

**COASTSIDE COUNTY WATER DISTRICT**

**766 MAIN STREET**

**HALF MOON BAY, CA 94019**

**SPECIAL MEETING OF THE BOARD OF DIRECTORS**

**Tuesday, November 10, 2009 - 6:00 p.m.**

**AGENDA**

**1) ROLL CALL**

**2) PUBLIC ANNOUNCEMENTS**

**3) CLOSED SESSION**

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

**4) RECONVENE TO OPEN SESSION**

Public report of closed session action.

**COASTSIDE COUNTY WATER DISTRICT**

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**MEETING OF THE BOARD OF DIRECTORS**

**Tuesday, November 10, 2009- 7:00 p.m.**

**AGENDA**

The Coastside County Water District (CCWD) does not discriminate against persons with disabilities. Upon request, the agenda and agenda packet materials can be provided in a format to accommodate special needs. If you require a copy of the agenda or related materials in an alternative format to accommodate a disability, or if you wish to attend this public meeting and will require special assistance or other special equipment, please call the District at (650) 726-4405 in advance and we will make every reasonable attempt to provide such an accommodation.

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](http://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 ANNOUNCEMENTS**

*Any person may address the Board of Directors at the commencement of the meeting on any matter within the jurisdiction of the Board that is not on the agenda for this meeting. Any person may address the Board on an agenda item when that item is called. The Chair requests that each person addressing the Board limits their presentation to three (3) minutes and complete and submit a Speaker Slip.*

**4) SPECIAL ORDER OF BUSINESS ([attachment](#))**

Resolution 2009-13 - A Resolution of the Board of Directors of the Coastside County Water District expressing gratitude to Everett Ascher for his leadership and dedicated service to the community in his capacity as a member of the CCWD Board of Directors

**5) 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 October 31, 2009 - Claims: \$715,257.81; Payroll: \$109,564.13 for a total of \$824,821.94 ([attachment](#))
- B. Acceptance of Financial Reports ([attachment](#))
- C. Minutes of the October 13, 2009 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. October 2009 Leak Report ([attachment](#))
- I. Rainfall Reports ([attachment](#))
- J. San Francisco Public Utilities Commission Hydrological Conditions Report for October 2009 ([attachment](#))
- K. Water Service Agreement for 311 Church Street ([attachment](#))

**6) MEETINGS ATTENDED / DIRECTOR COMMENTS**

**7) GENERAL BUSINESS**

- A. Nunes Flocculator Drive Purchase ([attachment](#))
- B. Amendment to General Manager's Employment Agreement ([attachment](#))
- C. Water Reclamation Update ([attachment](#))

**8) GENERAL MANAGER'S REPORT INCLUDING MONTHLY INFORMATIONAL REPORTS ([attachment](#))**

- A. Water Resources Report ([attachment](#))
- B. Water Shortage and Drought Contingency Plan Update ([attachment](#))
- C. Operations Report ([attachment](#))

**9) DIRECTOR AGENDA ITEMS - REQUESTS FOR FUTURE BOARD MEETINGS**

**10) ADJOURNMENT**

**RESOLUTION NO. 2009-13**

**A RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE COASTSIDE COUNTY WATER DISTRICT  
EXPRESSING ITS GRATITUDE TO EVERETT ASCHER  
FOR HIS LEADERSHIP AND DEDICATED SERVICE**

*WHEREAS, Everett Ascher was originally appointed to serve on the Board of Directors of the Coastside County Water District on January 28, 2003, and thereafter was elected by the voters to serve on the Board of Directors on November 4, 2003, and was again reelected on November 8, 2005; and*

*WHEREAS, Everett Ascher was thereafter elected by his fellow Directors to serve as President of the Board for the 2006 term and again elected by his fellow Directors to serve as Board President for the 2008 term; and*

*WHEREAS, numerous accomplishments have been made by the Coastside County Water District under Everett Ascher's leadership, including:*

- ◆ *Dedicated commitment towards a community water recycling project*
- ◆ *Securing and budgeting necessary funding for completion of the District's long-term capital projects, with successful issuance of bonds to fund future capital projects*
- ◆ *Successful completion of the third and final phase of the El Granada Pipeline Replacement Project*
- ◆ *Implementation of a comprehensive multi-year capital improvement program, a financially sound and successful operating budget, and compliance with increasingly restrictive water quality requirements*
- ◆ *Successful negotiation of a long term water supply agreement and individual water sales contract with the City and County of San Francisco*
- ◆ *Design and implementation of major improvements to the District's water treatment facilities*
- ◆ *Improved communications and cooperation with other public agencies*
- ◆ *Increased water conservation outreach to local schools, businesses, and the general public*
- ◆ *Successfully representing the District's interests at the Association of California Water Agencies (ACWA), while serving as a Board Member for Region 5, as well as serving on the California Special District's Association's (CSDA) 2009 Legislative Committee*
- ◆ *Devoted service as a member on a variety of District Advisory Committees, including the Finance Committee, the Human Resources Committee, the External Affairs Committee and the Coastside County Water District / Montara Water & Sanitary District Mutual Interest Committee, as well as served as the District's representative on the ACWA's Local Government Committee, the ACWA/JPIA, and the CSDA*

*WHEREAS,, the Coastside County Water District is poised to continue the successes achieved under Director Everett Ascher's leadership, thanks to his commitment and dedication.*

*NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Coastside County Water District does hereby express its sincere thanks to and appreciation of Everett Ascher for his loyal service to this community and to the Coastside County Water District.*

**PASSED AND ADOPTED** this 10<sup>th</sup> day of November 2009 by the following votes of the Board of Directors:

AYES:

NOES:

ABSENT:

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Chris R. Mickelsen  
President, Board of Directors  
Coastside County Water District

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David R. Dickson, Secretary of the Board

<u>Check Number</u>	<u>Vendor No</u>	<u>Vendor Name</u>	<u>Check Date</u>	<u>Void Amount</u>	<u>Check Amount</u>
13843	COU05	RECORDER'S OFFICE	10/02/2009	0.00	12.00
13844	ALL04	ALLIED WASTE SERVICES #925	10/02/2009	0.00	236.50
13845	ALV01	ALVES PETROLEUM, INC.	10/02/2009	0.00	1,790.56
13846	ATT01	AT&T MOBILTY	10/02/2009	0.00	562.01
13847	CAR05	CARNOUSTIE, LLC	10/02/2009	0.00	8,097.88
13848	COA 15	COASTSIDE NET, INC	10/02/2009	0.00	59.95
13849	HAR03	HARTFORD LIFE INSURANCE CO.	10/02/2009	0.00	2,644.00
13850	PAC02	PACIFICA CREDIT UNION	10/02/2009	0.00	750.00
13851	PUB01	PUB. EMP. RETIRE SYSTEM	10/02/2009	0.00	17,458.34
13852	VAL01	VALIC	10/02/2009	0.00	1,320.00
13853	COU05	RECORDER'S OFFICE	10/15/2009	0.00	18.00
13854	ASS01	HEALTH BENEFITS AUTHORITY (HBA	10/16/2009	0.00	18,062.58
13855	BFI02	BFI OF CALIFORNIA, INC.	10/16/2009	0.00	294.00
13856	HAR03	HARTFORD LIFE INSURANCE CO.	10/16/2009	0.00	2,644.00
13857	KAI01	KAISER FOUNDATION HEALTH	10/16/2009	0.00	8,288.00
13858	PAC01	PACIFIC GAS & ELECTRIC CO.	10/16/2009	0.00	59,853.29
13859	PAC02	PACIFICA CREDIT UNION	10/16/2009	0.00	750.00
13860	PUB01	PUB. EMP. RETIRE SYSTEM	10/16/2009	0.00	17,458.34
13861	SAN03	SAN FRANCISCO WATER DEPT.	10/16/2009	0.00	159,769.63
13862	TEA02	TEAMSTERS LOCAL UNION #856	10/16/2009	0.00	755.00
13863	VAL01	VALIC	10/16/2009	0.00	1,320.00
13864	ADP01	ADP, INC.	10/27/2009	0.00	498.55
13865	AME09	AMERICAN WATER WORKS ASSOC.	10/27/2009	0.00	113.50
13866	AND01	ANDREINI BROS. INC.	10/27/2009	0.00	133,052.34
13867	ANG01	ANGELO'S MUFFLER	10/27/2009	0.00	219.00
13868	ASS04	ASSOC.CALIF.WATER AGENCIES	10/27/2009	0.00	10,032.00
13869	ASS08	ASSOC. CALIF. WATER AGENCY	10/27/2009	0.00	13,000.00
13870	ATT02	AT&T	10/27/2009	0.00	1,224.60
13871	ATT03	AT&T LONG DISTANCE	10/27/2009	0.00	61.03
13872	AZT01	AZTEC GARDENS	10/27/2009	0.00	190.00
13873	BAS01	BASIC CHEMICAL SOLUTION, LLC	10/27/2009	0.00	4,756.68
13874	BAY05	BAY AREA WATER SUPPLY &	10/27/2009	0.00	7,252.00
13875	BIG01	BIG CREEK LUMBER	10/27/2009	0.00	55.54
13876	BIO01	BIOVIR LABORATORIES, INC.	10/27/2009	0.00	870.00
13877	BOR01	BORGES & MAHONEY, INC.	10/27/2009	0.00	237.60
13878	BOR04	G. BORTOLOTTO & CO.	10/27/2009	0.00	727.82
13879	BOW01	TERESA BOWERMAN	10/27/2009	0.00	150.00
13880	BRE01	CATHLEEN BRENNAN	10/27/2009	0.00	82.00
13881	CAL08	CALCON SYSTEMS, INC.	10/27/2009	0.00	15,549.54
13882	CAR03	CARROT-TOP INDUSTRIES, INC.	10/27/2009	0.00	144.19
13883	CAR04	CAROLLO ENGINEERS	10/27/2009	0.00	14,990.00
13884	COA19	COASTSIDE COUNTY WATER DIST.	10/27/2009	0.00	212.16
13885	COM01	COMMUNICATION LEASING SERVICES	10/27/2009	0.00	1,462.40
13886	CRE01	CRESCO EQUIPMENT RENTALS	10/27/2009	0.00	2,765.79
13887	DAT01	DATAPROSE, INC	10/27/2009	0.00	2,484.10
13888	DEL01	DELTA TECH SERVICE INC.	10/27/2009	0.00	855.00
13889	DEP04	DEPARTMENT OF PESTICIDE REGULA	10/27/2009	0.00	60.00
13890	DEP07	DEPARTMENT OF PUBLIC HEALTH	10/27/2009	0.00	6,952.17
13891	EWI01	EWING IRRIGATION PRODUCTS	10/27/2009	0.00	96.85
13892	FIR06	FIRST NATIONAL BANK	10/27/2009	0.00	1,791.75
13893	GEM01	GEMPLER'S, INC.	10/27/2009	0.00	2,365.62
13894	GOL04	GOLDEN STATE FLOW MEASUREMENT	10/27/2009	0.00	21,037.90
13895	GRA03	GRAINGER, INC.	10/27/2009	0.00	1,688.43
13896	GRA04	LARRY GRAY	10/27/2009	0.00	150.00
13897	GUI01	JOE GUISTINO	10/27/2009	0.00	626.58
13898	HAL01	HMB BLDG. & GARDEN INC.	10/27/2009	0.00	157.44
13899	HAL04	HALF MOON BAY REVIEW	10/27/2009	0.00	288.00
13900	HAL24	H.M.B.AUTO PARTS	10/27/2009	0.00	204.31
13901	HAN01	HANSONBRIDGETT. LLP	10/27/2009	0.00	5,730.00
13902	IED01	IEDA, INC.	10/27/2009	0.00	1,000.00
13903	INT04	INTELLIGENT TECHNOLOGIES	10/27/2009	0.00	1,142.00
13904	IRO01	IRON MOUNTAIN	10/27/2009	0.00	313.92

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13905	IRV01	IRVINE CONSULTING SERVICES, IN	10/27/2009	0.00	2,690.00
13906	IRV02	IRVINE CONSULTING SERVICES, IN	10/27/2009	0.00	585.50
13907	JAM01	JAMES FORD, INC.	10/27/2009	0.00	158.99
13908	JJA01	JJACPA, INC	10/27/2009	0.00	6,800.00
13909	KAE01	KAESER COMPRESSORS, INC.	10/27/2009	0.00	380.00
13910	MCT01	MCTV6	10/27/2009	0.00	375.00
13911	MET06	METLIFE SBC	10/27/2009	0.00	1,357.35
13912	MIS01	MISSION UNIFORM SERVICES INC.	10/27/2009	0.00	141.36
13913	MIS02	MISSION COMMUNICATIONS, LLC	10/27/2009	0.00	347.40
13914	MON01	DARIN BOVILLE	10/27/2009	0.00	600.00
13915	MON07	MONTEREY COUNTY LAB	10/27/2009	0.00	2,856.00
13916	OCE04	OCEAN SHORE CO.	10/27/2009	0.00	922.76
13917	OFF01	OFFICE DEPOT	10/27/2009	0.00	1,017.13
13918	OLS01	JANICE OLSON	10/27/2009	0.00	150.00
13919	ONL01	ONLINE RESOURCES	10/27/2009	0.00	150.00
13920	ONT01	ONTRAC	10/27/2009	0.00	284.59
13921	PIT04	PITNEY BOWES	10/27/2009	0.00	231.00
13922	PRI01	PRINCETON WELDING , INC.	10/27/2009	0.00	250.50
13923	PUM01	PUMP REPAIR SERVICE CO. INC.	10/27/2009	0.00	12,380.06
13924	RED01	RED WING SHOES	10/27/2009	0.00	376.43
13925	RIC01	RICOH AMERICAS CORPORATION	10/27/2009	0.00	1,933.40
13926	ROB01	ROBERTS & BRUNE CO.	10/27/2009	0.00	8,583.38
13927	ROG01	ROGUE WEB WORKS, LLC	10/27/2009	0.00	240.00
13928	SAN05	SAN MATEO CTY PUBLIC HEALTH LA	10/27/2009	0.00	628.00
13929	SAN06	SAN FRANCISCO PUC	10/27/2009	0.00	75.00
13930	SAN07	SM CTY ENVIRONMENTAL HEALTH	10/27/2009	0.00	1,283.00
13931	SAN12	SAN JOSE CONCRETE PIPE CO.	10/27/2009	0.00	28,891.00
13932	SER03	SERVICE PRESS	10/27/2009	0.00	1,024.84
13933	SEW01	SEWER AUTH. MID- COASTSIDE	10/27/2009	0.00	570.00
13934	SPE02	SPEEDY GLASS	10/27/2009	0.00	457.67
13935	SPR04	SPRINGBROOK SOFTWARE, INC	10/27/2009	0.00	6,750.00
13936	STE02	JIM STEELE	10/27/2009	0.00	11,475.00
13937	STR02	STRAWFLOWER ELECTRONICS	10/27/2009	0.00	65.39
13938	TET01	JAMES TETER	10/27/2009	0.00	2,620.38
13939	TUR04	SUSAN TURGEON	10/27/2009	0.00	160.91
13940	UB*00691	BILL WRIGHT	10/27/2009	0.00	57.50
13941	UB*00692	LISA GIORDANO	10/27/2009	0.00	55.22
13942	UB*00693	FERNANDO MARISCAL	10/27/2009	0.00	57.04
13943	UB*00694	SHI HONG ZHOU	10/27/2009	0.00	132.94
13944	UB*00695	TODD/JULIE SLOAN	10/27/2009	0.00	15.17
13945	UB*00696	MICHAEL AULT	10/27/2009	0.00	17.66
13946	UB*00697	R.HNATT/C.KABRICH	10/27/2009	0.00	23.75
13947	UB*00698	RANDY HOWARD	10/27/2009	0.00	91.35
13948	UB*00699	KYLE/JULIE SWANTOM	10/27/2009	0.00	48.70
13949	UB*00700	MARY ROSE BIANCHI	10/27/2009	0.00	12.78
13950	UB*00701	WENDY SUTER	10/27/2009	0.00	51.49
13951	UB*00702	PRIYNEHA GOHIL	10/27/2009	0.00	59.44
13952	UB*00703	FIELD ASSET SERVICES/DALE McPH	10/27/2009	0.00	61.85
13953	UNI01	UNITED STATES POSTAL SVC.	10/27/2009	0.00	1,464.00
13954	VER02	VERIZON WIRELESS	10/27/2009	0.00	817.08
13955	VIS03	VISION CELLULAR INC.	10/27/2009	0.00	1,242.56
13956	WES11	WEST COAST AGGREGATES, INC.	10/27/2009	0.00	213.85
13957	CAR02	CAROLYN STANFIELD	10/30/2009	0.00	485.00
13958	CRO02	CROSNO CONSTRUCTION, INC	10/30/2009	0.00	30,294.37
13959	HAR03	HARTFORD LIFE INSURANCE CO.	10/30/2009	0.00	2,394.00
13960	NAT02	NATIONAL METER & AUTOMATION	10/30/2009	0.00	5,374.11
13961	PAC02	PACIFICA CREDIT UNION	10/30/2009	0.00	750.00
13962	PUB01	PUB. EMP. RETIRE SYSTEM	10/30/2009	0.00	16,621.02
13963	SPR01	SPRING MOUNTAIN GALLERY	10/30/2009	0.00	50.00
13964	VAL01	VALIC	10/30/2009	0.00	1,320.00

<u>Check Number</u>	<u>Vendor No</u>	<u>Vendor Name</u>	<u>Check Date</u>	<u>Void Amount</u>	<u>Check Amount</u>
<b>Report Total:</b>				<b>0.00</b>	<b>715,257.81</b>



**COASTSIDE COUNTY WATER DISTRICT - PERIOD BUDGET ANALYSIS**  
**31-Oct-09**

<b>ACCOUNT</b>	<b>DESCRIPTION</b>	<b>CURRENT ACTUAL</b>	<b>CURRENT BUDGET</b>	<b>B/(W) VARIANCE</b>	<b>B/(W) % VAR</b>	<b>YTD ACTUAL</b>	<b>YTD BUDGET</b>	<b>B/(W) VARIANCE</b>	<b>B/(W) % VAR</b>
<b>REVENUE</b>									
1-0-4120-00	Water Revenue -All Areas	550,200	460,623	89,577	19.4%	2,350,464	2,460,687	(110,223)	(4.5%)
1-0-4170-00	Water Taken From Hydrants	2,466	2,083	383	18.4%	7,090	8,333	(1,244)	(14.9%)
1-0-4180-00	Late Notice -10% Penalty	4,508	4,167	341	8.2%	19,440	16,667	2,774	16.6%
1-0-4230-00	Service Connections	803	667	137	20.5%	2,801	2,667	134	5.0%
1-0-4235-00	CSP Connection T & S Fees	0	0	0	0.0%	0	0	0	0.0%
1-0-4920-00	Interest Earned	0	16,387	(16,387)	0.0%	15,806	32,775	(16,968)	(51.8%)
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	564	0	564	0.0%	25,732	0	25,732	0.0%
1-0-4950-00	Miscellaneous Income	316	3,083	(2,767)	(89.8%)	10,626	12,333	(1,707)	(13.8%)
1-0-4955-00	Cell Site Lease Income	14,336	6,850	7,486	109.3%	35,729	27,400	8,329	30.4%
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%	0	0	0	0.0%
1-0-4970-00	Wavecrest Reserve Conn. Fees	0	0	0	0.0%	0	0	0	0.0%
<b>REVENUE TOTALS</b>		<b>573,193</b>	<b>493,860</b>	<b>79,332.33</b>	<b>16.1%</b>	<b>2,467,688</b>	<b>2,560,861</b>	<b>(93,173)</b>	<b>(3.6%)</b>
<b>EXPENSES</b>									
1-1-5130-00	Water Purchased	159,770	173,432	13,662	7.9%	651,127	688,778	37,651	5.5%
1-1-5230-00	Pump Exp, Nunes T P	2,097	1,583	(513)	(32.4%)	5,707	6,333	626	9.9%
1-1-5231-00	Pump Exp, CSP Pump Station	55,918	39,318	(16,600)	(42.2%)	130,190	156,100	25,910	16.6%
1-1-5232-00	Pump Exp, Trans. & Dist.	1,352	2,110	758	35.9%	4,352	8,789	4,437	50.5%
1-1-5233-00	Pump Exp, Pilarcitos Can.	256	120	(136)	(113.2%)	770	480	(290)	(60.3%)
1-1-5234-00	Pump Exp. Denniston Proj.	(445)	2,859	3,304	115.6%	3,165	18,940	15,775	83.3%
1-1-5235-00	Denniston T.P. Operations	384	1,626	1,242	76.4%	3,217	10,771	7,554	70.1%
1-1-5236-00	Denniston T.P. Maintenance	2,738	2,111	(627)	(29.7%)	3,180	8,444	5,264	62.3%
1-1-5240-00	Nunes T P Operations	4,920	6,767	1,847	27.3%	29,437	26,851	(2,586)	(9.6%)
1-1-5241-00	Nunes T P Maintenance	5,261	3,165	(2,096)	(66.2%)	17,025	12,666	(4,359)	(34.4%)
1-1-5242-00	CSP Pump Station Operations	589	708	119	16.8%	1,959	2,832	873	30.8%
1-1-5243-00	CSP Pump Station Maintenance	8,061	2,313	(5,748)	(248.5%)	11,961	9,252	(2,709)	(29.3%)
1-1-5250-00	Laboratory Services	4,655	6,250	1,595	0.0%	15,008	25,000	9,992	0.0%
1-1-5318-00	Studies/Surveys/Consulting	1,462	1,879	416	22.2%	14,561	7,515	(7,047)	(93.8%)
1-1-5321-00	Water Conservation	5,293	5,054	(239)	(4.7%)	9,913	20,217	10,304	51.0%
1-1-5322-00	Community Outreach	1,128	2,392	1,264	52.8%	3,043	9,567	6,524	68.2%
1-1-5411-00	Salaries & Wages -Field	101,372	104,732	3,359	3.2%	305,326	314,195	8,868	2.8%
1-1-5412-00	Maintenance -General	15,607	11,708	(3,899)	(33.3%)	51,875	75,832	23,957	31.6%

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	5,897	3,958	(1,938)	(49.0%)	12,924	15,833	2,909	18.4%
1-1-5415-00	Maintenance -Well Fields	0	1,250	1,250	100.0%	0	5,000	5,000	100.0%
1-1-5610-00	Salaries/Wages-Administration	70,257	74,609	4,351	5.8%	208,651	223,826	15,174	6.8%
1-1-5620-00	Office Supplies & Expense	7,980	10,929	2,949	27.0%	31,618	43,717	12,099	27.7%
1-1-5621-00	Computer Services	10,578	3,988	(6,590)	(165.3%)	19,490	15,950	(3,540)	(22.2%)
1-1-5625-00	Meetings / Training / Seminars	1,565	1,667	102	6.1%	7,431	6,667	(764)	(11.5%)
1-1-5630-00	Insurance	44,055	43,819	(236)	(0.5%)	192,714	205,277	12,563	6.1%
1-1-5640-00	Employees Retirement Plan	49,958	51,663	1,705	3.3%	134,495	154,990	20,495	13.2%
1-1-5645-00	SIP 401K Plan	0	1,667	1,667	100.0%	0	6,667	6,667	100.0%
1-1-5681-00	Legal	4,196	4,333	137	3.2%	12,804	17,333	4,529	26.1%
1-1-5682-00	Engineering	480	1,250	770	61.6%	5,008	5,000	(8)	(0.2%)
1-1-5683-00	Financial Services	6,800	2,583	(4,217)	(163.2%)	13,600	10,333	(3,267)	(31.6%)
1-1-5684-00	Payroll Tax Expense	11,800	12,940	1,140	8.8%	37,550	38,820	1,270	3.3%
1-1-5687-00	Membership, Dues, Subscript.	15,792	17,485	1,693	9.7%	19,469	28,438	8,969	31.5%
1-1-5688-00	Election Expenses	0	0	0	0.0%	0	0	0	0.0%
1-1-5689-00	Labor Relations	1,000	1,000	0	0.0%	4,000	4,000	0	0.0%
1-1-5700-00	San Mateo County Fees	1,283	3,000	1,717	0.0%	2,027	3,800	1,773	0.0%
1-1-5705-00	State Fees	6,952	7,500	548	0.0%	6,952	7,500	548	0.0%
1-1-5710-00	Deprec, Trucks, Tools, Equipt.	0	0	0	0.0%	0	0	0	0.0%
1-1-5711-00	Debt Svc/Existing Bonds 1998A	0	0	0	0.0%	245,610	245,610	0	0.0%
1-1-5712-00	Debt Svc/Existing Bonds 2006B	0	0	0	0.0%	334,163	332,286	(1,877)	0.0%
1-1-5713-00	Contribution to CIP & Reserves	43,121	43,121	0	0.0%	172,486	172,486	0	0.0%
1-1-5745-00	CSP Connect. Reserve Contribu.	0	0	0	0.0%	0	0	0	0.0%
1-1-5746-00	Wavecrest CSP Connt. Reserve	0	0	0	0.0%	0	0	0	0.0%
<b>EXPENSE TOTALS</b>		<b>652,130</b>	<b>654,888</b>	<b>2,758</b>	<b>0.4%</b>	<b>2,722,809</b>	<b>2,946,093</b>	<b>223,284</b>	<b>7.6%</b>
<b>NET INCOME</b>		<b>(78,938)</b>	<b>(161,028)</b>	<b>82,090</b>		<b>(255,121)</b>	<b>(385,232)</b>	<b>130,111</b>	

**COASTSIDE COUNTY WATER DISTRICT**

**INVESTMENT REPORT**

October 31, 2009

		<i>Restricted</i>	<i>Restricted</i>	<i>Restricted for CSP CIP Projects</i>		
	<b>CASH FLOW &amp; OPERATING RESERVE</b>	<b>EMERGENCY RESERVES</b>	<b>CAPITAL EXPENDITURES</b>	<b>DISTRICT CSP CONTRIBUTION</b>	<b>CSP T&amp;S FEES</b>	<b>TOTAL</b>
<b>DISTRICT BALANCES</b>						
<u>CASH IN FNB</u>						
OPERATING ACCOUNT			\$430,209.60			\$430,209.60
CSP T&S ACCOUNT					\$22,867.49	\$22,867.49
TOTAL FIRST NATIONAL BANK	\$0.00	\$0.00	\$430,209.60	\$0.00	\$22,867.49	\$453,077.09
CASH WITH L.A.I.F	\$297,900.00	\$1,740,663.00	\$1,629,676.27	\$0.00	\$20,789.94	\$3,689,029.21
UNION BANK - Project Fund Balance			\$1,444,970.54			\$1,444,970.54
CASH ON HAND	\$1,930.00					\$0.00
						\$1,930.00
<b>TOTAL DISTRICT CASH BALANCES</b>	<b>\$299,830.00</b>	<b>\$1,740,663.00</b>	<b>\$3,504,856.41</b>	<b>\$0.00</b>	<b>\$43,657.43</b>	<b>\$5,589,006.84</b>
<b>ASSESSMENT DISTRICT BALANCES</b>						
<u>CASH IN FIRST NATIONAL BANK (FNB)</u>						
REDEMPTION ACCOUNT		\$ 87,126.29				
RESERVE ACCOUNT (Closed Account 8-4-04)		\$ -				
<b>TOTAL ASSESSMENT DISTRICT CASH</b>		<b>\$ 87,126.29</b>				
<i>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.</i>						

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

Oct 31 2009

Acct No.	Approved CIP Budget FY 09/10	Actual To Date FY 09/10	% Completed
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**PIPELINE PROJECTS**

Main Street/Hwy 92 Widening Project	1120-93	\$ 20,000		0.0%
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**WATER TREATMENT PLANTS**

Denniston Intake Maintenance	1120-03	\$ 80,000	\$ 89,820	112.3%
Denniston WTP - Intake Construction		\$ 100,000		
Nunes - Floc Drive Repair		\$ 50,000		
Nunes Filter Media Replacement	1121-25	\$ 50,000	\$ 14,346	28.7%

**FACILITIES & MAINTENANCE**

District Space Planning		\$ 25,000		
AMR Program	1121-41	\$ 400,000		0.0%
PRV Valves Replacement Project	1121-43	\$ 20,000	\$ 20,014	100.1%
Meter Change Program	1117-06	\$ 18,000	\$ 13,961	77.6%
Fire Hydrant Replacement	1121-49	\$ 40,000		0.0%
Pilarcitos Culvert Repair	1121-48	\$ 200,000	\$ 99,029	49.5%

**EQUIPMENT PURCHASE & REPLACEMENT**

Vehicle Replacement	1118-04	\$ 28,000		0.0%
Computer System	1118-02	\$ 5,000		0.0%
Office Equipment/Furniture	1118-02	\$ 3,000		0.0%
SCADA/Telemetry/electrical controls	1120-82	\$ 250,000	\$ 6,302	2.5%

**PUMP STATIONS / TANKS / WELLS**

Alves Tank Recoating (Interior/Exterior)	1121-08	\$ 300,000		0.0%
Cahill Tank Ladder Replacement		\$ 15,000		0.0%
Crystal Springs Check Valve Repair/Replacement		\$ 100,000		0.0%
Crystal Springs Re-roof and Paint		\$ 50,000		0.0%
Crystal Springs Soft Starts 1 & 3	1118-12	\$ 25,000	\$ 156	0.6%
EG Tank #1 Pump Station Pump Replacement		\$ 23,000		0.0%
EG Tank #1 Security Fence		\$ 20,000		0.0%



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

Oct 31 2009

Acct No.	Approved CIP Budget FY 09/10	Actual To Date FY 09/10	% Completed
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NON-BUDGETED ITEMS (CAPITAL EXPEDITURES) FOR CURRENT FISCAL YEAR 09/10

Nunes - Generator Radiator	1121-54	\$ 17,517	\$ 182
Installation of Base Stations (3) & Replacment at Dist. Offi	1118-13	\$	9,529

**Legal Cost Tracking Report  
12 Months At-A-Glance**

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

<b>Month</b>	<b>Admin (General Legal Fees)</b>	<b>Recycle Water Analysis</b>	<b>Transfer Program</b>	<b>CIP</b>	<b>Personnel</b>	<b>Lawsuits</b>	<b>Infrastructure Project Review  (Reimbursable)</b>	<b>TOTAL</b>
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<b>Dec-08</b>	4,167	182						4,349
<b>Jan-09</b>	1,354		1,508	2,193				5,055
<b>Feb-09</b>	2,651			494			3,978	7,123
<b>Mar-09</b>	4,212	494		113			3,134	7,953
<b>Apr-09</b>	3,588	7,670	754	1,222			104	13,338
<b>May-09</b>	3,210	1,300		3,000			442	7,952
<b>Jun-09</b>	7,454	2,002	182	52				9,690
<b>Jul-09</b>	15,556	3,250	1,222	364			234	20,626
<b>Aug-09</b>	4,661	2,574	312	312			1,084	8,943
<b>Sep-09</b>	4,389		130	130			1,872	6,521
<b>Oct-09</b>	4,196		234	1,300				5,730
								0

<b>TOTAL</b>	<b>55,438</b>	<b>17,472</b>	<b>4,342</b>	<b>9,179</b>	<b>0</b>	<b>0</b>	<b>10,848</b>	<b>97,279</b>
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**Engineer Cost Tracking Report  
12 Months At-A-Glance**

**Acct. No. 5682  
JAMES TETER  
Engineer**

<b>Month</b>	<b>Admin &amp; Retainer</b>	<b>Phase 3 EG Pipeline</b>	<b>CIP</b>	<b>Short Term WTP Imprv.</b>	<b>Studies &amp; Projects</b>	<b>TOTAL</b>	<b>Reimbursable from Projects</b>
<b>Nov-08</b>	480		11,849	81	1,820	<b>14,229</b>	1,820
<b>Dec-08</b>	281		14,110	81	3,740	<b>18,211</b>	1,820
<b>Jan-09</b>	2,825		566	2,372	5,022	<b>10,784</b>	5,022
<b>Feb-09</b>	2,529			14,082	1,501	<b>18,112</b>	1,501
<b>Mar-09</b>	1,071		825	9,703	1,369	<b>12,967</b>	1,369
<b>Apr-09</b>	561		161	7,744	3,357	<b>11,822</b>	3,357
<b>May-09</b>	1,526		2,774	1,940	5,915	<b>12,154</b>	5,915
<b>Jun-09</b>	480	322	2,496		7,420	<b>10,718</b>	7,420
<b>Jul-09</b>	1,379			6,010	2,490	<b>9,879</b>	2,490
<b>Aug-09</b>	1,642			5,459	1,660	<b>8,761</b>	1,660
<b>Sep-09</b>	1,507			4,946	4,111	<b>10,564</b>	4,111
<b>Oct-09</b>	480				2,140	<b>2,620</b>	2,140
<b>TOTAL</b>	<b>14,760</b>	<b>322</b>	<b>32,779</b>	<b>52,416</b>	<b>40,544</b>	<b>140,822</b>	<b>38,624</b>



*COASTSIDE COUNTY WATER DISTRICT*

*766 MAIN STREET*

*HALF MOON BAY, CA 94019*

**MINUTES OF THE SPECIAL BOARD OF DIRECTORS MEETING**

**Tuesday, October 13, 2009**

- 1) **ROLL CALL** - The Closed Session convened at 6:00 p.m. Present at roll call were President Mickelsen, Vice-President Feldman and Directors Ken Coverdell and Jim Larimer. Also present was David Dickson, General Manager.
  
