Faller, PE, Vice President
Principal-In-Charge

Enclosure

AUTHORIZATION:

COASTSIDE COUNTY WATER DISTRICT

By: _____
(Signature)

_____
(Print Name)

Title: _____

Date: _____

Proposal Fee Estimate

Kennedy/Jenks Consultants

CLIENT Name: Coastside County Water District

PROJECT Description: Denniston Creek WTP _ Pretreatment and Washwater Recovery System Improvements Final Design

Proposal/Job Number: B1068052 **Date:** 6/2/2010

January 1, 2009 Rates Classification:	Eng-Sci-9	Eng-Sci-8 JAF/JAD/TIW/DJW	Eng-Sci-7 CMT/DLB	Eng-Sci-6	Eng-Sci-5 SCM/PDS	Eng-Sci-4 ANK	Eng-Sci-3	Eng-Sci-2	Designer	CAD	Project Admin.	Admin. Assist.	Aide	Total	KJ Total Labor	Sub Contr. #1 Geotech	Sub Contr. #2 Su	KJ Sub-Markup	KJ ODCs	KJ ODCs Markup	Total Expenses	Total Labor + Expenses
Hourly Rate:	$225	$220	$210	$185	$165	$150	$135	$120	$125	$95	$85	$70	$55	Hours	Fees	Fees	Fees	10%	Fees	10%		Fees
Task 1: Project Management and QA/QC																						
Subtask 1-1: Project Management		80	24									24		128	$24,320			$0		$0	$0	$24,320
Subtask 1-2: QA/QC		40												40	$8,800			$0		$0	$0	$8,800
Task 1 - Subtotal	0	120	24	0	0	0	0	0	0	0	0	24	0	168	$33,120	$0	$0	$0	$0	$0	$0	$33,120
Task 2: Final Design - Drawings & Specificationis																						
Subtask 2-1: 4 General and 6 Civil Sheets			136			304			184			30		654	$99,260			$0		$0	$0	$99,260
Subtask 2-2: 9 Structural Sheets			52		120		104					18		294	$46,020			$0		$0	$0	$46,020
Subtask 2-2A: Geotechnical and Surveying Support			4		4									8	$1,500	$2,500	$2,500	$500		$0	$5,500	$7,000
Subtask 2-3: 7 Process/Mechanical Sheets			144			280			180			16		620	$95,860			$0		$0	$0	$95,860
Subtask 2-4: 5 P&ID and 6 Electrical Sheets		21				171			170			18		380	$52,780			$0		$0	$0	$52,780
Subtask 2-5 Raw Water Pump Station Improvements	0	7	6		16	84			50					163	$24,290			$0		$0	$0	$24,290
Task 2 - Subtotal	0	28	342	0	140	839	104	0	584	0	0	82	0	2119	$319,710	$2,500	$2,500	$500	$0	$0	$5,500	$325,210
Task 3: Workshops and Meetings																						
Subtask 3-1: Kickoff Workshop		4	4											8	$1,720			$0	$100	$10	$110	$1,830
Subtask 3-2: 50% Design Review Workshop		8	4									4		16	$2,880			$0	$200	$20	$220	$3,100
Subtask 3-3: 90% Design Review Workshop		4	4									4		12	$2,000			$0	$200	$20	$220	$2,220
Subtask 3-4: Final Design												8		8	$560			$0	$500	$50	$550	$1,110
Task 3 - Subtotal	0	16	12	0	0	0	0	0	0	0	0	16	0	44	$7,160	$0	$0	$0	$1,000	$100	$1,100	$8,260
Task 4: Estimate of Probable Cost & CEQA support																						
Subtask 4-1: Prepare 50% Design Cost Estimate		2	4			6								12	$2,180			$0		$0	$0	$2,180
Subtask 4-2: Prepare 90% Design Cost Estimate		2	4			6								12	$2,180			$0		$0	$0	$2,180
Subtask 4-3: Final Design Cost Estimate		2	2			4								8	$1,460			$0		$0	$0	$1,460
Subtask 4-4: CEQA Support			5			3								8	$1,500			$0		$0	$0	$1,500
Task 4 - Subtotal	0	6	15	0	0	19	0	0	0	0	0	0	0	40	$7,320	$0	$0	$0	$0	$0	$0	$7,320
Tasks 1 - 4 - Design Cost Subtotal																						**$373,910**

Proposal Fee Estimate

Kennedy/Jenks Consultants

CLIENT Name: Coastside County Water District

PROJECT Description: Denniston Creek WTP _ Pretreatment and Washwater Recovery System Improvements Final Design

Proposal/Job Number: B1068052 **Date:** 6/2/2010

January 1, 2009 Rates Classification:	Eng-Sci-9	Eng-Sci-8 JAF/JAD/TIW/DJW	Eng-Sci-7 CMT/DLB	Eng-Sci-6	Eng-Sci-5 SCM/PDS	Eng-Sci-4 ANK	Eng-Sci-3	Eng-Sci-2	Designer	CAD	Project Admin.	Admin. Assist.	Aide	Total	KJ Total Labor	Sub Contr. #1 Geotech	Sub Contr. #2 Su	KJ Sub-Markup	KJ ODCs	KJ ODCs Markup	Total Expenses	Total Labor + Expenses
Hourly Rate:	$225	$220	$210	$185	$165	$150	$135	$120	$125	$95	$85	$70	$55	Hours	Fees	Fees	Fees	10%	Fees	10%		Fees
Task 5: Bid Services																						
Subtask 5-1: Prepare Bid Documents (25 sets plans and specs)									2				2	4	$360			$0	$2,000	$200	$2,200	$2,560
Subtask 5-2: Prepare Addenda		4	8		16	24					8			60	$9,480			$0		$0	$0	$9,480
Subtask 5-3: Participate in Site Walk			8											8	$1,680			$0		$0	$0	$1,680
Subtask 5-4: Assist District in Bid Review		4												4	$880			$0		$0	$0	$880
Task 5 - Subtotal	0	8	16	0	16	24	0	0	2	0	8	0	2	76	$12,400	$0	$0	$0	$2,000	$200	$2,200	$14,600
Task 6: Review and Integrate STI Design into DCWTP Improvements																						
Subtask 6-1: Review STI Design Documents																						
Subtask 6-1A: Electrical & Control Review		24												24	$5,280			$0		$0	$0	$5,280
Subtask 6-1B: Mechanical/Process Review			16	4										20	$4,100			$0		$0	$0	$4,100
Subtask 6-1C: Structural/Architectural Review		16	2		8									26	$5,260			$0		$0	$0	$5,260
Subtask 6-2: Prepare Chemical System Control Strategies		8	24											32	$6,800			$0		$0	$0	$6,800
Subtask 6-3: Integrate STI Design into Final Design		40	24		8									72	$15,160			$0		$0	$0	$15,160
Subtask 6-4: Additional Design Services to complete STI		4	16		24	24			24					92	$14,800			$0		$0	$0	$14,800
Task 6 - Subtotal	0	92	82	4	40	24	0	0	24	0	0	0	0	266	$51,400	$0	$0	$0	$0	$0	$0	$51,400
Task 7: Water and Solids Balance																						
Subtask 7-1 Prepare Water and Solids Balance Analysis		2	6											8	$1,700			$0		$0	$0	$1,700
														0	$0			$0		$0	$0	$0
Task 7 - Subtotal	0	2	6	0	0	0	0	0	0	0	0	0	0	8	$1,700	$0	$0	$0	$0	$0	$0	$1,700
Task 8: SRF Application/Funding (Optional Task)																						
Subtask 8-1: Prepare SRF Pre-application Documents			2		4			8						14	$2,040			$0		$0	$0	$2,040
Subtask 8-2: Prepare Final SRF Application Documents			40		40			80		16	20			196	$27,820			$0	$1,500	$150	$1,650	$29,470
Task 8 - Subtotal	0	0	42	0	44	0	0	88	0	16	20	0	0	210	$29,860	$0	$0	$0	$1,500	$150	$1,650	$31,510
Additional and Optional Tasks 5 - 8 Subtotal																						**$99,210**
All Tasks Total	**0**	**279**	**545**	**4**	**256**	**990**	**104**	**88**	**660**	**16**	**28**	**122**	**2**	**2931**	**$462,670**	**$2,500**	**$2,500**	**$500**	**$4,500**	**$450**	**$10,450**	**$473,120**

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **David Dickson, General Manager**

Agenda: **June 8, 2010**

Report Date: June 4, 2010

Subject: **Fiscal Year 2010-2011 Revenue and Expense Budget and Capital Improvement Program**

Recommendation:
None. Agenda item for discussion only

Background:
This agenda item is provided to allow further public review and possible Board discussion of the District's proposed Fiscal Year 2010-2011 Revenue and Expense Budget and Capital Improvement Program. No Board action is required.

In accordance with the District's established procedure for development and approval of the annual budget , staff has prepared the draft Operations and Maintenance Budget for Fiscal Year 2010-2011 and draft ten-year Capital Improvement Program (CIP) for Fiscal Year 2010-2011 through 2019-2020 (Attachment A).

Staff reviewed the draft budget and CIP in detail with the full Board of Directors at a public budget work session held on April 29, 2010. At the Board of Directors meeting of May 11, 2010, the Board scheduled a public hearing on the budget and proposed rate increase for June 29, 2010 and authorized issuance of a notice of public hearing and proposed rate increase.

The notice of public hearing and proposed rate increase was mailed on May 14, 2010. As of June 4, we have received nine written protests (Attachment B).

Highlights of the draft budget and CIP:

Budget

- Total operating expense increase of 1.2% over FY10 budget, 2.5% over projected year-end FY10 expenses.

- Non-operating revenue lower by 14% vs. FY10 budget, 46% vs. projected FY10 actual year-end revenue due to differences in connection sales, tax share.
- Recommended rate increase of 14% based on revenue required to fund CIP, maintain reserves based on multi-year financing model.
- Contribution to CIP and reserves (net revenue) of $627,000.

CIP

- $21,433 total CIP (FY11 dollars)
- Increase of $3 million over previous CIP due to increase in Denniston plant upgrade cost, investment in water supply development/reliability.

Following the public hearing on June 29, 2010, the Board may approve the budget and adopt the rate increase. If a majority of affected property owners submit written protests, the rate increase cannot be adopted.