- 2) **PUBLIC ANNOUNCEMENTS** - There were no public announcements.
  
- 3) **CLOSED SESSION**
  - A. Public Employee Performance Evaluation  
(Cal. Govt. Code §54957): Title: General Manager
  
- 4) **RECONVENE TO OPEN SESSION** - The Closed Session concluded at approximately 7:00 p.m., immediately prior to commencement of the regular meeting, at which time President Mickelsen announced that no action was taken.

**COASTSIDE COUNTY WATER DISTRICT**

**766 MAIN STREET**

**HALF MOON BAY, CA 94019**

**MINUTES OF THE BOARD OF DIRECTORS MEETING**

**Tuesday, September 8, 2009**

- 1) **ROLL CALL:** President Mickelsen called the meeting to order at 7:06 p.m. Present at roll call were Vice-President Feldman, Directors Ken Coverdell, and Jim Larimer.

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 public announcements.

- 4) **CONSENT CALENDAR**

- A. Requesting the Board to review disbursements for the month Ending September 30, 2009 - Claims: \$1,197,821.83; Payroll: \$70,922.86 for a total of \$1,268,744.69
- B. Acceptance of Financial Reports
- C. Minutes of the September 8, 2009 Board of Directors Meeting
- D. Minutes of the September 23, 2009 Special Board Meeting
- E. Monthly Water Transfer Report
- F. Installed Water Connection Capacity and Water Meters Report
- G. Total CCWD Production Report
- H. CCWD Monthly Sales by Category Report
- I. September 2009 Leak Report

- J. Rainfall Reports
- K. San Francisco Public Utilities Commission Hydrological Conditions Report for September 2009

Vice-President Feldman reported that he had reviewed the monthly financial claims and found all to be in order.

**ON MOTION by Director Coverdell and seconded by Director Larimer, 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 Ascher	Absent
President Mickelsen	Aye

**5) MEETINGS ATTENDED / DIRECTOR COMMENTS**

Director Coverdell reported on the September meeting of the Bay Area Water Supply and Conservation Agency (BAWSCA). Vice-President Feldman reported on a recent Association of California Water Agencies (ACWA) Region 5 event that he attended with Director Ascher and Mr. Dickson on the Delta Perspective. Director Larimer reminded the Board that the San Mateo County Chapter of the California Special Districts Association is scheduled to meet on October 27, 2009 and encouraged the Board members to attend.

**6) GENERAL BUSINESS**

**A. Possible Amendment to General Manager's Employment Contract/Compensation**

There was no discussion on this item and no action taken.

**B. Resolution 2009-11 – A Resolution Adopting the Implementation of an Identity Theft Prevention Program**

Mr. Dickson provided the background of this item, advising the Board that, in response to the growing problem of identity theft, the Federal Trade Commission (FTC) issued regulations (“Red Flags Rule”), which requires financial institutions and creditors to implement a written program that provides for identification, detection, and response to Red Flags. Mr. Dickson explained that JoAnne Whelen had drafted the policy, which included a number of procedures put in place in the billing and record keeping operations to flag possible identity theft activities. He further advised that the office staff had reviewed the policy and provided some input. Mr. Miyaki added that his firm had reviewed the policy and found it to be a complete and comprehensive program.

**ON MOTION by Director Larimer and seconded by Vice-President Feldman, the Board voted as follows, to adopt Resolution 2009-11 approving and adopting the Coastside County Water District’s Identity Theft Prevention Program:**

Director Coverdell	Aye
Vice-President Feldman	Aye
Director Larimer	Aye
Director Ascher	Absent
President Mickelsen	Aye

**C. Approval of Contracts for Services for the Nunes Water Treatment Plant Short Term Improvements Project:**

- 1. Contract with EKI, Inc. for construction management services**
- 2. Contract with Frisch Engineering for electrical engineering services during construction**
- 3. Contract with Calcon Systems for SCADA programming services**

Mr. Dickson reported that staff had reviewed these contracts in detail with the Facilities Committee members on September 2, 2009 and that these ancillary contracts are essential and integral to the construction project. He introduced Steve and Jeff Tarentino from EKI, Inc., regarding the proposed project construction management services, and reviewed the proposals from Frisch Engineering for

the electrical/instrumentation engineering services during construction and the proposal from Calcon Systems for the SCADA programming. He proceeded to address a few questions from the Board regarding the proposals and the process.

**ON MOTION by Director Coverdell and seconded by President Mickelsen, the Board voted as follows, to approve the following contracts for services required to complete the Nunes Short-Term Improvements Project: the contract with EKI, Inc. for construction management services for an estimated cost of \$96,500; the contract with Frisch Engineering for electrical/instrumentation engineering services during construction at an estimated cost of \$44,170; and the contract with Calcon Systems for SCADA programming for a lump-sum cost of \$96,280:**

Director Coverdell	Aye
Vice-President Feldman	Aye
Director Larimer	Aye
Director Ascher	Absent
President Mickelsen	Aye

**D. Resolution 2009-12 Approving the form of and authorizing the execution and delivery of a purchase and sale agreement and related documents with respect to the sale of the seller's Proposition 1A receivable from the State; and directing and authorizing certain other actions in connection therewith**

Mr. Dickson reviewed the background of Proposition 1A and the emergency suspension of it, which was passed by the Legislature and signed by the Governor as part of the 2009-2010 budget package on July 28, 2009. He proceeded to explain how the securitization program would work and reviewed the legal agreements and documents prepared by the law firm, Orrick, Herrington & Sutcliffe, LLP, which were reviewed and approved by Hanson, Bridgett, LLP. He reviewed the benefits of participation in the program and recommended that the Board approve and adopt the Resolution, which authorizes the sale of CCWD's Proposition 1A Receivable to California Communities, approves the form and directs execution and delivery of the Purchase and Sale Agreement, authorizes and directs any authorized officer to send, or to cause to be sent, an irrevocable written instruction required by statute to the State Controller notifying the State of the sale of the Proposition 1A Receivable and instructing the disbursement of the Prop. 1A Receivable to the

Bond Trustee, and appoints certain CCWD officers and officials as authorized officers for purposes of signing documents. Mr. Dickson and Mr. Miyaki addressed several questions from Board members.

**ON MOTION by Director Coverdell and seconded by Director Larimer, the Board voted as follows to adopt Resolution 2009-11 Approving the form of and authorizing the execution and delivery of a purchase and sale agreement and related documents with respect to the sale of the District's Proposition 1A receivable from the State; and directing and authorizing certain other actions in connection therewith:**

Director Coverdell	Aye
Vice-President Feldman	Aye
Director Larimer	Aye
Director Ascher	Absent
President Mickelsen	Aye

**E. Water Reclamation Update**

Mr. Dickson reviewed the recent activities and developments, including the Pilot Test Project and the results of the September 28, 2009 Recycled Water Committee and the Sewer Authority Mid-Coastside's (SAM) Board meeting. Board discussion about the recycled water project ensued, with Mr. Dickson addressing some of the questions and providing additional details regarding the process. Director Coverdell recognized and complimented Mr. Dickson for his efforts in building a bridge and opening a partnership with SAM, noting that it was amazing step forward to bringing recycled water to our community. Additionally Mr. Dickson reported on his attendance at a recent Bay Area Recycled Water Coalition Meeting.

**7) GENERAL MANAGER'S REPORT INCLUDING MONTHLY INFORMATIONAL REPORTS**

- A. Monthly Water Resources Report**
- B. Water Shortage and Drought Contingency Plan Update**
- C. Operations Report**

Mr. Dickson introduced a slide show consisting of photographs taken at the recent sites of the Denniston Reservoir Maintenance

Project and the Pilarcitos Culvert Replacement Project, which was narrated by Steve Twitchell, Water Treatment Plant Supervisor. Mr. Dickson complimented Mr. Guistino for his tenacious efforts in obtaining permits for these important and valuable projects. His report also included the announcement that Director Feldman had been elected to serve on the Association of California Water Agencies (ACWA) Region 5 Board of Directors.

Ms. Brennan provided an update on water conservation, outreach, and water resources activities.

Mr. Guistino addressed questions from the Board members in regards to some of the current projects, including the Denniston Alternative Pre-Treatment Project, the Pilarcitos Canyon Blending Project.

**8) DIRECTOR AGENDA ITEMS - REQUESTS FOR FUTURE BOARD MEETINGS**

There was no discussion on this agenda item.

**9) ADJOURNMENT**

**ON MOTION by Director Feldman and seconded by Director Larimer, the Board voted unanimously to adjourn the October 13, 2009 meeting of the Coastside County Water District's Board of Directors:**

<b>Director Coverdell</b>	<b>Aye</b>
<b>Vice-President Feldman</b>	<b>Aye</b>
<b>Director Larimer</b>	<b>Aye</b>
<b>Director Ascher</b>	<b>Absent</b>
<b>President Mickelsen</b>	<b>Aye</b>

The meeting was adjourned at 8:40 p.m. The next regular meeting of the Coastside County Water District's Board of Directors is scheduled for Tuesday, November 10, 2009.

Respectfully submitted,

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David R. Dickson, General Manager  
Secretary of the Board

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Chris R. Mickelsen, President  
Board of Directors  
Coastside County Water District



# ***STAFF REPORT***

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

**From: David Dickson, General Manager**

**Agenda: November 10, 2009**

Report

Date: November 2, 2009

**Subject: Monthly Water Transfer Report**

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## **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 October 2009, 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 November 2009 follows this report as well as the approval from Patrick Miyaki and the confirmation letter from Glenna Lombardi.

**APPROVED WATER TRANSFERS FOR THE 2009 CALENDAR YEAR**

<b>DONATING APN</b>	<b>RECIPIENT APN</b>	<b>PROPERTY OWNERS</b>	<b># OF CONNECTIONS</b>	<b>DATE</b>
048-033-160	064-123-230 & 064-123-240	Carey, TRS to R., T. and A. Carey	.5--5/8"	Oct-09

# Memorandum

## VIA ELECTRONIC MAIL

**TO:** Glenna Lombardi

**FROM:** Patrick T. Miyaki

**DATE:** October 15, 2009

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

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Glenna, I reviewed the Application to transfer 1/2 of a 5/8-inch uninstalled non-priority water service connection from:

Robert E. and Helen J. Carey, Trustees; Robert E. Carey, Jr.,  
Thomas J. Carey, and Ann E. Carey (Luceo) (APN 048-033-160)

to

Robert E. Carey, Jr., Thomas J. Carey, and Ann E. Carey  
(APNs 064-123-230 and 064-123-240).

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

October 15, 2009

Robert E. and Helen J. Carey, Trustees of the Isabella Trust  
Robert E. Carey, Jr., Thomas J. Carey and Ann E. Carey (Luceo)  
2920 Woodside Road  
Woodside, CA 94062-2444

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 048-033-160** continues to have the remaining right to a one---3/4" (30 gpm) uninstalled, non-priority water service connection from the Coastside County Water District; and
- **APNS 064-123-230 & 064-123-240** now have a one—3/4" (30 gpm) non-priority water service connection assigned to them from the Crystal Springs Project. *(Note: The original assignment of one—5/8" non-priority water service connection has been augmented with a .5---5/8" for a total capacity of one---3/4" non-priority 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**

2009

Installed Water Connection Capacity	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Total
<b>HMB Non-Priority</b>													
0.5" capacity increase													
5/8" meter		3	1	1			1		1				7
3/4" meter													0
2" meter						1							
<b>HMB Priority</b>													
5/8" meter													0
3/4" meter		1											1
1" meter													0
1 1/2" meter													
2" meter													
<b>County Non-Priority</b>													
5/8" meter	1			1									2
3/4" meter													0
1" meter													0
<b>County Priority</b>													
5/8" meter													0
3/4" meter													0
1" meter													0
<b>Monthly Total</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>

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		3	1	1		8	1		1				15
HMB Priority		1.5											1.5
County Non-Priority	1			1									2
County Priority													0
<b>Monthly Total</b>	<b>1</b>	<b>4.5</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18.5</b>

**TOTAL CCWD PRODUCTION (MG) ALL SOURCES-2009**

	PILARCITOS WELLS	PILARCITOS LAKE	DENNISTON WELLS	DENNISTON RESERVOIR	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	IN-PLANT USAGE AND UNMETERED WATER	TREATED TOTAL
JAN	1.56	0.00	0.00	0.78	52.21	54.55	4.46	50.09
FEB	4.19	5.11	0.00	0.00	33.52	42.82	3.08	39.74
MAR	1.12	35.08	0.00	0.00	0.00	36.20	3.21	32.99
APR	0.00	58.566	0.30	0.76	0.00	59.63	5.17	54.46
MAY	0.00	49.27	2.43	12.46	3.77	67.93	5.00	62.93
JUN	0.00	57.09	2.38	11.07	5.84	76.38	4.74	71.64
JUL	0.00	1.78	0.00	1.27	90.10	93.15	3.64	89.52
AUG	0.00	0.00	0.00	0.00	82.30	82.30	3.24	79.06
SEPT	0.00	0.00	0.00	0.00	78.74	78.74	2.61	76.13
OCT	0.00	0.00	0.00	0.00	60.48	60.48	2.28	58.20
NOV								
DEC								
<b>TOTAL</b>	<b>6.87</b>	<b>206.90</b>	<b>5.11</b>	<b>26.34</b>	<b>406.96</b>	<b>652.18</b>	<b>37.415</b>	<b>614.76</b>
% TOTAL	1.1%	31.7%	0.8%	4.0%	62.4%	100.0%	5.7%	94.3%

12 Month Running Treated Total

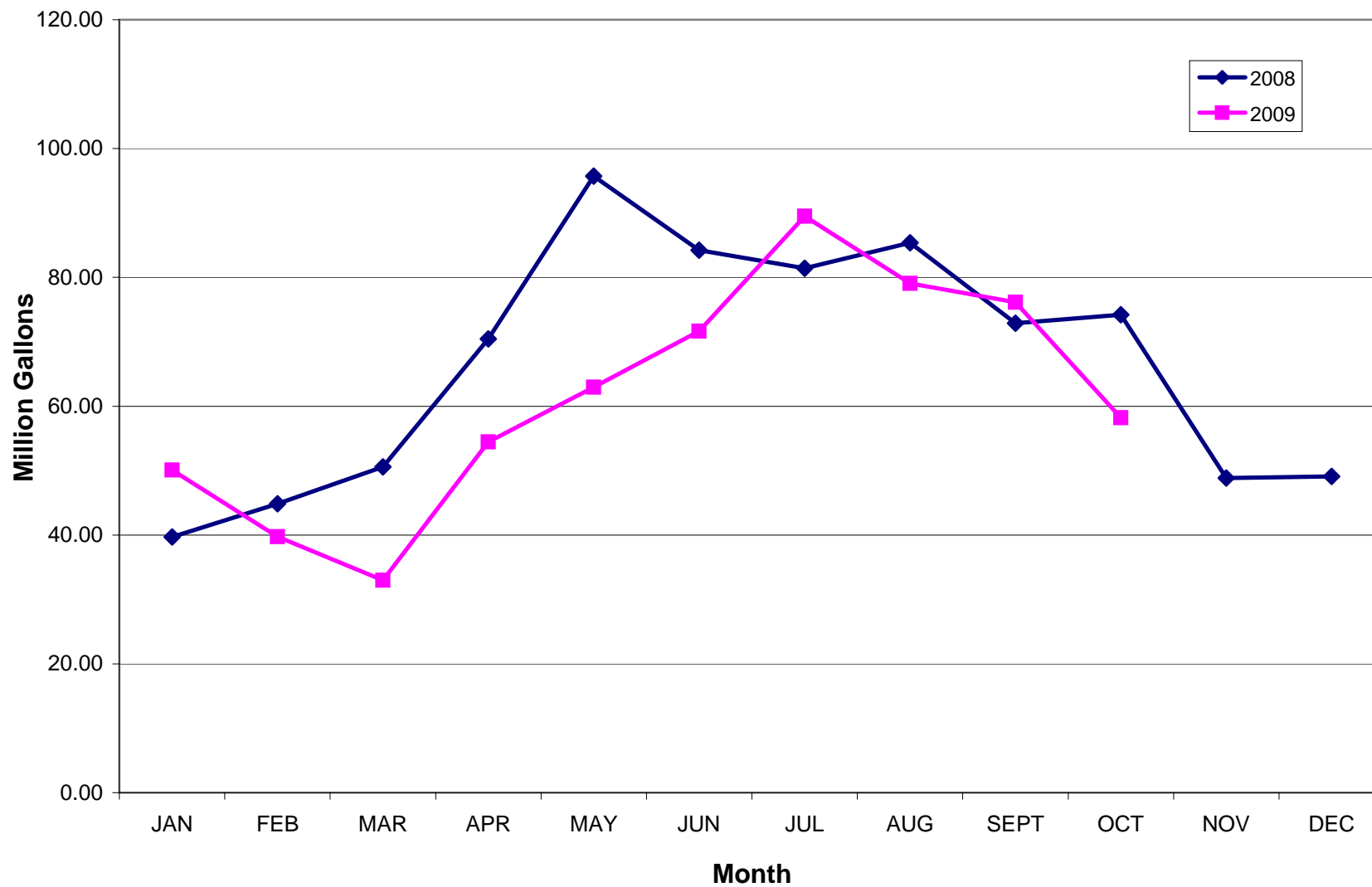
712.70

**TOTAL CCWD PRODUCTION (MG) ALL SOURCES-2008**

614.76

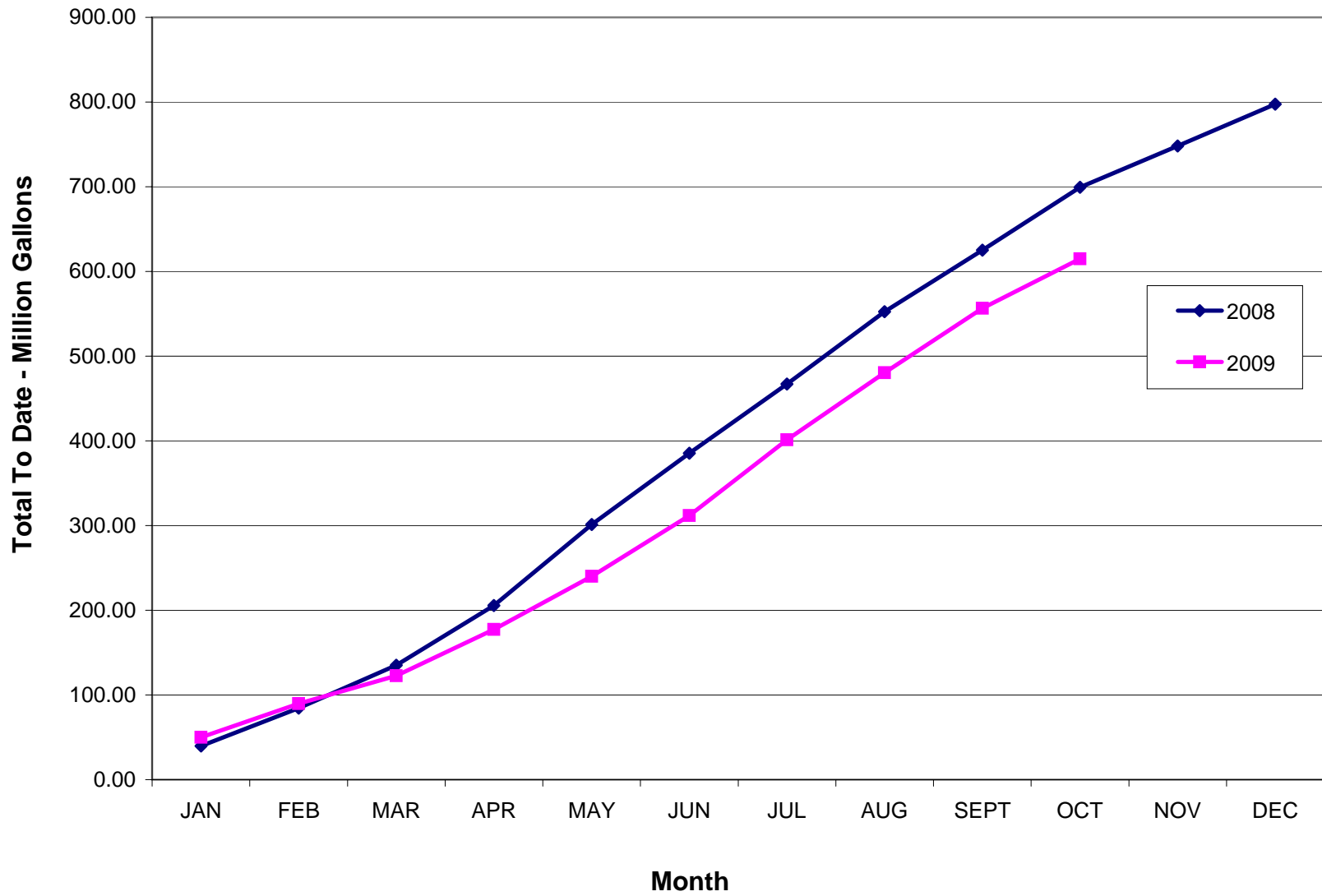
	PILARCITOS WELLS	PILARCITOS LAKE	DENNISTON WELLS	DENNISTON RESERVOIR	CRYSTAL SPRINGS RESERVOIR	RAW WATER TOTAL	IN-PLANT USAGE AND UNMETERED WATER	TREATED TOTAL
JAN	6.47	29.20	0.00	0.00	7.03	42.70	2.99	39.71
FEB	9.39	38.24	0.00	0.00	0.00	47.63	2.78	44.85
MAR	9.04	40.42	1.01	3.94	0.00	54.41	3.83	50.58
APR	0.00	58.26	0.88	13.53	1.84	74.51	4.06	70.45
MAY	0.00	29.32	2.89	14.00	54.87	101.08	5.36	95.72
JUN	0.00	0.00	3.32	9.15	77.34	89.81	5.6	84.21
JUL	0.00	0.00	3.50	9.75	75.32	88.57	7.136	81.43
AUG	0.00	0.00	0.33	2.55	87.00	89.88	4.492	85.39
SEPT	0.00	0.00	0.00	0.00	76.90	76.90	4	72.90
OCT	0.00	0.00	0.00	0.00	77.73	77.73	3.53	74.20
NOV	0	0.00	0	0.00	51.83	51.83	2.98	48.85
DEC	4.75	0.00	0	0.00	48.34	53.09	4	49.09
<b>TOTAL MG</b>	<b>29.65</b>	<b>195.44</b>	<b>11.93</b>	<b>52.92</b>	<b>558.20</b>	<b>848.14</b>	<b>50.761</b>	<b>797.38</b>
% TOTAL	3.5%	23.0%	1.4%	6.2%	65.8%	100.0%	6.0%	94.0%

Monthly Production 2009 vs. 2008





**Cumulative Production 2009 vs. 2008**



**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			348.57
COMMERCIAL	5.456	0.952	4.953	1.188	5.552	1.217	6.815	1.275	6.710	1.512			35.63
RESTAURANT	2.623	0.123	2.585	0.12	2.872	0.126	3.196	0.337	3.279	0.313			15.57
HOTELS/MOTELS	3.755	0.085	3.39	0.088	3.928	0.115	4.721	2.061	4.029	1.735			23.91
SCHOOLS	0.737	0.034	0.509	0.043	1.615	0.12	2.884	1.989	1.966	1.490			11.39
MULTI DWELL	1.863	1.331	2.533	1.277	2.441	1.435	2.872	3.378	3.531	2.424			23.09
BEACHES/PARKS	0.405	0.017	0.305	0.052	0.818	0.101	1.049	0.146	1.180	0.074			4.15
FLORAL	9.622	0.242	11.549	0.241	16.427	0.158	13.865	7.366	9.049	7.344			75.86
RECREATIONAL	0	0.17	0.046	0.221	0.055	0.203	0.070	0.260	0.080	0.194			1.30
MARINE	1.006	0	0.812	0	0.802	0	0.966	0.000	1.233	0.000			4.82
IRRIGATION	2.042	1.247	1.076	1.213	0.728	2.418	17.384	15.809	11.340	8.194			61.45
Portable Meters	0	0.371	0	0.193	0	0.362	0.000	1.739	0.000	1.676			4.34
<b>TOTAL - MG</b>	<b>50.61</b>	<b>39.91</b>	<b>46.64</b>	<b>41.86</b>	<b>58.96</b>	<b>54.35</b>	<b>83.24</b>	<b>89.36</b>	<b>71.44</b>	<b>73.72</b>	<b>0.00</b>	<b>0.00</b>	<b>610.08</b>

Running 12 Month Total

698.70

**Coastside County Water District Monthly Sales By Category (MG)  
2008**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	MG to Date
RESIDENTIAL	21.17	31.05	19.64	36.623	28.871	53.578	30.064	53.703	29.785	46.449	23.142	36.05	410.13
COMMERCIAL	5.38	1.1	6.17	1.23	6.781	1.477	7.938	1.441	7.877	1.238	5.593	1.026	47.25
RESTAURANT	1.96	0.04	2.13	0.053	2.887	0.045	3.231	0.026	2.673	0.127	3.722	0.123	17.02
HOTELS/MOTELS	4.48	0.24	4.5	0.138	5.305	0.136	5.671	0.158	5.778	0.126	1.831	0.088	28.45
SCHOOLS	0.93	0.07	0.86	0.068	2.224	0.171	3.515	0.115	3.428	0.103	0.332	0.052	11.87
MULTI DWELL	4.51	6.08	4.38	5.921	5.146	6.365	5.762	6.217	5.382	6.054	2.759	2.828	61.40
BEACHES/PARKS	0.38	0.01	0.28	0.025	0.786	0.064	1.173	0.079	0.993	0.094	0.568	0.009	4.46
FLORAL	17.55	0.21	17.31	0.227	22.968	0.293	16.961	0.35	15.601	0.306	6.556	0.292	98.62
RECREATIONAL	0.07	0.16	0.06	0.174	0.096	0.209	0.111	0.228	0.12	0.2	0.065	0.167	1.66
MARINE	1.15	0	0.32	0	0.402	0	0.37	0	1.143	0	0.943	0	4.33
IRRIGATION	3.12	0.48	0.12	1.476	14.77	3.251	28.197	3.333	17.651	2.634	0.382	1.695	77.11
PORTABLE METERS	0	0.33	0	0.284	0	1.296	0	1.587	0	1.735	0	0.403	
<b>MG</b>	<b>60.70</b>	<b>39.77</b>	<b>55.77</b>	<b>46.22</b>	<b>90.24</b>	<b>66.89</b>	<b>102.99</b>	<b>67.24</b>	<b>90.43</b>	<b>59.07</b>	<b>45.89</b>	<b>42.73</b>	<b>767.93</b>

**Coastside County Water District  
Monthly Leak Report  
October 2009**

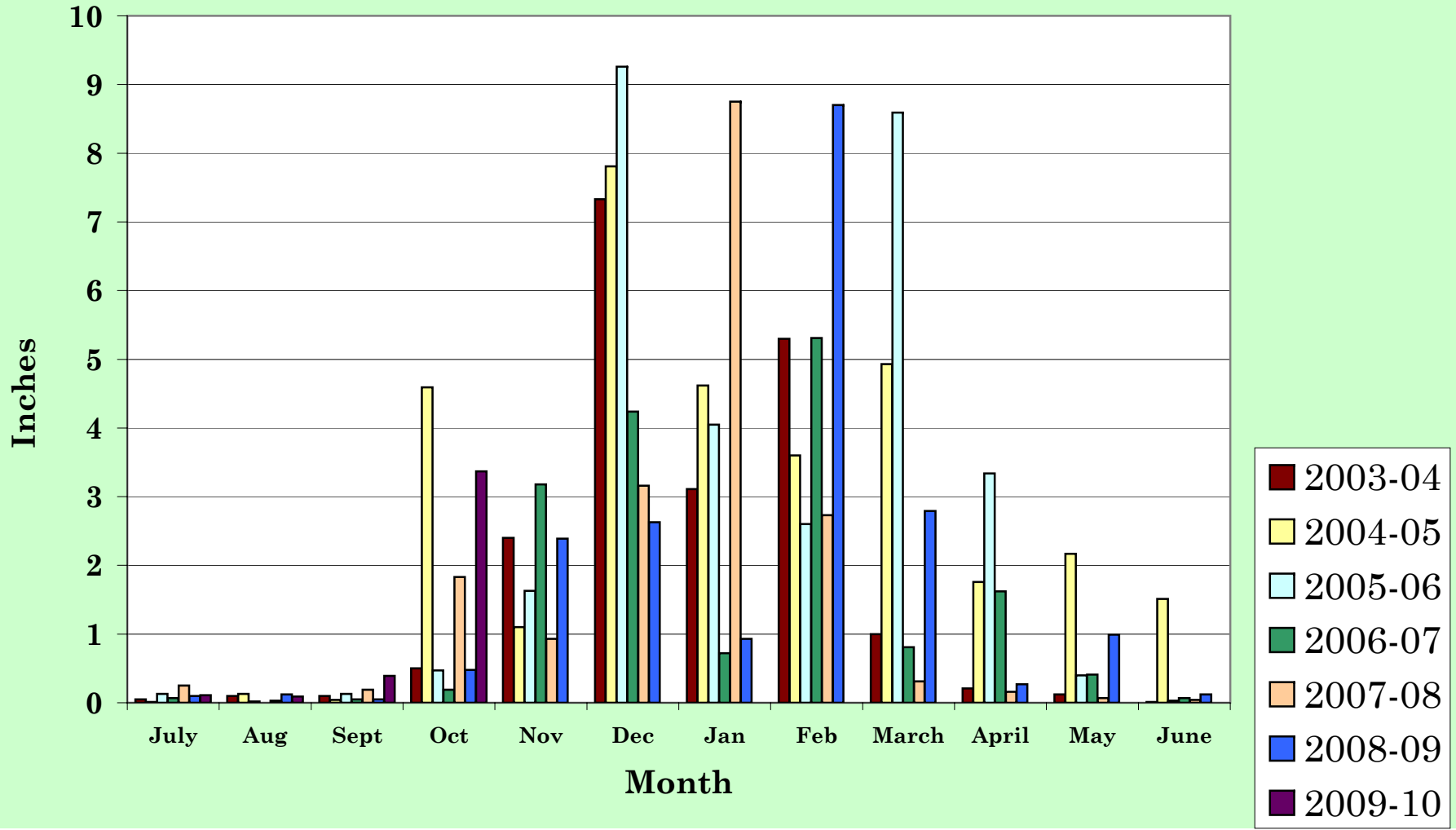
Date		City	Pipe Type/Size	Repair Material	Estimated Water Loss (gallons)	Repair Material Costs	Manpower and Equipment Costs	Estimated Cost of Repair (dollars)
02-Oct-09	222 Sevilla	EG	1" black plastic service	1 - 1" copxcop / 2' 1" copper / 2 tons rock	1,600	\$63.85	\$700	\$764
02-Oct-09	Palma @ Santiago	EG	3/4" blue plastic service	1 - 3/4" copxcop / 1 - 3/4" angle stop	2,100	\$71.71	\$400.00	\$472
07-Oct-09	Portola @ Columbus	EG	1" blue plastic	1 - 1" copxcop / 6' - 1" copper / 3 tons rock	1,100	\$104.42	\$700	\$804
10-Oct-09	Ferdinand @ Vallejo	EG	4" welded steel water main	4" x 12 1/2" full circle clamp / 3 tons rock	6,000	\$156.50	\$1,250	\$1,407
20-Oct-09	960 The Alameda	EG	2" galv main	1 - 2"x12" full circle / 1 ton rock	7,000	\$121.65	\$1,975	\$2,097
<b>TOTAL</b>					<b>17,800.00</b>	<b>518.13</b>	<b>5,025.00</b>	<b>5,543.13</b>



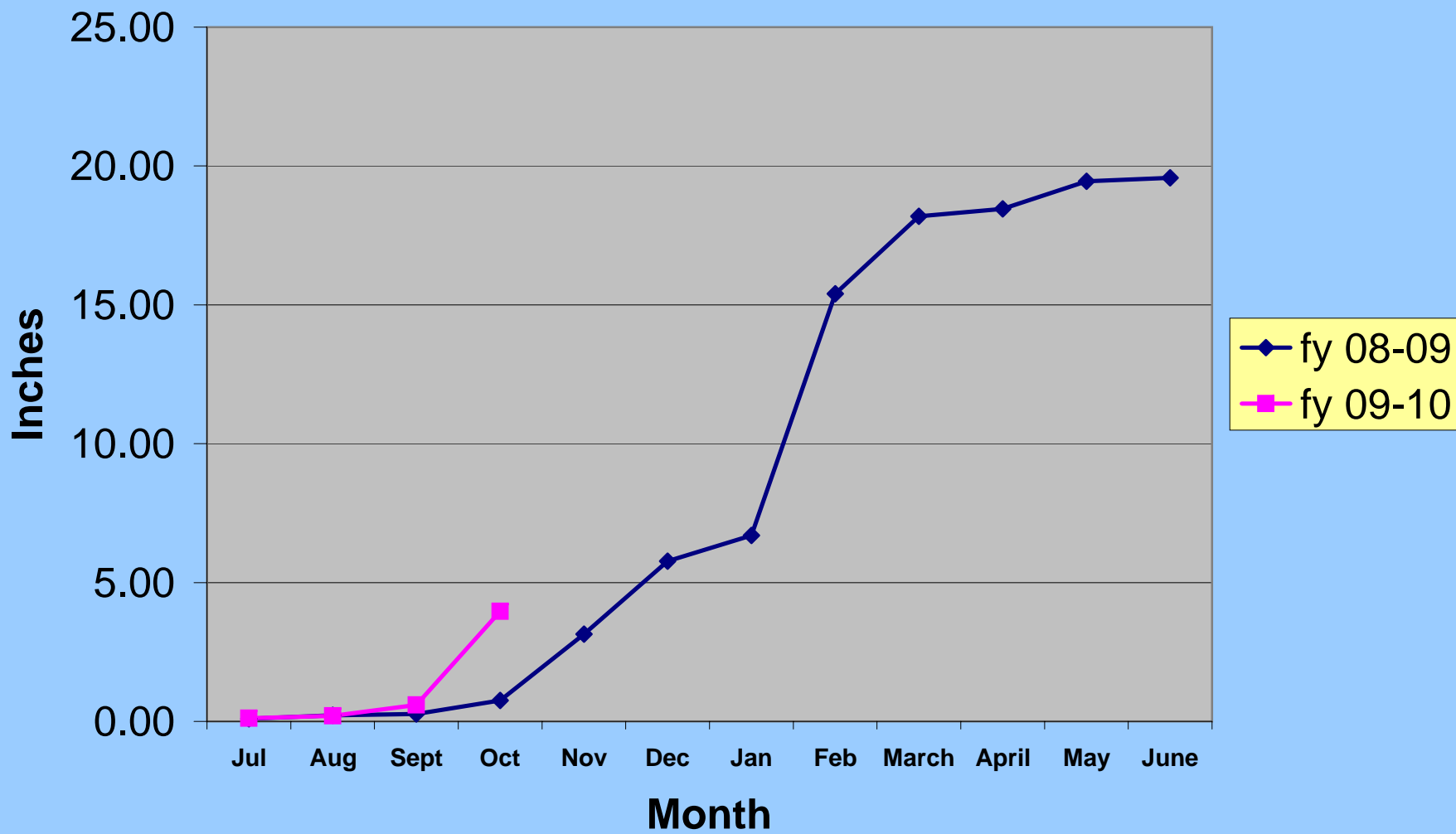
# Coastside County Water District

## Rainfall by Month

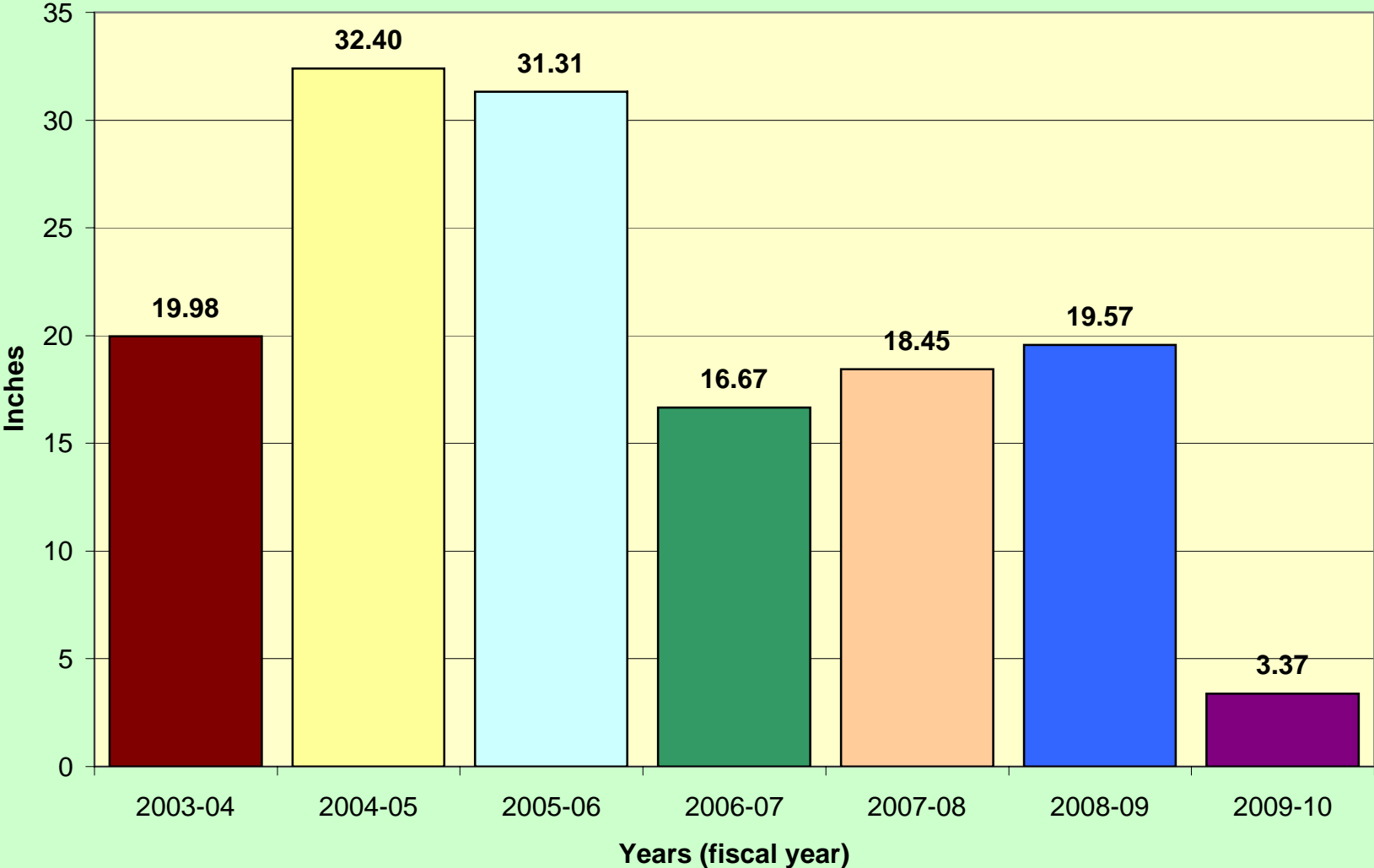
July '09 thru Jun '10



# Rainfall Totals fy 08 - 09



# Rain Totals



MONTHLY CLIMATOLOGICAL SUMMARY for OCT. 2009

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	59.1	77.5	2:00p	45.3	5:30a	8.2	2.2	0.00	1.3	16.0	10:30a	N
2	56.0	67.1	2:00p	45.1	5:30a	9.1	0.1	0.00	1.0	10.0	5:30p	SSW
3	55.6	60.2	12:00p	51.8	12:00m	9.4	0.0	0.00	3.6	23.0	7:30p	SW
4	53.6	60.0	3:30p	45.6	12:00m	11.4	0.0	0.00	2.4	20.0	12:30a	SSW
5	51.9	63.3	3:30p	42.9	6:30a	13.1	0.0	0.00	0.9	11.0	3:30p	NNE
6	53.3	65.7	11:00a	42.4	5:30a	11.7	0.0	0.00	0.9	14.0	11:00a	SSW
7	55.1	65.8	1:30p	44.3	6:00a	9.9	0.0	0.00	1.0	9.0	12:30p	SSW
8	59.7	68.3	1:00p	55.2	4:00a	5.4	0.1	0.00	1.2	9.0	12:30p	SSW
9	58.2	64.5	10:30a	54.3	6:00a	6.8	0.0	0.00	1.2	10.0	12:30p	SSW
10	57.0	65.0	12:30p	52.6	6:30a	8.0	0.0	0.00	0.9	8.0	12:30p	S
11	57.3	65.2	1:00p	51.4	6:30a	7.7	0.0	0.00	1.8	11.0	1:00p	S
12	60.9	67.9	3:00p	55.6	4:30a	4.4	0.2	0.00	3.7	25.0	4:30p	SE
13	61.7	63.5	4:30p	59.3	4:30a	3.3	0.0	3.21	7.0	34.0	1:00p	SE
14	66.5	74.3	1:30p	61.7	3:30a	0.9	2.3	0.01	2.0	14.0	12:30a	SE
15	66.8	76.0	12:30p	60.8	10:30p	0.9	2.7	0.00	0.6	9.0	8:00a	ESE
16	66.1	77.6	12:30p	50.2	7:00a	1.5	2.6	0.00	1.7	14.0	9:30a	N
17	62.5	68.9	2:00p	56.3	6:00a	3.1	0.6	0.01	0.9	13.0	2:00p	SW
18	62.2	69.0	12:30p	58.0	5:30a	3.2	0.4	0.00	0.5	7.0	10:30a	SSW
19	62.0	73.0	3:00p	53.4	11:00p	4.3	1.3	0.09	1.4	17.0	12:00p	S
20	58.8	67.1	3:00p	53.0	7:00a	6.2	0.0	0.01	1.0	10.0	12:30p	SW
21	59.9	65.7	4:00p	54.8	6:00a	5.1	0.0	0.00	1.3	11.0	1:30p	SW
22	59.1	68.7	12:00p	51.5	12:00m	6.0	0.1	0.01	1.3	15.0	4:00p	N
23	58.1	67.4	3:00p	50.2	4:00a	7.1	0.2	0.01	0.8	10.0	3:00p	SW
24	57.5	67.1	12:30p	50.3	12:00m	7.5	0.0	0.00	0.5	9.0	3:00p	SSW
25	56.1	66.9	3:00p	47.2	6:30a	9.0	0.1	0.01	0.6	8.0	1:30p	SSE
26	56.9	64.8	2:00p	50.1	6:00a	8.1	0.0	0.01	1.3	16.0	5:30p	S
27	55.9	61.5	11:00a	48.4	6:30a	9.1	0.0	0.00	4.1	21.0	11:30p	NNW
28	54.6	61.6	12:30p	43.7	12:00m	10.4	0.0	0.00	4.2	24.0	10:00a	N
29	51.8	61.8	3:30p	41.7	6:30a	13.2	0.0	0.00	0.9	13.0	2:00p	N
30	55.6	65.5	4:30p	47.0	3:30a	9.4	0.0	0.00	0.6	9.0	1:30p	SSW
31	56.2	65.0	2:30p	50.7	11:30p	8.8	0.0	0.00	0.6	9.0	2:00p	SW
	58.2	77.6	16	41.7	29	222.2	12.9	3.37	1.6	34.0	13	SSW

Max >= 90.0: 0

Max <= 32.0: 0

Min <= 32.0: 0

Min <= 0.0: 0

Max Rain: 3.21 ON 10/13/09

Days of Rain: 2 (>.01 in) 1 (>.1 in) 1 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration





# San Francisco Public Utilities Commission

## Hydrological Conditions Report

### For October 2009

J. Chester, B. McGurk, A. Mazurkiewicz, M. Tsang, November 3, 2009

#### Current System Storage

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

<b>Table 1</b>							
<b>Current Storage</b>							
<b>As of November 1, 2009</b>							
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	
<b>Tuolumne System</b>							
Hetch Hetchy <sup>1/</sup>	281,805		340,830		59,025		82.7%
Cherry <sup>2/</sup>	256,329		268,810		12,481		95.4%
Lake Eleanor <sup>3/</sup>	24,379		23,541		0		Full
Water Bank	555,158		570,000		14,842		97.4%
Tuolumne Storage	1,117,671		1,203,181		86,348		92.9%
<b>Local Bay Area Storage</b>							
Calaveras <sup>4/</sup>	33,236	10,830	96,824	31,550	63,588	20,720	34.3%
San Antonio	47,252	15,397	50,496	16,454	3,244	1,057	93.6%
Crystal Springs	54,472	17,750	58,377	19,022	3,905	1,272	93.3%
San Andreas	14,908	4,858	18,996	6,190	4,089	1,332	78.5%
Pilarcitos	2,025	660	3,100	1,010	1,075	350	65.3%
Total Local Storage	151,893	49,495	227,793	74,226	75,901	24,731	66.7%
<b>Total System</b>	<b>1,269,564</b>		<b>1,430,974</b>		<b>162,249</b>		<b>88.7%</b>

<sup>1/</sup> Maximum Hetch Hetchy Reservoir storage with drum gates de-activated.

<sup>2/</sup> Maximum Cherry Reservoir storage with flash-boards out.

<sup>3/</sup> Maximum Lake Eleanor storage with all stop-logs out.

<sup>4/</sup> Available capacity does not take into account current DSOD storage restrictions.

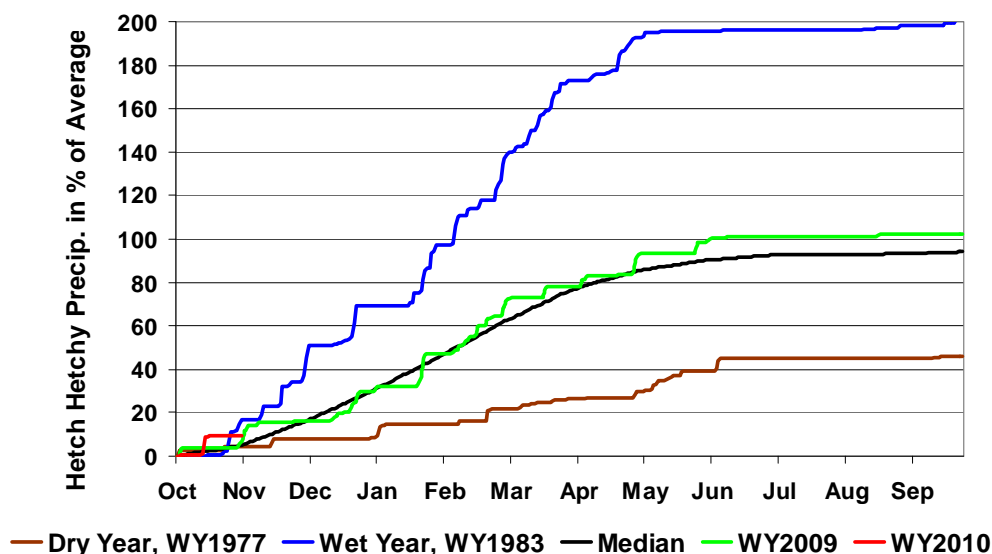
#### Hetch Hetchy System Precipitation Index <sup>5/</sup>

*Current Month:* The October six-station precipitation index is 4.46 inches, or 243% of the average index for the month. The majority of the month was relatively dry, however, a strong system on October 13<sup>th</sup> – 14<sup>th</sup>, brought 2.97 inches of precipitation to the Hetch Hetchy gage, and similar or higher amounts occurred at surrounding gages. The event also had the highest daily precipitation accumulation at Hetch Hetchy during the month of October since 1945 when 2.88 inches was recorded.

*Cumulative Precipitation to Date:* The accumulated six-station precipitation index for water year 2010 is 4.46 inches, which is 12.5% of the average annual water year total, or 243% of the season-to-date precipitation. The water year cumulative precipitation for the Hetch Hetchy gauge is shown in Figure 1 in red, and is slightly above the median line.

<sup>5/</sup>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.

### Precipitation at Hetch Hetchy: Water Year 2010



**Figure 1:** Water year 2010 cumulative precipitation received at Hetch Hetchy Reservoir through the end-of-month October. 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 October 31<sup>st</sup> is summarized below in Table 2. The October 13<sup>th</sup> – 14<sup>th</sup> storm brought above-average inflows into all upcountry reservoirs and is reflected in the percent-of-average statistics found in Table 2. Inflow to Hetch Hetchy Reservoir for October was 20,632 acre-feet, or 339% of the long-term average, while inflow at La Grange was 322% of average. In October, an unusually large 19,129 acre-feet of water became available to the City.

	October 2009				October 1, 2009 through October 31, 2009			
	Observed Flow	Median <sup>6</sup>	Average <sup>6</sup>	Percent of Average	Observed Flow	Median <sup>6</sup>	Average <sup>6</sup>	Percent of Average
Inflow to Hetch Hetchy Reservoir	20,632	3,221	6,085	339.1%	20,632	3,221	6,085	339.1%
Inflow to Cherry Reservoir and Lake Eleanor	25,037	2,194	5,127	488.3%	25,037	2,194	5,127	488.3%
Tuolumne River at La Grange	54,306	10,604	16,823	322.8%	54,306	10,604	16,823	322.8%
Water Available to the City	19,129	0	1,875	1,020%	19,129	0	1,875	1,020%

<sup>6</sup> Hydrologic Record: 1919 – 2005.

## Hetch Hetchy System Operations

A total of 25.9 TAF of water was released from Hetch Hetchy Reservoir in October to support minimum streamflow releases, SJPL deliveries, and ecological research. Operational changes in minimum streamflow releases were made in order to support fisheries habitat mapping studies in the Tuolumne River below Hetch Hetchy. These studies were in conjunction with U.S. Department of Fish and Wildlife and have concluded for the year.

During October, about 3,663 acre-feet of power draft was made from Cherry Reservoir to support the City's Municipal load and District Class 1. No water was transferred from Eleanor to Cherry in October.

## Local System Operations

The average rate at the Sunol Valley Water Treatment Plant for October was 19 MGD. The Harry Tracy Water Treatment Plant rate averaged 45 MGD in October.

## Local System Water Demand

October water demand averaged 213 MGD, a 22% decrease over the September average of 272 MGD. This drop in demand marks the beginning of the seasonal shift toward lower winter water usage.

## Local Precipitation

On October 13, a potent Pacific storm brought significant rainfall across both the Peninsula and East Bay watersheds. Precipitation totals are presented in Table 3.

**Table 3.** Precipitation totals for October 2009, at three Local Area reservoirs

Reservoir	Month Total (inches)	Percentage of Normal for the Month	Year To Date <sup>7</sup> (inches)	Percentage of Normal for the Year-to-Date <sup>7</sup>
Pilarcitos	4.97	221 %	5.20	174 %
Lower Crystal Springs	4.20	288 %	4.35	227 %
Calaveras	2.53	228 %	2.82	184 %

<sup>7</sup> Since July 1 2009

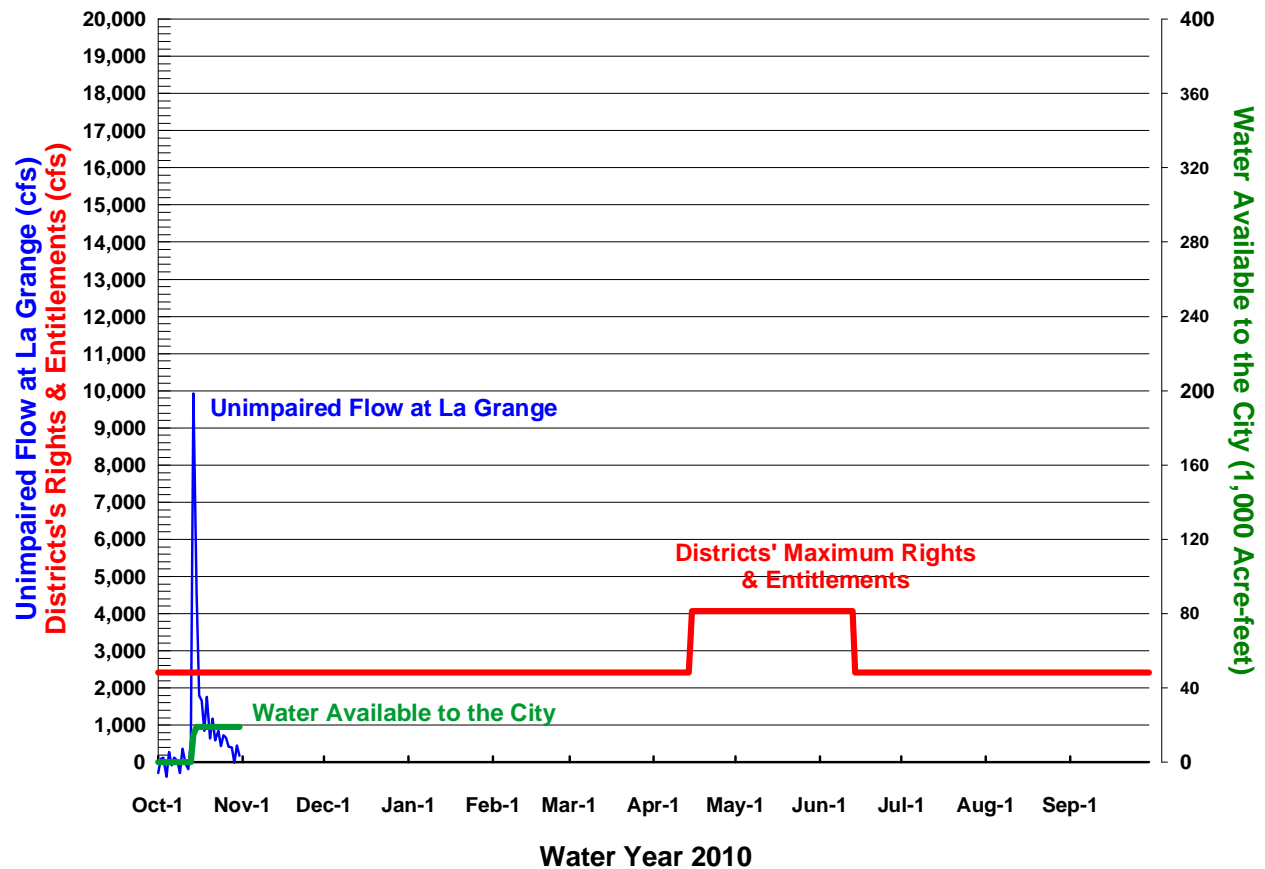
## Snowmelt and Water Supply

October 1<sup>st</sup> marked the beginning of water year 2010. October's large precipitation event created elevated inflow conditions as well as some high-elevation snow. These types of events are important because they recharge depleted soil moisture and ground water storage prior to the accumulation of the seasonal snowpack. Clear skies and relatively warm weather since the storm has melted much of the snow in the high country, and stream flows are receding with the dry conditions.