Attachment A

Operations & Maintenance Budget - FY 2010/2011

Account Number	Description	Proposed Budget FY 10/11	Approved FY 09/10 Budget	FY 10/11 Budget Vs. FY 09/10 Budget $ Change	FY 10/11 Budget Vs. FY 09/10 Budget % Change	Proj Year End Actual FY 09/10	FY 10/11 Budget Vs. FY 09/10 Actual $ Change	FY 10/11 Budget Vs. FY 09/10 Actual % Change	YTD Actual FY 09/10 as of March 31, 2010
	OPERATING REVENUE								
4120	Water Sales (1)	**$6,180,345**	$6,180,345	$0	0.0%	$5,421,355	$758,990	14.0%	$4,174,443
Total Operating Revenue		**$6,180,345**	**$6,180,345**	**$0**	**0.0%**	**$5,421,355**	**$758,990**	**14.0%**	**$4,174,443**
	NON-OPERATING REVENUE								
4170	Hydrant Sales	**$25,000**	$25,000	$0	0.0%	$17,449	$7,551	43.3%	$11,449
4180	Late Penalty	**$50,000**	$50,000	$0	0.0%	$55,966	-$5,966	-10.7%	$37,966
4230	Service Connections	**$8,000**	$458,000	-$450,000	-98.3%	$503,310	-$495,310	-98.4%	$3,310
4920	Interest Earned	**$26,418**	$65,549	-$39,131	-59.7%	$34,827	-$8,409	-24.1%	$19,827
4930	Property Taxes	**$600,000**	$300,000	$300,000	100.0%	$693,157	-$93,157	-13.4%	$393,157
4950	Miscellaneous	**$37,000**	$37,000	$0	0.0%	$85,891	-$48,891	-56.9%	$76,891
4955	Cell Site Lease Income	**$111,312**	$82,200	$29,112	35.4%	$89,098	$22,214	24.9%	$80,098
4965	ERAF Refund	**$100,000**	$100,000	$0	0.0%	$305,752	-$205,752	-67.3%	$305,752
Total Non-Operating Revenue		**$957,730**	**$1,117,749**	**-$160,019**	**-14.3%**	**$1,785,450**	**-$827,720**	**-46.4%**	**$928,450**
TOTAL REVENUES		**$7,138,075**	**$7,298,094**	**-$160,019**	**-2.2%**	**$7,206,805**	**-$68,730**	**-1.0%**	**$5,102,893**
	OPERATING EXPENSES								
5130	Water Purchased	**$1,671,874**	$1,610,934	$60,940	3.8%	$1,595,664	$76,210	4.8%	$1,150,664
5230	Electrical Exp. Nunes WTP	**$19,000**	$19,000	$0	0.0%	$20,789	-$1,789	-8.6%	$14,289
5231	Electrical Expenses, CSP	**$243,836**	$230,407	$13,429	5.8%	$247,477	-$3,640	-1.5%	$238,477
5232	Electrical Expenses/Trans. & Dist.	**$15,000**	$21,700	-$6,700	-30.9%	$12,140	$2,860	23.6%	$9,140
5233	Elec Exp/Pilarcitos Cyn	**$10,016**	$10,016	$0	0.0%	$13,462	-$3,446	-25.6%	$10,962
5234	Electrical Exp., Denn	**$53,176**	$53,176	$0	0.0%	$25,238	$27,938	110.7%	$8,238
5235	Denn. WTP Oper.	**$25,600**	$30,000	-$4,400	-14.7%	$19,711	$5,889	29.9%	$4,711
5236	Denn WTP Maint	**$38,000**	$43,000	-$5,000	-11.6%	$101,476	-$63,476	-62.6%	$16,476
5240	Nunes WTP Oper	**$64,820**	$65,400	-$580	-0.9%	$77,618	-$12,798	-16.5%	$59,618
5241	Nunes WTP Maint	**$38,000**	$38,000	$0	0.0%	$60,472	-$22,472	-37.2%	$43,472
5242	CSP - Operation	**$8,500**	$8,500	$0	0.0%	$10,216	-$1,716	-16.8%	$6,116
5243	CSP - Maintenance	**$53,500**	$68,500	-$15,000	-21.9%	$47,181	$6,319	13.4%	$30,181
5250	Laboratory Expenses	**$60,000**	$75,000	-$15,000	-20.0%	$52,109	$7,891	15.1%	$33,109
5318	Studies/Surveys/Consulting	**$22,000**	$22,544	-$544	-2.4%	$58,050	-$36,050	-62.1%	$43,050
5321	Water Conservation	**$92,500**	$60,650	$31,850	52.5%	$63,331	$29,169	46.1%	$48,331
5322	Community Outreach	**$26,200**	$28,700	-$2,500	-8.7%	$24,083	$2,117	8.8%	$14,083
5411	Salaries - Field	**$930,278**	$907,674	$22,604	2.5%	$905,450	$24,828	2.7%	$655,450
5412	Maintenance Expenses	**$192,500**	$189,500	$3,000	1.6%	$177,828	$14,672	8.3%	$107,828
5414	Motor Vehicle Exp.	**$44,500**	$47,500	-$3,000	-6.3%	$42,204	$2,296	5.4%	$35,205
5415	Maintenance, Wells	**$6,000**	$15,000	-$9,000	-60.0%	$3,713	$2,287	61.6%	$2,713
5610	Salaries, Admin.	**$640,368**	$646,607	-$6,239	-1.0%	$618,597	$21,771	3.5%	$443,597
5620	Office Expenses	**$118,875**	$131,150	-$12,275	-9.4%	$113,462	$5,413	4.8%	$78,462
5621	Computer Services	**$62,650**	$64,150	-$1,500	-2.3%	$57,528	$5,122	8.9%	$39,528
5625	Meetings/Training/Seminars	**$20,000**	$20,000	$0	0.0%	$21,654	-$1,654	-7.6%	$16,654
5630	Insurance	**$528,890**	$500,830	$28,060	5.6%	$508,885	$20,005	3.9%	$383,885
5640	Employee Retirement	**$437,789**	$447,750	-$9,961	-2.2%	$430,257	$7,532	1.8%	$305,257
5645	SIP 401 K Plan	**$30,000**	$20,000	$10,000	50.0%	$0	$30,000	0.0%	$0
5681	Legal	**$57,000**	$52,000	$5,000	9.6%	$56,008	$992	1.8%	$41,008
5682	Engineering	**$14,000**	$15,000	-$1,000	-6.7%	$12,782	$1,218	9.5%	$9,282
5683	Financial Services	**$31,000**	$31,000	$0	0.0%	$27,563	$3,438	12.5%	$19,863
5684	Payroll Taxes	**$111,951**	$112,146	-$195	-0.2%	$108,241	$3,710	3.4%	$78,241
5687	Memberships & Subscriptions	**$56,950**	$53,815	$3,135	5.8%	$48,760	$8,190	16.8%	$33,760
5688	Election Expense	**$0**	$15,000	-$15,000	-100.0%	$24,358	-$24,358	-100.0%	$24,358
5689	Union Expenses	**$12,000**	$12,000	$0	0.0%	$12,000	$0	0.0%	$9,000
5700	County Fees	**$10,800**	$10,800	$0	0.0%	$9,531	$1,269	13.3%	$7,531
5705	State Fees	**$10,500**	$10,500	$0	0.0%	$9,669	$831	8.6%	$8,669
Total Operating Expenses		**$5,758,073**	**$5,687,949**	**$70,124**	**1.2%**	**$5,617,506**	**$140,567**	**2.5%**	**$4,031,207**
	CAPITAL ACCOUNTS								
5711	Existing Bonds - 1998A	**$269,845**	$270,845	-$1,000	-0.4%	$270,844	-$999	-0.4%	$270,844
5712	Existing Bonds - 2006B	**$484,966**	$486,400	-$1,434	-0.3%	$489,296	-$4,330	-0.9%	$489,296
Total Capital Accounts		**$754,811**	**$757,245**	**-$2,434**	**-0.3%**	**$760,140**	**-$5,329**	**-0.7%**	**$760,140**
TOTAL REVENUE - TOTAL EXPENSE		**$625,190**	**$852,900**	**-$227,710**	**-26.7%**	**$829,159**	**-$203,968**	**-24.6%**	**$311,546**
5713	Cont. to CIP & Reserves	**$625,190**							

Notes:

(1) Water sales revenue calculated by applying rate increase to projected year-end sales.

Updated: 5/6/2010 8:55 AM

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4120		Description: Water Sales	
Actual Amount As Of:	31-Mar	2010		4,174,443
PROJECTED ACTIVITY to END of FY:				1,246,912
Projected YEAR END TOTAL:				5,421,355
PROPOSED Line Item Amount:				**$6,180,345**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				**5,844,903**
% Change Actual Year End compared to Proposed Line item amount.				14.0%
% Change to Previous Year Budget				5.7%
Dollar difference between proposed budget & current budget				335,442

NARRATIVE: See Worksheet 4120 A for calculations

Water sales revenues are not expected to increase during the next fiscal year due to new customers coming on line. The projection is that there will be approximately 35 new connections Increased Consumer awareness in the thrid year of drought will keep consumption to levels seen in FY 09/10.

Spread:

Jul	Aug	Sep	Oct	Nov	Dec	Totals
Jan	Feb	Mar	Apr	May	Jun	

Fiscal Year 2010/2011 Water Sales Projections

DRAFT

MONTH	a Res. hcf 09/10	b Res. hcf 10/11	c Other hcf 09/10	d Other hcf 10/11	e TOTAL Units 09/10	f TOTAL Units 10/11	g Per Cent Diff 09 v. 10 dif	h Residential $ Projected 10/11	i Other $ Projected $5.35 hcf	Base Charge 09/10	j Base Charge 10/11	Proposed FY 10/11 $ Budget
	Actual	Budget	Actual	Budget	Actual	Budget				Actual	Budget	
Jul-09	39,331	39,331	71,954	71,954	111,285	111,285	0.0%					
Aug-09	73,531	73,531	43,611	43,611	117,142	117,142	0.0%					
Sep-09	38,821	38,821	56,680	56,680	95,501	95,501	0.0%					
Oct-09	65,194	65,194	31,123	31,123	96,317	96,317	0.0%					
Nov-09	29,453	29,453	37,004	37,004	66,457	66,457	0.0%					
Dec-09	45,635	45,635	18,527	18,527	64,162	64,162	0.0%					
Jan-10	27,361	27,361	26,474	26,474	53,835	53,835	0.0%					
Feb-10	43,769	43,769	18,945	18,945	62,714	62,714	0.0%					
Mar-10	*22,892*	*22,892*	*29,916*	*29,916*	*52,808*	*52,808*	***0.0%***					
Apr-10	***48,522***	***48,522***	***8,739***	***8,739***	***57,261***	***57,261***	***0.0%***					
May-10	***30,662***	***30,662***	***66,432***	***66,432***	***97,094***	***97,094***	***0.0%***					
Jun-10	***62,178***	***62,178***	***11,789***	***11,789***	***73,967***	***73,967***	***0.0%***					
TOTAL	527,349	527,349	421,194	421,194	948,543	948,543	0.0%	$ -	$ -			

Average Residential Charge per Unit **$4.60**

Commercial Charge per Unit **$5.35**

$ -

FACTORS TO BE CONSIDERED

1. Superintendent projects a 40 MG purchase from Skylawn for next fiscal year
2. Anticipation of approximately 35 new connections next year.
3. April - June - Predicted Base on following:
   Actual Sales / Predicted Sales (Jul - Feb)
   Residential = 0.91
   Other = 1.242
   Budgeted Values for Residential & Other
   Above multiplied by factor to get predicted water sales.

Res Units	FY09/10	% FY 10/11
1-8	$3.93	
9 -25	$4.33	
26 - 40	$5.63	
41 +	$6.96	
Comm	$5.35	

Base Charge	FY 08/09	10.0% FY 09/10
5/8"	$21.87	***$24.06***
5/8"/ 2 dwelling units	$48.11	***$52.92***
3/4"	$32.88	***$36.17***
3/4"/ 2 dwelling units	$65.80	***$72.38***
1"	$54.80	***$60.28***
1.5"	$105.83	***$116.41***
2.0"	$175.40	***$192.94***
3"	$383.70	***$422.07***
4"	$1,315.71	***$1,447.28***

5/6/2010

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4170		Description: Hydrant Sales	
Actual Amount As Of:	31-Mar	2010		11,449
PROJECTED ACTIVITY to END of FY:				6,000
Projected YEAR END TOTAL:				17,449
PROPOSED Line Item Amount:				**25,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				25,000
% Change Actual Year End compared to Proposed Line item amount.				43.3%
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:

Water is taken from designated fire hydrants through portable meters for a variety of reasons. The most common use of this water is for new construction (dust control, earth compaction,etc.). Other uses of water through portable meters result in use for temporary irrigation, failed wells, temporary livestock watering, dust control for non construction purposes, festivals, etc.

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4180		Description: Late Penalty	
Actual Amount As Of:	31-Mar	2010		37,966
PROJECTED ACTIVITY to END of FY:				18,000
Projected YEAR END TOTAL:				55,966
PROPOSED Line Item Amount:				**50,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				50,000
% Change Actual Year End compared to Proposed Line item amount.				(10.7%)
% Change to Previous Year Budget				100.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4230		Description:	Service Connections
Actual Amount As Of:	31-Mar	2010		3,310
PROJECTED ACTIVITY to END of FY:				500,000
Projected YEAR END TOTAL:				503,310
PROPOSED Line Item Amount:				**8,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				458,000
% Change Actual Year End compared to Proposed Line item amount.				(98.4%)
% Change to Previous Year Budget				(98.3%)
Dollar difference between proposed budget & current budget				-450,000

NARRATIVE:
The amounts in the account show the labor cost charged to a customer for the installation of a new water service connection. The costs vary with each new installation depending upon the size of the service and how far it is from the distribution pipeline under the street. Cost of materials are not included in this category.

Labor		$8,000
	TOTAL	**$8,000**

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4920		Description:	Interest Earned
Actual Amount As Of:	31-Mar	2010		19,827
PROJECTED ACTIVITY to END of FY:				15,000
Projected YEAR END TOTAL:				34,827
PROPOSED Line Item Amount:			**$**	**26,418**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				65,549
% Change Actual Year End compared to Proposed Line item amount.				(24.1%)
% Change to Previous Year Budget				(59.7%)
Dollar difference between proposed budget & current budget				-39,131

NARRATIVE:
Interest income is derived from cash on deposit with LAIF. The interest income is calculated on funds that are not restricted to the CSP Project.

	Balance	Less CSP $						
Cash on Deposit	2,662,647	20,868	2,641,779	x	1.00%	=	$	26,418

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4930		Description:	Property Taxes
Actual Amount As Of:	31-Mar	2010		393,157
PROJECTED ACTIVITY to END of FY:				300,000
Projected YEAR END TOTAL:				693,157
PROPOSED Line Item Amount:				**600,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				300,000
% Change Actual Year End compared to Proposed Line item amount.				(13.4%)
% Change to Previous Year Budget				100.0%
Dollar difference between proposed budget & current budget				300,000

NARRATIVE:

Projected CCWD portion of unsecured/secured Property Tax	$600,000
TOTAL	$600,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4950		Description: Miscellaneous	
Actual Amount As Of:	31-Mar	2010		76,891
PROJECTED ACTIVITY to END of FY:				9,000
Projected YEAR END TOTAL:				85,891
PROPOSED Line Item Amount:				**37,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				37,000
% Change Actual Year End compared to Proposed Line item amount.				(56.9%)
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:

Revenue from disposal of excess equipment, vehicles and reimbursement of expense line items, in addition to the identified sources, are entered into the Miscellaneous Sales account line item, such as: returned check fees, re-connect fees, copies of documents, reimbursement of repairs., etc…)
Skylawn Memorial Park reimburses the District for pumping when the District is not operating the Crystal Springs Pump Station for benefit of the District.

Sub-Account		**FY 09/10**	**FY 10/11**
	Skylawn	25,000	25,000
	Miscellaneous	12,000	12,000
		37,000	37,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item			**Amount**
Acct. No.	4955	Description: Cell Site Lease Income	
Actual Amount As Of:	31-Mar	2010	80,098
PROJECTED ACTIVITY to END of FY:			9,000
Projected YEAR END TOTAL:			89,098
PROPOSED Line Item Amount:			**111,312**
Approved Line Item Amount:			
PREVIOUS YEAR BUDGET:			82,200
% Change Actual Year End compared to Proposed Line item amount.			24.9%
% Change to Previous Year Budget			35.4%
Dollar difference between proposed budget & current budget			29,112

NARRATIVE:

Revenue from disposal of excess equipment, vehicles and reimbursement of expense line items, in addition to the identified sources, are entered into the Miscellaneous Sales account line item, such as: returned check fees, re-connect fees, copies of documents, reimbursement of repairs., etc…)

Skylawn Memorial Park reimburses the District for pumping when the District is not operating the Crystal Springs Pump Station for benefit of the District.

Sub-Account		**FY 10/11**
	Sprint Spectrum Lease	21,852
	Sprint Spectrum Lease	19,812
	Metro PCS	22,464
	Metro PCS	22,464
	Verizon	24,720
		111,312

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	4965		Description: ERAF Refund	
Actual Amount As Of:	31-Mar	2010		305,752
PROJECTED ACTIVITY to END of FY:				0
Projected YEAR END TOTAL:				305,752
PROPOSED Line Item Amount:				**100,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				100,000
% Change Actual Year End compared to Proposed Line item amount.				(67.3%)
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:
Educational Revenue Augmentation Fund (ERAF). ERAF was established in 1992 to redirect property tax revenues from cities, counties and special districts to public education programs.

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5130		Description:	Water Purchased
Actual Amount As Of:	31-Mar	2010		1,150,664
PROJECTED ACTIVITY to END of FY:				445,000
Projected YEAR END TOTAL:				1,595,664
PROPOSED Line Item Amount:				**1,671,874**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				1,610,934
% Change Actual Year End compared to Proposed Line item amount.				4.8%
% Change to Previous Year Budget				3.8%
Dollar difference between proposed budget & current budget				60,940

NARRATIVE:
See worksheet 5130 A

The information on this sheet relates directly to Account 4120, water sales.

Water rates will increase approximately 15.2% from the SFWD this year. Cost per hcf $1.90

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

PRODUCTION & PUMPING SCHEDULE FY 2010/2011

	Denniston Surface		Denniston Wells		Pilarcitos Wells		SFWD Pilarcitos-Crystal Springs				SFWD Total		TOTAL PRODUCTION		**SFWD COST**
							Pilarcitos		CSP				FY 09/10	FY 10/11	**1.90 hcf**
	FY 09/10 hcf	FY 10/11 hcf	FY 09/10 hcf	FY 10/11 hcf	FY 09/10 hcf	FY 10/11 hcf	FY 09/10 hcf	FY 10/11 hcf	FY 09/10 hcf	FY 10/11 hcf	FY 09/10	FY 10/11	Actual hcf	Plan	**Plan**
Jul-09	1,698	8,311	0	2,756	0	0	0	0	120,454	113,746	120,454	113,746	122,152	124,813	**$216,117**
Aug-09	0	0	0	0	0	0	0	0	110,027	121,578	110,027	121,578	110,027	121,578	**$230,998**
Sep-09	0	0	0	0	0	0	0	0	105,267	99,118	105,267	99,118	105,267	99,118	**$188,324**
Oct-09	0	5,798	0	2,687	0	0	0	0	80,856	96,545	80,856	96,545	80,856	105,030	**$183,436**
Nov-09	3,810	5,690	922	2,420	6,872	10,655	0	0	64,171	58,083	64,171	58,083	75,775	76,848	**$110,358**
Dec-09	4,104	5,716	802	2,600	10,602	14,653	0	0	53,650	50,709	53,650	50,709	69,158	73,678	**$96,347**
Jan-10	0	0	0	0	12,955	15,535	8,342	42,667	33,890	0	42,232	42,667	55,187	58,202	**$81,067**
Feb-10	0	0	0	**0**	13,279	16,640	41,432	51,161	0	0	41,432	51,161	54,711	67,801	***$97,206***
Mar-10	0	16,273	0	2,500	15,576	14,508	50,382	25,244	0	0	50,382	25,244	65,958	58,525	***$47,964***
Apr-10	**20,400**	16,630	**3,000**	2,976	**0**	**0**	**56,400**	42,300	**0**	0	**56,400**	42,300	**79,800**	61,906	***$80,370***
May-10	**18,000**	20,794	**3,249**	4,052	**0**	**0**	**65,000**	74,983	**0**	0	**65,000**	74,983	**86,249**	99,829	***$142,468***
Jun-10	**17,326**	14,231	**3,640**	2,961	**0**	**0**	**40,000**	34,074	**37,000**	26,892	**77,000**	60,966	**97,966**	78,158	***$115,835***
hcf Totals	65,338	93,443	11,613	22,952	59,284	71,991	261,556	270,429	605,315	566,671	866,871	837,100	1,003,106	1,025,486	**$1,590,490**
MG Totals	48.87	69.90	8.69	17.17	44.34	53.85	195.64	202.28	452.78	423.87	648.42	626.15	750.32	767.06	
														Base Charge	**$81,384**
														Grand Total	**$1,671,874**

Note: Bold numbers in actual columns are estimates

Expect 72,608 hcf of estimated unmetered water (leaks, plant use, flow tests, etc…)for FY 10/11
7.4% unaccountable water

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5230		Description:	Electrical Exp. Nunes WTP
Actual Amount As Of:	31-Mar	2010		14,289
PROJECTED ACTIVITY to END of FY:				6,500
Projected YEAR END TOTAL:				20,789
PROPOSED Line Item Amount:				**19,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				19,000
% Change Actual Year End compared to Proposed Line item amount.				(8.6%)
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:
The costs shown for this line item are for electrical costs for operating the water treatment plant.

FY 10/11

PG&E	$19,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5231	Description:	Electrical Expenses, CSP	
Actual Amount As Of:	31-Mar	2010		238,477
PROJECTED ACTIVITY to END of FY:				9,000
Projected YEAR END TOTAL:				247,477
PROPOSED Line Item Amount:				**243,836**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				230,407
% Change Actual Year End compared to Proposed Line item amount.				(1.5%)
% Change to Previous Year Budget				5.8%
Dollar difference between proposed budget & current budget				13,429

NARRATIVE:
Skylawn is estimated to purchase 40 million gallons.
Anticpated less usage at Crystal Springs as FY 09/10 since Denniston WTP will be on-line more in FY 10/11.

	hcf	**rate to pump 1 unit of water**			
Pumping charges - electrical	566,671	0.384	=	$	217,602
Non-pumping electrical				$	5,700
Skylawn Pumping Expenses	53,476	0.384	=	$	20,535
TOTAL				$	243,836

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5232	Description:	Electrical Expenses/Trans. & Dist.	
Actual Amount As Of:	31-Mar	2010		9,140
PROJECTED ACTIVITY to END of FY:				3,000
Projected YEAR END TOTAL:				12,140
PROPOSED Line Item Amount:				**15,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				21,700
% Change Actual Year End compared to Proposed Line item amount.				23.6%
% Change to Previous Year Budget				(30.9%)
Dollar difference between proposed budget & current budget				-6,700

NARRATIVE:

	FY 10/11
Granada #1	$5,670
Granada #2	$3,400
Granada #3	$1,650
Alves Pump Station	$4,080
Miramontes Tank	$200
TOTAL	$15,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5233		Description:	Elec Exp/Pilarcitos Cyn
Actual Amount As Of:	31-Mar	2010		10,962
PROJECTED ACTIVITY to END of FY:				2,500
Projected YEAR END TOTAL:				13,462
PROPOSED Line Item Amount:				**10,016**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				10,016
% Change Actual Year End compared to Proposed Line item amount.				(25.6%)
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:
Assumes sufficient rain in October to pump Pilarcitos Wells
in November. During last three fiscal years this did not occur.
Assumes 46,000 units of production, at an energy cost of $0.20 per unit.
Expected to double well #2 output from being refurbish this spring.

Wells #1 & 3	$ 1,500	Well #4	$ 3,600	
Well #2	$ 370	Well #4A	$ 1,600	
Well #3A	$ 370	Well #5	$ 2,120	
Carter Hill	$ 256	Telemeter	$ 200	Total
TOTAL	**$ 2,496**	**Total**	**$ 7,520**	$ 10,016

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5234		Description:	Electrical Exp., Denn
Actual Amount As Of:	31-Mar	2010		8,238
PROJECTED ACTIVITY to END of FY:				17,000
Projected YEAR END TOTAL:				25,238
PROPOSED Line Item Amount:				**53,176**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				53,176
% Change Actual Year End compared to Proposed Line item amount.				110.7%
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:
Projected year end low due to inoperation of plant for most of FY 09/10.

	FY 10/11
Denn Pump Station	$28,560
Denn Well #1	$4,080
Denn Well #2,3,4	$3,400
Denn Well #5	$2,856
Denn Well #9	$3,400
Denn WTP	$8,160
Filter Recycle Pump	$2,720
TOTAL	$53,176

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5235		Description: Denn. WTP Oper.	
Actual Amount As Of:	31-Mar	2010		4,711
PROJECTED ACTIVITY to END of FY:				15,000
Projected YEAR END TOTAL:				19,711
PROPOSED Line Item Amount:				**25,600**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				30,000
% Change Actual Year End compared to Proposed Line item amount.				29.9%
% Change to Previous Year Budget				(14.7%)
Dollar difference between proposed budget & current budget				-4,400

NARRATIVE:
Chemical costs = $200/MG Expect to treat 112 MG.

ADMIN		**CHEMICALS**	
Telephone/DSL	$1,000	Caustic Soda	$12,000
Alarm System	$1,600	Alum	$1,600
Charts & Supplies	$3,000	Polymer	$3,200
		KMNo4	$800
		Sodium Hypoclorite	$2,400
		Admin	$5,600
		Chemicals	$20,000
		TOTAL	$25,600

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5236		Description: Denn WTP Maint	
Actual Amount As Of:	31-Mar	2010		16,476
PROJECTED ACTIVITY to END of FY:				85,000
Projected YEAR END TOTAL:				101,476
PROPOSED Line Item Amount:				**38,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				43,000
% Change Actual Year End compared to Proposed Line item amount.				(62.6%)
% Change to Previous Year Budget				(11.6%)
Dollar difference between proposed budget & current budget				-5,000

NARRATIVE:
Increased in year end over proposed for last year due to following activities:
Filter Failure

	FY 10/11
Electrical	$5,000
Instrumentation	$7,000
Telemetry	$3,000
Pump Repair	$15,000
Misc. Plumbing & Parts	$4,000
Sludge Removal	$4,000
TOTAL	**$38,000**

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5240		Description: Nunes WTP Oper	
Actual Amount As Of:	31-Mar	2010		59,618
PROJECTED ACTIVITY to END of FY:				18,000
Projected YEAR END TOTAL:				77,618
PROPOSED Line Item Amount:				**64,820**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				65,400
% Change Actual Year End compared to Proposed Line item amount.				(16.5%)
% Change to Previous Year Budget				(0.9%)
Dollar difference between proposed budget & current budget				-580

NARRATIVE:
Chemical costs = $87/MG.
Expect to treat 690 MG.

Telephone/DSL	$2,120
Alarm System	$1,000
Charts & Supplies	$2,000
Sub total	$5,120
TOTAL	$64,820

Chemicals	
Caustic	$14,000
Polymer	$2,700
Alum	$28,000
Hypo Chlor	$15,000
	$59,700

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5241		Description: Nunes WTP Maint	
Actual Amount As Of:	31-Mar	2010		43,472
PROJECTED ACTIVITY to END of FY:				17,000
Projected YEAR END TOTAL:				60,472
PROPOSED Line Item Amount:				**38,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				38,000
% Change Actual Year End compared to Proposed Line item amount.				(37.2%)
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:
Overdraft of maintenance budget due to costs incurred from failure of emergency generator switchgear ($13,000) as well as failure of alarm system and dial up notification ($6300).