November is the month which normally brings the possibility of significant precipitation and the start of the seasonal snowpack. Currently the short-term weather forecast predicts only scattered snow showers, with no significant accumulation in the near future. The National Weather Service's Climate Prediction Center predicts above-normal precipitation for the month of November and above-average precipitation accumulation for the next 3 months. This forecast is

based on global climate patterns and historical data and has inherent uncertainty. The forecast and conditions will be tracked to see if the predictions come to fruition.

### Unimpaired Flow at La Grange & Water Available to the City



**Figure 2:** 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 1<sup>st</sup>, 2009 through October 31<sup>st</sup>, 2009 was 19,129 acre-feet.

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

## ***STAFF REPORT***

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

**From:** David Dickson, General Manager

**Agenda:** November 10, 2009

Report

Date: November 5, 2009

**Subject:** Water Service Agreement for 311 Church Street

---

### **Recommendation:**

Approve the Water Service Agreement for R.E. Jeffs and Associates' development at 311 Church Street, Half Moon Bay in the form attached.

### **Background:**

R.E. Jeffs and Associates, Inc. is constructing a new residence at 311 Church Street. Because the existing two-inch steel line does not extend to the end of Church Street and because it does not have sufficient capacity to serve Jeffs' development, they will be required to construct a new six-inch line approximately 400 feet from the District's existing pipeline on Mill Street to the end of Church Street. In order to comply with Fire Department standards, they will also install a fire hydrant.

Once the new six-inch pipeline is installed, the five existing water services on Church Street can be connected to it and the old two-inch line abandoned. Jeffs has agreed to do this work, which would normally be the responsibility of the District.

In the absence of Jeffs' development, the existing two-inch line in Church Street would eventually have to be replaced at District expense. The District will therefore gain a significant benefit from this project. In consideration of this benefit and of Jeffs' agreement to do the work of connecting the existing services to the new pipeline, staff recommends that the District reimburse Jeffs \$25,000 of the project cost. District Engineer Jim Teter estimated project construction costs at \$72,000, not including connecting existing services.

### **Fiscal Impact:**

District cost of \$25,000.

## WATER SERVICE AGREEMENT

THIS AGREEMENT is made as of this \_\_\_\_ day of November, 2009, between COASTSIDE COUNTY WATER DISTRICT (“District”) and R. E. Jeffs and Associates, Inc. (collectively the “Applicant”).

1. **Recitals.** This Agreement is entered into with regard to the following facts and circumstances.
  - 1.1. District is a public corporation organized and existing under the provisions of the California Water Code and is engaged in the storage, transmission and sale of water for domestic purposes within the County of San Mateo.
  - 1.2. Applicant is engaged in the development of real property within the geographical limits of the District. Applicant is the owner of certain real property known as 311 Church Street, Half Moon Bay, California and designated in the records of the San Mateo County Assessor as APN #056-161-220 (the “Property”).
  - 1.3. Applicant represents it has obtained a Coastal Development Permit from the City of Half Moon Bay for, and proposes to construct on the Property, a development consisting of a single family residence.
  - 1.4. Applicant proposes to construct approximately 400 linear feet of 6-inch water main in Church Street (the “Project”) to provide a water and fire protection service connection to the proposed residence.
  - 1.5. The Project work shall include connecting five existing water services on Church Street to the new 6-inch pipeline and abandoning the existing 2-inch water main serving the residences.
2. **Components Of Agreement.** This Agreement shall consist of the following documents each of which are referred to and by this reference made a part hereof as fully and completely as if they were fully set forth herein:
  - 2.1. This Agreement.
  - 2.2. Plans for the project prepared by Sigma Prime Geosciences, Inc.. The Plans, consisting of 1 sheet, are attached hereto as Exhibit A.
  - 2.3. Water System Specifications for Pipeline Extension to 311 Church Street, Exhibit B, attached hereto.
  - 2.4. Coastal Development Permit authorizing construction of the Project Utility System (as defined below), to be furnished to the District and reviewed prior to the commencement

of construction.

2.5. Encroachment Permit from the City of Half Moon Bay, if applicable, to be furnished to the District prior to the commencement of the Project.

3. **Approval Of Project Utility System**

3.1. The Project Utility System, as defined below, shown on and described on the plans prepared by Sigma Prime Geosciences, Inc., is approved.

3.2. "Project Utility System" means the water mains, fittings, valves and housing thereof, fire hydrants, manholes and all appurtenances thereto, except water meters, as depicted and described in Exhibit A.

4. **Submittal of Proposal for Review and Approval by District.** Applicant is responsible for obtaining a Proposal for construction of the Project from a licensed, qualified contractor to construct the Project. The Contractor shall possess a valid California Contractor's License. The Contractor shall have satisfactorily completed construction of a minimum of 5 similar pipeline projects, and shall if requested submit a list of these projects together with the telephone number of the owner's representative who can be contacted regarding the work. Prior to commencement of construction, Applicant shall furnish a copy of the Proposal, along with evidence satisfactory to the District that the contractor possesses the necessary licenses and experience to construct the Project Utility System described above.

5. **Installation.** Applicant shall commence installation of the Project Utility System no later than 90 days, subject to extension for force majeure events not the fault of the applicant, after the date of this Agreement and shall complete its installation within twelve months after the date of this Agreement. If installation is not commenced and/or completed by such dates, the District may terminate this Agreement, unless the delay is solely attributable to events, such as fire, flood or earthquake, which are beyond the control of, and not the fault of, Applicant. Applicant shall install the Project Utility System in accordance with the plans attached as Exhibit A, the specifications attached as Exhibit B, all permits for the Project, and the further reasonable directions of the District Engineer.

6. **Inspection: Construction.**

6.1. Applicant shall notify District in writing at least ten (10) days in advance of the proposed starting date for construction, and shall not commence construction unless the District Engineer or other authorized District inspector is at the site of the work when construction begins. District agrees to make the District Engineer or other authorized District inspector available to be on site, provided the 10 days notice is given by Applicant. If construction is not continuous, District shall be notified at least forty-eight (48) hours in advance of the resumption of construction. Any work performed without notice to District may be rejected on that ground alone. The District Engineer will



observe and inspect facilities solely to protect the interests of the District and to determine whether the completed work is acceptable to District and can be incorporated into the District system. The District does not assume thereby any responsibility for the operations or safety practices of Applicant. Applicant is responsible for correct location of all facilities it installs. The District Engineer will not inspect facilities installed “downstream” of the individual meter boxes.

- 6.2. Applicant shall permit District’s employees and authorized representatives to inspect the Project Utility System, and the plans and materials therefore, at any reasonable time before, during, or after installation.
- 6.3. Applicant shall repair at its expense (or, at the option of District, shall reimburse District for the actual cost of repairs affected by it) any damage to District property caused by Applicant, its agents, employees, or contractors in construction the Project Utility System.

7. **Payment of Fees and Charges.** The Applicant will pay applicable fees and charges as follows:

- 7.1. **Transmission and Storage Fees.** None due. Any water connections shall be purchased by separate agreement. This Agreement only provides for construction of the Project Utility System, and not for purchase of water system capacity.
- 7.2. **Initial Filing Fee.** The District acknowledges receipt of a non-refundable initial filing fee in the amount of \$150.00.
- 7.3. **Plan Check and Construction Inspection Deposit.** Concurrently with the execution of this Agreement, Applicant will pay a deposit in the amount Four Thousand Dollars and no cents (\$4,000.00), which is the amount due for the District staff and Engineer's costs in reviewing final plans, inspecting the construction of the Project Utility System, modifications of water system maps, and administrative, legal, and auditing costs.
- 7.4. **Total Payment Due With Agreement.** The total payment due concurrently with execution of this Agreement shall be Four Thousand Dollars (\$4,000.00).

8. **Bonds.**

- 8.1. Prior to commencement of construction, Applicant shall furnish to District adequate and acceptable improvement security which shall consist of:
  - 8.1.1. A payment bond in the amount of 100% of the estimated cost of constructing the Project Utility System, to guarantee payment of the obligations referred to in Section 3248 of the Civil Code;

8.1.2. A performance bond in the amount of 100% of the estimated cost of constructing the Project Utility System, to guarantee faithful performance of the terms of this Agreement; and

8.1.3. A maintenance bond in the sum of 10% of the estimated cost of constructing the Project Utility System, to guarantee against defective materials and faulty workmanship for a period two (2) years from and after acceptance of the Project Utility System by District.

8.2. The bonds shall be in form and substance satisfactory to District's legal counsel and shall be issued by a surety company qualified to and doing business in California and otherwise acceptable to District.

9. **Indemnity.** District shall not be responsible or held liable in any manner whatsoever for any injury or damage which may be done to any person or property (or other loss or liability) as a result of the matters set forth in this Agreement and the installation of the Project Utility System by or on behalf of Applicant. Applicant, on its behalf and on behalf of its successors in interest, hereby agrees to waive any claims against District arising from or related to the events and activities described in this Agreement, and to indemnify and defend the District, its officers, employees, and agents, and hold it free, safe and harmless of, from and against any and all liability for the death of or injury to any person and for the loss of, or damage to, any property (including the loss of its use) which may arise from such events and activities. The agreements contained in this paragraph shall survive the performance of the remainder of this Agreement and shall remain in full force and effect notwithstanding such performance.

10. **Insurance.**

10.1. Applicant or its construction contractor shall, at its cost, maintain in full force and effect during the period beginning with the commencement of construction of the Project Utility System and terminating no earlier than thirty (30) days after completion thereof and approval by District for its connection with the District's distribution system, a policy or policies of liability insurance, as follows:

10.1.1. Bodily and personal injury liability in an amount not less than One Million Dollars (\$1,000,000.00) per person and Two Million Dollars (\$2,000,000.00) per occurrence; and

10.1.2. Property damage insurance in an amount not less than One Million Dollars (\$1,000,000.00) per occurrence.

10.2. Such policies shall insure District as an additional insured against any and all liability for the death of or injury to any person and for the loss of or damage to any property which may arise by reason of acts done or omitted to be done as a result of the installation of the Project Utility System by or on behalf of Applicant, and shall further

insure District against any and all costs and expenses, including attorneys fees, which District may incur in resisting any claim which may be made against District for any such injury or damage.

10.3. Each policy shall:

10.3.1. Be issued by an insurance company or companies qualified to do business in California and approved in writing by District;

10.3.2. Name District, its Directors, officers, agents and employees, as additional insureds;

10.3.3. Specify that it acts as Primary Insurance; the insurer being liable thereunder for the full amount of any loss up to and including the total limits of liability without right of contribution from any insurance effected by District;

10.3.4. Provide that the policy shall not be cancelled or altered without thirty (30) days prior written notice to District; and

10.3.5. Otherwise be in form reasonably satisfactory to District.

10.4. Applicant or its contractor shall provide, and maintain at all times during the course of installation of the Project Utility System, Workers' Compensation Insurance in conformance with the laws of the State of California. Such policy shall provide that the underwriter thereof waives all right of subrogation against District by reason of any claim arising out of or connected with installation of the Project Utility System and that such policy shall not be cancelled or altered without thirty (30) days prior written notice to District.

10.5. Copies of all policies required above (or Certificates of Insurance satisfactory to District) shall be delivered to District at least ten (10) days prior to commencement of construction of the Project Utility System.

11. **Conveyance Of Title To Project Utility System.** Full right, title and interest in and to all elements of the Project Utility System installed pursuant hereto will be granted to District upon written notice of acceptance thereof by District and without the necessity for any further action by Applicant. There shall be no obligation upon District to pay or reimburse to Applicant any part of the cost of the Project Utility System. Applicant warrants that upon such passage of title to District, the title shall be free and clear from any and all mechanics and materialmen liens that could arise from construction of the Project Utility System, charges and encumbrances whatsoever.

12. **Acceptance By District.** District shall accept the Project Utility System when all of the following conditions have been met: (1) completion of the Project Utility System; (2)

certification by District Engineer upon completion that the Project Utility System has been constructed in accordance with this Agreement; (3) furnishing by Applicant of evidence that it has paid all costs incurred in construction the Project Utility System; (4) performance by Applicant of all of its obligations under this Agreement which are to be completed prior to acceptance of the Project Utility System, including payment of all sums due the District; and (5) furnishing by Applicant of “as-built” drawings. Upon acceptance, Applicant shall be relieved of all future obligations to maintain the Project Utility System components that are located within the street right of way, subject to its obligation to repair defects, which obligation is secured by the maintenance bond provided above, for the duration of the term of such bond (i.e., two years after acceptance). Project facilities which are located on the Applicant’s property, including the backflow prevention device, shall be owned and maintained by Applicant.

13. **Reimbursement by District for Water Services to Existing Residences.** Following acceptance by the District of the Project Utility System, the District shall reimburse Applicant the sum of Twenty Thousand Dollars (\$25,000.00) in consideration of work done to connect existing services to the new pipeline.
14. **Execution And Performance Of Agreement.** Execution of this Agreement is a condition precedent to issuance by District of any letters, approvals, consents, or communications to any state, municipal, local or other public bodies regarding the availability of water service to the area to be developed. Full performance of and compliance with each and every term of this Agreement by Applicant is a condition precedent to water service by District.
15. **District Regulations.** Applicant shall at all times abide by and faithfully observe any and all District ordinances, resolutions, rules and regulations presently in effect, including current fee schedules, or which may hereafter be enacted or amended from time to time, including but not limited to “Regulations Regarding Water Service Extensions and Water System Improvements” a copy of which has previously been furnished to Applicant.
16. **Assignment.** Applicant’s rights under this Agreement may not be assigned in connection with a sale or conveyance of the Property without the express written consent of District, which shall not be unreasonably withheld. No such assignment shall be valid or binding on the District unless the assignee executes a written instrument, in form and substance satisfactory to District, assuming all of Applicant’s obligations under this Agreement, which have not been fully performed as of the date of assignment. Such assignment shall not release Applicant from any of its obligations to District under this Agreement. This Agreement shall be binding upon and shall inure to the benefit of the parties and their successors and permitted assigns. If the Applicant or a permitted successor or assign shall dis-incorporate, forfeit its articles or right of incorporation, or otherwise fully terminate without a successor or assign, District shall as of the date of dis-incorporation, forfeiture or termination own the Project Utility System free and clear of any obligation to any party.

17. **Notice.** Any notice required by this Agreement shall be satisfied by a notice in writing either delivered personally or sent by regular or certified mail, postage prepaid, and addressed as follows:

District: Coastside County Water District  
766 Main Street  
Half Moon Bay, CA 94019  
Attention: General Manager

Applicant: Mr. Cameron Jeffs  
R. E. Jeffs and Associates, Inc.  
6 Ashdown Place  
Half Moon Bay, CA 94019

Each party shall notify the other in writing of any change in the address provided above for providing notice hereunder.

18. **Construction Of Agreement.** Both parties have participated in preparing this Agreement. This Agreement shall be construed reasonably and not in favor of or against either party hereto on the grounds that one party prepared the Agreement.

19. **Entire Agreement.** This Agreement, including all of its components, contains the entire agreement between the parties hereto. No oral understandings, statements, promises or inducements contrary to the terms of this Agreement exist.

20. **Applicable Law.** This Agreement shall be governed by and construed and enforced in accordance with and subject to the laws of the State of California. Except as expressly provided for herein, this Agreement is not intended to, and does not, modify the District's rights to exercise the legislative discretion accorded to it by the laws of California. Any lawsuit related to this Agreement shall be commenced, and prosecuted in the courts of the State of California.

21. **Amendment.** Any amendment hereof, including any oral modification allegedly supported by new consideration, shall not be effective unless reduced to a writing signed by both parties.

22. **Authorized Signatures.** The individuals whose names are subscribed to this Agreement represent that they are authorized to act on behalf of the party for whom they sign.

23. **Time.** Time is of the essence of the Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the day and year first above written.

**Coastside County Water District**

**Applicant**

By: \_\_\_\_\_  
President, Board of Directors

\_\_\_\_\_  
Cameron Jeffs  
R. E. Jeffs and Associates, Inc.

Attest:

By: \_\_\_\_\_  
Secretary

# EXHIBIT A

## Project Plans

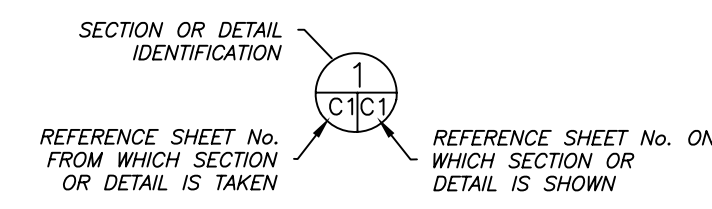
**GENERAL NOTES**

1. PLANS PREPARED AT REQUEST OF: CAMERON JEFFS, PROPERTY OWNER
2. ELEVATION DATUM: ASSUMED
3. CONTOUR INTERVAL IS 1 FOOT.
4. SITE SURVEYED BY COASTSIDE LAND SURVEYING. ADDITIONAL SITE MEASUREMENTS TO MILL STREET BY SIGMA PRIME.
5. THIS IS NOT A BOUNDARY SURVEY.

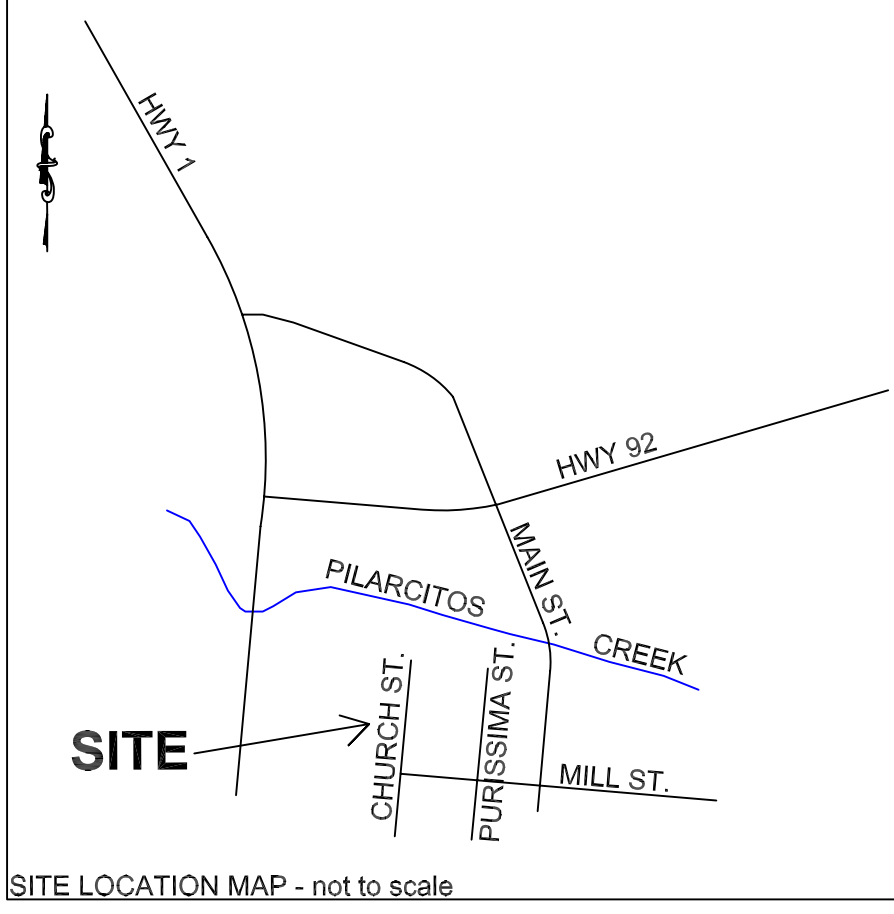
**LEGEND**

- 0.5' CONTOUR
- 2.5' CONTOUR
- 61.42' EXISTING SPOT ELEVATION
- 61.4' PROPOSED SPOT ELEVATION
- SSMH SEWER MANHOLE
- IP FOUND IRON PIPE (PROP CORNER)
- WM WATER METER
- BM BENCHMARK
- INV INVERT
- GV GATE VALVE
- (P) PROPOSED OR NEW
- (E) EXISTING
- PP UTILITY POLE

**SECTION AND DETAIL CONVENTION**

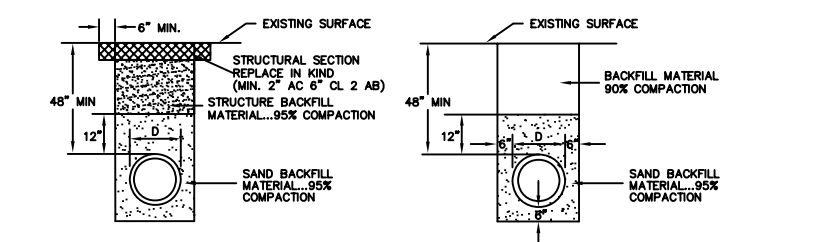


**WATER MAIN EXTENTION  
311 CHURCH STREET  
HALF MOON BAY**



**UTILITY NOTES**

1. INSTALLATION SHALL BE IN ACCORDANCE WITH CCWD OR CITY OF HALF MOON BAY STANDARDS. ALL SERVICE CONNECTIONS WILL FOLLOW THE COASTSIDE COUNTY WATER DISTRICT SPECIFICATIONS FOR CONSTRUCTION OF WATER SERVICE CONNECTIONS AND FIRE PROTECTION SERVICE CONNECTIONS (REVISED APRIL 2009)
2. CALL USA AT 800-227-2600 AT LEAST 48 HOURS PRIOR TO SITE WORK TO VERIFY OTHER UTILITIES LOCATIONS.



- NOTES**
1. SAND - MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS:  

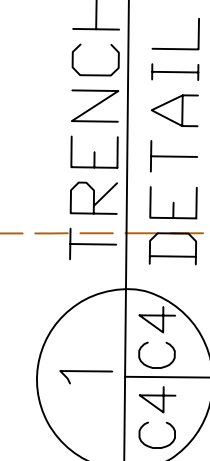
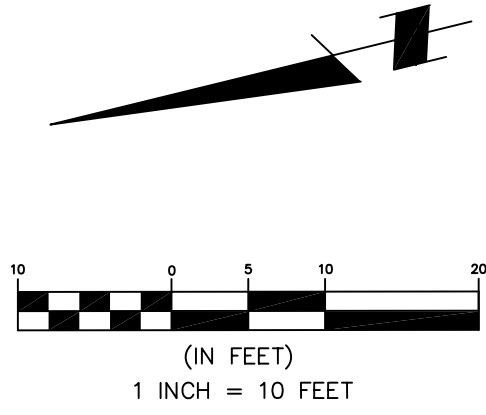
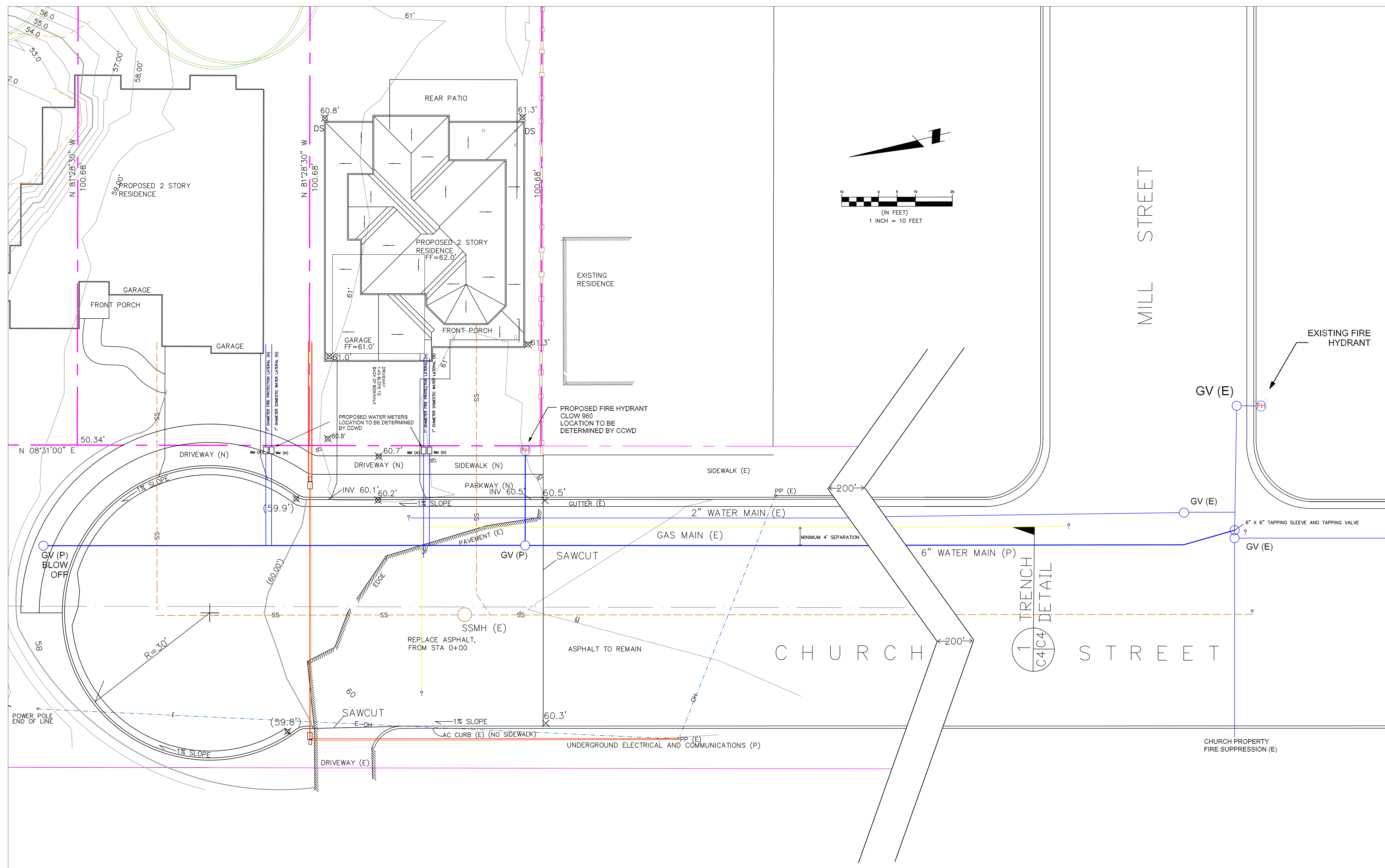
NO.	SEIVE SIZE	% PASSING SEIVE
No. 4	100	100
No. 200	0-5	0-5
  2. STRUCTURE BACKFILL MATERIAL - MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:  

NO.	SEIVE SIZE	% PASSING SEIVE
No. 4	100	100
No. 30	35-100	20-100
  3. BACKFILL MATERIAL - MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL.

**STANDARD TRENCH BACKFILL AND BEDDING DETAIL**



DATE: 3-26-09	DRAWN BY: CMK	CHECKED BY: AZG	REV. DATE: 9-2-09	REV. DATE:	REV. DATE:
Sigma Prime Geosciences, Inc. SIGMA PRIME GEOSCIENCES, INC. 1111 VASSAR STREET HALF MOON BAY, CA 94019 (650) 728-3660 FAX: 728-3660					



**WATER MAIN EXTENSION  
CHURCH STREET  
HALF MOON BAY**

SHEET  
**C-4**



## EXHIBIT B

### Specifications

September 14, 2009

Coastside County Water District

**WATER SYSTEM SPECIFICATIONS  
FOR  
PIPELINE EXTENSION TO 311 CHURCH STREET**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. Specifications. This document contains the technical specifications for all water system facilities for which ownership upon project completion will be conveyed by the Applicant, Cameron Jeffs, to the Coastside County Water District (CCWD). This document is not a complete set of specifications for the project; the Applicant and their engineer are responsible for all project specifications and contract documents other than this Water System Specifications document.
- B. Drawing. This Specifications document shall be used in conjunction with the engineering drawing for the project: "Water Main Extension, Church Street", Sheet C-4, dated 3/26/09 (Revised 9/2/09), prepared by Sigma Prime Geosciences, Inc.
- C. Conflicts Between Specifications and Drawings. Where conflicts occur between this Specification document and the engineering drawing (Sheet C-4), this Specifications document shall take precedence. Conflict resolution shall be performed by the District Engineer for the Coastside County Water District.

**1.02 REGULATORY AGENCIES**

- A. Water System. All water system work shall be in conformance with the rules and regulations of the Coastside County Water District, County of San Mateo Department of Health Services, and the State Department of Health Services.
- B. Safety. All work shall be in conformance with applicable State and Federal laws and regulations, rules and orders and as may be necessary in order that the work is performed in a safe manner and that the safety and health of the employees and the people of local communities is safeguarded.
- C. Work Within Street Right of Way Area Including Trench Backfill and Repaving. All work within the street right of way area shall be performed in conformance

with the requirements of the agency having jurisdiction over the right of way area (City of Half Moon Bay County of San Mateo County, or Caltrans). For the Pipeline Extension to 311 Church Street Project, the agency having jurisdiction over the right of way area is the City of Half Moon Bay).

- D. Pollution Abatement. All work shall be performed in conformance with NPDES (National Pollutant Discharge Elimination System) regulations as well as with all other applicable pollution abatement rules and regulations.

### 1.03 PERMITS

Prior to beginning work, the Applicant or the project Contractor shall obtain all permits required for the work. One known required permit for the Pipeline Extension to 311 Church Street project is a street encroachment permit from the City of Half Moon Bay.