	FY 10/11
Generator Service Contract	$1,000
Sludge Removal	$6,000
Electrical	$6,000
Instrumentation/Controls	$7,000
Motor & Pump Replacement	$6,000
Filter Inspection	$4,000
Annual Electrical PM	$6,000
Misc.	$2,000
	$38,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5242		Description:	CSP - Operation
Actual Amount As Of:	31-Mar	2010		6,116
PROJECTED ACTIVITY to END of FY:				4,100
Projected YEAR END TOTAL:				10,216
PROPOSED Line Item Amount:				**8,500**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				8,500
% Change Actual Year End compared to Proposed Line item amount.				(16.8%)
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:	**FY 10/11**
Telephone & Telemetry	$6,300
Alarm Co. (Bay Alarm / HMB Alarm)	$1,200
Fire System Maint.	$1,000
TOTAL	$8,500

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item			**Amount**
Acct. No.	5243	Description: CSP - Maintenance	
Actual Amount As Of:	31-Mar	2010	30,181
PROJECTED ACTIVITY to END of FY:			17,000
Projected YEAR END TOTAL:			47,181
PROPOSED Line Item Amount:			**53,500**
Approved Line Item Amount:			
PREVIOUS YEAR BUDGET:			68,500
% Change Actual Year End compared to Proposed Line item amount.			13.4%
% Change to Previous Year Budget			(21.9%)
Dollar difference between proposed budget & current budget			-15,000

NARRATIVE:
Will not be cleaning tunnel in FY 10/11. Anticipate needing more work on instrumentation and controls in FY 10/11.

	FY 10/11
Electrical Testing (ETI)	$10,000
Electrical Repair	$10,000
Equipment /Valve Maintenance	$12,000
Pressure Reducing Valves	$1,000
Misc. Equip/Air Vent	$1,500
Telemetry & Alarms	$4,000
Pump Maintenance	$15,000
	$53,500

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item			**Amount**
Acct. No.	5250	Description:	Laboratory Expenses
Actual Amount As Of:	31-Mar	2010	33,109
PROJECTED ACTIVITY to END of FY:			19,000
Projected YEAR END TOTAL:			52,109
PROPOSED Line Item Amount:			**60,000**
Approved Line Item Amount:			
PREVIOUS YEAR BUDGET:			75,000
% Change Actual Year End compared to Proposed Line item amount.			15.1%
% Change to Previous Year Budget			(20.0%)
Dollar difference between proposed budget & current budget			-15,000

NARRATIVE:
Laboratory Costs associated with water sampling throughout distribution system and Treatment Plants. Reduced testing due to end of IDSE monitoring

	FY 10/11
Nunes WTP	$30,000
Denniston WTP	$30,000
	$60,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5318		Description: Studies/Surveys/Consulting	
Actual Amount As Of:	31-Mar	2010		43,050
PROJECTED ACTIVITY to END of FY:				15,000
Projected YEAR END TOTAL:				58,050
PROPOSED Line Item Amount:				**$22,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				22,544
% Change Actual Year End compared to Proposed Line item amount.				(62.1%)
% Change to Previous Year Budget				(2.4%)
Dollar difference between proposed budget & current budget				-544

Narrative: Lease consultant agreement offset by Cell Site Lease Agreements in account 4955

Communication Lease Consultant (Til FY 10/11)	$17,000.00
Misc. Studies/Surveys	$5,000.00
	$22,000.00

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5321		Description: Water Conservation	
Actual Amount As Of:	31-Mar	2010		48,331
PROJECTED ACTIVITY to END of FY:				15,000
Projected YEAR END TOTAL:				63,331
PROPOSED Line Item Amount:				**92,500**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				60,650
% Change Actual Year End compared to Proposed Line item amount.				46.1%
% Change to Previous Year Budget				52.5%
Dollar difference between proposed budget & current budget				31,850

NARRATIVE:

Increase funding due to:

1. Rebates for toilets and washing machines is being increased in anticipation of losing grant funding, increased rebate amounts and an increase in participation per BAWSCA's WCIP.
2. School education is being increased in anticipation of new BAWSCA sponsored outreach to more grade levels.
3. Funding for residential surveys is a new item in anticipation of outsourcing this program to comply with CUWCC BMP.
4. Low flow device funding is being increased to provide low flow spray rinse valves to restaturants as part of BAWSCA's WCIP.
5. Funds included to install water meter at 766 Main Street to comply with BMP's.
6. Funds included for Pilarcitos IRWMP implementation.
7. Funds included to produce 2010 UWMP, which is due December 2009.

Legend:

BAWSCA - Bay Area Water Supply and Conservation Agency
BMP - Best Management Practices
CUWCC - California Urban Water Conservation Council
IRWMP - Integrated Regional Watershed Management Plan
UWMP - Urban Water Management Plan
WCIP - Water Conservation Implementation Plan

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

Budget Worksheet Fiscal Year 2010-2011	
Worksheet 5321 A – Water Conservation/Water Resources	**Proposed**
Description	**FY 10/11**
Foundational	
1.0 Utility Operations Programs	
1.1 Operations	
Conservation Coordinator	$0
Water Waste Prevention	$0
1.2 System Water Audits	$0
1.3 Metering	$0
1.4 Conservation Pricing	$0
Subtotal	$0
2.0 Education Programs	
2.1 Public Information Programs	
Events	$0
Bill Stuffers	$7,000
Website	$0
Direct Mail	$0
Point of Purchase Materials	$100
Landscape Workshops	$0
Media	$1,000
California Water Awareness Camapaign	$900
Materials (Conservation)	$2,000
2.2 School Education Programs	
Curriculum Materials	$500
Water Wise (BAWSCA)	$3,000
WTP Tours	$0
Subtotal	$14,500
Programmatic	
3.0 Residential	
3.1 High Efficiency Fixture Devices (Q=300 each)	$3,500
3.2 High Efficiency Toilet Rebates (Q=100)	$15,000
3.3 High Efficiency Clothes Washer Rebates (Q=200)	$28,060
3.4 Residential Assistance	
High Bill Relief Outreach (Q=50)	$0
Indoor Survey	$0
Outdoor Survey	$0
Subtotal	$46,560
4.0 Commercial, Industrial and Institutional	
4.1 Rebates	
High Efficiency Tank Toilets (Q=1)	$150
High Efficiency Urinals (Q=1)	$300
High Efficiency and Ultra Low Flow Flush Valve Toilets (Q=1)	$300
Water Efficient Ice Machines	$0
Connectionless Food Steamers	$0
Dry vacuum Pumps	$0
Cooling Tower (conductivity and pH)	$0
San Mateo Green Business Certification Program	$0
4.2 Give-away	

Restaurant Spray Valves (Q=1)	$90
Subtotal	$840
5.0 Landscape (Large)	
5.1 Dedicated Irrigation Account Water Budget Reports (Q=44)	$2,500
5.2 Surveys for Deedicated Irrigation Meters Accounts (1)	$1,400
5.3 Outreach to CII Mixed Use Meters	$0
Subtotal	$3,900
Water Resources	
legal	$0
UWMP 2010	$15,000
SB7 compliance	$5,000
Pilarcitos IRWMP Commitments ($2500)	$2,500
California Urban Water Conservation Council Dues	$3,000
BAWSCA Assessment (4*5572=22288)	$0
CCR (cal yr)	$0
WSE (cal yr)	$0
Springbrook	$1,200
DWR Water System Statistics Report (cal yr)	$0
Department of Public Health Annual Report (cal yr)	$0
BAWSCA Annual Report (FY)	$0
BAWSCA Water Management Charge (estimate=$19,556.98)	$0
California Urban Water Conservation Council Reporting	$0
Subtotal	$26,700
Total	$92,500

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5322		Description:	Community Outreach
Actual Amount As Of:	31-Mar	2010		14,083
PROJECTED ACTIVITY to END of FY:				10,000
Projected YEAR END TOTAL:				24,083
PROPOSED Line Item Amount:				**26,200**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				28,700
% Change Actual Year End compared to Proposed Line item amount.				8.8%
% Change to Previous Year Budget				(8.7%)
Dollar difference between proposed budget & current budget				-2,500

NARRATIVE:

Created new account per Finance Committee to accommodate new community outreach between CCWD and Customers. Increase due to additional printing of annual reports and postage. Decrease in MCTV services.

MCTV-Recording meetings(14 @ $375)	$5,000
Montara Fog (14 @ $300)	$4,200
Materials/Publications/Public Information	$5,000
Postage for Public Outreach	$6,000
Printing Annual Reports (Consumer Confidence Report/ Water Supply Evaluation, etc..)	$6,000

Spread: TOTAL **26,200**

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5411		Description: Salaries - Field	
Actual Amount As Of:	31-Mar	2010		655,450
PROJECTED ACTIVITY to END of FY:				250,000
Projected YEAR END TOTAL:				905,450
PROPOSED Line Item Amount:				**930,278**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				907,674
% Change Actual Year End compared to Proposed Line item amount.				2.7%
% Change to Previous Year Budget				2.5%
Dollar difference between proposed budget & current budget				22,604

NARRATIVE:
A COLA of 3.0% was used as a place holder based upon the Memorandum of Understanding between the CCWD and Teamsters Local 856.

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT
5/6/2010
FY 2010/2011 BUDGET WORKSHEET (5411 A)

SALARIES - Accounts 5411 & 5610

EMPLOYEE		Current Hrly Rate	COLA 3.0%	Annual Pay	O T Hours	O T Pay	Cert. Pay	TOTAL
FIELD #5411								
Superintendent		56.18	57.86	120,349			10,800	131,149
Distribution Supervisor		46.10	47.48	98,765	120	8,547	7,200	114,512
WTP Supervisor		49.65	51.14	106,370	120	9,205	7,200	122,775
Sr. WTP Oper.		43.88	45.20	94,009	120	8,135	7,200	109,344
Treat/Dist Op		29.56	30.45	63,329	80	3,654	4,800	71,783
Treat/Dist Op		28.84	29.70	61,781	80	3,564	4,800	70,146
Treat/Dist Op		28.84	29.71	61,787	80	3,565	4,800	70,151
Treat/Dist Op		29.56	30.45	63,335	80	3,654	7,200	74,189
Maint Worker		26.81	27.61	57,438	40	1,657	2,400	61,495
Maint Worker		24.29	25.02	52,034	40	1,501	1,200	54,735
Part-Time Help		15.00		15,000				15,000
Part-Time Help		15.00		15,000				15,000
Estimated Annual Merit Increase								
Standby Pay for On-Call Employees				20,000				20,000
Sub total, Field				**829,196**		**43,482**	**57,600**	**930,278**
ADMIN #5610								
Gen Manager		88.00	90.64	188,531				188,531
Water Conser.		35.05	36.10	75,091	40	2,166		77,257
Prj Coord. PT		60.00		12,000				12,000
Office Mgr		38.76	39.93	83,045	40	2,396		85,440
Admin Assist.		35.13	36.18	75,252	40	2,171	7,546	84,969
Office Speclst		26.81	27.62	57,443		-		57,443
Office Speclst		24.90	25.65	53,346	40	1,539		54,885
Office Speclst		26.81	27.62	57,443		-	2,400	59,843
Directors				20,000				20,000
Estimated Annual Merit Increase								
Sub total, Admin				**622,151**		**8,271**	**9,946**	**$640,368**
TOTAL				**1,451,347**				**$1,570,646**

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5412		Description: Maintenance Expenses	
Actual Amount As Of:	31-Mar	2010		107,828
PROJECTED ACTIVITY to END of FY:				70,000
Projected YEAR END TOTAL:				177,828
PROPOSED Line Item Amount:				**192,500**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				189,500
% Change Actual Year End compared to Proposed Line item amount.				8.3%
% Change to Previous Year Budget				1.6%
Dollar difference between proposed budget & current budget				3,000

NARRATIVE:

Laundry	$2,000	Tree Removal	$13,000
Service Products	$5,000	Paving	$15,000
Pump Repair	$6,000	Inventory	$13,000
Uniforms/Jackets/Shoes	$8,000	Materials	$5,000
USA	$500	Equip. Rental	$2,000
Backfill	$3,000	Radio Repair/PM	$3,000
Hydrant repair	$14,000	Landscape Maint	$2,000
Tank Inspection	$5,000	Main Repairs/Sml Line Replacmnt	$28,000
Generator services	$7,000	Cathodic Protection	$8,000
Safety Supplies	$4,000	Misc. tools, etc.	$4,000
DMV/Pre-employment Physical	$1,000	(Welder,Drill,Airtools, Sump Pump, Lrg tools)	
Miramar Alt Valve	$10,000	Waste Services	$3,000
Miramar Vault Valves	$4,000	Fence Repairs	$2,000
Sub totals	$69,500	Raising Valve (City/County)	$25,000
TOTAL **$ 192,500**			$123,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5414		Description: Motor Vehicle Exp.	
Actual Amount As Of:	31-Mar	2010		35,204
PROJECTED ACTIVITY to END of FY:				7,000
Projected YEAR END TOTAL:				42,204
PROPOSED Line Item Amount:				**44,500**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				47,500
% Change Actual Year End compared to Proposed Line item amount.				5.4%
% Change to Previous Year Budget				(6.3%)
Dollar difference between proposed budget & current budget				-3,000

NARRATIVE:

	FY 10/11
Gasoline	$29,000.00
Mobile Phones	$7,500.00
Service & Repairs	$8,000.00
Total	$44,500.00

Jul	Aug	Sept	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5415		Description: Maintenance, Wells	
Actual Amount As Of:	31-Mar	2010		2,713
PROJECTED ACTIVITY to END of FY:				1,000
Projected YEAR END TOTAL:				3,713
PROPOSED Line Item Amount:				**6,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				15,000
% Change Actual Year End compared to Proposed Line item amount.				61.6%
% Change to Previous Year Budget				(60.0%)
Dollar difference between proposed budget & current budget				-9,000

NARRATIVE:
FY 09/10 amounts lower from past year due to rehabilitation of wells and upgrades.

	FY 10/11
Electrical PM	$1,200
Pumps	$3,000
Electrical	$1,600
Plumbing	$200
	$6,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5610		Description: Salaries, Admin.	
Actual Amount As Of:	31-Mar	2010		443,597
PROJECTED ACTIVITY to END of FY:				175,000
Projected YEAR END TOTAL:				618,597
PROPOSED Line Item Amount:				**640,368**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				646,607
% Change Actual Year End compared to Proposed Line item amount.				3.5%
% Change to Previous Year Budget				(1.0%)
Dollar difference between proposed budget & current budget				-6,239

NARRATIVE:
A COLA of 3.0% was used as a place holder based upon the Memorandum of Understanding between the CCWD and Teamsters Local 856.

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5620		Description: Office Expenses	
Actual Amount As Of:	31-Mar	2010		78,462
PROJECTED ACTIVITY to END of FY:				35,000
Projected YEAR END TOTAL:				113,462
PROPOSED Line Item Amount:				**118,875**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				131,150
% Change Actual Year End compared to Proposed Line item amount.				4.8%
% Change to Previous Year Budget				(9.4%)
Dollar difference between proposed budget & current budget				-12,275

NARRATIVE:

See Sheet 5620 A which details the cost items comprising this line item

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

Account 5620 - Detail of Account

Account Name	Description		Amount
Postage	Mail Machine	$	2,500
	Bulk Mailing	$	5,000
	Pre-Stamped Envelopes	$	3,500
Phone Services	Monthly Service & Repairs	$	4,000
PG&E	Monthly Service (District Office)	$	6,000
Office Cleaning	Janitorial Service/Carpet Cleaning	$	7,500
File Storage	Iron Mountain - Offsite Storage	$	5,000
Leases	Mail & Copier Machines	$	13,000
	Office Alarms and Security Camera	$	4,000
Printing	Checks, Forms, Statements	$	1,700
Data Prose	Fulfillment Center for Billing Stmnts	$	20,000
	NetBill (Online Payments)	$	6,000
Emergency	Supplies	$	1,000
	AED Certification	$	125
Miscellaneous	Office Supplies	$	7,500
	Credit Card / Bank Fees	$	7,000
	DMV/Pre-Employment Physicals	$	400
	Employee Recognition Program	$	1,750
	Petty Cash	$	2,500
	Director recognition/framing	$	300
	ORCC LockBox Services	$	600
	Allowance for Bad Debt	$	5,000
Maintenance	Office Equipment/Repairs	$	2,500
	Office Maintenance/Repairs	$	5,000
Payroll	Payroll Processing with ADP	$	7,000
	TOTAL	$	118,875

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5621		Description: Computer Services	
Actual Amount As Of:	31-Mar	2010		39,528
PROJECTED ACTIVITY to END of FY:				18,000
Projected YEAR END TOTAL:				57,528
PROPOSED Line Item Amount:				**62,650**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				64,150
% Change Actual Year End compared to Proposed Line item amount.				8.9%
% Change to previous year budget:				(2.3%)
Dollar difference between proposed budget & current budget				-1,500

NARRATIVE: Addition of Check Scanner Annual Maintenance costs along with an increase in upgrades to software for water shortage billing module

Maintenance Agreements	
Springbrook	$12,000
Radix	$3,000
ICS	$15,000
Hansen	$2,500
Badger	$1,500
XC2 Software	$800
Check Scanner	$1,500
Subtotal	*$36,300*

Computer Services		
New/Upgrades to software/Cust Rpts	$	4,000
Services/Repairs	$	15,000
Coastside Net	$	1,000
Rogue Web Works (Website Maint.)	$	5,000
Sonic.net	$	450
Spam Filtering	$	900
Subtotal	$	26,350
Grand Total	**$**	**62,650**

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5625		Description:	Meetings/Training/Seminars
Actual Amount As Of:	31-Mar	2010		16,654
PROJECTED ACTIVITY to END of FY:				5,000
Projected YEAR END TOTAL:				21,654
PROPOSED Line Item Amount:				**20,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				20,000
% Change Actual Year End compared to Proposed Line item amount.				(7.6%)
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:

	Amount
Conferences (District Employees)	$ 5,000
Conferences/Seminars (Board of Directors)	$ 3,000
Staff Training/Seminars/Continuing Education	$ 4,000
Safety Training (CINTAS)	$ 7,000
WTO/WDO Renewal/Application Fees	$ 1,000
TOTAL	$ 20,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5630		Description:	Insurance
Actual Amount As Of:	31-Mar	2010		383,885
PROJECTED ACTIVITY to END of FY:				125,000
Projected YEAR END TOTAL:				508,885
PROPOSED Line Item Amount:				**528,890**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				500,830
% Change Actual Year End compared to Proposed Line item amount.				3.9%
% Change to Previous Year Budget				5.6%
Dollar difference between proposed budget & current budget				28,060

NARRATIVE:	**FY 09/10**	**FY 10/11**
Dental	**$21,253**	**$23,053**
LTD	**$16,158**	**$16,777**
Health	**$326,690**	**$351,723**
Liability	**$55,000**	**$55,000**
Life	**$5,361**	**$5,766**
Property	**$20,000**	**$20,000**
Vision	**$5,636**	**$5,834**
EAP Program	**$732**	**$737**
Workers Compensation	**$50,000**	**$50,000**
TOTAL	**$500,830**	**$528,890**

Estimated Rate Increases for: Dental Dental (10%), Health (Blue Cross - 15%), EAP (2%), VSP (2%), Life (3%), Health (Kaiser - 15%), LTD (3%)

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

Current FY 2009/2010	KAISER	Blue Cross	Dental	Vision	Life/AD&D	LTD Metlife	ACWA EAP	ACWA W/C	ACWA Property	ACWA Liability
July	$8,609	$15,483	$1,610	$470	$456	$1,307	$60	$11,664		
August	$8,609	$15,483	$1,610	$470	$456	$1,458	$60			$55,000
September	$7,533	$11,852	$1,643	$470	$497	$1,357	$60			
October	$8,288	$15,483	$1,643	$470	$467	$1,357	$60	$13,000		
November	$6,596	$15,483	$1,643	$470	$467	$1,357	$60			
December	$9,054	$16,139	$1,746	$477	$467	$1,357	$60			
January	$9,054	$16,139	$1,746	$477	$467	$1,357	$60	$11,387		
February	$9,054	$16,139	$1,746	$477	$467	$1,357	$60		**$17,000**	
March	*$9,054*	*$16,139*	*$1,746*	*$477*	*$467*	*$1,357*	*$60*			
April	*$9,054*	*$16,139*	*$1,746*	*$477*	*$467*	*$1,357*	*$60*	$12,000		
May	*$9,054*	*$16,139*	*$1,746*	*$477*	*$467*	*$1,357*	*$60*			
June	*$9,054*	*$16,139*	*$1,746*	*$477*	*$467*	*$1,357*	*$60*			
EE/Retirees Credit	-$5,904	-$22,322	-$4,978	-$237	-$169	$0				
Retiree Reimbursement	$3,528									
Sub Total	$100,637	$164,437	$15,397	$5,448	$5,440	$16,338	$722	$48,051	$17,000	$55,000
FY 09/10 Total	$112,176	$193,670	$20,957	$5,720	$5,598	$16,288	$722	$48,051		
June Rate x 12 months										
Approx.	*15%*	*15%*	*10%*	*2%*	*3%*	*3%*	*2%*			
Rate Increase	$129,002	$222,721	$23,053	$5,834	$5,766	$16,777	$737	$50,000	$20,000	$55,000
Total Medical	$351,723									
Total	$528,890									

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5640		Description: Employee Retirement	
Actual Amount As Of:	31-Mar	2010		305,257
PROJECTED ACTIVITY to END of FY:				125,000
Projected YEAR END TOTAL:				430,257
PROPOSED Line Item Amount:				**437,789**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				447,750
% Change Actual Year End compared to Proposed Line item amount.				1.8%
% Change to Previous Year Budget				(2.2%)
Dollar difference between proposed budget & current budget				-9,961

NARRATIVE:
This line item is a function of salaries and will be determined when salaries and employee complement is set by the Board.

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5645		Description: SIP 401 K Plan	
Actual Amount As Of:	31-Mar	2010		0
PROJECTED ACTIVITY to END of FY:				0
Projected YEAR END TOTAL:				0
PROPOSED Line Item Amount:				**30,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				20,000
% Change Actual Year End compared to Proposed Line item amount.				
% Change to Previous Year Budget				50.0%
Dollar difference between proposed budget & current budget				10,000

NARRATIVE:
Supplemental Income Trust Fund / AIP 401 K Plan base on the
Memorandum of Understading between CCWD and the Teamsters Union, Local 856

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT
DRAFT
Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5681		Description:	Legal
Actual Amount As Of:	31-Mar	2010		41,008
PROJECTED ACTIVITY to END of FY:				15,000
Projected YEAR END TOTAL:				56,008
PROPOSED Line Item Amount:				**57,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				52,000
% Change Actual Year End compared to Proposed Line item amount.				1.8%
% Change to Previous Year Budget				9.6%
Dollar difference between proposed budget & current budget				5,000

NARRATIVE:
This account is for the Legal Counsel General District business that is not included in capital projects or reimbursable projects. The legal costs for capital projects and reimbursable projects whether the work is performed by District Cousel or other counsel is part of the overall project and not an operating expense.

HansonBridgett		$55,000
Sherman/Feller		$2,000
	Total	**$57,000**

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5682		Description: Engineering	
Actual Amount As Of:	31-Mar	2010		9,282
PROJECTED ACTIVITY to END of FY:				3,500
Projected YEAR END TOTAL:				12,782
PROPOSED Line Item Amount:				**14,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				15,000
% Change Actual Year End compared to Proposed Line item amount.				9.5%
% Change to Previous Year Budget				(6.7%)
Dollar difference between proposed budget & current budget				-1,000

NARRATIVE:
This account is for the District Engineer's monthly retainer and for general District business that is not included in capital projects or reimbursable projects. The engineering costs for capital projects and reimbursable projects whether the work is performed by the District engineer or another engineer are part of the overall project and not an operating expense.

Note: Engineer will receive 1.8% increase in the hourly rate effective 7/1/10

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5683		Description: Financial Services	
Actual Amount As Of:	31-Mar	2010		19,863
PROJECTED ACTIVITY to END of FY:				7,700
Projected YEAR END TOTAL:				27,563
PROPOSED Line Item Amount:				**31,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				31,000
% Change Actual Year End compared to Proposed Line item amount.				12.5%
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:
Annual auditing services performed by Joseph J Arch, CPA and
Annual accounting/consultation services provided by John Parsons, CPA.

	FY 10/11
Financial Audit Service	$16,000
Accounting Services	$15,000
Total	**$31,000**

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5684		Description: Payroll Taxes	
Actual Amount As Of:	31-Mar	2010		78,241
PROJECTED ACTIVITY to END of FY:				30,000
Projected YEAR END TOTAL:				108,241
PROPOSED Line Item Amount:				**111,951**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				112,146
% Change Actual Year End compared to Proposed Line item amount.				3.4%
% Change to Previous Year Budget				(0.2%)
Dollar difference between proposed budget & current budget				-195

NARRATIVE:

Payroll taxes, i.e. Social Security is a function of salaries. It is applied at a total rate of 7.65% of gross payroll. The final amount will be determined when salaries and employee complement is finalized by the Board.