### 1.04 INSPECTION

- A. Responsible Agency:
  - 1. Water System Work. Inspection of water system facilities including backfill around piping will be performed by the CCWD. CCWD inspection fees shall be paid by the developer. In areas that are not public right of way areas, the Applicant or the Contractor shall retain a qualified soils engineer who shall perform field tests and certify in writing prior to project acceptance that the backfill is in conformance with project requirements.
  - 2. Work in Public Right of Way Areas. In public right of way areas, trench backfill and repaving will be inspected by the agency having jurisdiction over the right of way area. All inspection fees and soils testing costs shall be paid by the Applicant or the Contractor.
  - 3. Work in Private Property Areas. Inspection of trench backfill and repaving shall be performed by the Applicant or a qualified representative of the Applicant.
- B. Notification. The CCWD shall be notified by the Contractor 10 days prior to the proposed start of construction of water system facilities. If construction is not continuous, the CCWD shall be notified at least 48 hours in advance of the resumption of construction.
- C. Observation. The Engineer and his authorized representatives shall at all times have access to the work, and the Contractor shall furnish every reasonable facility for ascertaining that the materials and workmanship are in accordance with CCWD requirements. All work performed and all materials furnished shall be subject to the CCWD's on-site and off-site observations. The CCWD will observe and inspect facilities solely to protect the interests of the CCWD and to determine whether the completed work is acceptable for incorporation into the CCWD system. The CCWD does not assume thereby any responsibility for the

safety practices of the Contractor. The Contractor is responsible for the correct location of all facilities which are installed. All work shall be inspected by the CCWD prior to backfill. Work which has been backfilled prior to inspection by the CCWD shall be uncovered for observation at the expense of the Contractor.

#### 1.05 CHANGES

All work shall be performed in conformance with the project documents approved by the CCWD. Changes shall not be made without the written approval of the CCWD District Engineer.

#### 1.06 REPAIR OF DAMAGE

The Contractor shall repair at his expense any damage to CCWD or other property caused by his work. At the option of the CCWD, repairs to CCWD facilities will be completed by the CCWD with the cost of the repair work being paid by the Contractor.

#### 1.07 SITE CONDITIONS

The CCWD has performed no investigation of subsurface conditions in the work area. The Contractor shall visit the site prior to submitting his bid and shall be responsible for making his own evaluations, inspections and determinations of all site conditions, including subsurface.

#### 1.08 LINES AND GRADES

The Contractor will be solely responsible for all lines and grades. At no cost to the Contractor, the CCWD will field locate existing water system facilities based on best available information. However, this CCWD locating assistance is not guaranteed to be either accurate or complete. The Contractor shall uncover all existing facilities by hand excavation (potholing) ahead of his machine excavation work. Where the project drawings indicate the location of water system facilities with respect to property corners or easement boundaries, the Applicant or the Contractor shall retain the services of a licensed land surveyor to field locate each property corner and easement boundary required for installation of the new water system facilities at the proper locations.

#### 1.09 SALVAGEABLE MATERIALS

Existing CCWD materials removed during the normal prosecution of work deemed salvageable by the CCWD, except as otherwise noted on the project drawing to be reused, shall remain under CCWD ownership and shall be delivered to the CCWD corporation yard by the Contractor.

#### 1.10 PERSONAL LIABILITY

Neither the CCWD, its Engineer, nor any of the CCWD officers or employees shall be personally responsible for any liability arising under or by virtue of the Contractor's work.

#### 1.11 QUALITY ASSURANCE

- A. Performance Test. Prior to project completion, the Contractor shall demonstrate to the CCWD that all water system facilities perform in the manner in which they are intended for use.
- B. Leakage Test. All water pipelines, service tubing and piping accessories shall be tested for leakage in conformance with the requirements contained in Part 3 of this document.
- C. Disinfection. All potable water pipelines, service tubing and piping accessories shall be disinfected in conformance with the requirements contained in Part 3 of this document.

#### 1.12 REFERENCES TO STANDARD SPECIFICATIONS AND REGULATIONS

- A. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, law or regulation in effect at the time the project documents are prepared (date shown on Specification document).

### PART 2 - MATERIALS

#### 2.01 GENERAL REQUIREMENTS

All materials shall be in conformance with CCWD rules and regulations for "approved" materials. All materials shall be new. Manufacturers furnishing pipe, valves, or piping accessories shall have had similar products in successful

operation under similar operating conditions for a period of at least 5 years, and shall if requested submit a list of representative installations.

## 2.02 SHOP DRAWING REQUIREMENTS

- A. CCWD-Approved Materials. Where specific materials are listed below by manufacturer's name and model number, they are District-approved materials by CCWD Resolution No. 2003-11. No shop drawing submittals are required for these CCWD-approved materials.
- B. Approved Equal Materials. Where the term "or approved equal" is used below, the Contractor may propose the use of alternative materials to those named by submitting shop drawings for the proposed alternative materials. Five copies of each shop drawing shall be submitted to the Engineer for review. The shop drawing submittal information shall be as required to demonstrate to the satisfaction of the District Engineer that the material is equal to the District-approved material. No alternative materials shall be incorporated into the work until they have received the CCWD Engineer's favorable review. Where the term "or approved equal" is not utilized below, no alternatives will be considered by the CCWD.
- C. Contractor Verification. Where model, style or types of manufacturer's products are listed below, they are intended to indicate a standard of quality. The Contractor shall verify that the referenced model, style or type is correct for the actual project application prior to ordering the materials. When listed model numbers are no longer available or are incorrect, the District will provide new model numbers for District-approved materials.

## 2.03 DUCTILE IRON PIPE

- A. Pipe. Pipe shall normally be ductile iron pipe with push-on joints conforming to AWWA Standard C151, thickness Class 52. Where flanged joint pipe is required it shall conform to AWWA Standard C115, thickness Class 53.
- B. Pipe Joints:
  - 1. Push-On Pipe Joints. Push-on pipe shall normally be utilized for all buried piping except where otherwise indicated on the project drawings or otherwise required. Push-on joints shall conform to AWWA Standard C111 with restrained type "Field-Lok" gaskets as manufactured by U.S. Pipe and Foundry Co.
  - 2. Flanged Joint Pipe. Flanged joint pipe shall be utilized in buried piping where shown on the Contract Drawings or required. All above grade pipe shall have flanged joints. Flanges shall be in conformance with AWWA C115. Flanges

shall be Class 125, B16.1, rated for a service pressure of 250 psi. Bolts and nuts for all flanged joints shall be Type 316 stainless steel.

C. Fittings:

1. Fittings for Push-On Joint Pipe. Fittings shall be ductile iron conforming to AWWA Standard C153. Fittings shall be push-on type ("Tyton" style) or mechanical joint type as directed by the District. Fittings shall be furnished and installed with joint restraint devices as described below:
  - a. Restraint Device for Push-On Fittings: "Field-Lok" gaskets as manufactured by U.S. Pipe and Foundry Co.
  - b. Restraint Device for Mechanical Joint Fittings: Series 1110HD Megalug Retainer Glands as manufactured by EBBA Iron Sales, Inc.
2. Fittings for Flanged Pipe. Fittings shall be ductile iron conforming to AWWA C110. Fittings shall be screw-on type, normally Class 125, B16.1 Type, designed for a service pressure of 250 psi. Bolts and nuts for flanged joints shall be Type 316 stainless steel. Gaskets shall normally be 1/8 inch thick non-asbestos composition type.

D. Exterior Coating. Pipe and fittings shall be furnished with a 1 mil thick asphaltic coating. The finished coating shall be the manufacturer's standard conforming to AWWA requirements.

E. Interior Lining. Pipe and fittings shall be cement lined in conformance with AWWA Standard C104.

F. Polyethylene Encasement. Polyethylene encasement shall be tube type, conforming to AWWA Standard C105. Color may be Class A natural or Class C black.

## 2.04 COPPER TUBING

A. Tubing:

1. Buried Tubing. Copper tubing for buried service shall be Type K (soft) conforming to ASTM B88.
2. Exposed Tubing. Copper tubing for exposed service shall be Type L (hard) conforming to ASTM B88.

B. Tubing Joints and Fittings.

1. Buried Tubing. Joints and fittings for buried copper tubing shall be compression type which do not require flaring or soldering. Service fittings shall be Mueller Series 110 compression connections.
2. Exposed (Not Buried) Tubing. Joints and fittings for exposed copper tubing shall be wrought copper conforming to ANSI B16.22 or cast bronze conforming to ANSI B16.18 with soldered connections. Solder shall conform

to ASTM B3208g, alloy grade E or HB; solder and flux shall contain less than 0.2% lead.

## 2.05 BRASS PIPE

- A. Brass pipe shall be in conformance with ASTM-B43, regular. Joints shall be screwed type.

## 2.06 GATE VALVES

- A. Gate Valves 4 Inches in Diameter and Larger. Gate valves shall be resilient-wedge type conforming to AWWA C509 and the following additional requirements. Valves shall be rated at 250 psi working pressure. All body and bonnet bolts, studs, and nuts shall be Type 316 stainless steel. Stem seals shall be O-ring type. Valve operators shall be 2 inch square nut type. Valve end connections shall be normally push-on or mechanical joint type except where flanged end connections are required. The interior and exterior of the valve body shall be coated with 10 mils minimum of epoxy material which conforms to AWWA Standard C550. The CCWD-approved valves shall be Mueller Co. A-2360 Series or Clow Corp. Model 2639.
- B. Gate Valves 3 Inches in Diameter and Smaller. Valves shall be rated for 200 psi service, and shall be bronze body, solid wedge disc, non-rising stem, handwheel operated type with screwed end connections.

## 2.07 TAPPING SLEEVES AND TAPPING VALVES

- A. Tapping Sleeves. The CCWD-approved tapping sleeve is the JCM Model 432 all stainless steel tapping sleeve with Type 316 stainless steel body, bolts and nuts.
- B. Tapping Valves. The CCWD-approved tapping valve is the Mueller tapping gate valve conforming to the specifications requirements for Gate Valves in Paragraph 2.06 above. The valve outlet end connection shall be a mechanical joint type.

## 2.08 VALVE BOXES AND RISER PIPE

- A. Valve Boxes. Valve boxes shall be Christy Model G-5 with cast iron lids with the work "Water" cast into the lid.



- B. Riser Pipe. Riser pipe for the valve operator shall be 8 inch diameter PVC sewer pipe conforming to ASTM D-3034, SDR 35.

2.09 FIRE HYDRANT ASSEMBLIES

- A. Each fire hydrant assembly shall consist of a Clow 960 fire hydrant, a Clow No. LB 40 breakoff check valve, a 26 inch long hydrant bury piece with a mechanical joint 6 inch diameter end connection, and extension pieces as required. Bolts and nuts for flanged joints shall be Type 316 stainless steel.

2.10 SERVICE FITTINGS FOR COPPER TUBING

- A. Service fitting shall be Mueller Series 110 compression connections as listed below:

<u>Description</u>	<u>Mueller Model Number</u>	
	<u>3/4" &amp; 1" Size</u>	<u>1-1/2" &amp; 2" Size</u>
Corporation Stop	B-25008	B-25008
Meter Angle Stop	B-24258	B-24276
Union	H-15403	H-15403
Tee	H-15381	H-15381

- B. Angle Check Valves shall be products of Ford as listed below:

<u>Size</u>	<u>Model Number</u>
3/4"	HA31-323
1"	HA31-444
1-1/2"	HFA31-666
2"	HFA31-777

2.11 THRUST RESTRAINT DEVICES

- A. The following thrust restraint devices shall be provided where shown on the project drawings or otherwise permitted by the CCWD:
  1. Mechanical Joint Retainer Glands: Series 1110 HD Megalug Retainer Glands, a product of EBBA Iron Sales, Inc.
  2. Push-On Pipe Bell Restraint System: "Field-Lok" gasket, a product of U.S. Pipe and Foundry Co.

2.12 WATER METERS

- A. Water meters shall be Sensus meters with Orion automatic read devices. The Contractor shall purchase the meters through the CCWD.

2.13 METER BOXES

- A. Meter boxes shall be concrete, and shall be products of Christy Concrete Products, Inc. Meter box lids in non-traffic areas shall normally be concrete, and in traffic areas shall be galvanized steel. Lids shall have the work "Water" cast into the top. Extension pieces shall be provided as required so that the bottom of the meter box assembly is equal in elevation with the bottom of the meter or other device inside the box or as shown on the District Standard Installation Details or as directed by District field personnel. For water meter service connections, the following boxes and lids shall be provided:

CHRISTY METER BOXES AND LIDS

<u>Water Meter Size</u>	<u>Box No.</u>	<u>Non-Traffic Lid No.</u>
3/4"	B9	B9P
1"	B16	B16P
1-1/2"	As Req'd.	P Type

The "P" type lids are fabricated of reinforced concrete with a 1-3/4 inch hole for the automatic meter reading device. Where meter boxes are utilized for air release assemblies, blow off valve assemblies and other non-meter applications use the "D" type lid.

Where traffic-type lids are required, provide lid type as required by the District.

2.14 SERVICE SADDLES

- A. Service saddles shall be rated for a working pressure of 200 psi, and shall be bronze double strap type. Outlet shall be either AWWA taper or IPT as required for the pipe to be connected to the saddle. The District-approved service saddle is the Mueller BR2B Series.

2.15 FIRE HYDRANT GUARD POSTS

- A. Fire hydrant guard posts (bollards) shall be 4 inch diameter Schedule 40 galvanized steel pipe, 6 feet long.

2.16 CONCRETE

- A. Concrete shall contain a minimum 564 pounds of Portland cement per cubic yard. Minimum compressive strength after 28 days shall be 3,500 psi.

## 2.17 SAND BEDDING AND BACKFILL MATERIAL

Sand for use in bedding and backfilling water pipelines and service tubing shall conform the requirements contained in the current edition of "Standard Specifications" issued by Caltrans (California Department of Transportation), Section 19. Use of beach sand will not be permitted.

## 2.18 WATER

Water shall be potable water unless otherwise permitted by the CCWD, and will be made available to the Contractor by the CCWD from available facilities at or in the vicinity of the work site. Cost of water shall be paid by the Contractor using a portable meter obtained from the District.

## 2.19 TRENCH BACKFILL MATERIALS AND REPAVING MATERIALS

- A. Public Right of Way Areas. Materials within public right of way areas shall conform to the requirements of the agency having jurisdiction over the right of way area (City of Half Moon Bay, County of San Mateo, or Caltrans).
- B. Non-Public Right of Way Areas. Materials shall conform to the requirements contained in the current edition of "Standard Specifications" issued by Caltrans (California Department of Transportation), Section 19.

## PART 3 - EXECUTION

### 3.01 SEQUENCE OF UNDERGROUND UTILITY CONSTRUCTION

- A. The sequence of underground utility construction shall be that the deepest utility system shall be constructed first and the shallowest last, except that construction of water pipelines shall in all instances be constructed before the joint electrical trench facilities.

### 3.02 EXISTING UNDERGROUND UTILITIES

- A. Prior to beginning work the Contractor shall notify USA to have the location of all underground utilities marked in the field. Prior to beginning machine excavation the Contractor shall verify the exact location of each underground utility by hand excavation (potholing).

### 3.03 SITE MEETING WITH DISTRICT FIELD PERSONNEL

- A. General. Prior to beginning work the Contractor shall arrange a meeting at the site with District field personnel to review the work requirements. The District will require satisfactory evidence such as field survey stakes or property corner survey markers of the location of the property line adjacent to which meter boxes are to be installed before the exact location of meter boxes can be determined.
- B. Easement Staking. For pipelines to be constructed on private property within an easement, the Applicant shall retain the services of a licensed land surveyor to install stakes on the edges of the easement. A stake shall be installed at each easement angle point and at a maximum distance of 50 feet apart between angle points. The surveyor shall provide a letter to the District describing the work performed, and a copy of the easement description shall be attached to the letter.

### 3.04 TRENCH EXCAVATION, BACKFILL AND REPAVING

- A. Trench Excavation. Trenching for pipe and service tubing shall be in open cut unless otherwise permitted by the District. Existing pavement shall be cut with a pavement saw. Existing vegetation shall be preserved and protected. Tree roots over 2 inches in diameter shall not be cut or otherwise damaged. In unpaved areas topsoil shall be removed, stockpiled, and replaced after completion of trench backfilling. Work shall be performed to minimize disruption of traffic and so as not to obstruct driveways and other access roadways. Excavation shall be to a minimum depth of 4 inches below the pipe grade to accommodate the pipe bedding material. All pipe and service tubing shall be bedded in a 4 inch thick layer of sand.
- B. Trench Backfill:
  - 1. Pipe Zone Backfill. Backfilling work shall not begin until the District has completed its inspection of the piping work. All pipe and service tubing shall be backfilled with sand to a depth of 12 inches over the pipe. The sand shall be compacted to a minimum relative compaction of 95%.
  - 2. Upper Level Backfill:
    - a. Public Right of Way Areas. Backfilling shall conform to the requirements of the agency having jurisdiction over the right of way area (City of Half Moon Bay, County of San Mateo or Caltrans).
    - b. Non-Public Right of Way Areas. Under paved areas, backfill with structure backfill material compacted to a minimum 95% relative compaction.

Under unpaved areas backfill with suitable excavated material compacted to a minimum 90% relative compaction.

C. Trench Repaving:

1. Public Right of Way Areas. Conform to the requirements of the agency having jurisdiction over the right of way area (City of Half Moon Bay, County of San Mateo, or Caltrans).
2. Non-Public Right of Way Areas. Repave to restore paved area to a condition equal or better than that which existed prior to start of work including restoration of gravel, crushed rock or oiled surfaces.
3. Steel Traffic Plates. Contractor shall have available in the vicinity of the job site a sufficient number of steel traffic plates to cover 20 linear feet of trench. These plates shall be utilized as required to maintain traffic flow in streets, allow access to driveways and similar private roadways, and for passage of emergency vehicles. Normally all trenches shall be backfilled at the completion of each work day and temporary asphalt concrete paving installed in all areas which had existing pavement including sidewalks.
4. Disposal of Excavated Materials. Excess and unsuitable materials shall be disposed of off the site in conformance with the requirements of regulatory agencies.
5. Curb, Gutter and Sidewalk. All damaged areas shall be replaced with new materials.
  - a. Public Right of Way Areas. Work shall be performed in conformance with the requirements of the agency having jurisdiction over the right of way area (City of Half Moon Bay, County of San Mateo, or Caltrans).
  - b. Non-Public Right of Way Areas. In privately owned areas restoration shall be to a condition equal or better than that which existed prior to start of work.

### 3.05 PIPING GENERAL REQUIREMENTS

A. Location:

1. Pipelines. Pipelines shall be installed true to line and grade as shown on the Improvement Plans for Pacific Ridge. Buried pipelines shall be installed at a continuously sloping grade between points of given elevation without low or high points. If high points cannot be avoided, an air release valve assembly shall be provided. Location of the pipeline may be modified by the Engineer to clear obstructions. Depth of cover over the pipeline to finish grade shall be as shown on the Improvement Plans.
2. Service Connection Tubing. Tubing shall be installed at a continuously sloping grade upward from the connection point with the water pipeline to the water meter box without low or high points. Tubing shall be installed with a minimum depth of cover of 30 inches unless otherwise permitted by the District.

- B. Handling. Pipe and service tubing shall be handled carefully to prevent damage. Pipe and service tubing shall be plugged at the end of each work day and at other times as required to prevent the entry of water or foreign material.
- C. Trench Conditions. Pipe and service tubing shall have a full, even bearing on the top of the trench bedding material. All piping shall be laid in the dry; the Contractor shall dewater the trench as required. Piping ends shall be clean when joints are made.
- D. Clearance Distances of Water Pipelines from Other Underground Utilities and Facilities. Water pipelines and service tubing shall be installed with the following minimum clearances from other underground utilities:
  - 1. Electrical Wires or Conduits, Storm Drains, Telephone Conduits, Cable TV Wires or Conduits, Other Utilities, and Other Facilities. Minimum horizontal clearance shall be 4 feet; minimum vertical clearance shall be one foot.
  - 2. Sanitary Sewers Including House Laterals. Minimum horizontal clearance shall be 10 feet; minimum vertical clearance shall be one foot. Water pipelines shall pass over sanitary sewers where feasible. The Contractor shall provide written documentation to the CCWD for each instance where a sanitary sewer line is passing over a water pipeline.
- E. Thrust Restraints. All piping shall be adequately braced against thrust. Buried pipe shall be provided with concrete thrust blocks in conformance with the CCWD Standard Installation Details. Concrete thrust blocks are required for restrained joint type pipe fittings.
- F. Connections to Existing Water Pipelines. Connections of new water pipelines to existing water pipelines shall be made in a manner which does not require taking the existing water pipeline out of service. Where required, connections shall be made by the "hot tap" method. It shall be the responsibility of the Contractor to verify by actual field measurement all existing site conditions including the size and type of the existing pipeline prior to ordering the tapping sleeve and tapping valve for the hot-tap connection.
- G. Fire Hydrant Guard Posts. Guard posts (bollards) shall be installed at all fire hydrants not protected by curbing and at locations with curbing where in the opinion of the District the fire hydrant is not adequately protected from vehicle traffic. The number and location or required guard posts will be determined in the field by the District. The posts shall be installed 3 feet into the ground using concrete encasement. Following installation the interior of the pipe shall be filled with concrete.
- H. Leakage Test. All piping shall be tested for leakage in conformance with the requirements specified for each type of pipe. The Contractor shall provide all

materials and labor required for the leakage test including the pump, pressure gauge, corporation stops, and temporary plugs and thrust blocks. The procedure shall be to (1) fill the pipeline with water to the required test pressure, (2) disconnect the test pump hose and wait for the duration of the test period to elapse, (3) reconnect the test pump and measure the volume of water required to re-establish the test pressure. Following completion of the test the Contractor shall dispose of the leakage test water in conformance with NPDES regulations. It shall be the Contractor's responsibility to block off during the testing all piping appurtenances which may be damaged by the test pressure and to provide suitable thrust restraints. Leakage testing shall be witnessed by the District.

- I. Disinfection and Bacteriological Testing:
  1. General. All piping systems conveying potable water shall be disinfected. Disinfection shall be in conformance with AWWA Standard C651 except as otherwise required by this document. The Contractor shall provide all materials and labor required for the disinfection process and shall dispose of the disinfection solution in conformance with NPDES requirements including dechlorination.
  2. Procedure:
    - a. Preliminary Preparation. The system shall be flushed with water to remove and dirt introduced into the piping during construction operations. All service outlets and fire hydrants shall be opened and the flushing operations continued until clear water flows from each outlet (Note: flushing shall be deferred until after completion of the disinfection process if tablets have been placed in the pipeline during the construction for disinfection).
    - b. Introduction of Disinfection Agent. The disinfection agent may be any chlorine compound approved by AWWA C651. The disinfection agent shall be injected slowly and continuously into the system until tests indicate a chlorine residual concentration of at least 25 mg/L at each pipeline outlet. All outlets shall then be closed and this condition maintained for 24 hours.
    - c. Preliminary Tests. After 24 hours tests shall be made for residual chlorine at each pipeline outlet. The minimum acceptable concentration shall be 10 mg/L. If the concentration is less than 10 mg/L, the disinfection procedure shall be repeated. If the concentration at each outlet is over 10 mg/L, the system shall be flushed out until a test at each outlet indicates a chlorine residual of less than 1.0 mg/L.
    - d. Bacteriological Analyses. The CCWD will obtain samples from the piping being disinfected and have bacteriological analyses performed by a State certified laboratory. The number of samples taken shall conform to AWWA C651 (unless otherwise permitted by the District) and State Department of Health Services requirements. Costs of bacteriological analyses shall be paid by the Contractor.

- e. Final Approval. The requirement for final approval is that each water sample analyzed shall be in conformance with State disinfection requirements. If all bacteriological analyses are not in conformance with these requirements the disinfection procedure shall be repeated.
- f. Disinfection by Spraying or Swabbing. Water piping installations which cannot be disinfected using the procedure described above shall be disinfected by spraying or swabbing the pipeline interior with a minimum 1% chlorine solution immediately prior to installation.

### 3.06 DUCTILE IRON PIPE INSTALLATION

- A. General. Pipe installation shall be in conformance with Sections 1 through 3 of AWWA Standard C600 except as otherwise required by this Specification section. Pipe installation shall also be in conformance with the recommendations of the manufacturers of the pipe and fittings.
- B. Handling. Pipe shall be handled using pipe slings. Use of a forklift will not be permitted. Pipe ends shall be kept clean and shall be plugged at the end of each day's work or when pipe is not being laid to prevent the entry of water or foreign material.
- C. Restrained Joints and Concrete Thrust Blocks. All pipe joints shall be restrained using the materials described in Part 2 of this Specification section and also with a concrete thrust block.
- D. Pipe Taps. Pipe taps will be permitted in accordance with the following schedule:

#### Pipe Tap Schedule

Pipe Diameter	Maximum Tap Size	
	Without Saddle	With Saddle
4"	3/4"	2-1/2"
6"	1-1/4"	2-1/2"
8"	1-1/2"	2-1/2"
10" and larger	2"	2-1/2"

If the piping connection of larger pipes than permitted for taps is required, standard tee fitting shall be utilized.

- E. Maximum Pipe Joint Deflection. Special care shall be taken so as not to exceed the manufacturer's recommendations for joint deflection. For bends exceeding the applicable deflection, fittings shall be installed.
- F. Polyethylene Encasement. All ductile iron piping including pipe, fittings, valves and piping appurtenances shall be polyethylene encased. Installation shall be in conformance with either Methods A or B of AWWA Standard C105. The polyethylene encasement shall prevent contact between the piping and the surrounding backfill and bedding material but is not intended to be a completely airtight or watertight enclosure. Overlaps shall be secured by the use of adhesive tape furnished with the polyethylene encasement.



- G. Leakage Test. All ductile iron piping shall be tested for leakage for a duration of 2 hours at a test pressure of 250 psi. Allowable leakage for below grade piping shall not exceed the following:

<u>Pipe Diameter</u>	<u>Allowable Leakage per 1000 Linear Feet of Pipe During the 2 Hour Test Period</u>
4"	0.47 gallons
6"	0.71 gallons
8"	0.95 gallons
10"	1.19 gallons

### 3.07 COPPER SERVICE TUBING INSTALLATION

- A. Installation. Installation of copper tubing including jointing shall be in conformance with the recommendations of the manufacturers of the tubing and fittings.
- B. Leakage Test. Copper tubing shall be hydrostatically tested for leakage at 250 psi for a 2 hour duration test period. No leakage will be permitted.

### 3.08 INSTALLATION OF VALVES AND OTHER PIPING ACCESSORIES

- A. Installation of valves and other piping accessories shall be in conformance with the recommendations of the manufacturer of the product and in conformance with the District Standard Installation Details. A valve box shall be provided for each below grade valve. The Contactor shall demonstrate to the satisfaction of the District the proper performance of each piping accessory prior to project acceptance.
- B. Air Relief Valve Assemblies. An air relief valve assembly shall be installed at each pipeline high point where in the opinion of the CCWD entrapment of air could occur. The known locations where air relief valves are required are shown on the Contract Drawings. During construction, if additional pipeline high points are created which in the opinion of the CCWD could result in air entrapment, an air relief valve shall be installed at each of these additional locations.
- C. Tapping Sleeve and Valve Installation. Installation of tapping sleeves and tapping valves shall be performed only by CCWD-approved contractors. Contractors currently approved by the CCWD for performing hot tap work are DC Tapping Service, T & R Tapping Inc., and West Valley Construction Co.

### 3.09 FIRE HYDRANT GUARD POSTS

- A. The number of guard posts (bollards) to be installed and their location will be determined in the field by the District. Each post shall be installed 3 feet into the ground using concrete encasement, and following installation the post shall be filled with concrete.

### 3.11 SERVICE CONNECTION INSTALLATION

- A. Piping for Water Meter Installation. The piping for the water meter installation shall be constructed at a sufficient depth below grade to allow sufficient space for installation of the water meter and its automatic metering reading head. The required distance will vary depending on the size of water meter. CCWD personnel will provide the Contractor with the required information.
- B. Irrigation Service Connections. Irrigation service connections where shown on the project drawings shall consist of both an irrigation water meter service connection and a backflow prevention device. A CCWD Standard Installation Detail for each is included in this Specification document.