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item **Amount**

Acct. No. 5684 Description: Payroll Taxes

CALCULATION FOR PAYR0LL TAXES

		SOCIAL SECURITY 6.20%	MEDICARE 1.45%	TOTAL
TOTAL PAYROLL	$ 1,570,646			
AMOUNT SUBJECT TO SOCIAL SECURITY	$ 1,438,335	$ 89,177		$ 89,177
AMOUNT SUBJECT TO MEDICARE	$ 1,570,646		$ 22,774	$ 22,774
TOTAL				$ 111,951

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5687		Description:	Memberships & Subscriptions
Actual Amount As Of:	31-Mar	2010		33,760
PROJECTED ACTIVITY to END of FY:				15,000
Projected YEAR END TOTAL:				48,760
PROPOSED Line Item Amount:				**56,950**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				53,815
% Change Actual Year End compared to Proposed Line item amount.				16.8%
% Change to Previous Year Budget				5.8%
Dollar difference between proposed budget & current budget				3,135

NARRATIVE: See attached worksheet for detail of costs

Increase in BAWSCA Annual Assessments

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

Worksheet 5687A		
Budget Detail Worksheet		
Line Item: Memberships & Subscriptions		Description
Acct. No. 5687	**Amount**	
ACWA	$10,000	Membership dues
ACWA	$10,000	Delta Sustainability Dues
AWWA	$2,000	Membership dues and technical publications
BAWSCA	$24,000	Annual assessment & dues
California Emergency Utilities	$500	Annual Membership
Chamber of Commerce	$600	Membership dues & Farm Day Luncheon Tickets
CSDA	$4,000	Membership dues
IAMPO	$100	Subscription for Backflow Prevention Magazine
Miscellaneous	$1,000	Miscellaneous Dues/Memberships/Subscriptions
Springbrook Users Group	$50	Annual Users Group for Springbrook Software
Water Education Foundation	$1,000	Membership dues and technical publications
Water ReUse	$600	Annual Association Dues
Wellness Program	$2,500	Wellness Program group membership in health club
West Group (Formally Barclays)	$600	Updates on California Code of Regualtions regarding construction laws
TOTAL	$56,950	

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5688		Description:	Election Expense
Actual Amount As Of:	31-Mar	2010		24,358
PROJECTED ACTIVITY to END of FY:				0
Projected YEAR END TOTAL:				24,358
PROPOSED Line Item Amount:				**0**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				15,000
% Change Actual Year End compared to Proposed Line item amount.				(100.0%)
% Change to Previous Year Budget				
Dollar difference between proposed budget & current budget				-15,000

NARRATIVE:

Spread:

Jul	Aug	Sep	Oct	Nov	Dec	Totals
Jan	Feb	Mar	Apr	May	Jun	

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5689		Description:	Union Expenses
Actual Amount As Of:	31-Mar	2010		9,000
PROJECTED ACTIVITY to END of FY:				3,000
Projected YEAR END TOTAL:				12,000
PROPOSED Line Item Amount:				**12,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				12,000
% Change Actual Year End compared to Proposed Line item amount.				0.0%
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:

Serivces contracted with IEDA (Labor Negotiator)	$	12,000
TOTAL	$	12,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5700		Description: County Fees	
Actual Amount As Of:	31-Mar	2010		7,531
PROJECTED ACTIVITY to END of FY:				2,000
Projected YEAR END TOTAL:				9,531
PROPOSED Line Item Amount:				**10,800**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				10,800
% Change Actual Year End compared to Proposed Line item amount.				13.3%
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:

1. San Mateo County charges the District for collecting and transmitting property taxes ……	$2,000.00
2. The cost of the LAFCo budget, estimated ……..	$5,000.00
3. Hazardous Material Handling (Nunes & Denniston) ….	$3,000.00
4. Property Taxes	$800.00
	$10,800.00

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5705		Description: State Fees	
Actual Amount As Of:	31-Mar	2010		8,669
PROJECTED ACTIVITY to END of FY:				1,000
Projected YEAR END TOTAL:				9,669
PROPOSED Line Item Amount:				**10,500**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				10,500
% Change Actual Year End compared to Proposed Line item amount.				8.6%
% Change to Previous Year Budget				0.0%
Dollar difference between proposed budget & current budget				0

NARRATIVE:

#1 Fees are charged by the State Department of Health Services for reviewing applications and annual reports on operation of the Nunes & Denniston Water Treatment Plants
(DHS Fees - Increase due to additional services regarding new regulations)
#2 Water Rights (initialized by SWRCB) for both Pilarcitos & San Vincente
#3 RWQCB NPDES Annual Fee (estimated)
#4 Bay Area Air Quality Management Dist - Permits to Operate

#1	$7,500
#2	$1,000
#3	$1,000
#4	$1,000
	$10,500

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5711	Description:	Existing Bonds - 1998A	
Actual Amount As Of:	31-Mar	2010		270,844
PROJECTED ACTIVITY to END of FY:				0
Projected YEAR END TOTAL:				270,844
PROPOSED Line Item Amount:				**269,845**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				270,845
% Change Actual Year End compared to Proposed Line item amount.				(0.4%)
% Change to Previous Year Budget				(0.4%)
Dollar difference between proposed budget & current budget				-1,000

NARRATIVE:
ABAG Pooled Financing Program Series 1998A

September 2010 Payment	$250,235
March 2011 Payment	$19,610
Spread:	$269,845

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5712	Description:	Existing Bonds - 2006B	
Actual Amount As Of:	31-Mar	2010		489,296
PROJECTED ACTIVITY to END of FY:				0
Projected YEAR END TOTAL:				489,296
PROPOSED Line Item Amount:				**484,966**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				486,400
% Change Actual Year End compared to Proposed Line item amount.				(0.9%)
% Change to Previous Year Budget				(0.3%)
Dollar difference between proposed budget & current budget				-1,434

NARRATIVE:
CSCDA Pooled Financing Program Series 2006B

September 2010 Payment	$334,114
March 2011 Payment	$150,852
	$484,966

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT

Budget Worksheet

Fiscal Year
2010/2011

Line Item				**Amount**
Acct. No.	5713	Description:	Cont. to CIP & Reserves	
Actual Amount As Of:	31-Mar	2008		388,093
PROJECTED ACTIVITY to END of FY:				129,364
Projected YEAR END TOTAL:				517,457
PROPOSED Line Item Amount:				**600,000**
Approved Line Item Amount:				
PREVIOUS YEAR BUDGET:				517,457
% Change Actual Year End compared to Proposed Line item amount.				16.0%
% Change to Previous Year Budget				16.0%
Dollar difference between proposed budget & current budget				82,543

NARRATIVE:

Contribution to CIP & Reserves	$ 600,000
	$ 600,000

Spread:

Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun

COASTSIDE COUNTY WATER DISTRICT
PLANNED CAPITAL PROJECTS
FISCAL YEARS 10/11 THRU 19/20

= new or modified projects
= completed projects or projects to be deleted

Origin FY	Number		Priority	Budget FY 09/10	Projected FY09/10 Exp	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	10/11-19/20 Totals	FY10-19 Budget
PIPELINE PROJECTS - * *Pending Further Pressure Testing*																	
06	01	Avenue Cabrillo Phase I (Permitting/Design)	2	52,000	3,025		100,000	moved up								$100,000	$152,000
06	01	Avenue Cabrillo Phase I (Construction)	2					347,000			split into three construction phases					$347,000	$1,048,000
		Avenue Cabrillo Phase II (Construction)								246,000						$246,000	$0
		Avenue Cabrillo Phase III (Construction)									479,000					$479,000	$0
		Small line decommission behind Main Street				25,000										$25,000	$0
06	02	Highway #1 South Phase I / II	3										80,000	100,000	1,200,000	$1,380,000	$1,380,000
07	03	Pilarcitos Canyon Pipeline Replacement	1					100,000	1,000,000							$1,100,000	$1,100,000
07	04	Bell-Moon Pipeline Replacement Project	3								60,000	250,000				$310,000	$310,000
		* Main Street Pipeline Replacement Project - Phase 3	3									90,000	249,000			$339,000	$339,000
		* Bridgeport Drive Pipeline Replacement Project	3									110,000	840,000			$950,000	$950,000
		Rebuild Harbor 4" service vault				20,000										$20,000	$0
05	01	Main Street/Hwy 92 Widening Project		20,000		complete										$0	$20,000
																$5,296,000	$5,299,000
WATER TREATMENT PLANTS																	
99	05	Denniston Intake Maintenance	1	80,000	76,232	29,000	30,000	31,000	32,000	33,000	34,000	35,000	36,000	37,000	37,000	$334,000	$377,000
08	01	Denniston WTP- Filter Flow Meters	2													$0	$0
09		Denniston WTP - Intake study/predesign	1													$0	$0
10	02	Denniston WTP - Intake construction	1	100,000	25,000				100,000							$100,000	$100,000
08	02	Nunes WTP- Replace Cl2/pH Analyzer														$0	$0
09	03	Nunes - Backwash Variable Rates Project - study	3							deleted 15K						$0	$0
10	03	Nunes - Backwash Variable Rates Project - design/build	3			25,000				moved and reduced from 50K to 25K						$25,000	$50,000
10	04	Nunes - Floc Drive Repair	2	50,000	45,000	50,000	50,000									$100,000	$150,000
09	04	Nunes Backwash and WWR Tank Lights	2													$0	$0
07	01	Nunes Filter Media Replacement		50,000	50,000											$0	$0
09	05	Nunes Office Heater	2													$0	$0
08	03	Nunes UST removal and replaced with AGST														$0	$0
08	04	Nunes WTP - Head Loss System Replacement														$0	$0
08	05	Nunes WTP - Plant Painting	3			12,500	12,500	12,500	12,500							$50,000	$50,000
08	06	Nunes WTP- Filter to Waste System	3					5,000	75,000							$80,000	$80,000
08	07	Nunes WTP -Filter Valve Replacement	2							30,000	30,000	30,000	30,000	30,000		$150,000	$150,000
																$839,000	$957,000
FACILITIES & MAINTENANCE																	
9	6	District Space Planning	2	25,000	-											$0	$0
09	07	AMR Program + Fixed Network	1	400,000		100,000			300,000	400,000	400,000		100,000			$1,200,000	$1,300,000
08	08	PRV Valves Replacement Project**	2	20,000	20,639	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	$200,000	$200,000
99	01	Meter Change Program**	1	18,000	39,900	30,000	30,000	30,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	$230,000	$225,000
09	08	Main Office - Replace Skylights (repair leaks)														$0	$0
09	09	Fire Hydrant Replacement**	2	40,000		20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	$200,000	$80,000
09	10	Standardize Chlorine Analyzers at 6 facilities	2			15,000	15,000									$30,000	$30,000
09	11	Pilarcitos Culvert Repair	1	200,000	113,068											$0	$200,000
09	23	District Digital Mapping	3			75,000										$75,000	$75,000
																$1,935,000	$2,110,000
EQUIPMENT PURCHASE & REPLACEMENT																	
99	02	Vehicle Replacement	1	28,000		20,000					30,000	30,000	30,000	30,000		$140,000	$207,000
99	03	Computer System	1	5,000	5,000	12,000	12,000	6,000	5,000	5,000	5,000	5,000	5,000	5,000		$60,000	$46,000
99	04	Office Equipment/Furniture	1	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	$30,000	$30,000
06	03	SCADA/Telemetry/electrical controls	1	250,000	200,000	550,000	350,000	$50K								$900,000	$1,100,000
08	09	Dump Truck	1							100,000	deferred to					$100,000	$100,000
08	10	Backhoe	1						80,000		deferred to					$80,000	$80,000
08	12	New Service Truck Box (old dumptruck conversion)	3							50,000	deferred to					$50,000	$50,000
		Billing System Upgrade				75,000										$75,000	$0
																$1,435,000	$1,613,000
PUMP STATIONS / TANKS / WELLS																	
06	04	Hazen's Tank Replacement	2					280,000								$280,000	$280,000
10	05	Hazen's Tank Fence Upgrade	2	10,000												$0	$0
09	12	Crystal Springs Reroof and Paint	1	50,000												$0	$0
09	13	Crystal Springs Soft Starts 1 & 3	1	25,000												$0	$0