### 3.12 AS-BUILT DRAWINGS

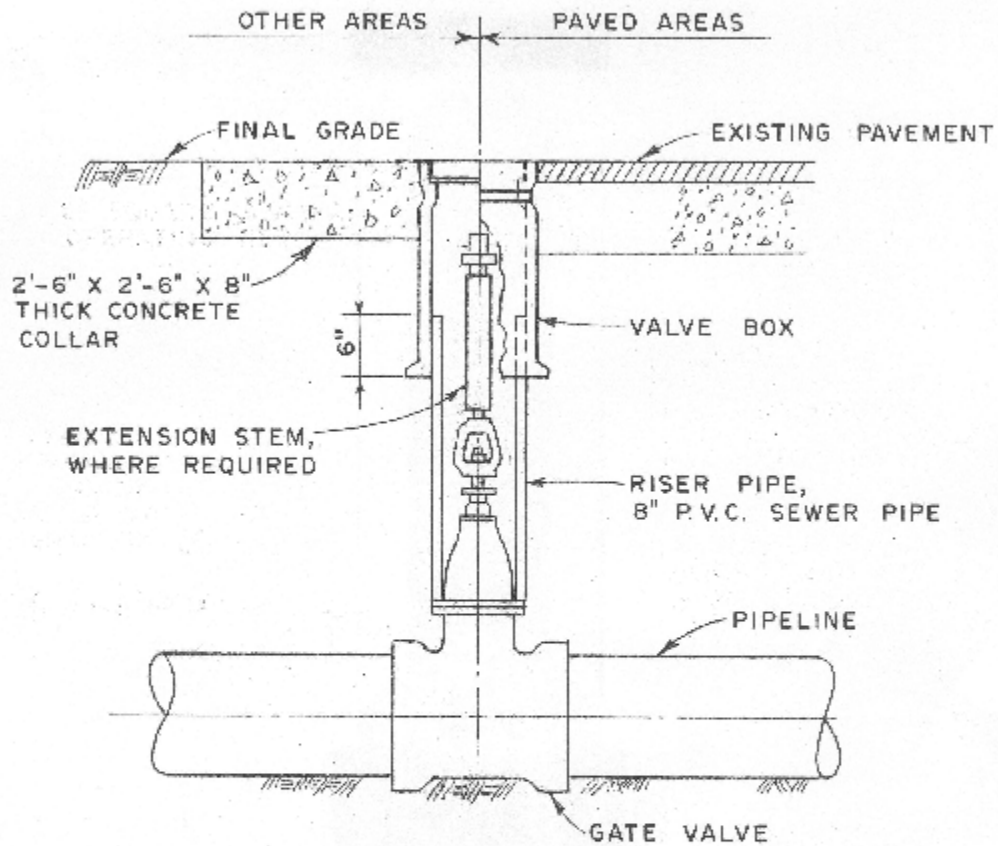
- A. Prior to project acceptance, the Contractor shall provide the District with a set of the project drawings marked for As-Built conditions. The as-built markings shall include the following (1) all changes made to the project drawings during construction, (2) field measurements locating the actual location of the pipeline horizontally from property corners and other surface facilities, (3) horizontal distance of each valve from a minimum of 2 permanent surface facilities such as utility poles, curb and gutter, etc., (4) depth of cover for the pipeline at all locations, as constructed, and (5) the locations of all underground facilities encountered during construction including horizontal location and depth of cover. In addition, documentation shall be provided describing each location where a sanitary sewer pipeline passes over a water pipeline.

### 3.13 CCWD STANDARD INSTALLATION DETAILS AND SPECIAL INSTALLATION DETAILS

- A. General. Installation of piping and appurtenances shall be in conformance with CCWD Standard Installation Details and special installation details prepared by the CCWD for the project. If there are conflicts between the CCWD Standard Installation Details and the project Improvement Plans, conflict resolution shall be performed by the CCWD District Engineer.

- B. Standard Installation Details. Details known to be required for the Pipeline Extension to 311 Church Street project are described below and attached to this specification document.
1. Gate Valve.
  2. Valve Location and Marking.
  3. Blow Off Valve. Location of blow off valve box shall be as generally shown on the project engineering drawing. The exact location shall be determined by CCWD field personnel in the field.
  4. Fire Hydrant. Location of fire hydrants shall be as generally as shown on the project engineering drawing. The exact location shall be as determined by CCWD field personnel in the field. Minimum clearance distance from fire hydrant piping and joint trench facilities shall be: 4 feet horizontal and 1 foot vertical.
  5. Horizontal Thrust Blocks.
  6. Vertical Thrust Blocks.
  7.  $\frac{3}{4}$ " Domestic Service Connection with 1" Fire Service Connection. Location of service connection facilities shall be as generally as shown on the project engineering drawing. The exact locations shall be as determined by CCWD field personnel in the field. Minimum clearance distance from service connection piping and joint trench facilities shall be: 4 feet horizontal and 1 foot vertical.
- C. Special Installation Details. There are no special installation details known to be required for this project. If required, special installation details will be prepared by the District and provided to the Contractor.

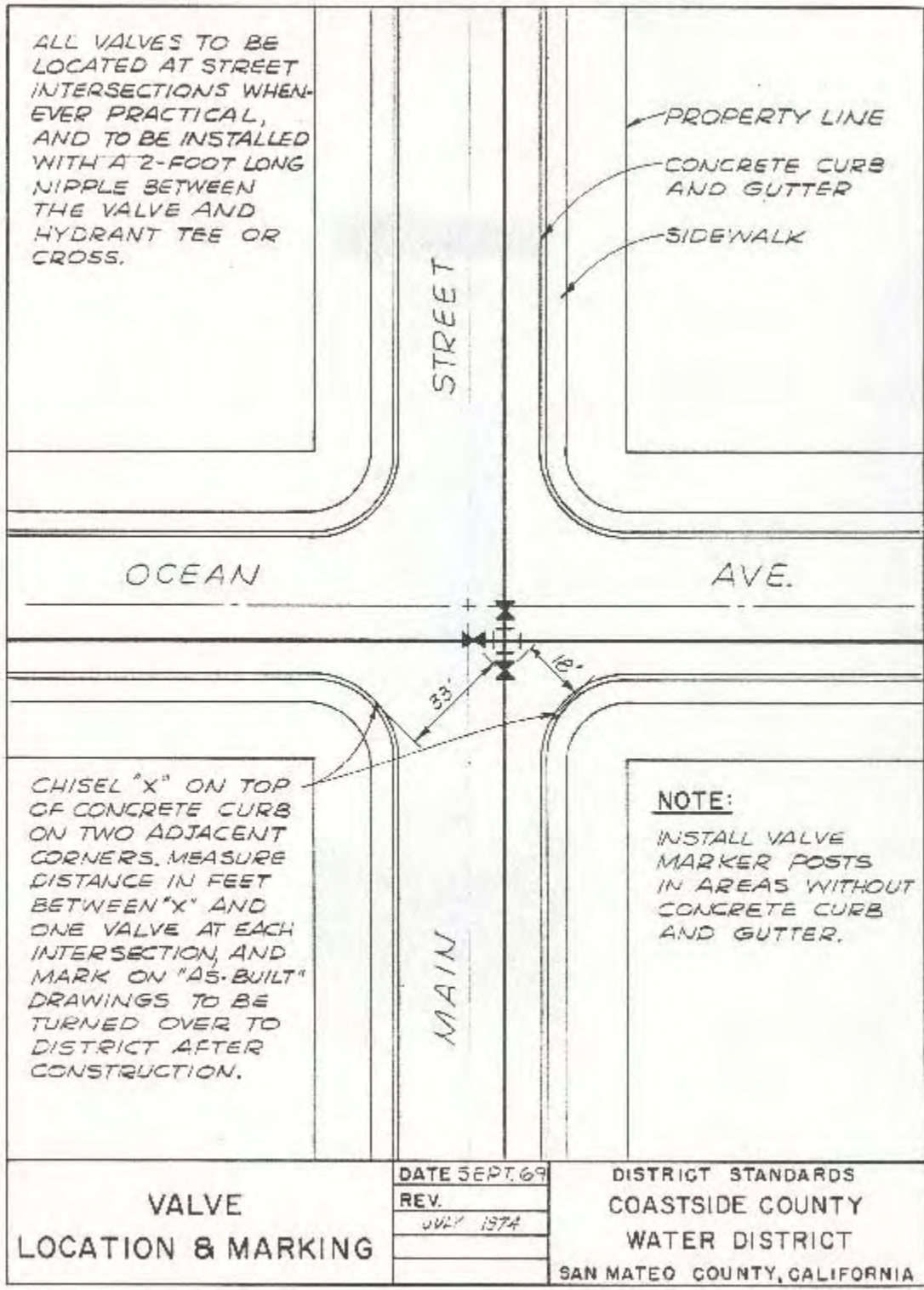
END OF WRITTEN DOCUMENT  
(Standard Installation Details Follow)

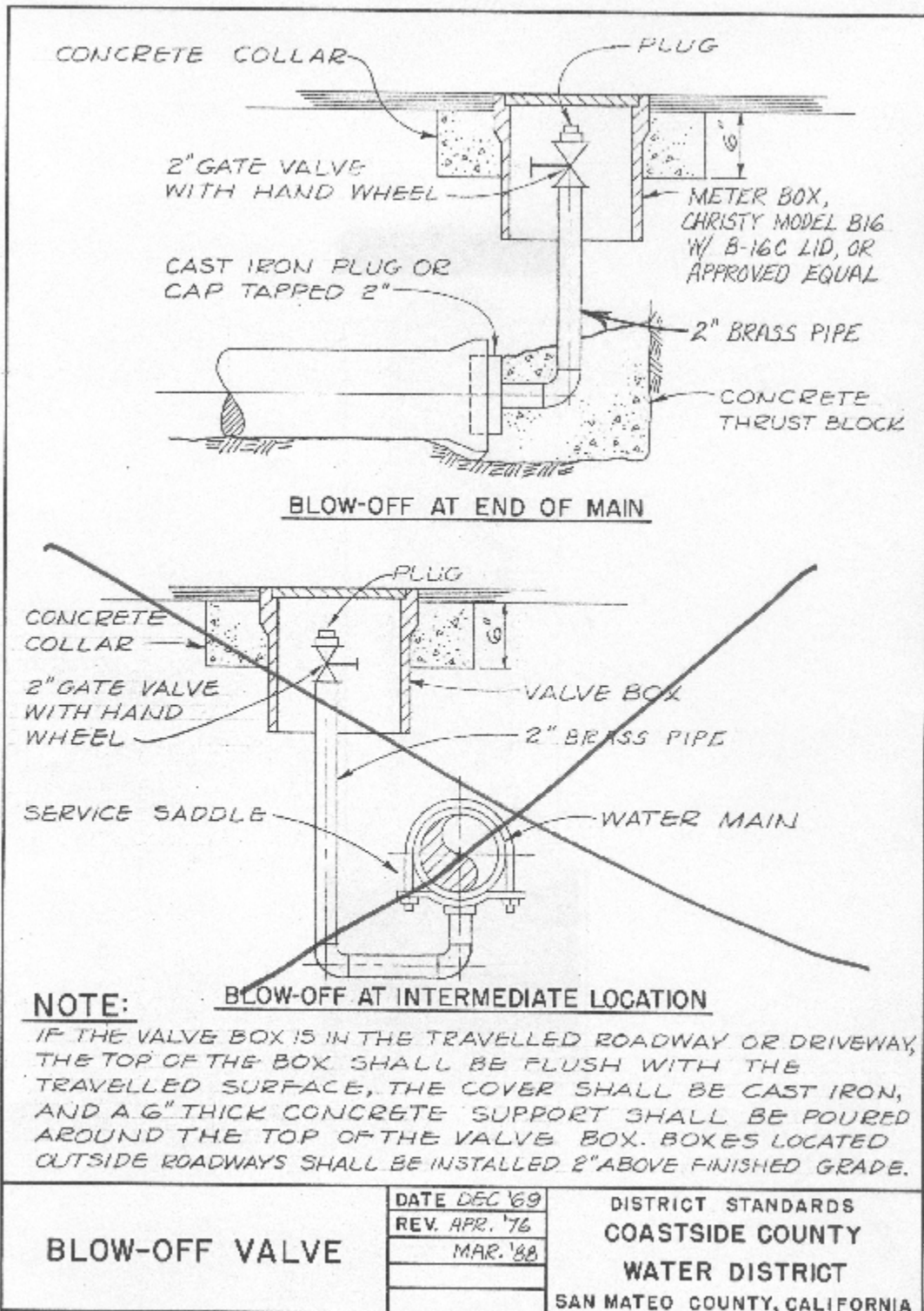


**NOTES:**

- I. SEE SPECIFICATIONS FOR MATERIAL AND ADDITIONAL INSTALLATION REQUIREMENTS.

<b>GATE VALVE</b> (ALL VALVES 12" AND SMALLER)	DATE SEPT. 69	DISTRICT STANDARDS COASTSIDE COUNTY WATER DISTRICT SAN MATEO COUNTY, CALIFORNIA
	REV.	
	JULY 1974	
	NOV 1981	
	JULY 2009	

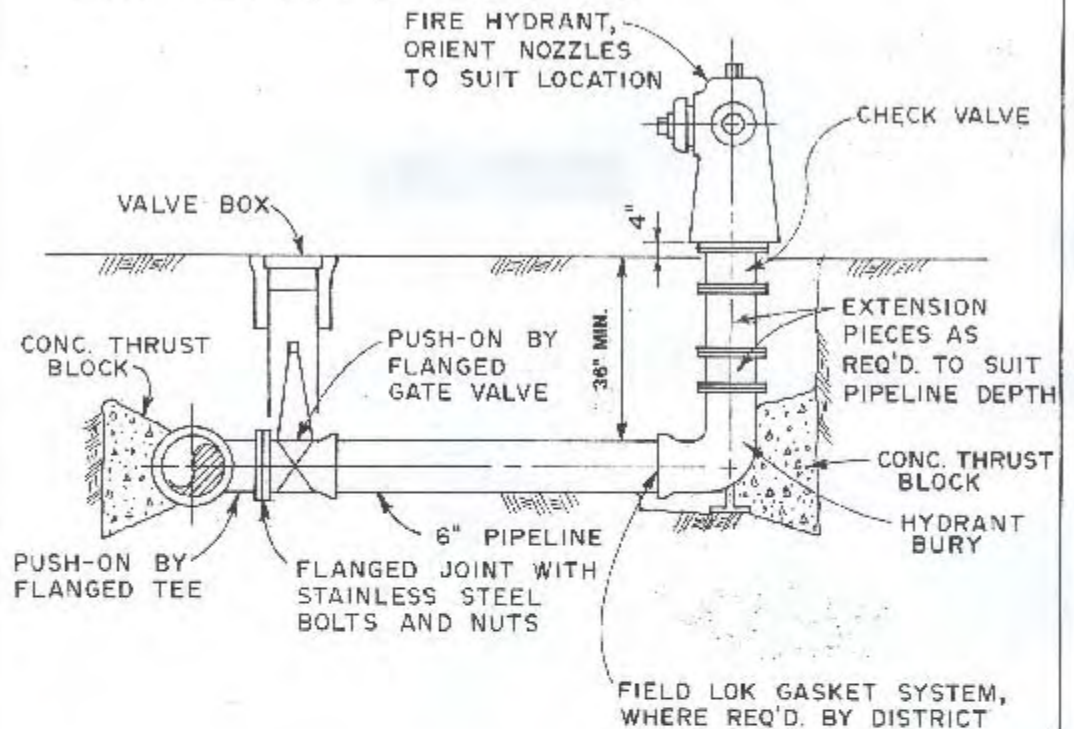






NOTE:

ALL BOLTS AND NUTS FOR FLANGED JOINTS, BOTH ABOVE AND BELOW GRADE, SHALL BE STAINLESS STEEL.

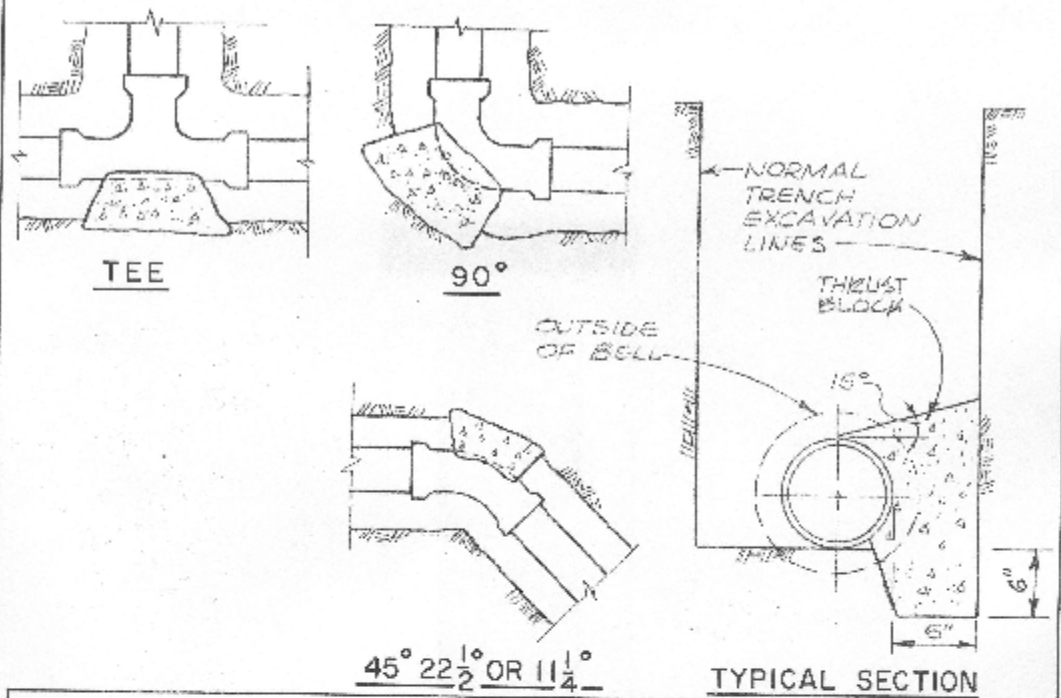


NOTES:

1. HYDRANT SHALL TYPICALLY BE LOCATED 2' BEHIND CURB, IN OTHER AREAS LOCATION SHALL BE DETERMINED IN FIELD BY DISTRICT.
2. USE HORIZONTAL BENDS IN 6" PIPELINE AS REQUIRED, BUT NO VERTICAL BENDS,
3. MATERIALS SHALL CONFORM TO SPECIFICATION REQUIREMENTS.
4. EACH HYDRANT SHALL HAVE 2-2 1/2" OUTLETS & 1-4 1/2" OUTLET. OUTLETS SHALL BE ORIENTED AS DIRECTED BY DISTRICT.
5. GUARD POSTS, NUMBER AND LOCATION TO BE DETERMINED IN FIELD BY DISTRICT, SHALL BE INSTALLED IN LOCATIONS WITHOUT CURB OR WHERE THE HYDRANT IS NOT ADEQUATELY PROTECTED BY CURB. GUARD POSTS SHALL BE 4" DIA. SCH. 40 GALVANIZED STEEL PIPE, 6 FEET LONG, INSTALLED 3 FEET DEEP IN CONCRETE, AND FILLED WITH CONCRETE.

FIRE HYDRANT

DISTRICT STANDARDS  
COASTSIDE COUNTY  
WATER DISTRICT  
SAN MATEO COUNTY, CALIFORNIA



**MINIMUM REQUIRED BEARING AREA AGAINST UNDISTURBED EARTH WALL**

PIPE SIZE	AREA IN SQUARE FEET AT FITTINGS				
	TEE CROSS	90°	45°	22 1/2°	11 1/4°
6	3	5	3	2	2
8	6	8	4	2	2
10	8	11	6	3	2
12	11	15	8	4	2
16	18	25	14	7	4

**NOTES:**

1. THRUST BLOCKS SHALL BE PLAIN CONCRETE POURED AGAINST UNDISTURBED EARTH.
2. CAPS AND PLUGS SHALL HAVE THRUST BLOCKS WITH AREAS AS SPECIFIED FOR TEES. CAPS, PLUGS, FLANGES, AND MECHANICAL JOINTS SHALL BE COVERED WITH 8 MILS OF POLYETHYLENE BEFORE THRUST BLOCKS ARE POURED.
3. AREA IS IN A PLANE AT RIGHT ANGLES TO THE LINE OF RESULTANT THRUST.
4. THRUST BLOCKS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING VALUE OF 3000 LB/S.F. AND 200 P.S.I.G. TEST PRESSURE. AREAS SHALL BE INCREASED FOR SOILS WITH LOWER BEARING VALUES OR FOR HIGHER TEST PRESSURE.

**HORIZONTAL THRUST BLOCKS**

DATE SEPT. 69  
REV. APR. 72

DISTRICT STANDARDS  
COASTSIDE COUNTY  
WATER DISTRICT  
SAN MATEO COUNTY, CALIFORNIA



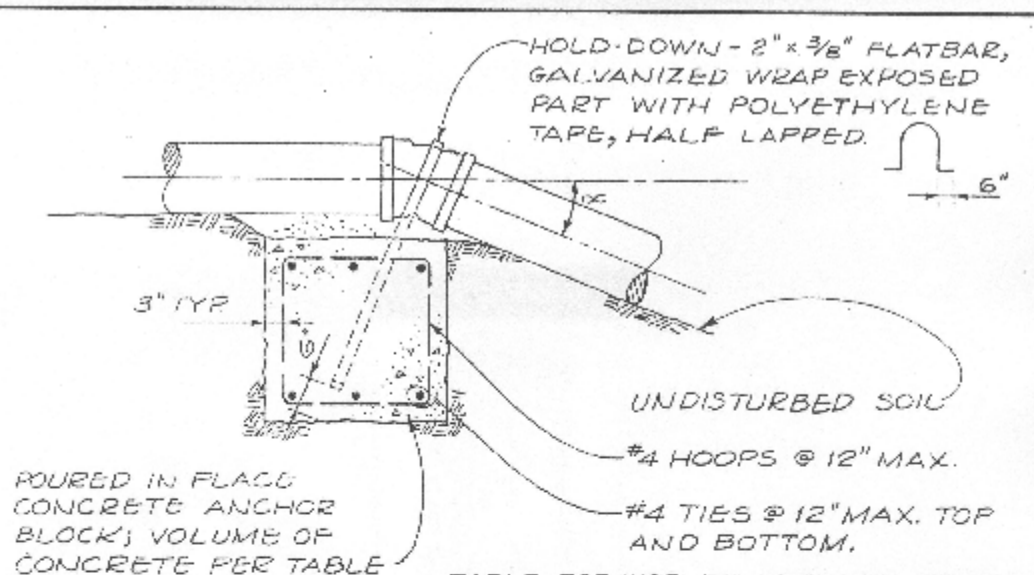
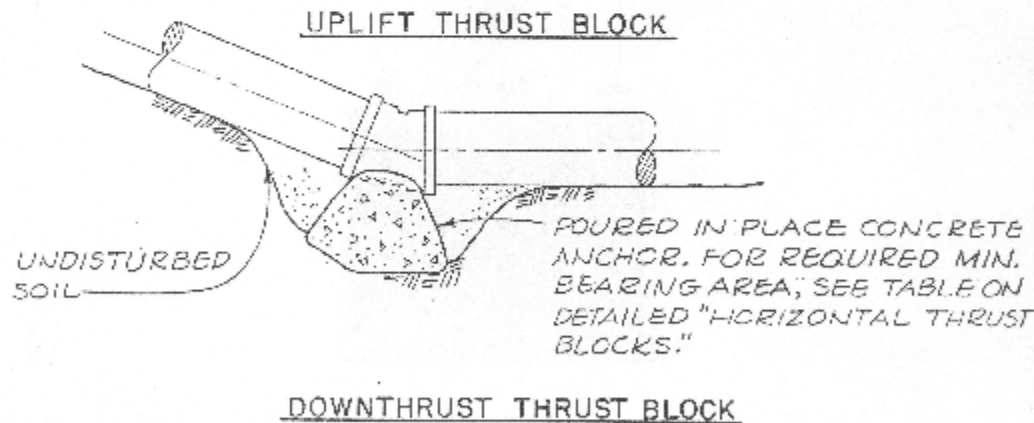
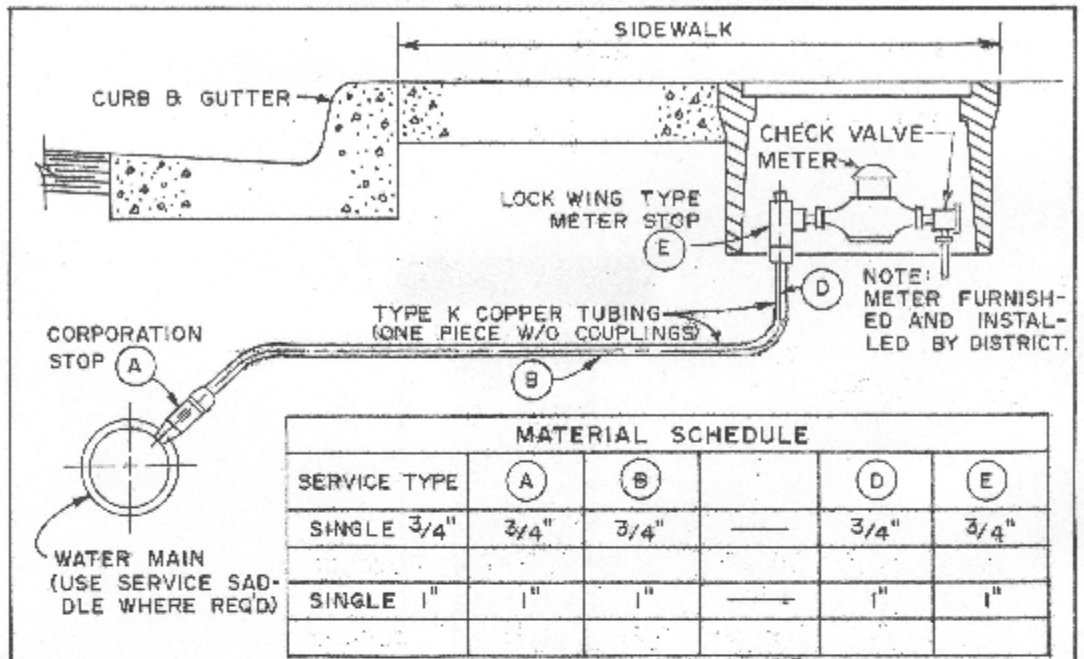


TABLE-FOR WORKING PRESSURE 150 PSI

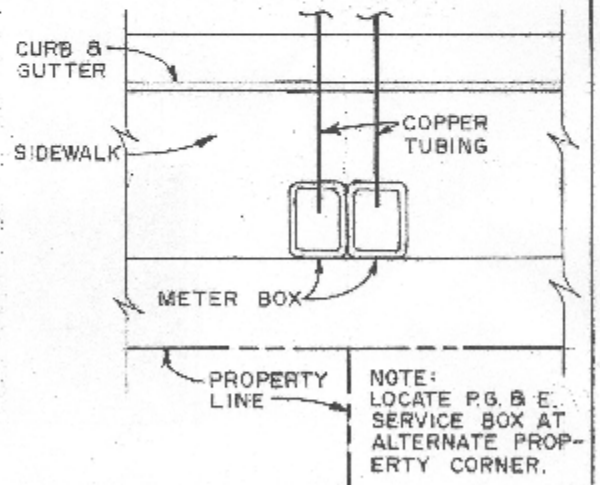
PIPE SIZE	REQUIRED CONCRETE VOLUME CUBIC FEET		
	$\alpha = 11\frac{1}{2}^\circ$	$\alpha = 22\frac{1}{2}^\circ$	$\alpha = 45^\circ$
6"	11	21	41
8"	19	38	74
10"	29	58	112
12"	41	84	—



<b>VERTICAL THRUST BLOCKS</b>	DATE DEC. 69	DISTRICT STANDARDS COASTSIDE COUNTY WATER DISTRICT SAN MATEO COUNTY, CALIFORNIA
	REV.	
	JULY 1974	
	NOV. 1981	



**TYPICAL INSTALLATION DETAIL**



**TYPICAL LOCATION DETAIL**

3/4" DOMESTIC SERVICE CONNECTION WITH 1" FIRE SERVICE CONNECTION	DATE: DEC. '75	DISTRICT STANDARDS COASTSIDE COUNTY WATER DISTRICT SAN MATEO COUNTY, CALIFORNIA
	REV.: MAR. '83	
	MAR. '08	
	JULY '09	

## **STAFF REPORT**

**To:** Coastside County Water District Board of Directors  
**From:** Joe Guistino, via General Manager David Dickson  
**Agenda:** November 10, 2009

Report

Date: November 4, 2009

**Subject:** Nunes Flocculator Drive Purchase

---

**Recommendation:** Authorize purchase and installation of 3 new flocculator drives for the Nunes Water Treatment Plant (WTP) at a total project cost of \$45,000.

**Background:** Nunes WTP is a conventional plant that utilizes mixers to gently stir the process stream to form particles that are heavy enough to settle out in the sedimentation basin. These mixers are called flocculators and are an important part of the treatment process. The nine existing flocculator drives have been running consistently 24/7-365 at the Nunes WTP since they were installed in 1982. These drives are extremely heavy and do not lend themselves to preventive maintenance procedures such as oil changes or gear inspections. Only one has had its oil changed since installed, and this resulted in a spillage of oil into the process stream. These units are positioned directly over the water and it was found to be nearly impossible to change the oil in these units without a high risk of spillage into the process stream. No other unit has had its oil changed since the first. Another unit failed in the early 90's, resulting in spillage of gear oil into the drinking water process and the subsequent ordeal with mitigation and removal. In our present regulatory climate, this would require special treatment by an outside firm and would be quite costly.

We consulted with the manufacturer as to oil changes and they do not recommend that we do any maintenance since to do so would entail a high risk of leakage since the original tolerances of the bushings and shafts are more than likely exceeded. Spillage of oil into the process stream would be disastrous and would require shutdown of the plant and the wasting of an estimated 100,000 - 300,000 gallons of water. We presently do not have the capacity to discharge this water and it would have to be trucked and treated before disposal. The cost to rebuild one of these units is twice the cost of a new, modern unit.

The replacement flocculator drives are easily accessible for oil changes and other preventive maintenance activities. They are also lubricated with food grade oil

that does not pose a toxic threat to the drinking water in the event that it accidentally gets into the process stream.

The new drives will come from Philadelphia, the maker of the original drives, and will mount directly to the existing baseplates. While similar drives are available from other manufacturers, they would require reconfiguration of the drive mounts and possibly the support structure.

Cost of the drives based on the lower of two quotes is \$34,836. CCWD staff will install them with the aid of a crane service. Drive shipping, crane service, and other miscellaneous expenses will bring the total project cost to about \$45,000.

**Fiscal Impact:** Project cost of \$45,000. The fiscal year 2010 Capital Improvement Budget has allotted \$50,000 per year for the next three years to replace three drives per year.