Revised: 4/8/20108:42 PM

COASTSIDE COUNTY WATER DISTRICT
PLANNED CAPITAL PROJECTS
FISCAL YEARS 10/11 THRU 19/20

= new or modified projects
= completed projects or projects to be deleted

Origin FY	Number		Priority	Budget FY 09/10	Projected FY09/10 Exp	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	10/11-19/20 Totals	FY10-19 Budget
09	14	CSP Pump #2 Rehabilitation	2													$0	$0
09	17	Crystal Springs Emergency Generator	2			50,000	study		300,000							$350,000	$300,000
		Crystal Springs Spare 350 HP pump					50,000									$50,000	$0
		Crystal Springs Rebuild spare 500 HP						25,000								$25,000	$0
		Replace/rebuild Air relief/Vacuum valves on CSP line							20,000							$20,000	$0
10	01	Crystal Springs Check Valve Repair/Replacement	1	100,000	100,000											$0	$100,000
		Crystal Springs stainless steel inlet valves (manual safety									100,000					$100,000	$0
		MCC Upgrades Denniston PP				30,000										$30,000	$0
06	05	Well Rehabilitation	2	40,000	12,380		25,000									$25,000	$100,000
08	14	Alves Tank Recoating, Interior+Exterior	1	300,000		100,000	exterior only			250,000	carried fwd,					$350,000	$300,000
08	15	Miramar Tank Interior Recoat + Mixing	1	230,000	300,000											$0	$230,000
08	16	Cahill Tank Exterior Recoat	2					150,000								$150,000	$150,000
10	06	Cahill Tank Ladder Replacement		15,000	15,000											$0	$15,000
08	17	El Granada Tank 2 Recoat + Ladder	2			200,000										$200,000	$200,000
08	18	EG Tank #3 Recoating Interior + Exterior	2				260,000									$260,000	$260,000
10	07	EG Tank #1 security fence		20,000	20,000											$0	$20,000
10	08	EG Tank #1 pump station pump replacement		23,000	23,000											$0	$23,000
		EG Tank #2 pump station pump replacement				30,000										$30,000	$0
		Miramar Tank Altitude Valve Replacement								30,000						$30,000	$0
		Alves Tank Altitude Valve Replacement							30,000							$30,000	$0
		Half Moon Bay Tank #1 Int & Ext Recoat				200,000										$200,000	$0
		Half Moon Bay Tank #2 Int & Ext Recoat											200,000			$200,000	$0
		Half Moon Bay Tank #3 Int & Ext Recoat													200,000	$200,000	$0
		Pump Station Chlorine analyzer replacements (4)				10,000	10,000	10,000	10,000							$40,000	$0
09	18	New Pilarcitos Well	3	25,000	10,000			150,000								$150,000	$175,000
09	19	Pilarcitos Canyon Blending Station	2	100,000	100,000											$0	$100,000
10	09	Miramar Tank Fence Upgrade				8,000										$8,000	$8,000
																$2,728,000	$2,261,000
DENNISTON WTP PRIORITY (SHORT-TERM) IMPROVEMENTS																	
08	19	Denniston Short Term WTP Modifications	2			50,000	300,000	900,000								$1,250,000	$1,600,000
08	20	Denniston Storage Tank Modification Project	1													$0	$0
																$1,250,000	$1,600,000
DENNISTON WTP (LONG-TERM) IMPROVEMENTS																	
08	22	Denniston Pre/Post Treatment Design	1	350,000	200,000	400,000										$400,000	$350,000
08	23	Denniston Pre/Post Treatment Construction	1				1,500,000	2,000,000								$3,500,000	$1,800,000
																$3,900,000	$2,150,000
NUNES WTP PRIORITY (SHORT-TERM) IMPROVEMENTS																	
08	24	Nunes WTP Short Term Modifications	1	600,000	300,000	1,100,000										$1,100,000	$1,800,000
																$1,100,000	$1,800,000
NUNES WTP (LONG-TERM) IMPROVEMENTS																	
08	26	Install Air Scour for Filters	2							100,000						$100,000	$100,000
08	27	Modify Filters for Rate of Flow Control	2	10,000						260,000						$260,000	$270,000
																$360,000	$370,000
WATER SUPPLY DEVELOPMENT																	
09	21	Reclamation Project Planning	1	100,000	50,000	100,000	50,000									$150,000	$250,000
09	22	Water Supply Alternatives Evaluation	1	50,000	50,000	100,000										$100,000	$50,000
		Water Supply Development/Reliability Program	1				250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	$2,250,000	$0
																$2,500,000	$300,000
Totals				$3,389,000	$1,761,244	$3,459,500	$3,087,500	$4,339,500	$2,277,500	$1,817,000	$1,451,000	$863,000	$1,883,000	$515,000	$1,750,000	$21,443,000	$18,460,000
FY10 Budget Totals				$3,337,000		$3,155,500	$3,625,500	$2,005,500	$1,799,500	$1,262,000	$1,406,000	$598,000	$1,239,000	$152,000		$18,460,000	
FY 09 Budget Totals				$5,402,000		$4,679,500	$2,236,500	$254,500	$1,224,000	$117,000	$120,000	$123,000	$125,500	$0		$19,684,000	

Revised: 4/8/20108:42 PM

NOTICE OF PUBLIC HEARING

PROPOSED 2010-2011 RATE INCREASES FOR WATER SERVICES

May 14, 2010

NOTICE IS HEREBY GIVEN that the Coastside County Water District (CCWD) Board of Directors will hold a public hearing to consider a proposed increase of up to 14% in the District's water rates. The proposed new rates are shown in the table below. If approved, the new rates will apply to meter readings on and after July 1, 2010.

Under the new rates, the typical residential customer using 14 units (Tier 2) bimonthly would pay an additional $5.71 per month. A customer using 5 units (Tier 1) bimonthly would pay an additional $3.06 per month. Customers using 34 (Tier 3) or 41 (Tier 4) units bimonthly would pay an additional $12.62 or $15.48 per month, respectively.

The proposed rate increase is necessitated by a number of factors: 1) an increase of 15.2% in wholesale water rates from the San Francisco Public Utilities Commission, 2) financing costs for required upgrades to the District's water treatment plants and other elements of the Capital Improvement Program, and 3) lower water consumption resulting from continued conservation efforts by District customers. The Draft CCWD 2010-2011 fiscal year budget describes the anticipated revenues and expenses in further detail. Copies are available at the District office or online at **www.coastsidewater.org.**

ATTEND THE PUBLIC HEARING:
Tuesday, June 29, 2010
Meeting begins at 7:00 pm
COASTSIDE COUNTY WATER DISTRICT OFFICE
766 Main Street, Half Moon Bay, CA 94019

YOU CAN BE HEARD: Proposition 218 allows a customer to respond to proposed rate increases prior to the public hearing. If you wish to protest the proposed rate changes, CCWD must receive your ***written protest*** prior to the close of, or during, the public hearing on June 29, 2010.

You may deliver your protest at the public hearing, or you can deliver the protest in advance by first class mail or personal delivery to:
Attention: General Manager, Coastside County Water District, 766 Main Street, Half Moon Bay, CA 94019
Emails will not be accepted

For your protest to be counted, please include one of the following: address(es) or Assessor Parcel Number(s) of the property(ies) you own, or the utility account number(s) for active utility accounts that are subject to the proposed rate adjustment(s). Protests are limited to one per parcel. If written protests are submitted by a majority of the affected property owners/customers, the proposed rate increases will not be imposed

COASTSIDE COUNTY WATER DISTRICT FY 2010-2011 PROPOSED WATER RATE SCHEDULE

RESIDENTIAL & OTHER - BASE CHARGE

Meter Size	Currently Bimonthly Base Charge	**Proposed Bimonthly Base Charge**
5/8 inch	$24.06	**$27.43**
5/8 inch for 2 dwelling units	$52.92	**$60.33**
3/4 inch	$36.17	**$41.23**
3/4 inch for 2 dwelling units	$72.38	**$82.51**
1.0 inch	$60.28	**$68.72**
1.5 inch	$116.41	**$132.71**
2.0 inch	$192.94	**$219.95**
3.0 inch	$422.07	**$481.16**
4.0 inch	$1,447.28	**$1,649.90**

RESIDENTIAL - WATER RATE SCHEDULE

Rate Tiers Bimonthly Use		Water Consumption Charge Per Unit	**Proposed Water Consumption Charge Per Unit**
1	1 – 8 Units	$3.93	**$4.48**
2	9 – 25 Units	$4.33	**$4.94**
3	26 – 40 Units	$5.63	**$6.42**
4	41+ Units	$6.96	**$7.93**

One Unit of water equals 100 cubic feet or 748 gallons

OTHER - WATER RATE SCHEDULE

Current Rate: $ 5.35 per unit **Proposed Rate: $6.10 per unit**

Attachment B

June 1, 2010

Dear General Manager,

My name is Patricia Miyaki
340 BRIDGEPORT DR
HMB, CA 94019
(650) 728-3620

I am protesting the proposed rate increases. It seems so unfair to punish customers for conserving water! Didn't you just raise our rates a few months ago?

Patricia Miyaki

COPY

RECEIVED
MAY 26 2010
COASTSIDE COUNTY
WATER DISTRICT

Elizabeth Flores-Zevallos & Cesar Queirolo
431 Saint John Avenue
Half Moon Bay CA 94019
Phone: (650) 726-22-71

May 19, 2010
Coastside County Water District
Attn: City Clerk

Attn: Rate Increase Protest

Elizabeth and I feel that the rates should not be increased at this time, considering the uncertainty of the economy and the social unrest at this time; instead, the city might consider renegotiating with Coastside County Water District a better alternative. Hence, we protest the proposal rate increase.

Thank you very much for your attention

Sincerely

Elizabeth Flores-Zevallos & Cesar Queirolo

COPY

RECEIVED
MAY 25 2010
COASTSIDE COUNTY
WATER DISTRICT

March 29, 2010

General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019
Re: Proposed Water Rates – Written Protest

We have reviewed the proposed increases in water rates and find the rationale and supporting data for the proposed rate increases to be insufficient. The primary rationale for the increase appears to be based on an increase in the wholesale water rates. Yet, in the same sentence, the rationale is lower water consumption.

It makes little sense to tie either the wholesale water rate increase or consumption, which are both variable expenses, to the fixed base rate charge. In addition, it makes even less sense to promote water conservation as a public goal (and fund the effort from the rate base) then justify the rate increase based on the success of the program.

A few observations from reviewing the Fiscal Year 2010-2011 Revenue and Expense Budget and Capital Improvement Program – Draft dated May 4, 2010:

1. The Capital Improvement Program expenses may be justified, but no information is presented to evaluate the merits. Where are the goals of the CIP outlined? Do the goals support a water conservation effort that reduces cost as consumption per capita decreases? As this is presented as a Draft 10 year plan, we would assume modifications can be made to lessen the impact of this item.
2. Unmetered water use of 72,608 or 7.4% unaccountable of the total district estimated use is not explained. Is this in-line with other water districts? Are there steps being taken to reduce this? What is the trend line over time?
3. Field and Administrative Salary adjustment of 3% based on a COLA adjustment. Since current COLA is trending near 0% this seems out of touch with current economic realities.
4. Insurance expenses use generic rate increase assumptions across the board. More justification or alternative supply arrangements are required to substantiate.
5. Lastly, no alternative scenarios are presented. Prudent financial and operational assessments require alternative proposals.

Please register our protest to this increase.

Sincerely,

Daniel J. Bohnert

Leigh Dreo

Daniel J. Bohnert
Leigh Dreo
Homeowners: 370 Saint Andrews Lane, Half Moon Bay
Parcel No. 066-372-150

COPY

RECEIVED
MAY 25 2010
COASTSIDE COUNTY
WATER DISTRICT

May 23, 2010

Attention: General Manager

I am writing to protest the proposed increase for water services. It is very disheartening to attempt to conserve water only to see the rates increase anyway. With my limited income, the 14% rise in rates will really pinch.

Sincerely,

Janet Rebling

Janet Rebling
178 Harbour Drive
PO Box 392
El Granada, Ca 94018

RECEIVED
MAY 24 2010
COASTSIDE COUNTY
WATER DISTRICT

COPY

MAY-21-10

To General Mgr. Coastside Water Dist

In these times I find it hard to understand why you can raise or think of raising anything let alone the water rates, especially 15% my God - what are you thinking of = your selves its evident. =

One should cut rates not raise them

Bill & Gail Wylie
123 Escalona Ave
El Granada. CA. 94018
925-443-3910
I.D 047-111-070

NO ON 218

NO RAISE

In these times we should all live within our means

This means you [signature]

If have made A copy of this letter in case
you loose this one

05-18-10

To: General Manager, C.C.W.D

From: Pat Baldwin
560 Palma St. El Granada

Dear General Manager, I am not in favor of the proposed rate increase, and I'm Protesting.

Regard's,

Pat Baldwin

Pat Baldwin

To The Board of directors,

I am writing this in protest to the Proposed Rate increase for Water Services in 2010-2011. We are a family of Three who use our water consumption carefully. Point #3 says rate increase is necessitated by lower water consumption? Are we being penalized for Trying to conserve? A 14% increase seems like alot. And as for this Tier method of charging the consumer, is this a fair method?

Sincerely, Rita Pickering (Kuchler)

60 San Pablo Ave.
Half Moon Bay, Ca.
726-4158

May 17, 2010

Re: protest of your intent to increase water rate to 14%

Dear Sir:

This is becoming a nasty habit on a yearly basis. All public entities are increasing rates with no regard to customer satisfaction.

OUR WAGES ARE NOT INCREASING. SOME OF US ARE TAKING CUTS. WHAT ABOUT YOU?

HOW ABOUT FREEZING YOUR PENSION SYSTEM AND FURLOUGHING YOUR OFFICE ONE DAY A WEEK TO SAVE MONEY. OF COURSE, KEEP EMERGENCY CREW ON CALL.

START RUNNING THE COASTSIDE COUNTY WATER DISRICT AS A BUSINESS. LOWER YOUR ACCESS FEES FOR NEW CONSTRUCTION.

MAYBE YOU NEED A FISCAL AUDIT.

THE INCREASE COULD BE LESS THAT 14% ALSO. DID YOU EVER HEAR ABOUT COMPROMISE?

THE MOST INSULTING ISSUE IS THAT WE HAVE CONSERVED WATER AND WE ARE NOW PENALIZED FOR IT.

SINCERELY,
Sandra Varga
SVF PARTNERSHIP

varga.rentals@gmail.com, 415-244-9262

220 MAIN ST., HALF MOON BAY, CA. 056-240-100

May 15, 2010

Attention: General Manager
Coastside County Water District
766 Main St
Half Moon Bay, Ca 94019

Avery Allen
163 Sevilla Ave
El Granada, CA 94018

I wish to protest the proposed rate increases scheduled for July 1, 2010. Put some of your projects on hold until we recover from the financial disaster. Take a pay cut like the rest of us.

Sincerely,

Avery T. Allen

Avery T. Allen

Staff Report

To: **The Board of Directors**
via David Dickson, General Manager

From: **Cathleen Brennan, Water Resources Analyst**

Agenda: **June 8, 2010**

Subject: **Advisory Stage of Water Shortage and Drought Contingency Plan**

Recommendation: Staff recommends that the Board of Directors declare a normal water year and cancel the Water Shortage Advisory, by motion.

Background

The District declared a Water Shortage Advisory in June of 2007, by implementing the Water Shortage and Drought Contingency Plan. As water conditions deteriorated across California from 2007 through 2009, the Governor declared a drought and eventually a state of emergency for areas impacted by water shortages.

- Coastside County Water District implemented the Advisory Stage in June of 2007.
- In June of 2008, Governor Schwarzenegger declared a state - wide drought.
- On February 27, 2009, Governor Schwarzenegger proclaimed a state of emergency due to drought conditions and the resulting water shortage.

The Water Shortage Advisory, as described in the District's Water Shortage and Drought Contingency Plan, was implemented to prepare the District and its customers for the potential of a water shortage. The Advisory allows the District adequate planning and coordination time. During the Water Shortage Advisory, the Districted requested voluntary curtailment of water consumption by its customers.

Report

After three years of below normal precipitation, water year 2010 has yielded normal to above normal precipitation in the watersheds that Coastside County Water District relies on for its water supply. With improving water conditions, staff recommends that the District cancel the Water Shortage Advisory.

The District will continue operating its water use efficiency (water conservation programs) programs and will continue to encourage its customers to use water efficiently. The District will continue to monitor water conditions and work with our utility billing software vendor to make the necessary modifications to the billing system for mandatory rationing.

Certain areas in California will continue to experience water shortages because of pumping restrictions in the Delta and other regional issues, but staff does not anticipate any local water shortages in the next fiscal year.

Fiscal Impacts

None.

Half Moon Bay Precipitation Records by Water Year.

- Water year 2007 was critically dry at 67% of annual historic average.
- Water year 2008 was dry at 72% of the annual historic average.
- Water year 2009 was dry at 78% of annual historic average.
- Water year 2010 started on October 1, 2009. Local precipitation is at 100% of normal to date.

Precipitation for Half Moon Bay													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Historic Average	1.3	3.4	3.7	5.5	4.8	3.9	1.6	0.6	0.2	0.0	0.1	0.3	25.4
	2009			2010									
Water Year 2010	3.4	0.4	2.6	6.4	3.0	2.2	4.2	2.0					24.2
	2008			2009									
Water Year 2009	0.5	2.4	2.6	0.9	8.7	2.8	0.3	1.0	0.1	0.1	0.1	0.4	19.9
	2007			2008									
Water Year 2008	1.8	0.9	3.2	8.8	2.7	0.3	0.2	0.1	0.0	0.1	0.1	0.1	18.3
	2006			2007									
Water Year 2007	0.2	3.2	4.2	0.7	5.3	0.8	1.6	0.4	0.1	0.3	0.0	0.2	17.0

√ San Francisco Public Utilities Commission

The SFPUC Hydrological Conditions Report for the month of May was not available to include with this staff report, but the April report indicated that the SFPUC water supply is much improved this year over the last three years. It continued to snow in May and Bay Area reservoirs are near full and snowmelt runoff will continue through June of this year.

√ Final Snow Survey Results – April 30, 2010

The Department of Water Resources announced in April that the water content in California's statewide mountain snowpack is 143 percent of normal. It continued to snow in May, so that percentage has increased.

Due to regulatory restrictions on pumping water from the Delta to protect native fish species, there will be less than normal water deliveries to farms and communities throughout the state from the State Water Project.

STAFF REPORT

To: **Coastside County Water District Board of Directors**

From: **David Dickson, General Manager**

Agenda: **June 8, 2010**

Report Date: June 4, 2010

Subject: **General Manager's Report**

Recommendation:
None. Information only.

Background:
For this month's report, I would like to highlight the following:

1. **San Mateo County Local Coastal Program Update Process**
   Following a County Board of Supervisors' May 11, 2010 hearing and discussion, the Board acted to direct County staff to request a one-year extension of the deadline for the County to respond to the Coastal Commission's December 10, 2009 action denying the County's request for certification of their proposed LCP amendments. This extension would give the County time for further discussions with Coastal Commission staff to resolve outstanding issues and to resubmit its LCP modifications.

   The Coastal Commission will consider the County's request for an extension at their June 9, 2010 meeting in Marina Del Rey. Coastal Commission staff has recommended that the County's deadline be extended to June 10, 2011.

2. **Water Reclamation Update**
   There's no progress to report with regard to developing a recycled water agreement between SAM and CCWD. We are waiting for SAM to respond to the principles of agreement the CCWD Board approved on February 9, 2010.

   The Half Moon Bay City Council, at its meeting on May 18, 2010, conditioned City approval of the SAM Fiscal Year 2010-2011 operating and capital improvement budgets on removing funding for recycled water and on a two party agreement for recycled water between SAM and CCWD as follows (From Exhibit 1 of Resolution C-37-10):

1. Amend the Recycled Water Project of the SAM Draft 4 JPA General and Project Budgets Fiscal Year 2010-11 to Reflect an Agency Agreement only between SAM and CCWD. (No Funding)

This action by the City Council may signal further delay in reaching agreement among SAM's member agencies on SAM's approach to recycling.

3. LAFCo Special District Member Ballot

Staff transmitted to LAFCo the Ballot For Selection of Special District Member, casting District's vote for David Altscher, on May 27, 2010.

4. CCWD Consumer Confidence Report

On June 1, 2010, we mailed the 2009 Annual Water Quality Report (Consumer Confidence Report) to all District customers. The report verified that the District's water met all state and federal drinking water requirements in 2009. I would like to recognize the efforts of Joe Guistino, Cathleen Brennan, and the District's field staff for their efforts in producing the Water Quality Report and delivering reliable, high quality drinking water to our customers.

MONTHLY REPORT

To: **David Dickson, General Manager**

From: **Joe Guistino, Superintendent of Operations**

Agenda: **June 8, 2010**

Report Date: **June 3, 2010**

Monthly Highlights

Denniston WTP

The instrumentation for the plant was repaired and the plant ran for 16 full days in May.

El Granada Pump Upgrades

Upgrades to El Granada Pump Stations 1 and 2 will allow us to deliver up to 250 gpm to the highlands.

Tank Recoating Projects

Miramar Tank was brought back on line in May. The water quality testing results came back very favorable and the tank is now operating smoothly.

Source of Supply

Pilarcitos Reservoir, Denniston Water Treatment Plant (WTP) and Denniston Wells were the major source of supply for the month of May.

Systems Improvement

Beautification

-Cleaned up Nunes WTP and Crystal Springs Pump Station (PS)
-Weed abatement at Alves PS and Denniston WTP.
-Weed spraying at Nunes and Denniston Plant grounds and Pilarcitos Canyon around well heads.
-Cleaned up around El Granada Tanks 2 and 3.
-Cleaned up El Granada Tank 1 PS.

Crystal Springs Roof

Contractors replaced the crumbling roof at Crystal Springs PS. The job was complete on 5 May. We are presently preparing bid documents to paint the pump house.

Nunes Septic Tank System

The crews brought the septic tank cleanout up to grade level, installed new access hatches and poured a concrete pad around them for ease of access.

Air Relief Valves
Crews installed some air relief valves on the coagulation tank and filters to eliminate nuisance air interfering with turbidity readings.

Update on Other Activities:
Denniston WTP
The instrumentation failure was fixed on 10 May and the plant ran for 14 days at an average rate of 415 gpm for a total monthly production of 7.6 MG.

Denniston Creek Biological Survey
We have retained Balance Hydrologics to monitor stream flows at Denniston and San Vicente Creeks. They have reinitiated the flow gauging station below the reservoir and at Mesa Luna, established that our flume upstream of the reservoir is accurate and installed two gauging stations in San Vicente Creek up and downstream of our diversion structure.

Andreini Water Service Agreement
We are putting the final touches on the water service agreement with Eddie Andreini for his property adjacent to the Nunes WTP. The agreement will be finalized in June and will appear before the Board in July for approval.

El Granada Pump Upgrades
With recent pump failures at El Granada 1 and 2 PS, we are upgrading the units to 250 gpm pumps to allow for faster delivery of water to the El Granada Highlands. We have installed the valves for placement of the new pumps, which will occur over the next few months. There was a brief neighborhood shutdown in the vicinity of EG 1 to facilitate the installation of the valves.

Safety/Training/Inspections/Meetings
Meetings Attended
6 May – Conference call with Jeff Tarantino of EKI and Steve Twitchell to discuss latest Request For Information from Short Term Improvement (STI) contractor.
11 May – Predesign workshop for Denniston Pretreatment Project with Kennedy/Jenks.
12 May – Safety Meeting
13 May – Met with Ocean Colony representatives to discuss feasibility of meter relocations and/or abandonment.
13 May – BAWSCA quarterly water quality meeting in Redwood City.
20 May – Met with Balance Hydrologics to establish locations of stream flow gauges on Denniston and San Vicente Creeks.
21 May – Sat on interview panel for selection of Senior Stationary Engineer for San Francisco Public Utility Commission (SFPUC).

Safety Training

This month's training was on First Aid and Automatic Emergency Defibrillator (AED). Duffy, Bruce, Patterson, Damrosch, Winch, Jack Whelen, Twitchell, Brazil, Joanne Whelen, Barrella, Turgeon, Brennan, Lunow and I were all present.

Training
Jack Whelen passed his Distribution Operator 3 test.
Logan Duffy passed his Distribution Operator 1 test.

Department of Public Health (DPH)
Water Quality Monitoring Program
We have corresponded with DPH as to the finalization of our required monitoring of our raw and treated water for the next 5 years.

Annual Water Quality Report
We have submitted the annual water quality report to DPH in May.

Projects
Tank Recoating Projects
Miramar Tank – Results for the Volatile Organic Compounds (VOC) and BACTI testing for the Miramar Tank were very favorable. There were only traces of VOCs which were far below the Maximum Contaminant Level (MCL) set by the DPH. The tank was put back in service on 11 May.

Denniston Treatment Improvements
Staff reviewed the latest draft proposal for the Denniston Pretreatment Improvement Project and met with Kennedy/Jenks on 11 May for discussion. A staff report requesting Board approval for final design work is agendized for this Board meeting.

Nunes Short Term Improvement Project
We met with the construction inspectors and the contractor on 6 May to discuss coating issues with the containment areas, specifically the possibility of water seepage causing premature failure of the coating in certain spots. The areas of concern would not have an impact on the integrity of the containment and we ordered them to proceed as designed.

Treatment Supervisor Steve Twitchell traveled to the Telstar office in Sacramento on 10 May to witness the Factory Acceptance Testing for the chemical feed control panels. The testing went as designed.

The contractor completed the temporary relocation for the alum, polymer and caustic feed systems. All went according to design and will improve safety during the rest of construction as well as reduce the construction schedule by as much as 4 months.

Crystal Springs Check Valve Replacement Project
The new check valve works very well. We no longer see drainage from the Cahill Tank when Crystal Springs is not in operation and the valve operates very smoothly.

We have submitted comments on the vault lid design and await the final design documents.

Pilarcitos Blending Station

We submitted a California Environmental Quality Act (CEQA) Notice of Exemption to the State Office of Planning and Research for this project. We are presently seeking quotes for the electrical terminals. District crews will install the power lines from the present PG&E drop line in Pilarcitos Canyon to the blending station terminal panel site.