## ***STAFF REPORT***

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

**From:** David Dickson, General Manager

**Agenda:** November 10, 2009

Report

Date: November 4, 2009

**Subject:** Amendment to General Manager's Employment Agreement

---

### **Recommendation:**

The Personnel Committee recommends that the Board approve the attached First Amendment to Employment Agreement between Coastside County Water District and General Manager David Dickson.

### **Background:**

The attached amendment to the General Manager's employment agreement, presented for the Board's consideration on behalf of the Personnel Committee (Directors Ascher and Feldman), would clarify that the General Manager receives the same cost-of-living adjustment as all District employees.

**FIRST AMENDMENT TO EMPLOYMENT AGREEMENT**

THIS FIRST AMENDMENT is made and entered into as of \_\_\_\_\_, 2009, by and between Coastside County Water District (“District”) and David Dickson (“Employee”).

WHEREAS, on September 29, 2007, the District and the Employee entered into an Employment Agreement establishing the terms and conditions of the Employee’s employment as General Manager.

WHEREAS, Section 3 of the Employment Agreement sets forth the Employee’s compensation.

WHEREAS, the District and the Employee desire to amend the Employment Agreement to clarify that the Employee will receive the same annual cost of living adjustment to the Employee’s compensation as all other District employees receive and, like all other District employees, the cost of living adjustment will be effective July 1 of each year.

NOW, THEREFORE, the District and the Employee agree as follows:

A. Compensation. Section 3, “Compensation,” of the Employment Agreement is amended to add the following sentence to the end of the section:

In addition, the Employee will receive the same cost of living adjustment in the Employee’s compensation as all other District employees receive and the cost of living adjustment will be effective July 1 of each year.

B. Effect on Agreement. Except for the modification to the Employment Agreement expressly set forth in this First Amendment, the terms and conditions of the Employment Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have entered into this First Amendment to the Employment Agreement as of the date first written above.

COASTSIDE COUNTY WATER DISTRICT

By: \_\_\_\_\_  
David Dickson  
General Manager

By: \_\_\_\_\_  
Chris Mickelsen  
President, Board of Directors

Attest:

\_\_\_\_\_  
Secretary

## **STAFF REPORT**

**To:** Coastside County Water District Board of Directors  
**From:** David Dickson, General Manager  
**Agenda:** November 10, 2009

Report

Date: November 6, 2009

**Subject:** Water Reclamation Update

---

### **Recommendation:**

None. Information only.

### **Background:**

Recent activities and developments in the water reclamation arena include:

**Water Reclamation Committee:** I met with the Water Reclamation Committee on November 4 to provide an update on recent activities. The most significant of these is a cooperative effort with SAM staff to develop principles of a CCWD-SAM agreement outlining each agency's role and responsibilities in development and implementation of a recycled water project. I anticipate bringing these principles before the Board for discussion at the December 8 meeting.

**Pilot Test Project:** We received the permit for test application of recycled water on the golf course on October 8. As of November 6, we have delivered 5 loads (about 7,000 gallons) to the storage tank at the golf course, and golf course personnel have been using the water on the 15<sup>th</sup> hole green and part of the fairway. We also obtained a permit for Nurserymen's Exchange to take water for testing and have delivered 150 gallons to them. The pilot test will continue into at least the first week in December.

**Bay Area Recycled Water Coalition:** I attended the monthly meeting of the Bay Area Recycled Water Coalition on November 5. The CCWD-SAM Midcoast Region Water Recycling Project is now on the Coalition's project list (attached). On October 15, the House passed H.R. 2442, the "Bay Area Regional Water Recycling Program Expansion Act", authorizing 8 Coalition projects with a Federal share totaling \$16.3 million. The Senate must pass a similar bill, S. 1138, before the authorization goes to the President. Once the projects are authorized, the funds must be appropriated by a separate bill. Anticipating that the authorization process will be completed, the Coalition wrote on November 3 to request that \$15.3 million be included in the President's FY 2011 budget (copy of letter attached). Our project would be authorized in 2011-2012 and would likely not be funded until 2013 or after.

Bay Area Recycled Water Coalition - Funding Summary Project Status

Project	Funding requests and sources							Project Status					
	Federal Share <sup>1</sup>	FY 09 Appropriation	Reclamation Funding-ARRA	FY 10 Appropriation*	Remaining Fed. Share	FY 11 Needs	FY 12 Needs	Needs in Future FY's	CEQA Status	NEPA Milestone <sup>5</sup>	Feasibility Determ. <sup>7</sup>	% Design	Construction Status <sup>8</sup>
<b>Authorized Projects</b>													
Antioch Recycled Water Project, DDSD <sup>2</sup>	\$ 2,250,000	\$ 1,418,300	\$ 467,800	\$ 363,900	\$ -	\$ -	\$ -		Complete	Complete	Complete	100%	Aug. 2009
Pittsburg Recycled Water Project, DDSD	\$ 1,750,000	\$ 1,750,000	\$ 363,900 <sup>5</sup>	\$ -	\$ -	\$ -	\$ -		Complete	Complete	Complete	100%	99%
Pacifica Recycled Water Project - NCCWD	\$ 2,500,000	\$ -	\$ 2,203,750	\$ 296,250	\$ -	\$ -	\$ -		Complete	3	Complete	100%	Nov. 2009
Palo Alto/Mtn. View/Moffet Area RWP	\$ 5,000,000	\$ 3,960,400	\$ -	\$ 1,039,600	\$ -	\$ -	\$ -		Complete	Complete	Complete	100%	100%
Redwood City Recycled Water Project	\$ 1,100,000	\$ 871,300	\$ -	\$ 228,700	\$ -	\$ -	\$ -		Complete	Complete	Complete	100%	100%
San Jose Phase 1C, South Bay Water Recycling	\$ 7,000,000	\$ -	\$ 6,460,000	\$ 540,000	\$ -	\$ -	\$ -		1/2 are complete	?	N/A	Varies	Varies
South Bay Advanced RW Treatment Facility, SCVWD <sup>3</sup>	\$ 8,250,000	\$ -	\$ 8,250,000	see below	\$ -	\$ -	\$ -		MND (11/09)	2	Aug. 2009	60%	Apr. 2010
South Santa Clara County RWP, SCVWD	\$ 7,000,000	\$ -	\$ 4,350,000	\$ 631,550	\$ 2,018,450	\$ 2,018,450	\$ -		Updating draft EIR (3/10)	2	Aug. 2009	30%	Jun-10
<b>Authorized Total</b>	<b>\$ 34,850,000</b>	<b>\$ 8,000,000</b>	<b>\$ 22,095,450</b>	<b>\$ 3,100,000</b>	<b>\$ 2,018,450</b>	<b>\$ 2,018,450</b>	<b>\$ -</b>						
<b>Projects Seeking Authorization or Amendment</b>													
CCCSD/Concord RWP	\$ 1,800,000	\$ -	\$ -	\$ -	\$ 1,800,000	\$ 1,000,000	\$ 800,000		Complete	2	Oct. 2009	Ph. 1=100% Ph. 2 = 0	Dec. 2010; Nov. 2011
Petaluma 2A, 2B & 3	\$ 6,000,000	\$ -	\$ -	\$ -	\$ 6,000,000	\$ 6,000,000	\$ -		Complete	1	Dec. 2009	100%	Nov. 2010
DSRSD	\$ 1,150,000	\$ -	\$ -	\$ -	\$ 1,150,000	\$ -	\$ 768,750	\$ 381,250	90%	2	June 2009	10%	Jan. 2012
Central Redwood City	\$ 8,000,000	\$ -	\$ -	\$ -	\$ 8,000,000	\$ 100,000	\$ 200,000	\$ 7,700,000	Complete	0	Dec 2010	10%	Mar. 2014
Palo Alto RW Pipeline	\$ 8,250,000	\$ -	\$ -	\$ -	\$ 8,250,000	\$ 250,000	\$ 1,000,000	\$ 7,000,000	MND-Pub. Rev.	3	June 2009	0%	Oct. 2010
Ironhouse RWP	\$ 7,000,000	\$ -	\$ -	\$ -	\$ 7,000,000	\$ 100,000	\$ 200,000	\$ 6,700,000	50%	0	TBD	0%	Oct. 2012
<sup>2</sup> Antioch RWP	\$ 875,000	See above		\$ -	\$ 875,000	\$ 875,000	\$ -		See above				
<sup>3</sup> S. Bay Advanced RW	\$ 5,000,000	See above		\$ -	\$ 5,000,000	\$ 5,000,000	\$ -		See above				
<b>Seeking Authorization Total</b>	<b>\$ 38,075,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ 13,325,000</b>	<b>\$ 2,968,750</b>	<b>\$ 21,781,250</b>					
<b>New BARWC Projects to Seek Authorization</b>													
Hayward RWP	\$ 6,750,000	\$ -	\$ -	\$ -		\$ -	\$ 6,750,000	\$ -	75%	0	2010	75%	Jan. 2011
Mid-Coastside Region WRP	\$ 3,275,000	\$ -	\$ -	\$ -		\$ -	\$ 775,000	\$ 2,500,000	0	0	2010		2012
Zone 7 Water Supply Imprvmt	\$ 8,500,000	\$ -	\$ -	\$ -		\$ -							
<b>Total of all BARWC Projects</b>	<b>\$ 72,925,000</b>	<b>\$ 8,000,000</b>	<b>\$ 22,095,450</b>	<b>\$ 3,100,000</b>		<b>\$ 15,343,450</b>	<b>\$ 7,525,000</b>	<b>\$ 2,500,000</b>					
<b>San Jose Projects Authorized in PL 102-575 Seeking Separate Appropriation</b>													
San Jose Phase 1A <sup>4</sup>	\$ 8,000,000	\$ 3,580,000	\$ -	\$ -	\$ 4,420,000				Complete	Complete	N/A	100%	100%
San Jose Phase 1B <sup>4</sup>	\$ 20,000,000	\$ -	\$ -	\$ -	\$ 20,000,000				Complete	Complete	N/A	100%	100%
<b>Total Other San Jose</b>	<b>\$ 28,000,000</b>	<b>\$ 3,580,000</b>	<b>\$ -</b>	<b>\$ -</b>									

Footnotes:

- <sup>1</sup> Federal share represents 25% of estimated project cost. San Jose was authorized in PL 102-575 and has received previous appropriations.
- <sup>2</sup> Antioch is seeking authorization amendment to increase Federal share by \$875,000.
- <sup>3</sup> S. Bay Advanced Treatment is seeking authorization amendment to increase Federal share by \$5M.
- <sup>4</sup> San Jose is seeking separate appropriation for Ph. 1A & 1B so was not included with BARWC FY needs.
- <sup>5</sup> Pittsburg will not use ARRA funds as the Federal Share is being met through a FY09 shift from Antioch.

\* Distribution of additional \$1.115 M in FY10 Funds  
TBD based on Authorization & project readiness

<sup>6</sup> Sequential Milestones for NEPA:	<sup>7</sup> Feasibility	<sup>8</sup> Construction Status
1=Contacted Reclamation re: intent to prepare documents. 2=Secured Funding w/Recl. via CFA or Reimbursable Agmt. 3=Submitted Documents to Reclamation. 4=Received Feedback from Reclamation. Complete=Approval Completed / Received Letter of Concurrence.	If Feasibility is not complete, provide past or projected submittal date.	If under construction, report % complete. If not, list anticipated start date (month/year).





November 2, 2009

Mr. Robert Wolf, Director  
Program and Budget  
U.S. Bureau of Reclamation  
U.S. Department of Interior  
1849 C Street NW  
Washington, D.C. 20240-0001

SUBJECT: BAY AREA RECYCLED WATER COALITION FISCAL YEAR 2011  
FUNDING IN PRESIDENT'S BUDGET

Dear Director Wolf:

On behalf of the Bay Area Recycled Water Coalition, a partnership of 14 public agencies committed to developing recycled water as a resource for over six million residents of the counties we serve in the San Francisco Bay Area, I am writing to respectfully request that \$15.3 million for the Coalition's projects be included in the CALFED section of the President's Fiscal Year 2011 Budget.

The \$15.3 million includes \$2 million for the South Santa Clara County Recycled Water Project authorized by P.L. 110-229 and \$13.3 million for the eight projects included in H.R. 2442, passed by the House on October 15, 2009, and S. 1138, pending in the Senate. Regarding the \$13.3 million, the Coalition believes that the authorization legislation will be enacted into law prior to Fiscal Year 2011 appropriations action.

Generally, this program benefits California and the Federal Government through the preservation of State and Federal reservoir supplies for higher uses, particularly in drought years; and provides a cost-effective, environmentally-friendly water supply alternative for increased dry year yield in the sensitive Bay-Delta Region. This program also advances the 1992 Central Valley Improvement Act, which directs the U.S. Bureau of Reclamation to identify new dry year water sources.

Specifically, as stated in our letter to you of September 9, 2009, the Coalition's projects have a definite positive impact on the Delta Region and are CALFED-oriented. The unique geographical situation of the San Francisco Bay Area Recycled Water Projects translates to benefits for the Sacramento/San Joaquin Delta system, which comprises the largest estuary on the west coast of North America and the source of drinking water for two-thirds – an estimated

Mr. Robert Wolf, Director

November 2, 2009

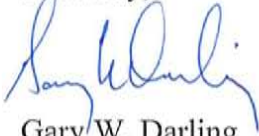
BAY AREA RECYCLED WATER COALITION FISCAL YEAR 2011 FUNDING IN  
PRESIDENT'S BUDGET

Page 2

25 million people – of California. Recycled water used by these communities will reduce their demand on the Central Valley Project, the California State Water Project, local runoff and groundwater. The Coalition's projects also fulfill one of the key CALFED mission areas, notably its water supply reliability program and, within that, its water use efficiency program.

The Bay Area Recycled Water Coalition appreciates the Federal funding received to date. Those funds have resulted in eight recycled water projects either completing construction or commencing construction in 2010. In order to continue to move new projects into the construction phase, the Coalition needs to secure a Federal partnership share of \$15.3 million in the Fiscal Year 2011 Budget to help meet the critical water crisis facing California.

Sincerely,



Gary W. Darling

General Manager

Delta Diablo Sanitation District

JS/GWD:dj

cc: Michael L. Connor, Commissioner, USBR  
Donald L. Glaser, Regional Director, Mid-Pacific USBR  
Pablo Arroyave, Deputy Regional Director, Mid-Pacific USBR  
Gene Ebner, Director, Water and Power Branch, OMB  
Matthew Siegel, Budget Analyst, OMB  
SF BARWC Agencies  
District File P.90024.03.04  
Chron File

## **STAFF REPORT**

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

**From:** David Dickson, General Manager

**Agenda:** November 10, 2009

Report

Date: November 6, 2009

**Subject:** General Manager's Report

---

### **Recommendation:**

Information only.

### **Background:**

I would like to highlight the following:

1. **Proposition 1A Securitization Program:** Thanks to excellent work by Joanne Whelen, we have completed all the submittals required to participate in the Proposition 1A Securitization Program. We have been notified that our certified Proposition 1A Receivable Amount will be \$53, 568 (see attached email).
2. **Letter to SFPUC requesting rate study:** On October 16, I sent a letter to Ed Harrington, General Manager of the San Francisco Public Utilities Commission, requesting that the SFPUC perform a rate study to determine whether the District should pay a lower rate for untreated water (copy attached). SFPUC committed to do the study in the new individual agency Water Sales Contract between SFPUC and CCWD.
3. **CCWD-MWSD Mutual Emergency Supply Agreement:** The ad-hoc CCWD-MWSD Mutual Interest Committee (Directors Ascher and Coverdell, with Director Feldman substituting for Director Ascher for this meeting) and I, along with District Counsel Patrick Miyaki, met with representatives of Montara Water and Sanitary District (Directors Ptacek and Slater-Carter, General Manager Heldmaier, District Counsel Schrickler) on October 20. This was the first opportunity we have had to discuss proposed language changes which we had transmitted to MWSD on April 17, 2009.

**STAFF REPORT**

**Agenda: November 10, 2009**

**Subject: General Manager's Report**

**Page Two**

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We were able to reach agreement addressing both sides' concerns with the proposed language, but were unable to agree on new language introduced by MWSD related to agency authority and boundaries. We agreed that CCWD Counsel Miyaki would draft language acceptable to CCWD that would attempt to address MWSD concerns. Counsel Miyaki transmitted the draft language to MWSD Counsel Schricker on October 22. Mr. Schricker reported to the MWSD Board on November 5 that he had not had an opportunity to review our October 22 letter.

## David Dickson

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**From:** Catherine Bando [cbando@greencoastcap.com]  
**Sent:** Wednesday, November 04, 2009 6:06 PM  
**To:** David Dickson  
**Subject:** Confirmation Amount - Proposition 1A Receivable

**To: David Dickson**

Based on the figures certified by your County-Auditor (pursuant to Government Code Section 6588.6 (e) (2)), we have matched your local agency to the following Proposition 1A Receivable Amount.

Local Agency Name	Prop. 1A Receivable Amount
Coastside County Water District	\$53,568

If the amount listed above for your local agency appears to be incorrect, please immediately contact Readie Callahan at [rcallahan@greencoastcap.com](mailto:rcallahan@greencoastcap.com) or (310) 553-8300 ext. 5. [Click here](#) to download a copy of your county's certified list of Proposition 1A amounts (navigate to the bottom of the web page to the heading that reads "8% property tax calculation by county" and click on your county's name in the dropdown box.)

If we do not hear from you prior to **November 6, 2009 at 5:00 PM PST**, the above amount will be considered the confirmed certified amount for your local agency.

With kind regards,  
Cathy Bando and Readie Callahan  
Proposition 1A Program Consultants



[cbando@greencoastcap.com](mailto:cbando@greencoastcap.com)  
[rcallahan@greencoastcap.com](mailto:rcallahan@greencoastcap.com)  
310.553.8300 x1 Cathy  
310.553.8300 x5 Readie



[www.cacommunities.org](http://www.cacommunities.org)  
[Prop1a@cacommunities.org](mailto:Prop1a@cacommunities.org)  
(800) 635-3993 x260



October 16, 2009

Mr. Ed Harrington  
General Manager  
San Francisco Public Utilities Commission  
1155 Market Street, 11th Floor  
San Francisco, CA 94103

**Re: Coastside County Water District Request for Rate Study**

Dear Mr. Harrington:

Coastside County Water District (CCWD) hereby requests that the San Francisco Public Utilities Commission (SFPUC) perform a rate study in accordance with Paragraph 8.b of the Water Sales Contract dated July 1, 2009 between CCWD and the City and County of San Francisco:

b. Within 6 months of receiving a request from Customer the SFPUC will initiate a one-time rate study to evaluate the possible creation of a wholesale untreated water rate classification for supplies delivered to Customer. Following the conclusion of the study, the SFPUC will consider the results in making its next round of annual rate recommendations to the Commission regarding wholesale service rates and rate structures, with adoption subject to the discretion of the SFPUC in accordance with section 6.04 of the WSA. SFPUC staff will provide a recommendation to create or not create a wholesale untreated water rate classification for supplies delivered to Customer after evaluating the rate study, and present that recommendation to the Commission. If adopted by the SFPUC, the new wholesale untreated water rate would have prospective application to Customer only, and would commence no earlier than Fiscal Year 2011-12.

We also request that you advise us of the schedule for undertaking and completing the rate study and particularly when the SFPUC will provide a draft of the rate study for review and comment.

Please do not hesitate to contact me if CCWD can provide any information or provide any assistance to SFPUC in connection with this rate study.

Sincerely,

David R. Dickson  
General Manager

cc: Chris Mickelsen, Board President  
Patrick Miyaki, District Counsel



# Monthly Report

**To:** David Dickson, General Manager  
**From:** Cathleen Brennan, Water Resources Analyst  
**Agenda:** November 10, 2009  
**Subject:** Water Resources Report

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This report is provided as an update on water conservation, outreach, and water resources activities.

Items: California Senate Bill 407  
Water Use Requirements for Residential Clothes Washers  
Estimated Use of Water in the United States in 2005  
Pumpkin Festival

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## □ California Senate Bill 407 - Padilla

Chaptered 587

An act to add Section 1102.155 to, and to add Article 1.4 (commencing with Section 1101.1) to Chapter 2 of Title 4 of Part 4 of Division 2 of the Civil Code, relating to water conservation. October 11, 2009.

This legislation requires residential and commercial real property built after January 1, 1994, to replace noncompliant plumbing (not water conserving) fixtures. Noncompliant fixtures are defined as:

- Any toilet manufactured to use more than 1.6 gallons per flush
- Any urinal manufactured to use more than 1 gallon per flush
- Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute.

These requirements result in a state mandated local program that creates a duty to inspect, by local building officials, and requires a disclosure at the time the property transfers.

### Milestones:

- On or after January 1, 2014, all building alterations or improvements to single-family residential real property must replace noncompliant fixtures as a condition for issuance of a certificate of completion and occupancy or final permit approval by the local building department.
- On or after January 1, 2014, for specified building alterations or improvements to multi-family residential real property and commercial real property must replace noncompliant fixtures as a condition for issuance of a certificate of completion and occupancy or final permit approval by the local building department.

- ❑ On or after January 1, 2017, all noncompliant fixtures in single-family residential real property shall be replaced by the property owner.
- ❑ On or after January 1, 2017, a seller or transferor of single-family residential real property, multi-family residential real property or commercial real property disclose to a purchaser or transferee, in writing, specified requirements for replacing plumbing fixtures and whether the real property includes noncompliant fixtures.
- ❑ On or after January 1, 2019, all noncompliant fixtures in multi-family residential real property and commercial real property shall be replaced.
- ❑ On or after January 1, 2019, that water- conserving fixtures prescribed by the bill operate at the manufacturer’s rated water consumption at the time that a tenant takes possession.

These regulations are an attempt to make existing plumbing more water efficient. Compliance will be enforced by the local building authority and by disclosures during property transfers.

- ❑ **California Energy Commission’s Water Use Requirements for New Clothes Washers**  
The following article was published in the San Francisco Chronicle on Thursday, October 29, 2009. It explains the state’s attempts to require more stringent water efficiency requirements for new residential clothes washers sold in California. California’s attempts to get approval have not yet been successful.

*Bob Egelko, Chronicle Staff Writer*

*A federal appeals court revived California's effort Wednesday to increase water efficiency in home washing machines, a plan that state regulators say would ease the water shortage and save households money.*

*The state Energy Commission's water-use requirements for new washers, the first in the nation, were scheduled to take effect in 2007. But the U.S. Energy Department under President George W. Bush vetoed the rules in 2006, saying California had not presented evidence supporting the need for the regulations. The Energy Department also said no top-loading machines - the type most commonly used in households - could meet the new standards.*

*The state already sets water-efficiency standards for commercial washing machines, but needs federal approval to regulate energy or water use for home appliances. On Wednesday, the Ninth U.S. Circuit Court of Appeals in San Francisco rejected the federal agency's reasoning in rejecting California's request and ordered President Obama's Energy Department to reconsider it.*



*"We have good reason to hope that we will get a more fair shake at (the Energy Department) this time," said Jonathan Blees, lawyer for the state Energy Commission. Although the Obama administration has not taken a position in the washing-machine dispute, Blees said the administration "is more hospitable to energy-efficiency efforts than the old administration was."*

*There was no immediate comment from the Energy Department or from the Association of Home Appliance Manufacturers, which opposes the California requirements.*

*A 2002 state law required the Energy Commission to set water-efficiency standards for residential washing machines, which state officials said consume 22 percent of the water used by an average household. Local water agencies and environmentalists supported the requirements to help the state cope with an increasingly serious water shortage.*

*Blees said the Energy Commission estimates that its requirements would add \$130 to the cost of a washing machine but save its owners \$243 in water and energy costs over the life of the machine. Because of a three-year waiting period in federal law, he said, the rules would take effect for machines manufactured in 2013 if the federal government approved them next year.*

*In Wednesday's 3-0 ruling, the court said the California commission had provided evidence to the federal agency to support its proposed standards, including a study by Pacific Gas and Electric Co., which backs the proposal.*

*The court also rejected the federal agency's conclusion that the new requirements would drive top-loaders out of the California market, saying the PG&E study predicted that manufacturers could comply by increasing efficiency by 5 percent.*

*The judges rejected the state agency's request to require federal approval of the California proposal, however, and instead told the Obama administration to reconsider it.*

*E-mail Bob Egelko at [begeko@sfnchronicle.com](mailto:begeko@sfnchronicle.com).*

*<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/10/29/BA1A1ABSL7.DTL>*

*This article appeared on page D - 2 of the San Francisco Chronicle*

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#### □ **Estimated Use of Water in the United States in 2005**

The U.S. Geological Service (USGS) published this report that presents water use estimates by source and by State. The entire report is available at <http://pubs.usgs.gov/circ/1344/>. The introduction to the USGS report is attached.

Included in this report are water use trends. Between 2000 and 2005 there was a slight decline of water use (-1%) by public and private water suppliers. Withdrawals from fresh

groundwater decreased (-5%) and withdrawals from saline groundwater increased (+13%). Withdrawals from fresh surface water increased (+2%) and withdrawals from saline surface water declined (-5%).

□ **Pumpkin Festival**

Coastside County Water District and Sewer Authority Mid-Coastside (SAM) co-hosted an information table at the Pumpkin Festival on Saturday, October 17<sup>th</sup>.

The photograph shows David Partida and Nelson Sandoval of SAM helping a local resident.



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□ **Summary of Meetings**

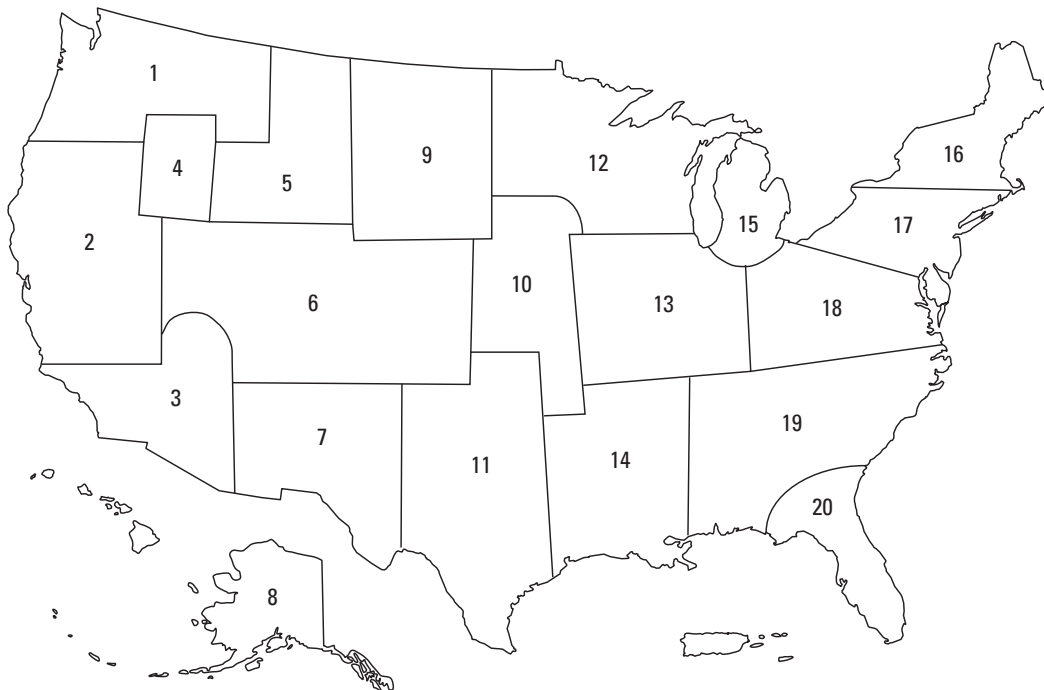
Customer Service – Webcast – AWWA - 10/21/2009

California Model Efficiency Landscape Ordinance Workshop –DWR - 10/26/2009

Bay Area Water Supply and Conservation Agency (BAWSCA) – TAC – 11/5/2009



**Cover.** Photo collage of water use and supply.



- 1—Chemical manufacturing plant. Photo used with permission.
- 2—Sand and gravel mine, Texas. Photo by Nancy L. Barber, USGS.
- 3—Domestic water use. Photo by Nancy L. Barber, USGS.
- 4—Fire hydrant. Photo by Peter Griffin, <http://www.publicdomainpictures.net>.
- 5—Upper Mississippi River, Wisconsin. Photo by Bob Nichols, USDA Natural Resources Conservation Service.
- 6—Livestock watering tank. Photo courtesy of USDA Natural Resources Conservation Service.
- 7—Domestic water use. Photo by Nancy L. Barber, USGS.
- 8—Alaska salmon. Photo courtesy of U.S. Fish and Wildlife Service.
- 9—Center pivot irrigation system. Photo by Tim McCabe, USDA Natural Resources Conservation Service.
- 10—Water tower. Photo by Nancy L. Barber, USGS.
- 11—Oil well, New Mexico. Photo by Alan M. Cressler, USGS.
- 12—Holstein dairy cows. Photo by Bob Nichols, USDA Natural Resources Conservation Service.
- 13—Flowing well in the Floridan aquifer, Brunswick, Georgia. Photo Alan M. Cressler, USGS.
- 14—Catfish ponds, Louisiana. Photo by Scott Bauer, USDA Agricultural Research Service.
- 15—NIPSCO Coal Power Plant cooling tower. Photo by John J. Mosesso, USGS National Biological Information Infrastructure.
- 16—Cranberry harvest, New Jersey. Photo by Keith Weller, USDA Agricultural Research Service.
- 17—Horseshoe Falls, Niagara River. Photo by Alan M. Cressler, USGS.
- 18—Domestic water use. Photo by Nancy L. Barber, USGS.
- 19—Breeder chickens in Cleburne County, Alabama. Photo by Michael J. Harper, Alabama Office of Water Resources.
- 20—Drip irrigation on citrus. Photo by Ron Nichols, USDA Natural Resources Conservation Service.



# **Estimated Use of Water in the United States in 2005**

By Joan F. Kenny, Nancy L. Barber, Susan S. Hutson, Kristin S. Linsey,  
John K. Lovelace, and Molly A. Maupin

Circular 1344

**U.S. Department of the Interior  
U.S. Geological Survey**

**U.S. Department of the Interior**  
KEN SALAZAR, Secretary

**U.S. Geological Survey**  
Suzette M. Kimball, Acting Director

U.S. Geological Survey, Reston, Virginia: 2009

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## Conversion Factors

Multiply	By	To obtain
<b>Area</b>		
acre	4,047	square meter (m <sup>2</sup> )
acre	0.4047	hectare (ha)
acre	.001562	square mile (mi <sup>2</sup> )
<b>Volume</b>		
acre-foot (acre-ft)	1,233	cubic meter (m <sup>3</sup> )
acre-foot (acre-ft)	325,851	gallons (gal)
acre-foot (acre-ft)	43,450	cubic feet (ft <sup>3</sup> )
cubic foot (ft <sup>3</sup> )	7.48	gallons (gal)
gallon (gal)	3.785	liter (L)
gallon (gal)	3.785	cubic decimeter (dm <sup>3</sup> )
million gallons (Mgal)	3,785	cubic meter (m <sup>3</sup> )
million gallons (Mgal)	3.07	acre-feet (acre-ft)
<b>Flow rate</b>		
acre-foot per year (acre-ft/yr)	1,233	cubic meter per year (m <sup>3</sup> /yr)
billion gallons per day (Bgal/d)	1.3185	billion cubic meters per year
gallon per day (gal/d)	3.785	liter per day (L/d)
million gallons per day (Mgal/d)	0.04381	cubic meter per second (m <sup>3</sup> /s)
million gallons per day (Mgal/d)	1.547	cubic feet per second (ft <sup>3</sup> /sec)
million gallons per day (Mgal/d)	1.121	thousand acre-feet per year (acre-ft/yr)
million gallons per day (Mgal/d)	1.3185	million cubic meters per year
thousand acre-feet per year (acre-ft/yr)	0.8921	million gallons per day (Mgal/d)
<b>Energy</b>		
gigawatthour (gWh)	3,600,000	Megajoule (MJ)
kilowatt-hour (kWh)	3,600,000	joule (J)
<b>Other</b>		
cubic foot (ft <sup>3</sup> )	62.4	pounds (lb)
gallon (gal)	8.34	pounds (lb)
gallons per day per square mile [(gal/d)/mi <sup>2</sup> ]	1.4614	cubic meter per day per square kilometer [(m <sup>3</sup> /d)/km <sup>2</sup> ]
inch of rain (in)	27,200	gallons per acre (gal/ac)

## Acronyms Used in this Report

SDWIS	Safe Drinking Water Information System
USDA ARS	U.S. Department of Agriculture, Agricultural Research Service
USDA NASS	U.S. Department of Agriculture, National Agricultural Statistics Service
USDA NRCS	U.S. Department of Agriculture, Natural Resources Conservation Service
USDOE EIA	U.S. Department of Energy, Energy Information Administration
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey



# Estimated Use of Water in the United States in 2005

By Joan F. Kenny, Nancy L. Barber, Susan S. Hutson, Kristin S. Linsey,  
John K. Lovelace, and Molly A. Maupin

## Abstract

Estimates of water use in the United States indicate that about 410 billion gallons per day (Bgal/d) were withdrawn in 2005 for all categories summarized in this report. This total is slightly less than the estimate for 2000, and about 5 percent less than total withdrawals in the peak year of 1980. Freshwater withdrawals in 2005 were 349 Bgal/d, or 85 percent of the total freshwater and saline-water withdrawals. Fresh groundwater withdrawals of 79.6 Bgal/day in 2005 were about 5 percent less than in 2000, and fresh surface-water withdrawals of 270 Bgal/day were about the same as in 2000. Withdrawals for thermoelectric-power generation and irrigation, the two largest uses of water, have stabilized or decreased since 1980. Withdrawals for public-supply and domestic uses have increased steadily since estimates began.

Thermoelectric-power generation water withdrawals were an estimated 201 Bgal/d in 2005, about 3 percent more than in 2000. In 2005, thermoelectric freshwater withdrawals accounted for 41 percent of all freshwater withdrawals. Nearly all of the water withdrawn for thermoelectric power was surface water used for once-through cooling at power plants. Twenty-nine percent of thermoelectric-power withdrawals were saline water from oceans and brackish coastal water bodies.

Withdrawals for irrigation in 2005 were 128 Bgal/d, about 8 percent less than in 2000 and approximately equal to estimates of irrigation water use in 1970. In 2005, irrigation withdrawals accounted for 37 percent of all freshwater withdrawals and 62 percent of all freshwater withdrawals excluding thermoelectric withdrawals. Irrigated acreage increased from 25 million acres in 1950 to 58 million acres in 1980, then remained fairly constant before increasing in 2000 and 2005 to more than 60 million acres. The number of acres irrigated using sprinkler and microirrigation systems has continued to increase and in 2005 accounted for 56 percent of the total irrigated acreage.

Water withdrawals for public supply were 44.2 Bgal/d in 2005, which is 2 percent more than in 2000, although the population increased by more than 5 percent during that time.

Public supply accounted for 13 percent of all freshwater withdrawals in 2005 and 21 percent of all freshwater withdrawals excluding thermoelectric withdrawals. The percentage of the U.S. population obtaining drinking water from public suppliers has increased steadily from 62 percent in 1950 to 86 percent in 2005. Most of the population providing their own household water obtained their supplies from ground-water sources.

Self-supplied industrial water withdrawals continued to decline in 2005, as they have since their peak in 1970. Self-supplied industrial withdrawals were an estimated 18.2 Bgal/d in 2005, a 30-percent decrease from 1985. An estimated 4.02 Bgal/d were withdrawn for mining in 2005, which is 11 percent less than in 2000, and 18 percent less than in 1990. Withdrawals for mining were only 58 percent freshwater.

Livestock water use was estimated to be 2.14 Bgal/d in 2005, which is the smallest estimate since 1975, possibly due to the use of standardized coefficients for estimation of animal water needs. Water use for aquaculture was an estimated 8.78 Bgal/d in 2005, nearly four times the amount estimated in 1985. Part of this increase is due to the inclusion of more facilities in the estimates in 2005, and the use of standardized coefficients for estimating aquaculture use from other data.

Fresh surface water was the source for a majority of the public-supply, irrigation, aquaculture, thermoelectric, and industrial withdrawals. Nearly 30 percent of all fresh surface-water withdrawals in 2005 occurred in five States. In California, Idaho, and Colorado, most of the fresh surface-water withdrawals were for irrigation. In Texas and Illinois, most of the fresh surface-water withdrawals were for thermoelectric power generation.

About 67 percent of fresh groundwater withdrawals in 2005 were for irrigation, and 18 percent were for public supply. More than half of fresh groundwater withdrawals in the United States in 2005 occurred in six States. In California, Texas, Nebraska, Arkansas, and Idaho, most of the fresh groundwater withdrawals were for irrigation. In Florida, 52 percent of all fresh groundwater withdrawals were for public supply, and 34 percent were for irrigation.

## Introduction

This report, “Estimated use of water in the United States in 2005,” is the twelfth in a series of reports that has been compiled and published by the U.S. Geological Survey (USGS) every 5 years since 1950. These reports include estimates of water withdrawals by State, source of water, and category of use. Data from 2005 and earlier years can be used to indicate changes in water use over time, among different geographic areas, and from different sources. Water-use information complements the study of surface-water and groundwater availability, and is essential to understanding how future water demands will be met while maintaining adequate water quality and quantities for human and ecosystem needs.

Water supplies and their uses are affected by factors such as demographics, economic trends, legal decisions, and climatic fluctuations. From 1950 to 2005 the population of the United States doubled, and also shifted from rural to urban areas. Southern and Western States have experienced the greatest increases in population, with concurrent expansion of public water supplies. In response to increased demands and limits on supplies, communities have sought additional water sources or instituted water-conservation measures.

Irrigation practices and crop types also have changed with time, technology, and the economy. In some geographic areas, increased costs and reduced water availability have led to the use of more efficient irrigation practices and a reduction in irrigation water use. In other areas, increases in both water use and irrigated acreage have occurred because of water availability, demand for certain crops, and the desire to improve crop yield by using irrigation to supplement rainfall.

Changes in technology and economic conditions have affected industrial and thermoelectric power water uses and spurred interest in water reuse and reclamation. In response to regulation of the quality and temperature of discharged water, withdrawals for some thermoelectric and industrial facilities have decreased. Cooling water is essential for producing most of the thermoelectric power generated in the United States, and increased electric energy usage has resulted in additional demands for water. Limitations on water supplies have led to the use of less water-intensive cooling technologies for producing thermoelectric power in newer plants.

Climatic fluctuations have a prominent effect on water withdrawals, particularly those for irrigation, thermoelectric power generation, and public supply. Periodic droughts have drawn attention to the limits of local and regional water supplies. However, the effects of climatic conditions in any particular year cannot be associated readily with the aggregate data presented in these reports. The effects of temperature and precipitation extremes often are difficult to isolate from other factors that affect water use. Also, because of the nature of reporting programs, water-use estimates for some categories of use may be based on ancillary data from several different years.

## Purpose and Scope

This report presents water-use estimates by source and by State for eight categories of water use for 2005. Sources include surface water and groundwater, both fresh and saline. Categories include public supply, domestic, irrigation, livestock, aquaculture, industrial, mining, and thermoelectric power. All withdrawals for the public-supply, domestic, irrigation, and livestock categories are shown as freshwater, although in some areas water is treated to reduce salinity for these uses. Both fresh and saline withdrawals are shown for industrial, mining, and thermoelectric-power generation uses. Geographic areas include the 50 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands, which are hereafter referred to as “States” for brevity.

The USGS series of 5-year national water-use estimates serves as one of the few sources of information about regional and national trends in water withdrawals. Earlier reports (MacKichan, 1951, 1957; MacKichan and Kammerer, 1961; Murray, 1968; Murray and Reeves, 1972, 1977; Solley and others, 1983, 1988, 1993, 1998; Hutson and others, 2004) are available on the Internet at <http://water.usgs.gov/watuse/>. County-level data for all published categories of use for the years 1985, 1990, 1995, 2000, and 2005 may be downloaded from this site.

## Terminology

The terms and units used in this report are similar to those used in previous USGS water-use Circulars; terms are defined in the Glossary at the end of this report. Withdrawal estimates for each category represent the total amount of water removed from the water source, regardless of how much of that total is consumptively used. In most cases, some fraction of the total withdrawal will be returned to the same or a different water source after use and is available for other withdrawals. Because of the uncertainty of estimating consumptive use and return flows on a category and State basis, estimates of consumptive use are not provided in this report. Saline water is defined as water containing dissolved solids of 1,000 milligrams per liter or more. Estimates of wastewater reuse were compiled by some States for the industrial, thermoelectric, and irrigation categories, but were not shown in the tables because of the small volumes of water compared to the totals.

Annual water-use data are expressed in this report in terms of million gallons per day (abbreviated as Mgal/d) and thousand acre-feet per year. The term billion gallons per day (abbreviated as Bgal/d) is used in the Abstract and Trends sections to more simply express large numbers for total uses. Units of millions or billions of gallons per day do not represent actual daily rates, but rather are used to express total amounts as an average daily rate for 1 year. For example, irrigation water may be applied only during parts of the year and at variable rates; therefore, the actual rate of application at any given time during the growing season is different from the average daily rate based on 365 days in a year.

The water-use data in this report are rounded to three significant figures. All values are rounded independently, so the sums of individual rounded numbers may not equal the totals. Percentage changes discussed in the text are calculated from the unrounded data and are expressed as integers. All population data are rounded to three significant figures.

## Changes for the 2005 Report

For 2005, the reported categories of water use are the same as for 2000, but every category includes data from every State. Estimates for the livestock, aquaculture, and mining categories, which were optional for some States in 2000, are reported for all States, some of which chose to use national datasets generated using methods described by Lovelace (2009a, b, c). Deliveries from public supply for domestic use, last reported for 1995, were compiled for 2005, but public-supply deliveries for commercial, industrial, and thermoelectric-power generation use were not. The amount of power generated by thermoelectric power plants, which was not reported for 2000, has been included for 2005.

Changes that were made to the presentation of livestock, aquaculture, and thermoelectric-power generation data in 2000 were continued for 2005. Livestock and aquaculture remain separate categories, with aquaculture including withdrawals for both fish farms, formerly reported with the animal-specialties category, and fish hatcheries, formerly reported with commercial use. Thermoelectric-power generation water use remains subdivided by cooling type (thermoelectric withdrawals by once-through and recirculating cooling types were first presented for 2000).

The Trends section of this report includes national totals for withdrawals by category and source of water from 1950 to 2005. These totals may have changed for some categories and years due to corrections or revisions to individual State data. Because of these changes, some of the percentage changes in this report may be slightly different from calculations made using data previously published in Hutson and others (2004). In addition, industrial and mining water withdrawals (formerly termed “other industrial” uses to distinguish them from thermoelectric-power water uses) are shown as separate categories. Estimates of livestock, aquaculture, and mining water uses for the States that did not report those uses in 2000 are included in category totals for this report so that national totals could be provided for all categories for that year.

As in the 2000 report, water-use estimates were not compiled on the basis of hydrologic unit (watershed) for 2005. Also, no data are presented for the commercial category. Instream use for hydroelectric-power generation was not compiled for 2005. Some of these additional water data may have been collected by individual States, but are not compiled as a national dataset or included in this report.

## Sources of Data and Methods of Analysis

The data presented in this report were compiled from various sources, depending on the category and the data available for each State. USGS personnel in each State determined

the best sources of information available, compiled or estimated the data, and prepared documentation of the sources and methods used to determine water use. Values calculated using different sources and methods have varying levels of precision, and therefore some estimates are more reliable than others. Because the largest users and the most prominent categories of use within each State have the greatest effect on the totals, obtaining reliable estimates for these large users and categories was the primary focus of the compilation effort.

Sources of information include national datasets, State agencies, individual questionnaires, and local contacts. National datasets available to each State included the U.S. Environmental Protection Agency (USEPA) Safe Drinking Water Information System (SDWIS), U.S. Census Bureau population estimates, U.S. Department of Agriculture (USDA) Farm and Ranch Irrigation Survey, USDA Census of Agriculture, USDA National Agricultural Statistics Service (NASS) crop and livestock estimates, and U.S. Department of Energy (USDOE) Energy Information Administration (EIA) facility reports. Datasets and sources of information used to produce the national estimates for the livestock, aquaculture, and mining categories included the USDA NASS, county extension agents, USGS Minerals Information Team, USDOE EIA, and U.S. Bureau of Mines. Sources of information are discussed in greater detail in the individual category sections of this report.

Many of these data, such as those from NASS and EIA, are collected annually. Other data are provided for years other than 2005, but are used to develop the 2005 estimates in some States because they are the most complete data available. For example, the USDA Census of Agriculture is produced in years ending in “2” and “7,” and the USDA Farm and Ranch Irrigation Survey is produced in years ending in “3” and “8.” For several States, the 2005 water-use estimates were based on 2004 information from State water-use reporting programs.

Guidelines for preparing the 2005 water-use estimates were developed and distributed to water-use personnel in each USGS Water Science Center. These guidelines have been published as USGS Techniques and Methods Book 4, Chapter E1, “Guidelines for preparation of State water-use estimates for 2005” (Hutson, 2007) which is available on the Internet at <http://pubs.usgs.gov/tm/2007/tm4e1/>. Reports published by individual States as part of the National Water-Use Information Program, as well as a list of contact personnel in each USGS Water Science Center, also are available on the Internet at <http://water.usgs.gov/watuse/>.

## Acknowledgments

This national compilation of water use would not be possible without the assistance and data provided by the many State and local agencies that manage water resources, operate data-collection programs, and administer regulations for use of water and other natural resources. The agencies and other organizations that provided assistance are listed for each State at the end of this report. The authors also gratefully acknowledge the USGS personnel in each State who compiled the data for this report.

# Monthly Report

**To:** David Dickson, General Manager  
**From:** Cathleen Brennan, Water Resources Analyst  
**Agenda:** November 10, 2009  
**Subject:** Water Shortage and Drought Contingency Plan

This report is provided as an update on the implementation of the Water Shortage and Drought Contingency Plan – Stage 1 (Advisory Stage). The Advisory Stage was implemented 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.

- √ **Local Precipitation**
  - 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<sup>st</sup>.

Precipitation for Half Moon Bay													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Historic Average</b>	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						
<b>Water Year 2010</b>	3.37												3.37
	2008						2009						
<b>Water Year 2009</b>	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						
<b>Water Year 2008</b>	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
	2009						2007						
<b>Water Year 2007</b>	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

## ***MONTHLY REPORT***

**To:** David Dickson, General Manager  
**From:** Joe Guistino, Superintendent of Operations  
**Agenda:** November 10, 2009

**Report**  
**Date:** November 3, 2009

---

### **Monthly Highlights**

#### Return to Denniston's Original Capacity

The Department of Public Health (DPH) has granted us permission to return to the original capacity of the Denniston Water Treatment Plant (WTP) now that we have increased our chlorine contact time with the Denniston Storage Tank Modification Project.

#### Denniston Rehabilitation

We finally dredged Denniston Reservoir and removed all of the tules along the face of the dam. We have a permission to annually dredge and remove tules to 2013.

#### Pilarcitos Canyon Culvert Repair Project

The culvert damaged and posing a threat to our raw water pipeline in Pilarcitos Canyon has been replaced with an environmentally friendly box culvert. It turned out beautifully.

### **Source of Supply**

Crystal Springs Reservoir was the sole source of supply for the month of October.

### **Systems Improvement**

#### Beautification

- Cleaned up Denniston Pump Station (PS)
- Crews removed brush and trees from behind the Nunes Sedimentation Basins.
- District corporation yard straightened up and inventory complete.
- Shop lunchroom cleaned.

#### New Phone Service

The District switched its cell phone carrier to Verizon. We were experiencing too many missed and dropped calls to maintain the high service that we expect to provide to our customers. We now have more reliable reception at our remote sites and phones that are rugged enough to withstand field conditions.

### PRV Station

We upgraded the Sevilla Street PRV station in El Granada as part of our ongoing effort to keep CCWD infrastructure sound and reliable.

### Nunes Emergency Generator

Work has started on the Nunes emergency generator to make it self cooling and not dependent on plant utility water. It had sometimes either failed to start or adversely affected the disinfection process in the past by taxing the plant utility water process.

### Denniston Tank Chlorine Injection Port

District Crew added a chlorine and air injection system on the Denniston Tank utilizing the new sample ports installed at the last upgrade. We can now circulate the tank and safely add disinfectant if needed.

### New Dialer

A new off hours dialer was installed in October. The old dialer was starting to fail and becoming unreliable.

### **Update on Other Activities:**

#### Meter Replacement Program

Crews replaced 46 meters and 5 meter heads in October. Replaced were 37 old style Sensus meters, 7 Rockwells and 2 Neptunes. All were replaced with AMRs.

#### Unidirectional Flushing Program

I have completed the planning and worksheets for the first 2 weeks of unidirectional flushing, which will take place in El Granada sometime after the rains start this season. I gave a talk at the Fall American Water Works Association (AWWA) Conference on our planning efforts and unidirectional flushing in general that was quite well received.

#### Storm Damage

The District did not sustain any serious damage from the 13 October storm. The damage was limited to two downed trees in Pilarcitos Canyon, one tree branch at El Granada PS #2 and a downed tree at Nunes that damaged a small part of the perimeter fence.

#### Reclaim Water Pilot

Commencing on 16 October, District crews hauled recycled water from the Sanitary Authority Midcoast (SAM) to Ocean Colony golf links. We hauled 4 loads (5600 gallons) in October.

#### Verizon Cell Tower

Verizon wireless is in the process of installing a cell tower at the site of the 3 Half Moon Bay Tanks. Startup is slated for December.



## On Call

Due to the increased traffic congestion through the holidays, 2 people will be on call on the weekends.

## **Safety/Training/Inspections/Meetings**

### Meetings Attended

5-8 October - Attended the California/Nevada Section American Water Works Association (Cal/Nev AWWA) Fall Conference in Las Vegas, Nevada.

27 October - Phone conference with members of the Water Quality Division of Cal/Nev AWWA.

27 October - Business lunch with Dave Lea and General Manager.

27 October - Met with landowners adjacent to Miramontes Tank to discuss access and water service issues.

28 October - Phone conference with Kennedy Jenks on ongoing projects

### Safety Meeting and Training

The Safety Committee meeting for October was postponed by the instructor.

### Truck Inspections

We have launched a weekly vehicle safety inspection program whereby all vehicles must pass a 25 point inspection. We now find problems before they can get serious or cause other safety issues.

### AWWA Presentations

I gave two presentations at the Cal/Nev Section AWWA Fall Conference:

1. Turning a Water Storage Tank Into A Clearwell-A Strategy for Disinfection By-Product Reduction. This talk described the changes that we made to the Denniston Storage Tank to allow for more disinfectant contact time through Denniston Water Treatment Plant (WTP) so that we can discontinue pre chlorination and its subsequent Trihalomethane (THM) formation.

2. Problems, Solutions and Daily Angst With Launching A Unidirectional Flushing Program (UDFP). This talk was basically unidirectional flushing 101. I described how I am planning the Coastside County Water District (CCWD) unidirectional flushing program. I also pull from my experience with UDFP at Contra Costa Water District.

Both talks were well attended and I received many compliments for the efforts that we are making at the District in the areas of water quality.

## **Department of Public Health (DPH)**

### Return to Denniston's Original Capacity

We received a letter, dated 13 October, from Eric Lacy, our DPH Inspection Engineer, granting us permission to utilize the Denniston Tank for contact time credit (CT credit). This is a significant event in that we can

- a. now discontinue pre chlorination at the Denniston WTP which will greatly reduce THM formation in the distribution system and
- b. operate the plant at it's design rate of 1100 gpm.

We were also commended in our efforts to improve the quality of water delivered to our customers.

## **Projects**

### Tank Recoating Projects

All mechanical work on the Miramar Tank has been complete. The coating work will commence in November.

District Engineer Jim Teter will be working with the crews to develop a bypass for Alves Tank when it is taken out of service for repairs and coated later this fiscal year.

### Short Term Improvement (STI) Project

EKI Consultants will be conducting the Construction Management of the STI Project. We will be meeting with the contractor in a kick off meeting on 12 November.

### Denniston Rehabilitation

Starting on 5 October, the contractors started dredging around the intakes and removing tules along the dam face. Crews cleared the area immediately around the lower intake by hand and rendered repairs to the screen. Staff is very pleased with the outcome and efforts are being made at this time to bring Denniston WTP on line. The biologist hired to oversee the operations did an excellent job and turned in a thorough report. No red legged frogs or San Francisco garter snakes were disturbed or even slightly annoyed during the operation. This report was forwarded to the California Department of Fish and Game (CDFG) per the permit instructions.

### Pilarcitos Canyon Culvert Repair Project

Preparation for this project commenced on the week of 28 September and the construction itself was done on the week of 5 October. The job went rather smoothly and the finished product turned out better than anticipated. The contractors and the biologist worked very well together so that there was no negative impact to the environment or local wildlife. I am pleased to state that I feel that there is no longer any danger to our raw water pipeline should we experience similar storms as those of January 2008. There was some very minor damage to two Christmas trees on the tree farm but it only amounted to \$150.

### Pilarcitos Canyon Blending Project

Consultant Kennedy Jenks is finalizing the construction drawings and preparing the bid specifications for this project. District will hire an electrical firm to supply power to the site by the time construction will start.

### Denniston Alternative Treatment Project

Kennedy Jenks is presently in the design phase of this project.





MARK B HORTON, MD, MSPH  
Director

State of California—Health and Human Services Agency  
California Department of Public Health



ARNOLD SCHWARZENEGGER  
Governor

October 13, 2009

Mr. Joe Guistino  
Superintendent of Operations  
Coastside County Water District  
766 Main Street  
Half Moon Bay, CA 94019

Dear Mr. Guistino:

**REQUEST FOR INCREASED CT CREDIT – DENNISTON WATER TREATMENT PLANT  
Coastside County Water District, Water System No. 4110011**

This letter is in response to your written request on May 13, 2009 to delay the addition of chlorine disinfectant until after the filtration process to reduce disinfection by-products formation, include the storage volume of the Denniston Tank as part of the CT calculation, and increase the Denniston Water Treatment Plant (WTP) production rate back to the original design rate of 2 gallons per minute per square foot (gpm/ft<sup>2</sup>).

The Denniston WTP is a direct filtration plant that currently includes pre-disinfection, injection of caustic soda, aluminum sulfate, polymer and potassium permanganate prior to the coagulation tank, a 10,000 gallon coagulation tank, three dual media pressure filters, and post disinfection. Until recently, finished water from the Denniston WTP either passed through a 1.5 million gallon capacity storage tank before being delivered to the CCWD distribution system or flowed directly into the distribution system. Inactivation of *Giardia lamblia* cysts, viruses, and *Cryptosporidium* is achieved within the Denniston WTP. According to calculations made by CCWD, the plant flow rate was reduced from its original design flow rate of 1,152 gpm (2 gpm/ft<sup>2</sup> x 576 ft<sup>2</sup> filter surface) to 700 gpm to provide longer detention time within the treatment plant to meet CT requirements.

In an effort to reduce disinfection by-products formation, CCWD modified the 1.5 MG storage tank with a separate inlet and outlet and route all finished water from the Denniston WTP through the storage tank before distribution. The volume maintained within the storage tank will be used as part of the CT calculations and allow CCWD to delay the addition of sodium hypochlorite until organic materials have been removed by the coagulation and filtration processes. Pre-disinfection must continue to be provided, however the sodium hypochlorite dosage into the raw water influent pipe will be minimized.

The Department commends CCWD for its continued efforts to improve the water quality served to your customers. Delaying the addition of sodium hypochlorite will reduce disinfection by-

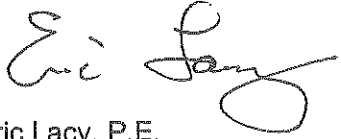
products formation to help CCWD comply with the Stage 2 Disinfectant and Disinfection By-Products Rule. The Department hereby approves CCWD's request to delay the addition of chlorine disinfectant until after the filtration process, include the storage volume of the Denniston Tank as part of the CT calculation, and increase the Denniston WTP production rate back to the original design rate of 2 gpm/ft<sup>2</sup> under the following conditions.

1. Coastside County Water District shall provide reliable treatment to water from its surface water and groundwater under the influence of surface water supply that meets a minimum total reduction of 99.9% (3 log) for *Giardia lamblia* cysts, 99.99% (4 log) for viruses, and 99% (2 log) for *Cryptosporidium* through the filtration and disinfection processes at all times. When the Denniston WTP is operated in accordance with a Department approved Operations Plan and the performance monitoring, design, reliability, and operational requirements appropriate to direct filtration, the filtration process is credited with providing 2 log *Giardia lamblia* cysts, 2 log *Cryptosporidium*, and 1 log virus removal. Based upon the overall reduction requirements specified above, the inactivation requirements for the Denniston WTP are 90 % (1 log) *Giardia lamblia* cysts and 99.9% (3 log) for virus through the disinfection process.
2. The flow rate through each pressure filter shall not exceed 2 gpm/ft<sup>2</sup> at any time.
3. The turbidity level of the combined filter effluent shall be less than or equal to 0.3 NTU in at least 95 percent of the measurement taken each month and shall not exceed 1 NTU for more than 1 continuous hour.
4. Coastside County Water District shall comply with the disinfection requirements at all times. Compliance with the disinfection inactivation requirements will be determined using the CT concept.
5. Coastside Count Water District shall measure and record the disinfectant residual concentration of the water being delivered to the distribution system continuously. If there is a failure of continuous disinfection residual monitoring equipment, grab sampling every four hours may be conducted in lieu of continuous monitoring, but for no more than five working days following the failure of the equipment.
6. In addition to complying with the CT disinfection requirements, CCWD shall comply with the following performance standards:
  - a. Water delivered to the distribution system shall not contain a disinfectant residual of less than 0.2 mg/L for more than four hours in any 24 hour period.
  - b. The residual disinfectant concentrations of samples collected from the distribution system shall be detectable in at least 95 percent of the samples taken each month that the system serves water to the public.
7. Coastside County Water District shall measure the residual disinfectant concentration at least at the same points in the distribution system and at the same time as total coliforms are sampled in accordance with Section 64421, Title 22, California Code of Regulations.

Mr. Joe Guistino  
October 13, 2009  
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The Department looks forward to working with you on many more improvement projects related to the CCWD treatment and distribution system. If you have any questions regarding this letter, please feel free to contact Ms. Van Tsang at (510) 620-3602.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Lacy". The signature is fluid and cursive, with the first name "Eric" and the last name "Lacy" clearly distinguishable.

Eric Lacy, P.E.  
District Engineer  
Santa Clara District  
Drinking Water Field Operations Branch  
Department of Public Health

cc: San Mateo County Environmental Health Department